2024 ANNUAL WATER QUALITY REPORT

FOR THE
NEWTON SANITARY LANDFILL
50-SDP-01-75P
NEWTON, IOWA

by:

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Engineering Management

6002-23A.320

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Certification

Prepared by: ____________________________________ Date: 1-15-2025

Typed: Todd Whipple, CPG

Section 1.0 Background Information

1.1 Report Priority

IDNR review of this document is considered to be a low priority. This report concludes that semi-annual detection and assessment monitoring should continue in accordance with the approved HMSP and in accordance with rule.

1.2 Period of Report Coverage

Water quality data evaluation is based on a running compilation of data beginning in March, 2008. Statistical evaluations herein are based on the most recent water quality data collected September 23, 2024.

The Annual Water Quality Report for the 1945 Closed Landfill is forwarded separately in November of each year in accordance with previous rules.

1.3 Current Site Maps

Figure 1 is attached illustrating the entirety of the property encompassed by the site. Figure 2 is attached illustrating the details of the current waste areas, site features, monitoring well locations, and subsurface gas probe locations.

1.4 Site Status and Applicable Rules

Site Location

The Newton Sanitary Landfill is located in Section 9, T79N, R19W, Jasper County, Iowa. The site encompasses approximately 319 acres. The facility is situated on Highway 14 approximately 1 mile south of the corporate limits of Newton, Iowa. The facility operates under the Iowa Department of Natural Resources (IDNR) Permit Number 50-SDP-01-75P.

Landfill Layout

The site is situated in the uplands above the Skunk River valley to the south. The facility includes two (2) closed landfills (the 1945 Landfill and Area A) and the RCRA Subtitle D Expansion Areas designated Area B, Area C, Area D, and Area E (Figure 1 & Figure 2). Areas B, C, and D are actively receiving waste from the planning area.

Applicable Rules

Iowa Administrative Code (IAC) 567-113 is applicable to the site. Area A is a closed landfill regulated under (IAC) 567-113 in accordance with the approved variance.

1.5 Summary of Hydrologic Monitoring System Plan (HMSP)

The HMSP includes MW-39, MW-48, MW-78, and SW-101(2016-2019 data) as background monitoring points. There are six (6) downgradient monitoring wells in Area A designated MW-41, MW-42, MW-58, MW-59, MW-60, and MW-61. There are four (4) downgradient monitoring points in Area B, C, and D designated MW-36, MW-62R, MW-79, and MW-80. MW-36 also serves as a downgradient monitoring point to the leachate holding lagoon on the site.

Groundwater underdrain head monitoring points GPZ-301 and GPZ-302 are the respective water level measurement points for Cell D-1 and D-2. Special Provision X.4.j of the Permit dated December 20, 2023 (Doc #108517) requires semi-annual water elevation measurement of these points. This information is included in the Monitoring Well Maintenance Reevaluation Plan, Appendix A and in the LCSPE in Appendix G. Additional Monitoring Well Maintenance Performance Reevaluation activities associated with the HMSP monitoring wells are also included in the information in Appendix A.

The Site Plan and the approved monitoring network is illustrated on Figure 1 and Figure 2. The Water Table Contour Map is included as Figure 3.

Table 1 - Current Status of the Hydrologic Monitoring System Plan (HMSP) & Required Monitoring

WELL	Monitoring Phase	3/2025	9/2025	Appendix II Samples
MW-48 (b)	Detection Monitoring	Appendix I	Appendix I	None
MW-78 (b)	Detection Monitoring	Appendix I	Appendix I	None
MW-39 (b)	Detection Monitoring	Appendix I	Appendix I	None
MW-62R	Assessment Monitoring	**Appendix II**	Appendix I(2)	3/19/12, 9/25/12, 3/11/15, 3/26/20
MW-36	Detection Monitoring	Appendix I	Appendix I	None
MW-79	Detection Monitoring	Appendix I	Appendix I	None
MW-80	Assessment Monitoring	**Appendix II**	Appendix I(2)	3/15/13, 9/25/13, 3/11/15, 3/26/20
MW-41	Assessment Monitoring	**Appendix II**	Appendix I(2)	3/19/12, 9/25/12, 3/11/15, 3/26/20
MW-42	Assessment Monitoring	Appendix I(1)	Appendix I(1)	3/23/17, 3/19/18, 3/2/23
MW-58	Assessment Monitoring	**Appendix II**	Appendix I(2)	3/19/12, 9/25/12, 3/11/15, 3/26/20
MW-59	Assessment Monitoring	**Appendix II**	Appendix I(2)	3/26/19, 3/26/20
MW-60	Assessment Monitoring	**Appendix II**	Appendix I(2)	9/25/12, 3/15/13, 3/11/15, 3/26/20
MW-61	Assessment Monitoring	Appendix I(1)	Appendix I(1)	3/23/17, 3/19/18, 3/2/23

(1) = Appendix I plus no detected Appendix II compounds (IAC 567-113.10(6)"d"2)
(2) = Any detected Appendix II compound in March, 2025.

Section 2.0 Reporting Period Monitoring Activities

Appendix B includes information related to Monitoring Activities at this facility. A summary of all well testing beginning March 16, 2008 is included in Appendix B.1.

Field sampling information for the March 4, 2024 and September 23, 2024 sampling episodes is included on the field forms (IDNR Form 542-1322) in Appendix B.2.

A comprehensive summary of Analytical Data for the episodes between March 16, 2008 and September 23, 2024 is included in Appendix C.

2.1 Current Detection Monitoring Activities

Background points are MW-39, MW-48, MW-78, SW-101 (2016-2019 data).

MW-36 (downgradient lagoon), MW-62R, MW-79, and MW-80 are downgradient monitoring wells for the Area B, C, & D Expansion Areas.

MW-41, MW-42, MW-58, MW-59, MW-60, and MW-61 are designated as downgradient monitoring wells for the Area A Closed Landfill (approved in Petition for Waiver from Administrative Rules).

The wells that remain in detection monitoring system are MW-36 and MW-79.

2.2 Current Assessment Monitoring Activities

Assessment monitoring points include MW-41, MW-42, MW-58, MW-59, MW-60, MW-61, MW-62R, and MW-80.

2.3 Current Corrective Actions

GWD-1 was connected to the leachate collection system on August 15, 2013 in satisfaction of IAC 567-113(10)2(3).

A remedial groundwater collection system is complete along the west and northwest side of Area A and is currently in operation.

Section 3.0 Data Evaluation and Summary

Statistical Evaluations are prepared by Otter Creek Environmental Services for each monitoring episode. The Groundwater Statistics Report for the Newton Sanitary Landfill, First Semi-Annual Monitoring Event in 2024, dated March, 2024 is included in Appendix D.1. The Groundwater Statistics Report for the Newton Sanitary Landfill, Second Semi-Annual Monitoring Event in 2024, dated October, 2024 is included in Appendix D.2.

The Keystone Analytical Reports for the laboratory testing performed for March 4, 2024, and September 23, 2024, sampling episodes are included in Appendix E.

QUALITY ASSURANCE/QUALITY CONTROL

A blind duplicate sample was collected at MW-78 during the March 4, 2024 sampling episode. A blind duplicate was collected at MW-59 during the September 23, 2024 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 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 (both the March 4, 2024, and September 23, 2024) 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 # 80731). A TSS and Field Turbidity Report was prepared and submitted on March 23, 2015, and was approved by IDNR on November 24, 2015 (Doc #84736). The November 24, 2015 IDNR approval letter also includes a requirement to evaluate and sort data within the background data pool and retain only data that is validated as appropriate.

The background data has been validated by exclusively utilizing "No-Purge" data (September 24, 2014 to present). The background data is summarized in Table 1, Attachment B to the Groundwater Statistics Report for the Newton Sanitary Landfill, Second Semi-Annual Monitoring Event in 2024, dated October, 2024 (included in Appendix D.2). Outliers in the background data in the referenced Table 1 are tagged with an asterisk and are excluded from use in calculating the Prediction Limits.

Field turbidity testing results are summarized in Appendix D.3.

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 concentration for a compound that is in excess of the calculated site prediction limit in a Detection Monitoring Well is recorded as a Statistically Significant Increase (SSI). Since the Prediction limit for VOC is set at the laboratory Method Reporting Level, any VOC detection is recorded as an SSI.

Appendix F includes summary Tables (by well) of all compounds at site monitoring wells that have exceeded a prediction limit (highlighted in light brown).

Exceedances of the Prediction Limit at a well that is in Assessment Monitoring, or Corrective Action Monitoring is not an SSI, instead the exceedance is further evaluated by Confidence Interval Statistics.

The current year review of Prediction Limit Exceedances at Assessment Monitoring Wells is presented below for 2024.

Spring 2024		Fall 2024	
MW-41 -	1,1-dichloroethane, cis-1,2-DCE	MW-41 -	1,1-dichloroethane, cis-1,2-DCE
MW-42 -	none	MW-42 -	none
MW-58 -	nickel, cis-1,2-DCE	MW-58 -	nickel
MW-59 -	none	MW-59	none
MW-60 -	none	MW-60	nickel
MW-61 -	none	MW-61	none
MW-62R -	barium, trichlorofluoromethane	MW-62R -	barium
MW-80 -	none	MW-80 -	none

A summary of current inorganic exceedances of the prediction limits is included on page 3 of the Spring and Fall, 2024 Otter Creek Report (Appendix D.1 and D.2).

A summary of current VOC SSI is included on page 5 of the Otter Creek Reports (Appendix D.1 and D.2). Table 1, Attachment E to the Statistical Evaluation Report (Appendix D.2) is a summary table of volatile organic compound detections to date. All historic verified VOC detections reported above the MRL exceed the prediction limit (which is equal to the reporting limit).

ASSESSMENT MONITORING

There are eight (8) wells that are currently in assessment monitoring at the Newton Landfill facility (MW-41, MW-42, MW-58, MW-59, MW-60, MW-61, MW-62R, and MW-80). The full Appendix II sampling events are summarized in the Table below.

At MW-60, MW-61, and MW-80, there have been no Appendix II detections of compounds beyond those included on the Appendix I list. At MW-41, MW-58, MW-59, and MW-62R, bis(2-ethylhexyl) phthalate is the single Appendix II compound detected beyond compounds that are included on the Appendix I list. At MW-42 bis(2-ethylhexyl) phthalate and 2,4,5-T are the Appendix II compounds detected (once each) beyond those compounds that are included on the Appendix I list. A summary of the Bis(2-ethylhexyl) phthalate and 2,4,5-T testing results are as follows. The green highlights denote full Appendix II sample events.

AREAS A, B, C, D - Bis(2-ethylhexyl)phthalate detections (ug/L)

Date	**MW-41**	**MW-42**	**MW-61**	**MW-62R**	**MW-58**	**MW-59**	**MW-60**	**MW-80**
3/19/12	**22.0**	NT	NT	<10	<8	NT	NT	NT
9/25/12	<10	NT	NT	**18.0**	<8	NT	<8	NT
3/15/13	NT	NT	NT	NT	NT	NT	<8	<8
9/25/13	<10	NT	NT	**19.0**	NT	NT	NT	<8
10/23/13	<10	NT	NT	<10	NT	NT	NT	NT
3/25/14	**83.0**	NT	NT	<10	NT	NT	NT	NT
9/25/14	<10	NT	NT	<10	NT	NT	NT	NT
3/11/15	<8	NT	NT	<8	<8	NT	<8	<8
9/17/15	**10.0**	NT	NT	<10	NT	NT	NT	NT
3/22/16	<10	NT	NT	<10	NT	NT	NT	NT
9/14/16	<10	NT	NT	<10	NT	NT	NT	NT
3/23/17	<10	<8	<8	<10	NT	NT	NT	NT
9/8/17	<6	NT	NT	<6	NT	NT	NT	NT
3/19/18	NT	<6	<6	NT	NT	NT	NT	NT
9/11/18	NT	NT	NT	NT	NT	NT	NT	NT
3/7/19	NT	NT	NT	NT	NT	**15.0**	NT	NT
6/6/19	NT	NT	NT	NT	NT	<6	NT	NT
9/4/19	NT	NT	NT	NT	NT	<6	NT	NT
12/4/19	NT	NT	NT	NT	NT	**6.0**	NT	NT
3/26/20	**8.0**	NT	NT	<6	**6.0**	<6	<6	<6
9/15/20	<6	NT	NT	NT	<6	<6	NT	NT
3/2/2021	NT	NT	NT	NT	NT	NT	NT	NT
9/7/2021	NT	NT	NT	NT	NT	NT	NT	NT
3/24/2022	NT	NT	NT	NT	NT	NT	NT	NT
8/31/2022	NT	NT	NT	NT	NT	NT	NT	NT
3/2/2023	NT	**6.0**	<6	NT	NT	NT	NT	NT
9/12/2023	NT	NT	NT	NT	NT	NT	NT	NT
3/4/2024	NT	NT	NT	NT	NT	NT	NT	NT
9/23/2024	NT	NT	NT	NT	NT	NT	NT	NT

AREAS A, B, C, D - 2,4,5-T (ug/L)

Date	**MW-41**	**MW-42**	**MW-61**	**MW-62R**	**MW-58**	**MW-59**	**MW-60**	**MW-80**
3/19/12	<0.5	NT	NT	<0.5	<0.5	NT	NT	NT
9/25/12	<0.5	NT	NT	<0.5	<0.5	NT	<0.5	NT
3/15/13	NT	NT	NT	NT	NT	NT	<0.5	<0.5
9/25/13	NT	NT	NT	NT	NT	NT	NT	<0.5
10/23/13	NT	NT	NT	NT	NT	NT	NT	NT
3/25/14	NT	NT	NT	NT	NT	NT	NT	NT
9/25/14	NT	NT	NT	NT	NT	NT	NT	NT
3/11/15	<0.5	NT	NT	<0.5	<0.5	NT	<0.5	<0.5
9/17/15	NT	NT	NT	NT	NT	NT	NT	NT
3/22/16	NT	NT	NT	NT	NT	NT	NT	NT
9/14/16	NT	NT	NT	NT	NT	NT	NT	NT
3/23/17	NT	<0.5	<0.5	NT	NT	NT	NT	NT
9/8/17	NT	NT	NT	NT	NT	NT	NT	NT
3/19/18	NT	**5.0**	<0.5	NT	NT	NT	NT	NT
9/11/18	NT	NT	NT	NT	NT	NT	NT	NT
3/7/19	NT	<0.5	NT	NT	NT	<0.5	NT	NT
9/4/19	NT	<0.5	NT	NT	NT	NT	NT	NT
3/26/20	<0.5	NT	NT	<0.5	<0.5	<0.5	<0.5	<0.5
9/15/20	NT	NT	NT	NT	NT	NT	NT	NT
3/2/2021	NT	NT	NT	NT	NT	NT	NT	NT
9/7/2021	NT	NT	NT	NT	NT	NT	NT	NT
3/24/2022	NT	NT	NT	NT	NT	NT	NT	NT
8/31/2022	NT	NT	NT	NT	NT	NT	NT	NT
3/2/2023	NT	<0.5	<0.5	NT	NT	NT	NT	NT
9/12/2023	NT	NT	NT	NT	NT	NT	NT	NT
3/4/2024	NT	NT	NT	NT	NT	NT	NT	NT
9/23/2024	NT	NT	NT	NT	NT	NT	NT	NT

Based on the results to date, detections of bis (2-ethylhexyl) phthalate and 2,4,5-T occur as isolated events.

The July 19, 2017 IDNR Letter (Doc #89979) allowed the frequency of bis (2-ethylhexyl) phthalate sampling to be reduced to once per five (5) years to coincide with the full Appendix II sampling performed on the five (5) year frequency. Semi-Annual sampling of 2,4,5-T was performed at MW-42 in 2019 and was discontinued after the compound was not verified in 2019.

The HMSP and the existing HMSP monitoring points are interpreted to be effective for on-going detection and assessment system monitoring at the facility.

SITE SPECIFIC GWPS

Review of the inorganic Prediction Limits in Table 5, Attachment B to the Groundwater Statistics Report for the Newton Sanitary Landfill, Second Semi-Annual Monitoring Event in 2024, dated October, 2024 (included in Appendix D.2) indicates that the prediction limit for cobalt (currently 6.9 ug/L) calculated from the background data exceeds the published IAC 567, Chapter 137 Statewide Standard (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 limit for Cobalt (6.9 ug/L) is utilized as the Site-Specific GWPS in accordance with 113.10(6)"h"(2).

STATISTICALLY SIGNIFICANT LEVELS

The detections that exceed the current site prediction limits are utilized to calculate the 95% lower confidence limits (LCL) 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.

There are no Statistically Significant Levels (SSL) recorded for either inorganic compounds or organic compounds in the Spring, 2024 or the Fall, 2024 sampling events (Appendix F). The Confidence Intervals (95% LCL and 95% UCL) for inorganic compounds are summarized in Table 1 of Attachment C of the Otter Creek Reports (Appendix D.1 and Appendix D.2). The Confidence Intervals (95% LCL and 95% UCL) for VOC are summarized in Table 2 of Attachment E of the Otter Creek Reports (Appendix D.1 and D.2).

There are no SSL recorded for any data collected since September, 2014 (Appendix F).

MONITORING WELL MAINTENANCE PERFORMANCE EVALUATION

See Appendix A.

CORRECTIVE ACTIONS EVALUATION

See Appendix G.

LEACHATE COLLECTION SYSTEM PERFORMANCE EVALUATION

See Appendix H.

GAS MONITORING EVALUATION

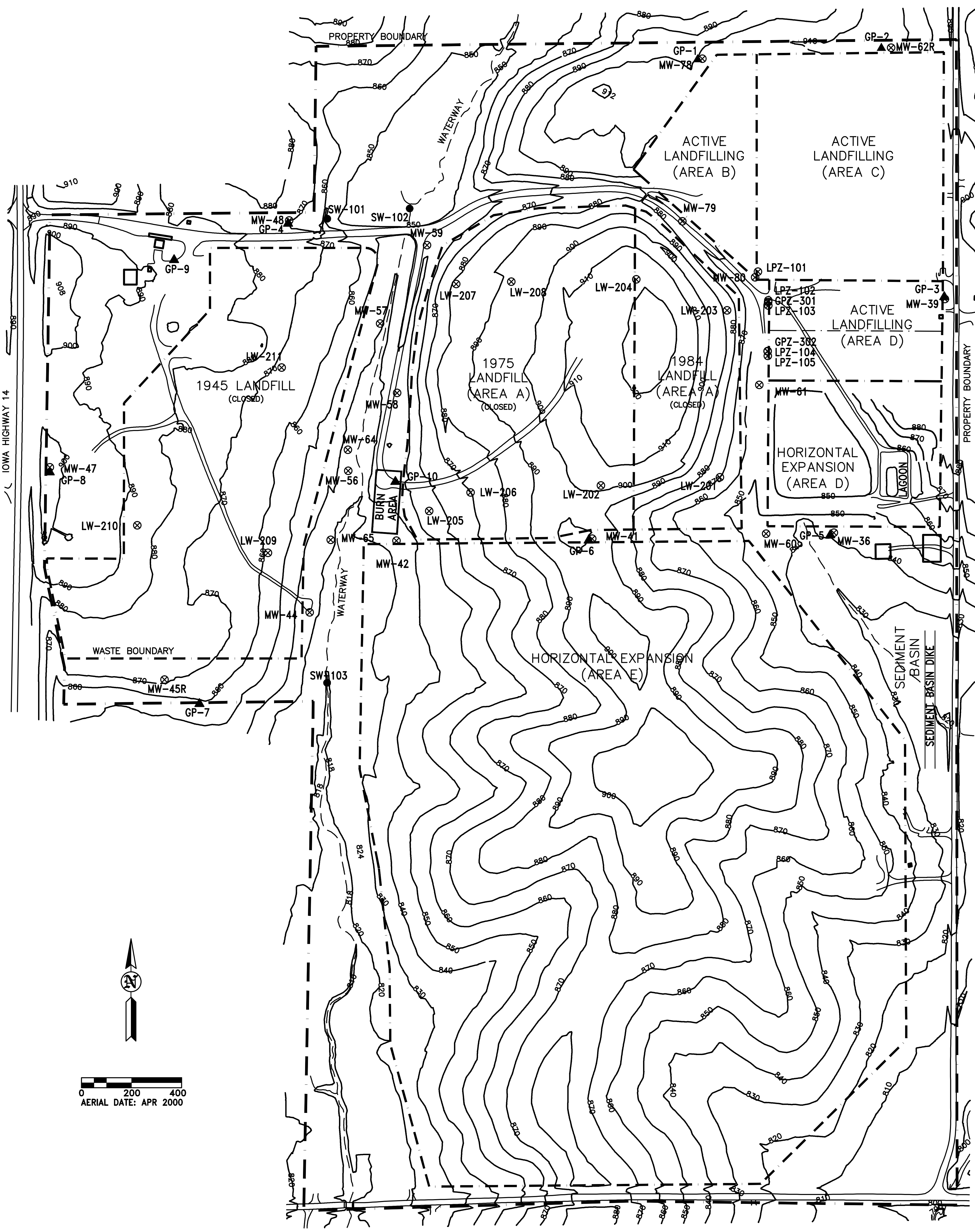
See Appendix I.

Section 4.0 Recommendations

It is recommended that semi-annual detection and assessment monitoring continue in accordance with the approved HMSP.

It is recommended that the prediction limit for Cobalt (6.9 ug/L) is utilized as the Site-Specific GWPS.

Figures



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SITE PLAN (TOTAL PROPERTY)

NEWTON SANITARY LANDFILL
MEWTON, IOWA

FIGURE:	1	
REVISION	NO.	DATE
DRAWN DRA	PROJECT NO. 6002	DATE 10-10-24

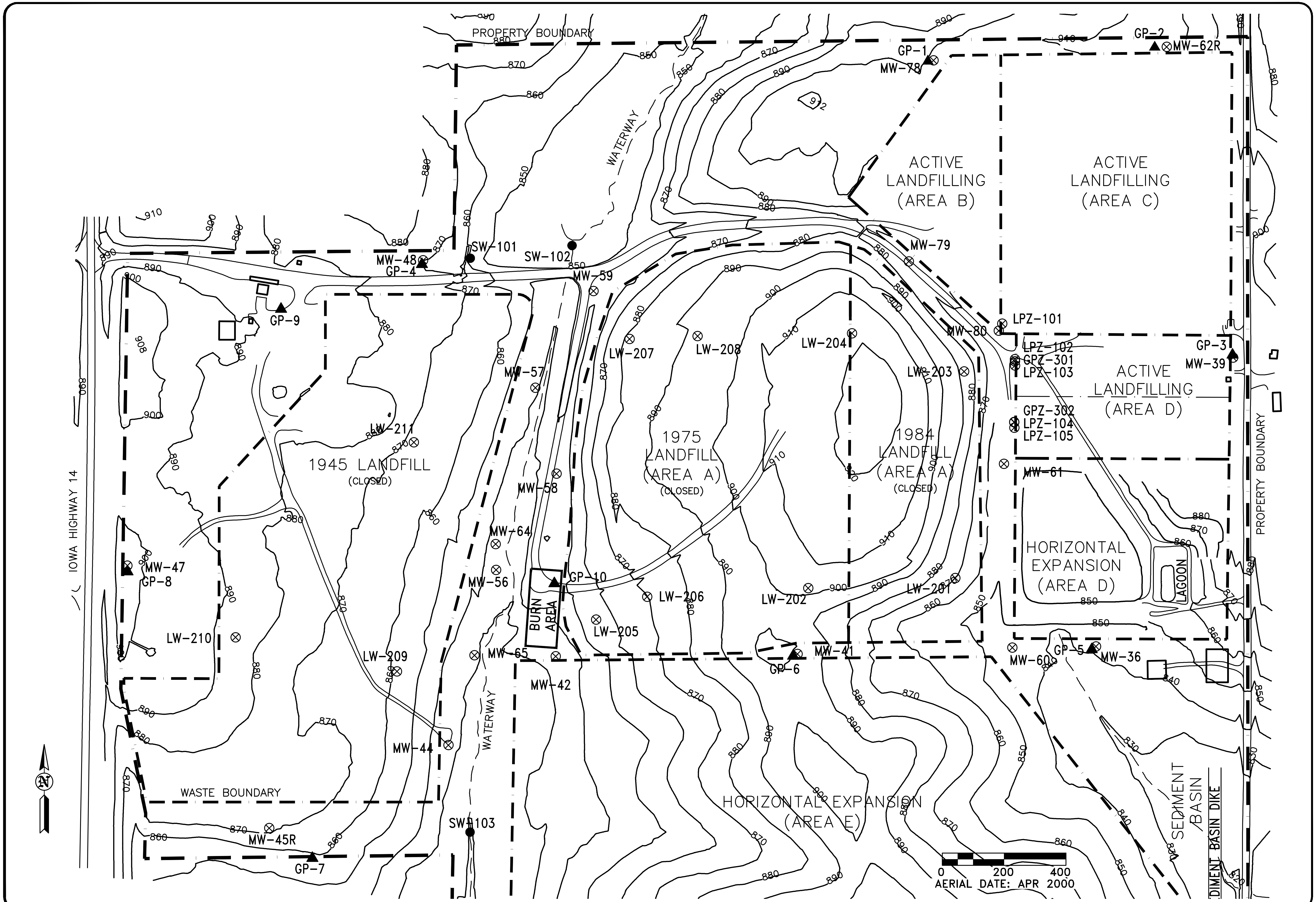

FIGURE: 2

REVISION	NO.	DATE
DRAWN DRA	PROJECT NO. 6002	DATE 10-10-24

SITE PLAN (WASTE AREA)

NEWTON SANITARY LANDFILL
NEWTON, IOWA

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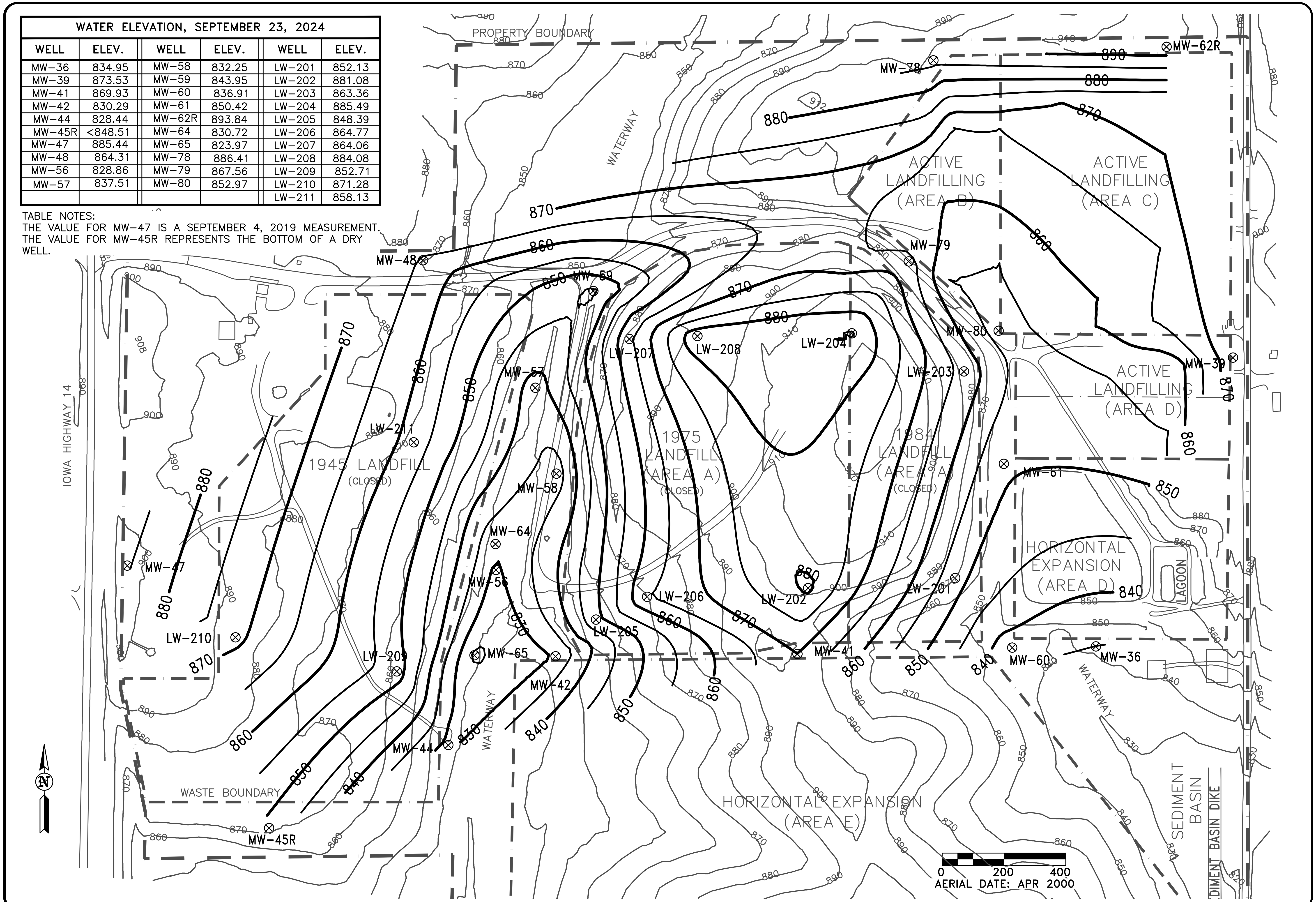
WATER ELEVATION, SEPTEMBER 23, 2024					
WELL	ELEV.	WELL	ELEV.	WELL	ELEV.
MW-36	834.95	MW-58	832.25	LW-201	852.13
MW-39	873.53	MW-59	843.95	LW-202	881.08
MW-41	869.93	MW-60	836.91	LW-203	863.36
MW-42	830.29	MW-61	850.42	LW-204	885.49
MW-44	828.44	MW-62R	893.84	LW-205	848.39
MW-45R	<848.51	MW-64	830.72	LW-206	864.77
MW-47	885.44	MW-65	823.97	LW-207	864.06
MW-48	864.31	MW-78	886.41	LW-208	884.08
MW-56	828.86	MW-79	867.56	LW-209	852.71
MW-57	837.51	MW-80	852.97	LW-210	871.28
				LW-211	858.13

TABLE NOTES:
THE VALUE FOR MW-47 IS A SEPTEMBER 4, 2019 MEASUREMENT.
THE VALUE FOR MW-45R REPRESENTS THE BOTTOM OF A DRY WELL.



GROUNDWATER CONTOURS
NEWTON SANITARY LANDFILL
NEWTON, IOWA

FIGURE: 3

REVISION	NO.	DATE
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Appendix A
Monitoring Well Maintenance and Performance Re-evaluation

MONITORING WELL MAINTENANCE AND PERFORMANCE REEVALUATION

The table below outlines the status of well performance and maintenance activities as required by IAC 567-113.10(2) f.

Years	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Water quality report	X	X	X	X	X	X	X	X	X	X	X
High and low water levels	X	X	X	X	X	X	X	X	X	X	X
Six-month water levels	X	X	X	X	X	X	X	X	X	X	X
Well-depth measurement	X	X	X	X	X	X	X	X	X	X	X
Recharge rates and chemistry		X	X	X	X	X		X		X	

X, completed; O, scheduled.

Years	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Water quality report	X	X	X	X	X	P	P	P	P	P	P
High and low water levels	X	X	X	X	X	P	P	P	P	P	P
Six-month water levels	X	X	X	X	X	P	P	P	P	P	P
Well-depth measurement	X	X	X	X	X	P	P	P	P	P	P
Recharge rates and chemistry	X		X		X		P		P		P

X, completed; O, scheduled.

A complete Monitoring Well Maintenance Performance Reevaluation was submitted to IDNR on May 25, 2011. The 2011 Report concluded that the integrity of all monitoring wells was intact, and that no changes in the HMSP were recommended.

Well depth measurements were made September 23, 2024. Review of the well depth data included on the field sampling forms in Appendix B.2 indicate that well sedimentation is estimated to be less than one (1) foot at all site monitoring wells, except MW-41 and MW-80, where 2.97 ft and 1.5 ft of sedimentation are recorded, respectively.

Monitoring well recharge reevaluation is due biennially according to 113.10(2)f. Biennial reevaluation of recharge for Areas A, B, C, and D was performed March 4, 2024 according to 113.10(2)f. Each well was purged of 2 well volumes following the sampling. Water elevations were collected in the well prior to purging and immediately upon completion of well purging. Water elevations were again recorded in each well approximately 4 to 6 hours following purging.

The 2024 well recovery data indicated that all wells appear to recover to 90% or greater in 4 to 8 hours. The exceptions are MW-39, MW-58, MW-59, and MW-79 which demonstrate recovery rates that require more than 8 hours for full recovery. The well recovery at each well is determined to be sufficient for collection of representative water samples. No changes to the HMSP are recommended based on review of well recharge.

Water level data for the entire site from 1992 through 2024 is summarized in the tables presented in Appendix A.1. Review of the 2024 data does not indicate excessive variability compared to historic water elevation data.

A Water Table Contour Map (Figure 3) dated September 23, 2024 is included in the body of the report. Review of the map confirms control of the water table surface in Area A, Area B, Area C, and Area D. Based on the apparent static condition of the water table across Area A, Area B, Area C, and Area D, it appears that the semi-annual water elevation data is sufficient to adequately monitor the hydrologic condition of the site.

Cell D-1 & D-2 Underdrain Monitoring Results

Groundwater underdrain monitoring points GPZ-301 and GPZ-302 are the respective water level measurement points for Cell D-1 and D-2. Special Provision X.4.j. of the Permit, dated December 20, 2023 (Doc #108517) requires semi-annual measurement of these points to demonstrate that 5.0 feet of separation is maintained between the base of waste and the water table. The 2024 data indicates that more than 5.0 feet of separation is documented. Information recorded for 2024 is summarized:

Point	TOC Elevation MSL	Depth to Water or Dry (ft)	Water Table or Dry Elevation MSL	Liner Elevation MSL	Separation (ft)
3/4/24					
GPZ-301	863.59	12.4	851.19	859.0	7.81
GPZ-302	858.59	9.00	849.59	857.0	7.41
6/3/24					
GPZ-301	863.59	12.4	851.19	859.0	7.81
GPZ-302	858.59	8.80	849.79	857.0	7.21
9/23/24					
GPZ-301	863.59	12.6	850.99	859.0	8.01
GPZ-302	858.59	9.20	849.39	857.0	7.61
12/11/24					
GPZ-301	863.59	12.35	851.24	859.0	7.76
GPZ-302	858.59	9.85	848.74	857.0	8.26

Appendix A.1 - Historic Water Elevation Data

NEWTON SANITARY LANDFILL
50-SDP-1-75P
MONTHLY WATER ELEVATIONS

	MW 48	MW-39	MW-78	MW 62R	MW 41	MW 42	MW 58	MW 59	MW 60	MW-61	MW-36	MW-79	MW-80
TOP PVC, FT.	875.20	911.85	905.08	917.16	901.73	838.40	848.04	853.39	846.18	855.61	845.00	879.09	868.07
(Revised)													
DATE													
6/29/92	864.8			899.19	871.01	828.70	832.55	840.19	835.58	850.21			
12/14/92	869.94			902.06	869.73	829.80	832.90	843.67	837.16	850.81			
1/28/93	869.53			899.57	866.86	828.80	832.62	842.09	836.47	851.06			
3/5/93	869.59			897.75	870.36	828.70	832.80	842.53	837.57	850.78			
9/14/93	869.64			903.82	874.15	830.10	833.52	844.25	839.67	851.23			
3/14/94	868.74			898.90	872.22	828.72	832.74	842.59	836.31	850.11			
9/6/94	864.02			896.06	871.79	827.92	832.14	841.69	835.72	850.71			
3/14/95	867.2			897.61	871.53	829.08	832.46	844.19	836.58	851.41			
9/25/95	863.2			897.18	872.83	827.95	832.24	840.59	835.68	848.41			
03/19/1996	868			897.46	871.13	828.22	832.44	843.94	836.98	849.26			
09/05/1996	864.8			898.36	872.63	828.52	832.18	840.59	835.60	848.34			
01/20/1997	866.28			895.41	871.67	827.78	832.12	844.37	835.91	848.37			
03/12/1997	869.42			895.56	871.31	828.15	832.29	845.37	836.20	849.36			
04/24/1997	869.33			900.83	870.26	828.97	832.58	843.38	838.46	849.24			
05/24/1997	869.09			902.46	869.23	829.50	833.04	842.47	839.10	849.02			
06/27/1997	867			901.38	870.53	829.36	832.67	842.00	838.17	848.87			
07/30/1997	865.57			899.58	872.26	828.95	832.29	841.29	836.00	848.37			
09/10/1997	865			896.66	872.33	828.90	832.14	841.39	835.58	848.16			
01/15/1998	869.35			901.16	872.28	830.00	832.97	842.58	839.25	848.72			
03/25/1998	870.2			906.56	872.63	832.20	833.54	846.54	843.23	849.96			
07/21/1998	868.35			901.10	874.14	829.78	833.42	842.43	837.78	848.87			
08/31/1998	866.23			897.51	873.24	829.85	832.72	841.65	836.14	848.58			
09/08/1998	865.5			897.16	873.13	828.70	832.89	841.21	835.98	848.49			
01/30/1999	865.92			895.29	871.75	827.78	832.26	844.65	836.13	848.43			
03/10/1999	868.95			896.16	871.73	829.30	832.59	845.94	837.40	848.71			
05/30/1999	869.13			905.22	871.44	830.42	833.37	843.72	840.02	848.95			
06/26/1999	868.68			903.44	872.43	829.55	832.89	843.15	837.73	849.03			
07/30/1999	865.03			898.82	872.70	828.71	832.51	840.59	836.14	848.86			
08/30/1999	866.48			897.52	872.66	828.76	832.62	842.22	835.98	848.98			
09/05/1999	856.5			897.36	872.68	828.65	832.59	841.59	835.93	848.93			
03/27/1900	865.22			894.54	867.33	827.40	832.04	841.29	835.73	848.21			
09/14/2000	864.5			896.26	871.08	828.55	832.64	841.19	836.18	849.11			
03/19/2001	870.3			897.71	872.93	831.10	832.74	848.39	839.43	848.81			
08/31/2001	864.35			895.16	872.33	829.20	832.34	840.39	835.88	848.21			
03/19/2002	865.25			894.56	869.98	828.30	832.39	846.39	835.68	848.31			
09/06/2002	864.6			894.56	869.73	828.95	832.44	840.74	836.03	847.41			
03/27/2003	867			894.56	869.03	828.60	832.24	841.49	835.78	848.01			
09/20/2003	863.9			894.61	870.08	828.55	832.42	840.61	836.54	848.43			

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NEWTON SANITARY LANDFILL
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MONTHLY WATER ELEVATIONS

	MW 48	MW-39	MW-78	MW 62R	MW 41	MW 42	MW 58	MW 59	MW 60	MW-61	MW-36	MW-79	MW-80
TOP PVC, FT.	875.20	911.85	905.08	917.16	901.73	838.40	848.04	853.39	846.18	855.61	845.00	879.09	868.07
(Revised)													
DATE													
03/24/2004	870.1			DRY	870.33	831.37	833.24	849.49	840.68	850.71			
09/11/2004	864.7			894.56	871.78	829.05	832.79	841.49	836.38	847.86			
03/02/2005	869.35			894.59	870.52	830.05	833.09	848.29	839.34	849.33			
09/09/2005	863.56			894.59	871.06	828.60	835.33	840.13	836.10	846.73			
11/01/2005	862.82			894.46	867.04	828.03	832.14	839.51	835.78	846.88			
03/09/2006	865.7			894.15	869.19	828.22	832.24	849.30	836.37	850.42			
06/29/2006	NT			NT	NT	NT	NT	NT	NT	NT			
09/01/2006	864.08			894.15	869.65	828.34	832.10	845.52	837.59	847.83			
12/29/2006	NT			NT	NT	NT	NT	NT	NT	NT			
03/27/2007	870.07			894.16	869.92	831.80	833.40	848.87	841.57	850.18			
06/20/2007	NT			NT	NT	NT	NT	NT	NT	NT			
09/24/2007	866			890.69	871.02	829.29	832.64	845.44	836.96	848.35			
12/21/2007	NT	NT		NT	NT	NT	NT	NT	NT	NT			
03/19/2008	870.33	875.49		894.53	870.51	832.26	833.86	849.12	842.22	850.00			
06/09/2008	NT	NT		NT	NT	NT	NT	NT	NT	NT			
09/15/2008	867.3	NT		893.96	871.43	829.60	832.84	847.99	837.43	849.21			
12/22/2008	NT	NT		NT	NT	NT	NT	NT	NT	NT			
03/05/2009	869.1	875.55		894.41	869.88	829.60	833.19	848.64	837.08	849.41			
06/24/2009	NT	NT		NT	NT	NT	NT	NT	NT	NT			
09/12/2009	866.6	890.95		896.38	871.33	830.00	833.29	844.97	839.38	848.26			
12/07/2009	NT	NT		NT	NT	NT	NT	NT	NT	NT			
03/30/2010	869.7	NT		901.96	871.53	832.00	833.79	849.04	841.28	850.01			
06/28/2010	NT	NT		NT	NT	NT	NT	NT	NT	NT			
09/27/2010	869.8	NT		902.36	872.53	832.30	833.94	848.69	841.48	848.21	837.65		
03/23/2011	869.55	876.00	888.98	895.61	869.93	829.15	832.69	849.29	838.18	850.41	836.50	870.14	852.97
09/08/2011	864.45	875.75	885.43	894.76	871.23	829.80	832.54	839.89	836.68	845.21	834.80	868.04	852.22
03/08/2012	865.5	874.00	887.43	891.36	869.68	829.35	832.84	849.24	838.88	850.43	836.10	868.09	852.70
07/18/2012	864.2	NT	NT	NT	NT	830.00	NT	NT	NT	843.46	834.25	NT	851.97
09/24/2012	862.5	873.55	882.88	890.06	869.63	828.90	831.89	837.69	835.98	842.61	833.20	866.19	851.17
03/14/2013	868.45	872.75	887.88	891.56	868.73	830.55	834.34	849.29	839.63	850.31	836.85	867.14	852.92
09/24/2013	862.7	870.95	885.03	893.46	871.03	831.60	832.89	838.24	836.43	844.36	834.30	866.39	852.17
03/24/2014	868.45	872.75	887.88	891.56	868.73	830.55	834.34	849.29	839.63	850.31	836.85	867.14	852.92
09/24/2014	862.7	870.95	885.03	893.46	871.03	831.60	832.89	838.24	836.43	844.36	834.30	866.39	852.17
03/11/2015	869.5	875.25	888.38	897.06	870.13	831.75	833.69	842.69	837.68	849.21	834.90	865.39	852.47
09/17/2015	866.6	874.73	889.65	897.17	871.12	831.60	834.44	842.49	837.78	849.10	835.67	868.08	853.35
03/22/2016	869.35	875.90	891.18	898.82	871.13	833.05	835.14	848.78	840.47	849.80	837.23	866.84	854.20
09/14/2016	865.35	881.93	886.37	893.41	870.43	831.08	833.09	843.99	836.43	849.31	834.80	868.14	852.52
03/23/2017	867.48	876.32	886.28	893.71	869.33	830.13	833.12	845.31	836.78	848.94	834.67	865.98	852.27

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MONTHLY WATER ELEVATIONS

	MW 48	MW-39	MW-78	MW 62R	MW 41	MW 42	MW 58	MW 59	MW 60	MW-61	MW-36	MW-79	MW-80
TOP PVC, FT.	875.20	911.85	905.08	917.16	901.73	838.40	848.04	853.39	846.18	855.61	845.00	879.09	868.07
(Revised)													
DATE													
09/08/2017	863.5	876.20	884.98	892.52	869.87	830.66	832.29	839.04	836.33	848.19	834.16	867.04	852.13
3/19/2018	867.99	875.05	887.27	892.46	868.95	830.52	832.68	848.48	837.75	850.37	835.20	865.61	852.62
9/11/2018	869.68	874.79	893.68	898.55	870.62	831.96	833.90	845.31	842.18	849.85	836.90	868.77	853.72
3/26/2019	869.62	882.89	891.39	898.80	870.08	832.23	834.83	848.66	841.34	850.31	836.15	866.89	853.99
9/4/2019	864.89	875.72	886.96	894.84	870.49	831.30	833.16	839.78	836.73	848.73	835.00	867.62	853.02
3/26/2020	869.3	874.97	893.32	901.51	870.22	833.46	835.93	848.72	842.93	850.64	837.46	867.64	854.92
9/15/2020	864.95	874.45	887.87	894.00	870.42	830.94	832.87	840.61	836.71	849.50	834.72	868.04	853.14
3/2/2021	868.6	873.92	894.84	898.12	869.81	831.70	833.93	849.11	841.46	850.93	837.25	867.49	854.01
9/7/2021	863.87	873.93	885.57	893.89	870.20	830.52	832.58	838.98	836.58	848.05	834.45	867.44	852.90
3/24/2022	868.18	873.47	892.57	897.46	869.27	831.44	833.01	849.02	839.20	851.16	836.45	866.84	853.42
9/1/2022	863.21	873.09	884.88	892.91	869.45	829.82	832.24	838.14	836.43	847.69	833.95	866.80	852.52
3/2/2023	867.6	872.59	891.99	897.18	868.33	830.57	832.67	848.54	838.25	851.00	836.15	867.30	852.90
9/12/2023	863.2	872.66	885.87	893.46	869.12	829.44	832.13	839.03	836.63	848.28	834.51	867.27	852.39
3/4/2024	866.03	872.91	888.83	893.39	868.28	829.45	832.25	844.70	837.82	849.63	834.75	866.24	852.95
9/23/2024	864.31	873.53	886.41	893.84	869.93	830.29	832.25	843.95	836.91	850.42	834.95	867.56	852.97

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Appendix B

Monitoring Activities Information

Appendix B.1 – Summary of All Well Testing Activities

Table B.1 -- Itemized Summary of Hydrologic Monitoring (to date)

WELL	**3/16/08**	**5/28/08**	**7/7/08**	**9/16/08**	**12/22/08**
GWD-1	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I

WELL	**3/5/09**	**9/13/09**	**3/29/10**	**9/28/10**	**12/22/10**
MW-62R (b)				Appendix I	Appendix I
MW-78 (b)					Appendix I
MW-36				Appendix I	Appendix I
MW-79					Appendix I
MW-80					Appendix I
GWD-1	Appendix I	Appendix I	Appendix I	Appendix I	
MW-41				Appendix I	
MW-42				Appendix I	
MW-58				Appendix I	
MW-59				Appendix I	
MW-60				Appendix I	
MW-61				Appendix I	
Duplicate				At MW-42	

WELL	**3/22/11**	**5/17/11**	**7/14/11**	**9/7/11**	**3/9/12**
MW-48 (b)					Appendix I
MW-78 (b)	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
MW-62R	Appendix I	Appendix I		Appendix I	**Appendix II**
MW-36	Appendix I			Appendix I	Appendix I
MW-79	Appendix I			Appendix I	Appendix I
MW-80	Appendix I			Appendix I	Appendix I
GWD-1	Appendix I			Appendix I	Dry
MW-41	Appendix I			Appendix I	**Appendix II**
MW-42	Appendix I			Appendix I	Appendix I
MW-58	Appendix I			Appendix I	**Appendix II**
MW-59	Appendix I			Appendix I	Appendix I
MW-60	Appendix I			Appendix I	Appendix I
MW-61	Appendix I			Appendix I	Appendix I
Duplicate	At MW-62R			At MW-42	At MW-59

WELL	**7/18/12**	**9/25/12**	**3/15/13**	**9/25/13**	**12/19/13**
MW-48 (b)	Appendix I	Appendix I	Appendix I	Appendix I	
MW-78 (b)		Appendix I	Appendix I	Appendix I	
MW-39 (b)		Appendix I	Appendix I	Appendix I	trichlorofluoromethane
MW-62R		**Appendix II**	Appendix I+	Appendix I+	
MW-36	Resample	Appendix I	Appendix I	Appendix I	
MW-79		Appendix I	Appendix I	Appendix I	
MW-80	Resample	Appendix I	**Appendix II**	**Appendix II**	
GWD-1		Appendix I	Not Tested	Not Tested	
MW-41		**Appendix II**	Appendix I+	Appendix I+	
MW-42	Resample	Appendix I	Appendix I	Appendix I	
MW-58		**Appendix II**	Appendix I*	Appendix I*	
MW-59		Appendix I	Appendix I	Appendix I	
MW-60		**Appendix II**	**Appendix II**	Appendix I*	
MW-61	Resample	Appendix I	Appendix I	Appendix I	
Duplicate		At MW-36	At MW-58	At MW-61	

WELL	3/24/14	8/8/14	9/25/14	12/5/14
MW-48 (b)	Appendix I		Appendix I +TSS	Appendix I
MW-78 (b)	Appendix I		Appendix I +TSS	Appendix I
MW-39 (b)	Appendix I		Appendix I +TSS	Appendix I
MW-62R	**Appendix I+**		**Appendix I(+) + TSS**	
MW-36	Appendix I		Appendix I +TSS	
MW-79	Appendix I		Appendix I +TSS	Resample - zn
MW-80	**Appendix I***		**Appendix I* + TSS**	
MW-41	**Appendix I+**		**Appendix I(+) + TSS**	
MW-42	Appendix I		Appendix I +TSS	
MW-58	**Appendix I***		**Appendix I* + TSS**	
MW-59	Appendix I	Resample - zn	Appendix I +TSS	
MW-60	**Appendix I***		**Appendix I* + TSS**	
MW-61	Appendix I	Resample - co	Appendix I +TSS	
Duplicate	At MW-62R		At MW-78	

WELL	3/11/15	6/16/15	9/17/15	12/17/15
MW-48 (b)	Appendix I	Appendix I	Appendix I	
MW-78 (b)	Appendix I	Appendix I	Appendix I	
MW-39 (b)	Appendix I	Appendix I	Appendix I	
MW-62R	**Appendix II**		**Appendix I(+)**	
MW-36	Appendix I		Appendix I	
MW-79	Appendix I		Appendix I	
MW-80	**Appendix II**		**Appendix I***	
MW-41	**Appendix II**		**Appendix I(+)**	
MW-42	Appendix I		Appendix I	
MW-58	**Appendix II**		**Appendix I***	
MW-59	Appendix I		Appendix I	
MW-60	**Appendix II**		**Appendix I***	Resample - ni
MW-61	Appendix I		Appendix I	Resample - cu
Duplicate	At MW-36		At MW-79	

Appendix I+ = Appendix I plus bis(2-ethylhexyl)phthalate (IAC 567-113.10(6)"d"2)
Appendix I* = Appendix I plus no detected Appendix II compounds (IAC 567-113.10(6)"d"2)

WELL	3/22/16	9/14/16	10/31/16
MW-48 (b)	Appendix I	Appendix I	
MW-78 (b)	Appendix I	Appendix I	
MW-39 (b)	Appendix I	Appendix I	
SW-101 (b)	NT	Appendix I	
MW-62R	**Appendix I(+)**	**Appendix I(+)**	
MW-36	Appendix I	Appendix I	
MW-79	Appendix I	Appendix I	
MW-80	**Appendix I***	**Appendix I***	
MW-41	**Appendix I(+)**	**Appendix I(+)**	
MW-42	Appendix I	Appendix I	Resample - co
MW-58	**Appendix I***	**Appendix I***	
MW-59	Appendix I	Appendix I	
MW-60	**Appendix I***	**Appendix I***	
MW-61	Appendix I	Appendix I	Resample - ni
Duplicate	At MW-79	At MW-61	

Appendix I+ = Appendix I plus bis(2-ethylhexyl)phthalate (IAC 567-113.10(6)"d"2)
Appendix I* = Appendix I plus no detected Appendix II compounds (IAC 567-113.10(6)"d"2)

WELL	3/23/17	6/9/17	9/8/17
MW-48 (b)	Appendix I		Appendix I
MW-78 (b)	Appendix I		Appendix I
MW-39 (b)	Appendix I		Appendix I
SW-101 (b)	Appendix I	R – cis-1,2-DCE	Appendix I
MW-62R	Appendix I[1]		Appendix I[1]
MW-36	Appendix I		Appendix I
MW-79	Appendix I		Appendix I
MW-80	Appendix I*		Appendix I*
MW-41	Appendix I[1]		Appendix I[1]
MW-42	Appendix II		Appendix I*
MW-58	Appendix I*		Appendix I*
MW-59	Appendix I		Appendix I
MW-60	Appendix I*		Appendix I*
MW-61	Appendix II		Appendix I*
Duplicate	At MW-36		At MW-41

WELL	3/19/18	6/5/18	9/11/18	12/5/18
MW-48 (b)	Appendix I		Appendix I	
MW-78 (b)	Appendix I		Appendix I	
MW-39 (b)	Appendix I		Appendix I	
SW-101 (b)	Appendix I		Appendix I	
MW-62R	Appendix I*		Appendix I*	
MW-36	Appendix I		Appendix I	
MW-79	Appendix I		Appendix I	
MW-80	Appendix I*		Appendix I*	
MW-41	Appendix I*		Appendix I*	
MW-42	Appendix II		Appendix I[2]	
MW-58	Appendix I*		Appendix I*	R – Cu + Ni
MW-59	Appendix I	R – Cu	Appendix I	R – Cu
MW-60	Appendix I*		Appendix I*	
MW-61	Appendix II		Appendix I*	
Duplicate	At MW-59		At MW-60	

WELL	3/26/19	6/6/19	9/4/19	12/4/19
MW-48 (b)	Appendix I		Appendix I	
MW-78 (b)	Appendix I		Appendix I	
MW-39 (b)	Appendix I		Appendix I	
SW-101 (b)	Appendix I	cis-1,2-DCE	Appendix I	cis-1,2-DCE+vinyl chloride
MW-62R	Appendix I*		Appendix I*	
MW-36	Appendix I		Appendix I	
MW-79	Appendix I		Appendix I	
MW-80	Appendix I*		Appendix I*	
MW-41	Appendix I*		Appendix I*	
MW-42	Appendix I[2]		Appendix I[2]	
MW-58	Appendix I*		Appendix I*	
MW-59	Appendix II	Appendix I[1]	Appendix I[1]	Appendix I[1]
MW-60	Appendix I*		Appendix I*	
MW-61	Appendix I*		Appendix I*	
Duplicate	At MW-48		At MW-61	

Appendix I[1] = Appendix I plus bis(2-ethylhexyl)phthalate (IAC 567-113.10(6)"d"2)
Appendix I[2] = Appendix I plus 2,4,5-T (IAC 567-113.10(6)"d"2)
Appendix I* = Appendix I plus no detected Appendix II compounds (IAC 567-113.10(6)"d"2)

WELL	3/26/20	9/15/2020	3/2/21	9/27/21	3/24/22	6/13/22	8/31/22
MW-48 (b)	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I		Appendix I
MW-78 (b)	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I		Appendix I
MW-39 (b)	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I		Appendix I
MW-62R	**Appendix II**	Appendix I	Appendix I	Appendix I	Appendix I		Appendix I
MW-36	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I		Appendix I
MW-79	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I	TCFM	Appendix I
MW-80	**Appendix II**	Appendix I	Appendix I	Appendix I	Appendix I		Appendix I
MW-41	**Appendix II**	Appendix I(1)	Appendix I	Appendix I	Appendix I		Appendix I
MW-42	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I		Appendix I
MW-58	**Appendix II**	Appendix I(1)	Appendix I	Appendix I	Appendix I		Appendix I
MW-59	**Appendix II**	Appendix I(1)	Appendix I	Appendix I	Appendix I		Appendix I
MW-60	**Appendix II**	Appendix I	Appendix I	Appendix I	Appendix I		Appendix I
MW-61	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I		Appendix I
Duplicate	At MW-79	At MW-60	At MW-62R	At MW-44	At MW-78		At MW-65

Appendix I(1) = Appendix I plus bis(2-ethylhexyl)phthalate (IAC 567-113.10(6)"d"2)
TCFM = Trichlorofluoromethane

WELL	3/02/23	9/12/23	3/4/2024	9/23/2024
MW-48 (b)	Appendix I	Appendix I	Appendix I	Appendix I
MW-78 (b)	Appendix I	Appendix I	Appendix I	Appendix I
MW-39 (b)	Appendix I	Appendix I	Appendix I	Appendix I
MW-62R	Appendix I	Appendix I	Appendix I	Appendix I
MW-36	Appendix I	Appendix I	Appendix I	Appendix I
MW-79	Appendix I	Appendix I	Appendix I	Appendix I
MW-80	Appendix I	Appendix I	Appendix I	Appendix I
MW-41	Appendix I	Appendix I	Appendix I	Appendix I
MW-42	**Appendix II**	Appendix I	Appendix I	Appendix I
MW-58	Appendix I	Appendix I	Appendix I	Appendix I
MW-59	Appendix I	Appendix I	Appendix I	Appendix I
MW-60	Appendix I	Appendix I	Appendix I	Appendix I
MW-61	**Appendix II**	Appendix I	Appendix I	Appendix I
Duplicate	At MW-61	At MW-44	At MW-78	At MW-59

Appendix I(1) = Appendix I plus bis(2-ethylhexyl)phthalate (IAC 567-113.10(6)"d"2)
TCFM = Trichlorofluoromethane

Appendix B.2 - Field Sampling Forms

NEWTON SANITARY LANDFILL
PERMIT # 50-SDP-1-75P **OPERATING LANDFILL**

3/4/2024 Sampled by: T. Whipple Weather conditions: Overcast, windy, 41-48 degrees

IDNR Form 542-1322

Monitoring Well: MW-41 (dg)

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

GENERAL INFORMATION

TOC	901.73
Well Depth	45.07
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	901.73
Well Depth	42.10
Top Screen	866.66
Bottom Screen	856.66
Bottom Well	856.66
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	36.00
Top sample	865.73
Bottom sample	861.73
Turbidity(NTU)	2.71

Date	Time	Water Level	Water Elevation	Notes
3/4/2024	13:38	33.45	868.28	

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		2.71
Appendix I	Metals	150	150		2.71
Appendix I	VOC	240	240		2.71
Full Appendix II	10 more containers	5620		0	
TSS	TSS	1000		0	
Supplemental	Quart Amber	945		0	
Supplemental				0	
Total			400	0	

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

TOC	901.73	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	45.07	Before purging	3/4/2024	13:38	33.45	868.28	2	1.1	Dry
		After purging				901.73			
		Top of Screen 5/1/1990				866.66			
						35.07	feet above (+) or below (-) top screen		
		Bottom of Well 5/1/1990				856.66			
		Bottom of Well	3/4/2024		42.10	859.63			
						2.97	feet sedimentation		
		Before Sampling		13:48	40.50	861.23			
		Recovery		16:00	36.95	864.78			
		Recovery				901.73			
		Recovery				901.73			
		Recovery				901.73			

IDNR Form 542-1322

Monitoring Well: MW-42 (dg)

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

GENERAL INFORMATION

TOC	838.4
Well Depth	27.86
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	838.4
Well Depth	27.00
Top Screen	820.54
Bottom Screen	810.54
Bottom Well	810.54
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	22.00
Top sample	816.40
Bottom sample	812.40
Turbidity(NTU)	3.75

Date	Time	Water Level	Water Elevation	Notes
3/4/2024	13:52	8.95	829.45	

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		3.75
Appendix I	Metals	150	150		3.75
Appendix I	VOC	240	240		3.75
Full Appendix II	10 more containers	5620			
TSS	TSS	1000		0	
Supplemental	2,4,5-T	946			
Supplemental					
Total			400	0	

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

TOC	838.4
Well Depth	27.86

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	3/4/2024	13:52	8.95	829.45	4	1.3	No
After purging				838.40			
Top of Screen 5/1/1990				820.54			
				17.86	feet above (+) or below (-) top screen		
Bottom of Well 5/1/1990				810.54			
Bottom of Well	3/4/2024		27.00	811.40			
				0.86	feet sedimentation		
Before Sampling		14:04	11.30	827.10			
Recovery		16:04	9.19	829.21			
Recovery				838.40			
Recovery				838.40			
Recovery				838.40			

IDNR Form 542-1322

Monitoring Well:	MW-48 (up)
Primary Sampling Method:	No-Purge for Appendix I
Secondary Sampling Method:	Purge & Sample for all analytes beyond Appendix I

GENERAL INFORMATION

TOC	875.2
Well Depth	26.73
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	875.2
Well Depth	25.90
Top Screen	858.47
Bottom Screen	848.57
Bottom Well	848.57
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	20.00
Top sample	855.20
Bottom sample	851.20
Turbidity(NTU)	2.33

Date	Time	Water Level	Water Elevation	Notes
3/4/2024	10:51	9.17	866.03	

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		2.33
Appendix I	Metals	150	150		2.33
Appendix I	VOC	240	240		2.33
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	875.2
Well Depth	26.73

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	3/4/2024	10:51	9.17	866.03	3	1.0	DRY
After purging				875.20			
Top of Screen 5/1/1990				858.47			
				16.73	feet above (+) or below (-) top screen		
Bottom of Well 5/1/1990				848.47			
Bottom of Well	3/4/2024		25.90	849.30			
				0.83	feet sedimentation		
Before Sampling		11:03	22.60	852.60			
Recovery		14:43	9.21	865.99			
Recovery				875.20			
Recovery				875.20			
Recovery				875.20			

IDNR Form 542-1322

Monitoring Well: MW-58

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

GENERAL INFORMATION

TOC	848.04
Well Depth	22.24
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	848.04
Well Depth	22.60
Top Screen	835.80
Bottom Screen	825.80
Bottom Well	825.80
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	16.50
Top sample	831.54
Bottom sample	827.54
Turbidity(NTU)	1.54

Date	Time	Water Level	Water Elevation	Notes
3/4/2024	14:13	15.79	832.25	

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		1.54
Appendix I	Metals	150	150		1.54
Appendix I	VOC	240	240		1.54
Full Appendix II	10 more containers	5620		0	
TSS	TSS	1000		0	
Supplemental				0	
Supplemental				0	
Total			400	0	

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

TOC	848.04	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	22.24	Before purging	3/4/2024	14:13	15.79	832.25	2	1.9	no
		After purging				848.04			
		Top of Screen 5/1/1990				835.80			
						12.24	feet above (+) or below (-) top screen		
		Bottom of Well 5/1/1990				825.80			
		Bottom of Well	3/4/2024		22.60	825.44			
						-0.36	feet sedimentation		
		Before Sampling		14:23	20.10	827.94			
		Recovery		16:06	17.74	830.30			
		Recovery				848.04			
		Recovery				848.04			
		Recovery				848.04			

IDNR Form 542-1322

Monitoring Well: MW-59 (dg)

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

GENERAL INFORMATION

TOC	853.39
Well Depth	18.99
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	853.39
Well Depth	18.80
Top Screen	844.40
Bottom Screen	834.40
Bottom Well	834.40
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	13.00
Top sample	840.39
Bottom sample	836.39
Turbidity(NTU)	1.42

Date	Time	Water Level	Water Elevation	Notes
3/4/2024	14:28	8.69	844.7	

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		1.42
Appendix I	Metals	150	150		1.42
Appendix I	VOC	240	240		1.42
Full Appendix II	10 more containers	5620		0	
TSS	TSS	1000		0	
Supplemental				0	
Supplemental				0	
Total			400	0	

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

TOC	853.39	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	18.99	Before purging	3/4/2024	14:28	8.69	844.70	2.5	1.5	no
		After purging				853.39			
		Top of Screen 5/1/1990				844.40			
						8.99	feet above (+) or below (-) top screen		
		Bottom of Well 5/1/1990				834.40			
		Bottom of Well	3/4/2024		18.80	834.59			
						0.19	feet sedimentation		
		Before Sampling		14:40	14.30	839.09	App I		
		Recovery		16:07	11.25	842.14	App II		
		Recovery				853.39			
		Recovery				853.39			
		Recovery				853.39			

IDNR Form 542-1322

Primary Sampling Method: No-Purge for Appendix I

Monitoring Well: MW-60 (dg) **Secondary Sampling Method:** Purge & Sample for all analytes beyond Appendix I

GENERAL INFORMATION

TOC	846.18
Well Depth	18.28
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	846.18
Well Depth	18.10
Top Screen	837.90
Bottom Screen	827.90
Bottom Well	827.90
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	13.00
Top sample	833.18
Bottom sample	829.18
Turbidity(NTU)	2.32

Date	Time	Water Level	Water Elevation	Notes
3/4/2024	12:29	8.36	837.82	

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		2.32
Appendix I	Metals	150	150		2.32
Appendix I	VOC	240	240		2.32
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	846.18	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	18.28	Before purging	3/4/2024	12:29	8.36	837.82	0	0.0	no
		After purging				846.18			
		Top of Screen 5/1/1990				837.90			
						8.28	feet above (+) or below (-) top screen		
		Bottom of Well 5/1/1990				827.90			
		Bottom of Well	3/4/2024		18.10	828.08			
						0.18	feet sedimentation		
		Before Sampling		12:40	12.40	833.78			
		Recovery		15:58	8.39	837.79			
		Recovery				846.18			
		Recovery				846.18			
		Recovery				846.18			

IDNR Form 542-1322

Monitoring Well:	MW-61 (dg)	Primary Sampling Method:	No-Purge for Appendix I
		Secondary Sampling Method:	Purge & Sample for all analytes beyond Appendix I

GENERAL INFORMATION

TOC	855.61
Well Depth	18.51
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	855.61
Well Depth	18.35
Top Screen	847.10
Bottom Screen	837.10
Bottom Well	837.10
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	13.00
Top sample	842.61
Bottom sample	838.61
Turbidity(NTU)	1.37

Date	Time	Water Level	Water Elevation	Notes
3/4/2024	12:48	5.98	849.63	

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		1.37
Appendix I	Metals	150	150		1.37
Appendix I	VOC	240	240		1.37
Full Appendix II	10 more containers	5620		0	
TSS	TSS	1000		0	
Supplemental				0	
Supplemental				0	
Total			400	0	

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

TOC	855.61	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	18.51	Before purging	3/4/2024	12:48	5.98	849.63	2.5	1.2	
		After purging				855.61			
		Top of Screen 5/1/1990				847.10			
						8.51	feet above (+) or below (-) top screen		
		Bottom of Well 5/1/1990				837.10			
		Bottom of Well	3/4/2024		18.35	837.26			
						0.16	feet sedimentation		
		Before Sampling		12:57	11.70	843.91			
		Recovery		15:40	5.98	849.63			
		Recovery				855.61			
		Recovery				855.61			
		Recovery				855.61			

IDNR Form 542-1322

Monitoring Well: MW-62R (dg)

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

GENERAL INFORMATION

TOC	917.16
Well Depth	38.75
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	917.16
Well Depth	38.30
Top Screen	893.41
Bottom Screen	878.41
Bottom Well	878.41
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	33.00
Top sample	884.16
Bottom sample	880.16
Turbidity(NTU)	2.43

Date	Time	Water Level	Water Elevation	Notes
3/4/2024	11:35	23.77	893.39	

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		2.43
Appendix I	Metals	150	150		2.43
Appendix I	VOC	240	240		2.43
Full Appendix II	10 more containers	5620		0	
TSS	TSS	1000		0	
Supplemental	glass amber	945		0	
Supplemental				0	
Total			400	0	

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

TOC	917.16
Well Depth	38.75

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	3/4/2024	11:35	23.77	893.39	3	1.2	
After purging				917.16			
Top of Screen 5/1/1990				893.41			
				23.75	feet above (+) or below (-) top screen		
Bottom of Well 5/1/1990				878.41			
Bottom of Well	3/4/2024		38.30	878.86			
				0.45	feet sedimentation		
Before Sampling		11:45	29.23	887.93			
Recovery		15:49	23.91	893.25			
Recovery				917.16			
Recovery				917.16			
Recovery				917.16			

IDNR Form 542-1322

Monitoring Well:	MW-36	**Primary Sampling Method:**	No-Purge for Appendix I
		Secondary Sampling Method:	Purge & Sample for all analytes beyond Appendix I

GENERAL INFORMATION

TOC	845
Well Depth	20.35
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	845
Well Depth	20.60
Top Screen	837.00
Bottom Screen	825.00
Bottom Well	825.00
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	15.00
Top sample	830.00
Bottom sample	826.00
Turbidity(NTU)	1.45

Date	Time	Water Level	Water Elevation	Notes
3/4/2024	12:14	10.25	834.75	

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		1.45
Appendix I	Metals	150	150		1.45
Appendix I	VOC	240	240		1.45
Full Appendix II	10 more containers	5620		0	
TSS	TSS	1000		0	
Supplemental				0	
Supplemental				0	
Total			400	0	

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

TOC	845	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	20.35	Before purging	3/4/2024	12:14	10.25	834.75	4	0.6	
		After purging				845.00			
		Top of Screen 5/1/1990				837.00			
						8.00	feet above (+) or below (-) top screen		
		Bottom of Well 5/1/1990				825.00			
		Bottom of Well	3/4/2024		20.60	824.40			
						-0.60	feet sedimentation		
		Before Sampling		12:24	11.10	833.90			
		Recovery		15:56	10.20	834.80			
		Recovery				845.00			
		Recovery				845.00			
		Recovery				845.00			

IDNR Form 542-1322

Monitoring Well: MW-78 (up)

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

GENERAL INFORMATION

TOC	905.08
Well Depth	41.60
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	905.08
Well Depth	41.70
Top Screen	873.48
Bottom Screen	863.48
Bottom Well	863.48
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	35.50
Top sample	869.58
Bottom sample	865.58
Turbidity(NTU)	1.75

Date	Time	Water Level	Water Elevation	Notes
3/4/2024	11:15	16.25	888.83	

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		1.75
Appendix I	Metals	150	150		1.75
Appendix I	VOC	240	240		1.75
Full Appendix II	10 more containers	5620		0	
TSS	TSS	1000		0	
Supplemental				0	
Supplemental				0	
Total			400	0	

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

TOC	905.08	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?	
Well Depth	41.60	Before purging	3/4/2024	11:15	16.25	888.83	3	0.7		
		After purging				905.08				
		Top of Screen 5/1/1990				873.48				
						31.60	feet above (+) or below (-) top screen			
		Bottom of Well 5/1/1990				863.48				
		Bottom of Well	3/4/2024		41.70	863.38				
						-0.10	feet sedimentation			
		Before Sampling		11:25	26.50	878.58				
		Recovery		15:47	18.78	886.30				
		Recovery				905.08				
		Recovery				905.08				
		Recovery				905.08				

IDNR Form 542-1322

Monitoring Well:	MW-79 (dg)	**Primary Sampling Method:**	No-Purge for Appendix I
		Secondary Sampling Method:	Purge & Sample for all analytes beyond Appendix I

GENERAL INFORMATION

TOC	879.09
Well Depth	27.00
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	879.09
Well Depth	27.00
Top Screen	862.09
Bottom Screen	852.09
Bottom Well	852.09
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	21.50
Top sample	857.59
Bottom sample	853.59
Turbidity(NTU)	2.20

Date	Time	Water Level	Water Elevation	Notes
3/4/2024	13:18	12.85	866.24	

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		2.20
Appendix I	Metals	150	150		2.20
Appendix I	VOC	240	240		2.20
Full Appendix II	10 more containers	5620		0	
TSS	TSS	1000		0	
Supplemental				0	
Supplemental				0	
Total			400	0	

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

		2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
TOC	879.09								
Well Depth	27.00	Before purging	3/4/2024	13:18	12.85	866.24	3	1.3	
		After purging				879.09			
		Top of Screen 5/1/1990				862.09			
						17.00	feet above (+) or below (-) top screen		
		Bottom of Well 5/1/1990				852.09			
		Bottom of Well	3/4/2024		27.00	852.09			
						0.00	feet sedimentation		
		Before Sampling		13:27	18.21	860.88			
		Recovery		15:44	17.04	862.05			
		Recovery				879.09			
		Recovery				879.09			
		Recovery				879.09			

IDNR Form 542-1322

Monitoring Well: MW-80 (dg)

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

GENERAL INFORMATION

TOC	868.07
Well Depth	21.50
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	868.07
Well Depth	20.00
Top Screen	856.57
Bottom Screen	846.57
Bottom Well	846.57
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	15.00
Top sample	853.07
Bottom sample	849.07
Turbidity(NTU)	6.01

Date	Time	Water Level	Water Elevation	Notes
3/4/2024	13:03	15.12	852.95	

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		6.01
Appendix I	Metals	150	150		6.01
Appendix I	VOC	240	240		6.01
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	868.07	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	21.50	Before purging	3/4/2024	13:03	15.12	852.95	2.5	2.4	no
		After purging				868.07			
		Top of Screen 5/1/1990				856.57			
						11.50	feet above (+) or below (-) top screen		
		Bottom of Well 5/1/1990				846.57			
		Bottom of Well	3/4/2024		20.00	848.07			
						1.50	feet sedimentation		
		Before Sampling		13:12	16.00	852.07			
		Recovery		15:43	15.14	852.93			
		Recovery				868.07			
		Recovery				868.07			
		Recovery				868.07			

IDNR Form 542-1322

Monitoring Well:	MW-39 (up)
Primary Sampling Method:	No-Purge for Appendix I
Secondary Sampling Method:	Purge & Sample for all analytes beyond Appendix I

GENERAL INFORMATION

TOC	911.85
Well Depth	60.49
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	911.85
Well Depth	59.80
Top Screen	861.36
Bottom Screen	851.36
Bottom Well	851.36
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	52.00
Top sample	859.85
Bottom sample	855.85
Turbidity(NTU)	1.36

Date	Time	Water Level	Water Elevation	Notes
3/4/2024	11:55	38.94	872.91	

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		1.36
Appendix I	Metals	150	150		1.36
Appendix I	VOC	240	240		1.36
Full Appendix II	10 more containers	5620		0	
TSS	TSS	1000		0	
Supplemental				0	
Supplemental				0	
Total			400	0	

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

TOC	911.85	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	60.49	Before purging	3/4/2024	11:55	38.94	872.91	2.5	0.7	
		After purging				911.85			
		Top of Screen 5/1/1990				861.36			
						50.49	feet above (+) or below (-) top screen		
		Bottom of Well 5/1/1990				851.36			
		Bottom of Well	3/4/2024		59.80	852.05			
						0.69	feet sedimentation		
		Before Sampling		12:04	48.90	862.95			
		Recovery		15:52	47.57	864.28			
		Recovery				911.85			
		Recovery				911.85			
		Recovery				911.85			

NEWTON SANITARY LANDFILL
PERMIT # 50-SDP-1-75P **OPERATING LANDFILL**

9/23/2024 Sampled by: T. Whipple Weather conditions: Overcast, calm, 65 degrees

IDNR Form 542-1322

Monitoring Well: MW-41 (dg)

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

GENERAL INFORMATION

TOC	901.73
Well Depth	45.07
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	901.73
Well Depth	42.10
Top Screen	866.66
Bottom Screen	856.66
Bottom Well	856.66
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	36.00
Top sample	865.73
Bottom sample	861.73
Turbidity(NTU)	1.82

Date	Time	Water Level	Water Elevation	Notes
9/23/2024	13:03	31.8	869.93	

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		1.82
Appendix I	Metals	150	150		1.82
Appendix I	VOC	240	240		1.82
Full Appendix II	10 more containers	5620		0	
TSS	TSS	1000		0	
Supplemental	Quart Amber	945		0	
Supplemental				0	
Total			400	0	

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

TOC	901.73	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	45.07	Before purging	9/23/2024	13:03	31.80	869.93		0.0	Dry
		After purging				901.73			
		Top of Screen 5/1/1990				866.66			
						35.07	feet above (+) or below (-) top screen		
		Bottom of Well 5/1/1990				856.66			
		Bottom of Well	9/23/2024		42.10	859.63			
						2.97	feet sedimentation		
		Before Sampling				901.73			
		Recovery				901.73			
		Recovery				901.73			
		Recovery				901.73			
		Recovery				901.73			

IDNR Form 542-1322

Monitoring Well: MW-42 (dg)

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

GENERAL INFORMATION

TOC	838.4
Well Depth	27.86
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	838.4
Well Depth	27.00
Top Screen	820.54
Bottom Screen	810.54
Bottom Well	810.54
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	21.00
Top sample	817.40
Bottom sample	813.40
Turbidity(NTU)	4.22

Date	Time	Water Level	Water Elevation	Notes
9/23/2024	12:49	8.11	830.29	

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		4.22
Appendix I	Metals	150	150		4.22
Appendix I	VOC	240	240		4.22
Full Appendix II	10 more containers	5620			
TSS	TSS	1000		0	
Supplemental	2,4,5-T	946			
Supplemental					
Total			400	0	

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

TOC	838.4	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	27.86	Before purging	9/23/2024	12:49	8.11	830.29		0.0	No
		After purging				838.40			
		Top of Screen 5/1/1990				820.54			
						17.86	feet above (+) or below (-) top screen		
		Bottom of Well 5/1/1990				810.54			
		Bottom of Well	9/23/2024		27.00	811.40			
						0.86	feet sedimentation		
		Before Sampling				838.40			
		Recovery				838.40			
		Recovery				838.40			
		Recovery				838.40			
		Recovery				838.40			

IDNR Form 542-1322

Monitoring Well: MW-48 (up)

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

GENERAL INFORMATION

TOC	875.2
Well Depth	26.73
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	875.2
Well Depth	25.90
Top Screen	858.47
Bottom Screen	848.57
Bottom Well	848.57
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	20.00
Top sample	855.20
Bottom sample	851.20
Turbidity(NTU)	3.07

Date	Time	Water Level	Water Elevation	Notes
9/23/2024	11:36	10.89	864.31	

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		3.07
Appendix I	Metals	150	150		3.07
Appendix I	VOC	240	240		3.07
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	875.2
Well Depth	26.73

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	9/23/2024	11:36	10.89	864.31		0.0	DRY
After purging				875.20			
Top of Screen 5/1/1990				858.47			
				16.73	feet above (+) or below (-) top screen		
Bottom of Well 5/1/1990				848.47			
Bottom of Well	9/23/2024		25.90	849.30			
				0.83	feet sedimentation		
Before Sampling				875.20			
Recovery				875.20			
Recovery				875.20			
Recovery				875.20			
Recovery				875.20			

IDNR Form 542-1322

Monitoring Well: MW-58

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

GENERAL INFORMATION

TOC	848.04
Well Depth	22.24
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	848.04
Well Depth	22.60
Top Screen	835.80
Bottom Screen	825.80
Bottom Well	825.80
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	17.00
Top sample	831.04
Bottom sample	827.04
Turbidity(NTU)	1.98

Date	Time	Water Level	Water Elevation	Notes
9/23/2024	12:34	15.79	832.25	

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		1.98
Appendix I	Metals	150	150		1.98
Appendix I	VOC	240	240		1.98
Full Appendix II	10 more containers	5620		0	
TSS	TSS	1000		0	
Supplemental				0	
Supplemental				0	
Total			400	0	

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

TOC	848.04	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	22.24	Before purging	9/23/2024	12:34	15.79	832.25		0.0	no
		After purging				848.04			
		Top of Screen 5/1/1990				835.80			
						12.24	feet above (+) or below (-) top screen		
		Bottom of Well 5/1/1990				825.80			
		Bottom of Well	9/23/2024		22.60	825.44			
						-0.36	feet sedimentation		
		Before Sampling				848.04			
		Recovery				848.04			
		Recovery				848.04			
		Recovery				848.04			
		Recovery				848.04			

IDNR Form 542-1322

Monitoring Well: MW-59 (dg)

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

GENERAL INFORMATION

TOC	853.39
Well Depth	18.99
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	853.39
Well Depth	18.80
Top Screen	844.40
Bottom Screen	834.40
Bottom Well	834.40
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	13.00
Top sample	840.39
Bottom sample	836.39
Turbidity(NTU)	2.24

Date	Time	Water Level	Water Elevation	Notes
9/23/2024	12:22	9.44	843.95	

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		2.24
Appendix I	Metals	150	150		2.24
Appendix I	VOC	240	240		2.24
Full Appendix II	10 more containers	5620		0	
TSS	TSS	1000		0	
Supplemental				0	
Supplemental				0	
Total			400	0	

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

TOC	853.39	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	18.99	Before purging	9/23/2024	12:22	9.44	843.95		0.0	no
		After purging				853.39			
		Top of Screen 5/1/1990				844.40			
						8.99	feet above (+) or below (-) top screen		
		Bottom of Well 5/1/1990				834.40			
		Bottom of Well	3/4/2024		18.80	834.59			
						0.19	feet sedimentation		
		Before Sampling				853.39	App I		
		Recovery				853.39	App II		
		Recovery				853.39			
		Recovery				853.39			
		Recovery				853.39			

IDNR Form 542-1322

Monitoring Well: MW-60 (dg)

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

GENERAL INFORMATION

TOC	846.18
Well Depth	18.28
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	846.18
Well Depth	18.10
Top Screen	837.90
Bottom Screen	827.90
Bottom Well	827.90
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	13.00
Top sample	833.18
Bottom sample	829.18
Turbidity(NTU)	3.21

Date	Time	Water Level	Water Elevation	Notes
9/23/2024	13:16	9.27	836.91	

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		3.21
Appendix I	Metals	150	150		3.21
Appendix I	VOC	240	240		3.21
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	846.18
Well Depth	18.28

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	9/23/2024	13:16	9.27	836.91		0.0	no
After purging				846.18			
Top of Screen 5/1/1990				837.90			
				8.28	feet above (+) or below (-) top screen		
Bottom of Well 5/1/1990				827.90			
Bottom of Well	3/4/2024		18.10	828.08			
				0.18	feet sedimentation		
Before Sampling				846.18			
Recovery				846.18			
Recovery				846.18			
Recovery				846.18			
Recovery				846.18			

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Monitoring Well: MW-61 (dg)

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

GENERAL INFORMATION

TOC	855.61
Well Depth	18.51
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	855.61
Well Depth	18.35
Top Screen	847.10
Bottom Screen	837.10
Bottom Well	837.10
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	13.00
Top sample	842.61
Bottom sample	838.61
Turbidity(NTU)	3.65

Date	Time	Water Level	Water Elevation	Notes
9/23/2024	14:44	5.19	850.42	

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		3.65
Appendix I	Metals	150	150		3.65
Appendix I	VOC	240	240		3.65
Full Appendix II	10 more containers	5620		0	
TSS	TSS	1000		0	
Supplemental				0	
Supplemental				0	
Total			400	0	

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

TOC	855.61	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	18.51	Before purging	9/23/2024	14:44	5.19	850.42		0.0	
		After purging				855.61			
		Top of Screen 5/1/1990				847.10			
						8.51	feet above (+) or below (-) top screen		
		Bottom of Well 5/1/1990				837.10			
		Bottom of Well	9/23/2024		18.35	837.26			
						0.16	feet sedimentation		
		Before Sampling				855.61			
		Recovery				855.61			
		Recovery				855.61			
		Recovery				855.61			
		Recovery				855.61			

IDNR Form 542-1322

Monitoring Well:	MW-62R (dg)
Primary Sampling Method:	No-Purge for Appendix I
Secondary Sampling Method:	Purge & Sample for all analytes beyond Appendix I

GENERAL INFORMATION

TOC	917.16
Well Depth	38.75
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	917.16
Well Depth	38.30
Top Screen	893.41
Bottom Screen	878.41
Bottom Well	878.41
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	33.00
Top sample	884.16
Bottom sample	880.16
Turbidity(NTU)	2.32

Date	Time	Water Level	Water Elevation	Notes
9/23/2024	13:56	23.32	893.84	

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		2.32
Appendix I	Metals	150	150		2.32
Appendix I	VOC	240	240		2.32
Full Appendix II	10 more containers	5620		0	
TSS	TSS	1000		0	
Supplemental	glass amber	945		0	
Supplemental				0	
Total			400	0	

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

TOC	917.16	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	38.75	Before purging	9/23/2024	13:56	23.32	893.84		0.0	
		After purging				917.16			
		Top of Screen 5/1/1990				893.41			
						23.75	feet above (+) or below (-) top screen		
		Bottom of Well 5/1/1990				878.41			
		Bottom of Well	9/23/2024		38.30	878.86			
						0.45	feet sedimentation		
		Before Sampling				917.16			
		Recovery				917.16			
		Recovery				917.16			
		Recovery				917.16			
		Recovery				917.16			

IDNR Form 542-1322

Monitoring Well: MW-36

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

GENERAL INFORMATION

TOC	845
Well Depth	20.35
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	845
Well Depth	20.60
Top Screen	837.00
Bottom Screen	825.00
Bottom Well	825.00
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	15.00
Top sample	830.00
Bottom sample	826.00
Turbidity(NTU)	1.98

Date	Time	Water Level	Water Elevation	Notes
9/23/2024	13:27	10.05	834.95	

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		1.98
Appendix I	Metals	150	150		1.98
Appendix I	VOC	240	240		1.98
Full Appendix II	10 more containers	5620		0	
TSS	TSS	1000		0	
Supplemental				0	
Supplemental				0	
Total			400	0	

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

TOC	845	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	20.35	Before purging	9/23/2024	13:27	10.05	834.95		0.0	
		After purging				845.00			
		Top of Screen 5/1/1990				837.00			
						8.00	feet above (+) or below (-) top screen		
		Bottom of Well 5/1/1990				825.00			
		Bottom of Well	9/23/2024		20.60	824.40			
						-0.60	feet sedimentation		
		Before Sampling				845.00			
		Recovery				845.00			
		Recovery				845.00			
		Recovery				845.00			
		Recovery				845.00			

IDNR Form 542-1322

Monitoring Well: MW-78 (up)

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

GENERAL INFORMATION

TOC	905.08
Well Depth	41.60
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	905.08
Well Depth	41.70
Top Screen	873.48
Bottom Screen	863.48
Bottom Well	863.48
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	36.00
Top sample	869.08
Bottom sample	865.08
Turbidity(NTU)	1.47

Date	Time	Water Level	Water Elevation	Notes
9/23/2024	14:07	18.67	886.41	

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		1.47
Appendix I	Metals	150	150		1.47
Appendix I	VOC	240	240		1.47
Full Appendix II	10 more containers	5620		0	
TSS	TSS	1000		0	
Supplemental				0	
Supplemental				0	
Total			400	0	

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

TOC	905.08	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	41.60	Before purging	9/23/2024	14:07	18.67	886.41		0.0	
		After purging				905.08			
		Top of Screen 5/1/1990				873.48			
						31.60	feet above (+) or below (-) top screen		
		Bottom of Well 5/1/1990				863.48			
		Bottom of Well	9/23/2024		41.70	863.38			
						-0.10	feet sedimentation		
		Before Sampling				905.08			
		Recovery				905.08			
		Recovery				905.08			
		Recovery				905.08			
		Recovery				905.08			

IDNR Form 542-1322

Monitoring Well: MW-79 (dg)

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

GENERAL INFORMATION

TOC	879.09
Well Depth	27.00
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	879.09
Well Depth	27.00
Top Screen	862.09
Bottom Screen	852.09
Bottom Well	852.09
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	22.00
Top sample	857.09
Bottom sample	853.09
Turbidity(NTU)	1.92

Date	Time	Water Level	Water Elevation	Notes
9/23/2024	14:19	11.53	867.56	

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		1.92
Appendix I	Metals	150	150		1.92
Appendix I	VOC	240	240		1.92
Full Appendix II	10 more containers	5620		0	
TSS	TSS	1000		0	
Supplemental				0	
Supplemental				0	
Total			400	0	

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

TOC	879.09	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	27.00	Before purging	9/23/2024	14:19	11.53	867.56		0.0	
		After purging				879.09			
		Top of Screen 5/1/1990				862.09			
						17.00	feet above (+) or below (-) top screen		
		Bottom of Well 5/1/1990				852.09			
		Bottom of Well	9/23/2024		27.00	852.09			
						0.00	feet sedimentation		
		Before Sampling				879.09			
		Recovery				879.09			
		Recovery				879.09			
		Recovery				879.09			
		Recovery				879.09			

IDNR Form 542-1322

Monitoring Well: MW-80 (dg)

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

GENERAL INFORMATION

TOC	868.07
Well Depth	21.50
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	868.07
Well Depth	20.00
Top Screen	856.57
Bottom Screen	846.57
Bottom Well	846.57
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	15.10
Top sample	852.97
Bottom sample	848.97
Turbidity(NTU)	4.85

Date	Time	Water Level	Water Elevation	Notes
9/23/2024	14:32	15.10	852.97	

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		4.85
Appendix I	Metals	150	150		4.85
Appendix I	VOC	240	240		4.85
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	868.07	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	21.50	Before purging	9/23/2024	14:32	15.10	852.97		0.0	no
		After purging				868.07			
		Top of Screen 5/1/1990				856.57			
						11.50	feet above (+) or below (-) top screen		
		Bottom of Well 5/1/1990				846.57			
		Bottom of Well	9/23/2024		20.00	848.07			
						1.50	feet sedimentation		
		Before Sampling				868.07			
		Recovery				868.07			
		Recovery				868.07			
		Recovery				868.07			
		Recovery				868.07			

IDNR Form 542-1322

Monitoring Well: MW-39 (up)

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

GENERAL INFORMATION

TOC	911.85
Well Depth	60.49
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	911.85
Well Depth	59.80
Top Screen	861.36
Bottom Screen	851.36
Bottom Well	851.36
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	53.00
Top sample	858.85
Bottom sample	854.85
Turbidity(NTU)	1.90

Date	Time	Water Level	Water Elevation	Notes
9/23/2024	13:42	38.32	873.53	

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		1.90
Appendix I	Metals	150	150		1.90
Appendix I	VOC	240	240		1.90
Full Appendix II	10 more containers	5620		0	
TSS	TSS	1000		0	
Supplemental				0	
Supplemental				0	
Total			400	0	

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

TOC	911.85
Well Depth	60.49

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	9/23/2024	13:42	38.32	873.53		0.0	
After purging				911.85			
Top of Screen 5/1/1990				861.36			
				50.49	feet above (+) or below (-) top screen		
Bottom of Well 5/1/1990				851.36			
Bottom of Well	9/23/2024		59.80	852.05			
				0.69	feet sedimentation		
Before Sampling				911.85			
Recovery				911.85			
Recovery				911.85			
Recovery				911.85			
Recovery				911.85			

Appendix C

Summary Tables

Table 1

Analytical Data Summary for MW-36

Constituents	Units	9/24/2014	3/11/2015	9/17/2015	3/22/2016	9/15/2016	3/23/2017	9/8/2017	3/19/2018	9/11/2018
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-dichloroethylene	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 (mek)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	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
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	150.0	127.0	137.0	131.0	138.0	132.0	151.0	126.0	97.3
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
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
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-dichloroethylene	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	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Copper, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
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
Lead, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Methyl iodide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
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	<8
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4	<4	<1	<4	<4	<4	<4	<4	<4
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,2-dichloroethylene	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
Trichloroethylene	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	13.1	<8.0	<8.0	<8.0	<8.0	<8.0	<20.0	<8.0	<8.0

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

Table 1

Analytical Data Summary for MW-36

Constituents	3/26/2019	9/4/2019	3/26/2020	9/15/2020	3/2/2021	9/7/2021	3/24/2022	8/31/2022	3/2/2023	3/28/2023
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-dichloroethylene	<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	<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 (mek)	<5	<5	<5	<5	<5	<5	<10	<10		<10
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5	<5	<5		<5
4-methyl-2-pentanone (mibk)	<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
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2	
Arsenic, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	
Barium, total	137.0	151.0	88.7	149.0	83.7	160.0	119.0	140.0	120.0	
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	
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1		<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1		<1
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-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1		<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1		<1
Cobalt, total	<.8	<.8	<.8	<.4	.8	.4	<.4	<.4	<.4	
Copper, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	
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
Lead, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	
Methyl iodide	<1	<1	<1	<1	<1	<1	<1	<1		<1
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5		<5
Nickel, total	<4.0	<4.0	<4.0	<4.0	<4.0	5.1	<4.0	<4.0	<4.0	
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	
Styrene	<1	<1	<1	<1	<1	<1	<1	<1		<1
Tetrachloroethylene	<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-dichloroethylene	<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
Trichloroethylene	<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	<20.0	<8.0	<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 1

Analytical Data Summary for MW-36

Constituents	9/12/2023	3/4/2024	9/23/2024
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-dichloroethylene	<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 (mek)	<10	<10	<10
2-hexanone (mbk)	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5
Acetone	<10	<10	<10
Acrylonitrile	<5	<5	<5
Antimony, total	<2	<2	<2
Arsenic, total	<4	<4	<4
Barium, total	104.0	128.0	125.0
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	<.8
Carbon disulfide	<1	<1	<1
Carbon tetrachloride	<1	<1	<1
Chlorobenzene	<1	<1	<1
Chloroethane	<1	<1	<1
Chloroform	<1	<1	<1
Chloromethane	<1	<1	<1
Chromium, total	<8	<8	<8
Cis-1,2-dichloroethylene	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1
Cobalt, total	<.4	<.4	<.4
Copper, total	<4	<4	<4
Dibromochloromethane	<1	<1	<1
Dibromomethane	<1	<1	<1
Ethylbenzene	<1	<1	<1
Lead, total	<4	<4	<4
Methyl iodide	<1	<1	<1
Methylene chloride	<5	<5	<5
Nickel, total	<4.0	<4.0	<4.0
Selenium, total	<4	<4	<4
Silver, total	<4	<4	<4
Styrene	<1	<1	<1
Tetrachloroethylene	<1	<1	<1
Thallium, total	<2	<2	<2
Toluene	<1	<1	<1
Trans-1,2-dichloroethylene	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5
Trichloroethylene	<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 2

Analytical Data Summary for MW-39

Constituents	Units	9/24/2014	12/5/2014	3/11/2015	6/16/2015	9/17/2015	3/22/2016	9/15/2016	3/23/2017	9/8/2017
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-dichloroethylene	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 (mek)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	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
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	60.6	139.0	136.0	148.0	128.0	123.0	103.0	129.0	117.0
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
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
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-dichloroethylene	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	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Copper, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
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
Lead, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Methyl iodide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
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
Selenium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	6.4	<4.0	<4.0
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4.0	<4.0	<4.0	<4.0	2.4	<4.0	<4.0	<4.0	<4.0
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,2-dichloroethylene	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
Trichloroethylene	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	<20.0

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

Table 2

Analytical Data Summary for MW-39

Constituents	3/19/2018	9/11/2018	3/26/2019	9/4/2019	3/26/2020	9/15/2020	3/2/2021	9/7/2021	3/24/2022
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-dichloroethylene	<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	<1	<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 (mek)	<5	<5	<5	<5	<5	<5	<5	<5	<10
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<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
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Barium, total	131.0	114.0	121.0	138.0	150.0	136.0	125.0	141.0	137.0
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
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
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-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	<.8	<.8	<.8	<.8	<.8	<.4	.8	<.4	<.4
Copper, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
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
Lead, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Methyl iodide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	<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	<2.0	<2.0
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,2-dichloroethylene	<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
Trichloroethylene	<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	24.6	<8.0	<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 2

Analytical Data Summary for MW-39

Constituents	8/31/2022	3/2/2023	9/12/2023	3/4/2024	9/23/2024
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-dichloroethylene	<1	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<5	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1	<1
2-butanone (mek)	<10	<10	<10	<10	<10
2-hexanone (mbk)	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5
Acetone	<10	<10	<10	<10	<10
Acrylonitrile	<5	<5	<5	<5	<5
Antimony, total	<2	<2	<2	<2	<2
Arsenic, total	<4	<4	<4	<4	<4
Barium, total	132.0	134.0	133.0	128.0	119.0
Benzene	<1	<1	<1	<1	<1
Beryllium, total	<4	<4	<4	<4	<4
Bromochloromethane	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1
Cadmium, total	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1
Chlorobenzene	<1	<1	<1	<1	<1
Chloroethane	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1
Chromium, total	<8	<8	<8	<8	<8
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1
Cobalt, total	.8	<.4	<.4	<.4	<.4
Copper, total	<4	<4	<4	<4	<4
Dibromochloromethane	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1	<1
Lead, total	<4	<4	<4	<4	<4
Methyl iodide	<1	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5	<5
Nickel, total	<4	<4	<4	<4	<4
Selenium, total	<4	<4	<4	<4	<4
Silver, total	<4.0	<4.0	<4.0	<4.0	<4.0
Styrene	<1	<1	<1	<1	<1
Tetrachloroethylene	<1	<1	<1	<1	<1
Thallium, total	<2.0	<2.0	<2.0	<2.0	<2.0
Toluene	<1	<1	<1	<1	<1
Trans-1,2-dichloroethylene	<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
Trichloroethylene	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1
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 3

Analytical Data Summary for MW-41

Constituents	Units	9/24/2014	3/11/2015	9/16/2015	3/22/2016	9/15/2016	3/23/2017	9/8/2017	3/19/2018
(3 4)-methylphenol	ug/L		<8						
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	19.3	23.1	24.9	24.1	26.2	24.4	23.4	26.7
1,1-dichloroethylene	ug/L	<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
1,2,4,5-tetrachlorobenzene	ug/L		<8						
1,2,4-trichlorobenzene	ug/L		<1						
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
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	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
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
1,4-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 (mek)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
2-chloronaphthalene	ug/L		<8						
2-chlorophenol	ug/L		<8						
2-hexanone (mbk)	ug/L	<5	<5	<5	<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-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 (mibk)	ug/L	<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
Acetonitrile	ug/L		<10						
Acetophenone	ug/L		<8						
Acrolein	ug/L		<10						
Acrylonitrile	ug/L	<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						

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

Table 3

Analytical Data Summary for MW-41

Constituents	9/11/2018	3/26/2019	9/4/2019	3/26/2020	9/15/2020	3/2/2021	9/7/2021	3/24/2022	8/31/2022
(3 4)-methylphenol				<8					
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	24.6	24.6	26.3	30.8	25.8	24.5	24.4	25.1	22.0
1,1-dichloroethylene	<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	<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	<1.0	<1.0	<1.0	1.2	<1.0	<1.0	<1.0	<1.0	<1.0
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)									
2,4,5-trichlorophenol				<8					
2,4,6-trichlorophenol				<8					
2,4-d									
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 (mek)	<5	<5	<5	<5	<5	<5	<5	<10	<10
2-chloronaphthalene				<8					
2-chlorophenol				<8					
2-hexanone (mbk)	<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-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 (mibk)	<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				<10					
Acetophenone				<8					
Acrolein				<10					
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5
Aldrin				<.05					
Allyl chloride				<1					
Alpha-bhc				<.05					
Anthracene				<8					

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Table 3

Analytical Data Summary for MW-41

Constituents	3/2/2023	9/12/2023	3/4/2024	9/23/2024
(3 4)-methylphenol				
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	23.9	23.0	19.0	22.0
1,1-dichloroethylene	<1	<1	<1	<1
1,1-dichloropropene				
1,2,3-trichloropropane	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene				
1,2,4-trichlorobenzene				
1,2-dibromo-3-chloropropane	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1
1,2-dichloropropane	1.0	<1.0	<1.0	1.0
1,2-dinitrobenzene				
1,3,5-trinitrobenzene				
1,3-dichlorobenzene				
1,3-dichloropropane				
1,3-dinitrobenzene				
1,4-dichlorobenzene	<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 (mek)	<10	<10	<10	<10
2-chloronaphthalene				
2-chlorophenol				
2-hexanone (mbk)	<5	<5	<5	<5
2-methylnaphthalene				
2-methylphenol (o-cresol)				
2-naphthylamine				
2-nitroaniline				
2-nitrophenol				
3,3´-dichlorobenzidine				
3,3-dimethylbenzidine				
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 (mibk)	<5	<5	<5	<5
4-nitroaniline				
4-nitrophenol				
5-nitro-o-toluidine				
7,12-dimethylbenz [a] anthracene				
Acenaphthene				
Acenaphthylene				
Acetone	<10	<10	<10	<10
Acetonitrile				
Acetophenone				
Acrolein				
Acrylonitrile	<5	<5	<5	<5
Aldrin				
Allyl chloride				
Alpha-bhc				
Anthracene				

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

Table 3

Analytical Data Summary for MW-41

Constituents	Units	9/24/2014	3/11/2015	9/16/2015	3/22/2016	9/15/2016	3/23/2017	9/8/2017	3/19/2018
Antimony, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
Arochlor 1016	ug/L		<.1						
Arochlor 1221	ug/L		<.2						
Arochlor 1232	ug/L		<.2						
Arochlor 1242	ug/L		<.2						
Arochlor 1248	ug/L		<.2						
Arochlor 1254	ug/L		<.1						
Arochlor 1260	ug/L		<.1						
Arsenic, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Azobenzene	ug/L		<8						
Barium, total	ug/L	77.2	80.3	78.3	84.5	79.1	79.5	82.6	80.7
Benzene	ug/L	<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(g,h,i)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
Beta-bhc	ug/L		<.05						
Bis (2-chloroethoxy) methane	ug/L		<8						
Bis(2-chloroethyl) ether	ug/L		<8						
Bis(2-ethylhexyl) phthalate	ug/L	<10	<8	10	<10	<10	<10	<6	
Bis[2-chloroisopropyl]ether	ug/L		<8						
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
Butyl benzyl phthalate	ug/L		<8						
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
Chlordane	ug/L		<.1						
Chlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzilate	ug/L		<8						
Chloroethane	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloroprene	ug/L		<1						
Chromium, total	ug/L	<8	<8	<8	<8	<8	<8	<8	<8
Chrysene	ug/L		<8						
Cis-1,2-dichloroethylene	ug/L	1.4	2.0	2.3	2.5	2.7	2.7	2.2	2.2
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Copper, total	ug/L	<4	<4	<4	<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	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<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 methanesulfonate	ug/L		<8						
Ethylbenzene	ug/L	<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						

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

Table 3

Analytical Data Summary for MW-41

Constituents	9/11/2018	3/26/2019	9/4/2019	3/26/2020	9/15/2020	3/2/2021	9/7/2021	3/24/2022	8/31/2022
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arochlor 1016				<.1					
Arochlor 1221				<.2					
Arochlor 1232				<.2					
Arochlor 1242				<.2					
Arochlor 1248				<.2					
Arochlor 1254				<.1					
Arochlor 1260				<.1					
Arsenic, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Azobenzene				<8					
Barium, total	75.1	84.1	89.6	88.9	85.1	80.9	82.0	84.4	84.2
Benzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Benzo(a)anthracene				<8					
Benzo(a)pyrene				<8					
Benzo(b)fluoranthene				<8					
Benzo(g,h,i)perylene				<8					
Benzo(k)fluoranthene				<8					
Benzyl alcohol				<8					
Beryllium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Beta-bhc				<.05					
Bis (2-chloroethoxy) methane				<8					
Bis(2-chloroethyl) ether				<8					
Bis(2-ethylhexyl) phthalate				8	<6				
Bis[2-chloroisopropyl]ether				<8					
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	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlordane				<.1					
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzilate				<8					
Chloroethane	<1.0	1.1	<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-dichloroethylene	2.6	3.9	3.9	5.3	5.0	4.6	4.9	4.9	4.0
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	<.8	<.8	<.8	<.8	<.4	1.1	<.4	<.4	<.4
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
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 methanesulfonate				<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					
Hexachlorobenzene				<.05					

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

Table 3

Analytical Data Summary for MW-41

Constituents	3/2/2023	9/12/2023	3/4/2024	9/23/2024
Antimony, total	<2	<2	<2	<2
Arochlor 1016				
Arochlor 1221				
Arochlor 1232				
Arochlor 1242				
Arochlor 1248				
Arochlor 1254				
Arochlor 1260				
Arsenic, total	<4	<4	<4	<4
Azobenzene				
Barium, total	69.9	72.9	71.2	69.4
Benzene	<1	<1	<1	<1
Benzo(a)anthracene				
Benzo(a)pyrene				
Benzo(b)fluoranthene				
Benzo(g,h,i)perylene				
Benzo(k)fluoranthene				
Benzyl alcohol				
Beryllium, total	<4	<4	<4	<4
Beta-bhc				
Bis (2-chloroethoxy) methane				
Bis(2-chloroethyl) ether				
Bis(2-ethylhexyl) phthalate				
Bis[2-chloroisopropyl]ether				
Bromochloromethane	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1
Butyl benzyl phthalate				
Cadmium, total	<.8	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1
Chlordane				
Chlorobenzene	<1	<1	<1	<1
Chlorobenzilate				
Chloroethane	<1.0	<1.0	<1.0	<1.0
Chloroform	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1
Chloroprene				
Chromium, total	<8	<8	<8	<8
Chrysene				
Cis-1,2-dichloroethylene	4.1	3.6	2.4	3.1
Cis-1,3-dichloropropene	<1	<1	<1	<1
Cobalt, total	<.4	<.4	<.4	<.4
Copper, total	<4	<4	<4	<4
Cyanide, total				
Delta-bhc				
Diallate				
Dibenzo(a,h)anthracene				
Dibenzofuran				
Dibromochloromethane	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1
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 methanesulfonate				
Ethylbenzene	<1	<1	<1	<1
Famphur				
Fluoranthene				
Fluorene				
Gamma-bhc [lindane]				
Heptachlor				
Heptachlor epoxide				
Hexachlorobenzene				

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

Table 3

Analytical Data Summary for MW-41

Constituents	Units	9/24/2014	3/11/2015	9/16/2015	3/22/2016	9/15/2016	3/23/2017	9/8/2017	3/19/2018
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						
Isobutanol	ug/L		<1000						
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
Mercury, total	ug/L		<.5						
Methacrylonitrile	ug/L		<1						
Methapyrilene	ug/L		<8						
Methoxychlor	ug/L		<.05						
Methyl iodide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
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
Naphthalene	ug/L		<8						
Nickel, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
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,o,o-triethyl phosphorothioate	ug/L		<.4						
O-toluidine	ug/L		<8						
P-(dimethylamino)azobenzene	ug/L		<8						
Parathion	ug/L		<.4						
Pentachlorobenzene	ug/L		<8						
Pentachloronitrobenzene (pcnb)	ug/L		<8						
Pentachlorophenol	ug/L		<8						
Phenacetin	ug/L		<8						
Phenanthrene	ug/L		<8						
Phenol	ug/L		<8						
Phorate	ug/L		<.4						
Pronamide	ug/L		<8						
Propionitrile	ug/L		<10						
Pyrene	ug/L		<8						
Safrole	ug/L		<8						
Selenium, total	ug/L	5.4	5.9	6.1	7.0	5.3	6.6	4.7	<4.0
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Sulfide, total	mg/L		<.1						
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4	<4	<1	<4	<4	<4	<4	<4
Thionazin	ug/L		<.4						
Tin, total	ug/L		<20						
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Toxaphene	ug/L		<.2						
Trans-1,2-dichloroethylene	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
Trichloroethylene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
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	11.2	11.9	8.3	<8.0	12.5	<8.0	<20.0	<8.0

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

Table 3

Analytical Data Summary for MW-41

Constituents	9/11/2018	3/26/2019	9/4/2019	3/26/2020	9/15/2020	3/2/2021	9/7/2021	3/24/2022	8/31/2022
Hexachlorobutadiene				<8					
Hexachlorocyclopentadiene				<8					
Hexachloroethane				<8					
Hexachloropropene				<8					
Indeno(1,2,3-cd)pyrene				<8					
Isobutanol				<1000					
Isodrin				<8					
Isophorone				<8					
Isosafrole				<8					
Kepone				<8					
Lead, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Mercury, total				<.5					
Methacrylonitrile				<1					
Methapyrilene				<8					
Methoxychlor				<.05					
Methyl iodide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methyl methacrylate				<1					
Methyl methanesulfonate				<8					
Methyl parathion				<.4					
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene				<8					
Nickel, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Nitrobenzene				<8					
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,o,o-triethyl phosphorothioate				<.4					
O-toluidine				<8					
P-(dimethylamino)azobenzene				<8					
Parathion				<.4					
Pentachlorobenzene				<8					
Pentachloronitrobenzene (pcnb)				<8					
Pentachlorophenol				<8					
Phenacetin				<8					
Phenanthrene				<8					
Phenol				<8					
Phorate				<.4					
Pronamide				<8					
Propionitrile				<10					
Pyrene				<8					
Safrole				<8					
Selenium, total	4.7	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Silver, total	<8	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfide, total				<.1					
Tetrachloroethylene	1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4	<2	<2	<2	<2	<2	<2	<2	<2
Thionazin				<.4					
Tin, total				<20					
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toxaphene				<.2					
Trans-1,2-dichloroethylene	<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
Trichloroethylene	1.1	<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	<8.0	24.9	<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 3

Analytical Data Summary for MW-41

Constituents	3/2/2023	9/12/2023	3/4/2024	9/23/2024
Hexachlorobutadiene				
Hexachlorocyclopentadiene				
Hexachloroethane				
Hexachloropropene				
Indeno(1,2,3-cd)pyrene				
Isobutanol				
Isodrin				
Isophorone				
Isosafrole				
Kepone				
Lead, total	<4	<4	<4	<4
Mercury, total				
Methacrylonitrile				
Methapyrilene				
Methoxychlor				
Methyl iodide	<1	<1	<1	<1
Methyl methacrylate				
Methyl methanesulfonate				
Methyl parathion				
Methylene chloride	<5	<5	<5	<5
Naphthalene				
Nickel, total	<4	<4	<4	<4
Nitrobenzene				
N-nitrosodiethylamine				
N-nitrosodimethylamine				
N-nitrosodi-n-butylamine				
N-nitroso-di-n-propylamine				
N-nitrosodiphenylamine				
N-nitrosomethylethylamine				
N-nitrosopiperidine				
N-nitrosopyrrolidine				
O,o,o-triethyl phosphorothioate				
O-toluidine				
P-(dimethylamino)azobenzene				
Parathion				
Pentachlorobenzene				
Pentachloronitrobenzene (pcnb)				
Pentachlorophenol				
Phenacetin				
Phenanthrene				
Phenol				
Phorate				
Pronamide				
Propionitrile				
Pyrene				
Safrole				
Selenium, total	<4.0	<4.0	<4.0	<4.0
Silver, total	<4	<4	<4	<4
Styrene	<1	<1	<1	<1
Sulfide, total				
Tetrachloroethylene	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2
Thionazin				
Tin, total				
Toluene	<1	<1	<1	<1
Toxaphene				
Trans-1,2-dichloroethylene	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5
Trichloroethylene	<1.0	<1.0	<1.0	<1.0
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	<20.0	<20.0	<20.0	<20.0

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

Table 4

Analytical Data Summary for MW-42

Constituents	Units	9/24/2014	3/11/2015	3/22/2016	9/15/2016	10/31/2016	3/23/2017	9/8/2017	3/19/2018
(3 4)-methylphenol	ug/L						<8		<8
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-dichloroethylene	ug/L	<1	<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
1,2,4,5-tetrachlorobenzene	ug/L						<8		<8
1,2,4-trichlorobenzene	ug/L						<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
1,2-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
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		5.0
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 (mek)	ug/L	<5	<5	<5	<5		<5	<5	<5
2-Chloroethyl Vinyl Ether	ug/L								
2-chloronaphthalene	ug/L						<8		<8
2-chlorophenol	ug/L						<8		<8
2-hexanone (mbk)	ug/L	<5	<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-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 (mibk)	ug/L	<5	<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	<10
Acetonitrile	ug/L						<10		<10
Acetophenone	ug/L						<8		<8
Acrolein	ug/L						<10		<10
Acrylonitrile	ug/L	<5	<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 4

Analytical Data Summary for MW-42

Constituents	9/11/2018	3/26/2019	9/4/2019	3/26/2020	9/15/2020	3/2/2021	9/7/2021	3/24/2022	8/31/2022
(3 4)-methylphenol									
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-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloropropene									
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene									
1,2,4-trichlorobenzene									
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
1,2-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
1,4-naphthoquinone									
1,4-phenylenediamine									
1-naphthylamine									
2,2-dichloropropane									
2,3,4,6-tetrachlorophenol									
2,4,5-t		<.5	<.5						
2,4,5-tp (silvex)		<.5							
2,4,5-trichlorophenol									
2,4,6-trichlorophenol									
2,4-d		<2							
2,4-dichlorophenol									
2,4-dimethylphenol									
2,4-dinitrophenol									
2,4-dinitrotoluene									
2,6-dichlorophenol									
2,6-dinitrotoluene									
2-acetylaminofluorene									
2-butanone (mek)	<5	<5	<5	<5	<5	<5	<5	<10	<10
2-Chloroethyl Vinyl Ether									
2-chloronaphthalene									
2-chlorophenol									
2-hexanone (mbk)	<5	<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-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 (mibk)	<5	<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	<10	<10	<10	<10	<10	<10	<10	<10
Acetonitrile									
Acetophenone									
Acrolein									
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5
Aldrin									
Allyl chloride									
Alpha-bhc									

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

Table 4

Analytical Data Summary for MW-42

Constituents	3/2/2023	9/12/2023	3/4/2024	9/23/2024
(3 4)-methylphenol	<8			
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-dichloroethylene	<1	<1	<1	<1
1,1-dichloropropene	<1			
1,2,3-trichloropropane	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene	<8			
1,2,4-trichlorobenzene	<1			
1,2-dibromo-3-chloropropane	<1	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1
1,2-dichloropropane	<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
1,4-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 (mek)	<5	<10	<10	<10
2-Chloroethyl Vinyl Ether	<2			
2-chloronaphthalene	<8			
2-chlorophenol	<8			
2-hexanone (mbk)	<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-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 (mibk)	<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
Acetonitrile	<10			
Acetophenone	<8			
Acrolein	<10			
Acrylonitrile	<5	<5	<5	<5
Aldrin	<.05			
Allyl chloride	<1			
Alpha-bhc	<.05			

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

Table 4

Analytical Data Summary for MW-42

Constituents	Units	9/24/2014	3/11/2015	3/22/2016	9/15/2016	10/31/2016	3/23/2017	9/8/2017	3/19/2018
Anthracene	ug/L						<8		<8
Antimony, total	ug/L	<2	<2	<2	<2		<2	<2	<2
Arochlor 1016	ug/L						<.1		<.1
Arochlor 1221	ug/L						<.2		<.2
Arochlor 1232	ug/L						<.2		<.2
Arochlor 1242	ug/L						<.2		<.2
Arochlor 1248	ug/L						<.2		<.2
Arochlor 1254	ug/L						<.1		<.1
Arochlor 1260	ug/L						<.1		<.1
Arsenic, total	ug/L	<4	<4	<4	<4		<4	<4	<4
Azobenzene	ug/L						<8		<8
Barium, total	ug/L	26.1	26.0	24.0	26.6		23.6	25.5	21.3
Benzene	ug/L	<1	<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(g,h,i)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	<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-ethylhexyl) phthalate	ug/L						<8		<6
Bis[2-chloroisopropyl]ether	ug/L						<8		<8
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
Butyl benzyl phthalate	ug/L						<8		<8
Cadmium, total	ug/L	<.8	<.8	<.8	<.8		<.8	<.8	<.8
Carbon disulfide	ug/L	<1	<1	<1	<1		<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1		<1	<1	<1
Chlordane	ug/L						<.1		<.1
Chlorobenzene	ug/L	<1	<1	<1	<1		<1	<1	<1
Chlorobenzilate	ug/L						<8		<8
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
Chloroprene	ug/L						<1		<1
Chromium, total	ug/L	<8	<8	<8	<8		<8	<8	<8
Chrysene	ug/L						<8		<8
Cis-1,2-dichloroethylene	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	1.4	1.6	<.8	4.8	4.8	<.8	4.0	<.8
Copper, total	ug/L	<4	<4	<4	<4		<4	<4	<4
Cyanide, total	mg/L						<.005		<.005
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	<1
Dibromomethane	ug/L	<1	<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 methanesulfonate	ug/L						<8		<8
Ethylbenzene	ug/L	<1	<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

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

Table 4

Analytical Data Summary for MW-42

Constituents	9/11/2018	3/26/2019	9/4/2019	3/26/2020	9/15/2020	3/2/2021	9/7/2021	3/24/2022	8/31/2022
Anthracene									
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arochlor 1016									
Arochlor 1221									
Arochlor 1232									
Arochlor 1242									
Arochlor 1248									
Arochlor 1254									
Arochlor 1260									
Arsenic, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Azobenzene									
Barium, total	21.6	29.3	23.3	27.8	22.3	17.6	20.9	21.0	18.8
Benzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Benzo(a)anthracene									
Benzo(a)pyrene									
Benzo(b)fluoranthene									
Benzo(g,h,i)perylene									
Benzo(k)fluoranthene									
Benzyl alcohol									
Beryllium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Beta-bhc									
Bis (2-chloroethoxy) methane									
Bis(2-chloroethyl) ether									
Bis(2-ethylhexyl) phthalate									
Bis[2-chloroisopropyl]ether									
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									
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlordane									
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzilate									
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
Chloroprene									
Chromium, total	<8	<8	<8	<8	<8	<8	<8	<8	<8
Chrysene									
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	1.7	<.8	4.5	2.1	2.9	.7	1.0	.4	1.5
Copper, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Cyanide, total									
Delta-bhc									
Diallate									
Dibenzo(a,h)anthracene									
Dibenzofuran									
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane									
Dieldrin									
Diethyl phthalate									
Dimethoate									
Dimethylphthalate									
Di-n-butyl phthalate									
Di-n-octyl phthalate									
Dinoseb		<.5							
Diphenylamine									
Disulfoton									
Endosulfan i									
Endosulfan ii									
Endosulfan sulfate									
Endrin									
Endrin aldehyde									
Ethyl methacrylate									
Ethyl methanesulfonate									
Ethylbenzene	<1	<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 4

Analytical Data Summary for MW-42

Constituents	3/2/2023	9/12/2023	3/4/2024	9/23/2024
Anthracene	<8			
Antimony, total	<2	<2	<2	<2
Arochlor 1016	<.1			
Arochlor 1221	<.2			
Arochlor 1232	<.2			
Arochlor 1242	<.2			
Arochlor 1248	<.2			
Arochlor 1254	<.1			
Arochlor 1260	<.1			
Arsenic, total	<4	<4	<4	<4
Azobenzene	<8			
Barium, total	17.3	21.2	19.4	19.3
Benzene	<1	<1	<1	<1
Benzo(a)anthracene	<8			
Benzo(a)pyrene	<8			
Benzo(b)fluoranthene	<8			
Benzo(g,h,i)perylene	<8			
Benzo(k)fluoranthene	<8			
Benzyl alcohol	<8			
Beryllium, total	<4	<4	<4	<4
Beta-bhc	<.05			
Bis (2-chloroethoxy) methane	<8			
Bis(2-chloroethyl) ether	<8			
Bis(2-ethylhexyl) phthalate	6			
Bis[2-chloroisopropyl]ether	<8			
Bromochloromethane	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1
Butyl benzyl phthalate	<8			
Cadmium, total	<.8	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1
Chlordane	<.1			
Chlorobenzene	<1	<1	<1	<1
Chlorobenzilate	<8			
Chloroethane	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1
Chloroprene	<1			
Chromium, total	<8	<8	<8	<8
Chrysene	<8			
Cis-1,2-dichloroethylene	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1
Cobalt, total	.6	4.9	.7	1.6
Copper, total	<4	<4	<4	<4
Cyanide, total	<.005			
Delta-bhc	<.05			
Diallate	<8			
Dibenzo(a,h)anthracene	<8			
Dibenzofuran	<8			
Dibromochloromethane	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<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 methanesulfonate	<8			
Ethylbenzene	<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 4

Analytical Data Summary for MW-42

Constituents	Units	9/24/2014	3/11/2015	3/22/2016	9/15/2016	10/31/2016	3/23/2017	9/8/2017	3/19/2018
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
Isobutanol	ug/L						<1000		<1000
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	<4
Mercury, total	ug/L						<.5		<.5
Methacrylonitrile	ug/L						<1		<1
Methapyrilene	ug/L						<8		<8
Methoxychlor	ug/L						<.05		<.05
Methyl iodide	ug/L	<1	<1	<1	<1		<1	<1	<1
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	<5
Naphthalene	ug/L						<8		<8
Nickel, total	ug/L	4.2	<4.0	<4.0	<4.0		<4.0	<4.0	<4.0
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,o,o-triethyl phosphorothioate	ug/L						<.4		<.4
O-toluidine	ug/L						<8		<8
P-(dimethylamino)azobenzene	ug/L						<8		<8
Parathion	ug/L						<.4		<.4
Pentachlorobenzene	ug/L						<8		<8
Pentachloronitrobenzene (pcnb)	ug/L						<8		<8
Pentachlorophenol	ug/L						<8		<8
Phenacetin	ug/L						<8		<8
Phenanthrene	ug/L						<8		<8
Phenol	ug/L						<8		<8
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	<4
Silver, total	ug/L	<4	<4	<4	<4		<4	<4	<4
Styrene	ug/L	<1	<1	<1	<1		<1	<1	<1
Sulfide, total	mg/L						<.1		<.1
Tetrachloroethylene	ug/L	<1	<1	<1	<1		<1	<1	<1
Thallium, total	ug/L	<4	<4	<4	<4		<4	<4	<4
Thionazin	ug/L						<.4		<.4
Tin, total	ug/L						<20		<20
Toluene	ug/L	<1	<1	<1	<1		<1	<1	<1
Toxaphene	ug/L						<.2		<.2
Trans-1,2-dichloroethylene	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
Trichloroethylene	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
Zinc, total	ug/L	9.6	<8.0	<8.0	<8.0		<8.0	<20.0	<8.0

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

Table 4

Analytical Data Summary for MW-42

Constituents	9/11/2018	3/26/2019	9/4/2019	3/26/2020	9/15/2020	3/2/2021	9/7/2021	3/24/2022	8/31/2022
Hexachlorobenzene									
Hexachlorobutadiene									
Hexachlorocyclopentadiene									
Hexachloroethane									
Hexachloropropene									
Indeno(1,2,3-cd)pyrene									
Isobutanol									
Isodrin									
Isophorone									
Isosafrole									
Kepone									
Lead, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Mercury, total									
Methacrylonitrile									
Methapyrilene									
Methoxychlor									
Methyl iodide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methyl methacrylate									
Methyl methanesulfonate									
Methyl parathion									
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene									
Nickel, total	<4.0	<4.0	<4.0	5.2	<4.0	<4.0	4.6	<4.0	5.0
Nitrobenzene									
N-nitrosodiethylamine									
N-nitrosodimethylamine									
N-nitrosodi-n-butylamine									
N-nitroso-di-n-propylamine									
N-nitrosodiphenylamine									
N-nitrosomethylethylamine									
N-nitrosopiperidine									
N-nitrosopyrrolidine									
O,o,o-triethyl phosphorothioate									
O-toluidine									
P-(dimethylamino)azobenzene									
Parathion									
Pentachlorobenzene									
Pentachloronitrobenzene (pcnb)									
Pentachlorophenol									
Phenacetin									
Phenanthrene									
Phenol									
Phorate									
Pronamide									
Propionitrile									
Pyrene									
Safrole									
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	<8	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfide, total									
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4	<2	<2	<2	<2	<2	<2	<2	<2
Thionazin									
Tin, total									
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toxaphene									
Trans-1,2-dichloroethylene	<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
Trichloroethylene	<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	22.5	<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 4

Analytical Data Summary for MW-42

Constituents	3/2/2023	9/12/2023	3/4/2024	9/23/2024
Hexachlorobenzene	<.05			
Hexachlorobutadiene	<8			
Hexachlorocyclopentadiene	<8			
Hexachloroethane	<8			
Hexachloropropene	<8			
Indeno(1,2,3-cd)pyrene	<8			
Isobutanol	<1000			
Isodrin	<8			
Isophorone	<8			
Isosafrole	<8			
Kepone	<8			
Lead, total	<4	<4	<4	<4
Mercury, total	<.5			
Methacrylonitrile	<1			
Methapyrilene	<8			
Methoxychlor	<.05			
Methyl iodide	<2	<1	<1	<1
Methyl methacrylate	<1			
Methyl methanesulfonate	<8			
Methyl parathion	<.4			
Methylene chloride	<5	<5	<5	<5
Naphthalene	<8			
Nickel, total	<4.0	5.3	<4.0	4.8
Nitrobenzene	<8			
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,o,o-triethyl phosphorothioate	<.4			
O-toluidine	<8			
P-(dimethylamino)azobenzene	<8			
Parathion	<.4			
Pentachlorobenzene	<8			
Pentachloronitrobenzene (pcnb)	<8			
Pentachlorophenol	<8			
Phenacetin	<8			
Phenanthrene	<8			
Phenol	<8			
Phorate	<.4			
Pronamide	<8			
Propionitrile	<10			
Pyrene	<8			
Safrole	<8			
Selenium, total	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4
Styrene	<1	<1	<1	<1
Sulfide, total	<.1			
Tetrachloroethylene	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2
Thionazin	<.4			
Tin, total	<20			
Toluene	<1	<1	<1	<1
Toxaphene	<.2			
Trans-1,2-dichloroethylene	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5
Trichloroethylene	<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	<20.0	<20.0	<20.0	<20.0

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

Table 5

Analytical Data Summary for MW-44

Constituents	Units	9/25/2014	12/5/2014	3/25/2015	9/16/2015	9/14/2016	3/23/2017	9/8/2017	12/5/2017
(3 4)-methylphenol	ug/L								
1,1,1,2-tetrachloroethane	ug/L					<1		<1	
1,1,1-trichloroethane	ug/L					<1		<1	
1,1,2,2-tetrachloroethane	ug/L					<1		<1	
1,1,2-trichloroethane	ug/L					<1		<1	
1,1-dichloroethane	ug/L					<1		<1	
1,1-dichloroethylene	ug/L					<1		<1	
1,1-dichloropropene	ug/L								
1,2,3-trichloropropane	ug/L					<1		<1	
1,2,4,5-tetrachlorobenzene	ug/L								
1,2,4-trichlorobenzene	ug/L								
1,2-dibromo-3-chloropropane	ug/L					<1		<1	
1,2-dibromoethane	ug/L					<1		<1	
1,2-dichlorobenzene	ug/L					<1		<1	
1,2-dichloroethane	ug/L					<1		<1	
1,2-dichloropropane	ug/L					<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	
1,4-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 (mek)	ug/L					<5		<5	
2-chloronaphthalene	ug/L								
2-chlorophenol	ug/L								
2-hexanone (mbk)	ug/L					<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-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 (mibk)	ug/L					<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		20	
Acetonitrile	ug/L								
Acetophenone	ug/L								
Acrolein	ug/L								
Acrylonitrile	ug/L					<5		<5	
Aldrin	ug/L								
Alkalinity as caco3	mg/L	967	776	880	826				
Allyl chloride	ug/L								
Alpha-bhc	ug/L								

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

Table 5

Analytical Data Summary for MW-44

Constituents	3/19/2018	9/11/2018	3/26/2019	9/4/2019	3/26/2020	9/15/2020	3/2/2021	9/7/2021	3/24/2022
(3 4)-methylphenol			<8		<8				
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-dichloroethylene	<1	<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
1,2,4,5-tetrachlorobenzene			<8		<8				
1,2,4-trichlorobenzene			<1		<1				
1,2-dibromo-3-chloropropane	<1	<1	<1	<1	<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
1,2-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
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 (mek)	<5	<5	<5	<5	<5	<5	<5	<5	<10
2-chloronaphthalene			<8		<8				
2-chlorophenol			<8		<8				
2-hexanone (mbk)	<5	<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-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 (mibk)	<5	<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	<10
Acetonitrile			<10		<10				
Acetophenone			<8		<8				
Acrolein			<10		<10				
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5
Aldrin			<.05		<.05				
Alkalinity as caco3									
Allyl chloride			<1		<1				
Alpha-bhc			<.05		<.05				

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

Table 5

Analytical Data Summary for MW-44

Constituents	8/31/2022	3/2/2023	3/28/2023	9/12/2023	3/4/2024	9/23/2024
(3 4)-methylphenol						
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-dichloroethylene	<1		<1	<1	<1	<1
1,1-dichloropropene						
1,2,3-trichloropropane	<1		<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene						
1,2,4-trichlorobenzene						
1,2-dibromo-3-chloropropane	<5		<5	<5	<5	<5
1,2-dibromoethane	<1		<1	<1	<1	<1
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						
1,3,5-trinitrobenzene						
1,3-dichlorobenzene						
1,3-dichloropropane						
1,3-dinitrobenzene						
1,4-dichlorobenzene	<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 (mek)	<10		<10	<10	<10	<10
2-chloronaphthalene						
2-chlorophenol						
2-hexanone (mbk)	<5		<5	<5	<5	<5
2-methylnaphthalene						
2-methylphenol (o-cresol)						
2-naphthylamine						
2-nitroaniline						
2-nitrophenol						
3,3´-dichlorobenzidine						
3,3-dimethylbenzidine						
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 (mibk)	<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
Acetonitrile						
Acetophenone						
Acrolein						
Acrylonitrile	<5		<5	<5	<5	<5
Aldrin						
Alkalinity as caco3						
Allyl chloride						
Alpha-bhc						

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

Table 5

Analytical Data Summary for MW-44

Constituents	Units	9/25/2014	12/5/2014	3/25/2015	9/16/2015	9/14/2016	3/23/2017	9/8/2017	12/5/2017
Anthracene	ug/L								
Antimony, total	ug/L					<2		<2	
Arochlor 1016	ug/L								
Arochlor 1221	ug/L								
Arochlor 1232	ug/L								
Arochlor 1242	ug/L								
Arochlor 1248	ug/L								
Arochlor 1254	ug/L								
Arochlor 1260	ug/L								
Arsenic, total	ug/L					<4.0		5.6	<4.0
Azobenzene	ug/L								
Barium, total	ug/L					129		130	
Benzene	ug/L					<1		<1	
Benzo(a)anthracene	ug/L								
Benzo(a)pyrene	ug/L								
Benzo(b)fluoranthene	ug/L								
Benzo(g,h,i)perylene	ug/L								
Benzo(k)fluoranthene	ug/L								
Benzyl alcohol	ug/L								
Beryllium, total	ug/L					<4		<4	
Beta-bhc	ug/L								
Bicarbonate, as caco3	mg/L	967	776	880	826				
Bis (2-chloroethoxy) methane	ug/L								
Bis(2-chloroethyl) ether	ug/L								
Bis(2-ethylhexyl) phthalate	ug/L								
Bis[2-chloroisopropyl]ether	ug/L								
Bromochloromethane	ug/L					<1		<1	
Bromodichloromethane	ug/L					<1		<1	
Bromoform	ug/L					<1		<1	
Bromomethane	ug/L					<1		<1	
Butyl benzyl phthalate	ug/L								
Cadmium, total	ug/L					<.8		<.8	
Calcium, total	mg/L	212 *	193 *	173 *	166 *				
Carbon disulfide	ug/L					<1		<1	
Carbon tetrachloride	ug/L					<1		<1	
Chemical oxygen demand	mg/L	63 *	260 *	43 *	39 *		34		
Chlordane	ug/L								
Chloride	mg/L	53.2 *	50.7 *	44.0 *	33.0 *		28.0		
Chlorobenzene	ug/L					<1		<1	
Chlorobenzilate	ug/L								
Chloroethane	ug/L					<1		<1	
Chloroform	ug/L					<1		<1	
Chloromethane	ug/L					<1		<1	
Chloroprene	ug/L								
Chromium, total	ug/L					<8		<8	
Chrysene	ug/L								
Cis-1,2-dichloroethylene	ug/L					<1		<1	
Cis-1,3-dichloropropene	ug/L					<1		<1	
Cobalt, total	ug/L					6.3		7.3	8.7
Copper, total	ug/L					<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					<1		<1	
Dibromomethane	ug/L					<1		<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 methanesulfonate	ug/L								
Ethylbenzene	ug/L					<1		<1	
Famphur	ug/L								
Fluoranthene	ug/L								

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

Table 5

Analytical Data Summary for MW-44

Constituents	3/19/2018	9/11/2018	3/26/2019	9/4/2019	3/26/2020	9/15/2020	3/2/2021	9/7/2021	3/24/2022
Anthracene			<8		<8				
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arochlor 1016			<.1		<.1				
Arochlor 1221			<.2		<.2				
Arochlor 1232			<.2		<.2				
Arochlor 1242			<.2		<.2				
Arochlor 1248			<.2		<.2				
Arochlor 1254			<.1		<.1				
Arochlor 1260			<.1		<.1				
Arsenic, total	<4.0	<4.0	6.6	7.9	<4.0	13.1	<4.0	9.4	7.6
Azobenzene			<8		<8				
Barium, total	109	120	135	128	126	269	110	144	134
Benzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Benzo(a)anthracene			<8		<8				
Benzo(a)pyrene			<8		<8				
Benzo(b)fluoranthene			<8		<8				
Benzo(g,h,i)perylene			<8		<8				
Benzo(k)fluoranthene			<8		<8				
Benzyl alcohol			<8		<8				
Beryllium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Beta-bhc			<.05		<.05				
Bicarbonate, as caco3									
Bis (2-chloroethoxy) methane			<8		<8				
Bis(2-chloroethyl) ether			<8		<8				
Bis(2-ethylhexyl) phthalate			<6		<6				
Bis[2-chloroisopropyl]ether			<8		<8				
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		<8				
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									
Chlordane			<.1		<.1				
Chloride									
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzilate			<8		<8				
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
Chloroprene			<1		<1				
Chromium, total	<8	<8	<8	<8	<8	<8	<8	<8	<8
Chrysene			<8		<8				
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	8.9	8.4	10.2	8.7	9.2	14.5	8.8	8.1	11.0
Copper, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
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	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
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 methanesulfonate			<8		<8				
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Famphur			<.4		<.4				
Fluoranthene			<8		<8				

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

Table 5

Analytical Data Summary for MW-44

Constituents	8/31/2022	3/2/2023	3/28/2023	9/12/2023	3/4/2024	9/23/2024
Anthracene						
Antimony, total	<2	<2		<2	<2	<2
Arochlor 1016						
Arochlor 1221						
Arochlor 1232						
Arochlor 1242						
Arochlor 1248						
Arochlor 1254						
Arochlor 1260						
Arsenic, total	10.0	<4.0		10.8	4.1	11.9
Azobenzene						
Barium, total	173	121		175	126	142
Benzene	<1		<1	<1	<1	<1
Benzo(a)anthracene						
Benzo(a)pyrene						
Benzo(b)fluoranthene						
Benzo(g,h,i)perylene						
Benzo(k)fluoranthene						
Benzyl alcohol						
Beryllium, total	<4	<4		<4	<4	<4
Beta-bhc						
Bicarbonate, as caco3						
Bis (2-chloroethoxy) methane						
Bis(2-chloroethyl) ether						
Bis(2-ethylhexyl) phthalate						
Bis[2-chloroisopropyl]ether						
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						
Cadmium, total	<.8	<.8		<.8	<.8	<.8
Calcium, total						
Carbon disulfide	<1		<1	<1	<1	<1
Carbon tetrachloride	<1		<1	<1	<1	<1
Chemical oxygen demand						
Chlordane						
Chloride						
Chlorobenzene	<1		<1	<1	<1	<1
Chlorobenzilate						
Chloroethane	<1		<1	<1	<1	<1
Chloroform	<1		<1	<1	<1	<1
Chloromethane	<1		<1	<1	<1	<1
Chloroprene						
Chromium, total	<8	<8		<8	<8	<8
Chrysene						
Cis-1,2-dichloroethylene	<1		<1	<1	<1	<1
Cis-1,3-dichloropropene	<1		<1	<1	<1	<1
Cobalt, total	11.6	8.8		10.7	9.7	10.3
Copper, total	<4	<4		<4	<4	<4
Cyanide, total						
Delta-bhc						
Diallate						
Dibenzo(a,h)anthracene						
Dibenzofuran						
Dibromochloromethane	<1		<1	<1	<1	<1
Dibromomethane	<1		<1	<1	<1	<1
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 methanesulfonate						
Ethylbenzene	<1		<1	<1	<1	<1
Famphur						
Fluoranthene						

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

Table 5

Analytical Data Summary for MW-44

Constituents	Units	9/25/2014	12/5/2014	3/25/2015	9/16/2015	9/14/2016	3/23/2017	9/8/2017	12/5/2017
Fluorene	ug/L								
Gamma-bhc [lindane]	ug/L								
Heptachlor	ug/L								
Heptachlor epoxide	ug/L								
Hexachlorobenzene	ug/L								
Hexachlorobutadiene	ug/L								
Hexachlorocyclopentadiene	ug/L								
Hexachloroethane	ug/L								
Hexachloropropene	ug/L								
Indeno(1,2,3-cd)pyrene	ug/L								
Iron, dissolved	ug/L	2110		2570	2810		1860		
Isobutanol	ug/L								
Isodrin	ug/L								
Isophorone	ug/L								
Isosafrole	ug/L								
Kepone	ug/L								
Lead, total	ug/L					<4		<4	
Magnesium, total	mg/L	92.8 *	73.6 *	74.2 *	65.8 *				
Mercury, total	ug/L								
Methacrylonitrile	ug/L								
Methapyrilene	ug/L								
Methoxychlor	ug/L								
Methyl iodide	ug/L					<1		<1	
Methyl methacrylate	ug/L								
Methyl methanesulfonate	ug/L								
Methyl parathion	ug/L								
Methylene chloride	ug/L					<5		<5	
Naphthalene	ug/L								
Nickel, total	ug/L					17.3		16.0	
Nitrobenzene	ug/L								
Nitrogen, ammonia	mg/L	21.7 *	21.0 *	13.6 *	13.8 *		13.8		
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,o,o-triethyl phosphorothioate	ug/L								
O-toluidine	ug/L								
P-(dimethylamino)azobenzene	ug/L								
Parathion	ug/L								
Pentachlorobenzene	ug/L								
Pentachloronitrobenzene (pcnb)	ug/L								
Pentachlorophenol	ug/L								
pH	S.U.	7.4		7.6	7.1				
Phenacetin	ug/L								
Phenanthrene	ug/L								
Phenol	ug/L								
Phenols, total	mg/L	<.1			<.1				
Phorate	ug/L								
Potassium, total	mg/L	30.3 *	22.8 *	20.8 *	20.8 *				
Pronamide	ug/L								
Propionitrile	ug/L								
Pyrene	ug/L								
Safrole	ug/L								
Selenium, total	ug/L					<4		<4	
Silver, total	ug/L					<4		<4	
Sodium, total	mg/L	128 *	140 *	137 *	133 *				
Solids, total dissolved	mg/L	1190 *	1200 *	736 *	1110 *				
Specific conductance	umhos/cm	1528		1644	1218				
Styrene	ug/L					<1		<1	
Sulfate	mg/L	227 *	212 *	179 *	157 *				
Sulfide, total	mg/L								
Tetrachloroethylene	ug/L					<1		<1	
Thallium, total	ug/L					<4		<4	
Thionazin	ug/L								
Tin, total	ug/L								
Toluene	ug/L					<1		<1	
Total organic halogens (tox)	mg/L	.103			.057				
Toxaphene	ug/L								
Trans-1,2-dichloroethylene	ug/L					<1		<1	
Trans-1,3-dichloropropene	ug/L					<1		<1	
Trans-1,4-dichloro-2-butene	ug/L					<5		<5	
Trichloroethylene	ug/L					<1		<1	
Trichlorofluoromethane	ug/L					<1		<1	

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

Table 5

Analytical Data Summary for MW-44

Constituents	3/19/2018	9/11/2018	3/26/2019	9/4/2019	3/26/2020	9/15/2020	3/2/2021	9/7/2021	3/24/2022
Fluorene			<8		<8				
Gamma-bhc [lindane]			<.05		<.05				
Heptachlor			<.05		<.05				
Heptachlor epoxide			<.05		<.05				
Hexachlorobenzene			<.05		<.05				
Hexachlorobutadiene			<8		<8				
Hexachlorocyclopentadiene			<8		<8				
Hexachloroethane			<8		<8				
Hexachloropropene			<8		<8				
Indeno(1,2,3-cd)pyrene			<8		<8				
Iron, dissolved									
Isobutanol			<1000		<1000				
Isodrin			<8		<8				
Isophorone			<8		<8				
Isosafrole			<8		<8				
Kepone			<8		<8				
Lead, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Magnesium, total									
Mercury, total			<.5		<.5				
Methacrylonitrile			<1		<1				
Methapyrilene			<8		<8				
Methoxychlor			<.05		<.05				
Methyl iodide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methyl methacrylate			<1		<1				
Methyl methanesulfonate			<8		<8				
Methyl parathion			<.4		<.4				
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene			<8		<8				
Nickel, total	12.7	12.8	11.9	11.7	13.2	26.2	9.7	13.2	12.2
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,o,o-triethyl phosphorothioate			<.4		<.4				
O-toluidine			<8		<8				
P-(dimethylamino)azobenzene			<8		<8				
Parathion			<.4		<.4				
Pentachlorobenzene			<8		<8				
Pentachloronitrobenzene (pcnb)			<8		<8				
Pentachlorophenol			<8		<8				
pH									
Phenacetin			<8		<8				
Phenanthrene			<8		<8				
Phenol			<8		<8				
Phenols, total									
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	<4
Silver, total	<4	<8	<4	<4	<4	<4	<4	<4	<4
Sodium, total									
Solids, total dissolved									
Specific conductance									
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfate									
Sulfide, total			<.1		<.1				
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4	<4	<2	<2	<2	<2	<2	<2	<2
Thionazin			<.4		<.4				
Tin, total			<20		<20				
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total organic halogens (tox)									
Toxaphene			<.2		<.2				
Trans-1,2-dichloroethylene	<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
Trichloroethylene	<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 5

Analytical Data Summary for MW-44

Constituents	8/31/2022	3/2/2023	3/28/2023	9/12/2023	3/4/2024	9/23/2024
Fluorene						
Gamma-bhc [lindane]						
Heptachlor						
Heptachlor epoxide						
Hexachlorobenzene						
Hexachlorobutadiene						
Hexachlorocyclopentadiene						
Hexachloroethane						
Hexachloropropene						
Indeno(1,2,3-cd)pyrene						
Iron, dissolved						
Isobutanol						
Isodrin						
Isophorone						
Isosafrole						
Kepone						
Lead, total	<4	<4		<4	<4	<4
Magnesium, total						
Mercury, total						
Methacrylonitrile						
Methapyrilene						
Methoxychlor						
Methyl iodide	<1		<1	<1	<1	<1
Methyl methacrylate						
Methyl methanesulfonate						
Methyl parathion						
Methylene chloride	<5		<5	<5	<5	<5
Naphthalene						
Nickel, total	13.5	10.0		13.2	10.0	10.9
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,o,o-triethyl phosphorothioate						
O-toluidine						
P-(dimethylamino)azobenzene						
Parathion						
Pentachlorobenzene						
Pentachloronitrobenzene (pcnb)						
Pentachlorophenol						
pH						
Phenacetin						
Phenanthrene						
Phenol						
Phenols, total						
Phorate						
Potassium, total						
Pronamide						
Propionitrile						
Pyrene						
Safrole						
Selenium, total	<4	<4		<4	<4	<4
Silver, total	<4	<4		<4	<4	<4
Sodium, total						
Solids, total dissolved						
Specific conductance						
Styrene	<1		<1	<1	<1	<1
Sulfate						
Sulfide, total						
Tetrachloroethylene	<1		<1	<1	<1	<1
Thallium, total	<2	<2		<2	<2	<2
Thionazin						
Tin, total						
Toluene	<1		<1	<1	<1	<1
Total organic halogens (tox)						
Toxaphene						
Trans-1,2-dichloroethylene	<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
Trichloroethylene	<1		<1	<1	<1	<1
Trichlorofluoromethane	<1		<1	<1	<1	<1

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

Table 5

Analytical Data Summary for MW-44

Constituents	Units	9/25/2014	12/5/2014	3/25/2015	9/16/2015	9/14/2016	3/23/2017	9/8/2017	12/5/2017
Vanadium, total	ug/L					<20		<20	
Vinyl acetate	ug/L					<5		<5	
Vinyl chloride	ug/L					<1		<1	
Xylenes, total	ug/L					<2		<2	
Zinc, total	ug/L					<8.0		<8.0	

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

Table 5

Analytical Data Summary for MW-44

Constituents	3/19/2018	9/11/2018	3/26/2019	9/4/2019	3/26/2020	9/15/2020	3/2/2021	9/7/2021	3/24/2022
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	<8.0	32.8	<8.0	<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 5

Analytical Data Summary for MW-44

Constituents	8/31/2022	3/2/2023	3/28/2023	9/12/2023	3/4/2024	9/23/2024
Vanadium, total	<20	<20		<20	<20	<20
Vinyl acetate	<5		<5	<5	<5	<5
Vinyl chloride	<1		<1	<1	<1	<1
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 6

Analytical Data Summary for MW-45

Constituents	Units	9/25/2014	12/5/2014	3/25/2015	9/16/2015	9/14/2016	3/23/2017	9/8/2017	3/19/2018
(3 4)-methylphenol	ug/L								
1,1,1,2-tetrachloroethane	ug/L					<1		<1	<1
1,1,1-trichloroethane	ug/L					<1		<1	<1
1,1,2,2-tetrachloroethane	ug/L					<1		<1	<1
1,1,2-trichloroethane	ug/L					<1		<1	<1
1,1-dichloroethane	ug/L					<1		<1	<1
1,1-dichloroethylene	ug/L					<1		<1	<1
1,1-dichloropropene	ug/L								
1,2,3-trichloropropane	ug/L					<1		<1	<1
1,2,4,5-tetrachlorobenzene	ug/L								
1,2,4-trichlorobenzene	ug/L								
1,2-dibromo-3-chloropropane	ug/L					<1		<1	<1
1,2-dibromoethane	ug/L					<1		<1	<1
1,2-dichlorobenzene	ug/L					<1		<1	<1
1,2-dichloroethane	ug/L					<1		<1	<1
1,2-dichloropropane	ug/L					<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
1,4-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 (mek)	ug/L					<5		<5	<5
2-chloronaphthalene	ug/L								
2-chlorophenol	ug/L								
2-hexanone (mbk)	ug/L					<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-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 (mibk)	ug/L					<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					<10.0		<10.0	<10.0
Acetonitrile	ug/L								
Acetophenone	ug/L								
Acrolein	ug/L								
Acrylonitrile	ug/L					<5		<5	<5
Aldrin	ug/L								
Alkalinity as caco3	mg/L		766	826	830				
Allyl chloride	ug/L								
Alpha-bhc	ug/L								

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

Table 6

Analytical Data Summary for MW-45

Constituents	9/11/2018	3/26/2019	9/4/2019	3/26/2020	9/15/2020	12/3/2020	3/2/2021
(3 4)-methylphenol				<8			
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-dichloroethylene	<1	<1	<1	<1	<1		<1
1,1-dichloropropene				<1			
1,2,3-trichloropropane	<1	<1	<1	<1	<1		<1
1,2,4,5-tetrachlorobenzene				<8			
1,2,4-trichlorobenzene				<1			
1,2-dibromo-3-chloropropane	<1	<1	<1	<5	<5		<5
1,2-dibromoethane	<1	<1	<1	<1	<1		<1
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				<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
1,4-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 (mek)	<5	<5	<5	<5	<5		<5
2-chloronaphthalene				<8			
2-chlorophenol				<8			
2-hexanone (mbk)	<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-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 (mibk)	<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		21.1
Acetonitrile				<10			
Acetophenone				<8			
Acrolein				<10			
Acrylonitrile	<5	<5	<5	<5	<5		<5
Aldrin				<.05			
Alkalinity as caco3							
Allyl chloride				<1			
Alpha-bhc				<.05			

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

Table 6

Analytical Data Summary for MW-45

Constituents	Units	9/25/2014	12/5/2014	3/25/2015	9/16/2015	9/14/2016	3/23/2017	9/8/2017	3/19/2018
Anthracene	ug/L								
Antimony, total	ug/L					<2		<2	<2
Arochlor 1016	ug/L								
Arochlor 1221	ug/L								
Arochlor 1232	ug/L								
Arochlor 1242	ug/L								
Arochlor 1248	ug/L								
Arochlor 1254	ug/L								
Arochlor 1260	ug/L								
Arsenic, total	ug/L					<4		<4	<4
Azobenzene	ug/L								
Barium, total	ug/L					41.8		36.4	40.3
Benzene	ug/L					<1		<1	<1
Benzo(a)anthracene	ug/L								
Benzo(a)pyrene	ug/L								
Benzo(b)fluoranthene	ug/L								
Benzo(g,h,i)perylene	ug/L								
Benzo(k)fluoranthene	ug/L								
Benzyl alcohol	ug/L								
Beryllium, total	ug/L					<4		<4	<4
Beta-bhc	ug/L								
Bicarbonate, as caco3	mg/L		766	826	830				
Bis (2-chloroethoxy) methane	ug/L								
Bis(2-chloroethyl) ether	ug/L								
Bis(2-ethylhexyl) phthalate	ug/L								
Bis[2-chloroisopropyl]ether	ug/L								
Bromochloromethane	ug/L					<1		<1	<1
Bromodichloromethane	ug/L					<1		<1	<1
Bromoform	ug/L					<1		<1	<1
Bromomethane	ug/L					<1		<1	<1
Butyl benzyl phthalate	ug/L								
Cadmium, total	ug/L					<.8		<.8	<.8
Calcium, total	mg/L		302 *	288 *	256 *				
Carbon disulfide	ug/L					<1		<1	<1
Carbon tetrachloride	ug/L					<1		<1	<1
Chemical oxygen demand	mg/L	49 *	501 *	67 *	23 *		28		
Chlordane	ug/L								
Chloride	mg/L	383 *	298 *	349 *	325 *		355		
Chlorobenzene	ug/L					<1		<1	<1
Chlorobenzilate	ug/L								
Chloroethane	ug/L					<1		<1	<1
Chloroform	ug/L					<1		<1	<1
Chloromethane	ug/L					<1		<1	<1
Chloroprene	ug/L								
Chromium, total	ug/L					<8		<8	<8
Chrysene	ug/L								
Cis-1,2-dichloroethylene	ug/L					<1		<1	<1
Cis-1,3-dichloropropene	ug/L					<1		<1	<1
Cobalt, total	ug/L					8.0		7.8	8.7
Copper, total	ug/L					<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					<1		<1	<1
Dibromomethane	ug/L					<1		<1	<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 methanesulfonate	ug/L								
Ethylbenzene	ug/L					<1		<1	<1
Famphur	ug/L								
Fluoranthene	ug/L								

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

Table 6

Analytical Data Summary for MW-45

Constituents	9/11/2018	3/26/2019	9/4/2019	3/26/2020	9/15/2020	12/3/2020	3/2/2021
Anthracene				<8			
Antimony, total	<2	<2	<2	<2	<2		
Arochlor 1016				<.1			
Arochlor 1221				<.2			
Arochlor 1232				<.2			
Arochlor 1242				<.2			
Arochlor 1248				<.2			
Arochlor 1254				<.1			
Arochlor 1260				<.1			
Arsenic, total	<4	<4	<4	<4	<4		
Azobenzene				<8			
Barium, total	33.3	53.8	35.2	36.6	26.5		
Benzene	<1	<1	<1	<1	<1		<1
Benzo(a)anthracene				<8			
Benzo(a)pyrene				<8			
Benzo(b)fluoranthene				<8			
Benzo(g,h,i)perylene				<8			
Benzo(k)fluoranthene				<8			
Benzyl alcohol				<8			
Beryllium, total	<4	<4	<4	<4	<4		
Beta-bhc				<.05			
Bicarbonate, as caco3							
Bis (2-chloroethoxy) methane				<8			
Bis(2-chloroethyl) ether				<8			
Bis(2-ethylhexyl) phthalate				<6			
Bis[2-chloroisopropyl]ether				<8			
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				<8			
Cadmium, total	<.8	<.8	<.8	<.8	<.8		
Calcium, total							
Carbon disulfide	<1	<1	<1	<1	<1		<1
Carbon tetrachloride	<1	<1	<1	<1	<1		<1
Chemical oxygen demand							
Chlordane				<.1			
Chloride							
Chlorobenzene	<1	<1	<1	<1	<1		<1
Chlorobenzilate				<8			
Chloroethane	<1	<1	<1	<1	<1		<1
Chloroform	<1	<1	<1	<1	<1		<1
Chloromethane	<1	<1	<1	<1	<1		<1
Chloroprene				<1			
Chromium, total	<8	<8	<8	<8	<8		
Chrysene				<8			
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1		<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1		<1
Cobalt, total	6.6	8.3	7.4	8.0	7.4	6.4	
Copper, total	<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
Dibromomethane	<1	<1	<1	<1	<1		<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 methanesulfonate				<8			
Ethylbenzene	<1	<1	<1	<1	<1		<1
Famphur				<.4			
Fluoranthene				<8			

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

Table 6

Analytical Data Summary for MW-45

Constituents	Units	9/25/2014	12/5/2014	3/25/2015	9/16/2015	9/14/2016	3/23/2017	9/8/2017	3/19/2018
Fluorene	ug/L								
Gamma-bhc [lindane]	ug/L								
Heptachlor	ug/L								
Heptachlor epoxide	ug/L								
Hexachlorobenzene	ug/L								
Hexachlorobutadiene	ug/L								
Hexachlorocyclopentadiene	ug/L								
Hexachloroethane	ug/L								
Hexachloropropene	ug/L								
Indeno(1,2,3-cd)pyrene	ug/L								
Iron, dissolved	ug/L	<100		<100	<100		<100		
Isobutanol	ug/L								
Isodrin	ug/L								
Isophorone	ug/L								
Isosafrole	ug/L								
Kepone	ug/L								
Lead, total	ug/L					<4		<4	<4
Magnesium, total	mg/L		152 *	158 *	138 *				
Mercury, total	ug/L								
Methacrylonitrile	ug/L								
Methapyrilene	ug/L								
Methoxychlor	ug/L								
Methyl iodide	ug/L					<1		<1	<1
Methyl methacrylate	ug/L								
Methyl methanesulfonate	ug/L								
Methyl parathion	ug/L								
Methylene chloride	ug/L					<5		<5	<5
Naphthalene	ug/L								
Nickel, total	ug/L					5.3		4.5	4.1
Nitrobenzene	ug/L								
Nitrogen, ammonia	mg/L	21.2 *	<1.0 *	<1.0 *	<1.0 *		<1.0		
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,o,o-triethyl phosphorothioate	ug/L								
O-toluidine	ug/L								
P-(dimethylamino)azobenzene	ug/L								
Parathion	ug/L								
Pentachlorobenzene	ug/L								
Pentachloronitrobenzene (pcnb)	ug/L								
Pentachlorophenol	ug/L								
pH	S.U.	7.6		7.5	7.4				
Phenacetin	ug/L								
Phenanthrene	ug/L								
Phenol	ug/L								
Phenols, total	mg/L	<.1			<.1				
Phorate	ug/L								
Potassium, total	mg/L		1.7 *	8.0 *	2.7 *				
Pronamide	ug/L								
Propionitrile	ug/L								
Pyrene	ug/L								
Safrole	ug/L								
Selenium, total	ug/L					<4		<4	<4
Silver, total	ug/L					<4		<4	<4
Sodium, total	mg/L		325 *	353 *	333 *				
Solids, total dissolved	mg/L		2550 *	1760 *	2480 *				
Specific conductance	umhos/cm	3208		3510	1891				
Styrene	ug/L					<1		<1	<1
Sulfate	mg/L		597 *	787 *	646 *				
Sulfide, total	mg/L								
Tetrachloroethylene	ug/L					<1		<1	<1
Thallium, total	ug/L					<4		<4	<4
Thionazin	ug/L								
Tin, total	ug/L								
Toluene	ug/L					<1		<1	<1
Total organic halogens (tox)	mg/L	.079			.084				
Toxaphene	ug/L								
Trans-1,2-dichloroethylene	ug/L					<1		<1	<1
Trans-1,3-dichloropropene	ug/L					<1		<1	<1
Trans-1,4-dichloro-2-butene	ug/L					<5		<5	<5
Trichloroethylene	ug/L					<1		<1	<1
Trichlorofluoromethane	ug/L					<1		<1	<1

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

Table 6

Analytical Data Summary for MW-45

Constituents	9/11/2018	3/26/2019	9/4/2019	3/26/2020	9/15/2020	12/3/2020	3/2/2021
Fluorene				<8			
Gamma-bhc [lindane]				<.05			
Heptachlor				<.05			
Heptachlor epoxide				<.05			
Hexachlorobenzene				<.05			
Hexachlorobutadiene				<8			
Hexachlorocyclopentadiene				<8			
Hexachloroethane				<8			
Hexachloropropene				<8			
Indeno(1,2,3-cd)pyrene				<8			
Iron, dissolved							
Isobutanol				<1000			
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 iodide	<1	<1	<1	<1	<1		<1
Methyl methacrylate				<1			
Methyl methanesulfonate				<8			
Methyl parathion				<.4			
Methylene chloride	<5	<5	<5	<5	<5		<5
Naphthalene				<8			
Nickel, total	<4.0	8.1	<4.0	<4.0	4.5		
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,o,o-triethyl phosphorothioate				<.4			
O-toluidine				<8			
P-(dimethylamino)azobenzene				<8			
Parathion				<.4			
Pentachlorobenzene				<8			
Pentachloronitrobenzene (pcnb)				<8			
Pentachlorophenol				<8			
pH							
Phenacetin				<8			
Phenanthrene				<8			
Phenol				<8			
Phenols, total							
Phorate				<.4			
Potassium, total							
Pronamide				<8			
Propionitrile				<10			
Pyrene				<8			
Safrole				<8			
Selenium, total	<4	<4	<4	<4	<4		
Silver, total	<8	<4	<4	<4	<4		
Sodium, total							
Solids, total dissolved							
Specific conductance							
Styrene	<1	<1	<1	<1	<1		<1
Sulfate							
Sulfide, total				<1.5			
Tetrachloroethylene	<1	<1	<1	<1	<1		<1
Thallium, total	<4	<2	<2	<2	<2		
Thionazin				<.4			
Tin, total				<20			
Toluene	<1	<1	<1	<1	<1		<1
Total organic halogens (tox)							
Toxaphene				<.2			
Trans-1,2-dichloroethylene	<1	<1	<1	<1	<1		<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1		<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5		<5
Trichloroethylene	<1	<1	<1	<1	<1		<1
Trichlorofluoromethane	<1	<1	<1	<1	<1		<1

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

Table 6

Analytical Data Summary for MW-45

Constituents	Units	9/25/2014	12/5/2014	3/25/2015	9/16/2015	9/14/2016	3/23/2017	9/8/2017	3/19/2018
Vanadium, total	ug/L					<20		<20	<20
Vinyl acetate	ug/L					<5		<5	<5
Vinyl chloride	ug/L					<1		<1	<1
Xylenes, total	ug/L					<2		<2	<2
Zinc, total	ug/L					<8.0		<8.0	<8.0

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

Table 6

Analytical Data Summary for MW-45

Constituents	9/11/2018	3/26/2019	9/4/2019	3/26/2020	9/15/2020	12/3/2020	3/2/2021
Vanadium, total	<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	<8.0	34.6	<8.0	<20.0	<20.0		

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

Table 7

Analytical Data Summary for MW-48

Constituents	Units	9/24/2014	9/25/2014	12/5/2014	3/11/2015	3/25/2015	6/16/2015	9/16/2015	3/22/2016
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-dichloroethylene	ug/L	<1		<1	<1		<1	<1	<1
1,2,3-trichloropropane	ug/L	<1		<1	<1		<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L	<1		<1	<1		<1	<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
1,4-dichlorobenzene	ug/L	<1		<1	<1		<1	<1	<1
2-butanone (mek)	ug/L	<5		<5	<5		<5	<5	<5
2-hexanone (mbk)	ug/L	<5		<5	<5		<5	<5	<5
4-methyl-2-pentanone (mibk)	ug/L	<5		<5	<5		<5	<5	<5
Acetone	ug/L	<10		<10	<10		<10	<10	<10
Acrylonitrile	ug/L	<5		<5	<5		<5	<5	<5
Alkalinity as caco3	mg/L		406			360		366	
Antimony, total	ug/L	<2		<2	<2		<2	<2	<2
Arsenic, total	ug/L	<4		<4	<4		<4	<4	<4
Barium, total	ug/L	181		168	143		161	150	153
Benzene	ug/L	<1		<1	<1		<1	<1	<1
Beryllium, total	ug/L	<4		<4	<4		<4	<4	<4
Bicarbonate, as caco3	mg/L		406			360		366	
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
Cadmium, total	ug/L	<.8		<.8	<.8		<.8	<.8	<.8
Calcium, total	mg/L		92 *			103 *		102 *	
Carbon disulfide	ug/L	<1		<1	<1		<1	<1	<1
Carbon tetrachloride	ug/L	<1		<1	<1		<1	<1	<1
Chemical oxygen demand	mg/L		12 *			11 *		<10 *	
Chloride	mg/L		29.1 *			26.0 *		23.0 *	
Chlorobenzene	ug/L	<1		<1	<1		<1	<1	<1
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
Chromium, total	ug/L	<8		<8	<8		<8	<8	<8
Cis-1,2-dichloroethylene	ug/L	<1		<1	<1		<1	<1	<1
Cis-1,3-dichloropropene	ug/L	<1		<1	<1		<1	<1	<1
Cobalt, total	ug/L	<.8		<.8	<.8		<.8	<.8	<.8
Copper, total	ug/L	<4		<4	<4		<4	<4	<4
Dibromochloromethane	ug/L	<1		<1	<1		<1	<1	<1
Dibromomethane	ug/L	<1		<1	<1		<1	<1	<1
Ethylbenzene	ug/L	<1		<1	<1		<1	<1	<1
Iron, dissolved	ug/L		<100			<100		<100	
Lead, total	ug/L	<4		<4	<4		<4	<4	<4
Magnesium, total	mg/L		42.9 *			50.5 *		45.7 *	
Methyl iodide	ug/L	<1		<1	<1		<1	<1	<1
Methylene chloride	ug/L	<5		<5	<5		<5	<5	<5
Nickel, total	ug/L	<4		<4	<4		<4	<4	<4
Nitrogen, ammonia	mg/L		<1 *			<1 *		<1 *	
pH	S.U.		7.3			7.7		7.6	
Phenols, total	mg/L		<.1					<.1	
Potassium, total	mg/L		<1.0 *			5.3 *		2.2 *	
Selenium, total	ug/L	<4		<4	<4		<4	<4	<4
Silver, total	ug/L	<4		<4	<4		<4	<4	<4
Sodium, total	mg/L		10.8 *			10.3 *		11.3 *	
Solids, total dissolved	mg/L		525 *			481 *		448 *	
Specific conductance	umhos/cm		713			712		683	
Styrene	ug/L	<1		<1	<1		<1	<1	<1
Sulfate	mg/L		30.8 *			28.0 *		20.1 *	
Tetrachloroethylene	ug/L	<1.0		<1.0	<1.0		<1.0	<1.0	<1.0
Thallium, total	ug/L	<4		<4	<4		<4	<4	<4
Toluene	ug/L	<1		<1	<1		<1	<1	<1
Total organic halogens (tox)	mg/L		<.01					.01	
Trans-1,2-dichloroethylene	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
Trichloroethylene	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

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

Table 7

Analytical Data Summary for MW-48

Constituents	9/14/2016	3/23/2017	9/8/2017	3/19/2018	9/11/2018	3/26/2019	9/4/2019	3/26/2020	9/15/2020	3/2/2021
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-dichloroethylene	<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	<1	<1	<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 (mek)	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<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 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	140	146	171	145	151	153	160	156	152	159
Benzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bicarbonate, as caco3										
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	<.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
Chemical oxygen demand		<10								
Chloride		19.0								
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-dichloroethylene	<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	<.8	<.8	<.8	<.8	<.8	<.4	.9
Copper, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
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
Iron, dissolved		<100								
Lead, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Magnesium, total										
Methyl iodide	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Nitrogen, ammonia		<1								
pH										
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										
Specific conductance										
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfate										
Tetrachloroethylene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Thallium, total	<4	<4	<4	<4	<4	<2	<2	<2	<2	<2
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total organic halogens (tox)										
Trans-1,2-dichloroethylene	<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
Trichloroethylene	<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

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

Table 7

Analytical Data Summary for MW-48

Constituents	9/7/2021	3/24/2022	8/31/2022	3/2/2023	9/12/2023	3/4/2024	5/29/2024	9/23/2024
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-dichloroethylene	<1	<1	<1	<1	<1	<1		<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1		<1
1,2-dibromo-3-chloropropane	<5	<5	<5	<5	<5	<5		<5
1,2-dibromoethane	<1	<1	<1	<1	<1	<1		<1
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 (mek)	<5	<10	<10	<10	<10	<10		<10
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5		<5
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5	<5		<5
Acetone	<10	<10	<10	<10	<10	<10		<10
Acrylonitrile	<5	<5	<5	<5	<5	<5		<5
Alkalinity as caco3								
Antimony, total	<2	<2	<2	<2	<2	<2		<2
Arsenic, total	<4	<4	<4	<4	<4	<4		<4
Barium, total	149	143	157	149	168	149		148
Benzene	<1	<1	<1	<1	<1	<1		<1
Beryllium, total	<4	<4	<4	<4	<4	<4		<4
Bicarbonate, as caco3								
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-dichloroethylene	<1	<1	<1	<1	<1	<1		<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1		<1
Cobalt, total	<.4	.4	<.4	<.4	<.4	<.4		<.4
Copper, total	<4	<4	<4	<4	<4	<4		<4
Dibromochloromethane	<1	<1	<1	<1	<1	<1		<1
Dibromomethane	<1	<1	<1	<1	<1	<1		<1
Ethylbenzene	<1	<1	<1	<1	<1	<1		<1
Iron, dissolved								
Lead, total	<4	<4	<4	<4	<4	<4		<4
Magnesium, total								
Methyl iodide	<1	<1	<1	<1	<1	<1		<1
Methylene chloride	<5	<5	<5	<5	<5	<5		<5
Nickel, total	<4	<4	<4	<4	<4	<4		<4
Nitrogen, ammonia								
pH								
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								
Specific conductance								
Styrene	<1	<1	<1	<1	<1	<1		<1
Sulfate								
Tetrachloroethylene	<1.0	<1.0	<1.0	<1.0	<1.0	2.3	<1.0	<1.0
Thallium, total	<2	<2	<2	<2	<2	<2		<2
Toluene	<1	<1	<1	<1	<1	<1		<1
Total organic halogens (tox)								
Trans-1,2-dichloroethylene	<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
Trichloroethylene	<1	<1	<1	<1	<1	<1		<1
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

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

Table 7

Analytical Data Summary for MW-48

Constituents	Units	9/24/2014	9/25/2014	12/5/2014	3/11/2015	3/25/2015	6/16/2015	9/16/2015	3/22/2016
Zinc, total	ug/L	<8.0		<8.0	32.3		<8.0	<8.0	<8.0

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

Table 7

Analytical Data Summary for MW-48

Constituents	9/14/2016	3/23/2017	9/8/2017	3/19/2018	9/11/2018	3/26/2019	9/4/2019	3/26/2020	9/15/2020	3/2/2021
Zinc, total	<8.0	<8.0	<20.0	<8.0	<20.0	<20.0	<8.0	<20.0	<20.0	<20.0

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

Table 7

Analytical Data Summary for MW-48

Constituents	9/7/2021	3/24/2022	8/31/2022	3/2/2023	9/12/2023	3/4/2024	5/29/2024	9/23/2024
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 8

Analytical Data Summary for MW-56

Constituents	Units	9/25/2014	3/25/2015	9/16/2015	9/14/2016	3/23/2017	9/8/2017	12/5/2017	3/19/2018
(3 4)-methylphenol	ug/L				<8				
1,1,1,2-tetrachloroethane	ug/L				<1		<1		<1
1,1,1-trichloroethane	ug/L				<1		<1		<1
1,1,2,2-tetrachloroethane	ug/L				<1		<1		<1
1,1,2-trichloroethane	ug/L				<1		<1		<1
1,1-dichloroethane	ug/L				5.0		10.4		<1.0
1,1-dichloroethylene	ug/L				<1		<1		<1
1,1-dichloropropene	ug/L				<1				
1,2,3-trichloropropane	ug/L				<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				<1		<1		<1
1,2-dibromoethane	ug/L				<1		<1		<1
1,2-dichlorobenzene	ug/L				<1		<1		<1
1,2-dichloroethane	ug/L				<1		<1		<1
1,2-dichloropropane	ug/L				<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
1,4-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 (mek)	ug/L				<5		<5		<5
2-chloronaphthalene	ug/L				<8				
2-chlorophenol	ug/L				<8				
2-hexanone (mbk)	ug/L				<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-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 (mibk)	ug/L				<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
Acetonitrile	ug/L				<10				
Acetophenone	ug/L				<8				
Acrolein	ug/L				<10				
Acrylonitrile	ug/L				<5		<5		<5
Aldrin	ug/L				<.05				
Allyl chloride	ug/L				<1				
Alpha-bhc	ug/L				<.05				
Anthracene	ug/L				<8				

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

Table 8

Analytical Data Summary for MW-56

Constituents	9/11/2018	3/26/2019	9/4/2019	3/26/2020	9/15/2020	3/2/2021	9/7/2021	3/24/2022	8/31/2022
(3 4)-methylphenol							<8		
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	4.7	<1.0	6.9	<1.0	8.4	<1.0	7.4
1,1-dichloroethylene	<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	<1	<1	<5	<5	<5	<1	<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
1,2-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 (mek)	<5	<5	<5	<5	<5	<5	<5	<10	<10
2-chloronaphthalene							<8		
2-chlorophenol							<8		
2-hexanone (mbk)	<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-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 (mibk)	<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							<10		
Acetophenone							<8		
Acrolein							<10		
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5
Aldrin							<.05		
Allyl chloride							<1		
Alpha-bhc							<.05		
Anthracene							<8		

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Table 8

Analytical Data Summary for MW-56

Constituents	3/2/2023	9/12/2023	3/4/2024	9/23/2024
(3 4)-methylphenol				
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	<1.0	4.0	1.7	2.6
1,1-dichloroethylene	<1	<1	<1	<1
1,1-dichloropropene				
1,2,3-trichloropropane	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene				
1,2,4-trichlorobenzene				
1,2-dibromo-3-chloropropane	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1
1,2-dichloropropane	<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
1,4-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 (mek)	<10	<10	<10	<10
2-chloronaphthalene				
2-chlorophenol				
2-hexanone (mbk)	<5	<5	<5	<5
2-methylnaphthalene				
2-methylphenol (o-cresol)				
2-naphthylamine				
2-nitroaniline				
2-nitrophenol				
3,3´-dichlorobenzidine				
3,3-dimethylbenzidine				
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 (mibk)	<5	<5	<5	<5
4-nitroaniline				
4-nitrophenol				
5-nitro-o-toluidine				
7,12-dimethylbenz [a] anthracene				
Acenaphthene				
Acenaphthylene				
Acetone	<10	<10	<10	<10
Acetonitrile				
Acetophenone				
Acrolein				
Acrylonitrile	<5	<5	<5	<5
Aldrin				
Allyl chloride				
Alpha-bhc				
Anthracene				

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

Table 8

Analytical Data Summary for MW-56

Constituents	Units	9/25/2014	3/25/2015	9/16/2015	9/14/2016	3/23/2017	9/8/2017	12/5/2017	3/19/2018
Antimony, total	ug/L				<2		<2		<2
Arochlor 1016	ug/L				<.10				
Arochlor 1221	ug/L				<.20				
Arochlor 1232	ug/L				<.20				
Arochlor 1242	ug/L				<.20				
Arochlor 1248	ug/L				<.20				
Arochlor 1254	ug/L				<.10				
Arochlor 1260	ug/L				<.10				
Arsenic, total	ug/L				<4		<4		<4
Azobenzene	ug/L				<8				
Barium, total	ug/L				30.3		28.9		15.4
Benzene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	1.4		<1.0
Benzo(a)anthracene	ug/L				<8				
Benzo(a)pyrene	ug/L				<8				
Benzo(b)fluoranthene	ug/L				<8				
Benzo(g,h,i)perylene	ug/L				<8				
Benzo(k)fluoranthene	ug/L				<8				
Benzyl alcohol	ug/L				<8				
Beryllium, total	ug/L				<4		<4		<4
Beta-bhc	ug/L				<.05				
Bis (2-chloroethoxy) methane	ug/L				<8				
Bis(2-chloroethyl) ether	ug/L				<8				
Bis(2-ethylhexyl) phthalate	ug/L				<8				
Bis[2-chloroisopropyl]ether	ug/L				<8				
Bromochloromethane	ug/L				<1		<1		<1
Bromodichloromethane	ug/L				<1		<1		<1
Bromoform	ug/L				<1		<1		<1
Bromomethane	ug/L				<1		<1		<1
Butyl benzyl phthalate	ug/L				<8				
Cadmium, total	ug/L				<.8		<.8		<.8
Carbon disulfide	ug/L				<1		<1		<1
Carbon tetrachloride	ug/L				<1		<1		<1
Chemical oxygen demand	mg/L	27 *	40 *	80 *		12			
Chlordane	ug/L				<.1				
Chloride	mg/L	65 *	84 *	42 *		65			
Chlorobenzene	ug/L	<1	<1	<1	<1	<1	<1		<1
Chlorobenzilate	ug/L				<8				
Chloroethane	ug/L				<1		<1		<1
Chloroform	ug/L				<1		<1		<1
Chloromethane	ug/L				<1		<1		<1
Chloroprene	ug/L				<1				
Chromium, total	ug/L				<8		<8		<8
Chrysene	ug/L				<8				
Cis-1,2-dichloroethylene	ug/L				<1		<1		<1
Cis-1,3-dichloropropene	ug/L				<1		<1		<1
Cobalt, total	ug/L				4.0		3.1		<.8
Copper, total	ug/L				<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				<1		<1		<1
Dibromomethane	ug/L				<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 methanesulfonate	ug/L				<8				
Ethylbenzene	ug/L				<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				

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

Table 8

Analytical Data Summary for MW-56

Constituents	9/11/2018	3/26/2019	9/4/2019	3/26/2020	9/15/2020	3/2/2021	9/7/2021	3/24/2022	8/31/2022
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arochlor 1016							<.13		
Arochlor 1221							<.25		
Arochlor 1232							<.25		
Arochlor 1242							<.25		
Arochlor 1248							<.25		
Arochlor 1254							<.13		
Arochlor 1260							<.13		
Arsenic, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Azobenzene							<8		
Barium, total	26.9	23.0	31.6	20.9	28.7	15.9	33.5	13.2	28.6
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(g,h,i)perylene							<8		
Benzo(k)fluoranthene							<8		
Benzyl alcohol							<8		
Beryllium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Beta-bhc							<.05		
Bis (2-chloroethoxy) methane							<8		
Bis(2-chloroethyl) ether							<8		
Bis(2-ethylhexyl) phthalate							<6		
Bis[2-chloroisopropyl]ether							<8		
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	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
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									
Chlordane							<.1		
Chloride									
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzilate							<8		
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
Chloroprene							<1		
Chromium, total	<8	<8	<8	<8	<8	<8	<8	<8	<8
Chrysene							<8		
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	<.8	<.8	3.2	<.8	2.7	1.8	3.7	<.4	3.3
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
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 methanesulfonate							<8		
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Famphur							<.4		
Fluoranthene							<8		
Fluorene							<8		
Gamma-bhc [lindane]							<.05		
Heptachlor							<.05		

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

Table 8

Analytical Data Summary for MW-56

Constituents	3/2/2023	9/12/2023	3/4/2024	9/23/2024
Antimony, total	<2	<2	<2	<2
Arochlor 1016				
Arochlor 1221				
Arochlor 1232				
Arochlor 1242				
Arochlor 1248				
Arochlor 1254				
Arochlor 1260				
Arsenic, total	<4	<4	<4	<4
Azobenzene				
Barium, total	13.8	25.8	23.5	39.2
Benzene	<1.0	<1.0	<1.0	<1.0
Benzo(a)anthracene				
Benzo(a)pyrene				
Benzo(b)fluoranthene				
Benzo(g,h,i)perylene				
Benzo(k)fluoranthene				
Benzyl alcohol				
Beryllium, total	<4	<4	<4	<4
Beta-bhc				
Bis (2-chloroethoxy) methane				
Bis(2-chloroethyl) ether				
Bis(2-ethylhexyl) phthalate				
Bis[2-chloroisopropyl]ether				
Bromochloromethane	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1
Butyl benzyl phthalate				
Cadmium, total	<.8	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1
Chemical oxygen demand				
Chlordane				
Chloride				
Chlorobenzene	<1	<1	<1	<1
Chlorobenzilate				
Chloroethane	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1
Chloroprene				
Chromium, total	<8	<8	<8	<8
Chrysene				
Cis-1,2-dichloroethylene	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1
Cobalt, total	<.4	2.1	.6	2.5
Copper, total	<4	<4	<4	<4
Cyanide, total				
Delta-bhc				
Diallate				
Dibenzo(a,h)anthracene				
Dibenzofuran				
Dibromochloromethane	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1
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 methanesulfonate				
Ethylbenzene	<1	<1	<1	<1
Famphur				
Fluoranthene				
Fluorene				
Gamma-bhc [lindane]				
Heptachlor				

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

Table 8

Analytical Data Summary for MW-56

Constituents	Units	9/25/2014	3/25/2015	9/16/2015	9/14/2016	3/23/2017	9/8/2017	12/5/2017	3/19/2018
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				
Iron, dissolved	ug/L	1140	421	841		580			
Isobutanol	ug/L				<1000				
Isodrin	ug/L				<8				
Isophorone	ug/L				<8				
Isosafrole	ug/L				<8				
Kepone	ug/L				<8				
Lead, total	ug/L				<4.0		<4.0		<4.0
Mercury, total	ug/L				<.5				
Methacrylonitrile	ug/L				<1				
Methapyrilene	ug/L				<8				
Methoxychlor	ug/L				<.05				
Methyl iodide	ug/L				<1		<1		<1
Methyl methacrylate	ug/L				<1				
Methyl methanesulfonate	ug/L				<8				
Methyl parathion	ug/L				<.4				
Methylene chloride	ug/L				<5		<5		<5
Naphthalene	ug/L				<8				
Nickel, total	ug/L				12.2		13.8	14.0	<4.0
Nitrobenzene	ug/L				<8				
Nitrogen, ammonia	mg/L	<1 *	<1 *	<1 *		<1			
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,o,o-triethyl phosphorothioate	ug/L				<.4				
O-toluidine	ug/L				<8				
P-(dimethylamino)azobenzene	ug/L				<8				
Parathion	ug/L				<.4				
Pentachlorobenzene	ug/L				<8				
Pentachloronitrobenzene (pcnb)	ug/L				<8				
Pentachlorophenol	ug/L				<8				
pH	S.U.	7.1	7.8	6.9					
Phenacetin	ug/L				<8				
Phenanthrene	ug/L				<8				
Phenol	ug/L				<8				
Phenols, total	mg/L	<.1		<.1					
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
Silver, total	ug/L				<4		<4		<4
Specific conductance	umhos/cm	1784	2480	1313					
Styrene	ug/L				<1		<1		<1
Sulfide, total	mg/L				<.1				
Tetrachloroethylene	ug/L				<1		<1		<1
Thallium, total	ug/L				<4		<4		<4
Thionazin	ug/L				<.4				
Tin, total	ug/L				<20				
Toluene	ug/L				<1		<1		<1
Total organic halogens (tox)	mg/L	.039		<.010					
Toxaphene	ug/L				<.2				
Trans-1,2-dichloroethylene	ug/L				<1		<1		<1
Trans-1,3-dichloropropene	ug/L				<1		<1		<1
Trans-1,4-dichloro-2-butene	ug/L				<5		<5		<5
Trichloroethylene	ug/L				<1		<1		<1
Trichlorofluoromethane	ug/L				<1		<1		<1
Vanadium, total	ug/L				<20		<20		<20
Vinyl acetate	ug/L				<5		<5		<5
Vinyl chloride	ug/L	<1.0	<1.0	<1.0	2.8	<1.0	4.2		<1.0
Xylenes, total	ug/L				<2		<2		<2
Zinc, total	ug/L				19.4		22.9		<8.0

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

Table 8

Analytical Data Summary for MW-56

Constituents	9/11/2018	3/26/2019	9/4/2019	3/26/2020	9/15/2020	3/2/2021	9/7/2021	3/24/2022	8/31/2022
Heptachlor epoxide							<.05		
Hexachlorobenzene							<.05		
Hexachlorobutadiene							<8		
Hexachlorocyclopentadiene							<8		
Hexachloroethane							<8		
Hexachloropropene							<8		
Indeno(1,2,3-cd)pyrene							<8		
Iron, dissolved									
Isobutanol							<1000		
Isodrin							<8		
Isophorone							<8		
Isosafrole							<8		
Kepone							<8		
Lead, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Mercury, total							<.5		
Methacrylonitrile							<1		
Methapyrilene							<8		
Methoxychlor							<.05		
Methyl iodide	<1	<1	<1	<1	<1	<1	<2	<1	<1
Methyl methacrylate							<1		
Methyl methanesulfonate							<8		
Methyl parathion							<.4		
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene							<8		
Nickel, total	<4.0	<4.0	7.0	<4.0	10.9	<4.0	13.1	<4.0	10.1
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,o,o-triethyl phosphorothioate							<.4		
O-toluidine							<8		
P-(dimethylamino)azobenzene							<8		
Parathion							<.4		
Pentachlorobenzene							<8		
Pentachloronitrobenzene (pcnb)							<8		
Pentachlorophenol							<8		
pH									
Phenacetin							<8		
Phenanthrene							<8		
Phenol							<8		
Phenols, total									
Phorate							<.4		
Pronamide							<8		
Propionitrile							<10		
Pyrene							<8		
Safrole							<8		
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	<8	<4	<4	<4	<4	<4	<4	<4	<4
Specific conductance									
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfide, total							<.1		
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4	<2	<2	<2	<2	<2	<2	<2	<2
Thionazin							<.4		
Tin, total							<20		
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total organic halogens (tox)									
Toxaphene							<.2		
Trans-1,2-dichloroethylene	<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
Trichloroethylene	<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	<1.0	<1.0	<1.0	<1.0	1.9	<1.0	2.2	<1.0	<1.0
Xylenes, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	11.5	34.6	<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 8

Analytical Data Summary for MW-56

Constituents	3/2/2023	9/12/2023	3/4/2024	9/23/2024
Heptachlor epoxide				
Hexachlorobenzene				
Hexachlorobutadiene				
Hexachlorocyclopentadiene				
Hexachloroethane				
Hexachloropropene				
Indeno(1,2,3-cd)pyrene				
Iron, dissolved				
Isobutanol				
Isodrin				
Isophorone				
Isosafrole				
Kepone				
Lead, total	<4.0	<4.0	14.6	<4.0
Mercury, total				
Methacrylonitrile				
Methapyrilene				
Methoxychlor				
Methyl iodide	<1	<1	<1	<1
Methyl methacrylate				
Methyl methanesulfonate				
Methyl parathion				
Methylene chloride	<5	<5	<5	<5
Naphthalene				
Nickel, total	<4.0	9.6	4.7	7.3
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,o,o-triethyl phosphorothioate				
O-toluidine				
P-(dimethylamino)azobenzene				
Parathion				
Pentachlorobenzene				
Pentachloronitrobenzene (pcnb)				
Pentachlorophenol				
pH				
Phenacetin				
Phenanthrene				
Phenol				
Phenols, total				
Phorate				
Pronamide				
Propionitrile				
Pyrene				
Safrole				
Selenium, total	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4
Specific conductance				
Styrene	<1	<1	<1	<1
Sulfide, total				
Tetrachloroethylene	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2
Thionazin				
Tin, total				
Toluene	<1	<1	<1	<1
Total organic halogens (tox)				
Toxaphene				
Trans-1,2-dichloroethylene	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5
Vinyl chloride	<1.0	<1.0	<1.0	<1.0
Xylenes, total	<2	<2	<2	<2
Zinc, total	<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-57

Constituents	Units	9/25/2014	3/25/2015	9/16/2015	9/14/2016	3/23/2017	9/8/2017	12/5/2017	3/19/2018
(3 4)-methylphenol	ug/L								
1,1,1,2-tetrachloroethane	ug/L				<1		<1		<1
1,1,1-trichloroethane	ug/L				<1		<1		<1
1,1,2,2-tetrachloroethane	ug/L				<1		<1		<1
1,1,2-trichloroethane	ug/L				<1		<1		<1
1,1-dichloroethane	ug/L				<1		<1		<1
1,1-dichloroethylene	ug/L				<1		<1		<1
1,1-dichloropropene	ug/L								
1,2,3-trichloropropane	ug/L				<1		<1		<1
1,2,4,5-tetrachlorobenzene	ug/L								
1,2,4-trichlorobenzene	ug/L								
1,2-dibromo-3-chloropropane	ug/L				<1		<1		<1
1,2-dibromoethane	ug/L				<1		<1		<1
1,2-dichlorobenzene	ug/L				<1		<1		<1
1,2-dichloroethane	ug/L				<1		<1		<1
1,2-dichloropropane	ug/L				<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
1,4-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 (mek)	ug/L				<5		<5		<5
2-Chloroethyl Vinyl Ether	ug/L								
2-chloronaphthalene	ug/L								
2-chlorophenol	ug/L								
2-hexanone (mbk)	ug/L				<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-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 (mibk)	ug/L				<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				<10.0		18.2		<10.0
Acetonitrile	ug/L								
Acetophenone	ug/L								
Acrolein	ug/L								
Acrylonitrile	ug/L				<5		<5		<5
Aldrin	ug/L								
Allyl chloride	ug/L								
Alpha-bhc	ug/L								

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

Table 9

Analytical Data Summary for MW-57

Constituents	9/11/2018	3/26/2019	9/4/2019	3/26/2020	6/18/2020	9/15/2020	12/3/2020	3/2/2021	9/7/2021
(3 4)-methylphenol									
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-dichloroethylene	<1	<1	<1	<1		<1		<1	<1
1,1-dichloropropene									
1,2,3-trichloropropane	<1	<1	<1	<1		<1		<1	<1
1,2,4,5-tetrachlorobenzene									
1,2,4-trichlorobenzene									
1,2-dibromo-3-chloropropane	<1	<1	<1	<5		<5		<5	<5
1,2-dibromoethane	<1	<1	<1	<1		<1		<1	<1
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
1,2-dinitrobenzene									
1,3,5-trinitrobenzene									
1,3-dichlorobenzene									
1,3-dichloropropane									
1,3-dinitrobenzene									
1,4-dichlorobenzene	<1	<1	<1	<1		<1		<1	<1
1,4-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 (mek)	<5	<5	<5	<5		<5		<5	<5
2-Chloroethyl Vinyl Ether									
2-chloronaphthalene									
2-chlorophenol									
2-hexanone (mbk)	<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-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 (mibk)	<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
Acetonitrile									
Acetophenone									
Acrolein									
Acrylonitrile	<5	<5	<5	<5		<5		<5	<5
Aldrin									
Allyl chloride									
Alpha-bhc									

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

Table 9

Analytical Data Summary for MW-57

Constituents	12/3/2021	3/24/2022	8/31/2022	3/2/2023	9/12/2023	3/4/2024	9/23/2024
(3 4)-methylphenol				<8			
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-dichloroethylene		<1	<1	<1	<1	<1	<1
1,1-dichloropropene				<1			
1,2,3-trichloropropane		<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene				<8			
1,2,4-trichlorobenzene				<1			
1,2-dibromo-3-chloropropane		<5	<5	<1	<5	<5	<5
1,2-dibromoethane		<1	<1	<1	<1	<1	<1
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				<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
1,4-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 (mek)		<10	<10	<5	<10	<10	<10
2-Chloroethyl Vinyl Ether				<2			
2-chloronaphthalene				<8			
2-chlorophenol				<8			
2-hexanone (mbk)		<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-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 (mibk)		<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
Acetonitrile				<10			
Acetophenone				<8			
Acrolein				<10			
Acrylonitrile		<5	<5	<5	<5	<5	<5
Aldrin				<.05			
Allyl chloride				<1			
Alpha-bhc				<.05			

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

Table 9

Analytical Data Summary for MW-57

Constituents	Units	9/25/2014	3/25/2015	9/16/2015	9/14/2016	3/23/2017	9/8/2017	12/5/2017	3/19/2018
Anthracene	ug/L								
Antimony, total	ug/L				<2		<2		<2
Arochlor 1016	ug/L								
Arochlor 1221	ug/L								
Arochlor 1232	ug/L								
Arochlor 1242	ug/L								
Arochlor 1248	ug/L								
Arochlor 1254	ug/L								
Arochlor 1260	ug/L								
Arsenic, total	ug/L				<4.0		4.1		<4.0
Azobenzene	ug/L								
Barium, total	ug/L				301		563	398	279
Benzene	ug/L				<1		<1		<1
Benzo(a)anthracene	ug/L								
Benzo(a)pyrene	ug/L								
Benzo(b)fluoranthene	ug/L								
Benzo(g,h,i)perylene	ug/L								
Benzo(k)fluoranthene	ug/L								
Benzyl alcohol	ug/L								
Beryllium, total	ug/L				<4		<4		<4
Beta-bhc	ug/L								
Bis (2-chloroethoxy) methane	ug/L								
Bis(2-chloroethyl) ether	ug/L								
Bis(2-ethylhexyl) phthalate	ug/L								
Bis[2-chloroisopropyl]ether	ug/L								
Bromochloromethane	ug/L				<1		<1		<1
Bromodichloromethane	ug/L				<1		<1		<1
Bromoform	ug/L				<1		<1		<1
Bromomethane	ug/L				<1		<1		<1
Butyl benzyl phthalate	ug/L								
Cadmium, total	ug/L				<.8		<.8		<.8
Carbon disulfide	ug/L				<1		<1		<1
Carbon tetrachloride	ug/L				<1		<1		<1
Chemical oxygen demand	mg/L	25 *	20 *	21 *		13			
Chlordane	ug/L								
Chloride	mg/L	41 *	81 *	54 *		116			
Chlorobenzene	ug/L				<1		<1		<1
Chlorobenzilate	ug/L								
Chloroethane	ug/L				<1		<1		<1
Chloroform	ug/L				<1		<1		<1
Chloromethane	ug/L				<1		<1		<1
Chloroprene	ug/L								
Chromium, total	ug/L				<8		<8		<8
Chrysene	ug/L								
Cis-1,2-dichloroethylene	ug/L				<1		<1		<1
Cis-1,3-dichloropropene	ug/L				<1		<1		<1
Cobalt, total	ug/L				<.8		4.2		<.8
Copper, total	ug/L				<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				<1		<1		<1
Dibromomethane	ug/L				<1		<1		<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 methanesulfonate	ug/L								
Ethylbenzene	ug/L				<1		<1		<1
Famphur	ug/L								
Fluoranthene	ug/L								
Fluorene	ug/L								
Gamma-bhc [lindane]	ug/L								

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

Table 9

Analytical Data Summary for MW-57

Constituents	9/11/2018	3/26/2019	9/4/2019	3/26/2020	6/18/2020	9/15/2020	12/3/2020	3/2/2021	9/7/2021
Anthracene									
Antimony, total	<2	<2	<2	<2		<2		<2	<2
Arochlor 1016									
Arochlor 1221									
Arochlor 1232									
Arochlor 1242									
Arochlor 1248									
Arochlor 1254									
Arochlor 1260									
Arsenic, total	<4.0	<4.0	<4.0	4.5		5.5		<4.0	4.7
Azobenzene									
Barium, total	189	287	344	513	301	517	388	112	507
Benzene	<1	<1	<1	<1		<1		<1	<1
Benzo(a)anthracene									
Benzo(a)pyrene									
Benzo(b)fluoranthene									
Benzo(g,h,i)perylene									
Benzo(k)fluoranthene									
Benzyl alcohol									
Beryllium, total	<4	<4	<4	<4		<4		<4	<4
Beta-bhc									
Bis (2-chloroethoxy) methane									
Bis(2-chloroethyl) ether									
Bis(2-ethylhexyl) phthalate									
Bis[2-chloroisopropyl]ether									
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
Butyl benzyl phthalate									
Cadmium, total	<.8	<.8	<.8	<.8		<.8		<.8	<.8
Carbon disulfide	<1	<1	<1	<1		<1		<1	<1
Carbon tetrachloride	<1	<1	<1	<1		<1		<1	<1
Chemical oxygen demand									
Chlordane									
Chloride									
Chlorobenzene	<1	<1	<1	<1		<1		<1	<1
Chlorobenzilate									
Chloroethane	<1	<1	<1	<1		<1		<1	<1
Chloroform	<1	<1	<1	<1		<1		<1	<1
Chloromethane	<1	<1	<1	<1		<1		<1	<1
Chloroprene									
Chromium, total	<8	<8	<8	<8		<8		<8	<8
Chrysene									
Cis-1,2-dichloroethylene	<1	<1	<1	<1		<1		<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1		<1		<1	<1
Cobalt, total	<.8	<.8	<.8	1.1		2.4		1.0	3.1
Copper, total	<4.0	<4.0	<4.0	4.2	<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	<1
Dibromomethane	<1	<1	<1	<1		<1		<1	<1
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 methanesulfonate									
Ethylbenzene	<1	<1	<1	<1		<1		<1	<1
Famphur									
Fluoranthene									
Fluorene									
Gamma-bhc [lindane]									

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

Table 9

Analytical Data Summary for MW-57

Constituents	12/3/2021	3/24/2022	8/31/2022	3/2/2023	9/12/2023	3/4/2024	9/23/2024
Anthracene				<8			
Antimony, total		<2	<2	<2	<2	<2	<2
Arochlor 1016				<.1			
Arochlor 1221				<.2			
Arochlor 1232				<.2			
Arochlor 1242				<.2			
Arochlor 1248				<.2			
Arochlor 1254				<.1			
Arochlor 1260				<.1			
Arsenic, total		<4.0	4.0	<4.0	<4.0	<4.0	<4.0
Azobenzene				<8			
Barium, total	362	317	509	254	445	250	302
Benzene		<1	<1	<1	<1	<1	<1
Benzo(a)anthracene				<8			
Benzo(a)pyrene				<8			
Benzo(b)fluoranthene				<8			
Benzo(g,h,i)perylene				<8			
Benzo(k)fluoranthene				<8			
Benzyl alcohol				<8			
Beryllium, total		<4	<4	<4	<4	<4	<4
Beta-bhc				<.05			
Bis (2-chloroethoxy) methane				<8			
Bis(2-chloroethyl) ether				<8			
Bis(2-ethylhexyl) phthalate				7			
Bis[2-chloroisopropyl]ether				<8			
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				<8			
Cadmium, total		<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide		<1	<1	<1	<1	<1	<1
Carbon tetrachloride		<1	<1	<1	<1	<1	<1
Chemical oxygen demand							
Chlordane				<.1			
Chloride							
Chlorobenzene		<1	<1	<1	<1	<1	<1
Chlorobenzilate				<8			
Chloroethane		<1	<1	<1	<1	<1	<1
Chloroform		<1	<1	<1	<1	<1	<1
Chloromethane		<1	<1	<1	<1	<1	<1
Chloroprene				<1			
Chromium, total		<8	<8	<8	<8	<8	<8
Chrysene				<8			
Cis-1,2-dichloroethylene		<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene		<1	<1	<1	<1	<1	<1
Cobalt, total		.7	3.5	.5	.5	.4	1.0
Copper, total		<4.0	5.0	<4.0	<4.0	<4.0	<4.0
Cyanide, total				<.005			
Delta-bhc				<.05			
Diallate				<8			
Dibenzo(a,h)anthracene				<8			
Dibenzofuran				<8			
Dibromochloromethane		<1	<1	<1	<1	<1	<1
Dibromomethane		<1	<1	<1	<1	<1	<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 methanesulfonate				<8			
Ethylbenzene		<1	<1	<1	<1	<1	<1
Famphur				<.4			
Fluoranthene				<8			
Fluorene				<8			
Gamma-bhc [lindane]				<.05			

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

Table 9

Analytical Data Summary for MW-57

Constituents	Units	9/25/2014	3/25/2015	9/16/2015	9/14/2016	3/23/2017	9/8/2017	12/5/2017	3/19/2018
Heptachlor	ug/L								
Heptachlor epoxide	ug/L								
Hexachlorobenzene	ug/L								
Hexachlorobutadiene	ug/L								
Hexachlorocyclopentadiene	ug/L								
Hexachloroethane	ug/L								
Hexachloropropene	ug/L								
Indeno(1,2,3-cd)pyrene	ug/L								
Iron, dissolved	ug/L	<100	<100	<100		<100			
Isobutanol	ug/L								
Isodrin	ug/L								
Isophorone	ug/L								
Isosafrole	ug/L								
Kepone	ug/L								
Lead, total	ug/L				<4		<4		<4
Mercury, total	ug/L								
Methacrylonitrile	ug/L								
Methapyrilene	ug/L								
Methoxychlor	ug/L								
Methyl iodide	ug/L				<1		<1		<1
Methyl methacrylate	ug/L								
Methyl methanesulfonate	ug/L								
Methyl parathion	ug/L								
Methylene chloride	ug/L				<5		<5		<5
Naphthalene	ug/L								
Nickel, total	ug/L				4.3		9.0		4.1
Nitrobenzene	ug/L								
Nitrogen, ammonia	mg/L	<1 *	<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,o,o-triethyl phosphorothioate	ug/L								
O-toluidine	ug/L								
P-(dimethylamino)azobenzene	ug/L								
Parathion	ug/L								
Pentachlorobenzene	ug/L								
Pentachloronitrobenzene (pcnb)	ug/L								
Pentachlorophenol	ug/L								
pH	S.U.	7.5	7.6	7.4					
Phenacetin	ug/L								
Phenanthrene	ug/L								
Phenol	ug/L								
Phenols, total	mg/L	<.1		<.1					
Phorate	ug/L								
Pronamide	ug/L								
Propionitrile	ug/L								
Pyrene	ug/L								
Safrole	ug/L								
Selenium, total	ug/L				<4		<4		<4
Silver, total	ug/L				<4		<4		<4
Specific conductance	umhos/cm	1437	1677	1518					
Styrene	ug/L				<1		<1		<1
Sulfide, total	mg/L								
Tetrachloroethylene	ug/L				<1		<1		<1
Thallium, total	ug/L				<4		<4		<4
Thionazin	ug/L								
Tin, total	ug/L								
Toluene	ug/L				<1		<1		<1
Total organic halogens (tox)	mg/L	.036		<.010					
Toxaphene	ug/L								
Trans-1,2-dichloroethylene	ug/L				<1		<1		<1
Trans-1,3-dichloropropene	ug/L				<1		<1		<1
Trans-1,4-dichloro-2-butene	ug/L				<5		<5		<5
Trichloroethylene	ug/L				<1		<1		<1
Trichlorofluoromethane	ug/L				<1		<1		<1
Vanadium, total	ug/L				<20		<20		<20
Vinyl acetate	ug/L				<5		<5		<5
Vinyl chloride	ug/L				<1		<1		<1
Xylenes, total	ug/L				<2		<2		<2
Zinc, total	ug/L				<8.0		<8.0		<8.0

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

Table 9

Analytical Data Summary for MW-57

Constituents	9/11/2018	3/26/2019	9/4/2019	3/26/2020	6/18/2020	9/15/2020	12/3/2020	3/2/2021	9/7/2021
Heptachlor									
Heptachlor epoxide									
Hexachlorobenzene									
Hexachlorobutadiene									
Hexachlorocyclopentadiene									
Hexachloroethane									
Hexachloropropene									
Indeno(1,2,3-cd)pyrene									
Iron, dissolved									
Isobutanol									
Isodrin									
Isophorone									
Isosafrole									
Kepone									
Lead, total	<4	<4	<4	<4		<4		<4	<4
Mercury, total									
Methacrylonitrile									
Methapyrilene									
Methoxychlor									
Methyl iodide	<1	<1	<1	<1		<1		<1	<1
Methyl methacrylate									
Methyl methanesulfonate									
Methyl parathion									
Methylene chloride	<5	<5	<5	<5		<5		<5	<5
Naphthalene									
Nickel, total	<4.0	<4.0	<4.0	<4.0		5.9		<4.0	5.9
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,o,o-triethyl phosphorothioate									
O-toluidine									
P-(dimethylamino)azobenzene									
Parathion									
Pentachlorobenzene									
Pentachloronitrobenzene (pcnb)									
Pentachlorophenol									
pH									
Phenacetin									
Phenanthrene									
Phenol									
Phenols, total									
Phorate									
Pronamide									
Propionitrile									
Pyrene									
Safrole									
Selenium, total	<4	<4	<4	<4		<4		<4	<4
Silver, total	<8	<4	<4	<4		<4		<4	<4
Specific conductance									
Styrene	<1	<1	<1	<1		<1		<1	<1
Sulfide, total									
Tetrachloroethylene	<1	<1	<1	<1		<1		<1	<1
Thallium, total	<4	<2	<2	<2		<2		<2	<2
Thionazin									
Tin, total									
Toluene	<1	<1	<1	<1		<1		<1	<1
Total organic halogens (tox)									
Toxaphene									
Trans-1,2-dichloroethylene	<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
Trichloroethylene	<1	<1	<1	<1		<1		<1	<1
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	9.5	25.8	<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-57

Constituents	12/3/2021	3/24/2022	8/31/2022	3/2/2023	9/12/2023	3/4/2024	9/23/2024
Heptachlor				<.05			
Heptachlor epoxide				<.05			
Hexachlorobenzene				<.05			
Hexachlorobutadiene				<8			
Hexachlorocyclopentadiene				<8			
Hexachloroethane				<8			
Hexachloropropene				<8			
Indeno(1,2,3-cd)pyrene				<8			
Iron, dissolved							
Isobutanol				<1000			
Isodrin				<8			
Isophorone				<8			
Isosafrole				<8			
Kepone				<8			
Lead, total		<4	<4	<4	<4	<4	<4
Mercury, total				<.5			
Methacrylonitrile				<1			
Methapyrilene				<8			
Methoxychlor				<.05			
Methyl iodide		<1	<1	<2	<1	<1	<1
Methyl methacrylate				<1			
Methyl methanesulfonate				<8			
Methyl parathion				<.4			
Methylene chloride		<5	<5	<5	<5	<5	<5
Naphthalene				<8			
Nickel, total		<4.0	6.0	<4.0	<4.0	<4.0	4.6
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,o,o-triethyl phosphorothioate				<.4			
O-toluidine				<8			
P-(dimethylamino)azobenzene				<8			
Parathion				<.4			
Pentachlorobenzene				<8			
Pentachloronitrobenzene (pcnb)				<8			
Pentachlorophenol				<8			
pH							
Phenacetin				<8			
Phenanthrene				<8			
Phenol				<8			
Phenols, total							
Phorate				<.4			
Pronamide				<8			
Propionitrile				<10			
Pyrene				<8			
Safrole				<8			
Selenium, total		<4	<4	<4	<4	<4	<4
Silver, total		<4	<4	<4	<4	<4	<4
Specific conductance							
Styrene		<1	<1	<1	<1	<1	<1
Sulfide, total				<.1			
Tetrachloroethylene		<1	<1	<1	<1	<1	<1
Thallium, total		<2	<2	<2	<2	<2	<2
Thionazin				<.4			
Tin, total				<20			
Toluene		<1	<1	<1	<1	<1	<1
Total organic halogens (tox)							
Toxaphene				<.2			
Trans-1,2-dichloroethylene		<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene		<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene		<5	<5	<5	<5	<5	<5
Trichloroethylene		<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 10

Analytical Data Summary for MW-58

Constituents	Units	9/24/2014	3/11/2015	9/17/2015	3/22/2016	9/15/2016	3/23/2017	9/8/2017	3/19/2018
(3 4)-methylphenol	ug/L		<8						
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-dichloroethylene	ug/L	<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
1,2,4,5-tetrachlorobenzene	ug/L		<8						
1,2,4-trichlorobenzene	ug/L		<1						
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
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
1,2-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
1,4-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 (mek)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
2-chloronaphthalene	ug/L		<8						
2-chlorophenol	ug/L		<8						
2-hexanone (mbk)	ug/L	<5	<5	<5	<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-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 (mibk)	ug/L	<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
Acetonitrile	ug/L		<10						
Acetophenone	ug/L		<8						
Acrolein	ug/L		<10						
Acrylonitrile	ug/L	<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						

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

Table 10

Analytical Data Summary for MW-58

Constituents	9/11/2018	12/5/2018	3/26/2019	9/4/2019	3/26/2020	9/15/2020	3/2/2021	9/7/2021	3/24/2022
(3 4)-methylphenol					<8				
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-dichloroethylene	<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		<1	<1	<5	<5	<5	<5	<5
1,2-dibromoethane	<1		<1	<1	<1	<1	<1	<1	<1
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)									
2,4,5-trichlorophenol					<8				
2,4,6-trichlorophenol					<8				
2,4-d									
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 (mek)	<5		<5	<5	<5	<5	<5	<5	<10
2-chloronaphthalene					<8				
2-chlorophenol					<8				
2-hexanone (mbk)	<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-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 (mibk)	<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					<10				
Acetophenone					<8				
Acrolein					<10				
Acrylonitrile	<5		<5	<5	<5	<5	<5	<5	<5
Aldrin					<.05				
Allyl chloride					<1				
Alpha-bhc					<.05				
Anthracene					<8				

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

Table 10

Analytical Data Summary for MW-58

Constituents	8/31/2022	3/2/2023	9/12/2023	3/4/2024	9/23/2024
(3 4)-methylphenol					
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-dichloroethylene	<1	<1	<1	<1	<1
1,1-dichloropropene					
1,2,3-trichloropropane	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene					
1,2,4-trichlorobenzene					
1,2-dibromo-3-chloropropane	<5	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1
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					
1,3,5-trinitrobenzene					
1,3-dichlorobenzene					
1,3-dichloropropane					
1,3-dinitrobenzene					
1,4-dichlorobenzene	<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 (mek)	<10	<10	<10	<10	<10
2-chloronaphthalene					
2-chlorophenol					
2-hexanone (mbk)	<5	<5	<5	<5	<5
2-methylnaphthalene					
2-methylphenol (o-cresol)					
2-naphthylamine					
2-nitroaniline					
2-nitrophenol					
3,3´-dichlorobenzidine					
3,3-dimethylbenzidine					
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 (mibk)	<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
Acetonitrile					
Acetophenone					
Acrolein					
Acrylonitrile	<5	<5	<5	<5	<5
Aldrin					
Allyl chloride					
Alpha-bhc					
Anthracene					

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Table 10

Analytical Data Summary for MW-58

Constituents	Units	9/24/2014	3/11/2015	9/17/2015	3/22/2016	9/15/2016	3/23/2017	9/8/2017	3/19/2018
Antimony, total	ug/L	2.3	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Arochlor 1016	ug/L		<.1						
Arochlor 1221	ug/L		<.2						
Arochlor 1232	ug/L		<.2						
Arochlor 1242	ug/L		<.2						
Arochlor 1248	ug/L		<.2						
Arochlor 1254	ug/L		<.1						
Arochlor 1260	ug/L		<.1						
Arsenic, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Azobenzene	ug/L		<8						
Barium, total	ug/L	37.8	25.0	27.4	26.4	25.9	25.7	23.6	24.7
Benzene	ug/L	<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(g,h,i)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
Beta-bhc	ug/L		<.05						
Bis (2-chloroethoxy) methane	ug/L		<8						
Bis(2-chloroethyl) ether	ug/L		<8						
Bis(2-ethylhexyl) phthalate	ug/L		<8						
Bis[2-chloroisopropyl]ether	ug/L		<8						
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
Butyl benzyl phthalate	ug/L		<8						
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
Chlordane	ug/L		<.1						
Chlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzilate	ug/L		<8						
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
Chloroprene	ug/L		<1						
Chromium, total	ug/L	<8	<8	<8	<8	<8	<8	<8	<8
Chrysene	ug/L		<8						
Cis-1,2-dichloroethylene	ug/L	3.8	5.8	5.3	4.1	5.8	4.8	5.2	4.0
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	<.8	<.8	<.8	<.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
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	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<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 methanesulfonate	ug/L		<8						
Ethylbenzene	ug/L	<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						

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

Table 10

Analytical Data Summary for MW-58

Constituents	9/11/2018	12/5/2018	3/26/2019	9/4/2019	3/26/2020	9/15/2020	3/2/2021	9/7/2021	3/24/2022
Antimony, total	<2.0		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Arochlor 1016					<.1				
Arochlor 1221					<.2				
Arochlor 1232					<.2				
Arochlor 1242					<.2				
Arochlor 1248					<.2				
Arochlor 1254					<.1				
Arochlor 1260					<.1				
Arsenic, total	<4		<4	<4	<4	<4	<4	<4	<4
Azobenzene					<8				
Barium, total	24.6		30.2	24.1	23.2	24.0	22.2	24.2	23.8
Benzene	<1		<1	<1	<1	<1	<1	<1	<1
Benzo(a)anthracene					<8				
Benzo(a)pyrene					<8				
Benzo(b)fluoranthene					<8				
Benzo(g,h,i)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-ethylhexyl) phthalate					6	<6			
Bis[2-chloroisopropyl]ether					<8				
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	<.8		<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	<1		<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1		<1	<1	<1	<1	<1	<1	<1
Chlordane					<.1				
Chlorobenzene	<1		<1	<1	<1	<1	<1	<1	<1
Chlorobenzilate					<8				
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		<8	<8	<8	<8	<8	<8	<8
Chrysene					<8				
Cis-1,2-dichloroethylene	3.9		2.7	3.6	2.8	2.9	1.7	2.1	1.7
Cis-1,3-dichloropropene	<1		<1	<1	<1	<1	<1	<1	<1
Cobalt, total	<.8		<.8	<.8	<.8	<.4	.8	<.4	<.4
Copper, total	25.5	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<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
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 methanesulfonate					<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				

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

Table 10

Analytical Data Summary for MW-58

Constituents	8/31/2022	3/2/2023	9/12/2023	3/4/2024	9/23/2024
Antimony, total	<2.0	<2.0	<2.0	<2.0	<2.0
Arochlor 1016					
Arochlor 1221					
Arochlor 1232					
Arochlor 1242					
Arochlor 1248					
Arochlor 1254					
Arochlor 1260					
Arsenic, total	<4	<4	<4	<4	<4
Azobenzene					
Barium, total	21.7	22.9	22.1	23.8	20.9
Benzene	<1	<1	<1	<1	<1
Benzo(a)anthracene					
Benzo(a)pyrene					
Benzo(b)fluoranthene					
Benzo(g,h,i)perylene					
Benzo(k)fluoranthene					
Benzyl alcohol					
Beryllium, total	<4	<4	<4	<4	<4
Beta-bhc					
Bis (2-chloroethoxy) methane					
Bis(2-chloroethyl) ether					
Bis(2-ethylhexyl) phthalate					
Bis[2-chloroisopropyl]ether					
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					
Cadmium, total	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1
Chlordane					
Chlorobenzene	<1	<1	<1	<1	<1
Chlorobenzilate					
Chloroethane	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1
Chloroprene					
Chromium, total	<8	<8	<8	<8	<8
Chrysene					
Cis-1,2-dichloroethylene	1.7	1.8	1.7	1.0	<1.0
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1
Cobalt, total	<.4	<.4	<.4	<.4	<.4
Copper, total	<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
Dibromomethane	<1	<1	<1	<1	<1
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 methanesulfonate					
Ethylbenzene	<1	<1	<1	<1	<1
Famphur					
Fluoranthene					
Fluorene					
Gamma-bhc [lindane]					
Heptachlor					
Heptachlor epoxide					
Hexachlorobenzene					

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

Table 10

Analytical Data Summary for MW-58

Constituents	Units	9/24/2014	3/11/2015	9/17/2015	3/22/2016	9/15/2016	3/23/2017	9/8/2017	3/19/2018
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						
Isobutanol	ug/L		<1000						
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
Mercury, total	ug/L		<.5						
Methacrylonitrile	ug/L		<1						
Methapyrilene	ug/L		<8						
Methoxychlor	ug/L		<.05						
Methyl iodide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
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
Naphthalene	ug/L		<8						
Nickel, total	ug/L	6.5	8.7	12.8	21.2	13.3	23.8	21.1	25.5
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,o,o-triethyl phosphorothioate	ug/L		<.4						
O-toluidine	ug/L		<8						
P-(dimethylamino)azobenzene	ug/L		<8						
Parathion	ug/L		<.4						
Pentachlorobenzene	ug/L		<8						
Pentachloronitrobenzene (pcnb)	ug/L		<8						
Pentachlorophenol	ug/L		<8						
Phenacetin	ug/L		<8						
Phenanthrene	ug/L		<8						
Phenol	ug/L		<8						
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
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Sulfide, total	mg/L		<.1						
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4	<4	<1	<4	<4	<4	<4	<4
Thionazin	ug/L		<.4						
Tin, total	ug/L		<20						
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Toxaphene	ug/L		<.2						
Trans-1,2-dichloroethylene	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
Trichloroethylene	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	8.4	15.5	<8.0	<8.0	<8.0	<8.0	<20.0	<8.0

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

Table 10

Analytical Data Summary for MW-58

Constituents	9/11/2018	12/5/2018	3/26/2019	9/4/2019	3/26/2020	9/15/2020	3/2/2021	9/7/2021	3/24/2022
Hexachlorobutadiene					<8				
Hexachlorocyclopentadiene					<8				
Hexachloroethane					<8				
Hexachloropropene					<8				
Indeno(1,2,3-cd)pyrene					<8				
Isobutanol					<1000				
Isodrin					<8				
Isophorone					<8				
Isosafrole					<8				
Kepone					<8				
Lead, total	<4		<4	<4	<4	<4	<4	<4	<4
Mercury, total					<.5				
Methacrylonitrile					<1				
Methapyrilene					<8				
Methoxychlor					<.05				
Methyl iodide	<1		<1	<1	<1	<1	<1	<1	<1
Methyl methacrylate					<1				
Methyl methanesulfonate					<8				
Methyl parathion					<.4				
Methylene chloride	<5		<5	<5	<5	<5	<5	<5	<5
Naphthalene					<8				
Nickel, total	18.4	18.4	22.9	4.3	19.9	17.7	14.7	16.3	18.3
Nitrobenzene					<8				
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,o,o-triethyl phosphorothioate					<.4				
O-toluidine					<8				
P-(dimethylamino)azobenzene					<8				
Parathion					<.4				
Pentachlorobenzene					<8				
Pentachloronitrobenzene (pcnb)					<8				
Pentachlorophenol					<8				
Phenacetin					<8				
Phenanthrene					<8				
Phenol					<8				
Phorate					<.4				
Pronamide					<8				
Propionitrile					<10				
Pyrene					<8				
Safrole					<8				
Selenium, total	<4		<4	<4	<4	<4	<4	<4	<4
Silver, total	<8		<4	<4	<4	<4	<4	<4	<4
Styrene	<1		<1	<1	<1	<1	<1	<1	<1
Sulfide, total					<.1				
Tetrachloroethylene	<1		<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4		<2	<2	<2	<2	<2	<2	<2
Thionazin					<.4				
Tin, total					<20				
Toluene	<1		<1	<1	<1	<1	<1	<1	<1
Toxaphene					<.2				
Trans-1,2-dichloroethylene	<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
Trichloroethylene	<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	20.2		31.1	<8.0	<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 10

Analytical Data Summary for MW-58

Constituents	8/31/2022	3/2/2023	9/12/2023	3/4/2024	9/23/2024
Hexachlorobutadiene					
Hexachlorocyclopentadiene					
Hexachloroethane					
Hexachloropropene					
Indeno(1,2,3-cd)pyrene					
Isobutanol					
Isodrin					
Isophorone					
Isosafrole					
Kepone					
Lead, total	<4	<4	<4	<4	<4
Mercury, total					
Methacrylonitrile					
Methapyrilene					
Methoxychlor					
Methyl iodide	<1	<1	<1	<1	<1
Methyl methacrylate					
Methyl methanesulfonate					
Methyl parathion					
Methylene chloride	<5	<5	<5	<5	<5
Naphthalene					
Nickel, total	14.7	15.5	13.9	16.7	12.6
Nitrobenzene					
N-nitrosodiethylamine					
N-nitrosodimethylamine					
N-nitrosodi-n-butylamine					
N-nitroso-di-n-propylamine					
N-nitrosodiphenylamine					
N-nitrosomethylethylamine					
N-nitrosopiperidine					
N-nitrosopyrrolidine					
O,o,o-triethyl phosphorothioate					
O-toluidine					
P-(dimethylamino)azobenzene					
Parathion					
Pentachlorobenzene					
Pentachloronitrobenzene (pcnb)					
Pentachlorophenol					
Phenacetin					
Phenanthrene					
Phenol					
Phorate					
Pronamide					
Propionitrile					
Pyrene					
Safrole					
Selenium, total	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4
Styrene	<1	<1	<1	<1	<1
Sulfide, total					
Tetrachloroethylene	<1	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2	<2
Thionazin					
Tin, total					
Toluene	<1	<1	<1	<1	<1
Toxaphene					
Trans-1,2-dichloroethylene	<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
Trichloroethylene	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2
Zinc, total	<20.0	<20.0	<20.0	<20.0	21.0

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

Table 11

Analytical Data Summary for MW-59

Constituents	Units	9/24/2014	3/11/2015	9/17/2015	3/22/2016	9/15/2016	3/23/2017	9/8/2017	3/19/2018
(3 4)-methylphenol	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-dichloroethylene	ug/L	<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
1,2,4,5-tetrachlorobenzene	ug/L								
1,2,4-trichlorobenzene	ug/L								
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
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
1,2-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 (mek)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
2-chloronaphthalene	ug/L								
2-chlorophenol	ug/L								
2-hexanone (mbk)	ug/L	<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-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 (mibk)	ug/L	<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	<10
Acetonitrile	ug/L								
Acetophenone	ug/L								
Acrolein	ug/L								
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Aldrin	ug/L								
Allyl chloride	ug/L								
Alpha-bhc	ug/L								
Anthracene	ug/L								

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

Table 11

Analytical Data Summary for MW-59

Constituents	6/5/2018	9/11/2018	12/5/2018	3/26/2019	6/6/2019	9/4/2019	12/4/2019	3/26/2020	9/15/2020
(3 4)-methylphenol				<8				<8	
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-dichloroethylene		<1		<1		<1		<1	<1
1,1-dichloropropene				<1				<1	
1,2,3-trichloropropane		<1		<1		<1		<1	<1
1,2,4,5-tetrachlorobenzene				<8				<8	
1,2,4-trichlorobenzene				<1				<1	
1,2-dibromo-3-chloropropane		<1		<1		<1		<5	<5
1,2-dibromoethane		<1		<1		<1		<1	<1
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				<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
1,4-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					
2,4,5-trichlorophenol				<8				<8	
2,4,6-trichlorophenol				<8				<8	
2,4-d				<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 (mek)		<5		<5		<5		<5	<5
2-chloronaphthalene				<8				<8	
2-chlorophenol				<8				<8	
2-hexanone (mbk)		<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-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 (mibk)		<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
Acetonitrile				<10				<10	
Acetophenone				<8				<8	
Acrolein				<10				<10	
Acrylonitrile		<5		<5		<5		<5	<5
Aldrin				<.05				<.05	
Allyl chloride				<1				<1	
Alpha-bhc				<.05				<.05	
Anthracene				<8				<8	

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

Table 11

Analytical Data Summary for MW-59

Constituents	3/2/2021	9/7/2021	3/24/2022	8/31/2022	3/2/2023	9/12/2023	3/4/2024	9/23/2024
(3 4)-methylphenol								
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-dichloroethylene	<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	<5	<5	<5	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1	<1	<1	<1
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								
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 (mek)	<5	<5	<10	<10	<10	<10	<10	<10
2-chloronaphthalene								
2-chlorophenol								
2-hexanone (mbk)	<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-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 (mibk)	<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	<10	<10	<10	<10	<10	<10	<10
Acetonitrile								
Acetophenone								
Acrolein								
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5
Aldrin								
Allyl chloride								
Alpha-bhc								
Anthracene								

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

Table 11

Analytical Data Summary for MW-59

Constituents	Units	9/24/2014	3/11/2015	9/17/2015	3/22/2016	9/15/2016	3/23/2017	9/8/2017	3/19/2018
Antimony, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
Arochlor 1016	ug/L								
Arochlor 1221	ug/L								
Arochlor 1232	ug/L								
Arochlor 1242	ug/L								
Arochlor 1248	ug/L								
Arochlor 1254	ug/L								
Arochlor 1260	ug/L								
Arsenic, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Azobenzene	ug/L								
Barium, total	ug/L	57.8	30.4	43.4	34.8	37.9	47.1	50.4	38.5
Benzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Benzo(a)anthracene	ug/L								
Benzo(a)pyrene	ug/L								
Benzo(b)fluoranthene	ug/L								
Benzo(g,h,i)perylene	ug/L								
Benzo(k)fluoranthene	ug/L								
Benzyl alcohol	ug/L								
Beryllium, total	ug/L	<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-ethylhexyl) phthalate	ug/L								
Bis[2-chloroisopropyl]ether	ug/L								
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
Butyl benzyl phthalate	ug/L								
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
Chlordane	ug/L								
Chlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzilate	ug/L								
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
Chloroprene	ug/L								
Chromium, total	ug/L	<8	<8	<8	<8	<8	<8	<8	<8
Chrysene	ug/L								
Cis-1,2-dichloroethylene	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	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Copper, total	ug/L	4.4	<4.0	<4.0	4.7	<4.0	<4.0	<4.0	4.8
Cyanide, total	mg/L								
Delta-bhc	ug/L								
Diallate	ug/L								
Dibenzo(a,h)anthracene	ug/L								
Dibenzofuran	ug/L								
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<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 methanesulfonate	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								

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

Table 11

Analytical Data Summary for MW-59

Constituents	6/5/2018	9/11/2018	12/5/2018	3/26/2019	6/6/2019	9/4/2019	12/4/2019	3/26/2020	9/15/2020
Antimony, total		<2		<2		<2		<2	<2
Arochlor 1016				<.1				<.1	
Arochlor 1221				<.2				<.2	
Arochlor 1232				<.2				<.2	
Arochlor 1242				<.2				<.2	
Arochlor 1248				<.2				<.2	
Arochlor 1254				<.1				<.1	
Arochlor 1260				<.1				<.1	
Arsenic, total		<4		<4		<4		<4	<4
Azobenzene				<8				<8	
Barium, total		77.7		42.0		41.1		33.1	40.1
Benzene		<1		<1		<1		<1	<1
Benzo(a)anthracene				<8				<8	
Benzo(a)pyrene				<8				<8	
Benzo(b)fluoranthene				<8				<8	
Benzo(g,h,i)perylene				<8				<8	
Benzo(k)fluoranthene				<8				<8	
Benzyl alcohol				<8				<8	
Beryllium, total		<4		<4		<4		<4	<4
Beta-bhc				<.05				<.05	
Bis (2-chloroethoxy) methane				<8				<8	
Bis(2-chloroethyl) ether				<8				<8	
Bis(2-ethylhexyl) phthalate				15	<6	<6	6	<6	<6
Bis[2-chloroisopropyl]ether				<8				<8	
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				<8	
Cadmium, total		<.8		<.8		<.8		<.8	<.8
Carbon disulfide		<1		<1		<1		<1	<1
Carbon tetrachloride		<1		<1		<1		<1	<1
Chlordane				<.1				<.1	
Chlorobenzene		<1		<1		<1		<1	<1
Chlorobenzilate				<8				<8	
Chloroethane		<1		<1		<1		<1	<1
Chloroform		<1		<1		<1		<1	<1
Chloromethane		<1		<1		<1		<1	<1
Chloroprene				<1				<1	
Chromium, total		<8		<8		<8		<8	<8
Chrysene				<8				<8	
Cis-1,2-dichloroethylene		<1		<1		<1		<1	<1
Cis-1,3-dichloropropene		<1		<1		<1		<1	<1
Cobalt, total		<.8		<.8		<.8		<.8	<.4
Copper, total	<4.0	4.6	4.1	5.5		<4.0		6.9	<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
Dibromomethane		<1		<1		<1		<1	<1
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 methanesulfonate				<8				<8	
Ethylbenzene		<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	
Hexachlorobenzene				<.05				<.05	

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

Table 11

Analytical Data Summary for MW-59

Constituents	3/2/2021	9/7/2021	3/24/2022	8/31/2022	3/2/2023	9/12/2023	3/4/2024	9/23/2024
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2
Arochlor 1016								
Arochlor 1221								
Arochlor 1232								
Arochlor 1242								
Arochlor 1248								
Arochlor 1254								
Arochlor 1260								
Arsenic, total	<4	<4	<4	<4	<4	<4	<4	<4
Azobenzene								
Barium, total	47.2	46.4	35.0	48.2	33.9	55.1	33.5	25.2
Benzene	<1	<1	<1	<1	<1	<1	<1	<1
Benzo(a)anthracene								
Benzo(a)pyrene								
Benzo(b)fluoranthene								
Benzo(g,h,i)perylene								
Benzo(k)fluoranthene								
Benzyl alcohol								
Beryllium, total	<4	<4	<4	<4	<4	<4	<4	<4
Beta-bhc								
Bis (2-chloroethoxy) methane								
Bis(2-chloroethyl) ether								
Bis(2-ethylhexyl) phthalate								
Bis[2-chloroisopropyl]ether								
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	<.8
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1
Chlordane								
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzilate								
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	<8
Chrysene								
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	1.1	<.4	<.4	.4	<.4	<.4	<.4	<.4
Copper, total	<4.0	<4.0	8.2	6.0	6.8	<4.0	<4.0	<4.0
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
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 methanesulfonate								
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1
Famphur								
Fluoranthene								
Fluorene								
Gamma-bhc [lindane]								
Heptachlor								
Heptachlor epoxide								
Hexachlorobenzene								

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

Table 11

Analytical Data Summary for MW-59

Constituents	Units	9/24/2014	3/11/2015	9/17/2015	3/22/2016	9/15/2016	3/23/2017	9/8/2017	3/19/2018
Hexachlorobutadiene	ug/L								
Hexachlorocyclopentadiene	ug/L								
Hexachloroethane	ug/L								
Hexachloropropene	ug/L								
Indeno(1,2,3-cd)pyrene	ug/L								
Isobutanol	ug/L								
Isodrin	ug/L								
Isophorone	ug/L								
Isosafrole	ug/L								
Kepone	ug/L								
Lead, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Mercury, total	ug/L								
Methacrylonitrile	ug/L								
Methapyrilene	ug/L								
Methoxychlor	ug/L								
Methyl iodide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Methyl methacrylate	ug/L								
Methyl methanesulfonate	ug/L								
Methyl parathion	ug/L								
Methylene chloride	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene	ug/L								
Nickel, total	ug/L	8.0	8.2	5.5	<4.0	<4.0	4.8	7.1	<4.0
Nitrobenzene	ug/L								
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,o,o-triethyl phosphorothioate	ug/L								
O-toluidine	ug/L								
P-(dimethylamino)azobenzene	ug/L								
Parathion	ug/L								
Pentachlorobenzene	ug/L								
Pentachloronitrobenzene (pcnb)	ug/L								
Pentachlorophenol	ug/L								
Phenacetin	ug/L								
Phenanthrene	ug/L								
Phenol	ug/L								
Phorate	ug/L								
Pronamide	ug/L								
Propionitrile	ug/L								
Pyrene	ug/L								
Safrole	ug/L								
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
Sulfide, total	mg/L								
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4	<4	<1	<4	<4	<4	<4	<4
Thionazin	ug/L								
Tin, total	ug/L								
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Toxaphene	ug/L								
Trans-1,2-dichloroethylene	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
Trichloroethylene	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	8.8	<8.0	14.8	<8.0	<8.0	<8.0	<20.0	<8.0

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

Table 11

Analytical Data Summary for MW-59

Constituents	6/5/2018	9/11/2018	12/5/2018	3/26/2019	6/6/2019	9/4/2019	12/4/2019	3/26/2020	9/15/2020
Hexachlorobutadiene				<8				<8	
Hexachlorocyclopentadiene				<8				<8	
Hexachloroethane				<8				<8	
Hexachloropropene				<8				<8	
Indeno(1,2,3-cd)pyrene				<8				<8	
Isobutanol				<1000				<1000	
Isodrin				<8				<8	
Isophorone				<8				<8	
Isosafrole				<8				<8	
Kepone				<8				<8	
Lead, total		<4		<4		<4		<4	<4
Mercury, total				<.5				<.5	
Methacrylonitrile				<1				<1	
Methapyrilene				<8				<8	
Methoxychlor				<.05				<.05	
Methyl iodide		<1		<1		<1		<1	<1
Methyl methacrylate				<1				<1	
Methyl methanesulfonate				<8				<8	
Methyl parathion				<.4				<.4	
Methylene chloride		<5		<5		<5		<5	<5
Naphthalene				<8				<8	
Nickel, total		<4.0		5.1		4.8		<4.0	4.0
Nitrobenzene				<8				<8	
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,o,o-triethyl phosphorothioate				<.4				<.4	
O-toluidine				<8				<8	
P-(dimethylamino)azobenzene				<8				<8	
Parathion				<.4				<.4	
Pentachlorobenzene				<8				<8	
Pentachloronitrobenzene (pcnb)				<8				<8	
Pentachlorophenol				<8				<8	
Phenacetin				<8				<8	
Phenanthrene				<8				<8	
Phenol				<8				<8	
Phorate				<.4				<.4	
Pronamide				<8				<8	
Propionitrile				<10				<10	
Pyrene				<8				<8	
Safrole				<8				<8	
Selenium, total		<4		<4		<4		<4	<4
Silver, total		<8		<4		<4		<4	<4
Styrene		<1		<1		<1		<1	<1
Sulfide, total				<.1				<.1	
Tetrachloroethylene		<1		<1		<1		<1	<1
Thallium, total		<4		<2		<2		<2	<2
Thionazin				<.4				<.4	
Tin, total				<20				<20	
Toluene		<1		<1		<1		<1	<1
Toxaphene				<.2				<.2	
Trans-1,2-dichloroethylene		<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
Trichloroethylene		<1		<1		<1		<1	<1
Trichlorofluoromethane		<1		<1		<1		<1	<1
Vanadium, total		<20		<20		<20		<20	<20
Vinyl acetate		<5		<5		<5		<5	<5
Vinyl chloride		<1		<1		<1		<1	<1
Xylenes, total		<2		<2		<2		<2	<2
Zinc, total		<8.0		13.7		<8.0		<20.0	<20.0

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

Table 11

Analytical Data Summary for MW-59

Constituents	3/2/2021	9/7/2021	3/24/2022	8/31/2022	3/2/2023	9/12/2023	3/4/2024	9/23/2024
Hexachlorobutadiene								
Hexachlorocyclopentadiene								
Hexachloroethane								
Hexachloropropene								
Indeno(1,2,3-cd)pyrene								
Isobutanol								
Isodrin								
Isophorone								
Isosafrole								
Kepone								
Lead, total	<4	<4	<4	<4	<4	<4	<4	<4
Mercury, total								
Methacrylonitrile								
Methapyrilene								
Methoxychlor								
Methyl iodide	<1	<1	<1	<1	<1	<1	<1	<1
Methyl methacrylate								
Methyl methanesulfonate								
Methyl parathion								
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene								
Nickel, total	<4.0	4.3	<4.0	5.4	<4.0	<4.0	<4.0	<4.0
Nitrobenzene								
N-nitrosodiethylamine								
N-nitrosodimethylamine								
N-nitrosodi-n-butylamine								
N-nitroso-di-n-propylamine								
N-nitrosodiphenylamine								
N-nitrosomethylethylamine								
N-nitrosopiperidine								
N-nitrosopyrrolidine								
O,o,o-triethyl phosphorothioate								
O-toluidine								
P-(dimethylamino)azobenzene								
Parathion								
Pentachlorobenzene								
Pentachloronitrobenzene (pcnb)								
Pentachlorophenol								
Phenacetin								
Phenanthrene								
Phenol								
Phorate								
Pronamide								
Propionitrile								
Pyrene								
Safrole								
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	<1	<1	<1	<1	<1	<1	<1	<1
Sulfide, total								
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2	<2	<2	<2	<2
Thionazin								
Tin, total								
Toluene	<1	<1	<1	<1	<1	<1	<1	<1
Toxaphene								
Trans-1,2-dichloroethylene	<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
Trichloroethylene	<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	<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 12

Analytical Data Summary for MW-60

Constituents	Units	9/24/2014	3/11/2015	9/17/2015	12/17/2015	3/22/2016	9/15/2016	3/23/2017	9/8/2017
(3 4)-methylphenol	ug/L		<8						
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-dichloroethylene	ug/L	<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
1,2,4,5-tetrachlorobenzene	ug/L		<8						
1,2,4-trichlorobenzene	ug/L		<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
1,2-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
1,4-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 (mek)	ug/L	<5	<5	<5		<5	<5	<5	<5
2-chloronaphthalene	ug/L		<8						
2-chlorophenol	ug/L		<8						
2-hexanone (mbk)	ug/L	<5	<5	<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-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 (mibk)	ug/L	<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
Acetonitrile	ug/L		<10						
Acetophenone	ug/L		<8						
Acrolein	ug/L		<10						
Acrylonitrile	ug/L	<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						

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

Table 12

Analytical Data Summary for MW-60

Constituents	3/19/2018	9/11/2018	3/26/2019	9/4/2019	3/26/2020	9/15/2020	3/2/2021	9/7/2021	3/24/2022
(3 4)-methylphenol					<8				
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-dichloroethylene	<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	<1	<1	<1	<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
1,2-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)									
2,4,5-trichlorophenol					<8				
2,4,6-trichlorophenol					<8				
2,4-d									
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 (mek)	<5	<5	<5	<5	<5	<5	<5	<5	<10
2-chloronaphthalene					<8				
2-chlorophenol					<8				
2-hexanone (mbk)	<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-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 (mibk)	<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					<10				
Acetophenone					<8				
Acrolein					<10				
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5
Aldrin					<.05				
Allyl chloride					<1				
Alpha-bhc					<.05				
Anthracene					<8				

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

Table 12

Analytical Data Summary for MW-60

Constituents	8/31/2022	3/2/2023	3/28/2023	9/12/2023	3/4/2024	9/23/2024
(3 4)-methylphenol						
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-dichloroethylene	<1		<1	<1	<1	<1
1,1-dichloropropene						
1,2,3-trichloropropane	<1		<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene						
1,2,4-trichlorobenzene						
1,2-dibromo-3-chloropropane	<5		<5	<5	<5	<5
1,2-dibromoethane	<1		<1	<1	<1	<1
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						
1,3,5-trinitrobenzene						
1,3-dichlorobenzene						
1,3-dichloropropane						
1,3-dinitrobenzene						
1,4-dichlorobenzene	<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 (mek)	<10		<10	<10	<10	<10
2-chloronaphthalene						
2-chlorophenol						
2-hexanone (mbk)	<5		<5	<5	<5	<5
2-methylnaphthalene						
2-methylphenol (o-cresol)						
2-naphthylamine						
2-nitroaniline						
2-nitrophenol						
3,3´-dichlorobenzidine						
3,3-dimethylbenzidine						
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 (mibk)	<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
Acetonitrile						
Acetophenone						
Acrolein						
Acrylonitrile	<5		<5	<5	<5	<5
Aldrin						
Allyl chloride						
Alpha-bhc						
Anthracene						

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

Table 12

Analytical Data Summary for MW-60

Constituents	Units	9/24/2014	3/11/2015	9/17/2015	12/17/2015	3/22/2016	9/15/2016	3/23/2017	9/8/2017
Antimony, total	ug/L	<2	<2	<2		<2	<2	<2	<2
Arochlor 1016	ug/L		<.1						
Arochlor 1221	ug/L		<.2						
Arochlor 1232	ug/L		<.2						
Arochlor 1242	ug/L		<.2						
Arochlor 1248	ug/L		<.2						
Arochlor 1254	ug/L		<.1						
Arochlor 1260	ug/L		<.1						
Arsenic, total	ug/L	<4	<4	<4		<4	<4	<4	<4
Azobenzene	ug/L		<8						
Barium, total	ug/L	127.0	107.0	163.0		149.0	127.0	96.9	130.0
Benzene	ug/L	<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(g,h,i)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
Beta-bhc	ug/L		<.05						
Bis (2-chloroethoxy) methane	ug/L		<8						
Bis(2-chloroethyl) ether	ug/L		<8						
Bis(2-ethylhexyl) phthalate	ug/L		<8						
Bis[2-chloroisopropyl]ether	ug/L		<8						
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
Butyl benzyl phthalate	ug/L		<8						
Cadmium, total	ug/L	<.8	<.8	<.8		<.8	<.8	<.8	<.8
Carbon disulfide	ug/L	<1	<1	<1		<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1		<1	<1	<1	<1
Chlordane	ug/L		<.1						
Chlorobenzene	ug/L	<1	<1	<1		<1	<1	<1	<1
Chlorobenzilate	ug/L		<8						
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
Chloroprene	ug/L		<1						
Chromium, total	ug/L	<8	<8	<8		<8	<8	<8	<8
Chrysene	ug/L		<8						
Cis-1,2-dichloroethylene	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	<.8	<.8		<.8	<.8	<.8	<.8
Copper, total	ug/L	<4.0	<4.0	<4.0		<4.0	<4.0	<4.0	<4.0
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	<1	<1	<1		<1	<1	<1	<1
Dibromomethane	ug/L	<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 methanesulfonate	ug/L		<8						
Ethylbenzene	ug/L	<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						

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

Table 12

Analytical Data Summary for MW-60

Constituents	3/19/2018	9/11/2018	3/26/2019	9/4/2019	3/26/2020	9/15/2020	3/2/2021	9/7/2021	3/24/2022
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arochlor 1016					<.1				
Arochlor 1221					<.2				
Arochlor 1232					<.2				
Arochlor 1242					<.2				
Arochlor 1248					<.2				
Arochlor 1254					<.1				
Arochlor 1260					<.1				
Arsenic, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Azobenzene					<8				
Barium, total	88.4	152.0	176.0	219.0	256.0	273.0	282.0	284.0	247.0
Benzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Benzo(a)anthracene					<8				
Benzo(a)pyrene					<8				
Benzo(b)fluoranthene					<8				
Benzo(g,h,i)perylene					<8				
Benzo(k)fluoranthene					<8				
Benzyl alcohol					<8				
Beryllium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Beta-bhc					<.05				
Bis (2-chloroethoxy) methane					<8				
Bis(2-chloroethyl) ether					<8				
Bis(2-ethylhexyl) phthalate					<6				
Bis[2-chloroisopropyl]ether					<8				
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	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlordane					<.1				
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzilate					<8				
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
Chloroprene					<1				
Chromium, total	<8	<8	<8	<8	<8	<8	<8	<8	<8
Chrysene					<8				
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	<.8	<.8	<.8	1.0	<.8	2.2	2.5	4.1	1.0
Copper, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<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	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<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 methanesulfonate					<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				
Hexachlorobenzene					<.05				

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

Table 12

Analytical Data Summary for MW-60

Constituents	8/31/2022	3/2/2023	3/28/2023	9/12/2023	3/4/2024	9/23/2024
Antimony, total	<2	<2		<2	<2	<2
Arochlor 1016						
Arochlor 1221						
Arochlor 1232						
Arochlor 1242						
Arochlor 1248						
Arochlor 1254						
Arochlor 1260						
Arsenic, total	<4	<4		<4	<4	<4
Azobenzene						
Barium, total	285.0	205.0		312.0	192.0	238.0
Benzene	<1		<1	<1	<1	<1
Benzo(a)anthracene						
Benzo(a)pyrene						
Benzo(b)fluoranthene						
Benzo(g,h,i)perylene						
Benzo(k)fluoranthene						
Benzyl alcohol						
Beryllium, total	<4	<4		<4	<4	<4
Beta-bhc						
Bis (2-chloroethoxy) methane						
Bis(2-chloroethyl) ether						
Bis(2-ethylhexyl) phthalate						
Bis[2-chloroisopropyl]ether						
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						
Cadmium, total	<.8	<.8		<.8	<.8	<.8
Carbon disulfide	<1		<1	<1	<1	<1
Carbon tetrachloride	<1		<1	<1	<1	<1
Chlordane						
Chlorobenzene	<1		<1	<1	<1	<1
Chlorobenzilate						
Chloroethane	<1		<1	<1	<1	<1
Chloroform	<1		<1	<1	<1	<1
Chloromethane	<1		<1	<1	<1	<1
Chloroprene						
Chromium, total	<8	<8		<8	<8	<8
Chrysene						
Cis-1,2-dichloroethylene	<1		<1	<1	<1	<1
Cis-1,3-dichloropropene	<1		<1	<1	<1	<1
Cobalt, total	6.0	1.3		6.6	.5	1.3
Copper, total	10.3	<4.0		<4.0	<4.0	<4.0
Cyanide, total						
Delta-bhc						
Diallate						
Dibenzo(a,h)anthracene						
Dibenzofuran						
Dibromochloromethane	<1		<1	<1	<1	<1
Dibromomethane	<1		<1	<1	<1	<1
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 methanesulfonate						
Ethylbenzene	<1		<1	<1	<1	<1
Famphur						
Fluoranthene						
Fluorene						
Gamma-bhc [lindane]						
Heptachlor						
Heptachlor epoxide						
Hexachlorobenzene						

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

Table 12

Analytical Data Summary for MW-60

Constituents	Units	9/24/2014	3/11/2015	9/17/2015	12/17/2015	3/22/2016	9/15/2016	3/23/2017	9/8/2017
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						
Isobutanol	ug/L		<1000						
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
Mercury, total	ug/L		<.5						
Methacrylonitrile	ug/L		<1						
Methapyrilene	ug/L		<8						
Methoxychlor	ug/L		<.05						
Methyl iodide	ug/L	<1	<1	<1		<1	<1	<1	<1
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
Naphthalene	ug/L		<8						
Nickel, total	ug/L	7.0	<4.0	13.6	<4.0	7.9	17.3	<4.0	7.5
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,o,o-triethyl phosphorothioate	ug/L		<.4						
O-toluidine	ug/L		<8						
P-(dimethylamino)azobenzene	ug/L		<8						
Parathion	ug/L		<.4						
Pentachlorobenzene	ug/L		<8						
Pentachloronitrobenzene (pcnb)	ug/L		<8						
Pentachlorophenol	ug/L		<8						
Phenacetin	ug/L		<8						
Phenanthrene	ug/L		<8						
Phenol	ug/L		<8						
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
Silver, total	ug/L	<4	<4	<4		<4	<4	<4	<4
Styrene	ug/L	<1	<1	<1		<1	<1	<1	<1
Sulfide, total	mg/L		.27						
Tetrachloroethylene	ug/L	<1	<1	<1		<1	<1	<1	<1
Thallium, total	ug/L	<4	<4	<1		<4	<4	<4	<4
Thionazin	ug/L		<.4						
Tin, total	ug/L		<20						
Toluene	ug/L	<1	<1	<1		<1	<1	<1	<1
Toxaphene	ug/L		<.2						
Trans-1,2-dichloroethylene	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
Trichloroethylene	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
Zinc, total	ug/L	9.6	<8.0	<8.0		<8.0	<8.0	<8.0	<20.0

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

Table 12

Analytical Data Summary for MW-60

Constituents	3/19/2018	9/11/2018	3/26/2019	9/4/2019	3/26/2020	9/15/2020	3/2/2021	9/7/2021	3/24/2022
Hexachlorobutadiene					<8				
Hexachlorocyclopentadiene					<8				
Hexachloroethane					<8				
Hexachloropropene					<8				
Indeno(1,2,3-cd)pyrene					<8				
Isobutanol					<1000				
Isodrin					<8				
Isophorone					<8				
Isosafrole					<8				
Kepone					<8				
Lead, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Mercury, total					<.5				
Methacrylonitrile					<1				
Methapyrilene					<8				
Methoxychlor					<.05				
Methyl iodide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methyl methacrylate					<1				
Methyl methanesulfonate					<8				
Methyl parathion					<.4				
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene					<8				
Nickel, total	<4.0	<4.0	15.2	24.8	19.4	34.4	22.0	30.1	18.2
Nitrobenzene					<8				
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,o,o-triethyl phosphorothioate					<.4				
O-toluidine					<8				
P-(dimethylamino)azobenzene					<8				
Parathion					<.4				
Pentachlorobenzene					<8				
Pentachloronitrobenzene (pcnb)					<8				
Pentachlorophenol					<8				
Phenacetin					<8				
Phenanthrene					<8				
Phenol					<8				
Phorate					<.4				
Pronamide					<8				
Propionitrile					<10				
Pyrene					<8				
Safrole					<8				
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	<4	<8	<4	<4	<4	<4	<4	<4	<4
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfide, total					<.10				
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4	<4	<2	<2	<2	<2	<2	<2	<2
Thionazin					<.4				
Tin, total					<20				
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toxaphene					<.2				
Trans-1,2-dichloroethylene	<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
Trichloroethylene	<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	16.9	23.3	<8.0	<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 12

Analytical Data Summary for MW-60

Constituents	8/31/2022	3/2/2023	3/28/2023	9/12/2023	3/4/2024	9/23/2024
Hexachlorobutadiene						
Hexachlorocyclopentadiene						
Hexachloroethane						
Hexachloropropene						
Indeno(1,2,3-cd)pyrene						
Isobutanol						
Isodrin						
Isophorone						
Isosafrole						
Kepone						
Lead, total	<4	<4		<4	<4	<4
Mercury, total						
Methacrylonitrile						
Methapyrilene						
Methoxychlor						
Methyl iodide	<1		<1	<1	<1	<1
Methyl methacrylate						
Methyl methanesulfonate						
Methyl parathion						
Methylene chloride	<5		<5	<5	<5	<5
Naphthalene						
Nickel, total	45.7	11.5		26.4	<4.0	29.2
Nitrobenzene						
N-nitrosodiethylamine						
N-nitrosodimethylamine						
N-nitrosodi-n-butylamine						
N-nitroso-di-n-propylamine						
N-nitrosodiphenylamine						
N-nitrosomethylethylamine						
N-nitrosopiperidine						
N-nitrosopyrrolidine						
O,o,o-triethyl phosphorothioate						
O-toluidine						
P-(dimethylamino)azobenzene						
Parathion						
Pentachlorobenzene						
Pentachloronitrobenzene (pcnb)						
Pentachlorophenol						
Phenacetin						
Phenanthrene						
Phenol						
Phorate						
Pronamide						
Propionitrile						
Pyrene						
Safrole						
Selenium, total	<4	<4		<4	<4	<4
Silver, total	<4	<4		<4	<4	<4
Styrene	<1		<1	<1	<1	<1
Sulfide, total						
Tetrachloroethylene	<1		<1	<1	<1	<1
Thallium, total	<2	<2		<2	<2	<2
Thionazin						
Tin, total						
Toluene	<1		<1	<1	<1	<1
Toxaphene						
Trans-1,2-dichloroethylene	<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
Trichloroethylene	<1		<1	<1	<1	<1
Trichlorofluoromethane	<1		<1	<1	<1	<1
Vanadium, total	<20	<20		<20	<20	<20
Vinyl acetate	<5		<5	<5	<5	<5
Vinyl chloride	<1		<1	<1	<1	<1
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 13

Analytical Data Summary for MW-61

Constituents	Units	9/24/2014	3/11/2015	9/17/2015	12/17/2015	3/22/2016	9/15/2016	10/31/2016	3/23/2017
(3 4)-methylphenol	ug/L								<8
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-dichloroethylene	ug/L	<1	<1	<1		<1	<1		<1
1,1-dichloropropene	ug/L								<1
1,2,3-trichloropropane	ug/L	<1	<1	<1		<1	<1		<1
1,2,4,5-tetrachlorobenzene	ug/L								<8
1,2,4-trichlorobenzene	ug/L								<1
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1		<1	<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
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
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 (mek)	ug/L	<5	<5	<5		<5	<5		<5
2-Chloroethyl Vinyl Ether	ug/L								
2-chloronaphthalene	ug/L								<8
2-chlorophenol	ug/L								<8
2-hexanone (mbk)	ug/L	<5	<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-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 (mibk)	ug/L	<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
Acetonitrile	ug/L								<10
Acetophenone	ug/L								<8
Acrolein	ug/L								<10
Acrylonitrile	ug/L	<5	<5	<5		<5	<5		<5
Aldrin	ug/L								<.05
Allyl chloride	ug/L								<1
Alpha-bhc	ug/L								<.05

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

Table 13

Analytical Data Summary for MW-61

Constituents	9/8/2017	3/19/2018	9/11/2018	3/26/2019	9/4/2019	3/26/2020	9/15/2020	3/2/2021	9/7/2021
(3 4)-methylphenol		<8							
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-dichloroethylene	<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	<1	<1	<1	<1	<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
1,2-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 (mek)	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-Chloroethyl Vinyl Ether									
2-chloronaphthalene		<8							
2-chlorophenol		<8							
2-hexanone (mbk)	<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-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 (mibk)	<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		<10							
Acetophenone		<8							
Acrolein		<10							
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5
Aldrin		<.05							
Allyl chloride		<1							
Alpha-bhc		<.05							

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

Table 13

Analytical Data Summary for MW-61

Constituents	3/24/2022	8/31/2022	3/2/2023	9/12/2023	3/4/2024	9/23/2024
(3 4)-methylphenol			<8			
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-dichloroethylene	<1	<1	<1	<1	<1	<1
1,1-dichloropropene			<1			
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene			<8			
1,2,4-trichlorobenzene			<1			
1,2-dibromo-3-chloropropane	<5	<5	<1	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1	<1
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			<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
1,4-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 (mek)	<10	<10	<5	<10	<10	<10
2-Chloroethyl Vinyl Ether			<2			
2-chloronaphthalene			<8			
2-chlorophenol			<8			
2-hexanone (mbk)	<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-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 (mibk)	<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
Acetonitrile			<10			
Acetophenone			<8			
Acrolein			<10			
Acrylonitrile	<5	<5	<5	<5	<5	<5
Aldrin			<.05			
Allyl chloride			<1			
Alpha-bhc			<.05			

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

Table 13

Analytical Data Summary for MW-61

Constituents	Units	9/24/2014	3/11/2015	9/17/2015	12/17/2015	3/22/2016	9/15/2016	10/31/2016	3/23/2017
Anthracene	ug/L								<8
Antimony, total	ug/L	<2	<2	<2		<2	<2		<2
Arochlor 1016	ug/L								<.1
Arochlor 1221	ug/L								<.2
Arochlor 1232	ug/L								<.2
Arochlor 1242	ug/L								<.2
Arochlor 1248	ug/L								<.2
Arochlor 1254	ug/L								<.1
Arochlor 1260	ug/L								<.1
Arsenic, total	ug/L	<4	<4	<4		<4	<4		<4
Azobenzene	ug/L								<8
Barium, total	ug/L	40.3	29.8	35.8		33.1	37.9		36.9
Benzene	ug/L	<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(g,h,i)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
Beta-bhc	ug/L								<.05
Bis (2-chloroethoxy) methane	ug/L								<8
Bis(2-chloroethyl) ether	ug/L								<8
Bis(2-ethylhexyl) phthalate	ug/L								<8
Bis[2-chloroisopropyl]ether	ug/L								<8
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
Cadmium, total	ug/L	<.8	<.8	<.8		<.8	<.8		<.8
Carbon disulfide	ug/L	<1	<1	<1		<1	<1		<1
Carbon tetrachloride	ug/L	<1	<1	<1		<1	<1		<1
Chlordane	ug/L								<.1
Chlorobenzene	ug/L	<1	<1	<1		<1	<1		<1
Chlorobenzilate	ug/L								<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
Chromium, total	ug/L	<8	<8	<8		<8	<8		<8
Chrysene	ug/L								<8
Cis-1,2-dichloroethylene	ug/L	<1	<1	<1		<1	<1		<1
Cis-1,3-dichloropropene	ug/L	<1	<1	<1		<1	<1		<1
Cobalt, total	ug/L	1.9	<.8	<.8		<.8	<.8		<.8
Copper, total	ug/L	<4.0	<4.0	13.1	<4.0	<4.0	<4.0		<4.0
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	<1	<1	<1		<1	<1		<1
Dibromomethane	ug/L	<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 methanesulfonate	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 13

Analytical Data Summary for MW-61

Constituents	9/8/2017	3/19/2018	9/11/2018	3/26/2019	9/4/2019	3/26/2020	9/15/2020	3/2/2021	9/7/2021
Anthracene		<8							
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arochlor 1016		<.1							
Arochlor 1221		<.2							
Arochlor 1232		<.2							
Arochlor 1242		<.2							
Arochlor 1248		<.2							
Arochlor 1254		<.1							
Arochlor 1260		<.1							
Arsenic, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Azobenzene		<8							
Barium, total	40.1	38.0	46.1	41.4	42.5	47.2	49.2	49.0	60.0
Benzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Benzo(a)anthracene		<8							
Benzo(a)pyrene		<8							
Benzo(b)fluoranthene		<8							
Benzo(g,h,i)perylene		<8							
Benzo(k)fluoranthene		<8							
Benzyl alcohol		<8							
Beryllium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Beta-bhc		<.05							
Bis (2-chloroethoxy) methane		<8							
Bis(2-chloroethyl) ether		<8							
Bis(2-ethylhexyl) phthalate		<6							
Bis[2-chloroisopropyl]ether		<8							
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	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlordane		<.1							
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzilate		<8							
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
Chloroprene		<1							
Chromium, total	<8	<8	<8	<8	<8	<8	<8	<8	<8
Chrysene		<8							
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	<.8	<.8	<.8	<.8	<.8	<.8	.4	1.6	.4
Copper, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<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	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<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 methanesulfonate		<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 13

Analytical Data Summary for MW-61

Constituents	3/24/2022	8/31/2022	3/2/2023	9/12/2023	3/4/2024	9/23/2024
Anthracene			<8			
Antimony, total	<2	<2	<2	<2	<2	<2
Arochlor 1016			<.1			
Arochlor 1221			<.2			
Arochlor 1232			<.2			
Arochlor 1242			<.2			
Arochlor 1248			<.2			
Arochlor 1254			<.1			
Arochlor 1260			<.1			
Arsenic, total	<4	<4	<4	<4	<4	<4
Azobenzene			<8			
Barium, total	50.0	55.6	44.9	48.5	48.5	51.7
Benzene	<1	<1	<1	<1	<1	<1
Benzo(a)anthracene			<8			
Benzo(a)pyrene			<8			
Benzo(b)fluoranthene			<8			
Benzo(g,h,i)perylene			<8			
Benzo(k)fluoranthene			<8			
Benzyl alcohol			<8			
Beryllium, total	<4	<4	<4	<4	<4	<4
Beta-bhc			<.05			
Bis (2-chloroethoxy) methane			<8			
Bis(2-chloroethyl) ether			<8			
Bis(2-ethylhexyl) phthalate			<6			
Bis[2-chloroisopropyl]ether			<8			
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			<8			
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1
Chlordane			<.1			
Chlorobenzene	<1	<1	<1	<1	<1	<1
Chlorobenzilate			<8			
Chloroethane	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1
Chloroprene			<1			
Chromium, total	<8	<8	<8	<8	<8	<8
Chrysene			<8			
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1
Cobalt, total	<.4	.8	<.4	<.4	<.4	<.4
Copper, total	<4.0	<4.0	<4.0	<4.0	<4.0	5.0
Cyanide, total			<.005			
Delta-bhc			<.05			
Diallate			<8			
Dibenzo(a,h)anthracene			<8			
Dibenzofuran			<8			
Dibromochloromethane	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<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 methanesulfonate			<8			
Ethylbenzene	<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 13

Analytical Data Summary for MW-61

Constituents	Units	9/24/2014	3/11/2015	9/17/2015	12/17/2015	3/22/2016	9/15/2016	10/31/2016	3/23/2017
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
Isobutanol	ug/L								<1000
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
Mercury, total	ug/L								<.5
Methacrylonitrile	ug/L								<1
Methapyrilene	ug/L								<8
Methoxychlor	ug/L								<.05
Methyl iodide	ug/L	<1	<1	<1		<1	<1		<1
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
Naphthalene	ug/L								<8
Nickel, total	ug/L	13.9	<4.0	13.2		<4.0	14.9	27.7	<4.0
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,o,o-triethyl phosphorothioate	ug/L								<.4
O-toluidine	ug/L								<8
P-(dimethylamino)azobenzene	ug/L								<8
Parathion	ug/L								<.4
Pentachlorobenzene	ug/L								<8
Pentachloronitrobenzene (pcnb)	ug/L								<8
Pentachlorophenol	ug/L								<8
Phenacetin	ug/L								<8
Phenanthrene	ug/L								<8
Phenol	ug/L								<8
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
Silver, total	ug/L	<4	<4	<4		<4	<4		<4
Styrene	ug/L	<1	<1	<1		<1	<1		<1
Sulfide, total	mg/L								<.1
Tetrachloroethylene	ug/L	<1	<1	<1		<1	<1		<1
Thallium, total	ug/L	<4	<4	<1		<4	<4		<4
Thionazin	ug/L								<.4
Tin, total	ug/L								<20
Toluene	ug/L	<1	<1	<1		<1	<1		<1
Toxaphene	ug/L								<.2
Trans-1,2-dichloroethylene	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
Trichloroethylene	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	8.7	<8.0	13.6		25.7	<8.0		<8.0

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

Table 13

Analytical Data Summary for MW-61

Constituents	9/8/2017	3/19/2018	9/11/2018	3/26/2019	9/4/2019	3/26/2020	9/15/2020	3/2/2021	9/7/2021
Hexachlorobenzene		<.05							
Hexachlorobutadiene		<8							
Hexachlorocyclopentadiene		<8							
Hexachloroethane		<8							
Hexachloropropene		<8							
Indeno(1,2,3-cd)pyrene		<8							
Isobutanol		<1000							
Isodrin		<8							
Isophorone		<8							
Isosafrole		<8							
Kepone		<8							
Lead, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Mercury, total		<.5							
Methacrylonitrile		<1							
Methapyrilene		<8							
Methoxychlor		<.05							
Methyl iodide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methyl methacrylate		<1							
Methyl methanesulfonate		<8							
Methyl parathion		<.4							
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene		<8							
Nickel, total	5.7	<4.0	<4.0	4.3	8.9	9.3	8.5	6.1	13.7
Nitrobenzene		<8							
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,o,o-triethyl phosphorothioate		<.4							
O-toluidine		<8							
P-(dimethylamino)azobenzene		<8							
Parathion		<.4							
Pentachlorobenzene		<8							
Pentachloronitrobenzene (pcnb)		<8							
Pentachlorophenol		<8							
Phenacetin		<8							
Phenanthrene		<8							
Phenol		<8							
Phorate		<.4							
Pronamide		<8							
Propionitrile		<10							
Pyrene		<8							
Safrole		<8							
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	<4	<4	<8	<4	<4	<4	<4	<4	<4
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfide, total		<.1							
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4	<4	<4	<2	<2	<2	<2	<2	<2
Thionazin		<.4							
Tin, total		<20							
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toxaphene		<.2							
Trans-1,2-dichloroethylene	<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
Trichloroethylene	<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	<20.0	<8.0	<8.0	13.4	<8.0	<20.0	<20.0	<20.0	<20.0

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

Table 13

Analytical Data Summary for MW-61

Constituents	3/24/2022	8/31/2022	3/2/2023	9/12/2023	3/4/2024	9/23/2024
Hexachlorobenzene			<.05			
Hexachlorobutadiene			<8			
Hexachlorocyclopentadiene			<8			
Hexachloroethane			<8			
Hexachloropropene			<8			
Indeno(1,2,3-cd)pyrene			<8			
Isobutanol			<1000			
Isodrin			<8			
Isophorone			<8			
Isosafrole			<8			
Kepone			<8			
Lead, total	<4	<4	<4	<4	<4	<4
Mercury, total			<.5			
Methacrylonitrile			<1			
Methapyrilene			<8			
Methoxychlor			<.05			
Methyl iodide	<1	<1	<2	<1	<1	<1
Methyl methacrylate			<1			
Methyl methanesulfonate			<8			
Methyl parathion			<.4			
Methylene chloride	<5	<5	<5	<5	<5	<5
Naphthalene			<8			
Nickel, total	6.6	15.3	4.8	<4.0	4.8	5.6
Nitrobenzene			<8			
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,o,o-triethyl phosphorothioate			<.4			
O-toluidine			<8			
P-(dimethylamino)azobenzene			<8			
Parathion			<.4			
Pentachlorobenzene			<8			
Pentachloronitrobenzene (pcnb)			<8			
Pentachlorophenol			<8			
Phenacetin			<8			
Phenanthrene			<8			
Phenol			<8			
Phorate			<.4			
Pronamide			<8			
Propionitrile			<10			
Pyrene			<8			
Safrole			<8			
Selenium, total	<4	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4	<4
Styrene	<1	<1	<1	<1	<1	<1
Sulfide, total			<.1			
Tetrachloroethylene	<1	<1	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2	<2	<2
Thionazin			<.4			
Tin, total			<20			
Toluene	<1	<1	<1	<1	<1	<1
Toxaphene			<.2			
Trans-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5
Trichloroethylene	<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 14

Analytical Data Summary for MW-62R

Constituents	Units	9/24/2014	3/11/2015	9/16/2015	3/22/2016	9/15/2016	3/23/2017	9/8/2017	3/19/2018
(3 4)-methylphenol	ug/L		<8						
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-dichloroethylene	ug/L	<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
1,2,4,5-tetrachlorobenzene	ug/L		<8						
1,2,4-trichlorobenzene	ug/L		<1						
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
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
1,2-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
1,4-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 (mek)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
2-chloronaphthalene	ug/L		<8						
2-chlorophenol	ug/L		<8						
2-hexanone (mbk)	ug/L	<5	<5	<5	<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-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 (mibk)	ug/L	<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
Acetonitrile	ug/L		<10						
Acetophenone	ug/L		<8						
Acrolein	ug/L		<10						
Acrylonitrile	ug/L	<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						

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

Table 14

Analytical Data Summary for MW-62R

Constituents	9/11/2018	3/26/2019	9/4/2019	3/26/2020	9/15/2020	3/2/2021	9/7/2021	3/24/2022	8/31/2022
(3 4)-methylphenol				<8					
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-dichloroethylene	<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	<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
1,2-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)									
2,4,5-trichlorophenol				<8					
2,4,6-trichlorophenol				<8					
2,4-d									
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 (mek)	<5	<5	<5	<5	<5	<5	<5	<10	<10
2-chloronaphthalene				<8					
2-chlorophenol				<8					
2-hexanone (mbk)	<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-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 (mibk)	<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				<10					
Acetophenone				<8					
Acrolein				<10					
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5
Aldrin				<.05					
Allyl chloride				<1					
Alpha-bhc				<.05					
Anthracene				<8					

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

Table 14

Analytical Data Summary for MW-62R

Constituents	3/2/2023	9/12/2023	3/4/2024	9/23/2024
(3 4)-methylphenol				
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-dichloroethylene	<1	<1	<1	<1
1,1-dichloropropene				
1,2,3-trichloropropane	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene				
1,2,4-trichlorobenzene				
1,2-dibromo-3-chloropropane	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1
1,2-dichloropropane	<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
1,4-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 (mek)	<10	<10	<10	<10
2-chloronaphthalene				
2-chlorophenol				
2-hexanone (mbk)	<5	<5	<5	<5
2-methylnaphthalene				
2-methylphenol (o-cresol)				
2-naphthylamine				
2-nitroaniline				
2-nitrophenol				
3,3´-dichlorobenzidine				
3,3-dimethylbenzidine				
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 (mibk)	<5	<5	<5	<5
4-nitroaniline				
4-nitrophenol				
5-nitro-o-toluidine				
7,12-dimethylbenz [a] anthracene				
Acenaphthene				
Acenaphthylene				
Acetone	<10	<10	<10	<10
Acetonitrile				
Acetophenone				
Acrolein				
Acrylonitrile	<5	<5	<5	<5
Aldrin				
Allyl chloride				
Alpha-bhc				
Anthracene				

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

Table 14

Analytical Data Summary for MW-62R

Constituents	Units	9/24/2014	3/11/2015	9/16/2015	3/22/2016	9/15/2016	3/23/2017	9/8/2017	3/19/2018
Antimony, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
Arochlor 1016	ug/L		<.1						
Arochlor 1221	ug/L		<.2						
Arochlor 1232	ug/L		<.2						
Arochlor 1242	ug/L		<.2						
Arochlor 1248	ug/L		<.2						
Arochlor 1254	ug/L		<.1						
Arochlor 1260	ug/L		<.1						
Arsenic, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Azobenzene	ug/L		<8						
Barium, total	ug/L	833	773	802	817	784	831	864	858
Benzene	ug/L	<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(g,h,i)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
Beta-bhc	ug/L		<.05						
Bis (2-chloroethoxy) methane	ug/L		<8						
Bis(2-chloroethyl) ether	ug/L		<8						
Bis(2-ethylhexyl) phthalate	ug/L	<10	<8	<10	<10	<10	<10	<6	
Bis[2-chloroisopropyl]ether	ug/L		<8						
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
Butyl benzyl phthalate	ug/L		<8						
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
Chlordane	ug/L		<.1						
Chlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzilate	ug/L		<8						
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
Chloroprene	ug/L		<1						
Chromium, total	ug/L	<8	<8	<8	<8	<8	<8	<8	<8
Chrysene	ug/L		<8						
Cis-1,2-dichloroethylene	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	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Copper, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Cyanide, total	mg/L		.006						
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
Dibromomethane	ug/L	<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 methanesulfonate	ug/L		<8						
Ethylbenzene	ug/L	<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						

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

Table 14

Analytical Data Summary for MW-62R

Constituents	9/11/2018	3/26/2019	9/4/2019	3/26/2020	9/15/2020	3/2/2021	9/7/2021	3/24/2022	8/31/2022
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arochlor 1016				<.1					
Arochlor 1221				<.2					
Arochlor 1232				<.2					
Arochlor 1242				<.2					
Arochlor 1248				<.2					
Arochlor 1254				<.1					
Arochlor 1260				<.1					
Arsenic, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Azobenzene				<8					
Barium, total	816	891	917	1060	1070	1010	1060	1020	1060
Benzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Benzo(a)anthracene				<8					
Benzo(a)pyrene				<8					
Benzo(b)fluoranthene				<8					
Benzo(g,h,i)perylene				<8					
Benzo(k)fluoranthene				<8					
Benzyl alcohol				<8					
Beryllium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Beta-bhc				<.05					
Bis (2-chloroethoxy) methane				<8					
Bis(2-chloroethyl) ether				<8					
Bis(2-ethylhexyl) phthalate				<6					
Bis[2-chloroisopropyl]ether				<8					
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	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlordane				<.1					
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzilate				<8					
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
Chloroprene				<1					
Chromium, total	<8	<8	<8	<8	<8	<8	<8	<8	<8
Chrysene				<8					
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	<.8	<.8	<.8	<.8	<.4	1.1	.4	.4	<.4
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
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 methanesulfonate				<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					
Hexachlorobenzene				<.05					

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

Table 14

Analytical Data Summary for MW-62R

Constituents	3/2/2023	9/12/2023	3/4/2024	9/23/2024
Antimony, total	<2	<2	<2	<2
Arochlor 1016				
Arochlor 1221				
Arochlor 1232				
Arochlor 1242				
Arochlor 1248				
Arochlor 1254				
Arochlor 1260				
Arsenic, total	<4	<4	<4	<4
Azobenzene				
Barium, total	1170	1050	1010	945
Benzene	<1	<1	<1	<1
Benzo(a)anthracene				
Benzo(a)pyrene				
Benzo(b)fluoranthene				
Benzo(g,h,i)perylene				
Benzo(k)fluoranthene				
Benzyl alcohol				
Beryllium, total	<4	<4	<4	<4
Beta-bhc				
Bis (2-chloroethoxy) methane				
Bis(2-chloroethyl) ether				
Bis(2-ethylhexyl) phthalate				
Bis[2-chloroisopropyl]ether				
Bromochloromethane	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1
Butyl benzyl phthalate				
Cadmium, total	<.8	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1
Chlordane				
Chlorobenzene	<1	<1	<1	<1
Chlorobenzilate				
Chloroethane	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1
Chloroprene				
Chromium, total	<8	<8	<8	<8
Chrysene				
Cis-1,2-dichloroethylene	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1
Cobalt, total	<.4	<.4	<.4	<.4
Copper, total	<4	<4	<4	<4
Cyanide, total				
Delta-bhc				
Diallate				
Dibenzo(a,h)anthracene				
Dibenzofuran				
Dibromochloromethane	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1
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 methanesulfonate				
Ethylbenzene	<1	<1	<1	<1
Famphur				
Fluoranthene				
Fluorene				
Gamma-bhc [lindane]				
Heptachlor				
Heptachlor epoxide				
Hexachlorobenzene				

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

Table 14

Analytical Data Summary for MW-62R

Constituents	Units	9/24/2014	3/11/2015	9/16/2015	3/22/2016	9/15/2016	3/23/2017	9/8/2017	3/19/2018
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						
Isobutanol	ug/L		<1000						
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
Mercury, total	ug/L		<.5						
Methacrylonitrile	ug/L		<1						
Methapyrilene	ug/L		<8						
Methoxychlor	ug/L		<.05						
Methyl iodide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
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
Naphthalene	ug/L		<8						
Nickel, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
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,o,o-triethyl phosphorothioate	ug/L		<.4						
O-toluidine	ug/L		<8						
P-(dimethylamino)azobenzene	ug/L		<8						
Parathion	ug/L		<.4						
Pentachlorobenzene	ug/L		<8						
Pentachloronitrobenzene (pcnb)	ug/L		<8						
Pentachlorophenol	ug/L		<8						
Phenacetin	ug/L		<8						
Phenanthrene	ug/L		<8						
Phenol	ug/L		<8						
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
Silver, total	ug/L	<4	<4	<4	<4	4	<4	<4	<4
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Sulfide, total	mg/L		<.1						
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4	<4	<1	<4	<4	<4	<4	<4
Thionazin	ug/L		<.4						
Tin, total	ug/L		<20						
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Toxaphene	ug/L		<.2						
Trans-1,2-dichloroethylene	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
Trichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	8.6	8.8	6.3	5.5	6.5	6.0	5.1	4.8
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	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<20.0	70.2

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

Table 14

Analytical Data Summary for MW-62R

Constituents	9/11/2018	3/26/2019	9/4/2019	3/26/2020	9/15/2020	3/2/2021	9/7/2021	3/24/2022	8/31/2022
Hexachlorobutadiene				<8					
Hexachlorocyclopentadiene				<8					
Hexachloroethane				<8					
Hexachloropropene				<8					
Indeno(1,2,3-cd)pyrene				<8					
Isobutanol				<1000					
Isodrin				<8					
Isophorone				<8					
Isosafrole				<8					
Kepone				<8					
Lead, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Mercury, total				<.5					
Methacrylonitrile				<1					
Methapyrilene				<8					
Methoxychlor				<.05					
Methyl iodide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methyl methacrylate				<1					
Methyl methanesulfonate				<8					
Methyl parathion				<.4					
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene				<8					
Nickel, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Nitrobenzene				<8					
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,o,o-triethyl phosphorothioate				<.4					
O-toluidine				<8					
P-(dimethylamino)azobenzene				<8					
Parathion				<.4					
Pentachlorobenzene				<8					
Pentachloronitrobenzene (pcnb)				<8					
Pentachlorophenol				<8					
Phenacetin				<8					
Phenanthrene				<8					
Phenol				<8					
Phorate				<.4					
Pronamide				<8					
Propionitrile				<10					
Pyrene				<8					
Safrole				<8					
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	<8	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfide, total				<.1					
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4	<2	<2	<2	<2	<2	<2	<2	<2
Thionazin				<.4					
Tin, total				<20					
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toxaphene				<.2					
Trans-1,2-dichloroethylene	<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
Trichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	5.1	3.4	3.4	2.2	1.7	2.0	1.3	<1.0	1.6
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	30.1	24.7	<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 14

Analytical Data Summary for MW-62R

Constituents	3/2/2023	9/12/2023	3/4/2024	9/23/2024
Hexachlorobutadiene				
Hexachlorocyclopentadiene				
Hexachloroethane				
Hexachloropropene				
Indeno(1,2,3-cd)pyrene				
Isobutanol				
Isodrin				
Isophorone				
Isosafrole				
Kepone				
Lead, total	<4	<4	<4	<4
Mercury, total				
Methacrylonitrile				
Methapyrilene				
Methoxychlor				
Methyl iodide	<1	<1	<1	<1
Methyl methacrylate				
Methyl methanesulfonate				
Methyl parathion				
Methylene chloride	<5	<5	<5	<5
Naphthalene				
Nickel, total	<4	<4	<4	<4
Nitrobenzene				
N-nitrosodiethylamine				
N-nitrosodimethylamine				
N-nitrosodi-n-butylamine				
N-nitroso-di-n-propylamine				
N-nitrosodiphenylamine				
N-nitrosomethylethylamine				
N-nitrosopiperidine				
N-nitrosopyrrolidine				
O,o,o-triethyl phosphorothioate				
O-toluidine				
P-(dimethylamino)azobenzene				
Parathion				
Pentachlorobenzene				
Pentachloronitrobenzene (pcnb)				
Pentachlorophenol				
Phenacetin				
Phenanthrene				
Phenol				
Phorate				
Pronamide				
Propionitrile				
Pyrene				
Safrole				
Selenium, total	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4
Styrene	<1	<1	<1	<1
Sulfide, total				
Tetrachloroethylene	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2
Thionazin				
Tin, total				
Toluene	<1	<1	<1	<1
Toxaphene				
Trans-1,2-dichloroethylene	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1
Trichlorofluoromethane	1.9	1.4	1.0	<1.0
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	<20.0	<20.0	<20.0	<20.0

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

Table 15

Analytical Data Summary for MW-64

Constituents	Units	9/25/2014	3/25/2015	9/16/2015	9/14/2016	3/23/2017	9/8/2017	3/19/2018	9/11/2018
(3 4)-methylphenol	ug/L				<8				
1,1,1,2-tetrachloroethane	ug/L				<1		<1	<1	<1
1,1,1-trichloroethane	ug/L				<1		<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L				<1		<1	<1	<1
1,1,2-trichloroethane	ug/L				<1		<1	<1	<1
1,1-dichloroethane	ug/L				1.9		2.0	2.6	1.2
1,1-dichloroethylene	ug/L				<1		<1	<1	<1
1,1-dichloropropene	ug/L				<1				
1,2,3-trichloropropane	ug/L				<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				<1		<1	<1	<1
1,2-dibromoethane	ug/L				<1		<1	<1	<1
1,2-dichlorobenzene	ug/L				<1		<1	<1	<1
1,2-dichloroethane	ug/L				<1		<1	<1	<1
1,2-dichloropropane	ug/L				<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
1,4-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 (mek)	ug/L				<5		<5	<5	<5
2-chloronaphthalene	ug/L				<8				
2-chlorophenol	ug/L				<8				
2-hexanone (mbk)	ug/L				<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-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 (mibk)	ug/L				<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
Acetonitrile	ug/L				<10				
Acetophenone	ug/L				<8				
Acrolein	ug/L				<10				
Acrylonitrile	ug/L				<5		<5	<5	<5
Aldrin	ug/L				<.05				
Allyl chloride	ug/L				<1				
Alpha-bhc	ug/L				<.05				
Anthracene	ug/L				<8				

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

Table 15

Analytical Data Summary for MW-64

Constituents	3/26/2019	9/4/2019	3/26/2020	9/15/2020	3/2/2021	9/7/2021	3/24/2022	8/31/2022	3/2/2023
(3 4)-methylphenol	<8								
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	2.4	2.3	2.4	1.8	2.7	1.6	2.1	1.6	2.3
1,1-dichloroethylene	<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	<1	<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
1,2-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 (mek)	<5	<5	<5	<5	<5	<5	<10	<10	<10
2-chloronaphthalene	<8								
2-chlorophenol	<8								
2-hexanone (mbk)	<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-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 (mibk)	<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	<10								
Acetophenone	<8								
Acrolein	<10								
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5
Aldrin	<.05								
Allyl chloride	<1								
Alpha-bhc	<.05								
Anthracene	<8								

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

Table 15

Analytical Data Summary for MW-64

Constituents	9/12/2023	3/4/2024	9/23/2024
(3 4)-methylphenol			
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	1.8	1.5	1.7
1,1-dichloroethylene	<1	<1	<1
1,1-dichloropropene			
1,2,3-trichloropropane	<1	<1	<1
1,2,4,5-tetrachlorobenzene			
1,2,4-trichlorobenzene			
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
1,2-dinitrobenzene			
1,3,5-trinitrobenzene			
1,3-dichlorobenzene			
1,3-dichloropropane			
1,3-dinitrobenzene			
1,4-dichlorobenzene	<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 (mek)	<10	<10	<10
2-chloronaphthalene			
2-chlorophenol			
2-hexanone (mbk)	<5	<5	<5
2-methylnaphthalene			
2-methylphenol (o-cresol)			
2-naphthylamine			
2-nitroaniline			
2-nitrophenol			
3,3´-dichlorobenzidine			
3,3-dimethylbenzidine			
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 (mibk)	<5	<5	<5
4-nitroaniline			
4-nitrophenol			
5-nitro-o-toluidine			
7,12-dimethylbenz [a] anthracene			
Acenaphthene			
Acenaphthylene			
Acetone	<10	<10	<10
Acetonitrile			
Acetophenone			
Acrolein			
Acrylonitrile	<5	<5	<5
Aldrin			
Allyl chloride			
Alpha-bhc			
Anthracene			

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

Table 15

Analytical Data Summary for MW-64

Constituents	Units	9/25/2014	3/25/2015	9/16/2015	9/14/2016	3/23/2017	9/8/2017	3/19/2018	9/11/2018
Antimony, total	ug/L				<2		<2	<2	<2
Arochlor 1016	ug/L				<.1				
Arochlor 1221	ug/L				<.2				
Arochlor 1232	ug/L				<.2				
Arochlor 1242	ug/L				<.2				
Arochlor 1248	ug/L				<.2				
Arochlor 1254	ug/L				<.1				
Arochlor 1260	ug/L				<.1				
Arsenic, total	ug/L				21.6		7.9	19.3	24.2
Azobenzene	ug/L				<8				
Barium, total	ug/L				56.9		57.4	59.4	62.5
Benzene	ug/L	<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(g,h,i)perylene	ug/L				<8				
Benzo(k)fluoranthene	ug/L				<8				
Benzyl alcohol	ug/L				<8				
Beryllium, total	ug/L				<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-ethylhexyl) phthalate	ug/L				<8				
Bis[2-chloroisopropyl]ether	ug/L				<8				
Bromochloromethane	ug/L				<1		<1	<1	<1
Bromodichloromethane	ug/L				<1		<1	<1	<1
Bromoform	ug/L				<1		<1	<1	<1
Bromomethane	ug/L				<1		<1	<1	<1
Butyl benzyl phthalate	ug/L				<8				
Cadmium, total	ug/L				<.8		<.8	<.8	<.8
Carbon disulfide	ug/L				<1		<1	<1	<1
Carbon tetrachloride	ug/L				<1		<1	<1	<1
Chemical oxygen demand	mg/L	114 *	95 *	83 *		68			
Chlordane	ug/L				<.1				
Chloride	mg/L	133 *	626 *	476 *		620			
Chlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzilate	ug/L				<8				
Chloroethane	ug/L				<1		<1	<1	<1
Chloroform	ug/L				<1		<1	<1	<1
Chloromethane	ug/L				<1		<1	<1	<1
Chloroprene	ug/L				<1				
Chromium, total	ug/L				<8		<8	<8	<8
Chrysene	ug/L				<8				
Cis-1,2-dichloroethylene	ug/L				36.4		23.7	17.2	15.1
Cis-1,3-dichloropropene	ug/L				<1		<1	<1	<1
Cobalt, total	ug/L				27.0		34.4	19.1	25.1
Copper, total	ug/L				<4.0		<4.0	<4.0	<4.0
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				<1		<1	<1	<1
Dibromomethane	ug/L				<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 methanesulfonate	ug/L				<8				
Ethylbenzene	ug/L				<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				

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

Table 15

Analytical Data Summary for MW-64

Constituents	3/26/2019	9/4/2019	3/26/2020	9/15/2020	3/2/2021	9/7/2021	3/24/2022	8/31/2022	3/2/2023
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arochlor 1016	<.1								
Arochlor 1221	<.2								
Arochlor 1232	<.2								
Arochlor 1242	<.2								
Arochlor 1248	<.2								
Arochlor 1254	<.1								
Arochlor 1260	<.1								
Arsenic, total	40.2	22.2	40.3	21.1	20.2	25.2	19.2	27.4	26.4
Azobenzene	<8								
Barium, total	141.0	55.1	96.2	57.6	58.8	51.6	51.2	40.0	61.2
Benzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Benzo(a)anthracene	<8								
Benzo(a)pyrene	<8								
Benzo(b)fluoranthene	<8								
Benzo(g,h,i)perylene	<8								
Benzo(k)fluoranthene	<8								
Benzyl alcohol	<8								
Beryllium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Beta-bhc	<.05								
Bis (2-chloroethoxy) methane	<8								
Bis(2-chloroethyl) ether	<8								
Bis(2-ethylhexyl) phthalate	<6								
Bis[2-chloroisopropyl]ether	<8								
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	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
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									
Chlordane	<.1								
Chloride									
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzilate	<8								
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
Chloroprene	<1								
Chromium, total	<8	<8	<8	<8	<8	<8	<8	<8	<8
Chrysene	<8								
Cis-1,2-dichloroethylene	9.7	8.3	4.6	6.4	7.4	7.4	3.9	5.4	3.3
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	16.1	23.0	14.7	20.8	14.6	21.0	11.8	21.6	11.0
Copper, total	4.2	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<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	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<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 methanesulfonate	<8								
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Famphur	<.4								
Fluoranthene	<8								
Fluorene	<8								
Gamma-bhc [lindane]	<.05								
Heptachlor	<.05								

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

Table 15

Analytical Data Summary for MW-64

Constituents	9/12/2023	3/4/2024	9/23/2024
Antimony, total	<2	<2	<2
Arochlor 1016			
Arochlor 1221			
Arochlor 1232			
Arochlor 1242			
Arochlor 1248			
Arochlor 1254			
Arochlor 1260			
Arsenic, total	23.1	29.6	30.6
Azobenzene			
Barium, total	43.3	68.5	52.8
Benzene	<1	<1	<1
Benzo(a)anthracene			
Benzo(a)pyrene			
Benzo(b)fluoranthene			
Benzo(g,h,i)perylene			
Benzo(k)fluoranthene			
Benzyl alcohol			
Beryllium, total	<4	<4	<4
Beta-bhc			
Bis (2-chloroethoxy) methane			
Bis(2-chloroethyl) ether			
Bis(2-ethylhexyl) phthalate			
Bis[2-chloroisopropyl]ether			
Bromochloromethane	<1	<1	<1
Bromodichloromethane	<1	<1	<1
Bromoform	<1	<1	<1
Bromomethane	<1	<1	<1
Butyl benzyl phthalate			
Cadmium, total	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1
Carbon tetrachloride	<1	<1	<1
Chemical oxygen demand			
Chlordane			
Chloride			
Chlorobenzene	<1	<1	<1
Chlorobenzilate			
Chloroethane	<1	<1	<1
Chloroform	<1	<1	<1
Chloromethane	<1	<1	<1
Chloroprene			
Chromium, total	<8	<8	<8
Chrysene			
Cis-1,2-dichloroethylene	4.5	2.4	4.1
Cis-1,3-dichloropropene	<1	<1	<1
Cobalt, total	18.7	12.0	17.9
Copper, total	<4.0	<4.0	<4.0
Cyanide, total			
Delta-bhc			
Diallate			
Dibenzo(a,h)anthracene			
Dibenzofuran			
Dibromochloromethane	<1	<1	<1
Dibromomethane	<1	<1	<1
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 methanesulfonate			
Ethylbenzene	<1	<1	<1
Famphur			
Fluoranthene			
Fluorene			
Gamma-bhc [lindane]			
Heptachlor			

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

Table 15

Analytical Data Summary for MW-64

Constituents	Units	9/25/2014	3/25/2015	9/16/2015	9/14/2016	3/23/2017	9/8/2017	3/19/2018	9/11/2018
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				
Iron, dissolved	ug/L	115000	119000	111000		114000			
Isobutanol	ug/L				<1000				
Isodrin	ug/L				<8				
Isophorone	ug/L				<8				
Isosafrole	ug/L				<8				
Kepone	ug/L				<8				
Lead, total	ug/L				<4		<4	<4	<4
Mercury, total	ug/L				<.5				
Methacrylonitrile	ug/L				<1				
Methapyrilene	ug/L				<8				
Methoxychlor	ug/L				<.05				
Methyl iodide	ug/L				<1		<1	<1	<1
Methyl methacrylate	ug/L				<1				
Methyl methanesulfonate	ug/L				<8				
Methyl parathion	ug/L				<.4				
Methylene chloride	ug/L				<5		<5	<5	<5
Naphthalene	ug/L				<8				
Nickel, total	ug/L				56.3		73.1	46.2	55.4
Nitrobenzene	ug/L				<8				
Nitrogen, ammonia	mg/L	1.61 *	1.42 *	1.30 *		1.19			
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,o,o-triethyl phosphorothioate	ug/L				<.4				
O-toluidine	ug/L				<8				
P-(dimethylamino)azobenzene	ug/L				<8				
Parathion	ug/L				<.4				
Pentachlorobenzene	ug/L				<8				
Pentachloronitrobenzene (pcnb)	ug/L				<8				
Pentachlorophenol	ug/L				<8				
pH	S.U.	7.4	7.3	6.6					
Phenacetin	ug/L				<8				
Phenanthrene	ug/L				<8				
Phenol	ug/L				<8				
Phenols, total	mg/L	<.1		<.1					
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
Silver, total	ug/L				<4		<4	<4	<8
Specific conductance	umhos/cm	5892	6012	3202					
Styrene	ug/L				<1		<1	<1	<1
Sulfide, total	mg/L				<.1				
Tetrachloroethylene	ug/L				<1		<1	<1	<1
Thallium, total	ug/L				<4		<4	<4	<4
Thionazin	ug/L				<.4				
Tin, total	ug/L				<20				
Toluene	ug/L				<1		<1	<1	<1
Total organic halogens (tox)	mg/L	.389		.099					
Toxaphene	ug/L				<.2				
Trans-1,2-dichloroethylene	ug/L				<1		<1	<1	<1
Trans-1,3-dichloropropene	ug/L				<1		<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L				<5		<5	<5	<5
Trichloroethylene	ug/L				<1		<1	<1	<1
Trichlorofluoromethane	ug/L				<1		<1	<1	<1
Vanadium, total	ug/L				<20		<20	<20	<20
Vinyl acetate	ug/L				<5		<5	<5	<5
Vinyl chloride	ug/L	38.9	20.0	20.1	23.7	14.3	17.4	14.4	7.9
Xylenes, total	ug/L				<2		<2	<2	<2
Zinc, total	ug/L				11.1		<20.0	<8.0	8.2

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

Table 15

Analytical Data Summary for MW-64

Constituents	3/26/2019	9/4/2019	3/26/2020	9/15/2020	3/2/2021	9/7/2021	3/24/2022	8/31/2022	3/2/2023
Heptachlor epoxide	<.05								
Hexachlorobenzene	<.05								
Hexachlorobutadiene	<8								
Hexachlorocyclopentadiene	<8								
Hexachloroethane	<8								
Hexachloropropene	<8								
Indeno(1,2,3-cd)pyrene	<8								
Iron, dissolved									
Isobutanol	<1000								
Isodrin	<8								
Isophorone	<8								
Isosafrole	<8								
Kepone	<8								
Lead, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Mercury, total	<.5								
Methacrylonitrile	<1								
Methapyrilene	<8								
Methoxychlor	<.05								
Methyl iodide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methyl methacrylate	<1								
Methyl methanesulfonate	<8								
Methyl parathion	<.4								
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene	<8								
Nickel, total	41.6	45.9	39.4	46.6	35.4	49.9	33.0	49.9	30.6
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,o,o-triethyl phosphorothioate	<.4								
O-toluidine	<8								
P-(dimethylamino)azobenzene	<8								
Parathion	<.4								
Pentachlorobenzene	<8								
Pentachloronitrobenzene (pcnb)	<8								
Pentachlorophenol	<8								
pH									
Phenacetin	<8								
Phenanthrene	<8								
Phenol	<8								
Phenols, total									
Phorate	<.4								
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
Specific conductance									
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfide, total	<.1								
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Thionazin	<.4								
Tin, total	<20								
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total organic halogens (tox)									
Toxaphene	<.2								
Trans-1,2-dichloroethylene	<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
Trichloroethylene	<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	7.0	5.6	3.7	5.6	3.4	2.6	1.6	1.7	1.9
Xylenes, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	62.6	<8.0	<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 15

Analytical Data Summary for MW-64

Constituents	9/12/2023	3/4/2024	9/23/2024
Heptachlor epoxide			
Hexachlorobenzene			
Hexachlorobutadiene			
Hexachlorocyclopentadiene			
Hexachloroethane			
Hexachloropropene			
Indeno(1,2,3-cd)pyrene			
Iron, dissolved			
Isobutanol			
Isodrin			
Isophorone			
Isosafrole			
Kepone			
Lead, total	<4	<4	<4
Mercury, total			
Methacrylonitrile			
Methapyrilene			
Methoxychlor			
Methyl iodide	<1	<1	<1
Methyl methacrylate			
Methyl methanesulfonate			
Methyl parathion			
Methylene chloride	<5	<5	<5
Naphthalene			
Nickel, total	43.1	32.0	42.6
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,o,o-triethyl phosphorothioate			
O-toluidine			
P-(dimethylamino)azobenzene			
Parathion			
Pentachlorobenzene			
Pentachloronitrobenzene (pcnb)			
Pentachlorophenol			
pH			
Phenacetin			
Phenanthrene			
Phenol			
Phenols, total			
Phorate			
Pronamide			
Propionitrile			
Pyrene			
Safrole			
Selenium, total	<4	<4	<4
Silver, total	<4	<4	<4
Specific conductance			
Styrene	<1	<1	<1
Sulfide, total			
Tetrachloroethylene	<1	<1	<1
Thallium, total	<2	<2	<2
Thionazin			
Tin, total			
Toluene	<1	<1	<1
Total organic halogens (tox)			
Toxaphene			
Trans-1,2-dichloroethylene	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5
Trichloroethylene	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1
Vanadium, total	<20	<20	<20
Vinyl acetate	<5	<5	<5
Vinyl chloride	1.8	2.7	1.7
Xylenes, total	<2	<2	<2
Zinc, total	<20.0	51.4	21.5

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

Table 16

Analytical Data Summary for MW-65

Constituents	Units	9/25/2014	3/25/2015	9/16/2015	9/14/2016	3/23/2017	9/8/2017	3/19/2018	9/11/2018
(3 4)-methylphenol	ug/L				<8				
1,1,1,2-tetrachloroethane	ug/L				<1		<1	<1	<1
1,1,1-trichloroethane	ug/L				<1		<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L				<1		<1	<1	<1
1,1,2-trichloroethane	ug/L				<1		<1	<1	<1
1,1-dichloroethane	ug/L				<1		<1	<1	<1
1,1-dichloroethylene	ug/L				<1		<1	<1	<1
1,1-dichloropropene	ug/L				<1				
1,2,3-trichloropropane	ug/L				<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				<1		<1	<1	<1
1,2-dibromoethane	ug/L				<1		<1	<1	<1
1,2-dichlorobenzene	ug/L				<1		<1	<1	<1
1,2-dichloroethane	ug/L				<1		<1	<1	<1
1,2-dichloropropane	ug/L				<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
1,4-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 (mek)	ug/L				<5		<5	<5	<5
2-chloronaphthalene	ug/L				<8				
2-chlorophenol	ug/L				<8				
2-hexanone (mbk)	ug/L				<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-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 (mibk)	ug/L				<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
Acetonitrile	ug/L				<10				
Acetophenone	ug/L				<8				
Acrolein	ug/L				<10				
Acrylonitrile	ug/L				<5		<5	<5	<5
Aldrin	ug/L				<.05				
Allyl chloride	ug/L				<1				
Alpha-bhc	ug/L				<.05				
Anthracene	ug/L				<8				

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

Table 16

Analytical Data Summary for MW-65

Constituents	3/26/2019	9/4/2019	3/26/2020	9/15/2020	3/2/2021	9/7/2021	3/24/2022	8/31/2022	3/2/2023
(3 4)-methylphenol	<8								
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-dichloroethylene	<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	<1	<5	<5	<5	<5	<5	<5	
1,2-dibromoethane	<1	<1	<1	<1	<1	<1	<1	<1	
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 (mek)	<5	<5	<5	<5	<5	<5	<10	<10	
2-chloronaphthalene	<8								
2-chlorophenol	<8								
2-hexanone (mbk)	<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-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 (mibk)	<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	<10								
Acetophenone	<8								
Acrolein	<10								
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	
Aldrin	<.05								
Allyl chloride	<1								
Alpha-bhc	<.05								
Anthracene	<8								

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

Table 16

Analytical Data Summary for MW-65

Constituents	3/28/2023	9/12/2023	3/4/2024	9/23/2024
(3 4)-methylphenol				
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-dichloroethylene	<1	<1	<1	<1
1,1-dichloropropene				
1,2,3-trichloropropane	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene				
1,2,4-trichlorobenzene				
1,2-dibromo-3-chloropropane	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1
1,2-dichloropropane	<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
1,4-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 (mek)	<10	<10	<10	<10
2-chloronaphthalene				
2-chlorophenol				
2-hexanone (mbk)	<5	<5	<5	<5
2-methylnaphthalene				
2-methylphenol (o-cresol)				
2-naphthylamine				
2-nitroaniline				
2-nitrophenol				
3,3´-dichlorobenzidine				
3,3-dimethylbenzidine				
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 (mibk)	<5	<5	<5	<5
4-nitroaniline				
4-nitrophenol				
5-nitro-o-toluidine				
7,12-dimethylbenz [a] anthracene				
Acenaphthene				
Acenaphthylene				
Acetone	<10	<10	<10	<10
Acetonitrile				
Acetophenone				
Acrolein				
Acrylonitrile	<5	<5	<5	<5
Aldrin				
Allyl chloride				
Alpha-bhc				
Anthracene				

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

Table 16

Analytical Data Summary for MW-65

Constituents	Units	9/25/2014	3/25/2015	9/16/2015	9/14/2016	3/23/2017	9/8/2017	3/19/2018	9/11/2018
Antimony, total	ug/L				<2		<2	<2	<2
Arochlor 1016	ug/L				<.1				
Arochlor 1221	ug/L				<.2				
Arochlor 1232	ug/L				<.2				
Arochlor 1242	ug/L				<.2				
Arochlor 1248	ug/L				<.2				
Arochlor 1254	ug/L				<.1				
Arochlor 1260	ug/L				<.1				
Arsenic, total	ug/L				8.0		<4.0	<4.0	<4.0
Azobenzene	ug/L				<8				
Barium, total	ug/L				30.5		19.2	18.3	32.1
Benzene	ug/L	<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(g,h,i)perylene	ug/L				<8				
Benzo(k)fluoranthene	ug/L				<8				
Benzyl alcohol	ug/L				<8				
Beryllium, total	ug/L				<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-ethylhexyl) phthalate	ug/L				<8				
Bis[2-chloroisopropyl]ether	ug/L				<8				
Bromochloromethane	ug/L				<1		<1	<1	<1
Bromodichloromethane	ug/L				<1		<1	<1	<1
Bromoform	ug/L				<1		<1	<1	<1
Bromomethane	ug/L				<1		<1	<1	<1
Butyl benzyl phthalate	ug/L				<8				
Cadmium, total	ug/L				<.8		<.8	<.8	<.8
Carbon disulfide	ug/L				<1		<1	<1	<1
Carbon tetrachloride	ug/L				<1		<1	<1	<1
Chemical oxygen demand	mg/L	50 *	30 *	60 *		36			
Chlordane	ug/L				<.1				
Chloride	mg/L	65 *	72 *	91 *		100			
Chlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzilate	ug/L				<8				
Chloroethane	ug/L				<1		<1	<1	<1
Chloroform	ug/L				<1		<1	<1	<1
Chloromethane	ug/L				<1		<1	<1	<1
Chloroprene	ug/L				<1				
Chromium, total	ug/L				<8		<8	<8	<8
Chrysene	ug/L				<8				
Cis-1,2-dichloroethylene	ug/L				<1		<1	<1	<1
Cis-1,3-dichloropropene	ug/L				<1		<1	<1	<1
Cobalt, total	ug/L				10.7		3.1	8.8	11.3
Copper, total	ug/L				6.7		<4.0	<4.0	8.0
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				<1		<1	<1	<1
Dibromomethane	ug/L				<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 methanesulfonate	ug/L				<8				
Ethylbenzene	ug/L				<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				

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

Table 16

Analytical Data Summary for MW-65

Constituents	3/26/2019	9/4/2019	3/26/2020	9/15/2020	3/2/2021	9/7/2021	3/24/2022	8/31/2022	3/2/2023
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arochlor 1016	<.1								
Arochlor 1221	<.2								
Arochlor 1232	<.2								
Arochlor 1242	<.2								
Arochlor 1248	<.2								
Arochlor 1254	<.1								
Arochlor 1260	<.1								
Arsenic, total	5.8	4.0	<4.0	4.1	<4.0	<4.0	<4.0	4.3	9.5
Azobenzene	<8								
Barium, total	33.0	23.9	13.9	10.1	14.3	18.6	12.9	16.9	39.9
Benzene	<1	<1	<1	<1	<1	<1	<1	<1	
Benzo(a)anthracene	<8								
Benzo(a)pyrene	<8								
Benzo(b)fluoranthene	<8								
Benzo(g,h,i)perylene	<8								
Benzo(k)fluoranthene	<8								
Benzyl alcohol	<8								
Beryllium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Beta-bhc	<.05								
Bis (2-chloroethoxy) methane	<8								
Bis(2-chloroethyl) ether	<8								
Bis(2-ethylhexyl) phthalate	<6								
Bis[2-chloroisopropyl]ether	<8								
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	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	
Chemical oxygen demand									
Chlordane	<.1								
Chloride									
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	
Chlorobenzilate	<8								
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	<8	<8	<8	<8	<8	<8	<8	<8
Chrysene	<8								
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	
Cobalt, total	10.0	3.7	1.6	2.7	3.2	2.1	.7	5.5	9.3
Copper, total	4.0	<4.0	<4.0	<4.0	10.3	<4.0	<4.0	4.4	5.2
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	
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 methanesulfonate	<8								
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	
Famphur	<.4								
Fluoranthene	<8								
Fluorene	<8								
Gamma-bhc [lindane]	<.05								
Heptachlor	<.05								

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

Table 16

Analytical Data Summary for MW-65

Constituents	3/28/2023	9/12/2023	3/4/2024	9/23/2024
Antimony, total		<2	<2	<2
Arochlor 1016				
Arochlor 1221				
Arochlor 1232				
Arochlor 1242				
Arochlor 1248				
Arochlor 1254				
Arochlor 1260				
Arsenic, total		<4.0	6.7	7.9
Azobenzene				
Barium, total		19.1	30.0	35.4
Benzene	<1	<1	<1	<1
Benzo(a)anthracene				
Benzo(a)pyrene				
Benzo(b)fluoranthene				
Benzo(g,h,i)perylene				
Benzo(k)fluoranthene				
Benzyl alcohol				
Beryllium, total		<4	<4	<4
Beta-bhc				
Bis (2-chloroethoxy) methane				
Bis(2-chloroethyl) ether				
Bis(2-ethylhexyl) phthalate				
Bis[2-chloroisopropyl]ether				
Bromochloromethane	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1
Butyl benzyl phthalate				
Cadmium, total		<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1
Chemical oxygen demand				
Chlordane				
Chloride				
Chlorobenzene	<1	<1	<1	<1
Chlorobenzilate				
Chloroethane	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1
Chloroprene				
Chromium, total		<8	<8	<8
Chrysene				
Cis-1,2-dichloroethylene	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1
Cobalt, total		5.2	9.2	3.4
Copper, total		<4.0	<4.0	8.7
Cyanide, total				
Delta-bhc				
Diallate				
Dibenzo(a,h)anthracene				
Dibenzofuran				
Dibromochloromethane	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1
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 methanesulfonate				
Ethylbenzene	<1	<1	<1	<1
Famphur				
Fluoranthene				
Fluorene				
Gamma-bhc [lindane]				
Heptachlor				

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

Table 16

Analytical Data Summary for MW-65

Constituents	Units	9/25/2014	3/25/2015	9/16/2015	9/14/2016	3/23/2017	9/8/2017	3/19/2018	9/11/2018
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				
Iron, dissolved	ug/L	16500	1580	115000		152000			
Isobutanol	ug/L				<1000				
Isodrin	ug/L				<8				
Isophorone	ug/L				<8				
Isosafrole	ug/L				<8				
Kepone	ug/L				<8				
Lead, total	ug/L				<4		<4	<4	<4
Mercury, total	ug/L				<.5				
Methacrylonitrile	ug/L				<1				
Methapyrilene	ug/L				<8				
Methoxychlor	ug/L				<.05				
Methyl iodide	ug/L				<1		<1	<1	<1
Methyl methacrylate	ug/L				<1				
Methyl methanesulfonate	ug/L				<8				
Methyl parathion	ug/L				<.4				
Methylene chloride	ug/L				<5		<5	<5	<5
Naphthalene	ug/L				<8				
Nickel, total	ug/L				28.2		10.9	15.3	24.8
Nitrobenzene	ug/L				<8				
Nitrogen, ammonia	mg/L	<1 *	<1 *	<1 *		<1			
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,o,o-triethyl phosphorothioate	ug/L				<.4				
O-toluidine	ug/L				<8				
P-(dimethylamino)azobenzene	ug/L				<8				
Parathion	ug/L				<.4				
Pentachlorobenzene	ug/L				<8				
Pentachloronitrobenzene (pcnb)	ug/L				<8				
Pentachlorophenol	ug/L				<8				
pH	S.U.	7.3	7.9	6.5					
Phenacetin	ug/L				<8				
Phenanthrene	ug/L				<8				
Phenol	ug/L				<8				
Phenols, total	mg/L	<.1		<.1					
Phorate	ug/L				<.4				
Pronamide	ug/L				<8				
Propionitrile	ug/L				<10				
Pyrene	ug/L				<8				
Safrole	ug/L				<8				
Selenium, total	ug/L				<4.0		<4.0	<4.0	<4.0
Silver, total	ug/L				<4		<4	<4	<8
Specific conductance	umhos/cm	2738	3290	1726					
Styrene	ug/L				<1		<1	<1	<1
Sulfide, total	mg/L				<.1				
Tetrachloroethylene	ug/L				<1		<1	<1	<1
Thallium, total	ug/L				<4		<4	<4	<4
Thionazin	ug/L				<.4				
Tin, total	ug/L				<20				
Toluene	ug/L				<1		<1	<1	<1
Total organic halogens (tox)	mg/L	.039		.038					
Toxaphene	ug/L				<.2				
Trans-1,2-dichloroethylene	ug/L				<1		<1	<1	<1
Trans-1,3-dichloropropene	ug/L				<1		<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L				<5		<5	<5	<5
Trichloroethylene	ug/L				<1		<1	<1	<1
Trichlorofluoromethane	ug/L				<1		<1	<1	<1
Vanadium, total	ug/L				<20		<20	<20	<20
Vinyl acetate	ug/L				<5		<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	ug/L				<2		<2	<2	<2
Zinc, total	ug/L				38.3		23.5	13.9	21.7

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

Table 16

Analytical Data Summary for MW-65

Constituents	3/26/2019	9/4/2019	3/26/2020	9/15/2020	3/2/2021	9/7/2021	3/24/2022	8/31/2022	3/2/2023
Heptachlor epoxide	<.05								
Hexachlorobenzene	<.05								
Hexachlorobutadiene	<8								
Hexachlorocyclopentadiene	<8								
Hexachloroethane	<8								
Hexachloropropene	<8								
Indeno(1,2,3-cd)pyrene	<8								
Iron, dissolved									
Isobutanol	<1000								
Isodrin	<8								
Isophorone	<8								
Isosafrole	<8								
Kepone	<8								
Lead, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Mercury, total	<.5								
Methacrylonitrile	<1								
Methapyrilene	<8								
Methoxychlor	<.05								
Methyl iodide	<1	<1	<1	<1	<1	<1	<1	<1	
Methyl methacrylate	<1								
Methyl methanesulfonate	<8								
Methyl parathion	<.4								
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	
Naphthalene	<8								
Nickel, total	12.3	9.2	7.6	5.8	7.4	4.5	<4.0	13.0	20.7
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,o,o-triethyl phosphorothioate	<.4								
O-toluidine	<8								
P-(dimethylamino)azobenzene	<8								
Parathion	<.4								
Pentachlorobenzene	<8								
Pentachloronitrobenzene (pcnb)	<8								
Pentachlorophenol	<8								
pH									
Phenacetin	<8								
Phenanthrene	<8								
Phenol	<8								
Phenols, total									
Phorate	<.4								
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	8.2
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Specific conductance									
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	
Sulfide, total	<.1								
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	
Thallium, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Thionazin	<.4								
Tin, total	<20								
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	
Total organic halogens (tox)									
Toxaphene	<.2								
Trans-1,2-dichloroethylene	<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	
Trichloroethylene	<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	<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	50.5	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	25.7

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

Table 16

Analytical Data Summary for MW-65

Constituents	3/28/2023	9/12/2023	3/4/2024	9/23/2024
Heptachlor epoxide				
Hexachlorobenzene				
Hexachlorobutadiene				
Hexachlorocyclopentadiene				
Hexachloroethane				
Hexachloropropene				
Indeno(1,2,3-cd)pyrene				
Iron, dissolved				
Isobutanol				
Isodrin				
Isophorone				
Isosafrole				
Kepone				
Lead, total		<4	<4	<4
Mercury, total				
Methacrylonitrile				
Methapyrilene				
Methoxychlor				
Methyl iodide	<1	<1	<1	<1
Methyl methacrylate				
Methyl methanesulfonate				
Methyl parathion				
Methylene chloride	<5	<5	<5	<5
Naphthalene				
Nickel, total		7.3	14.9	13.5
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,o,o-triethyl phosphorothioate				
O-toluidine				
P-(dimethylamino)azobenzene				
Parathion				
Pentachlorobenzene				
Pentachloronitrobenzene (pcnb)				
Pentachlorophenol				
pH				
Phenacetin				
Phenanthrene				
Phenol				
Phenols, total				
Phorate				
Pronamide				
Propionitrile				
Pyrene				
Safrole				
Selenium, total		<4.0	<4.0	<4.0
Silver, total		<4	<4	<4
Specific conductance				
Styrene	<1	<1	<1	<1
Sulfide, total				
Tetrachloroethylene	<1	<1	<1	<1
Thallium, total		<2	<2	<2
Thionazin				
Tin, total				
Toluene	<1	<1	<1	<1
Total organic halogens (tox)				
Toxaphene				
Trans-1,2-dichloroethylene	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1
Vanadium, total		<20	<20	<20
Vinyl acetate	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2
Zinc, total		<20.0	21.5	29.4

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

Table 17

Analytical Data Summary for MW-78

Constituents	Units	9/24/2014	12/5/2014	3/11/2015	6/16/2015	9/16/2015	3/22/2016	9/15/2016	3/23/2017	9/8/2017
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-dichloroethylene	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 (mek)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	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
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	304	291	304	329	298	309	311	307	357
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
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
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-dichloroethylene	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	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Copper, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
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
Lead, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Methyl iodide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
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
Selenium, total	ug/L	5.4	5.6	6.5	8.6	8.1	8.9	9.4	10.6	6.9
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4	<4	<4	<4	<1	<4	<4	<4	<4
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,2-dichloroethylene	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
Trichloroethylene	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	10.7	<8.0	<8.0	8.4	<8.0	<8.0	<8.0	<8.0	<20.0

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

Table 17

Analytical Data Summary for MW-78

Constituents	3/19/2018	9/11/2018	3/26/2019	9/4/2019	3/26/2020	9/15/2020	3/2/2021	9/7/2021	3/24/2022
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-dichloroethylene	<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	<1	<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 (mek)	<5	<5	<5	<5	<5	<5	<5	<5	<10
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<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
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Barium, total	320	295	285	332	304	319	304	332	291
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
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
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-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	<.8	<.8	<.8	<.8	<.8	<.4	1.0	<.4	<.4
Copper, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
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
Lead, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Methyl iodide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Selenium, total	8.3	5.6	9.5	6.8	5.4	8.5	9.4	4.9	6.3
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4	<4	<2	<2	<2	<2	<2	<2	<2
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,2-dichloroethylene	<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
Trichloroethylene	<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	17.6	<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 17

Analytical Data Summary for MW-78

Constituents	8/31/2022	3/2/2023	9/12/2023	3/4/2024	9/23/2024
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-dichloroethylene	<1	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<5	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1	<1
2-butanone (mek)	<10	<10	<10	<10	<10
2-hexanone (mbk)	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5
Acetone	<10	<10	<10	<10	<10
Acrylonitrile	<5	<5	<5	<5	<5
Antimony, total	<2	<2	<2	<2	<2
Arsenic, total	<4	<4	<4	<4	<4
Barium, total	340	345	309	341	284
Benzene	<1	<1	<1	<1	<1
Beryllium, total	<4	<4	<4	<4	<4
Bromochloromethane	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1
Cadmium, total	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1
Chlorobenzene	<1	<1	<1	<1	<1
Chloroethane	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1
Chromium, total	<8	<8	<8	<8	<8
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1
Cobalt, total	<.4	<.4	<.4	<.4	<.4
Copper, total	<4	<4	<4	<4	<4
Dibromochloromethane	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1	<1
Lead, total	<4	<4	<4	<4	<4
Methyl iodide	<1	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5	<5
Nickel, total	<4	<4	<4	<4	<4
Selenium, total	6.2	7.9	5.8	5.7	4.1
Silver, total	<4	<4	<4	<4	<4
Styrene	<1	<1	<1	<1	<1
Tetrachloroethylene	<1	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2	<2
Toluene	<1	<1	<1	<1	<1
Trans-1,2-dichloroethylene	<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
Trichloroethylene	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1
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 18

Analytical Data Summary for MW-79

Constituents	Units	9/24/2014	12/5/2014	3/11/2015	9/17/2015	3/22/2016	9/15/2016	3/23/2017	9/8/2017	3/19/2018
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-dichloroethylene	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	<1		<1	<1	<1	<1	<1	<1	<1
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 (mek)	ug/L	<5		<5	<5	<5	<5	<5	<5	<5
2-hexanone (mbk)	ug/L	<5		<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	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	127.0		91.0	98.4	87.0	101.0	89.2	114.0	82.5
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-dichloroethylene	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	2.6		<.8	<.8	<.8	<.8	<.8	<.8	<.8
Copper, total	ug/L	10.3		<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
Dibromomethane	ug/L	<1		<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1		<1	<1	<1	<1	<1	<1	<1
Lead, total	ug/L	4.4		<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Methyl iodide	ug/L	<1		<1	<1	<1	<1	<1	<1	<1
Methylene chloride	ug/L	<5		<5	<5	<5	<5	<5	<5	<5
Nickel, total	ug/L	9.3		<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
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
Tetrachloroethylene	ug/L	<1		<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4		<4	<1	<4	<4	<4	<4	<4
Toluene	ug/L	<1		<1	<1	<1	<1	<1	<1	<1
Trans-1,2-dichloroethylene	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
Trichloroethylene	ug/L	<1		<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
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	35.9	<8.0	<8.0	8.2	<8.0	<8.0	<8.0	<20.0	<8.0

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

Table 18

Analytical Data Summary for MW-79

Constituents	9/11/2018	3/26/2019	9/4/2019	3/26/2020	9/15/2020	3/2/2021	9/7/2021	3/24/2022	8/31/2022	3/2/2023
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-dichloroethylene	<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	<5	<5	<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 (mek)	<5	<5	<5	<5	<5	<5	<5	<10	<10	<10
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<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
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	98.7	88.0	90.3	80.4	76.3	62.9	63.3	62.1	62.1	66.8
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	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
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-dichloroethylene	<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	<.8	<.4	1.3	<.4	<.4	<.4	<.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
Ethylbenzene	<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
Methyl iodide	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
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	<4.0	<4.0	<4.0
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	<8	<4	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4	<2	<2	<2	<2	<2	<2	<2	<2	<2
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,2-dichloroethylene	<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
Trichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.6	<1.0	<1.0
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	21.3	<8.0	<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 18

Analytical Data Summary for MW-79

Constituents	9/12/2023	3/4/2024	9/23/2024
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-dichloroethylene	<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 (mek)	<10	<10	<10
2-hexanone (mbk)	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5
Acetone	<10	<10	<10
Acrylonitrile	<5	<5	<5
Antimony, total	<2	<2	<2
Arsenic, total	<4	<4	<4
Barium, total	62.1	57.9	64.7
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	<.8
Carbon disulfide	<1	<1	<1
Carbon tetrachloride	<1	<1	<1
Chlorobenzene	<1	<1	<1
Chloroethane	<1	<1	<1
Chloroform	<1	<1	<1
Chloromethane	<1	<1	<1
Chromium, total	<8	<8	<8
Cis-1,2-dichloroethylene	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1
Cobalt, total	<.4	<.4	<.4
Copper, total	<4.0	<4.0	<4.0
Dibromochloromethane	<1	<1	<1
Dibromomethane	<1	<1	<1
Ethylbenzene	<1	<1	<1
Lead, total	<4.0	<4.0	<4.0
Methyl iodide	<1	<1	<1
Methylene chloride	<5	<5	<5
Nickel, total	<4.0	<4.0	<4.0
Selenium, total	<4	<4	<4
Silver, total	<4	<4	<4
Styrene	<1	<1	<1
Tetrachloroethylene	<1	<1	<1
Thallium, total	<2	<2	<2
Toluene	<1	<1	<1
Trans-1,2-dichloroethylene	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5
Trichloroethylene	<1	<1	<1
Trichlorofluoromethane	<1.0	<1.0	<1.0
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 19

Analytical Data Summary for MW-80

Constituents	Units	9/24/2014	3/11/2015	9/17/2015	3/22/2016	9/15/2016	3/23/2017	9/8/2017	3/19/2018
(3 4)-methylphenol	ug/L		<8						
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-dichloroethylene	ug/L	<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
1,2,4,5-tetrachlorobenzene	ug/L		<8						
1,2,4-trichlorobenzene	ug/L		<1						
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
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
1,2-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
1,4-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 (mek)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
2-chloronaphthalene	ug/L		<8						
2-chlorophenol	ug/L		<8						
2-hexanone (mbk)	ug/L	<5	<5	<5	<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-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 (mibk)	ug/L	<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
Acetonitrile	ug/L		<10						
Acetophenone	ug/L		<8						
Acrolein	ug/L		<10						
Acrylonitrile	ug/L	<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						

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

Table 19

Analytical Data Summary for MW-80

Constituents	9/11/2018	3/26/2019	9/4/2019	3/26/2020	9/15/2020	3/2/2021	9/7/2021	3/24/2022	8/31/2022
(3 4)-methylphenol				<8					
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-dichloroethylene	<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	<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
1,2-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)									
2,4,5-trichlorophenol				<8					
2,4,6-trichlorophenol				<8					
2,4-d									
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 (mek)	<5	<5	<5	<5	<5	<5	<5	<10	<10
2-chloronaphthalene				<8					
2-chlorophenol				<8					
2-hexanone (mbk)	<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-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 (mibk)	<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				<10					
Acetophenone				<8					
Acrolein				<10					
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5
Aldrin				<.05					
Allyl chloride				<1					
Alpha-bhc				<.05					
Anthracene				<8					

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

Table 19

Analytical Data Summary for MW-80

Constituents	3/2/2023	9/12/2023	3/4/2024	9/23/2024
(3 4)-methylphenol				
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-dichloroethylene	<1	<1	<1	<1
1,1-dichloropropene				
1,2,3-trichloropropane	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene				
1,2,4-trichlorobenzene				
1,2-dibromo-3-chloropropane	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1
1,2-dichloropropane	<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
1,4-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 (mek)	<10	<10	<10	<10
2-chloronaphthalene				
2-chlorophenol				
2-hexanone (mbk)	<5	<5	<5	<5
2-methylnaphthalene				
2-methylphenol (o-cresol)				
2-naphthylamine				
2-nitroaniline				
2-nitrophenol				
3,3´-dichlorobenzidine				
3,3-dimethylbenzidine				
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 (mibk)	<5	<5	<5	<5
4-nitroaniline				
4-nitrophenol				
5-nitro-o-toluidine				
7,12-dimethylbenz [a] anthracene				
Acenaphthene				
Acenaphthylene				
Acetone	<10	<10	<10	<10
Acetonitrile				
Acetophenone				
Acrolein				
Acrylonitrile	<5	<5	<5	<5
Aldrin				
Allyl chloride				
Alpha-bhc				
Anthracene				

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

Table 19

Analytical Data Summary for MW-80

Constituents	Units	9/24/2014	3/11/2015	9/17/2015	3/22/2016	9/15/2016	3/23/2017	9/8/2017	3/19/2018
Antimony, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
Arochlor 1016	ug/L		<.1						
Arochlor 1221	ug/L		<.2						
Arochlor 1232	ug/L		<.2						
Arochlor 1242	ug/L		<.2						
Arochlor 1248	ug/L		<.2						
Arochlor 1254	ug/L		<.1						
Arochlor 1260	ug/L		<.1						
Arsenic, total	ug/L	<4.0	8.2	<4.0	<4.0	9.3	10.8	<4.0	<4.0
Azobenzene	ug/L		<8						
Barium, total	ug/L	241	259	259	290	276	276	288	216
Benzene	ug/L	<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(g,h,i)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
Beta-bhc	ug/L		<.05						
Bis (2-chloroethoxy) methane	ug/L		<8						
Bis(2-chloroethyl) ether	ug/L		<8						
Bis(2-ethylhexyl) phthalate	ug/L		<8						
Bis[2-chloroisopropyl]ether	ug/L		<8						
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
Butyl benzyl phthalate	ug/L		<8						
Cadmium, total	ug/L	<.8	<.8	<.8	<.8	<.8	1.1	<.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
Chlordane	ug/L		<.1						
Chlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzilate	ug/L		<8						
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
Chloroprene	ug/L		<1						
Chromium, total	ug/L	<8	<8	<8	<8	<8	<8	<8	<8
Chrysene	ug/L		<8						
Cis-1,2-dichloroethylene	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	<.8	<.8	<.8	<.8	2.1	1.7	3.0	.8
Copper, total	ug/L	5.5	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
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	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<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 methanesulfonate	ug/L		<8						
Ethylbenzene	ug/L	<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						

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

Table 19

Analytical Data Summary for MW-80

Constituents	9/11/2018	3/26/2019	9/4/2019	3/26/2020	9/15/2020	3/2/2021	9/7/2021	3/24/2022	8/31/2022
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arochlor 1016				<.1					
Arochlor 1221				<.2					
Arochlor 1232				<.2					
Arochlor 1242				<.2					
Arochlor 1248				<.2					
Arochlor 1254				<.1					
Arochlor 1260				<.1					
Arsenic, total	<4.0	59.0	<4.0	<4.0	4.1	<4.0	5.4	<4.0	240.0
Azobenzene				<8					
Barium, total	228	380	228	172	201	154	168	145	562
Benzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Benzo(a)anthracene				<8					
Benzo(a)pyrene				<8					
Benzo(b)fluoranthene				<8					
Benzo(g,h,i)perylene				<8					
Benzo(k)fluoranthene				<8					
Benzyl alcohol				<8					
Beryllium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Beta-bhc				<.05					
Bis (2-chloroethoxy) methane				<8					
Bis(2-chloroethyl) ether				<8					
Bis(2-ethylhexyl) phthalate				<6					
Bis[2-chloroisopropyl]ether				<8					
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	<.8	<.8	1.0	<.8	<.8	<.8	<.8	<.8	2.6
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlordane				<.1					
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzilate				<8					
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
Chloroprene				<1					
Chromium, total	<8	<8	<8	<8	<8	<8	<8	<8	<8
Chrysene				<8					
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	<.8	<.8	.9	1.4	2.5	1.7	2.7	2.9	7.4
Copper, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<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	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<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 methanesulfonate				<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					
Hexachlorobenzene				<.05					

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

Table 19

Analytical Data Summary for MW-80

Constituents	3/2/2023	9/12/2023	3/4/2024	9/23/2024
Antimony, total	<2	<2	<2	<2
Arochlor 1016				
Arochlor 1221				
Arochlor 1232				
Arochlor 1242				
Arochlor 1248				
Arochlor 1254				
Arochlor 1260				
Arsenic, total	4.6	<4.0	<4.0	<4.0
Azobenzene				
Barium, total	145	146	131	135
Benzene	<1	<1	<1	<1
Benzo(a)anthracene				
Benzo(a)pyrene				
Benzo(b)fluoranthene				
Benzo(g,h,i)perylene				
Benzo(k)fluoranthene				
Benzyl alcohol				
Beryllium, total	<4	<4	<4	<4
Beta-bhc				
Bis (2-chloroethoxy) methane				
Bis(2-chloroethyl) ether				
Bis(2-ethylhexyl) phthalate				
Bis[2-chloroisopropyl]ether				
Bromochloromethane	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1
Butyl benzyl phthalate				
Cadmium, total	<.8	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1
Chlordane				
Chlorobenzene	<1	<1	<1	<1
Chlorobenzilate				
Chloroethane	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1
Chloroprene				
Chromium, total	<8	<8	<8	<8
Chrysene				
Cis-1,2-dichloroethylene	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1
Cobalt, total	1.2	.7	1.3	.8
Copper, total	<4.0	<4.0	<4.0	<4.0
Cyanide, total				
Delta-bhc				
Diallate				
Dibenzo(a,h)anthracene				
Dibenzofuran				
Dibromochloromethane	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1
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 methanesulfonate				
Ethylbenzene	<1	<1	<1	<1
Famphur				
Fluoranthene				
Fluorene				
Gamma-bhc [lindane]				
Heptachlor				
Heptachlor epoxide				
Hexachlorobenzene				

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

Table 19

Analytical Data Summary for MW-80

Constituents	Units	9/24/2014	3/11/2015	9/17/2015	3/22/2016	9/15/2016	3/23/2017	9/8/2017	3/19/2018
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						
Isobutanol	ug/L		<1000						
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
Mercury, total	ug/L		<.5						
Methacrylonitrile	ug/L		<1						
Methapyrilene	ug/L		<8						
Methoxychlor	ug/L		<.05						
Methyl iodide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
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
Naphthalene	ug/L		<8						
Nickel, total	ug/L	<4.0	<4.0	<4.0	6.9	8.4	11.1	10.4	6.8
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,o,o-triethyl phosphorothioate	ug/L		<.4						
O-toluidine	ug/L		<8						
P-(dimethylamino)azobenzene	ug/L		<8						
Parathion	ug/L		<.4						
Pentachlorobenzene	ug/L		<8						
Pentachloronitrobenzene (pcnb)	ug/L		<8						
Pentachlorophenol	ug/L		<8						
Phenacetin	ug/L		<8						
Phenanthrene	ug/L		<8						
Phenol	ug/L		<8						
Phorate	ug/L		<.4						
Pronamide	ug/L		<8						
Propionitrile	ug/L		<10						
Pyrene	ug/L		<8						
Safrole	ug/L		<8						
Selenium, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Sulfide, total	mg/L		<.1						
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4	<4	<1	<4	<4	<4	<4	<4
Thionazin	ug/L		<.4						
Tin, total	ug/L		<20						
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Toxaphene	ug/L		<.2						
Trans-1,2-dichloroethylene	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
Trichloroethylene	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	36.0	<8.0	10.7	13.0	<8.0	<8.0	<20.0	<8.0

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

Table 19

Analytical Data Summary for MW-80

Constituents	9/11/2018	3/26/2019	9/4/2019	3/26/2020	9/15/2020	3/2/2021	9/7/2021	3/24/2022	8/31/2022
Hexachlorobutadiene				<8					
Hexachlorocyclopentadiene				<8					
Hexachloroethane				<8					
Hexachloropropene				<8					
Indeno(1,2,3-cd)pyrene				<8					
Isobutanol				<1000					
Isodrin				<8					
Isophorone				<8					
Isosafrole				<8					
Kepone				<8					
Lead, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Mercury, total				<.5					
Methacrylonitrile				<1					
Methapyrilene				<8					
Methoxychlor				<.05					
Methyl iodide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methyl methacrylate				<1					
Methyl methanesulfonate				<8					
Methyl parathion				<.4					
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene				<8					
Nickel, total	4.1	5.7	6.0	4.6	6.2	<4.0	5.1	4.7	8.1
Nitrobenzene				<8					
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,o,o-triethyl phosphorothioate				<.4					
O-toluidine				<8					
P-(dimethylamino)azobenzene				<8					
Parathion				<.4					
Pentachlorobenzene				<8					
Pentachloronitrobenzene (pcnb)				<8					
Pentachlorophenol				<8					
Phenacetin				<8					
Phenanthrene				<8					
Phenol				<8					
Phorate				<.4					
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	31.6
Silver, total	<8	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfide, total				<.1					
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4	<2	<2	<2	<2	<2	<2	<2	<2
Thionazin				<.4					
Tin, total				<20					
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toxaphene				<.2					
Trans-1,2-dichloroethylene	<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
Trichloroethylene	<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	16.1	23.3	<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 19

Analytical Data Summary for MW-80

Constituents	3/2/2023	9/12/2023	3/4/2024	9/23/2024
Hexachlorobutadiene				
Hexachlorocyclopentadiene				
Hexachloroethane				
Hexachloropropene				
Indeno(1,2,3-cd)pyrene				
Isobutanol				
Isodrin				
Isophorone				
Isosafrole				
Kepone				
Lead, total	<4	<4	<4	<4
Mercury, total				
Methacrylonitrile				
Methapyrilene				
Methoxychlor				
Methyl iodide	<1	<1	<1	<1
Methyl methacrylate				
Methyl methanesulfonate				
Methyl parathion				
Methylene chloride	<5	<5	<5	<5
Naphthalene				
Nickel, total	<4.0	<4.0	<4.0	<4.0
Nitrobenzene				
N-nitrosodiethylamine				
N-nitrosodimethylamine				
N-nitrosodi-n-butylamine				
N-nitroso-di-n-propylamine				
N-nitrosodiphenylamine				
N-nitrosomethylethylamine				
N-nitrosopiperidine				
N-nitrosopyrrolidine				
O,o,o-triethyl phosphorothioate				
O-toluidine				
P-(dimethylamino)azobenzene				
Parathion				
Pentachlorobenzene				
Pentachloronitrobenzene (pcnb)				
Pentachlorophenol				
Phenacetin				
Phenanthrene				
Phenol				
Phorate				
Pronamide				
Propionitrile				
Pyrene				
Safrole				
Selenium, total	<4.0	<4.0	<4.0	<4.0
Silver, total	<4	<4	<4	<4
Styrene	<1	<1	<1	<1
Sulfide, total				
Tetrachloroethylene	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2
Thionazin				
Tin, total				
Toluene	<1	<1	<1	<1
Toxaphene				
Trans-1,2-dichloroethylene	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5
Trichloroethylene	<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	<20.0	<20.0	<20.0	<20.0

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

Table 20

Analytical Data Summary for PECS-1

Constituents	Units	3/26/2020	9/15/2020	3/2/2021	9/7/2021	3/24/2022	3/2/2023	3/4/2024	9/23/2024
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-dichloroethylene	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 (mek)	ug/L	<5	<5	<5	<5	<10	<10	<10	<10
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	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
Benzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
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
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
Cis-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
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
Methyl iodide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Toluene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.8
Trans-1,2-dichloroethylene	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
Trichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
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

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

Table 21

Analytical Data Summary for SW-101

Constituents	Units	3/25/2015	9/14/2016	3/23/2017	6/9/2017	9/8/2017	3/19/2018	9/11/2018	3/26/2019
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-dichloroethylene	ug/L		<1	<1		<1	<1	<1	<1
1,2,3-trichloropropane	ug/L		<1	<1		<1	<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L		<1	<1		<1	<1	<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
1,4-dichlorobenzene	ug/L		<1	<1		<1	<1	<1	<1
2-butanone (mek)	ug/L		<5	<5		<5	<5	<5	<5
2-hexanone (mbk)	ug/L		<5	<5		<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	ug/L		<5	<5		<5	<5	<5	<5
Acetone	ug/L		<10	<10		<10	<10	<10	<10
Acrylonitrile	ug/L		<5	<5		<5	<5	<5	<5
Antimony, total	ug/L		<2	<2		<2	<2	<2	<2
Arsenic, total	ug/L		<4.0	<4.0		<4.0	4.4	<4.0	<4.0
Barium, total	ug/L		188	233		272	162	127	160
Benzene	ug/L		<1	<1		<1	<1	<1	<1
Beryllium, total	ug/L		<4	<4		<4	<4	<4	<4
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
Cadmium, total	ug/L		<.8	<.8		<.8	<.8	<.8	<.8
Carbon disulfide	ug/L		<1	<1		<1	<1	<1	<1
Carbon tetrachloride	ug/L		<1	<1		<1	<1	<1	<1
Chemical oxygen demand	mg/L	34 *							
Chloride	mg/L	87 *							
Chlorobenzene	ug/L		<1	<1		<1	<1	<1	<1
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
Chromium, total	ug/L		<8	<8		<8	<8	<8	<8
Cis-1,2-dichloroethylene	ug/L		<1.0	1.4	<1.0	<1.0	<1.0	<1.0	2.8
Cis-1,3-dichloropropene	ug/L		<1	<1		<1	<1	<1	<1
Cobalt, total	ug/L		4.5	4.2		6.9	2.3	1.9	1.8
Copper, total	ug/L		<4	<4		<4	<4	<4	<4
Dibromochloromethane	ug/L		<1	<1		<1	<1	<1	<1
Dibromomethane	ug/L		<1	<1		<1	<1	<1	<1
Ethylbenzene	ug/L		<1	<1		<1	<1	<1	<1
Iron, dissolved	ug/L	1080							
Lead, total	ug/L		<4	<4		<4	<4	<4	<4
Methyl iodide	ug/L		<1	<1		<1	<1	<1	<1
Methylene chloride	ug/L		<5	<5		<5	<5	<5	<5
Nickel, total	ug/L		8.7	5.4		8.6	<4.0	<4.0	4.2
Nitrogen, ammonia	mg/L	<1 *							
pH	S.U.	7.4							
Selenium, total	ug/L		<4	<4		<4	<4	<4	<4
Silver, total	ug/L		<4	<4		<4	<4	<8	<4
Specific conductance	umhos/cm	913							
Styrene	ug/L		<1	<1		<1	<1	<1	<1
Tetrachloroethylene	ug/L		<1	<1		<1	<1	<1	<1
Thallium, total	ug/L		<4	<4		<4	<4	<4	<2
Toluene	ug/L		<1	<1		<1	<1	<1	<1
Trans-1,2-dichloroethylene	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
Trichloroethylene	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		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0
Xylenes, total	ug/L		<2	<2		<2	<2	<2	<2
Zinc, total	ug/L		<8	<8		<20	<8	<8	<20

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

Table 21

Analytical Data Summary for SW-101

Constituents	6/6/2019	9/4/2019	12/4/2019
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	
1,1-dichloroethylene		<1	
1,2,3-trichloropropane		<1	
1,2-dibromo-3-chloropropane		<1	
1,2-dibromoethane		<1	
1,2-dichlorobenzene		<1	
1,2-dichloroethane		<1	
1,2-dichloropropane		<1	
1,4-dichlorobenzene		<1	
2-butanone (mek)		<5	
2-hexanone (mbk)		<5	
4-methyl-2-pentanone (mibk)		<5	
Acetone		<10	
Acrylonitrile		<5	
Antimony, total		<2	
Arsenic, total		7.3	
Barium, total		256	
Benzene		<1	
Beryllium, total		<4	
Bromochloromethane		<1	
Bromodichloromethane		<1	
Bromoform		<1	
Bromomethane		<1	
Cadmium, total		<.8	
Carbon disulfide		<1	
Carbon tetrachloride		<1	
Chemical oxygen demand			
Chloride			
Chlorobenzene		<1	
Chloroethane		<1	
Chloroform		<1	
Chloromethane		<1	
Chromium, total		<8	
Cis-1,2-dichloroethylene	<1.0	2.9	3.6
Cis-1,3-dichloropropene		<1	
Cobalt, total		5.9	
Copper, total		<4	
Dibromochloromethane		<1	
Dibromomethane		<1	
Ethylbenzene		<1	
Iron, dissolved			
Lead, total		<4	
Methyl iodide		<1	
Methylene chloride		<5	
Nickel, total		7.5	
Nitrogen, ammonia			
pH			
Selenium, total		<4	
Silver, total		<4	
Specific conductance			
Styrene		<1	
Tetrachloroethylene		<1	
Thallium, total		<2	
Toluene		<1	
Trans-1,2-dichloroethylene		<1	
Trans-1,3-dichloropropene		<1	
Trans-1,4-dichloro-2-butene		<5	
Trichloroethylene		<1	
Trichlorofluoromethane		<1	
Vanadium, total		<20	
Vinyl acetate		<5	
Vinyl chloride		1.6	<1.0
Xylenes, total		<2	
Zinc, total		<8	

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

Table 22

Analytical Data Summary for SW-101R

Constituents	Units	3/26/2020	9/15/2020	3/2/2021	9/7/2021	3/24/2022	8/31/2022	3/2/2023	9/12/2023	3/4/2024
(3 4)-methylphenol	ug/L	<8		<8						
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-dichloroethylene	ug/L	<1	<1	<1	<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	<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	<1	<5	<5	<5	<5	<5	<5
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
1,2-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	<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 (mek)	ug/L	<5	<5	<5	<5	<10	<10	<10	<10	<10
2-chloronaphthalene	ug/L	<8		<8						
2-chlorophenol	ug/L	<8		<8						
2-hexanone (mbk)	ug/L	<5	<5	<5	<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-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 (mibk)	ug/L	<5	<5	<5	<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	<10	<10	<10
Acetonitrile	ug/L	<10		<10						
Acetophenone	ug/L	<8		<8						
Acrolein	ug/L	<10		<10						
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Aldrin	ug/L	<.05		<.05						
Allyl chloride	ug/L	<1		<1						
Alpha-bhc	ug/L	<.05		<.05						
Anthracene	ug/L	<8		<8						

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

Table 22

Analytical Data Summary for SW-101R

Constituents	9/23/2024
(3 4)-methylphenol	
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
1,1-dichloroethylene	<1
1,1-dichloropropene	
1,2,3-trichloropropane	<1
1,2,4,5-tetrachlorobenzene	
1,2,4-trichlorobenzene	
1,2-dibromo-3-chloropropane	<5
1,2-dibromoethane	<1
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 (mek)	<10
2-chloronaphthalene	
2-chlorophenol	
2-hexanone (mbk)	<5
2-methylnaphthalene	
2-methylphenol (o-cresol)	
2-naphthylamine	
2-nitroaniline	
2-nitrophenol	
3,3´-dichlorobenzidine	
3,3-dimethylbenzidine	
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 (mibk)	<5
4-nitroaniline	
4-nitrophenol	
5-nitro-o-toluidine	
7,12-dimethylbenz [a] anthracene	
Acenaphthene	
Acenaphthylene	
Acetone	<10
Acetonitrile	
Acetophenone	
Acrolein	
Acrylonitrile	<5
Aldrin	
Allyl chloride	
Alpha-bhc	
Anthracene	

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

Table 22

Analytical Data Summary for SW-101R

Constituents	Units	3/26/2020	9/15/2020	3/2/2021	9/7/2021	3/24/2022	8/31/2022	3/2/2023	9/12/2023	3/4/2024
Antimony, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arochlor 1016	ug/L	<.1		<.1						
Arochlor 1221	ug/L	<.2		<.2						
Arochlor 1232	ug/L	<.2		<.2						
Arochlor 1242	ug/L	<.2		<.2						
Arochlor 1248	ug/L	<.2		<.2						
Arochlor 1254	ug/L	<.1		<.1						
Arochlor 1260	ug/L	<.1		<.1						
Arsenic, total	ug/L	5.5	5.4	<4.0	6.9	15.2	4.7	5.7	4.1	<4.0
Azobenzene	ug/L	<8		<8						
Barium, total	ug/L	232	243	157	265	363	265	266	249	240
Benzene	ug/L	<1	<1	<1	<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(g,h,i)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	<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-ethylhexyl) phthalate	ug/L	<6		<6						
Bis[2-chloroisopropyl]ether	ug/L	<8		<8						
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
Butyl benzyl phthalate	ug/L	<8		<8						
Cadmium, total	ug/L	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
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
Chlordane	ug/L	<.1		<.1						
Chlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzilate	ug/L	<8		<8						
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
Chloroprene	ug/L	<1		<1						
Chromium, total	ug/L	<8	<8	<8	<8	<8	<8	<8	<8	<8
Chrysene	ug/L	<8		<8						
Cis-1,2-dichloroethylene	ug/L	2.6	1.8	2.1	5.9	5.5	6.1	5.9	6.0	4.0
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	3.5	3.8	2.2	5.1	3.1	6.6	3.0	4.1	2.7
Copper, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Cyanide, total	mg/L	<.005		<.005						
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	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<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 methanesulfonate	ug/L	<8		<8						
Ethylbenzene	ug/L	<1	<1	<1	<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						

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

Table 22

Analytical Data Summary for SW-101R

Constituents	9/23/2024
Antimony, total	<2
Arochlor 1016	
Arochlor 1221	
Arochlor 1232	
Arochlor 1242	
Arochlor 1248	
Arochlor 1254	
Arochlor 1260	
Arsenic, total	4.7
Azobenzene	
Barium, total	236
Benzene	<1
Benzo(a)anthracene	
Benzo(a)pyrene	
Benzo(b)fluoranthene	
Benzo(g,h,i)perylene	
Benzo(k)fluoranthene	
Benzyl alcohol	
Beryllium, total	<4
Beta-bhc	
Bis (2-chloroethoxy) methane	
Bis(2-chloroethyl) ether	
Bis(2-ethylhexyl) phthalate	
Bis[2-chloroisopropyl]ether	
Bromochloromethane	<1
Bromodichloromethane	<1
Bromoform	<1
Bromomethane	<1
Butyl benzyl phthalate	
Cadmium, total	<.8
Carbon disulfide	<1
Carbon tetrachloride	<1
Chlordane	
Chlorobenzene	<1
Chlorobenzilate	
Chloroethane	<1
Chloroform	<1
Chloromethane	<1
Chloroprene	
Chromium, total	<8
Chrysene	
Cis-1,2-dichloroethylene	3.4
Cis-1,3-dichloropropene	<1
Cobalt, total	3.9
Copper, total	<4
Cyanide, total	
Delta-bhc	
Diallate	
Dibenzo(a,h)anthracene	
Dibenzofuran	
Dibromochloromethane	<1
Dibromomethane	<1
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 methanesulfonate	
Ethylbenzene	<1
Famphur	
Fluoranthene	
Fluorene	
Gamma-bhc [lindane]	
Heptachlor	
Heptachlor epoxide	
Hexachlorobenzene	

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

Table 22

Analytical Data Summary for SW-101R

Constituents	Units	3/26/2020	9/15/2020	3/2/2021	9/7/2021	3/24/2022	8/31/2022	3/2/2023	9/12/2023	3/4/2024
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						
Isobutanol	ug/L	<1000		<1000						
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	<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 iodide	ug/L	<1	<1	<2	<1	<1	<1	<1	<1	<1
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	<5	<5	<5
Naphthalene	ug/L	<8		<8						
Nickel, total	ug/L	6.5	5.3	<4.0	6.4	<4.0	7.5	<4.0	4.9	<4.0
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,o,o-triethyl phosphorothioate	ug/L	<.4		<.4						
O-toluidine	ug/L	<8		<8						
P-(dimethylamino)azobenzene	ug/L	<8		<8						
Parathion	ug/L	<.4		<.4						
Pentachlorobenzene	ug/L	<8		<8						
Pentachloronitrobenzene (pcnb)	ug/L	<8		<8						
Pentachlorophenol	ug/L	<8		<8						
Phenacetin	ug/L	<8		<8						
Phenanthrene	ug/L	<8		<8						
Phenol	ug/L	<8		<8						
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	<4	<4	<4
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfide, total	mg/L	<.1		<.1						
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<2	<2	<2	<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	<1	<1	<1
Toxaphene	ug/L	<.2		<.2						
Trans-1,2-dichloroethylene	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
Trichloroethylene	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	<1.0	1.8	1.8	4.6	6.5	3.9	5.9	4.4	5.3
Xylenes, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	<20	<20	<20	<20	<20	<20	<20	<20	<20

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

Table 22

Analytical Data Summary for SW-101R

Constituents	9/23/2024
Hexachlorobutadiene	
Hexachlorocyclopentadiene	
Hexachloroethane	
Hexachloropropene	
Indeno(1,2,3-cd)pyrene	
Isobutanol	
Isodrin	
Isophorone	
Isosafrole	
Kepone	
Lead, total	<4
Mercury, total	
Methacrylonitrile	
Methapyrilene	
Methoxychlor	
Methyl iodide	<1
Methyl methacrylate	
Methyl methanesulfonate	
Methyl parathion	
Methylene chloride	<5
Naphthalene	
Nickel, total	4.7
Nitrobenzene	
N-nitrosodiethylamine	
N-nitrosodimethylamine	
N-nitrosodi-n-butylamine	
N-nitroso-di-n-propylamine	
N-nitrosodiphenylamine	
N-nitrosomethylethylamine	
N-nitrosopiperidine	
N-nitrosopyrrolidine	
O,o,o-triethyl phosphorothioate	
O-toluidine	
P-(dimethylamino)azobenzene	
Parathion	
Pentachlorobenzene	
Pentachloronitrobenzene (pcnb)	
Pentachlorophenol	
Phenacetin	
Phenanthrene	
Phenol	
Phorate	
Pronamide	
Propionitrile	
Pyrene	
Safrole	
Selenium, total	<4
Silver, total	<4
Styrene	<1
Sulfide, total	
Tetrachloroethylene	<1
Thallium, total	<2
Thionazin	
Tin, total	
Toluene	<1
Toxaphene	
Trans-1,2-dichloroethylene	<1
Trans-1,3-dichloropropene	<1
Trans-1,4-dichloro-2-butene	<5
Trichloroethylene	<1
Trichlorofluoromethane	<1
Vanadium, total	<20
Vinyl acetate	<5
Vinyl chloride	3.1
Xylenes, total	<2
Zinc, total	<20

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

Table 23

Analytical Data Summary for SW-102

Constituents	Units	9/25/2014	3/25/2015	9/16/2015	3/23/2017	3/19/2018	9/11/2018	3/26/2019	9/4/2019
1,1,1,2-tetrachloroethane	ug/L					<1	<1	<1	<1
1,1,1-trichloroethane	ug/L					<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L					<1	<1	<1	<1
1,1,2-trichloroethane	ug/L					<1	<1	<1	<1
1,1-dichloroethane	ug/L					<1	<1	<1	<1
1,1-dichloroethylene	ug/L					<1	<1	<1	<1
1,2,3-trichloropropane	ug/L					<1	<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L					<1	<1	<1	<1
1,2-dibromoethane	ug/L					<1	<1	<1	<1
1,2-dichlorobenzene	ug/L					<1	<1	<1	<1
1,2-dichloroethane	ug/L					<1	<1	<1	<1
1,2-dichloropropane	ug/L					<1	<1	<1	<1
1,4-dichlorobenzene	ug/L					<1	<1	<1	<1
2-butanone (mek)	ug/L					<5	<5	<5	<5
2-hexanone (mbk)	ug/L					<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	ug/L					<5	<5	<5	<5
Acetone	ug/L					<10	<10	<10	<10
Acrylonitrile	ug/L					<5	<5	<5	<5
Antimony, total	ug/L					<2	<2	<2	<2
Arsenic, total	ug/L					<4.0	<4.0	<4.0	5.6
Barium, total	ug/L					110	178	145	221
Benzene	ug/L					<1	<1	<1	<1
Beryllium, total	ug/L					<4	<4	<4	<4
Bromochloromethane	ug/L					<1	<1	<1	<1
Bromodichloromethane	ug/L					<1	<1	<1	<1
Bromoform	ug/L					<1	<1	<1	<1
Bromomethane	ug/L					<1	<1	<1	<1
Cadmium, total	ug/L					<.8	<.8	<.8	<.8
Carbon disulfide	ug/L					<1	<1	<1	<1
Carbon tetrachloride	ug/L					<1	<1	<1	<1
Chemical oxygen demand	mg/L	15 *	14 *	<10 *	<10				
Chloride	mg/L	36 *	44 *	18 *	35				
Chlorobenzene	ug/L					<1	<1	<1	<1
Chloroethane	ug/L					<1	<1	<1	<1
Chloroform	ug/L					<1	<1	<1	<1
Chloromethane	ug/L					<1	<1	<1	<1
Chromium, total	ug/L					<8	<8	<8	<8
Cis-1,2-dichloroethylene	ug/L					<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L					<1	<1	<1	<1
Cobalt, total	ug/L					<.8	<.8	<.8	1.6
Copper, total	ug/L					<4	<4	<4	<4
Dibromochloromethane	ug/L					<1	<1	<1	<1
Dibromomethane	ug/L					<1	<1	<1	<1
Ethylbenzene	ug/L					<1	<1	<1	<1
Iron, dissolved	ug/L	382	202	143	450				
Lead, total	ug/L					<4	<4	<4	<4
Methyl iodide	ug/L					<1	<1	<1	<1
Methylene chloride	ug/L					<5	<5	<5	<5
Nickel, total	ug/L					<4.0	7.6	<4.0	4.0
Nitrogen, ammonia	mg/L	<1 *	<1 *	<1 *	<1				
pH	S.U.	7.9	7.2	7.9					
Phenols, total	mg/L	<.1		<.1					
Selenium, total	ug/L					<4	<4	<4	<4
Silver, total	ug/L					<4	<8	<4	<4
Specific conductance	umhos/cm	525	582	581					
Styrene	ug/L					<1	<1	<1	<1
Tetrachloroethylene	ug/L					<1	<1	<1	<1
Thallium, total	ug/L					<4	<4	<2	<2
Toluene	ug/L					<1	<1	<1	<1
Total organic halogens (tox)	mg/L	.016		.058					
Trans-1,2-dichloroethylene	ug/L					<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L					<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L					<5	<5	<5	<5
Trichloroethylene	ug/L					<1	<1	<1	<1
Trichlorofluoromethane	ug/L					<1	<1	<1	<1
Vanadium, total	ug/L					<20	<20	<20	<20
Vinyl acetate	ug/L					<5	<5	<5	<5
Vinyl chloride	ug/L					<1	<1	<1	<1
Xylenes, total	ug/L					<2	<2	<2	<2
Zinc, total	ug/L					<8.0	8.7	<20.0	<20.0

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

Table 23

Analytical Data Summary for SW-102

Constituents	3/26/2020	9/15/2020	3/2/2021	9/7/2021	3/24/2022	3/2/2023	3/4/2024	9/23/2024
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-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<5	<5	<5	<5	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1	<1	<1	<1
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
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	<5	<5	<5	<5	<10	<10	<10	<10
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	<4.0	4.4	<4.0	5.9	<4.0	<4.0	<4.0	4.3
Barium, total	169	150	142	190	118	103	134	190
Benzene	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	<4	<4	<4	<4	<4	<4	<4	<4
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
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1
Chemical oxygen demand								
Chloride								
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1
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
Chromium, total	<8	<8	<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	<.8	.9	1.1	1.2	.5	<.4	<.4	1.1
Copper, total	<4	<4	<4	<4	<4	<4	<4	<4
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1
Iron, dissolved								
Lead, total	<4	<4	<4	<4	<4	<4	<4	<4
Methyl iodide	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Nitrogen, ammonia								
pH								
Phenols, total								
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4
Specific conductance								
Styrene	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2	<2	<2	<2	<2
Toluene	<1	<1	<1	<1	<1	<1	<1	<1
Total organic halogens (tox)								
Trans-1,2-dichloroethylene	<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
Trichloroethylene	<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	<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 24

Analytical Data Summary for SW-103

Constituents	Units	9/25/2014	3/25/2015	9/16/2015	3/23/2017	3/19/2018	9/11/2018	3/26/2019	9/4/2019
1,1,1,2-tetrachloroethane	ug/L					<1	<1	<1	<1
1,1,1-trichloroethane	ug/L					<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L					<1	<1	<1	<1
1,1,2-trichloroethane	ug/L					<1	<1	<1	<1
1,1-dichloroethane	ug/L					<1	<1	<1	<1
1,1-dichloroethylene	ug/L					<1	<1	<1	<1
1,2,3-trichloropropane	ug/L					<1	<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L					<1	<1	<1	<1
1,2-dibromoethane	ug/L					<1	<1	<1	<1
1,2-dichlorobenzene	ug/L					<1	<1	<1	<1
1,2-dichloroethane	ug/L					<1	<1	<1	<1
1,2-dichloropropane	ug/L					<1	<1	<1	<1
1,4-dichlorobenzene	ug/L					<1	<1	<1	<1
2-butanone (mek)	ug/L					<5	<5	<5	<5
2-hexanone (mbk)	ug/L					<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	ug/L					<5	<5	<5	<5
Acetone	ug/L					<10	<10	<10	<10
Acrylonitrile	ug/L					<5	<5	<5	<5
Antimony, total	ug/L					<2	<2	<2	<2
Arsenic, total	ug/L					<4	<4	<4	<4
Barium, total	ug/L					109.0	163.0	138.0	114.0
Benzene	ug/L					<1	<1	<1	<1
Beryllium, total	ug/L					<4	<4	<4	<4
Bromochloromethane	ug/L					<1	<1	<1	<1
Bromodichloromethane	ug/L					<1	<1	<1	<1
Bromoform	ug/L					<1	<1	<1	<1
Bromomethane	ug/L					<1	<1	<1	<1
Cadmium, total	ug/L					<.8	<.8	<.8	<.8
Carbon disulfide	ug/L					<1	<1	<1	<1
Carbon tetrachloride	ug/L					<1	<1	<1	<1
Chemical oxygen demand	mg/L	13 *	19 *	<10 *	<10				
Chloride	mg/L	37 *	47 *	26 *	43				
Chlorobenzene	ug/L					<1	<1	<1	<1
Chloroethane	ug/L					<1	<1	<1	<1
Chloroform	ug/L					<1	<1	<1	<1
Chloromethane	ug/L					<1	<1	<1	<1
Chromium, total	ug/L					<8	<8	<8	<8
Cis-1,2-dichloroethylene	ug/L					<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L					<1	<1	<1	<1
Cobalt, total	ug/L					<.8	<.8	<.8	1.1
Copper, total	ug/L					<4	<4	<4	<4
Dibromochloromethane	ug/L					<1	<1	<1	<1
Dibromomethane	ug/L					<1	<1	<1	<1
Ethylbenzene	ug/L					<1	<1	<1	<1
Iron, dissolved	ug/L	<100	473 *	<100	550				
Lead, total	ug/L					<4	<4	<4	<4
Methyl iodide	ug/L					<1	<1	<1	<1
Methylene chloride	ug/L					<5	<5	<5	<5
Nickel, total	ug/L					<4.0	<4.0	<4.0	5.7
Nitrogen, ammonia	mg/L	<1 *	<1 *	<1 *	<1				
pH	S.U.	7.8	7.5	8.4					
Phenols, total	mg/L	<.1		<.1					
Selenium, total	ug/L					<4	<4	<4	<4
Silver, total	ug/L					<4	<8	<4	<4
Specific conductance	umhos/cm	575	674	606					
Styrene	ug/L					<1	<1	<1	<1
Tetrachloroethylene	ug/L					<1	<1	<1	<1
Thallium, total	ug/L					<4	<4	<2	<2
Toluene	ug/L					<1	<1	<1	<1
Total organic halogens (tox)	mg/L	<.01		.02					
Trans-1,2-dichloroethylene	ug/L					<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L					<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L					<5	<5	<5	<5
Trichloroethylene	ug/L					<1	<1	<1	<1
Trichlorofluoromethane	ug/L					<1	<1	<1	<1
Vanadium, total	ug/L					<20	<20	<20	<20
Vinyl acetate	ug/L					<5	<5	<5	<5
Vinyl chloride	ug/L					<1	<1	<1	<1
Xylenes, total	ug/L					<2	<2	<2	<2
Zinc, total	ug/L					<8.0	8.5	<20.0	<8.0

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

Table 24

Analytical Data Summary for SW-103

Constituents	3/26/2020	9/15/2020	3/2/2021	9/7/2021	3/24/2022	3/2/2023	3/28/2023	3/4/2024	9/23/2024
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-dichloroethylene	<1	<1	<1	<1	<1		<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1		<1	<1	<1
1,2-dibromo-3-chloropropane	<5	<5	<5	<5	<5		<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1		<1	<1	<1
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
1,4-dichlorobenzene	<1	<1	<1	<1	<1		<1	<1	<1
2-butanone (mek)	<5	<5	<5	<5	<10		<10	<10	<10
2-hexanone (mbk)	<5	<5	<5	<5	<5		<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5		<5	<5	<5
Acetone	<10	<10	<10	<10	<10		<10	<10	<10
Acrylonitrile	<5	<5	<5	<5	<5		<5	<5	<5
Antimony, total	<2	<2	<2	<2	<2	<2		<2	<2
Arsenic, total	<4	<4	<4	<4	<4	<4		<4	<4
Barium, total	163.0	116.0	105.0	143.0	116.0	92.9		118.0	141.0
Benzene	<1	<1	<1	<1	<1		<1	<1	<1
Beryllium, total	<4	<4	<4	<4	<4	<4		<4	<4
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
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.8		<.8	<.8
Carbon disulfide	<1	<1	<1	<1	<1		<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1		<1	<1	<1
Chemical oxygen demand									
Chloride									
Chlorobenzene	<1	<1	<1	<1	<1		<1	<1	<1
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
Chromium, total	<8	<8	<8	<8	<8	<8		<8	<8
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1		<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1		<1	<1	<1
Cobalt, total	<.8	.6	2.6	.6	.6	.8		.7	.6
Copper, total	<4	<4	<4	<4	<4	<4		<4	<4
Dibromochloromethane	<1	<1	<1	<1	<1		<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1		<1	<1	<1
Ethylbenzene	<1	<1	<1	<1	<1		<1	<1	<1
Iron, dissolved									
Lead, total	<4	<4	<4	<4	<4	<4		<4	<4
Methyl iodide	<1	<1	<1	<1	<1		<1	<1	<1
Methylene chloride	<5	<5	<5	<5	<5		<5	<5	<5
Nickel, total	<4.0	<4.0	<4.0	5.1	<4.0	<4.0		<4.0	4.5
Nitrogen, ammonia									
pH									
Phenols, total									
Selenium, total	<4	<4	<4	<4	<4	<4		<4	<4
Silver, total	<4	<4	<4	<4	<4	<4		<4	<4
Specific conductance									
Styrene	<1	<1	<1	<1	<1		<1	<1	<1
Tetrachloroethylene	<1	<1	<1	<1	<1		<1	<1	<1
Thallium, total	<2	<2	<2	<2	<2	<2		<2	<2
Toluene	<1	<1	<1	<1	<1		<1	<1	<1
Total organic halogens (tox)									
Trans-1,2-dichloroethylene	<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
Trichloroethylene	<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	<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.

Appendix D

Statistical Report

APPENDIX D.1 –Spring Statistical Evaluation

GROUND WATER STATISTICS

FOR THE

NEWTON SANITARY LANDFILL

First Semi-Annual Monitoring Event in 2024

Prepared for:
City of Newton Sanitary Landfill
3202 Ia-14
Newton, Jasper County, IA

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INTRODUCTION

This report summarizes the results of the statistical analysis used to evaluate the ground water quality data obtained during the first semi-annual monitoring event in 2024 at the Newton Sanitary Landfill in Newton, Jasper County, Iowa. The statistical plan was 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 method is described and applied to the Newton Landfill data. The statistical plan conforms with IAC 567, Chapter 113.10, USEPA guidance document ("*Statistical Analysis of Ground-Water Monitoring Data at RCRA Facilities, Unified Guidance"*, March 2009), and the American Society for Testing and Materials (ASTM) standard D6312-98, *Developing Appropriate Statistical Approaches for Ground-Water Detection Monitoring Programs*.

Ground Water Monitoring Program

The groundwater monitoring network for Newton Sanitary Landfill includes GWD-1, MW-36, MW-39, MW-41, MW-42, MW-48, MW-58, MW-59, MW-60, MW-61, MW-62R, MW-78, MW-79, and MW-80. Each of the groundwater monitoring wells is to be 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 in Table 1 below.

Table 1: Detection monitoring constituents listed in Appendix I of IAC 567, Chapter 113.

Organic Compounds:

Acetone	*trans*-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	*cis*-1,2-Dichloroethene	1,1,2,2-Tetrachloroethane
Bromoform	*trans*-1,2-Dichloroethene	Tetrachloroethene
Carbon disulfide	1,2-Dichloropropane	Toluene
Carbon tetrachloride	*cis*-1,3-Dichloropropene	1,1,1-Trichloroethane
Chlorobenzene	*trans*-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 2024 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 was applied to the Newton Landfill data using the DUMPStat® statistical program. 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.

<u>Results of the Interwell Statistics</u>

The prior background data used in the statistical analysis included the ground water data collected from ground water wells MW-62R and MW-78. Since there were verified detections of trichlorofluoromethane at MW-62R, it was recommended that MW-62R not be used as a background well. In its' place, MW-48 and MW-39 were added as background points. Additionally, SW-101 was approved as a background point. The background data used in this statistical analysis includes the ground water data collected from ground water wells MW-39, MW-48, MW-78, and SW-101 during the period from September 2014 through the current data. A summary of the background data from monitoring wells MW-39, MW-48, MW-78, and SW-101 used to determine the site prediction limits are 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-36, MW-41, MW-42, MW-58, MW-59, MW-60, MW-61, MW-62R, MW-79, MW-80, and SW-101R compared to the site prediction limits. Prediction limit exceedances are flagged with asterisks. For the most current data, the current site prediction limit exceedances are summarized in the table below.

Trace Metal Prediction Limit Exceedances during the First Semi-Annual Monitoring Event in 2024

Well	Trace Metal Detected	Result, µg/L	Prediction Limit, µg/L	Prediction Limit Type	Verified/ Awaiting verification	Ground Water Standard, µg/L
MW-58	Nickel	16.7	8.7000	Nonparametric	Verified	100[a]
MW-62R	Barium	1010	357.0000	Nonparametric	Verified	2000[a]

a – USEPA MCL
b – Iowa Statewide Standard

The detection frequencies of the parameters in the up and down gradient monitoring wells are summarized in Table 3. With the exception of barium, these constituents are rarely detected in the upgradient wells. With the detection frequencies being less than 50% for all but barium, nonparametric site prediction limits are used for those trace metals.

Table 4 summarizes the results of the Shapiro-Wilk test. The background barium data are normally distributed so barium uses a normal site prediction limit. Table 5 is a summary of the statistics and prediction limits determined for the metals. 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 3 standard deviation unit increases over background.

The past and present verified trace metal exceedances were evaluated against the ground water protection standards (GWPS) using confidence limits calculated in accordance with the Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, USEPA, March 2009. 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 95% LCLs calculated for the metals which exceeded site prediction limits are below the respective GWPS (Attachment C).

<u>Results of the Interwell Statistics – Old Landfill</u>

The current ground water data from monitoring wells MW-44, MW-56, MW-57, MW-64, and MW-65 was compared to site prediction limits established from monitoring wells MW-39, MW-48, MW-78, and SW-101. A summary of the background data from monitoring wells MW-39, MW-48, MW-78, and SW-101 used to determine the site prediction limits are 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-44, MW-56, MW-57, MW-64, and MW-65 compared to the site prediction limits. Prediction limit exceedances are flagged with asterisks. For the most current data, the current site prediction limit exceedances are summarized in the table below.

Trace Metal Prediction Limit Exceedances during the First Semi-Annual Monitoring Event in 2024

Well	Trace Metal Detected	Result, µg/L	Prediction Limit, µg/L	Prediction Limit Type	Verified/ Awaiting verification	Ground Water Standard, µg/L
MW-44	Cobalt	9.7	6.9000	Nonparametric	Verified	2.1[b]
	Nickel	10.0	8.7000	Nonparametric	Verified	100[a]
MW-56	Lead	14.6	4.0000	Nonparametric	Awaiting verification	100[a]
MW-64	Arsenic	29.6	7.3000	Nonparametric	Verified	10[a]
	Cobalt	12.0	6.9000	Nonparametric	Verified	2.1[b]
	Nickel	32.0	8.7000	Nonparametric	Verified	100[a]
	Zinc	51.4	32.3000	Nonparametric	Awaiting verification	2000[b]
MW-65	Cobalt	9.2	6.9000	Nonparametric	Awaiting verification	2.1[b]
	Nickel	14.9	8.7000	Nonparametric	Awaiting verification	100[a]

a – USEPA MCL
b – Iowa Statewide Standard

The detection frequencies of the parameters in the up and down gradient monitoring wells are summarized in Table 3. With the exception of barium, these constituents are rarely detected in the upgradient wells. With the detection frequencies being less than 50% for all but barium, nonparametric site prediction limits are used for those trace metals.

Table 4 summarizes the results of the Shapiro-Wilk test. The background barium data are normally distributed so barium uses a normal site prediction limit. Table 5 is a summary of the statistics and prediction limits determined for the metals. 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 3 standard deviation unit increases over background.

The past and present verified trace metal exceedances were evaluated against the ground water protection standards (GWPS) using confidence limits.

The 95% LCL for cobalt at MW-44 (8.772 µg/L) exceeds the GWPS of 2.1 µg/L.
The 95% LCL for arsenic at MW-64 (23.445 µg/L) exceeds the GWPS of 10 µg/L.
The 95% LCL for cobalt at MW-64 (9.769 µg/L) exceeds the GWPS of 2.1 µg/L.
The 95% LCL for cobalt at MW-65 (4.647 µg/L) exceeds the GWPS of 2.1 µg/L.

The 95% LCLs calculated for the remainder of the metals which exceeded site prediction limits are below the respective 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 Newton Landfill during the first semi-annual monitoring event in 2024 are summarized below. Historical VOC detections are summarized in Attachment E.

VOCs detected during the First Semi-Annual Monitoring Event in 2024

Well	VOC Detected	Result, µg/L	Reporting Limit, µg/L	Verified/ Awaiting Verification	Ground Water Standard
MW-41	1,1-Dichloroethane	19.0	1	Verified	140[b]
	cis-1,2-Dichloroethene	2.4	1	Verified	70[a]
MW-48	Tetrachloroethene	2.3	1	Awaiting Verification	5[a]
MW-58	*cis*-1,2-Dichloroethene	1.0	1	Verified	70[a]
MW-62R	Trichlorofluoromethane	1.0	1	Verified	2000[b]
SW-101R	*cis*-1,2-Dichloroethene	4.0	1	Verified	70[a]
	Vinyl chloride	5.3	1	Verified	2[a]

a - USEPA MCL, b – Iowa Statewide Standard

VOCs detected during the First Semi-Annual Monitoring Event in 2024 – Old Landfill

Well	VOC Detected	Result, µg/L	Reporting Limit, µg/L	Verified/ Awaiting Verification	Ground Water Standard
MW-56	1,1-Dichloroethane	1.7	1	Verified	140[b]
MW-64	1,1-Dichloroethane	1.5	1	Verified	140[b]
	cis-1,2-Dichloroethene	2.4	1	Verified	70[a]
	Vinyl chloride	2.7	1	Verified	2[a]

a - USEPA MCL, b – Iowa Statewide Standard

The verified VOC detections were evaluated against the ground water protection standards (GWPS) using confidence limits calculated in accordance with the Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, USEPA, March 2009. 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 95% LCL for vinyl chloride at SW-101R (3.821 μg/L) exceeds the GWPS of 2 μg/L. The 95% LCLs calculated for the remainder of verified VOCs are below the respective GWPS

CONCLUSIONS

This report summarizes the statistical analyses used to evaluate the ground water data obtained during the first semi-annual monitoring event in 2024 at Newton Sanitary Landfill. The ground water data was compared to background using prediction limits. There are verified site prediction limit exceedances for nickel at MW-58, barium at MW-62R, cobalt and nickel at MW-44, and arsenic, cobalt, and nickel at MW-64.

The VOC data obtained during the first semi-annual monitoring event in 2024 were compared to MCLs or PQLs. There were verified detections of 1,1-dichloroethane and *cis*-1,2-dichloroethene at MW-41; *cis*-1,2-dichloroethene at MW-58; trichlorofluoromethane at MW-62R; *cis*-1,2-dichloroethene and vinyl chloride at SW-101R; 1,1-dichloroethane at MW-56; and 1,1-dichloroethane, *cis*-1,2-dichloroethene, and vinyl chloride at MW-64.

Attachment A

Summary of the Data obtained during the First Semi-Annual Monitoring Event in 2024

Table 1

Analytical Data Summary for 3/4/2024

Constituents	Units	MW-36	MW-39	MW-41	MW-42	MW-44	MW-48	MW-56	MW-57	MW-58	MW-59	MW-60
1,1,1,2-tetrachloroethane	ug/L	<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
1,1,2,2-tetrachloroethane	ug/L	<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-dichloroethane	ug/L	<1.0	<1.0	19.0	<1.0	<1.0	<1.0	1.7	<1.0	<1.0	<1.0	<1.0
1,1-dichloroethylene	ug/L	<1	<1	<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	<1
1,2-dibromo-3-chloropropane	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2-dibromoethane	ug/L	<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
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Antimony, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	ug/L	<4.0	<4.0	<4.0	<4.0	4.1	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Barium, total	ug/L	128.0	128.0	71.2	19.4	126.0	149.0	23.5	250.0	23.8	33.5	192.0
Benzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bromochloromethane	ug/L	<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
Bromoform	ug/L	<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
Cadmium, total	ug/L	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	ug/L	<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
Chlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	ug/L	<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
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	ug/L	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethylene	ug/L	<1.0	<1.0	2.4	<1.0	<1.0	<1.0	<1.0	<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
Cobalt, total	ug/L	<.4	<.4	<.4	.7	9.7	<.4	.6	.4	<.4	<.4	.5
Copper, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Dibromochloromethane	ug/L	<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
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	14.6	<4.0	<4.0	<4.0	<4.0
Methyl iodide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	ug/L	<4.0	<4.0	<4.0	<4.0	10.0	<4.0	4.7	<4.0	16.7	<4.0	<4.0
Selenium, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Silver, total	ug/L	<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
Tetrachloroethylene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	2.3	<1.0	<1.0	<1.0	<1.0	<1.0
Thallium, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,2-dichloroethylene	ug/L	<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
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	ug/L	<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
Vanadium, total	ug/L	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Xylenes, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	<20.0	<20.0	<20.0	<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 1

Analytical Data Summary for 3/4/2024

Constituents	MW-61	MW-62R	MW-64	MW-65	MW-78	MW-79	MW-80	PECS-1	SW-101R	SW-102	SW-103
1,1,1,2-tetrachloroethane	<1	<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
1,1,2,2-tetrachloroethane	<1	<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
1,1-dichloroethane	<1.0	<1.0	1.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-dichloroethylene	<1	<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
1,2-dibromo-3-chloropropane	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Antimony, total	<2	<2	<2	<2	<2	<2	<2		<2	<2	<2
Arsenic, total	<4.0	<4.0	29.6	6.7	<4.0	<4.0	<4.0		<4.0	<4.0	<4.0
Barium, total	48.5	1010.0	68.5	30.0	341.0	57.9	131.0		240.0	134.0	118.0
Benzene	<1	<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	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.8	<.8		<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<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-dichloroethylene	<1.0	<1.0	2.4	<1.0	<1.0	<1.0	<1.0	<1.0	4.0	<1.0	<1.0
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	<.4	<.4	12.0	9.2	<.4	<.4	1.3		2.7	<.4	.7
Copper, total	<4	<4	<4	<4	<4	<4	<4		<4	<4	<4
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	<1	<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
Methyl iodide	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	4.8	<4.0	32.0	14.9	<4.0	<4.0	<4.0		<4.0	<4.0	<4.0
Selenium, total	<4.0	<4.0	<4.0	<4.0	5.7	<4.0	<4.0		<4.0	<4.0	<4.0
Silver, total	<4	<4	<4	<4	<4	<4	<4		<4	<4	<4
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Thallium, total	<2	<2	<2	<2	<2	<2	<2		<2	<2	<2
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<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	<5
Trichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	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	<5
Vinyl chloride	<1.0	<1.0	2.7	<1.0	<1.0	<1.0	<1.0	<1.0	5.3	<1.0	<1.0
Xylenes, total	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	<20.0	<20.0	51.4	21.5	<20.0	<20.0	<20.0		<20.0	<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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Antimony, total	ug/L	MW-39	09/24/2014	ND	2.0000		
Antimony, total	ug/L	MW-39	12/05/2014	ND	2.0000		
Antimony, total	ug/L	MW-39	03/11/2015	ND	2.0000		
Antimony, total	ug/L	MW-39	06/16/2015	ND	2.0000		
Antimony, total	ug/L	MW-39	09/17/2015	ND	2.0000		
Antimony, total	ug/L	MW-39	03/22/2016	ND	2.0000		
Antimony, total	ug/L	MW-39	09/15/2016	ND	2.0000		
Antimony, total	ug/L	MW-39	03/23/2017	ND	2.0000		
Antimony, total	ug/L	MW-39	09/08/2017	ND	2.0000		
Antimony, total	ug/L	MW-39	03/19/2018	ND	2.0000		
Antimony, total	ug/L	MW-39	09/11/2018	ND	2.0000		
Antimony, total	ug/L	MW-39	03/26/2019	ND	2.0000		
Antimony, total	ug/L	MW-39	09/04/2019	ND	2.0000		
Antimony, total	ug/L	MW-39	03/26/2020	ND	2.0000		
Antimony, total	ug/L	MW-39	09/15/2020	ND	2.0000		
Antimony, total	ug/L	MW-39	03/02/2021	ND	2.0000		
Antimony, total	ug/L	MW-39	09/07/2021	ND	2.0000		
Antimony, total	ug/L	MW-39	03/24/2022	ND	2.0000		
Antimony, total	ug/L	MW-39	08/31/2022	ND	2.0000		
Antimony, total	ug/L	MW-39	03/02/2023	ND	2.0000		
Antimony, total	ug/L	MW-39	09/12/2023	ND	2.0000		
Antimony, total	ug/L	MW-39	03/04/2024	ND	2.0000		
Arsenic, total	ug/L	MW-39	09/24/2014	ND	4.0000		
Arsenic, total	ug/L	MW-39	12/05/2014	ND	4.0000		
Arsenic, total	ug/L	MW-39	03/11/2015	ND	4.0000		
Arsenic, total	ug/L	MW-39	06/16/2015	ND	4.0000		
Arsenic, total	ug/L	MW-39	09/17/2015	ND	4.0000		
Arsenic, total	ug/L	MW-39	03/22/2016	ND	4.0000		
Arsenic, total	ug/L	MW-39	09/15/2016	ND	4.0000		
Arsenic, total	ug/L	MW-39	03/23/2017	ND	4.0000		
Arsenic, total	ug/L	MW-39	09/08/2017	ND	4.0000		
Arsenic, total	ug/L	MW-39	03/19/2018	ND	4.0000		
Arsenic, total	ug/L	MW-39	09/11/2018	ND	4.0000		
Arsenic, total	ug/L	MW-39	03/26/2019	ND	4.0000		
Arsenic, total	ug/L	MW-39	09/04/2019	ND	4.0000		
Arsenic, total	ug/L	MW-39	03/26/2020	ND	4.0000		
Arsenic, total	ug/L	MW-39	09/15/2020	ND	4.0000		
Arsenic, total	ug/L	MW-39	03/02/2021	ND	4.0000		
Arsenic, total	ug/L	MW-39	09/07/2021	ND	4.0000		
Arsenic, total	ug/L	MW-39	03/24/2022	ND	4.0000		
Arsenic, total	ug/L	MW-39	08/31/2022	ND	4.0000		
Arsenic, total	ug/L	MW-39	03/02/2023	ND	4.0000		
Arsenic, total	ug/L	MW-39	09/12/2023	ND	4.0000		
Arsenic, total	ug/L	MW-39	03/04/2024	ND	4.0000		
Barium, total	ug/L	MW-39	09/24/2014		60.6000		
Barium, total	ug/L	MW-39	12/05/2014		139.0000		
Barium, total	ug/L	MW-39	03/11/2015		136.0000		
Barium, total	ug/L	MW-39	06/16/2015		148.0000		
Barium, total	ug/L	MW-39	09/17/2015		128.0000		
Barium, total	ug/L	MW-39	03/22/2016		123.0000		
Barium, total	ug/L	MW-39	09/15/2016		103.0000		
Barium, total	ug/L	MW-39	03/23/2017		129.0000		
Barium, total	ug/L	MW-39	09/08/2017		117.0000		
Barium, total	ug/L	MW-39	03/19/2018		131.0000		
Barium, total	ug/L	MW-39	09/11/2018		114.0000		
Barium, total	ug/L	MW-39	03/26/2019		121.0000		
Barium, total	ug/L	MW-39	09/04/2019		138.0000		
Barium, total	ug/L	MW-39	03/26/2020		150.0000		
Barium, total	ug/L	MW-39	09/15/2020		136.0000		
Barium, total	ug/L	MW-39	03/02/2021		125.0000		
Barium, total	ug/L	MW-39	09/07/2021		141.0000		
Barium, total	ug/L	MW-39	03/24/2022		137.0000		
Barium, total	ug/L	MW-39	08/31/2022		132.0000		
Barium, total	ug/L	MW-39	03/02/2023		134.0000		
Barium, total	ug/L	MW-39	09/12/2023		133.0000		
Barium, total	ug/L	MW-39	03/04/2024		128.0000		
Beryllium, total	ug/L	MW-39	09/24/2014	ND	4.0000		
Beryllium, total	ug/L	MW-39	12/05/2014	ND	4.0000		
Beryllium, total	ug/L	MW-39	03/11/2015	ND	4.0000		
Beryllium, total	ug/L	MW-39	06/16/2015	ND	4.0000		
Beryllium, total	ug/L	MW-39	09/17/2015	ND	4.0000		
Beryllium, total	ug/L	MW-39	03/22/2016	ND	4.0000		
Beryllium, total	ug/L	MW-39	09/15/2016	ND	4.0000		
Beryllium, total	ug/L	MW-39	03/23/2017	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-39	09/08/2017	ND	4.0000		
Beryllium, total	ug/L	MW-39	03/19/2018	ND	4.0000		
Beryllium, total	ug/L	MW-39	09/11/2018	ND	4.0000		
Beryllium, total	ug/L	MW-39	03/26/2019	ND	4.0000		
Beryllium, total	ug/L	MW-39	09/04/2019	ND	4.0000		
Beryllium, total	ug/L	MW-39	03/26/2020	ND	4.0000		
Beryllium, total	ug/L	MW-39	09/15/2020	ND	4.0000		
Beryllium, total	ug/L	MW-39	03/02/2021	ND	4.0000		
Beryllium, total	ug/L	MW-39	09/07/2021	ND	4.0000		
Beryllium, total	ug/L	MW-39	03/24/2022	ND	4.0000		
Beryllium, total	ug/L	MW-39	08/31/2022	ND	4.0000		
Beryllium, total	ug/L	MW-39	03/02/2023	ND	4.0000		
Beryllium, total	ug/L	MW-39	09/12/2023	ND	4.0000		
Beryllium, total	ug/L	MW-39	03/04/2024	ND	4.0000		
Cadmium, total	ug/L	MW-39	09/24/2014	ND	0.8000		
Cadmium, total	ug/L	MW-39	12/05/2014	ND	0.8000		
Cadmium, total	ug/L	MW-39	03/11/2015	ND	0.8000		
Cadmium, total	ug/L	MW-39	06/16/2015	ND	0.8000		
Cadmium, total	ug/L	MW-39	09/17/2015	ND	0.8000		
Cadmium, total	ug/L	MW-39	03/22/2016	ND	0.8000		
Cadmium, total	ug/L	MW-39	09/15/2016	ND	0.8000		
Cadmium, total	ug/L	MW-39	03/23/2017	ND	0.8000		
Cadmium, total	ug/L	MW-39	09/08/2017	ND	0.8000		
Cadmium, total	ug/L	MW-39	03/19/2018	ND	0.8000		
Cadmium, total	ug/L	MW-39	09/11/2018	ND	0.8000		
Cadmium, total	ug/L	MW-39	03/26/2019	ND	0.8000		
Cadmium, total	ug/L	MW-39	09/04/2019	ND	0.8000		
Cadmium, total	ug/L	MW-39	03/26/2020	ND	0.8000		
Cadmium, total	ug/L	MW-39	09/15/2020	ND	0.8000		
Cadmium, total	ug/L	MW-39	03/02/2021	ND	0.8000		
Cadmium, total	ug/L	MW-39	09/07/2021	ND	0.8000		
Cadmium, total	ug/L	MW-39	03/24/2022	ND	0.8000		
Cadmium, total	ug/L	MW-39	08/31/2022	ND	0.8000		
Cadmium, total	ug/L	MW-39	03/02/2023	ND	0.8000		
Cadmium, total	ug/L	MW-39	09/12/2023	ND	0.8000		
Cadmium, total	ug/L	MW-39	03/04/2024	ND	0.8000		
Chromium, total	ug/L	MW-39	09/24/2014	ND	8.0000		
Chromium, total	ug/L	MW-39	12/05/2014	ND	8.0000		
Chromium, total	ug/L	MW-39	03/11/2015	ND	8.0000		
Chromium, total	ug/L	MW-39	06/16/2015	ND	8.0000		
Chromium, total	ug/L	MW-39	09/17/2015	ND	8.0000		
Chromium, total	ug/L	MW-39	03/22/2016	ND	8.0000		
Chromium, total	ug/L	MW-39	09/15/2016	ND	8.0000		
Chromium, total	ug/L	MW-39	03/23/2017	ND	8.0000		
Chromium, total	ug/L	MW-39	09/08/2017	ND	8.0000		
Chromium, total	ug/L	MW-39	03/19/2018	ND	8.0000		
Chromium, total	ug/L	MW-39	09/11/2018	ND	8.0000		
Chromium, total	ug/L	MW-39	03/26/2019	ND	8.0000		
Chromium, total	ug/L	MW-39	09/04/2019	ND	8.0000		
Chromium, total	ug/L	MW-39	03/26/2020	ND	8.0000		
Chromium, total	ug/L	MW-39	09/15/2020	ND	8.0000		
Chromium, total	ug/L	MW-39	03/02/2021	ND	8.0000		
Chromium, total	ug/L	MW-39	09/07/2021	ND	8.0000		
Chromium, total	ug/L	MW-39	03/24/2022	ND	8.0000		
Chromium, total	ug/L	MW-39	08/31/2022	ND	8.0000		
Chromium, total	ug/L	MW-39	03/02/2023	ND	8.0000		
Chromium, total	ug/L	MW-39	09/12/2023	ND	8.0000		
Chromium, total	ug/L	MW-39	03/04/2024	ND	8.0000		
Cobalt, total	ug/L	MW-39	09/24/2014	ND	0.8000		
Cobalt, total	ug/L	MW-39	12/05/2014	ND	0.8000		
Cobalt, total	ug/L	MW-39	03/11/2015	ND	0.8000		
Cobalt, total	ug/L	MW-39	06/16/2015	ND	0.8000		
Cobalt, total	ug/L	MW-39	09/17/2015	ND	0.8000		
Cobalt, total	ug/L	MW-39	03/22/2016	ND	0.8000		
Cobalt, total	ug/L	MW-39	09/15/2016	ND	0.8000		
Cobalt, total	ug/L	MW-39	03/23/2017	ND	0.8000		
Cobalt, total	ug/L	MW-39	09/08/2017	ND	0.8000		
Cobalt, total	ug/L	MW-39	03/19/2018	ND	0.8000		
Cobalt, total	ug/L	MW-39	09/11/2018	ND	0.8000		
Cobalt, total	ug/L	MW-39	03/26/2019	ND	0.8000		
Cobalt, total	ug/L	MW-39	09/04/2019	ND	0.8000		
Cobalt, total	ug/L	MW-39	03/26/2020	ND	0.8000		
Cobalt, total	ug/L	MW-39	09/15/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-39	03/02/2021		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	
Cobalt, total	ug/L	MW-39	09/07/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-39	03/24/2022	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-39	08/31/2022		0.8000		
Cobalt, total	ug/L	MW-39	03/02/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-39	09/12/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-39	03/04/2024	ND	0.4000	0.8000	**
Copper, total	ug/L	MW-39	09/24/2014	ND	4.0000		
Copper, total	ug/L	MW-39	12/05/2014	ND	4.0000		
Copper, total	ug/L	MW-39	03/11/2015	ND	4.0000		
Copper, total	ug/L	MW-39	06/16/2015	ND	4.0000		
Copper, total	ug/L	MW-39	09/17/2015	ND	4.0000		
Copper, total	ug/L	MW-39	03/22/2016	ND	4.0000		
Copper, total	ug/L	MW-39	09/15/2016	ND	4.0000		
Copper, total	ug/L	MW-39	03/23/2017	ND	4.0000		
Copper, total	ug/L	MW-39	09/08/2017	ND	4.0000		
Copper, total	ug/L	MW-39	03/19/2018	ND	4.0000		
Copper, total	ug/L	MW-39	09/11/2018	ND	4.0000		
Copper, total	ug/L	MW-39	03/26/2019	ND	4.0000		
Copper, total	ug/L	MW-39	09/04/2019	ND	4.0000		
Copper, total	ug/L	MW-39	03/26/2020	ND	4.0000		
Copper, total	ug/L	MW-39	09/15/2020	ND	4.0000		
Copper, total	ug/L	MW-39	03/02/2021	ND	4.0000		
Copper, total	ug/L	MW-39	09/07/2021	ND	4.0000		
Copper, total	ug/L	MW-39	03/24/2022	ND	4.0000		
Copper, total	ug/L	MW-39	08/31/2022	ND	4.0000		
Copper, total	ug/L	MW-39	03/02/2023	ND	4.0000		
Copper, total	ug/L	MW-39	09/12/2023	ND	4.0000		
Copper, total	ug/L	MW-39	03/04/2024	ND	4.0000		
Lead, total	ug/L	MW-39	09/24/2014	ND	4.0000		
Lead, total	ug/L	MW-39	12/05/2014	ND	4.0000		
Lead, total	ug/L	MW-39	03/11/2015	ND	4.0000		
Lead, total	ug/L	MW-39	06/16/2015	ND	4.0000		
Lead, total	ug/L	MW-39	09/17/2015	ND	4.0000		
Lead, total	ug/L	MW-39	03/22/2016	ND	4.0000		
Lead, total	ug/L	MW-39	09/15/2016	ND	4.0000		
Lead, total	ug/L	MW-39	03/23/2017	ND	4.0000		
Lead, total	ug/L	MW-39	09/08/2017	ND	4.0000		
Lead, total	ug/L	MW-39	03/19/2018	ND	4.0000		
Lead, total	ug/L	MW-39	09/11/2018	ND	4.0000		
Lead, total	ug/L	MW-39	03/26/2019	ND	4.0000		
Lead, total	ug/L	MW-39	09/04/2019	ND	4.0000		
Lead, total	ug/L	MW-39	03/26/2020	ND	4.0000		
Lead, total	ug/L	MW-39	09/15/2020	ND	4.0000		
Lead, total	ug/L	MW-39	03/02/2021	ND	4.0000		
Lead, total	ug/L	MW-39	09/07/2021	ND	4.0000		
Lead, total	ug/L	MW-39	03/24/2022	ND	4.0000		
Lead, total	ug/L	MW-39	08/31/2022	ND	4.0000		
Lead, total	ug/L	MW-39	03/02/2023	ND	4.0000		
Lead, total	ug/L	MW-39	09/12/2023	ND	4.0000		
Lead, total	ug/L	MW-39	03/04/2024	ND	4.0000		
Nickel, total	ug/L	MW-39	09/24/2014	ND	4.0000		
Nickel, total	ug/L	MW-39	12/05/2014	ND	4.0000		
Nickel, total	ug/L	MW-39	03/11/2015	ND	4.0000		
Nickel, total	ug/L	MW-39	06/16/2015	ND	4.0000		
Nickel, total	ug/L	MW-39	09/17/2015	ND	4.0000		
Nickel, total	ug/L	MW-39	03/22/2016	ND	4.0000		
Nickel, total	ug/L	MW-39	09/15/2016	ND	4.0000		
Nickel, total	ug/L	MW-39	03/23/2017	ND	4.0000		
Nickel, total	ug/L	MW-39	09/08/2017	ND	4.0000		
Nickel, total	ug/L	MW-39	03/19/2018	ND	4.0000		
Nickel, total	ug/L	MW-39	09/11/2018	ND	4.0000		
Nickel, total	ug/L	MW-39	03/26/2019	ND	4.0000		
Nickel, total	ug/L	MW-39	09/04/2019	ND	4.0000		
Nickel, total	ug/L	MW-39	03/26/2020	ND	4.0000		
Nickel, total	ug/L	MW-39	09/15/2020	ND	4.0000		
Nickel, total	ug/L	MW-39	03/02/2021	ND	4.0000		
Nickel, total	ug/L	MW-39	09/07/2021	ND	4.0000		
Nickel, total	ug/L	MW-39	03/24/2022	ND	4.0000		
Nickel, total	ug/L	MW-39	08/31/2022	ND	4.0000		
Nickel, total	ug/L	MW-39	03/02/2023	ND	4.0000		
Nickel, total	ug/L	MW-39	09/12/2023	ND	4.0000		
Nickel, total	ug/L	MW-39	03/04/2024	ND	4.0000		
Selenium, total	ug/L	MW-39	09/24/2014	ND	4.0000		
Selenium, total	ug/L	MW-39	12/05/2014	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-39	03/11/2015	ND	4.0000		
Selenium, total	ug/L	MW-39	06/16/2015	ND	4.0000		
Selenium, total	ug/L	MW-39	09/17/2015	ND	4.0000		
Selenium, total	ug/L	MW-39	03/22/2016	ND	4.0000		
Selenium, total	ug/L	MW-39	09/15/2016	ND	4.0000		
Selenium, total	ug/L	MW-39	03/23/2017	ND	4.0000		
Selenium, total	ug/L	MW-39	09/08/2017	ND	4.0000		
Selenium, total	ug/L	MW-39	03/19/2018	ND	4.0000		
Selenium, total	ug/L	MW-39	09/11/2018	ND	4.0000		
Selenium, total	ug/L	MW-39	03/26/2019	ND	4.0000		
Selenium, total	ug/L	MW-39	09/04/2019	ND	4.0000		
Selenium, total	ug/L	MW-39	03/26/2020	ND	4.0000		
Selenium, total	ug/L	MW-39	09/15/2020	ND	4.0000		
Selenium, total	ug/L	MW-39	03/02/2021	ND	4.0000		
Selenium, total	ug/L	MW-39	09/07/2021	ND	4.0000		
Selenium, total	ug/L	MW-39	03/24/2022	ND	4.0000		
Selenium, total	ug/L	MW-39	08/31/2022	ND	4.0000		
Selenium, total	ug/L	MW-39	03/02/2023	ND	4.0000		
Selenium, total	ug/L	MW-39	09/12/2023	ND	4.0000		
Selenium, total	ug/L	MW-39	03/04/2024	ND	4.0000		
Silver, total	ug/L	MW-39	09/24/2014	ND	4.0000		
Silver, total	ug/L	MW-39	12/05/2014	ND	4.0000		
Silver, total	ug/L	MW-39	03/11/2015	ND	4.0000		
Silver, total	ug/L	MW-39	06/16/2015	ND	4.0000		
Silver, total	ug/L	MW-39	09/17/2015	ND	4.0000		
Silver, total	ug/L	MW-39	03/22/2016	ND	4.0000		
Silver, total	ug/L	MW-39	09/15/2016		6.4000		
Silver, total	ug/L	MW-39	03/23/2017	ND	4.0000		
Silver, total	ug/L	MW-39	09/08/2017	ND	4.0000		
Silver, total	ug/L	MW-39	03/19/2018	ND	4.0000		
Silver, total	ug/L	MW-39	09/11/2018	ND	4.0000		
Silver, total	ug/L	MW-39	03/26/2019	ND	4.0000		
Silver, total	ug/L	MW-39	09/04/2019	ND	4.0000		
Silver, total	ug/L	MW-39	03/26/2020	ND	4.0000		
Silver, total	ug/L	MW-39	09/15/2020	ND	4.0000		
Silver, total	ug/L	MW-39	03/02/2021	ND	4.0000		
Silver, total	ug/L	MW-39	09/07/2021	ND	4.0000		
Silver, total	ug/L	MW-39	03/24/2022	ND	4.0000		
Silver, total	ug/L	MW-39	08/31/2022	ND	4.0000		
Silver, total	ug/L	MW-39	03/02/2023	ND	4.0000		
Silver, total	ug/L	MW-39	09/12/2023	ND	4.0000		
Silver, total	ug/L	MW-39	03/04/2024	ND	4.0000		
Thallium, total	ug/L	MW-39	09/24/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	12/05/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	03/11/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	06/16/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	09/17/2015		2.4000		
Thallium, total	ug/L	MW-39	03/22/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	09/15/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	03/23/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	09/08/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	03/19/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	09/11/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	03/26/2019	ND	2.0000		
Thallium, total	ug/L	MW-39	09/04/2019	ND	2.0000		
Thallium, total	ug/L	MW-39	03/26/2020	ND	2.0000		
Thallium, total	ug/L	MW-39	09/15/2020	ND	2.0000		
Thallium, total	ug/L	MW-39	03/02/2021	ND	2.0000		
Thallium, total	ug/L	MW-39	09/07/2021	ND	2.0000		
Thallium, total	ug/L	MW-39	03/24/2022	ND	2.0000		
Thallium, total	ug/L	MW-39	08/31/2022	ND	2.0000		
Thallium, total	ug/L	MW-39	03/02/2023	ND	2.0000		
Thallium, total	ug/L	MW-39	09/12/2023	ND	2.0000		
Thallium, total	ug/L	MW-39	03/04/2024	ND	2.0000		
Vanadium, total	ug/L	MW-39	09/24/2014	ND	20.0000		
Vanadium, total	ug/L	MW-39	12/05/2014	ND	20.0000		
Vanadium, total	ug/L	MW-39	03/11/2015	ND	20.0000		
Vanadium, total	ug/L	MW-39	06/16/2015	ND	20.0000		
Vanadium, total	ug/L	MW-39	09/17/2015	ND	20.0000		
Vanadium, total	ug/L	MW-39	03/22/2016	ND	20.0000		
Vanadium, total	ug/L	MW-39	09/15/2016	ND	20.0000		
Vanadium, total	ug/L	MW-39	03/23/2017	ND	20.0000		
Vanadium, total	ug/L	MW-39	09/08/2017	ND	20.0000		
Vanadium, total	ug/L	MW-39	03/19/2018	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-39	09/11/2018	ND	20.0000		
Vanadium, total	ug/L	MW-39	03/26/2019	ND	20.0000		
Vanadium, total	ug/L	MW-39	09/04/2019	ND	20.0000		
Vanadium, total	ug/L	MW-39	03/26/2020	ND	20.0000		
Vanadium, total	ug/L	MW-39	09/15/2020	ND	20.0000		
Vanadium, total	ug/L	MW-39	03/02/2021	ND	20.0000		
Vanadium, total	ug/L	MW-39	09/07/2021	ND	20.0000		
Vanadium, total	ug/L	MW-39	03/24/2022	ND	20.0000		
Vanadium, total	ug/L	MW-39	08/31/2022	ND	20.0000		
Vanadium, total	ug/L	MW-39	03/02/2023	ND	20.0000		
Vanadium, total	ug/L	MW-39	09/12/2023	ND	20.0000		
Vanadium, total	ug/L	MW-39	03/04/2024	ND	20.0000		
Zinc, total	ug/L	MW-39	09/24/2014	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	12/05/2014	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	03/11/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	06/16/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	09/17/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	03/22/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	09/15/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	03/23/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	09/08/2017	ND	20.0000		
Zinc, total	ug/L	MW-39	03/19/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	09/11/2018	ND	20.0000		
Zinc, total	ug/L	MW-39	03/26/2019		24.6000		
Zinc, total	ug/L	MW-39	09/04/2019	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	03/26/2020	ND	20.0000		
Zinc, total	ug/L	MW-39	09/15/2020	ND	20.0000		
Zinc, total	ug/L	MW-39	03/02/2021	ND	20.0000		
Zinc, total	ug/L	MW-39	09/07/2021	ND	20.0000		
Zinc, total	ug/L	MW-39	03/24/2022	ND	20.0000		
Zinc, total	ug/L	MW-39	08/31/2022	ND	20.0000		
Zinc, total	ug/L	MW-39	03/02/2023	ND	20.0000		
Zinc, total	ug/L	MW-39	09/12/2023	ND	20.0000		
Zinc, total	ug/L	MW-39	03/04/2024	ND	20.0000		
Antimony, total	ug/L	MW-48	09/24/2014	ND	2.0000		
Antimony, total	ug/L	MW-48	12/05/2014	ND	2.0000		
Antimony, total	ug/L	MW-48	03/11/2015	ND	2.0000		
Antimony, total	ug/L	MW-48	06/16/2015	ND	2.0000		
Antimony, total	ug/L	MW-48	09/16/2015	ND	2.0000		
Antimony, total	ug/L	MW-48	03/22/2016	ND	2.0000		
Antimony, total	ug/L	MW-48	09/14/2016	ND	2.0000		
Antimony, total	ug/L	MW-48	03/23/2017	ND	2.0000		
Antimony, total	ug/L	MW-48	09/08/2017	ND	2.0000		
Antimony, total	ug/L	MW-48	03/19/2018	ND	2.0000		
Antimony, total	ug/L	MW-48	09/11/2018	ND	2.0000		
Antimony, total	ug/L	MW-48	03/26/2019	ND	2.0000		
Antimony, total	ug/L	MW-48	09/04/2019	ND	2.0000		
Antimony, total	ug/L	MW-48	03/26/2020	ND	2.0000		
Antimony, total	ug/L	MW-48	09/15/2020	ND	2.0000		
Antimony, total	ug/L	MW-48	03/02/2021	ND	2.0000		
Antimony, total	ug/L	MW-48	09/07/2021	ND	2.0000		
Antimony, total	ug/L	MW-48	03/24/2022	ND	2.0000		
Antimony, total	ug/L	MW-48	08/31/2022	ND	2.0000		
Antimony, total	ug/L	MW-48	03/02/2023	ND	2.0000		
Antimony, total	ug/L	MW-48	09/12/2023	ND	2.0000		
Antimony, total	ug/L	MW-48	03/04/2024	ND	2.0000		
Arsenic, total	ug/L	MW-48	09/24/2014	ND	4.0000		
Arsenic, total	ug/L	MW-48	12/05/2014	ND	4.0000		
Arsenic, total	ug/L	MW-48	03/11/2015	ND	4.0000		
Arsenic, total	ug/L	MW-48	06/16/2015	ND	4.0000		
Arsenic, total	ug/L	MW-48	09/16/2015	ND	4.0000		
Arsenic, total	ug/L	MW-48	03/22/2016	ND	4.0000		
Arsenic, total	ug/L	MW-48	09/14/2016	ND	4.0000		
Arsenic, total	ug/L	MW-48	03/23/2017	ND	4.0000		
Arsenic, total	ug/L	MW-48	09/08/2017	ND	4.0000		
Arsenic, total	ug/L	MW-48	03/19/2018	ND	4.0000		
Arsenic, total	ug/L	MW-48	09/11/2018	ND	4.0000		
Arsenic, total	ug/L	MW-48	03/26/2019	ND	4.0000		
Arsenic, total	ug/L	MW-48	09/04/2019	ND	4.0000		
Arsenic, total	ug/L	MW-48	03/26/2020	ND	4.0000		
Arsenic, total	ug/L	MW-48	09/15/2020	ND	4.0000		
Arsenic, total	ug/L	MW-48	03/02/2021	ND	4.0000		
Arsenic, total	ug/L	MW-48	09/07/2021	ND	4.0000		
Arsenic, total	ug/L	MW-48	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-48	08/31/2022	ND	4.0000		
Arsenic, total	ug/L	MW-48	03/02/2023	ND	4.0000		
Arsenic, total	ug/L	MW-48	09/12/2023	ND	4.0000		
Arsenic, total	ug/L	MW-48	03/04/2024	ND	4.0000		
Barium, total	ug/L	MW-48	09/24/2014		181.0000		
Barium, total	ug/L	MW-48	12/05/2014		168.0000		
Barium, total	ug/L	MW-48	03/11/2015		143.0000		
Barium, total	ug/L	MW-48	06/16/2015		161.0000		
Barium, total	ug/L	MW-48	09/16/2015		150.0000		
Barium, total	ug/L	MW-48	03/22/2016		153.0000		
Barium, total	ug/L	MW-48	09/14/2016		140.0000		
Barium, total	ug/L	MW-48	03/23/2017		146.0000		
Barium, total	ug/L	MW-48	09/08/2017		171.0000		
Barium, total	ug/L	MW-48	03/19/2018		145.0000		
Barium, total	ug/L	MW-48	09/11/2018		151.0000		
Barium, total	ug/L	MW-48	03/26/2019		153.0000		
Barium, total	ug/L	MW-48	09/04/2019		160.0000		
Barium, total	ug/L	MW-48	03/26/2020		156.0000		
Barium, total	ug/L	MW-48	09/15/2020		152.0000		
Barium, total	ug/L	MW-48	03/02/2021		159.0000		
Barium, total	ug/L	MW-48	09/07/2021		149.0000		
Barium, total	ug/L	MW-48	03/24/2022		143.0000		
Barium, total	ug/L	MW-48	08/31/2022		157.0000		
Barium, total	ug/L	MW-48	03/02/2023		149.0000		
Barium, total	ug/L	MW-48	09/12/2023		168.0000		
Barium, total	ug/L	MW-48	03/04/2024		149.0000		
Beryllium, total	ug/L	MW-48	09/24/2014	ND	4.0000		
Beryllium, total	ug/L	MW-48	12/05/2014	ND	4.0000		
Beryllium, total	ug/L	MW-48	03/11/2015	ND	4.0000		
Beryllium, total	ug/L	MW-48	06/16/2015	ND	4.0000		
Beryllium, total	ug/L	MW-48	09/16/2015	ND	4.0000		
Beryllium, total	ug/L	MW-48	03/22/2016	ND	4.0000		
Beryllium, total	ug/L	MW-48	09/14/2016	ND	4.0000		
Beryllium, total	ug/L	MW-48	03/23/2017	ND	4.0000		
Beryllium, total	ug/L	MW-48	09/08/2017	ND	4.0000		
Beryllium, total	ug/L	MW-48	03/19/2018	ND	4.0000		
Beryllium, total	ug/L	MW-48	09/11/2018	ND	4.0000		
Beryllium, total	ug/L	MW-48	03/26/2019	ND	4.0000		
Beryllium, total	ug/L	MW-48	09/04/2019	ND	4.0000		
Beryllium, total	ug/L	MW-48	03/26/2020	ND	4.0000		
Beryllium, total	ug/L	MW-48	09/15/2020	ND	4.0000		
Beryllium, total	ug/L	MW-48	03/02/2021	ND	4.0000		
Beryllium, total	ug/L	MW-48	09/07/2021	ND	4.0000		
Beryllium, total	ug/L	MW-48	03/24/2022	ND	4.0000		
Beryllium, total	ug/L	MW-48	08/31/2022	ND	4.0000		
Beryllium, total	ug/L	MW-48	03/02/2023	ND	4.0000		
Beryllium, total	ug/L	MW-48	09/12/2023	ND	4.0000		
Beryllium, total	ug/L	MW-48	03/04/2024	ND	4.0000		
Cadmium, total	ug/L	MW-48	09/24/2014	ND	0.8000		
Cadmium, total	ug/L	MW-48	12/05/2014	ND	0.8000		
Cadmium, total	ug/L	MW-48	03/11/2015	ND	0.8000		
Cadmium, total	ug/L	MW-48	06/16/2015	ND	0.8000		
Cadmium, total	ug/L	MW-48	09/16/2015	ND	0.8000		
Cadmium, total	ug/L	MW-48	03/22/2016	ND	0.8000		
Cadmium, total	ug/L	MW-48	09/14/2016	ND	0.8000		
Cadmium, total	ug/L	MW-48	03/23/2017	ND	0.8000		
Cadmium, total	ug/L	MW-48	09/08/2017	ND	0.8000		
Cadmium, total	ug/L	MW-48	03/19/2018	ND	0.8000		
Cadmium, total	ug/L	MW-48	09/11/2018	ND	0.8000		
Cadmium, total	ug/L	MW-48	03/26/2019	ND	0.8000		
Cadmium, total	ug/L	MW-48	09/04/2019	ND	0.8000		
Cadmium, total	ug/L	MW-48	03/26/2020	ND	0.8000		
Cadmium, total	ug/L	MW-48	09/15/2020	ND	0.8000		
Cadmium, total	ug/L	MW-48	03/02/2021	ND	0.8000		
Cadmium, total	ug/L	MW-48	09/07/2021	ND	0.8000		
Cadmium, total	ug/L	MW-48	03/24/2022	ND	0.8000		
Cadmium, total	ug/L	MW-48	08/31/2022	ND	0.8000		
Cadmium, total	ug/L	MW-48	03/02/2023	ND	0.8000		
Cadmium, total	ug/L	MW-48	09/12/2023	ND	0.8000		
Cadmium, total	ug/L	MW-48	03/04/2024	ND	0.8000		
Chromium, total	ug/L	MW-48	09/24/2014	ND	8.0000		
Chromium, total	ug/L	MW-48	12/05/2014	ND	8.0000		
Chromium, total	ug/L	MW-48	03/11/2015	ND	8.0000		
Chromium, total	ug/L	MW-48	06/16/2015	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-48	09/16/2015	ND	8.0000		
Chromium, total	ug/L	MW-48	03/22/2016	ND	8.0000		
Chromium, total	ug/L	MW-48	09/14/2016	ND	8.0000		
Chromium, total	ug/L	MW-48	03/23/2017	ND	8.0000		
Chromium, total	ug/L	MW-48	09/08/2017	ND	8.0000		
Chromium, total	ug/L	MW-48	03/19/2018	ND	8.0000		
Chromium, total	ug/L	MW-48	09/11/2018	ND	8.0000		
Chromium, total	ug/L	MW-48	03/26/2019	ND	8.0000		
Chromium, total	ug/L	MW-48	09/04/2019	ND	8.0000		
Chromium, total	ug/L	MW-48	03/26/2020	ND	8.0000		
Chromium, total	ug/L	MW-48	09/15/2020	ND	8.0000		
Chromium, total	ug/L	MW-48	03/02/2021	ND	8.0000		
Chromium, total	ug/L	MW-48	09/07/2021	ND	8.0000		
Chromium, total	ug/L	MW-48	03/24/2022	ND	8.0000		
Chromium, total	ug/L	MW-48	08/31/2022	ND	8.0000		
Chromium, total	ug/L	MW-48	03/02/2023	ND	8.0000		
Chromium, total	ug/L	MW-48	09/12/2023	ND	8.0000		
Chromium, total	ug/L	MW-48	03/04/2024	ND	8.0000		
Cobalt, total	ug/L	MW-48	09/24/2014	ND	0.8000		
Cobalt, total	ug/L	MW-48	12/05/2014	ND	0.8000		
Cobalt, total	ug/L	MW-48	03/11/2015	ND	0.8000		
Cobalt, total	ug/L	MW-48	06/16/2015	ND	0.8000		
Cobalt, total	ug/L	MW-48	09/16/2015	ND	0.8000		
Cobalt, total	ug/L	MW-48	03/22/2016	ND	0.8000		
Cobalt, total	ug/L	MW-48	09/14/2016	ND	0.8000		
Cobalt, total	ug/L	MW-48	03/23/2017	ND	0.8000		
Cobalt, total	ug/L	MW-48	09/08/2017	ND	0.8000		
Cobalt, total	ug/L	MW-48	03/19/2018	ND	0.8000		
Cobalt, total	ug/L	MW-48	09/11/2018	ND	0.8000		
Cobalt, total	ug/L	MW-48	03/26/2019	ND	0.8000		
Cobalt, total	ug/L	MW-48	09/04/2019	ND	0.8000		
Cobalt, total	ug/L	MW-48	03/26/2020	ND	0.8000		
Cobalt, total	ug/L	MW-48	09/15/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-48	03/02/2021		0.9000		
Cobalt, total	ug/L	MW-48	09/07/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-48	03/24/2022		0.4000		
Cobalt, total	ug/L	MW-48	08/31/2022	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-48	03/02/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-48	09/12/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-48	03/04/2024	ND	0.4000	0.8000	**
Copper, total	ug/L	MW-48	09/24/2014	ND	4.0000		
Copper, total	ug/L	MW-48	12/05/2014	ND	4.0000		
Copper, total	ug/L	MW-48	03/11/2015	ND	4.0000		
Copper, total	ug/L	MW-48	06/16/2015	ND	4.0000		
Copper, total	ug/L	MW-48	09/16/2015	ND	4.0000		
Copper, total	ug/L	MW-48	03/22/2016	ND	4.0000		
Copper, total	ug/L	MW-48	09/14/2016	ND	4.0000		
Copper, total	ug/L	MW-48	03/23/2017	ND	4.0000		
Copper, total	ug/L	MW-48	09/08/2017	ND	4.0000		
Copper, total	ug/L	MW-48	03/19/2018	ND	4.0000		
Copper, total	ug/L	MW-48	09/11/2018	ND	4.0000		
Copper, total	ug/L	MW-48	03/26/2019	ND	4.0000		
Copper, total	ug/L	MW-48	09/04/2019	ND	4.0000		
Copper, total	ug/L	MW-48	03/26/2020	ND	4.0000		
Copper, total	ug/L	MW-48	09/15/2020	ND	4.0000		
Copper, total	ug/L	MW-48	03/02/2021	ND	4.0000		
Copper, total	ug/L	MW-48	09/07/2021	ND	4.0000		
Copper, total	ug/L	MW-48	03/24/2022	ND	4.0000		
Copper, total	ug/L	MW-48	08/31/2022	ND	4.0000		
Copper, total	ug/L	MW-48	03/02/2023	ND	4.0000		
Copper, total	ug/L	MW-48	09/12/2023	ND	4.0000		
Copper, total	ug/L	MW-48	03/04/2024	ND	4.0000		
Lead, total	ug/L	MW-48	09/24/2014	ND	4.0000		
Lead, total	ug/L	MW-48	12/05/2014	ND	4.0000		
Lead, total	ug/L	MW-48	03/11/2015	ND	4.0000		
Lead, total	ug/L	MW-48	06/16/2015	ND	4.0000		
Lead, total	ug/L	MW-48	09/16/2015	ND	4.0000		
Lead, total	ug/L	MW-48	03/22/2016	ND	4.0000		
Lead, total	ug/L	MW-48	09/14/2016	ND	4.0000		
Lead, total	ug/L	MW-48	03/23/2017	ND	4.0000		
Lead, total	ug/L	MW-48	09/08/2017	ND	4.0000		
Lead, total	ug/L	MW-48	03/19/2018	ND	4.0000		
Lead, total	ug/L	MW-48	09/11/2018	ND	4.0000		
Lead, total	ug/L	MW-48	03/26/2019	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-48	09/04/2019	ND	4.0000		
Lead, total	ug/L	MW-48	03/26/2020	ND	4.0000		
Lead, total	ug/L	MW-48	09/15/2020	ND	4.0000		
Lead, total	ug/L	MW-48	03/02/2021	ND	4.0000		
Lead, total	ug/L	MW-48	09/07/2021	ND	4.0000		
Lead, total	ug/L	MW-48	03/24/2022	ND	4.0000		
Lead, total	ug/L	MW-48	08/31/2022	ND	4.0000		
Lead, total	ug/L	MW-48	03/02/2023	ND	4.0000		
Lead, total	ug/L	MW-48	09/12/2023	ND	4.0000		
Lead, total	ug/L	MW-48	03/04/2024	ND	4.0000		
Nickel, total	ug/L	MW-48	09/24/2014	ND	4.0000		
Nickel, total	ug/L	MW-48	12/05/2014	ND	4.0000		
Nickel, total	ug/L	MW-48	03/11/2015	ND	4.0000		
Nickel, total	ug/L	MW-48	06/16/2015	ND	4.0000		
Nickel, total	ug/L	MW-48	09/16/2015	ND	4.0000		
Nickel, total	ug/L	MW-48	03/22/2016	ND	4.0000		
Nickel, total	ug/L	MW-48	09/14/2016	ND	4.0000		
Nickel, total	ug/L	MW-48	03/23/2017	ND	4.0000		
Nickel, total	ug/L	MW-48	09/08/2017	ND	4.0000		
Nickel, total	ug/L	MW-48	03/19/2018	ND	4.0000		
Nickel, total	ug/L	MW-48	09/11/2018	ND	4.0000		
Nickel, total	ug/L	MW-48	03/26/2019	ND	4.0000		
Nickel, total	ug/L	MW-48	09/04/2019	ND	4.0000		
Nickel, total	ug/L	MW-48	03/26/2020	ND	4.0000		
Nickel, total	ug/L	MW-48	09/15/2020	ND	4.0000		
Nickel, total	ug/L	MW-48	03/02/2021	ND	4.0000		
Nickel, total	ug/L	MW-48	09/07/2021	ND	4.0000		
Nickel, total	ug/L	MW-48	03/24/2022	ND	4.0000		
Nickel, total	ug/L	MW-48	08/31/2022	ND	4.0000		
Nickel, total	ug/L	MW-48	03/02/2023	ND	4.0000		
Nickel, total	ug/L	MW-48	09/12/2023	ND	4.0000		
Nickel, total	ug/L	MW-48	03/04/2024	ND	4.0000		
Selenium, total	ug/L	MW-48	09/24/2014	ND	4.0000		
Selenium, total	ug/L	MW-48	12/05/2014	ND	4.0000		
Selenium, total	ug/L	MW-48	03/11/2015	ND	4.0000		
Selenium, total	ug/L	MW-48	06/16/2015	ND	4.0000		
Selenium, total	ug/L	MW-48	09/16/2015	ND	4.0000		
Selenium, total	ug/L	MW-48	03/22/2016	ND	4.0000		
Selenium, total	ug/L	MW-48	09/14/2016	ND	4.0000		
Selenium, total	ug/L	MW-48	03/23/2017	ND	4.0000		
Selenium, total	ug/L	MW-48	09/08/2017	ND	4.0000		
Selenium, total	ug/L	MW-48	03/19/2018	ND	4.0000		
Selenium, total	ug/L	MW-48	09/11/2018	ND	4.0000		
Selenium, total	ug/L	MW-48	03/26/2019	ND	4.0000		
Selenium, total	ug/L	MW-48	09/04/2019	ND	4.0000		
Selenium, total	ug/L	MW-48	03/26/2020	ND	4.0000		
Selenium, total	ug/L	MW-48	09/15/2020	ND	4.0000		
Selenium, total	ug/L	MW-48	03/02/2021	ND	4.0000		
Selenium, total	ug/L	MW-48	09/07/2021	ND	4.0000		
Selenium, total	ug/L	MW-48	03/24/2022	ND	4.0000		
Selenium, total	ug/L	MW-48	08/31/2022	ND	4.0000		
Selenium, total	ug/L	MW-48	03/02/2023	ND	4.0000		
Selenium, total	ug/L	MW-48	09/12/2023	ND	4.0000		
Selenium, total	ug/L	MW-48	03/04/2024	ND	4.0000		
Silver, total	ug/L	MW-48	09/24/2014	ND	4.0000		
Silver, total	ug/L	MW-48	12/05/2014	ND	4.0000		
Silver, total	ug/L	MW-48	03/11/2015	ND	4.0000		
Silver, total	ug/L	MW-48	06/16/2015	ND	4.0000		
Silver, total	ug/L	MW-48	09/16/2015	ND	4.0000		
Silver, total	ug/L	MW-48	03/22/2016	ND	4.0000		
Silver, total	ug/L	MW-48	09/14/2016	ND	4.0000		
Silver, total	ug/L	MW-48	03/23/2017	ND	4.0000		
Silver, total	ug/L	MW-48	09/08/2017	ND	4.0000		
Silver, total	ug/L	MW-48	03/19/2018	ND	4.0000		
Silver, total	ug/L	MW-48	09/11/2018	ND	4.0000		
Silver, total	ug/L	MW-48	03/26/2019	ND	4.0000		
Silver, total	ug/L	MW-48	09/04/2019	ND	4.0000		
Silver, total	ug/L	MW-48	03/26/2020	ND	4.0000		
Silver, total	ug/L	MW-48	09/15/2020	ND	4.0000		
Silver, total	ug/L	MW-48	03/02/2021	ND	4.0000		
Silver, total	ug/L	MW-48	09/07/2021	ND	4.0000		
Silver, total	ug/L	MW-48	03/24/2022	ND	4.0000		
Silver, total	ug/L	MW-48	08/31/2022	ND	4.0000		
Silver, total	ug/L	MW-48	03/02/2023	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-48	09/12/2023	ND	4.0000		
Silver, total	ug/L	MW-48	03/04/2024	ND	4.0000		
Thallium, total	ug/L	MW-48	09/24/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-48	12/05/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-48	03/11/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-48	06/16/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-48	09/16/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-48	03/22/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-48	09/14/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-48	03/23/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-48	09/08/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-48	03/19/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-48	09/11/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-48	03/26/2019	ND	2.0000		
Thallium, total	ug/L	MW-48	09/04/2019	ND	2.0000		
Thallium, total	ug/L	MW-48	03/26/2020	ND	2.0000		
Thallium, total	ug/L	MW-48	09/15/2020	ND	2.0000		
Thallium, total	ug/L	MW-48	03/02/2021	ND	2.0000		
Thallium, total	ug/L	MW-48	09/07/2021	ND	2.0000		
Thallium, total	ug/L	MW-48	03/24/2022	ND	2.0000		
Thallium, total	ug/L	MW-48	08/31/2022	ND	2.0000		
Thallium, total	ug/L	MW-48	03/02/2023	ND	2.0000		
Thallium, total	ug/L	MW-48	09/12/2023	ND	2.0000		
Thallium, total	ug/L	MW-48	03/04/2024	ND	2.0000		
Vanadium, total	ug/L	MW-48	09/24/2014	ND	20.0000		
Vanadium, total	ug/L	MW-48	12/05/2014	ND	20.0000		
Vanadium, total	ug/L	MW-48	03/11/2015	ND	20.0000		
Vanadium, total	ug/L	MW-48	06/16/2015	ND	20.0000		
Vanadium, total	ug/L	MW-48	09/16/2015	ND	20.0000		
Vanadium, total	ug/L	MW-48	03/22/2016	ND	20.0000		
Vanadium, total	ug/L	MW-48	09/14/2016	ND	20.0000		
Vanadium, total	ug/L	MW-48	03/23/2017	ND	20.0000		
Vanadium, total	ug/L	MW-48	09/08/2017	ND	20.0000		
Vanadium, total	ug/L	MW-48	03/19/2018	ND	20.0000		
Vanadium, total	ug/L	MW-48	09/11/2018	ND	20.0000		
Vanadium, total	ug/L	MW-48	03/26/2019	ND	20.0000		
Vanadium, total	ug/L	MW-48	09/04/2019	ND	20.0000		
Vanadium, total	ug/L	MW-48	03/26/2020	ND	20.0000		
Vanadium, total	ug/L	MW-48	09/15/2020	ND	20.0000		
Vanadium, total	ug/L	MW-48	03/02/2021	ND	20.0000		
Vanadium, total	ug/L	MW-48	09/07/2021	ND	20.0000		
Vanadium, total	ug/L	MW-48	03/24/2022	ND	20.0000		
Vanadium, total	ug/L	MW-48	08/31/2022	ND	20.0000		
Vanadium, total	ug/L	MW-48	03/02/2023	ND	20.0000		
Vanadium, total	ug/L	MW-48	09/12/2023	ND	20.0000		
Vanadium, total	ug/L	MW-48	03/04/2024	ND	20.0000		
Zinc, total	ug/L	MW-48	09/24/2014	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-48	12/05/2014	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-48	03/11/2015		32.3000		
Zinc, total	ug/L	MW-48	06/16/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-48	09/16/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-48	03/22/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-48	09/14/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-48	03/23/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-48	09/08/2017	ND	20.0000		
Zinc, total	ug/L	MW-48	03/19/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-48	09/11/2018	ND	20.0000		
Zinc, total	ug/L	MW-48	03/26/2019	ND	20.0000		
Zinc, total	ug/L	MW-48	09/04/2019	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-48	03/26/2020	ND	20.0000		
Zinc, total	ug/L	MW-48	09/15/2020	ND	20.0000		
Zinc, total	ug/L	MW-48	03/02/2021	ND	20.0000		
Zinc, total	ug/L	MW-48	09/07/2021	ND	20.0000		
Zinc, total	ug/L	MW-48	03/24/2022	ND	20.0000		
Zinc, total	ug/L	MW-48	08/31/2022	ND	20.0000		
Zinc, total	ug/L	MW-48	03/02/2023	ND	20.0000		
Zinc, total	ug/L	MW-48	09/12/2023	ND	20.0000		
Zinc, total	ug/L	MW-48	03/04/2024	ND	20.0000		
Antimony, total	ug/L	MW-78	09/24/2014	ND	2.0000		
Antimony, total	ug/L	MW-78	12/05/2014	ND	2.0000		
Antimony, total	ug/L	MW-78	03/11/2015	ND	2.0000		
Antimony, total	ug/L	MW-78	06/16/2015	ND	2.0000		
Antimony, total	ug/L	MW-78	09/16/2015	ND	2.0000		
Antimony, total	ug/L	MW-78	03/22/2016	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	
Antimony, total	ug/L	MW-78	09/15/2016	ND	2.0000		
Antimony, total	ug/L	MW-78	03/23/2017	ND	2.0000		
Antimony, total	ug/L	MW-78	09/08/2017	ND	2.0000		
Antimony, total	ug/L	MW-78	03/19/2018	ND	2.0000		
Antimony, total	ug/L	MW-78	09/11/2018	ND	2.0000		
Antimony, total	ug/L	MW-78	03/26/2019	ND	2.0000		
Antimony, total	ug/L	MW-78	09/04/2019	ND	2.0000		
Antimony, total	ug/L	MW-78	03/26/2020	ND	2.0000		
Antimony, total	ug/L	MW-78	09/15/2020	ND	2.0000		
Antimony, total	ug/L	MW-78	03/02/2021	ND	2.0000		
Antimony, total	ug/L	MW-78	09/07/2021	ND	2.0000		
Antimony, total	ug/L	MW-78	03/24/2022	ND	2.0000		
Antimony, total	ug/L	MW-78	08/31/2022	ND	2.0000		
Antimony, total	ug/L	MW-78	03/02/2023	ND	2.0000		
Antimony, total	ug/L	MW-78	09/12/2023	ND	2.0000		
Antimony, total	ug/L	MW-78	03/04/2024	ND	2.0000		
Arsenic, total	ug/L	MW-78	09/24/2014	ND	4.0000		
Arsenic, total	ug/L	MW-78	12/05/2014	ND	4.0000		
Arsenic, total	ug/L	MW-78	03/11/2015	ND	4.0000		
Arsenic, total	ug/L	MW-78	06/16/2015	ND	4.0000		
Arsenic, total	ug/L	MW-78	09/16/2015	ND	4.0000		
Arsenic, total	ug/L	MW-78	03/22/2016	ND	4.0000		
Arsenic, total	ug/L	MW-78	09/15/2016	ND	4.0000		
Arsenic, total	ug/L	MW-78	03/23/2017	ND	4.0000		
Arsenic, total	ug/L	MW-78	09/08/2017	ND	4.0000		
Arsenic, total	ug/L	MW-78	03/19/2018	ND	4.0000		
Arsenic, total	ug/L	MW-78	09/11/2018	ND	4.0000		
Arsenic, total	ug/L	MW-78	03/26/2019	ND	4.0000		
Arsenic, total	ug/L	MW-78	09/04/2019	ND	4.0000		
Arsenic, total	ug/L	MW-78	03/26/2020	ND	4.0000		
Arsenic, total	ug/L	MW-78	09/15/2020	ND	4.0000		
Arsenic, total	ug/L	MW-78	03/02/2021	ND	4.0000		
Arsenic, total	ug/L	MW-78	09/07/2021	ND	4.0000		
Arsenic, total	ug/L	MW-78	03/24/2022	ND	4.0000		
Arsenic, total	ug/L	MW-78	08/31/2022	ND	4.0000		
Arsenic, total	ug/L	MW-78	03/02/2023	ND	4.0000		
Arsenic, total	ug/L	MW-78	09/12/2023	ND	4.0000		
Arsenic, total	ug/L	MW-78	03/04/2024	ND	4.0000		
Barium, total	ug/L	MW-78	09/24/2014		304.0000		
Barium, total	ug/L	MW-78	12/05/2014		291.0000		
Barium, total	ug/L	MW-78	03/11/2015		304.0000		
Barium, total	ug/L	MW-78	06/16/2015		329.0000		
Barium, total	ug/L	MW-78	09/16/2015		298.0000		
Barium, total	ug/L	MW-78	03/22/2016		309.0000		
Barium, total	ug/L	MW-78	09/15/2016		311.0000		
Barium, total	ug/L	MW-78	03/23/2017		307.0000		
Barium, total	ug/L	MW-78	09/08/2017		357.0000		
Barium, total	ug/L	MW-78	03/19/2018		320.0000		
Barium, total	ug/L	MW-78	09/11/2018		295.0000		
Barium, total	ug/L	MW-78	03/26/2019		285.0000		
Barium, total	ug/L	MW-78	09/04/2019		332.0000		
Barium, total	ug/L	MW-78	03/26/2020		304.0000		
Barium, total	ug/L	MW-78	09/15/2020		319.0000		
Barium, total	ug/L	MW-78	03/02/2021		304.0000		
Barium, total	ug/L	MW-78	09/07/2021		332.0000		
Barium, total	ug/L	MW-78	03/24/2022		291.0000		
Barium, total	ug/L	MW-78	08/31/2022		340.0000		
Barium, total	ug/L	MW-78	03/02/2023		345.0000		
Barium, total	ug/L	MW-78	09/12/2023		309.0000		
Barium, total	ug/L	MW-78	03/04/2024		341.0000		
Beryllium, total	ug/L	MW-78	09/24/2014	ND	4.0000		
Beryllium, total	ug/L	MW-78	12/05/2014	ND	4.0000		
Beryllium, total	ug/L	MW-78	03/11/2015	ND	4.0000		
Beryllium, total	ug/L	MW-78	06/16/2015	ND	4.0000		
Beryllium, total	ug/L	MW-78	09/16/2015	ND	4.0000		
Beryllium, total	ug/L	MW-78	03/22/2016	ND	4.0000		
Beryllium, total	ug/L	MW-78	09/15/2016	ND	4.0000		
Beryllium, total	ug/L	MW-78	03/23/2017	ND	4.0000		
Beryllium, total	ug/L	MW-78	09/08/2017	ND	4.0000		
Beryllium, total	ug/L	MW-78	03/19/2018	ND	4.0000		
Beryllium, total	ug/L	MW-78	09/11/2018	ND	4.0000		
Beryllium, total	ug/L	MW-78	03/26/2019	ND	4.0000		
Beryllium, total	ug/L	MW-78	09/04/2019	ND	4.0000		
Beryllium, total	ug/L	MW-78	03/26/2020	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-78	09/15/2020	ND	4.0000		
Beryllium, total	ug/L	MW-78	03/02/2021	ND	4.0000		
Beryllium, total	ug/L	MW-78	09/07/2021	ND	4.0000		
Beryllium, total	ug/L	MW-78	03/24/2022	ND	4.0000		
Beryllium, total	ug/L	MW-78	08/31/2022	ND	4.0000		
Beryllium, total	ug/L	MW-78	03/02/2023	ND	4.0000		
Beryllium, total	ug/L	MW-78	09/12/2023	ND	4.0000		
Beryllium, total	ug/L	MW-78	03/04/2024	ND	4.0000		
Cadmium, total	ug/L	MW-78	09/24/2014	ND	0.8000		
Cadmium, total	ug/L	MW-78	12/05/2014	ND	0.8000		
Cadmium, total	ug/L	MW-78	03/11/2015	ND	0.8000		
Cadmium, total	ug/L	MW-78	06/16/2015	ND	0.8000		
Cadmium, total	ug/L	MW-78	09/16/2015	ND	0.8000		
Cadmium, total	ug/L	MW-78	03/22/2016	ND	0.8000		
Cadmium, total	ug/L	MW-78	09/15/2016	ND	0.8000		
Cadmium, total	ug/L	MW-78	03/23/2017	ND	0.8000		
Cadmium, total	ug/L	MW-78	09/08/2017	ND	0.8000		
Cadmium, total	ug/L	MW-78	03/19/2018	ND	0.8000		
Cadmium, total	ug/L	MW-78	09/11/2018	ND	0.8000		
Cadmium, total	ug/L	MW-78	03/26/2019	ND	0.8000		
Cadmium, total	ug/L	MW-78	09/04/2019	ND	0.8000		
Cadmium, total	ug/L	MW-78	03/26/2020	ND	0.8000		
Cadmium, total	ug/L	MW-78	09/15/2020	ND	0.8000		
Cadmium, total	ug/L	MW-78	03/02/2021	ND	0.8000		
Cadmium, total	ug/L	MW-78	09/07/2021	ND	0.8000		
Cadmium, total	ug/L	MW-78	03/24/2022	ND	0.8000		
Cadmium, total	ug/L	MW-78	08/31/2022	ND	0.8000		
Cadmium, total	ug/L	MW-78	03/02/2023	ND	0.8000		
Cadmium, total	ug/L	MW-78	09/12/2023	ND	0.8000		
Cadmium, total	ug/L	MW-78	03/04/2024	ND	0.8000		
Chromium, total	ug/L	MW-78	09/24/2014	ND	8.0000		
Chromium, total	ug/L	MW-78	12/05/2014	ND	8.0000		
Chromium, total	ug/L	MW-78	03/11/2015	ND	8.0000		
Chromium, total	ug/L	MW-78	06/16/2015	ND	8.0000		
Chromium, total	ug/L	MW-78	09/16/2015	ND	8.0000		
Chromium, total	ug/L	MW-78	03/22/2016	ND	8.0000		
Chromium, total	ug/L	MW-78	09/15/2016	ND	8.0000		
Chromium, total	ug/L	MW-78	03/23/2017	ND	8.0000		
Chromium, total	ug/L	MW-78	09/08/2017	ND	8.0000		
Chromium, total	ug/L	MW-78	03/19/2018	ND	8.0000		
Chromium, total	ug/L	MW-78	09/11/2018	ND	8.0000		
Chromium, total	ug/L	MW-78	03/26/2019	ND	8.0000		
Chromium, total	ug/L	MW-78	09/04/2019	ND	8.0000		
Chromium, total	ug/L	MW-78	03/26/2020	ND	8.0000		
Chromium, total	ug/L	MW-78	09/15/2020	ND	8.0000		
Chromium, total	ug/L	MW-78	03/02/2021	ND	8.0000		
Chromium, total	ug/L	MW-78	09/07/2021	ND	8.0000		
Chromium, total	ug/L	MW-78	03/24/2022	ND	8.0000		
Chromium, total	ug/L	MW-78	08/31/2022	ND	8.0000		
Chromium, total	ug/L	MW-78	03/02/2023	ND	8.0000		
Chromium, total	ug/L	MW-78	09/12/2023	ND	8.0000		
Chromium, total	ug/L	MW-78	03/04/2024	ND	8.0000		
Cobalt, total	ug/L	MW-78	09/24/2014	ND	0.8000		
Cobalt, total	ug/L	MW-78	12/05/2014	ND	0.8000		
Cobalt, total	ug/L	MW-78	03/11/2015	ND	0.8000		
Cobalt, total	ug/L	MW-78	06/16/2015	ND	0.8000		
Cobalt, total	ug/L	MW-78	09/16/2015	ND	0.8000		
Cobalt, total	ug/L	MW-78	03/22/2016	ND	0.8000		
Cobalt, total	ug/L	MW-78	09/15/2016	ND	0.8000		
Cobalt, total	ug/L	MW-78	03/23/2017	ND	0.8000		
Cobalt, total	ug/L	MW-78	09/08/2017	ND	0.8000		
Cobalt, total	ug/L	MW-78	03/19/2018	ND	0.8000		
Cobalt, total	ug/L	MW-78	09/11/2018	ND	0.8000		
Cobalt, total	ug/L	MW-78	03/26/2019	ND	0.8000		
Cobalt, total	ug/L	MW-78	09/04/2019	ND	0.8000		
Cobalt, total	ug/L	MW-78	03/26/2020	ND	0.8000		
Cobalt, total	ug/L	MW-78	09/15/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-78	03/02/2021		1.0000		
Cobalt, total	ug/L	MW-78	09/07/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-78	03/24/2022	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-78	08/31/2022	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-78	03/02/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-78	09/12/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-78	03/04/2024	ND	0.4000	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	
Copper, total	ug/L	MW-78	09/24/2014	ND	4.0000		
Copper, total	ug/L	MW-78	12/05/2014	ND	4.0000		
Copper, total	ug/L	MW-78	03/11/2015	ND	4.0000		
Copper, total	ug/L	MW-78	06/16/2015	ND	4.0000		
Copper, total	ug/L	MW-78	09/16/2015	ND	4.0000		
Copper, total	ug/L	MW-78	03/22/2016	ND	4.0000		
Copper, total	ug/L	MW-78	09/15/2016	ND	4.0000		
Copper, total	ug/L	MW-78	03/23/2017	ND	4.0000		
Copper, total	ug/L	MW-78	09/08/2017	ND	4.0000		
Copper, total	ug/L	MW-78	03/19/2018	ND	4.0000		
Copper, total	ug/L	MW-78	09/11/2018	ND	4.0000		
Copper, total	ug/L	MW-78	03/26/2019	ND	4.0000		
Copper, total	ug/L	MW-78	09/04/2019	ND	4.0000		
Copper, total	ug/L	MW-78	03/26/2020	ND	4.0000		
Copper, total	ug/L	MW-78	09/15/2020	ND	4.0000		
Copper, total	ug/L	MW-78	03/02/2021	ND	4.0000		
Copper, total	ug/L	MW-78	09/07/2021	ND	4.0000		
Copper, total	ug/L	MW-78	03/24/2022	ND	4.0000		
Copper, total	ug/L	MW-78	08/31/2022	ND	4.0000		
Copper, total	ug/L	MW-78	03/02/2023	ND	4.0000		
Copper, total	ug/L	MW-78	09/12/2023	ND	4.0000		
Copper, total	ug/L	MW-78	03/04/2024	ND	4.0000		
Lead, total	ug/L	MW-78	09/24/2014	ND	4.0000		
Lead, total	ug/L	MW-78	12/05/2014	ND	4.0000		
Lead, total	ug/L	MW-78	03/11/2015	ND	4.0000		
Lead, total	ug/L	MW-78	06/16/2015	ND	4.0000		
Lead, total	ug/L	MW-78	09/16/2015	ND	4.0000		
Lead, total	ug/L	MW-78	03/22/2016	ND	4.0000		
Lead, total	ug/L	MW-78	09/15/2016	ND	4.0000		
Lead, total	ug/L	MW-78	03/23/2017	ND	4.0000		
Lead, total	ug/L	MW-78	09/08/2017	ND	4.0000		
Lead, total	ug/L	MW-78	03/19/2018	ND	4.0000		
Lead, total	ug/L	MW-78	09/11/2018	ND	4.0000		
Lead, total	ug/L	MW-78	03/26/2019	ND	4.0000		
Lead, total	ug/L	MW-78	09/04/2019	ND	4.0000		
Lead, total	ug/L	MW-78	03/26/2020	ND	4.0000		
Lead, total	ug/L	MW-78	09/15/2020	ND	4.0000		
Lead, total	ug/L	MW-78	03/02/2021	ND	4.0000		
Lead, total	ug/L	MW-78	09/07/2021	ND	4.0000		
Lead, total	ug/L	MW-78	03/24/2022	ND	4.0000		
Lead, total	ug/L	MW-78	08/31/2022	ND	4.0000		
Lead, total	ug/L	MW-78	03/02/2023	ND	4.0000		
Lead, total	ug/L	MW-78	09/12/2023	ND	4.0000		
Lead, total	ug/L	MW-78	03/04/2024	ND	4.0000		
Nickel, total	ug/L	MW-78	09/24/2014	ND	4.0000		
Nickel, total	ug/L	MW-78	12/05/2014	ND	4.0000		
Nickel, total	ug/L	MW-78	03/11/2015	ND	4.0000		
Nickel, total	ug/L	MW-78	06/16/2015	ND	4.0000		
Nickel, total	ug/L	MW-78	09/16/2015	ND	4.0000		
Nickel, total	ug/L	MW-78	03/22/2016	ND	4.0000		
Nickel, total	ug/L	MW-78	09/15/2016	ND	4.0000		
Nickel, total	ug/L	MW-78	03/23/2017	ND	4.0000		
Nickel, total	ug/L	MW-78	09/08/2017	ND	4.0000		
Nickel, total	ug/L	MW-78	03/19/2018	ND	4.0000		
Nickel, total	ug/L	MW-78	09/11/2018	ND	4.0000		
Nickel, total	ug/L	MW-78	03/26/2019	ND	4.0000		
Nickel, total	ug/L	MW-78	09/04/2019	ND	4.0000		
Nickel, total	ug/L	MW-78	03/26/2020	ND	4.0000		
Nickel, total	ug/L	MW-78	09/15/2020	ND	4.0000		
Nickel, total	ug/L	MW-78	03/02/2021	ND	4.0000		
Nickel, total	ug/L	MW-78	09/07/2021	ND	4.0000		
Nickel, total	ug/L	MW-78	03/24/2022	ND	4.0000		
Nickel, total	ug/L	MW-78	08/31/2022	ND	4.0000		
Nickel, total	ug/L	MW-78	03/02/2023	ND	4.0000		
Nickel, total	ug/L	MW-78	09/12/2023	ND	4.0000		
Nickel, total	ug/L	MW-78	03/04/2024	ND	4.0000		
Selenium, total	ug/L	MW-78	09/24/2014		5.4000		
Selenium, total	ug/L	MW-78	12/05/2014		5.6000		
Selenium, total	ug/L	MW-78	03/11/2015		6.5000		
Selenium, total	ug/L	MW-78	06/16/2015		8.6000		
Selenium, total	ug/L	MW-78	09/16/2015		8.1000		
Selenium, total	ug/L	MW-78	03/22/2016		8.9000		
Selenium, total	ug/L	MW-78	09/15/2016		9.4000		
Selenium, total	ug/L	MW-78	03/23/2017		10.6000		

* - 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-78	09/08/2017		6.9000		
Selenium, total	ug/L	MW-78	03/19/2018		8.3000		
Selenium, total	ug/L	MW-78	09/11/2018		5.6000		
Selenium, total	ug/L	MW-78	03/26/2019		9.5000		
Selenium, total	ug/L	MW-78	09/04/2019		6.8000		
Selenium, total	ug/L	MW-78	03/26/2020		5.4000		
Selenium, total	ug/L	MW-78	09/15/2020		8.5000		
Selenium, total	ug/L	MW-78	03/02/2021		9.4000		
Selenium, total	ug/L	MW-78	09/07/2021		4.9000		
Selenium, total	ug/L	MW-78	03/24/2022		6.3000		
Selenium, total	ug/L	MW-78	08/31/2022		6.2000		
Selenium, total	ug/L	MW-78	03/02/2023		7.9000		
Selenium, total	ug/L	MW-78	09/12/2023		5.8000		
Selenium, total	ug/L	MW-78	03/04/2024		5.7000		
Silver, total	ug/L	MW-78	09/24/2014	ND	4.0000		
Silver, total	ug/L	MW-78	12/05/2014	ND	4.0000		
Silver, total	ug/L	MW-78	03/11/2015	ND	4.0000		
Silver, total	ug/L	MW-78	06/16/2015	ND	4.0000		
Silver, total	ug/L	MW-78	09/16/2015	ND	4.0000		
Silver, total	ug/L	MW-78	03/22/2016	ND	4.0000		
Silver, total	ug/L	MW-78	09/15/2016	ND	4.0000		
Silver, total	ug/L	MW-78	03/23/2017	ND	4.0000		
Silver, total	ug/L	MW-78	09/08/2017	ND	4.0000		
Silver, total	ug/L	MW-78	03/19/2018	ND	4.0000		
Silver, total	ug/L	MW-78	09/11/2018	ND	4.0000		
Silver, total	ug/L	MW-78	03/26/2019	ND	4.0000		
Silver, total	ug/L	MW-78	09/04/2019	ND	4.0000		
Silver, total	ug/L	MW-78	03/26/2020	ND	4.0000		
Silver, total	ug/L	MW-78	09/15/2020	ND	4.0000		
Silver, total	ug/L	MW-78	03/02/2021	ND	4.0000		
Silver, total	ug/L	MW-78	09/07/2021	ND	4.0000		
Silver, total	ug/L	MW-78	03/24/2022	ND	4.0000		
Silver, total	ug/L	MW-78	08/31/2022	ND	4.0000		
Silver, total	ug/L	MW-78	03/02/2023	ND	4.0000		
Silver, total	ug/L	MW-78	09/12/2023	ND	4.0000		
Silver, total	ug/L	MW-78	03/04/2024	ND	4.0000		
Thallium, total	ug/L	MW-78	09/24/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-78	12/05/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-78	03/11/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-78	06/16/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-78	09/16/2015	ND	1.0000	2.0000	**
Thallium, total	ug/L	MW-78	03/22/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-78	09/15/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-78	03/23/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-78	09/08/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-78	03/19/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-78	09/11/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-78	03/26/2019	ND	2.0000		
Thallium, total	ug/L	MW-78	09/04/2019	ND	2.0000		
Thallium, total	ug/L	MW-78	03/26/2020	ND	2.0000		
Thallium, total	ug/L	MW-78	09/15/2020	ND	2.0000		
Thallium, total	ug/L	MW-78	03/02/2021	ND	2.0000		
Thallium, total	ug/L	MW-78	09/07/2021	ND	2.0000		
Thallium, total	ug/L	MW-78	03/24/2022	ND	2.0000		
Thallium, total	ug/L	MW-78	08/31/2022	ND	2.0000		
Thallium, total	ug/L	MW-78	03/02/2023	ND	2.0000		
Thallium, total	ug/L	MW-78	09/12/2023	ND	2.0000		
Thallium, total	ug/L	MW-78	03/04/2024	ND	2.0000		
Vanadium, total	ug/L	MW-78	09/24/2014	ND	20.0000		
Vanadium, total	ug/L	MW-78	12/05/2014	ND	20.0000		
Vanadium, total	ug/L	MW-78	03/11/2015	ND	20.0000		
Vanadium, total	ug/L	MW-78	06/16/2015	ND	20.0000		
Vanadium, total	ug/L	MW-78	09/16/2015	ND	20.0000		
Vanadium, total	ug/L	MW-78	03/22/2016	ND	20.0000		
Vanadium, total	ug/L	MW-78	09/15/2016	ND	20.0000		
Vanadium, total	ug/L	MW-78	03/23/2017	ND	20.0000		
Vanadium, total	ug/L	MW-78	09/08/2017	ND	20.0000		
Vanadium, total	ug/L	MW-78	03/19/2018	ND	20.0000		
Vanadium, total	ug/L	MW-78	09/11/2018	ND	20.0000		
Vanadium, total	ug/L	MW-78	03/26/2019	ND	20.0000		
Vanadium, total	ug/L	MW-78	09/04/2019	ND	20.0000		
Vanadium, total	ug/L	MW-78	03/26/2020	ND	20.0000		
Vanadium, total	ug/L	MW-78	09/15/2020	ND	20.0000		
Vanadium, total	ug/L	MW-78	03/02/2021	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-78	09/07/2021	ND	20.0000		
Vanadium, total	ug/L	MW-78	03/24/2022	ND	20.0000		
Vanadium, total	ug/L	MW-78	08/31/2022	ND	20.0000		
Vanadium, total	ug/L	MW-78	03/02/2023	ND	20.0000		
Vanadium, total	ug/L	MW-78	09/12/2023	ND	20.0000		
Vanadium, total	ug/L	MW-78	03/04/2024	ND	20.0000		
Zinc, total	ug/L	MW-78	09/24/2014		10.7000		
Zinc, total	ug/L	MW-78	12/05/2014	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-78	03/11/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-78	06/16/2015		8.4000		
Zinc, total	ug/L	MW-78	09/16/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-78	03/22/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-78	09/15/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-78	03/23/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-78	09/08/2017	ND	20.0000		
Zinc, total	ug/L	MW-78	03/19/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-78	09/11/2018	ND	20.0000		
Zinc, total	ug/L	MW-78	03/26/2019	ND	20.0000		
Zinc, total	ug/L	MW-78	09/04/2019		17.6000		
Zinc, total	ug/L	MW-78	03/26/2020	ND	20.0000		
Zinc, total	ug/L	MW-78	09/15/2020	ND	20.0000		
Zinc, total	ug/L	MW-78	03/02/2021	ND	20.0000		
Zinc, total	ug/L	MW-78	09/07/2021	ND	20.0000		
Zinc, total	ug/L	MW-78	03/24/2022	ND	20.0000		
Zinc, total	ug/L	MW-78	08/31/2022	ND	20.0000		
Zinc, total	ug/L	MW-78	03/02/2023	ND	20.0000		
Zinc, total	ug/L	MW-78	09/12/2023	ND	20.0000		
Zinc, total	ug/L	MW-78	03/04/2024	ND	20.0000		
Antimony, total	ug/L	SW-101	09/14/2016	ND	2.0000		
Antimony, total	ug/L	SW-101	03/23/2017	ND	2.0000		
Antimony, total	ug/L	SW-101	09/08/2017	ND	2.0000		
Antimony, total	ug/L	SW-101	03/19/2018	ND	2.0000		
Antimony, total	ug/L	SW-101	09/11/2018	ND	2.0000		
Antimony, total	ug/L	SW-101	03/26/2019	ND	2.0000		
Antimony, total	ug/L	SW-101	09/04/2019	ND	2.0000		
Arsenic, total	ug/L	SW-101	09/14/2016	ND	4.0000		
Arsenic, total	ug/L	SW-101	03/23/2017	ND	4.0000		
Arsenic, total	ug/L	SW-101	09/08/2017	ND	4.0000		
Arsenic, total	ug/L	SW-101	03/19/2018		4.4000		
Arsenic, total	ug/L	SW-101	09/11/2018	ND	4.0000		
Arsenic, total	ug/L	SW-101	03/26/2019	ND	4.0000		
Arsenic, total	ug/L	SW-101	09/04/2019		7.3000		
Barium, total	ug/L	SW-101	09/14/2016		188.0000		
Barium, total	ug/L	SW-101	03/23/2017		233.0000		
Barium, total	ug/L	SW-101	09/08/2017		272.0000		
Barium, total	ug/L	SW-101	03/19/2018		162.0000		
Barium, total	ug/L	SW-101	09/11/2018		127.0000		
Barium, total	ug/L	SW-101	03/26/2019		160.0000		
Barium, total	ug/L	SW-101	09/04/2019		256.0000		
Beryllium, total	ug/L	SW-101	09/14/2016	ND	4.0000		
Beryllium, total	ug/L	SW-101	03/23/2017	ND	4.0000		
Beryllium, total	ug/L	SW-101	09/08/2017	ND	4.0000		
Beryllium, total	ug/L	SW-101	03/19/2018	ND	4.0000		
Beryllium, total	ug/L	SW-101	09/11/2018	ND	4.0000		
Beryllium, total	ug/L	SW-101	03/26/2019	ND	4.0000		
Beryllium, total	ug/L	SW-101	09/04/2019	ND	4.0000		
Cadmium, total	ug/L	SW-101	09/14/2016	ND	0.8000		
Cadmium, total	ug/L	SW-101	03/23/2017	ND	0.8000		
Cadmium, total	ug/L	SW-101	09/08/2017	ND	0.8000		
Cadmium, total	ug/L	SW-101	03/19/2018	ND	0.8000		
Cadmium, total	ug/L	SW-101	09/11/2018	ND	0.8000		
Cadmium, total	ug/L	SW-101	03/26/2019	ND	0.8000		
Cadmium, total	ug/L	SW-101	09/04/2019	ND	0.8000		
Chromium, total	ug/L	SW-101	09/14/2016	ND	8.0000		
Chromium, total	ug/L	SW-101	03/23/2017	ND	8.0000		
Chromium, total	ug/L	SW-101	09/08/2017	ND	8.0000		
Chromium, total	ug/L	SW-101	03/19/2018	ND	8.0000		
Chromium, total	ug/L	SW-101	09/11/2018	ND	8.0000		
Chromium, total	ug/L	SW-101	03/26/2019	ND	8.0000		
Chromium, total	ug/L	SW-101	09/04/2019	ND	8.0000		
Cobalt, total	ug/L	SW-101	09/14/2016		4.5000		
Cobalt, total	ug/L	SW-101	03/23/2017		4.2000		
Cobalt, total	ug/L	SW-101	09/08/2017		6.9000		
Cobalt, total	ug/L	SW-101	03/19/2018		2.3000		

*   - Outlier for that well and constituent.
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*** - 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	SW-101	09/11/2018		1.9000		
Cobalt, total	ug/L	SW-101	03/26/2019		1.8000		
Cobalt, total	ug/L	SW-101	09/04/2019		5.9000		
Copper, total	ug/L	SW-101	09/14/2016	ND	4.0000		
Copper, total	ug/L	SW-101	03/23/2017	ND	4.0000		
Copper, total	ug/L	SW-101	09/08/2017	ND	4.0000		
Copper, total	ug/L	SW-101	03/19/2018	ND	4.0000		
Copper, total	ug/L	SW-101	09/11/2018	ND	4.0000		
Copper, total	ug/L	SW-101	03/26/2019	ND	4.0000		
Copper, total	ug/L	SW-101	09/04/2019	ND	4.0000		
Lead, total	ug/L	SW-101	09/14/2016	ND	4.0000		
Lead, total	ug/L	SW-101	03/23/2017	ND	4.0000		
Lead, total	ug/L	SW-101	09/08/2017	ND	4.0000		
Lead, total	ug/L	SW-101	03/19/2018	ND	4.0000		
Lead, total	ug/L	SW-101	09/11/2018	ND	4.0000		
Lead, total	ug/L	SW-101	03/26/2019	ND	4.0000		
Lead, total	ug/L	SW-101	09/04/2019	ND	4.0000		
Nickel, total	ug/L	SW-101	09/14/2016		8.7000		
Nickel, total	ug/L	SW-101	03/23/2017		5.4000		
Nickel, total	ug/L	SW-101	09/08/2017		8.6000		
Nickel, total	ug/L	SW-101	03/19/2018	ND	4.0000		
Nickel, total	ug/L	SW-101	09/11/2018	ND	4.0000		
Nickel, total	ug/L	SW-101	03/26/2019		4.2000		
Nickel, total	ug/L	SW-101	09/04/2019		7.5000		
Selenium, total	ug/L	SW-101	09/14/2016	ND	4.0000		
Selenium, total	ug/L	SW-101	03/23/2017	ND	4.0000		
Selenium, total	ug/L	SW-101	09/08/2017	ND	4.0000		
Selenium, total	ug/L	SW-101	03/19/2018	ND	4.0000		
Selenium, total	ug/L	SW-101	09/11/2018	ND	4.0000		
Selenium, total	ug/L	SW-101	03/26/2019	ND	4.0000		
Selenium, total	ug/L	SW-101	09/04/2019	ND	4.0000		
Silver, total	ug/L	SW-101	09/14/2016	ND	4.0000		
Silver, total	ug/L	SW-101	03/23/2017	ND	4.0000		
Silver, total	ug/L	SW-101	09/08/2017	ND	4.0000		
Silver, total	ug/L	SW-101	03/19/2018	ND	4.0000		
Silver, total	ug/L	SW-101	09/11/2018	ND	8.0000	4.0000	**
Silver, total	ug/L	SW-101	03/26/2019	ND	4.0000		
Silver, total	ug/L	SW-101	09/04/2019	ND	4.0000		
Thallium, total	ug/L	SW-101	09/14/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	SW-101	03/23/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	SW-101	09/08/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	SW-101	03/19/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	SW-101	09/11/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	SW-101	03/26/2019	ND	2.0000		
Thallium, total	ug/L	SW-101	09/04/2019	ND	2.0000		
Vanadium, total	ug/L	SW-101	09/14/2016	ND	20.0000		
Vanadium, total	ug/L	SW-101	03/23/2017	ND	20.0000		
Vanadium, total	ug/L	SW-101	09/08/2017	ND	20.0000		
Vanadium, total	ug/L	SW-101	03/19/2018	ND	20.0000		
Vanadium, total	ug/L	SW-101	09/11/2018	ND	20.0000		
Vanadium, total	ug/L	SW-101	03/26/2019	ND	20.0000		
Vanadium, total	ug/L	SW-101	09/04/2019	ND	20.0000		
Zinc, total	ug/L	SW-101	09/14/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	SW-101	03/23/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	SW-101	09/08/2017	ND	20.0000		
Zinc, total	ug/L	SW-101	03/19/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	SW-101	09/11/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	SW-101	03/26/2019	ND	20.0000		
Zinc, total	ug/L	SW-101	09/04/2019	ND	8.0000	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-36	03/04/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-36	03/04/2024	ND	4.0000		7.3000
Barium, total	ug/L	MW-36	03/04/2024		128.0000		357.0000
Beryllium, total	ug/L	MW-36	03/04/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-36	03/04/2024	ND	0.8000		0.8000
Chromium, total	ug/L	MW-36	03/04/2024	ND	8.0000		8.0000
Cobalt, total	ug/L	MW-36	03/04/2024	ND	0.4000		6.9000
Copper, total	ug/L	MW-36	03/04/2024	ND	4.0000		4.0000
Lead, total	ug/L	MW-36	03/04/2024	ND	4.0000		4.0000
Nickel, total	ug/L	MW-36	03/04/2024	ND	4.0000		8.7000
Selenium, total	ug/L	MW-36	03/04/2024	ND	4.0000		10.6000
Silver, total	ug/L	MW-36	03/04/2024	ND	4.0000		6.4000
Thallium, total	ug/L	MW-36	03/04/2024	ND	2.0000		2.4000
Vanadium, total	ug/L	MW-36	03/04/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-36	03/04/2024	ND	20.0000		32.3000
Antimony, total	ug/L	MW-41	03/04/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-41	03/04/2024	ND	4.0000		7.3000
Barium, total	ug/L	MW-41	03/04/2024		71.2000		357.0000
Beryllium, total	ug/L	MW-41	03/04/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-41	03/04/2024	ND	0.8000		0.8000
Chromium, total	ug/L	MW-41	03/04/2024	ND	8.0000		8.0000
Cobalt, total	ug/L	MW-41	03/04/2024	ND	0.4000		6.9000
Copper, total	ug/L	MW-41	03/04/2024	ND	4.0000		4.0000
Lead, total	ug/L	MW-41	03/04/2024	ND	4.0000		4.0000
Nickel, total	ug/L	MW-41	03/04/2024	ND	4.0000		8.7000
Selenium, total	ug/L	MW-41	03/04/2024	ND	4.0000		10.6000
Silver, total	ug/L	MW-41	03/04/2024	ND	4.0000		6.4000
Thallium, total	ug/L	MW-41	03/04/2024	ND	2.0000		2.4000
Vanadium, total	ug/L	MW-41	03/04/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-41	03/04/2024	ND	20.0000		32.3000
Antimony, total	ug/L	MW-42	03/04/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-42	03/04/2024	ND	4.0000		7.3000
Barium, total	ug/L	MW-42	03/04/2024		19.4000		357.0000
Beryllium, total	ug/L	MW-42	03/04/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-42	03/04/2024	ND	0.8000		0.8000
Chromium, total	ug/L	MW-42	03/04/2024	ND	8.0000		8.0000
Cobalt, total	ug/L	MW-42	03/04/2024		0.7000		6.9000
Copper, total	ug/L	MW-42	03/04/2024	ND	4.0000		4.0000
Lead, total	ug/L	MW-42	03/04/2024	ND	4.0000		4.0000
Nickel, total	ug/L	MW-42	03/04/2024	ND	4.0000		8.7000
Selenium, total	ug/L	MW-42	03/04/2024	ND	4.0000		10.6000
Silver, total	ug/L	MW-42	03/04/2024	ND	4.0000		6.4000
Thallium, total	ug/L	MW-42	03/04/2024	ND	2.0000		2.4000
Vanadium, total	ug/L	MW-42	03/04/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-42	03/04/2024	ND	20.0000		32.3000
Antimony, total	ug/L	MW-58	03/04/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-58	03/04/2024	ND	4.0000		7.3000
Barium, total	ug/L	MW-58	03/04/2024		23.8000		357.0000
Beryllium, total	ug/L	MW-58	03/04/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-58	03/04/2024	ND	0.8000		0.8000
Chromium, total	ug/L	MW-58	03/04/2024	ND	8.0000		8.0000
Cobalt, total	ug/L	MW-58	03/04/2024	ND	0.4000		6.9000
Copper, total	ug/L	MW-58	03/04/2024	ND	4.0000		4.0000
Lead, total	ug/L	MW-58	03/04/2024	ND	4.0000		4.0000
Nickel, total	ug/L	MW-58	03/04/2024		16.7000	***	8.7000
Selenium, total	ug/L	MW-58	03/04/2024	ND	4.0000		10.6000
Silver, total	ug/L	MW-58	03/04/2024	ND	4.0000		6.4000
Thallium, total	ug/L	MW-58	03/04/2024	ND	2.0000		2.4000
Vanadium, total	ug/L	MW-58	03/04/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-58	03/04/2024	ND	20.0000		32.3000
Antimony, total	ug/L	MW-59	03/04/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-59	03/04/2024	ND	4.0000		7.3000
Barium, total	ug/L	MW-59	03/04/2024		33.5000		357.0000
Beryllium, total	ug/L	MW-59	03/04/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-59	03/04/2024	ND	0.8000		0.8000
Chromium, total	ug/L	MW-59	03/04/2024	ND	8.0000		8.0000
Cobalt, total	ug/L	MW-59	03/04/2024	ND	0.4000		6.9000
Copper, total	ug/L	MW-59	03/04/2024	ND	4.0000		4.0000
Lead, total	ug/L	MW-59	03/04/2024	ND	4.0000		4.0000
Nickel, total	ug/L	MW-59	03/04/2024	ND	4.0000		8.7000
Selenium, total	ug/L	MW-59	03/04/2024	ND	4.0000		10.6000
Silver, total	ug/L	MW-59	03/04/2024	ND	4.0000		6.4000

* - 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 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Thallium, total	ug/L	MW-59	03/04/2024	ND	2.0000		2.4000
Vanadium, total	ug/L	MW-59	03/04/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-59	03/04/2024	ND	20.0000		32.3000
Antimony, total	ug/L	MW-60	03/04/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-60	03/04/2024	ND	4.0000		7.3000
Barium, total	ug/L	MW-60	03/04/2024		192.0000		357.0000
Beryllium, total	ug/L	MW-60	03/04/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-60	03/04/2024	ND	0.8000		0.8000
Chromium, total	ug/L	MW-60	03/04/2024	ND	8.0000		8.0000
Cobalt, total	ug/L	MW-60	03/04/2024		0.5000		6.9000
Copper, total	ug/L	MW-60	03/04/2024	ND	4.0000		4.0000
Lead, total	ug/L	MW-60	03/04/2024	ND	4.0000		4.0000
Nickel, total	ug/L	MW-60	03/04/2024	ND	4.0000	**	8.7000
Selenium, total	ug/L	MW-60	03/04/2024	ND	4.0000		10.6000
Silver, total	ug/L	MW-60	03/04/2024	ND	4.0000		6.4000
Thallium, total	ug/L	MW-60	03/04/2024	ND	2.0000		2.4000
Vanadium, total	ug/L	MW-60	03/04/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-60	03/04/2024	ND	20.0000		32.3000
Antimony, total	ug/L	MW-61	03/04/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-61	03/04/2024	ND	4.0000		7.3000
Barium, total	ug/L	MW-61	03/04/2024		48.5000		357.0000
Beryllium, total	ug/L	MW-61	03/04/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-61	03/04/2024	ND	0.8000		0.8000
Chromium, total	ug/L	MW-61	03/04/2024	ND	8.0000		8.0000
Cobalt, total	ug/L	MW-61	03/04/2024	ND	0.4000		6.9000
Copper, total	ug/L	MW-61	03/04/2024	ND	4.0000		4.0000
Lead, total	ug/L	MW-61	03/04/2024	ND	4.0000		4.0000
Nickel, total	ug/L	MW-61	03/04/2024		4.8000		8.7000
Selenium, total	ug/L	MW-61	03/04/2024	ND	4.0000		10.6000
Silver, total	ug/L	MW-61	03/04/2024	ND	4.0000		6.4000
Thallium, total	ug/L	MW-61	03/04/2024	ND	2.0000		2.4000
Vanadium, total	ug/L	MW-61	03/04/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-61	03/04/2024	ND	20.0000		32.3000
Antimony, total	ug/L	MW-62R	03/04/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-62R	03/04/2024	ND	4.0000		7.3000
Barium, total	ug/L	MW-62R	03/04/2024		1010.0000	***	357.0000
Beryllium, total	ug/L	MW-62R	03/04/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-62R	03/04/2024	ND	0.8000		0.8000
Chromium, total	ug/L	MW-62R	03/04/2024	ND	8.0000		8.0000
Cobalt, total	ug/L	MW-62R	03/04/2024	ND	0.4000		6.9000
Copper, total	ug/L	MW-62R	03/04/2024	ND	4.0000		4.0000
Lead, total	ug/L	MW-62R	03/04/2024	ND	4.0000		4.0000
Nickel, total	ug/L	MW-62R	03/04/2024	ND	4.0000		8.7000
Selenium, total	ug/L	MW-62R	03/04/2024	ND	4.0000		10.6000
Silver, total	ug/L	MW-62R	03/04/2024	ND	4.0000		6.4000
Thallium, total	ug/L	MW-62R	03/04/2024	ND	2.0000		2.4000
Vanadium, total	ug/L	MW-62R	03/04/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-62R	03/04/2024	ND	20.0000		32.3000
Antimony, total	ug/L	MW-79	03/04/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-79	03/04/2024	ND	4.0000		7.3000
Barium, total	ug/L	MW-79	03/04/2024		57.9000		357.0000
Beryllium, total	ug/L	MW-79	03/04/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-79	03/04/2024	ND	0.8000		0.8000
Chromium, total	ug/L	MW-79	03/04/2024	ND	8.0000		8.0000
Cobalt, total	ug/L	MW-79	03/04/2024	ND	0.4000		6.9000
Copper, total	ug/L	MW-79	03/04/2024	ND	4.0000		4.0000
Lead, total	ug/L	MW-79	03/04/2024	ND	4.0000		4.0000
Nickel, total	ug/L	MW-79	03/04/2024	ND	4.0000		8.7000
Selenium, total	ug/L	MW-79	03/04/2024	ND	4.0000		10.6000
Silver, total	ug/L	MW-79	03/04/2024	ND	4.0000		6.4000
Thallium, total	ug/L	MW-79	03/04/2024	ND	2.0000		2.4000
Vanadium, total	ug/L	MW-79	03/04/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-79	03/04/2024	ND	20.0000		32.3000
Antimony, total	ug/L	MW-80	03/04/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-80	03/04/2024	ND	4.0000		7.3000
Barium, total	ug/L	MW-80	03/04/2024		131.0000		357.0000
Beryllium, total	ug/L	MW-80	03/04/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-80	03/04/2024	ND	0.8000		0.8000
Chromium, total	ug/L	MW-80	03/04/2024	ND	8.0000		8.0000
Cobalt, total	ug/L	MW-80	03/04/2024		1.3000		6.9000
Copper, total	ug/L	MW-80	03/04/2024	ND	4.0000		4.0000
Lead, total	ug/L	MW-80	03/04/2024	ND	4.0000		4.0000

* - 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 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Nickel, total	ug/L	MW-80	03/04/2024	ND	4.0000		8.7000
Selenium, total	ug/L	MW-80	03/04/2024	ND	4.0000		10.6000
Silver, total	ug/L	MW-80	03/04/2024	ND	4.0000		6.4000
Thallium, total	ug/L	MW-80	03/04/2024	ND	2.0000		2.4000
Vanadium, total	ug/L	MW-80	03/04/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-80	03/04/2024	ND	20.0000		32.3000
Antimony, total	ug/L	SW-101R	03/04/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	SW-101R	03/04/2024	ND	4.0000		7.3000
Barium, total	ug/L	SW-101R	03/04/2024		240.0000		357.0000
Beryllium, total	ug/L	SW-101R	03/04/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	SW-101R	03/04/2024	ND	0.8000		0.8000
Chromium, total	ug/L	SW-101R	03/04/2024	ND	8.0000		8.0000
Cobalt, total	ug/L	SW-101R	03/04/2024		2.7000		6.9000
Copper, total	ug/L	SW-101R	03/04/2024	ND	4.0000		4.0000
Lead, total	ug/L	SW-101R	03/04/2024	ND	4.0000		4.0000
Nickel, total	ug/L	SW-101R	03/04/2024	ND	4.0000		8.7000
Selenium, total	ug/L	SW-101R	03/04/2024	ND	4.0000		10.6000
Silver, total	ug/L	SW-101R	03/04/2024	ND	4.0000		6.4000
Thallium, total	ug/L	SW-101R	03/04/2024	ND	2.0000		2.4000
Vanadium, total	ug/L	SW-101R	03/04/2024	ND	20.0000		20.0000
Zinc, total	ug/L	SW-101R	03/04/2024	ND	20.0000		32.3000

* - 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	Upgradient Detect	Upgradient N	Upgradient Proportion	Downgradient Detect	Downgradient N	Downgradient Proportion
Antimony, total	0	73	0.000	2	294	0.007
Arsenic, total	2	73	0.027	29	294	0.099
Barium, total	73	73	1.000	293	293	1.000
Beryllium, total	0	73	0.000	3	293	0.010
Cadmium, total	0	73	0.000	13	293	0.044
Chromium, total	0	73	0.000	13	294	0.044
Cobalt, total	12	73	0.164	94	298	0.315
Copper, total	0	73	0.000	56	297	0.189
Lead, total	0	73	0.000	20	293	0.068
Nickel, total	5	73	0.068	167	298	0.560
Selenium, total	22	73	0.301	23	293	0.078
Silver, total	1	73	0.014	1	293	0.003
Thallium, total	1	73	0.014	0	293	0.000
Vanadium, total	0	73	0.000	11	294	0.037
Zinc, total	5	73	0.068	76	295	0.258

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	0	73	0.000									nonpar
Arsenic, total	2	73	0.027									nonpar
Barium, total	73	73	1.000	2.565	2.759					2.326	non-norm	nonpar
Beryllium, total	0	73	0.000									nonpar
Cadmium, total	0	73	0.000									nonpar
Chromium, total	0	73	0.000									nonpar
Cobalt, total	12	73	0.164	0.421	0.600					2.326	normal	nonpar
Copper, total	0	73	0.000									nonpar
Lead, total	0	73	0.000									nonpar
Nickel, total	5	73	0.068	0.460	0.593					2.326	normal	nonpar
Selenium, total	22	73	0.301	1.190	0.968					2.326	normal	nonpar
Silver, total	1	73	0.014									nonpar
Thallium, total	1	73	0.014									nonpar
Vanadium, total	0	73	0.000									nonpar
Zinc, total	5	73	0.068	0.090	0.311					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	0	73					2.0000	nonpar	***	0.99
Arsenic, total	ug/L	2	73					7.3000	nonpar		0.99
Barium, total	ug/L	73	73					357.0000	nonpar		0.99
Beryllium, total	ug/L	0	73					4.0000	nonpar	***	0.99
Cadmium, total	ug/L	0	73					0.8000	nonpar	***	0.99
Chromium, total	ug/L	0	73					8.0000	nonpar	***	0.99
Cobalt, total	ug/L	12	73					6.9000	nonpar		0.99
Copper, total	ug/L	0	73					4.0000	nonpar	***	0.99
Lead, total	ug/L	0	73					4.0000	nonpar	***	0.99
Nickel, total	ug/L	5	73					8.7000	nonpar		0.99
Selenium, total	ug/L	22	73					10.6000	nonpar		0.99
Silver, total	ug/L	1	73					6.4000	nonpar		0.99
Thallium, total	ug/L	1	73					2.4000	nonpar		0.99
Vanadium, total	ug/L	0	73					20.0000	nonpar	***	0.99
Zinc, total	ug/L	5	73					32.3000	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
Nickel, total	ug/L	MW-58	09/27/2010		13.2000	*	8.7000
Nickel, total	ug/L	MW-58	03/23/2011		67.5000	*	8.7000
Nickel, total	ug/L	MW-58	09/08/2011		17.6000	*	8.7000
Nickel, total	ug/L	MW-58	03/09/2012		31.4000	*	8.7000
Nickel, total	ug/L	MW-58	09/25/2012		24.1000	*	8.7000
Nickel, total	ug/L	MW-58	03/15/2013		12.4000	*	8.7000
Nickel, total	ug/L	MW-58	09/25/2013		17.2000	*	8.7000
Nickel, total	ug/L	MW-58	03/25/2014		12.8000	*	8.7000
Nickel, total	ug/L	MW-58	09/24/2014		6.5000		8.7000
Nickel, total	ug/L	MW-58	03/11/2015		8.7000		8.7000
Nickel, total	ug/L	MW-58	09/17/2015		12.8000	*	8.7000
Nickel, total	ug/L	MW-58	03/22/2016		21.2000	*	8.7000
Nickel, total	ug/L	MW-58	09/15/2016		13.3000	*	8.7000
Nickel, total	ug/L	MW-58	03/23/2017		23.8000	*	8.7000
Nickel, total	ug/L	MW-58	09/08/2017		21.1000	*	8.7000
Nickel, total	ug/L	MW-58	03/19/2018		25.5000	*	8.7000
Nickel, total	ug/L	MW-58	09/11/2018		18.4000	*	8.7000
Nickel, total	ug/L	MW-58	12/05/2018		18.4000	*	8.7000
Nickel, total	ug/L	MW-58	03/26/2019		22.9000	*	8.7000
Nickel, total	ug/L	MW-58	09/04/2019		4.3000		8.7000
Nickel, total	ug/L	MW-58	03/26/2020		19.9000	*	8.7000
Nickel, total	ug/L	MW-58	09/15/2020		17.7000	*	8.7000
Nickel, total	ug/L	MW-58	03/02/2021		14.7000	*	8.7000
Nickel, total	ug/L	MW-58	09/07/2021		16.3000	*	8.7000
Nickel, total	ug/L	MW-58	03/24/2022		18.3000	*	8.7000
Nickel, total	ug/L	MW-58	08/31/2022		14.7000	*	8.7000
Nickel, total	ug/L	MW-58	03/02/2023		15.5000	*	8.7000
Nickel, total	ug/L	MW-58	09/12/2023		13.9000	*	8.7000
Nickel, total	ug/L	MW-58	03/04/2024		16.7000	*	8.7000
Nickel, total	ug/L	MW-60	09/28/2010		16.9000	*	8.7000
Nickel, total	ug/L	MW-60	03/23/2011		19.7000	*	8.7000
Nickel, total	ug/L	MW-60	09/08/2011		21.4000	*	8.7000
Nickel, total	ug/L	MW-60	03/09/2012		24.4000	*	8.7000
Nickel, total	ug/L	MW-60	09/25/2012		18.0000	*	8.7000
Nickel, total	ug/L	MW-60	03/15/2013		6.8000		8.7000
Nickel, total	ug/L	MW-60	09/24/2013		26.6000	*	8.7000
Nickel, total	ug/L	MW-60	03/25/2014		14.6000	*	8.7000
Nickel, total	ug/L	MW-60	09/24/2014		7.0000		8.7000
Nickel, total	ug/L	MW-60	03/11/2015	ND	4.0000		8.7000
Nickel, total	ug/L	MW-60	09/17/2015		13.6000	*	8.7000
Nickel, total	ug/L	MW-60	12/17/2015	ND	4.0000		8.7000
Nickel, total	ug/L	MW-60	03/22/2016		7.9000		8.7000
Nickel, total	ug/L	MW-60	09/15/2016		17.3000	*	8.7000
Nickel, total	ug/L	MW-60	03/23/2017	ND	4.0000		8.7000
Nickel, total	ug/L	MW-60	09/08/2017		7.5000		8.7000
Nickel, total	ug/L	MW-60	03/19/2018	ND	4.0000		8.7000
Nickel, total	ug/L	MW-60	09/11/2018	ND	4.0000		8.7000
Nickel, total	ug/L	MW-60	03/26/2019		15.2000	*	8.7000
Nickel, total	ug/L	MW-60	09/04/2019		24.8000	*	8.7000
Nickel, total	ug/L	MW-60	03/26/2020		19.4000	*	8.7000
Nickel, total	ug/L	MW-60	09/15/2020		34.4000	*	8.7000
Nickel, total	ug/L	MW-60	03/02/2021		22.0000	*	8.7000
Nickel, total	ug/L	MW-60	09/07/2021		30.1000	*	8.7000
Nickel, total	ug/L	MW-60	03/24/2022		18.2000	*	8.7000
Nickel, total	ug/L	MW-60	08/31/2022		45.7000	*	8.7000
Nickel, total	ug/L	MW-60	03/02/2023		11.5000	*	8.7000
Nickel, total	ug/L	MW-60	09/12/2023		26.4000	*	8.7000
Nickel, total	ug/L	MW-60	03/04/2024	ND	4.0000		8.7000
Barium, total	ug/L	MW-62R	09/28/2010		775.0000	*	357.0000
Barium, total	ug/L	MW-62R	12/22/2010		805.0000	*	357.0000
Barium, total	ug/L	MW-62R	03/23/2011		688.0000	*	357.0000
Barium, total	ug/L	MW-62R	05/17/2011		716.0000	*	357.0000
Barium, total	ug/L	MW-62R	07/14/2011		615.0000	*	357.0000
Barium, total	ug/L	MW-62R	09/08/2011		706.0000	*	357.0000
Barium, total	ug/L	MW-62R	03/09/2012		651.0000	*	357.0000
Barium, total	ug/L	MW-62R	09/25/2012		612.0000	*	357.0000
Barium, total	ug/L	MW-62R	03/15/2013		685.0000	*	357.0000
Barium, total	ug/L	MW-62R	09/24/2013		925.0000	*	357.0000
Barium, total	ug/L	MW-62R	03/25/2014		706.0000	*	357.0000
Barium, total	ug/L	MW-62R	09/24/2014		833.0000	*	357.0000
Barium, total	ug/L	MW-62R	03/11/2015		773.0000	*	357.0000

*   - Significantly increased over background.
** - Detect at limit for 100% NDs in background (NPPL only).
*** - Manual exclusion.
ND = Not Detected, Result = detection limit.

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
Barium, total	ug/L	MW-62R	09/16/2015		802.0000	*	357.0000
Barium, total	ug/L	MW-62R	03/22/2016		817.0000	*	357.0000
Barium, total	ug/L	MW-62R	09/15/2016		784.0000	*	357.0000
Barium, total	ug/L	MW-62R	03/23/2017		831.0000	*	357.0000
Barium, total	ug/L	MW-62R	09/08/2017		864.0000	*	357.0000
Barium, total	ug/L	MW-62R	03/19/2018		858.0000	*	357.0000
Barium, total	ug/L	MW-62R	09/11/2018		816.0000	*	357.0000
Barium, total	ug/L	MW-62R	03/26/2019		891.0000	*	357.0000
Barium, total	ug/L	MW-62R	09/04/2019		917.0000	*	357.0000
Barium, total	ug/L	MW-62R	03/26/2020		1060.0000	*	357.0000
Barium, total	ug/L	MW-62R	09/15/2020		1070.0000	*	357.0000
Barium, total	ug/L	MW-62R	03/02/2021		1010.0000	*	357.0000
Barium, total	ug/L	MW-62R	09/07/2021		1060.0000	*	357.0000
Barium, total	ug/L	MW-62R	03/24/2022		1020.0000	*	357.0000
Barium, total	ug/L	MW-62R	08/31/2022		1060.0000	*	357.0000
Barium, total	ug/L	MW-62R	03/02/2023		1170.0000	*	357.0000
Barium, total	ug/L	MW-62R	09/12/2023		1050.0000	*	357.0000
Barium, total	ug/L	MW-62R	03/04/2024		1010.0000	*	357.0000

*   - Significantly increased over background.
** - Detect at limit for 100% NDs in background (NPPL only).
*** - Manual exclusion.
ND = Not Detected, Result = detection limit.

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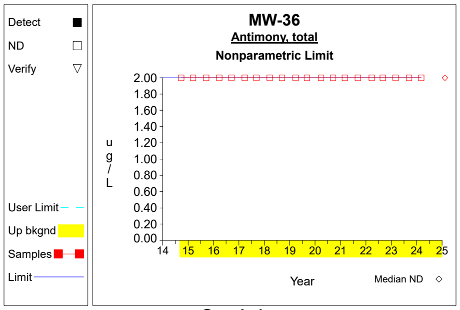
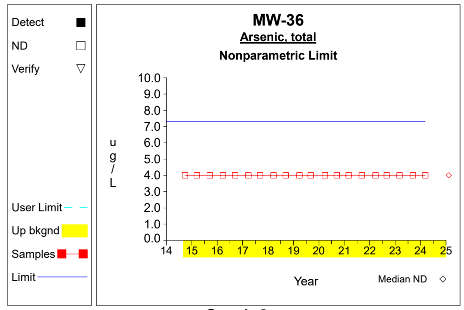
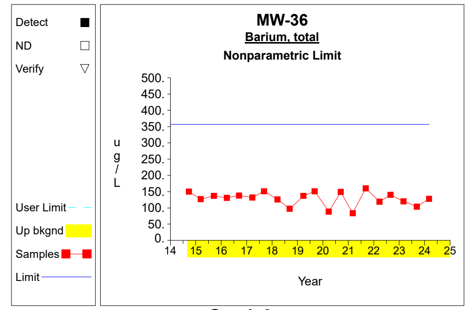
Up vs. Down Prediction Limits



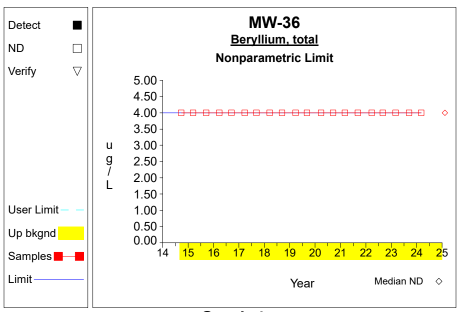
Graph 1



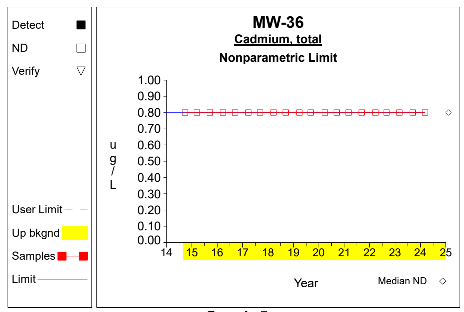
Graph 2



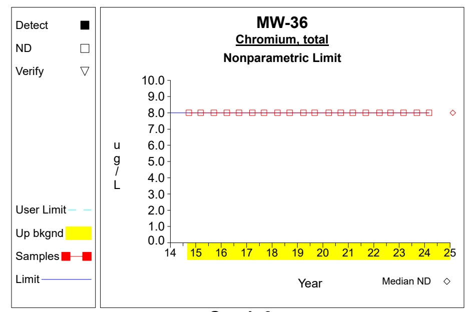
Graph 3



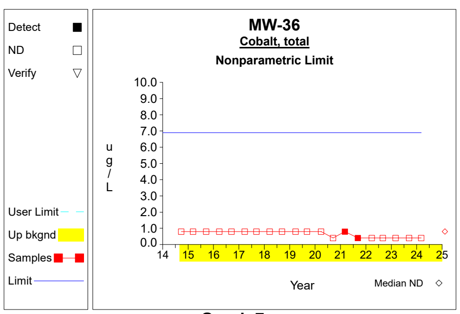
Graph 4



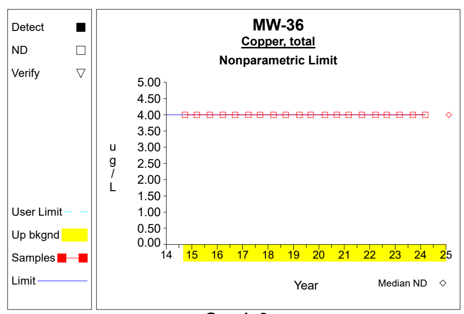
Graph 5



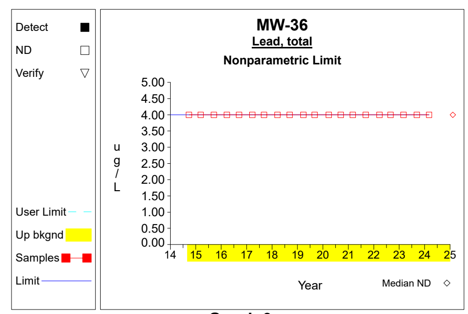
Graph 6



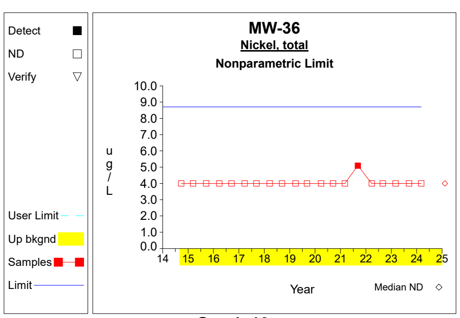
Graph 7



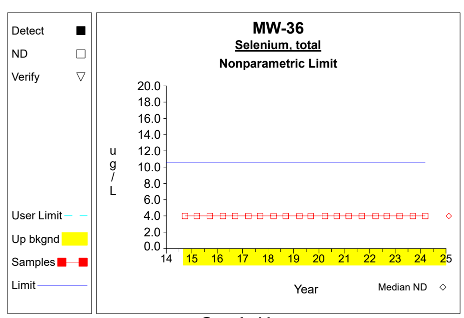
Graph 8



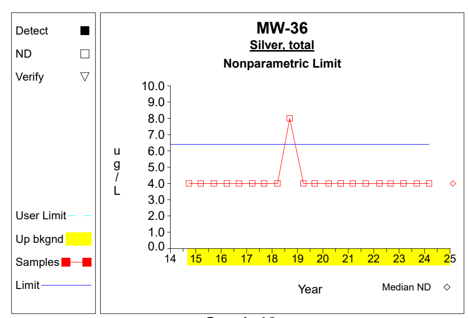
Graph 9



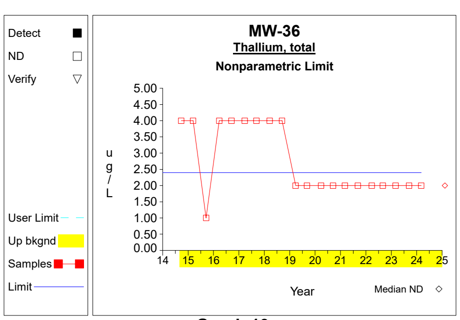
Graph 10



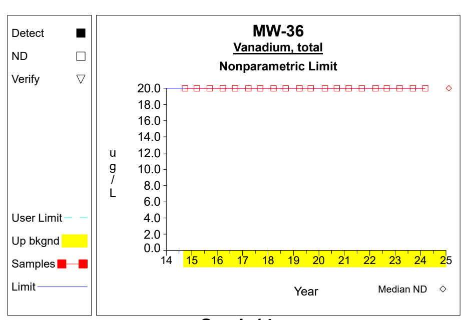
Graph 11



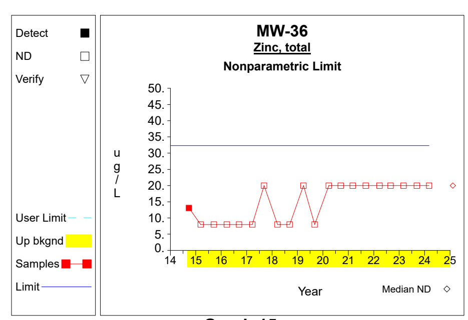
Graph 12



Graph 13



Graph 14



Graph 15

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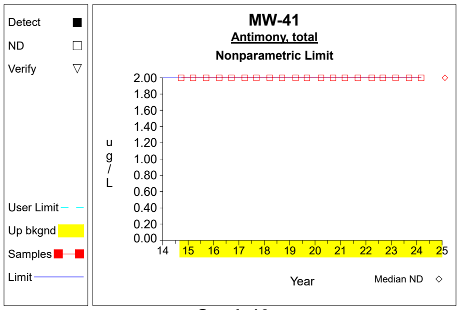
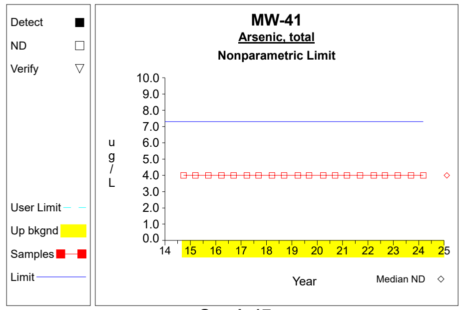
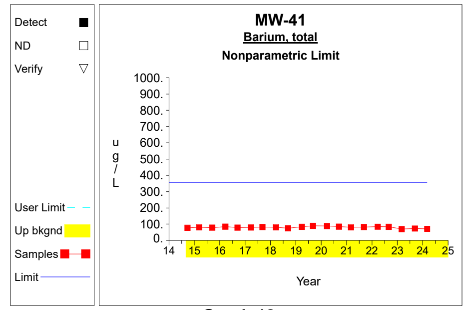
Up vs. Down Prediction Limits



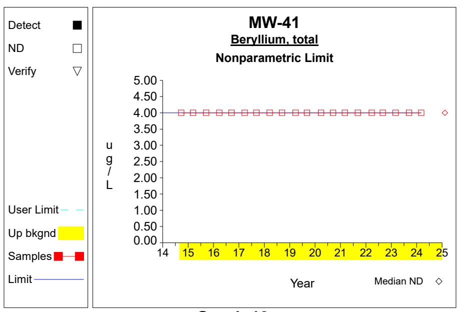
Graph 16



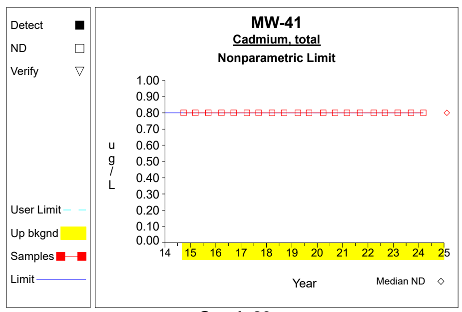
Graph 17



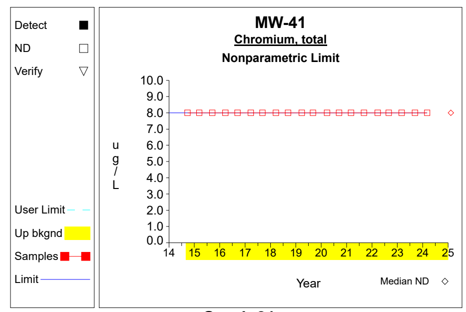
Graph 18



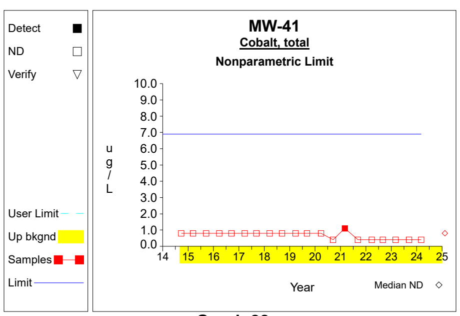
Graph 19



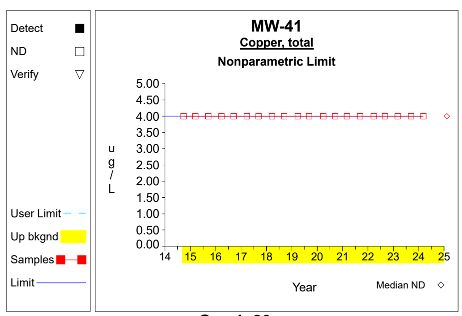
Graph 20



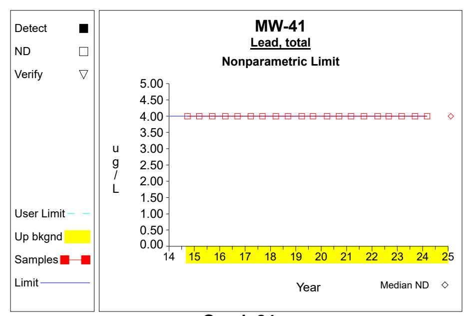
Graph 21



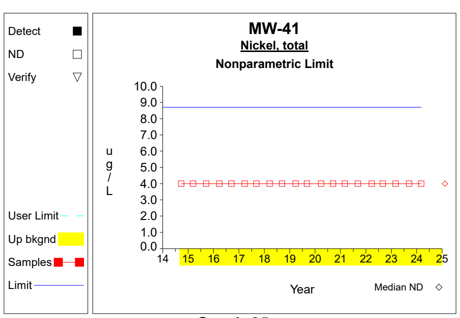
Graph 22



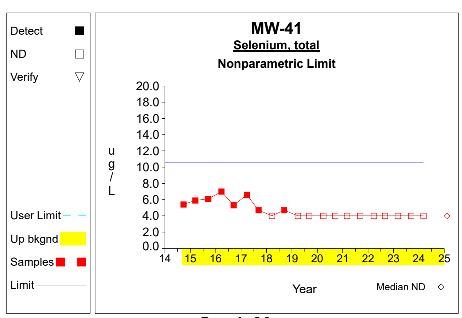
Graph 23



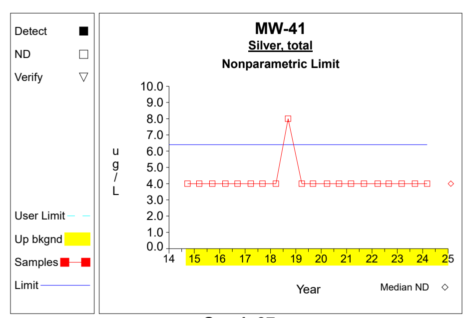
Graph 24



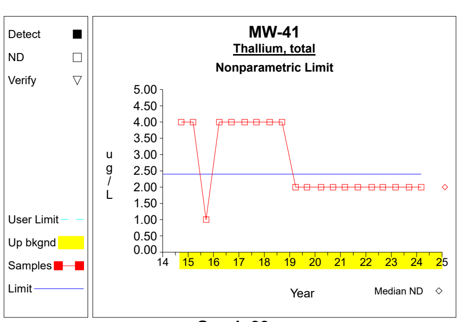
Graph 25



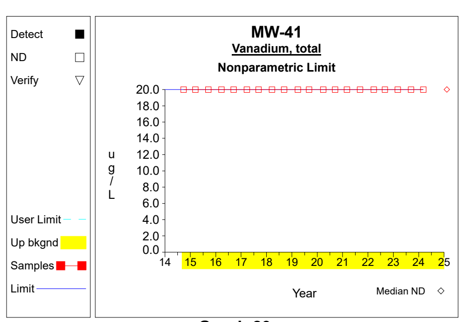
Graph 26



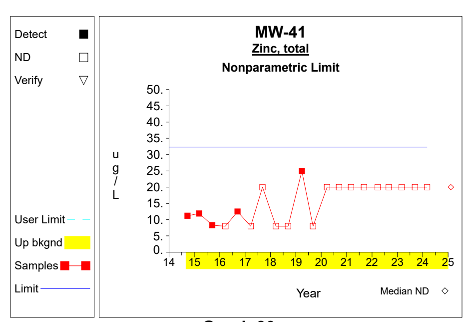
Graph 27



Graph 28



Graph 29



Graph 30

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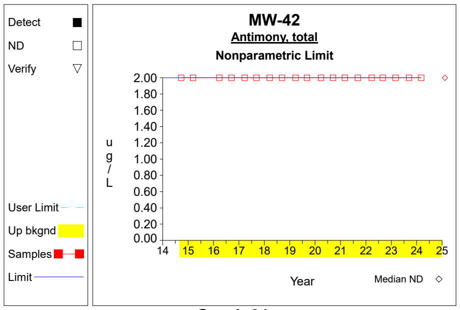
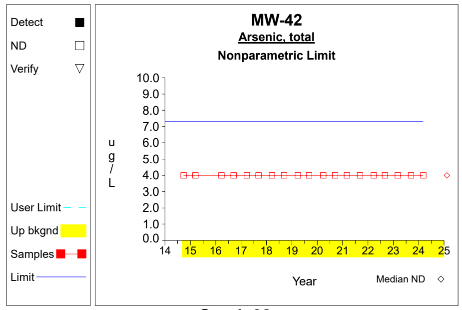
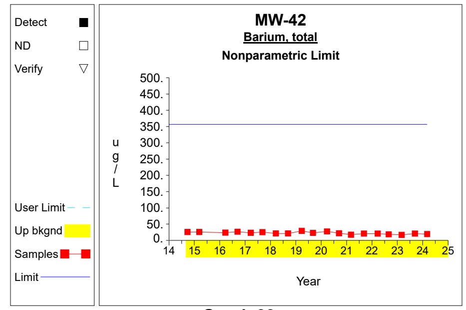
Up vs. Down Prediction Limits



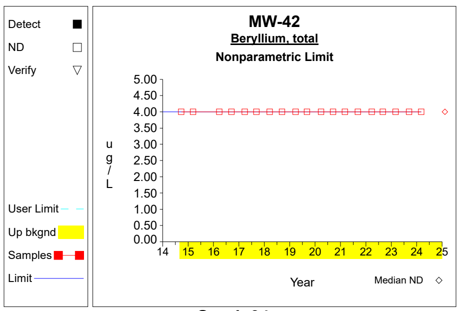
Graph 31



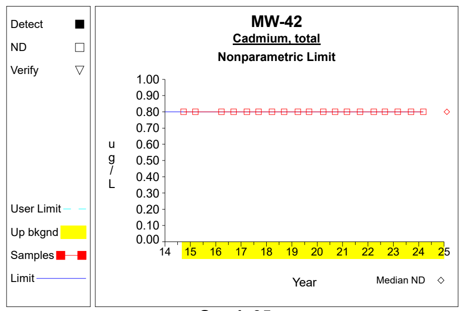
Graph 32



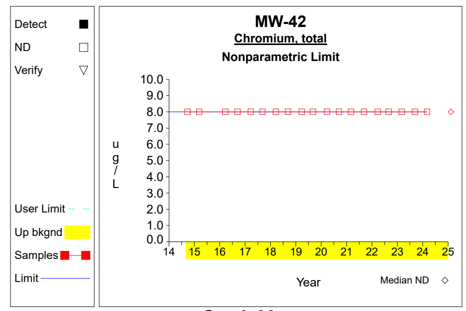
Graph 33



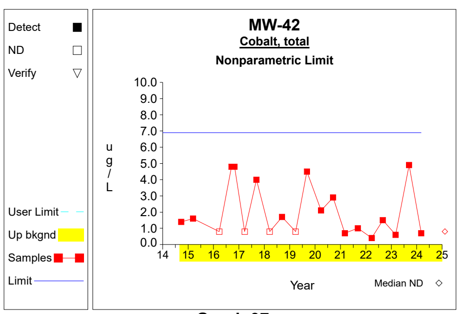
Graph 34



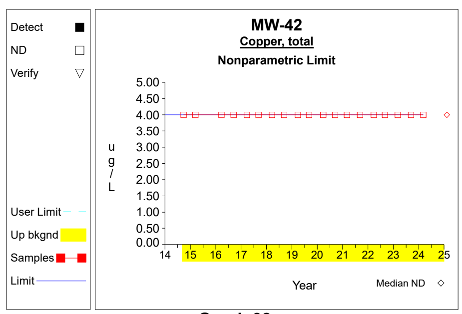
Graph 35



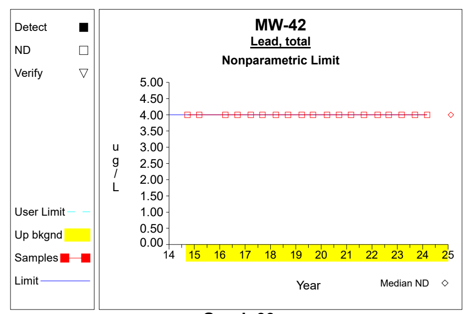
Graph 36



Graph 37



Graph 38



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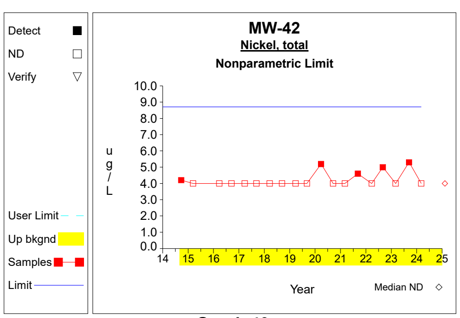
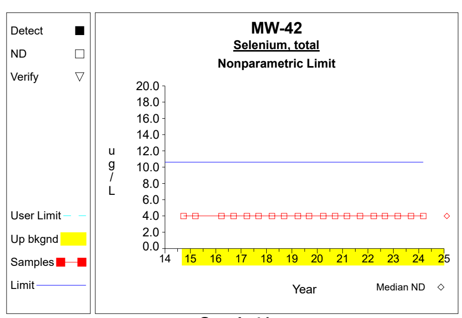


Graph 40



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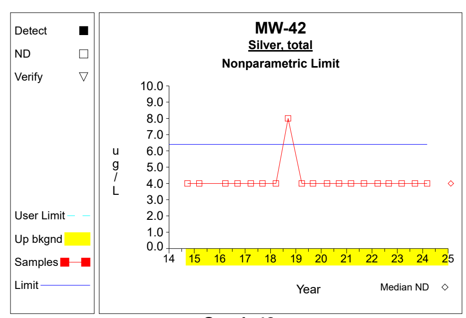

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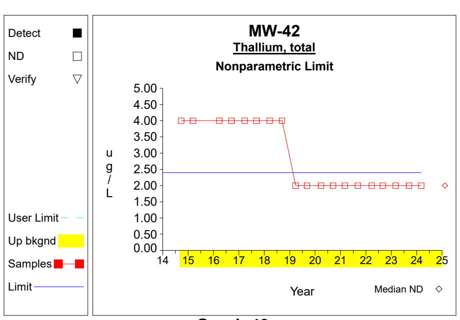

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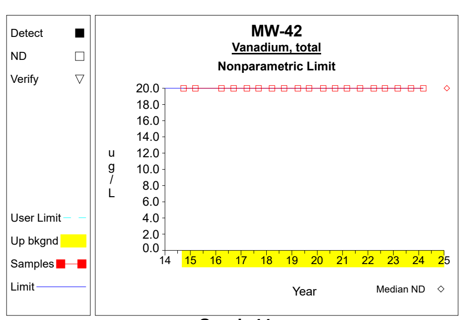

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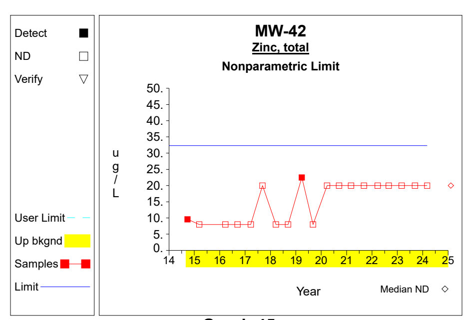

Graph 45

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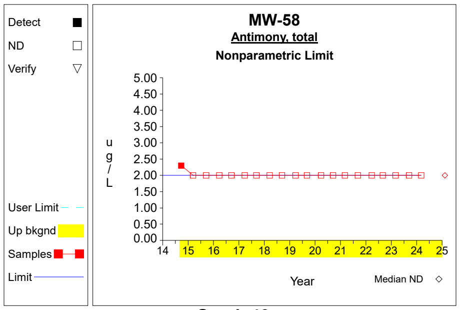
Up vs. Down Prediction Limits



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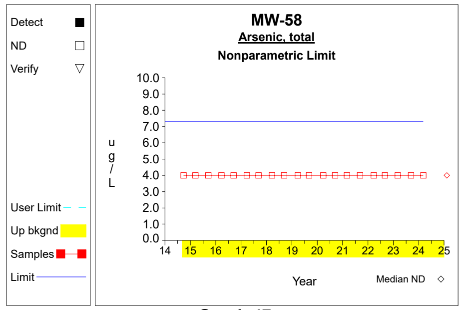
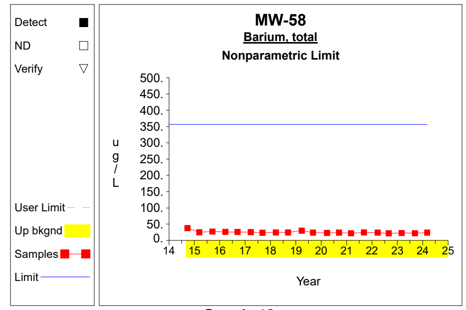
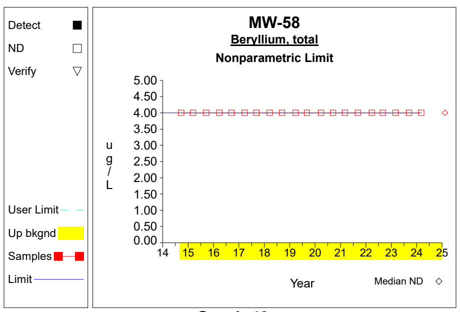


Graph 47



Graph 48



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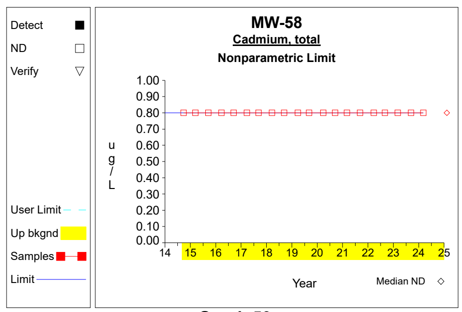

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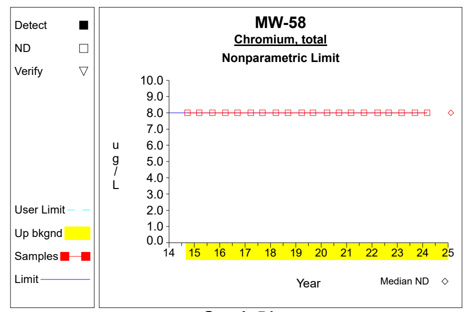

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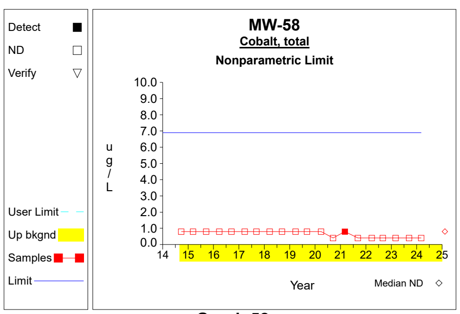

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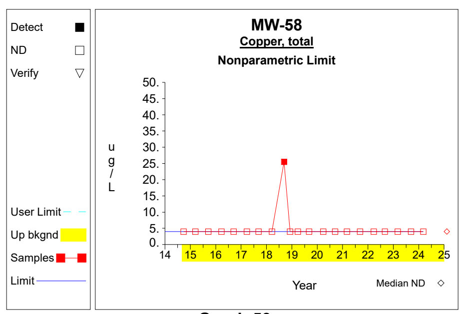

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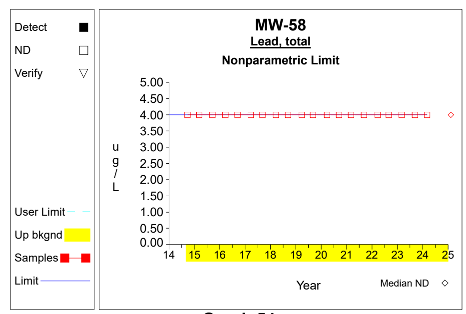

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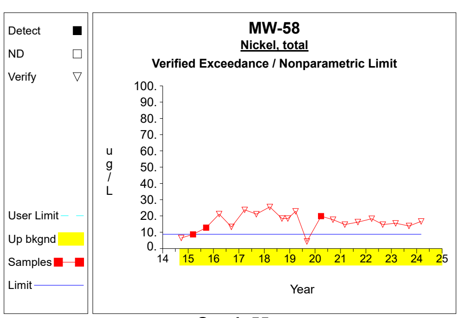

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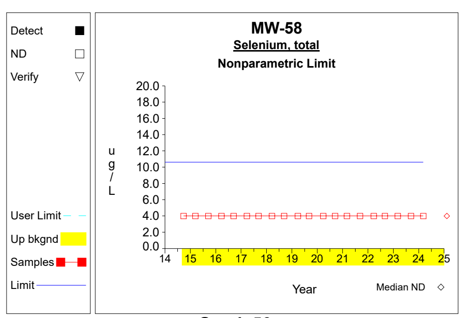

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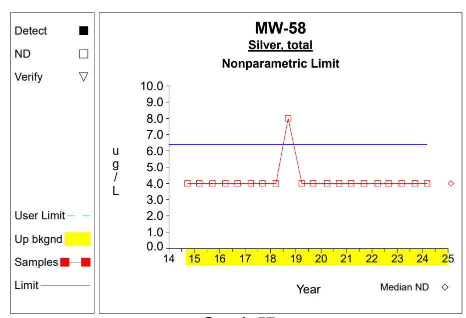

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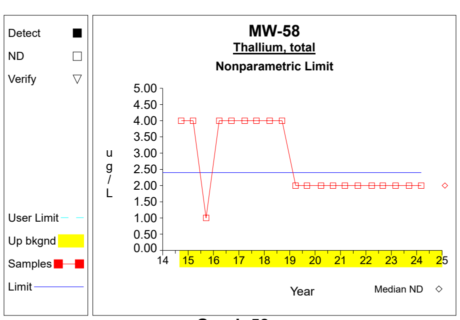

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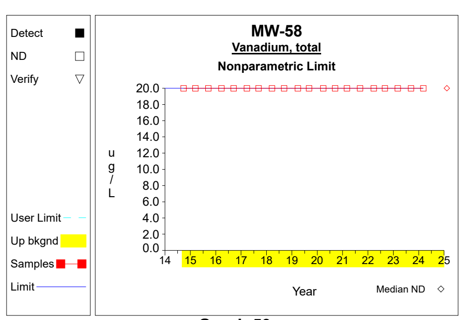

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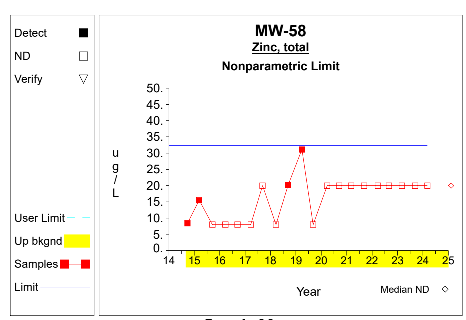

Graph 60

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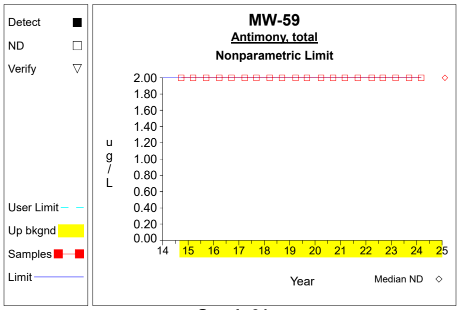
Up vs. Down Prediction Limits



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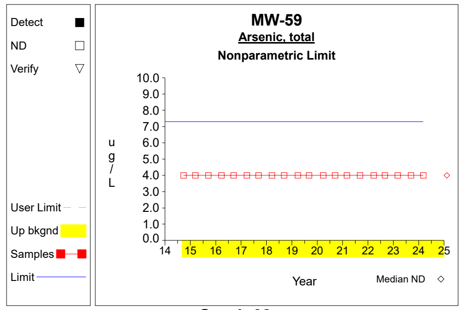
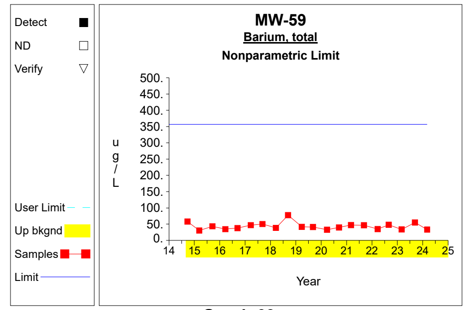
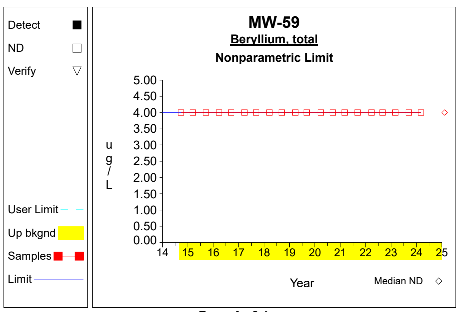


Graph 62



Graph 63



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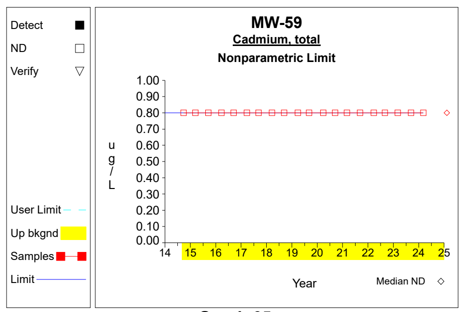
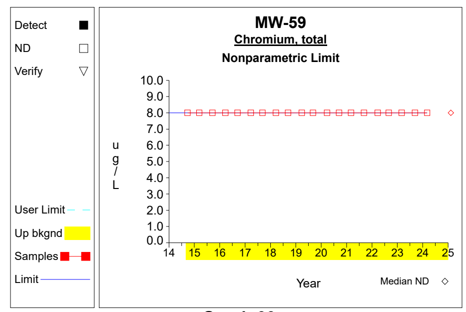


Graph 65



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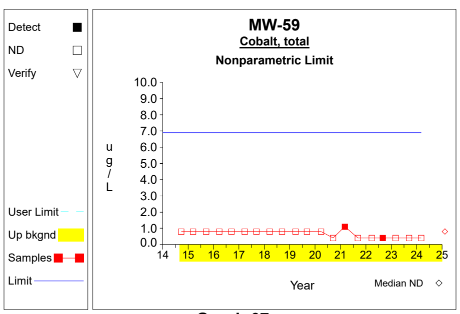

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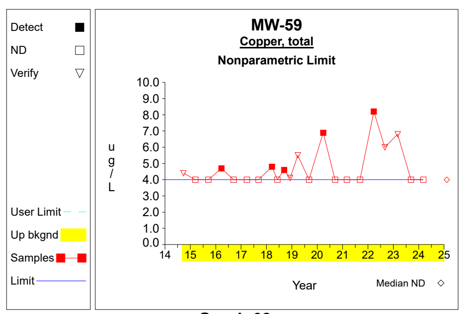

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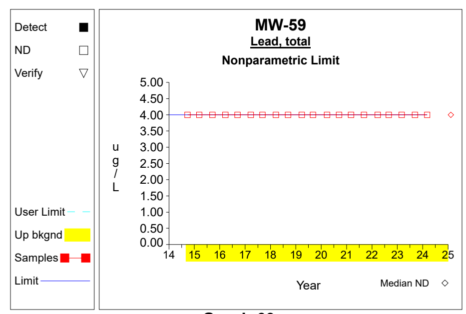

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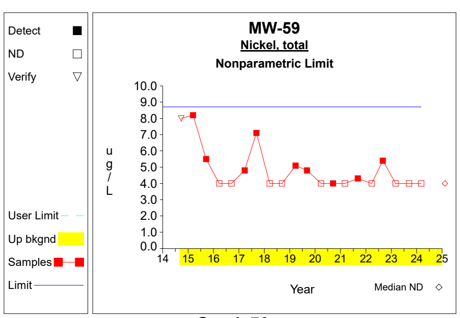

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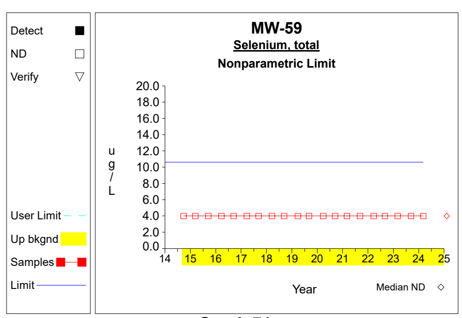

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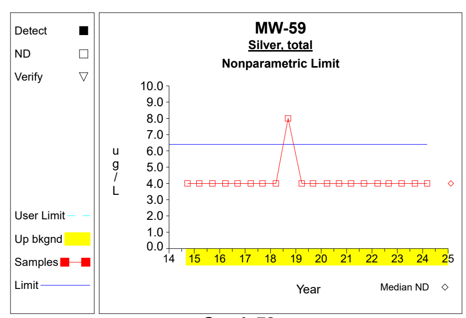

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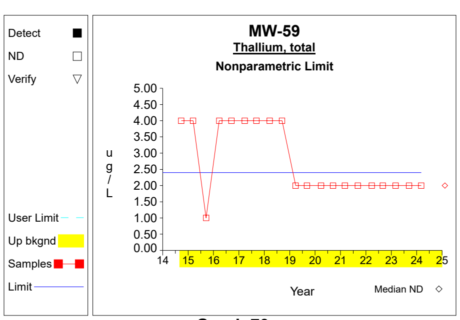

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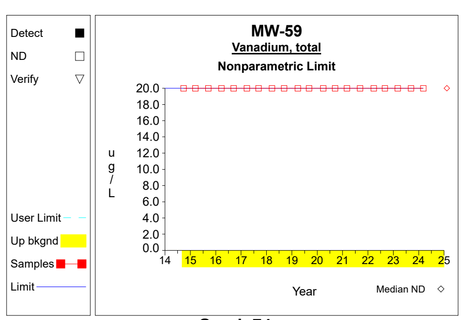

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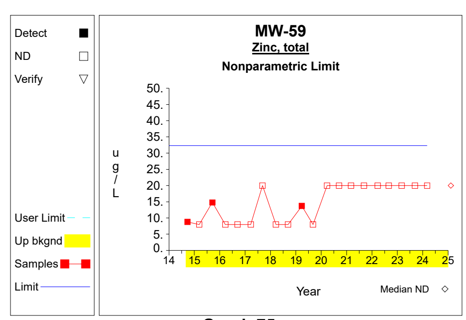

Graph 75

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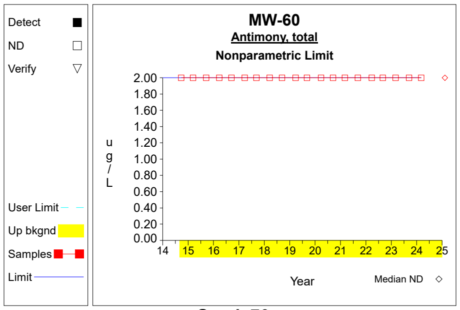
Up vs. Down Prediction Limits



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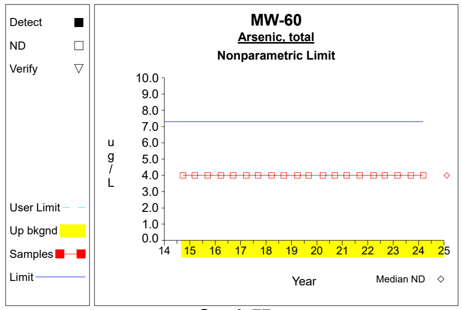

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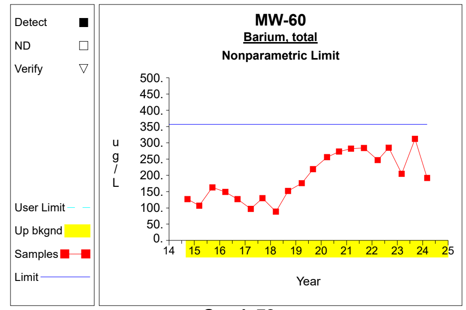

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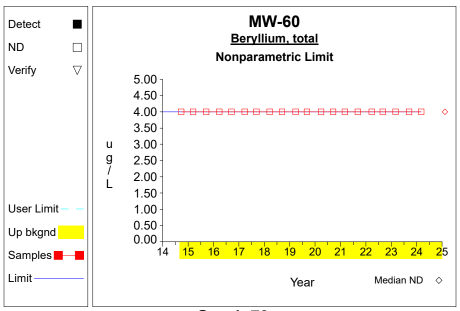

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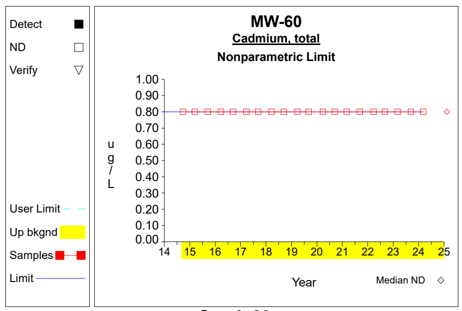

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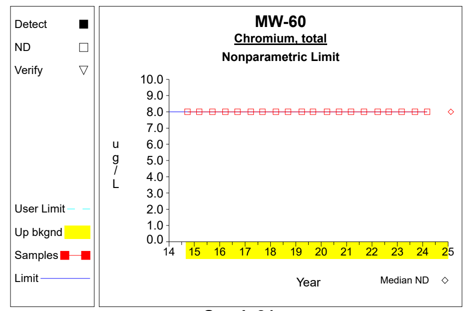

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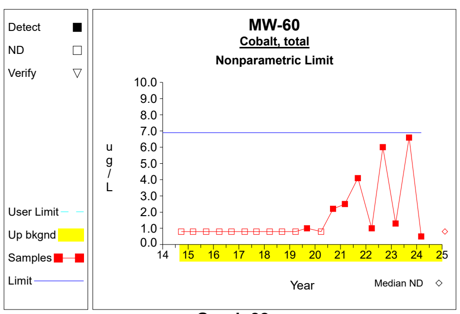

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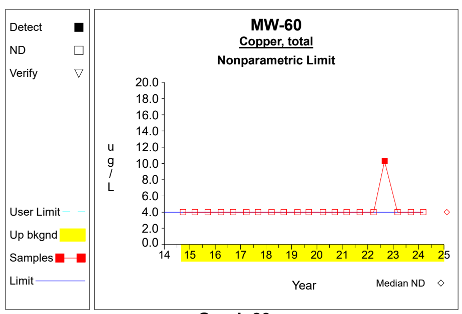
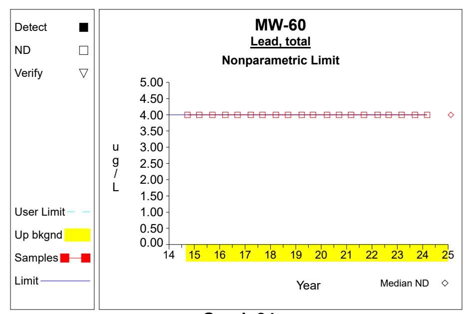


Graph 83



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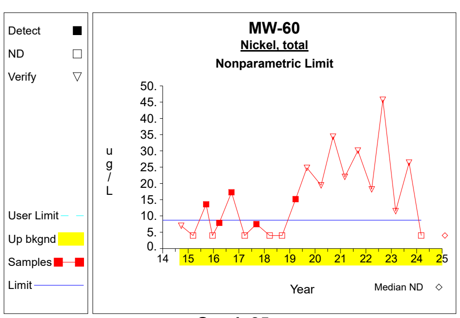

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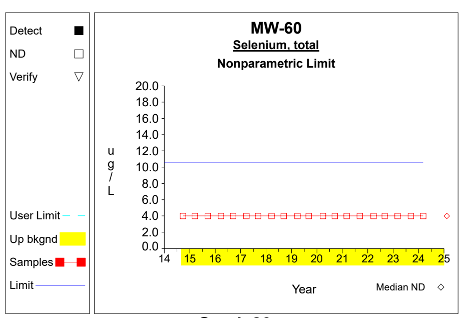

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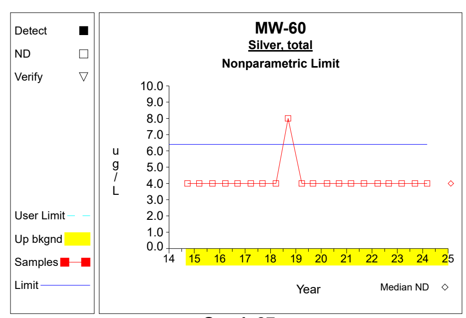

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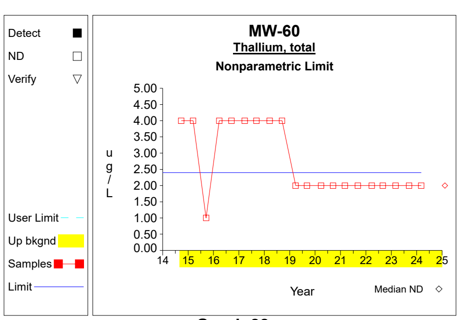

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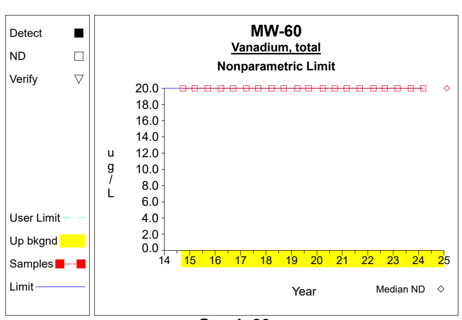

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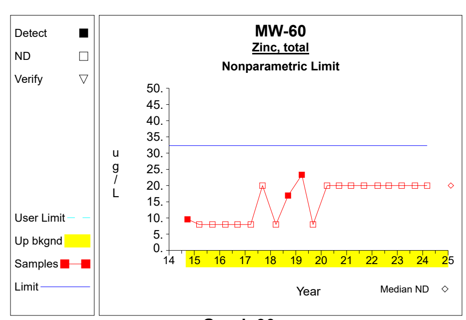

Graph 90

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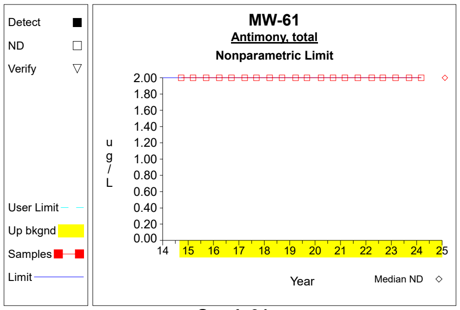
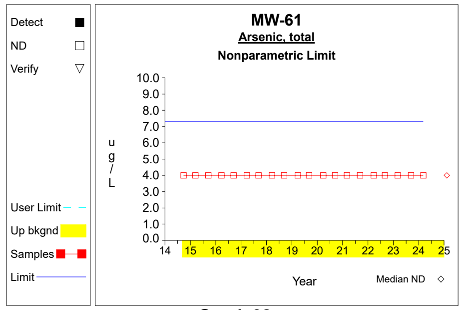
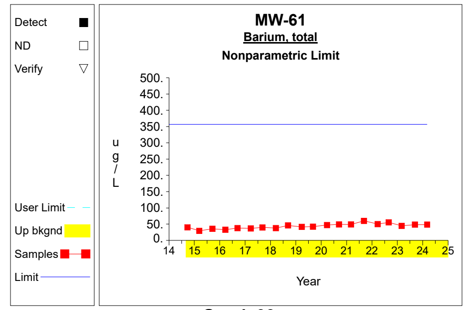
Up vs. Down Prediction Limits



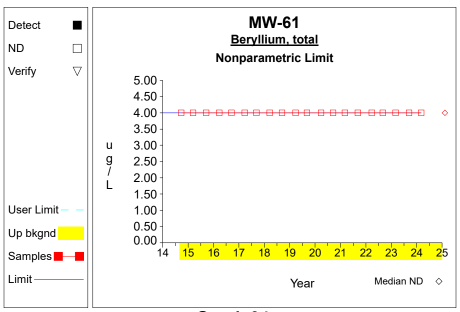
Graph 91



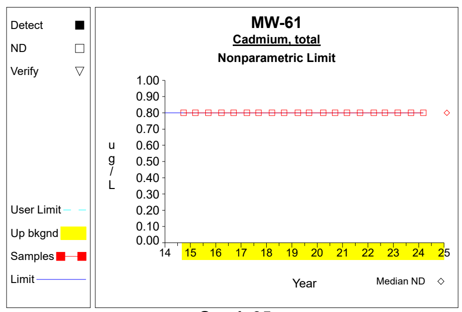
Graph 92



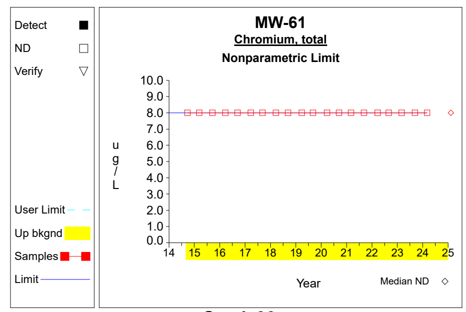
Graph 93



Graph 94



Graph 95



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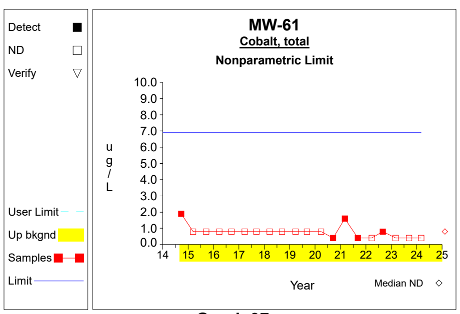

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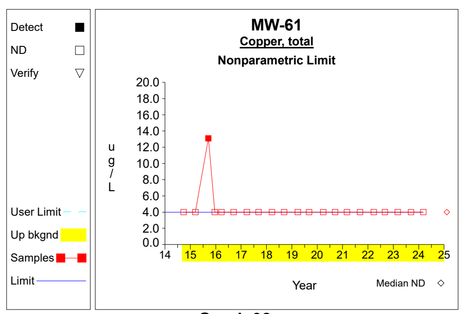

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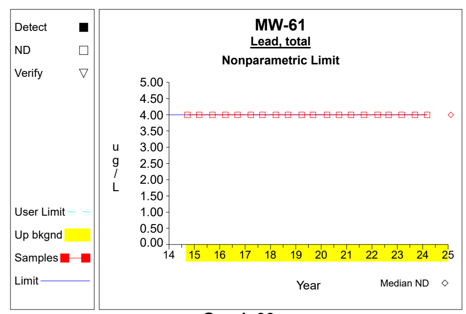

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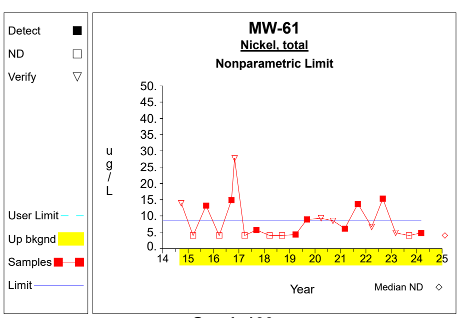
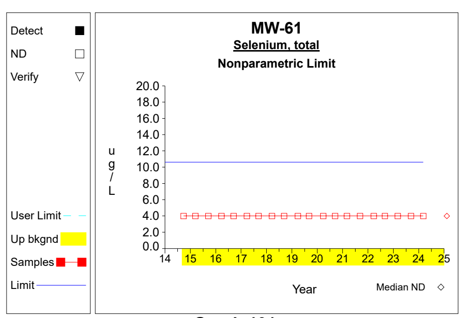


Graph 100



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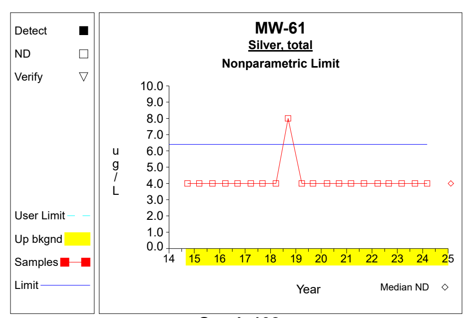

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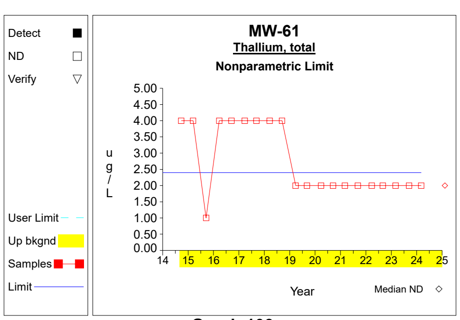
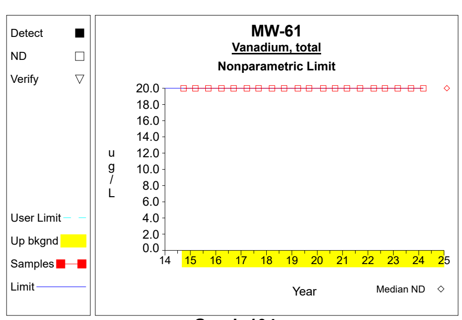


Graph 103



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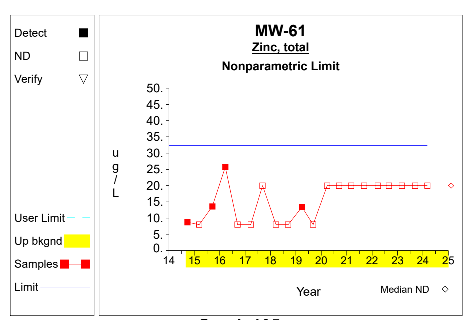
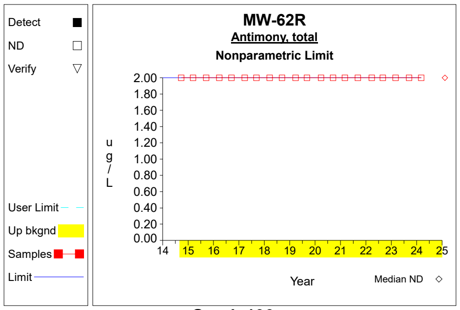
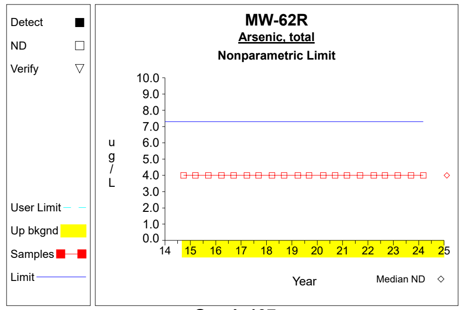


Graph 105

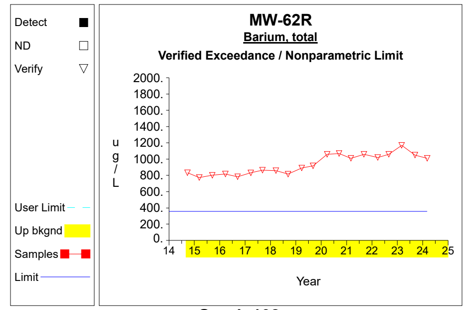
Up vs. Down Prediction Limits



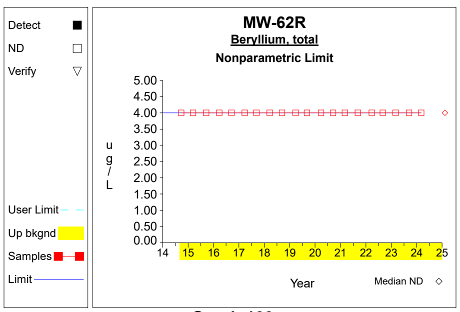
Graph 106



Graph 107



Graph 108



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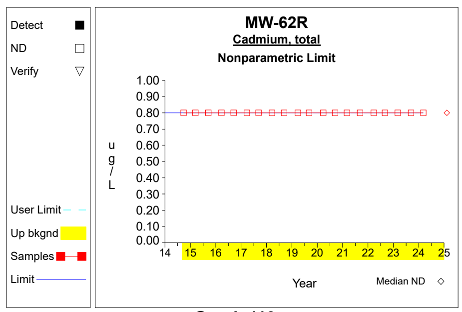

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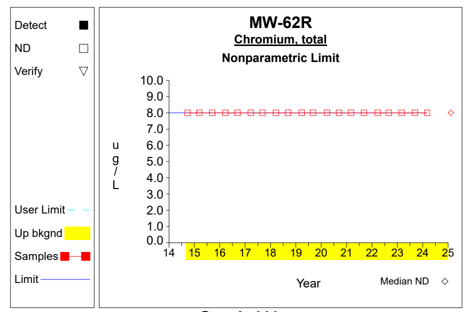
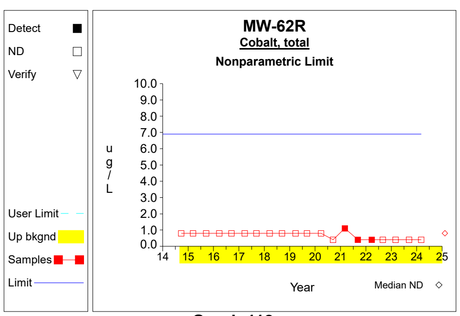
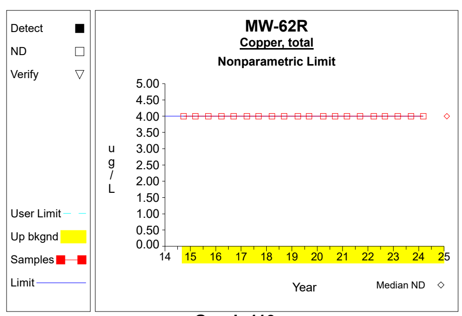


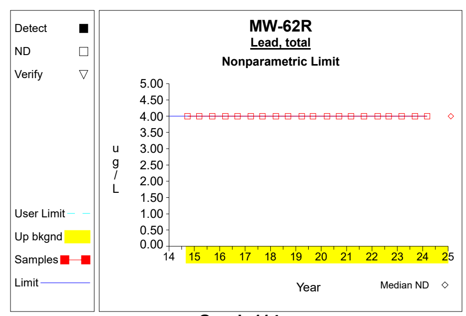
Graph 111



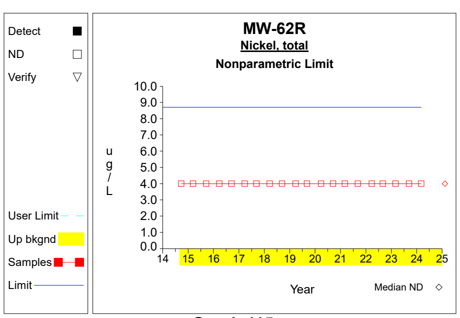
Graph 112



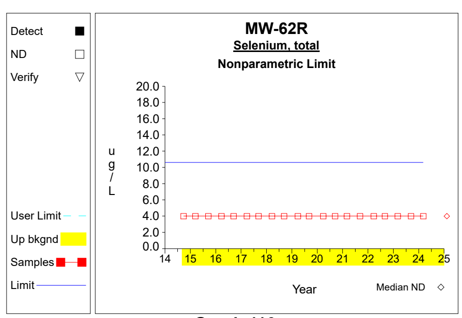
Graph 113



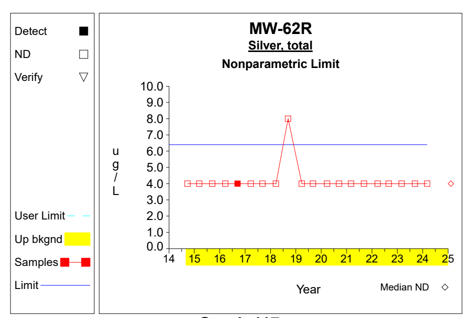
Graph 114



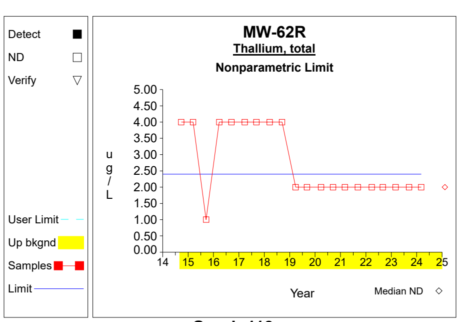
Graph 115



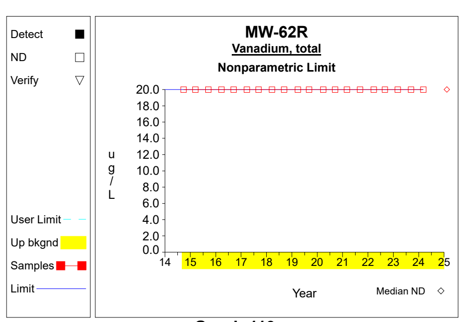
Graph 116



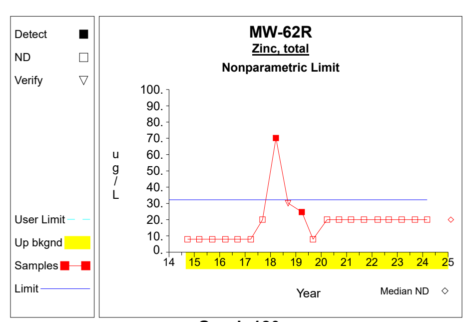
Graph 117



Graph 118

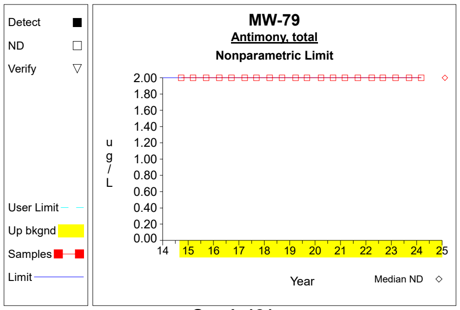


Graph 119

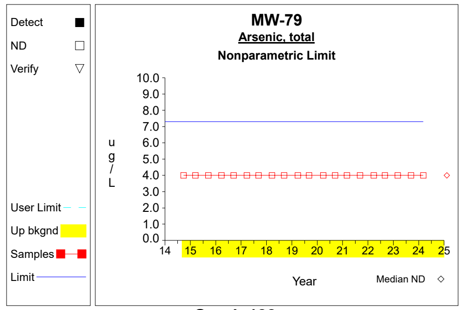


Graph 120

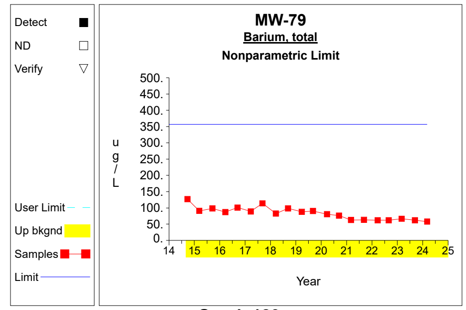
Up vs. Down Prediction Limits



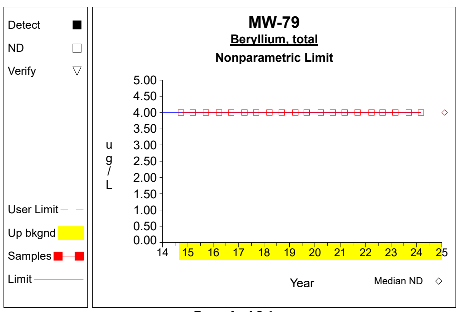
Graph 121



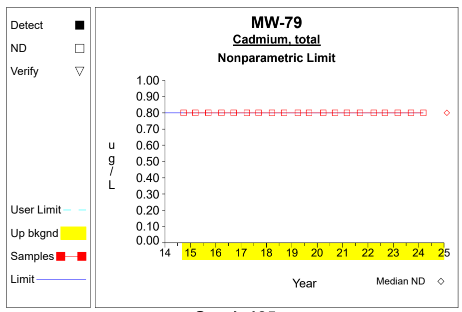
Graph 122



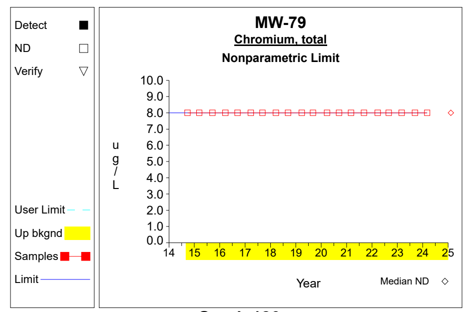
Graph 123



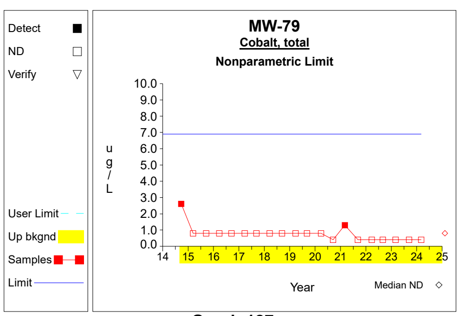
Graph 124



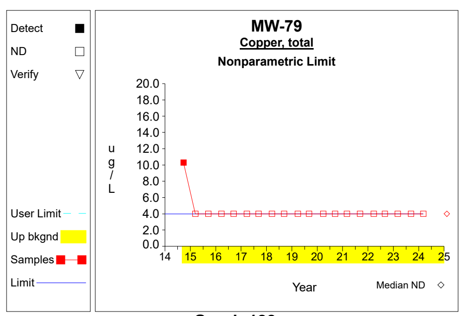
Graph 125



Graph 126



Graph 127



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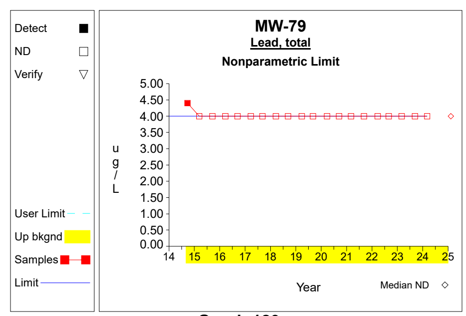
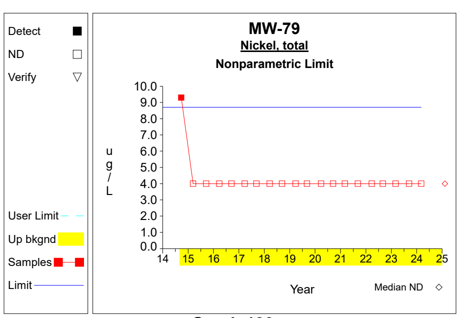
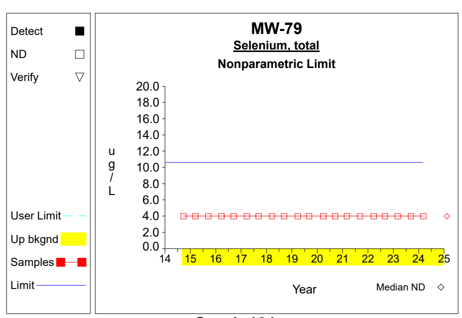


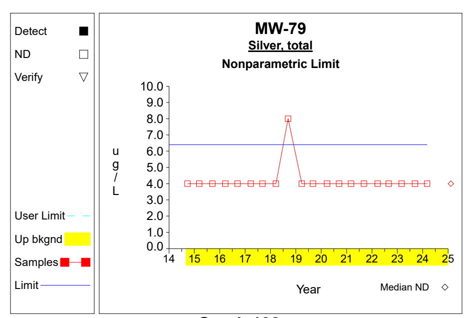
Graph 129



Graph 130



Graph 131



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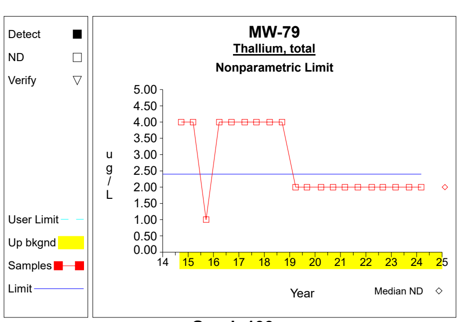
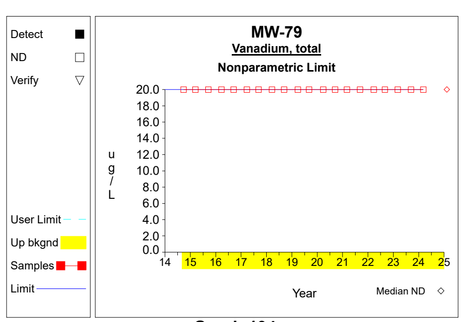
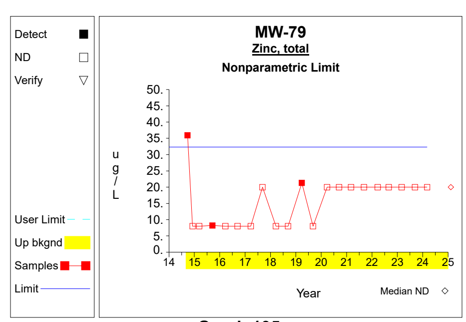


Graph 133



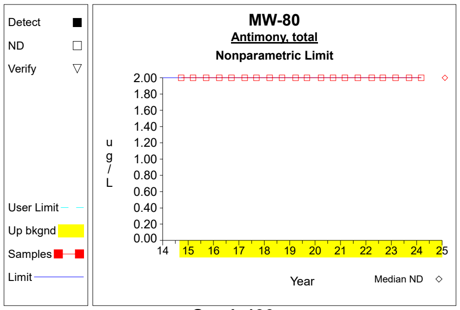
Graph 134



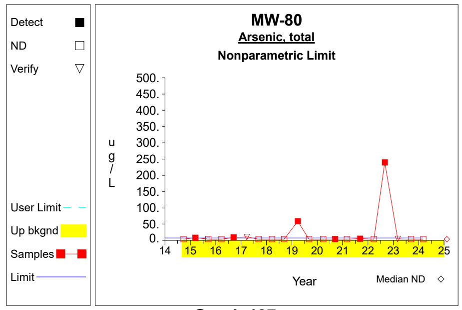
Graph 135

Newton [GW] March 2024

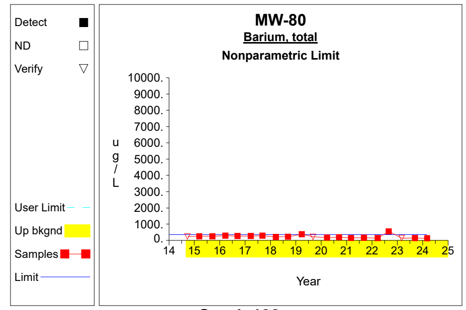
Up vs. Down Prediction Limits



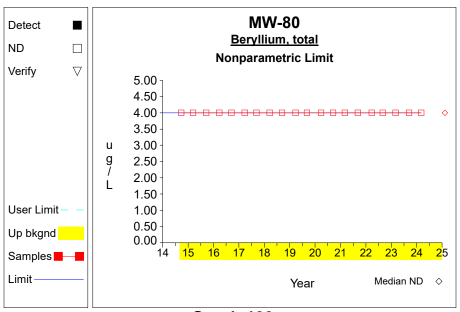
Graph 136



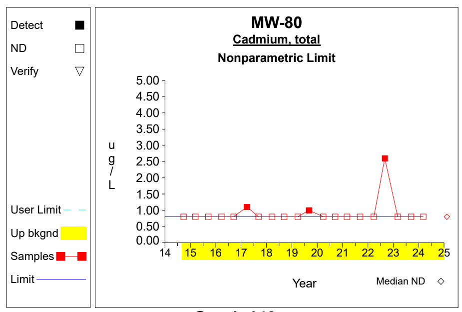
Graph 137



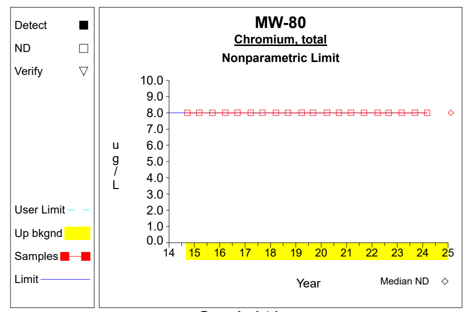
Graph 138



Graph 139



Graph 140



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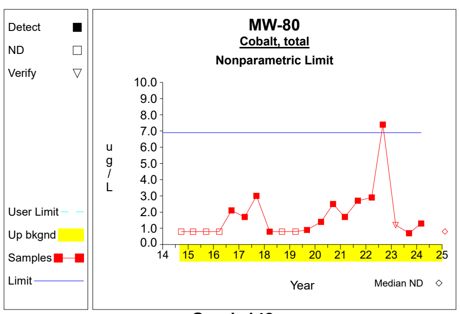

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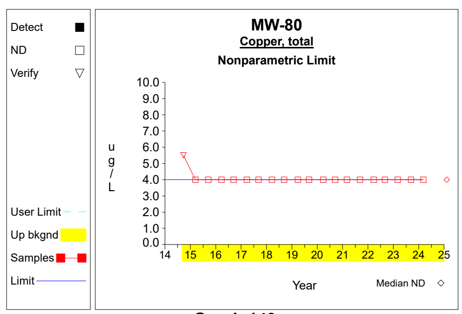

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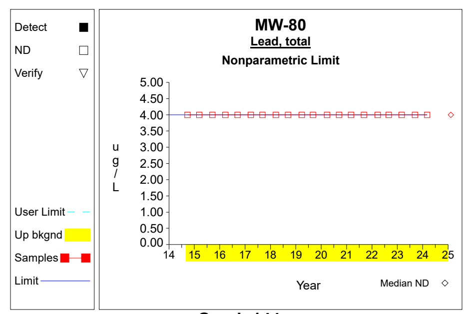

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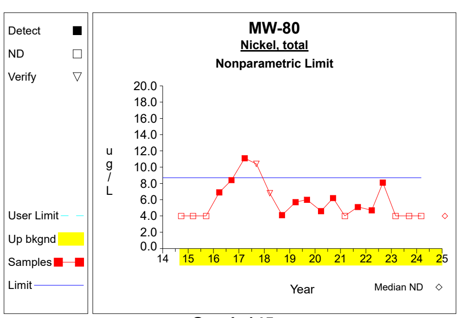

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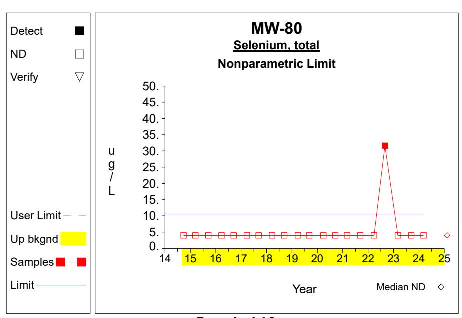
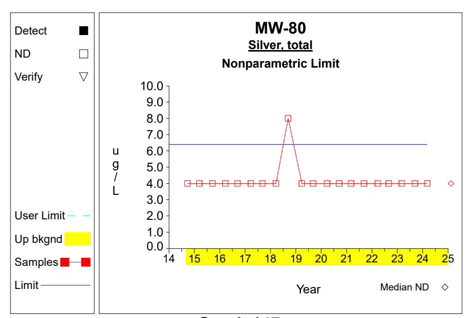


Graph 146



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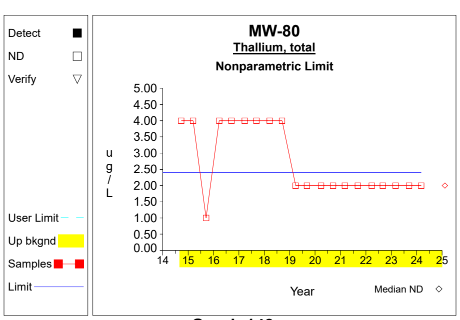
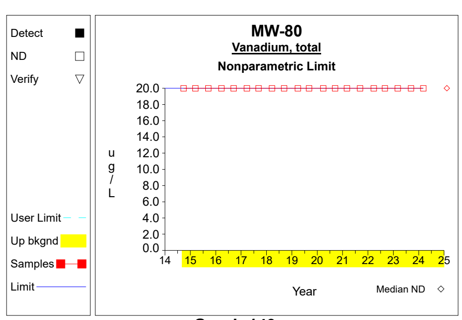
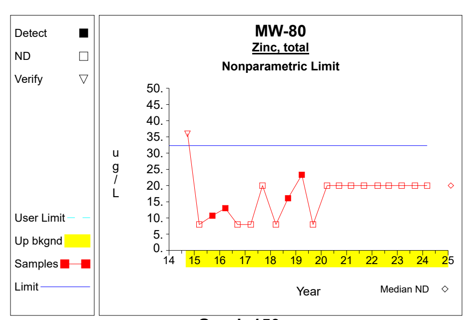


Graph 148



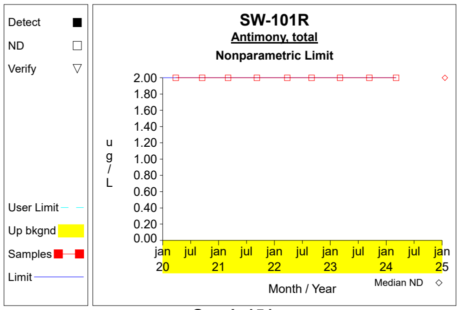
Graph 149



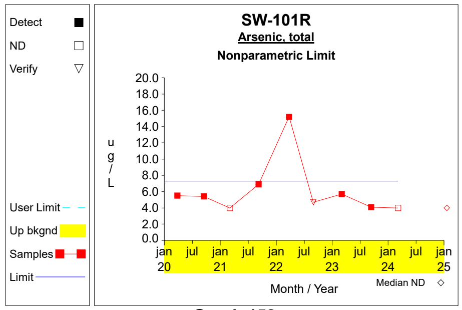
Graph 150

Prepared by: Otter Creek Environmental

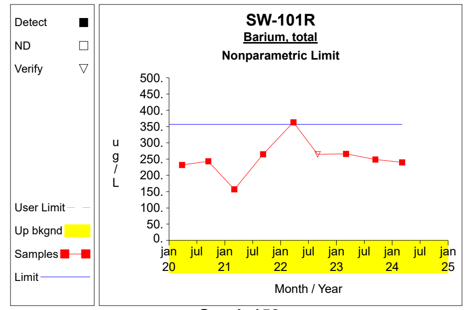
Up vs. Down Prediction Limits



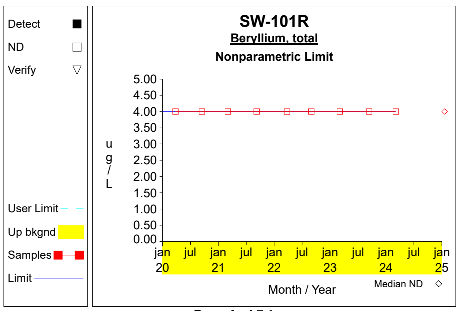
Graph 151



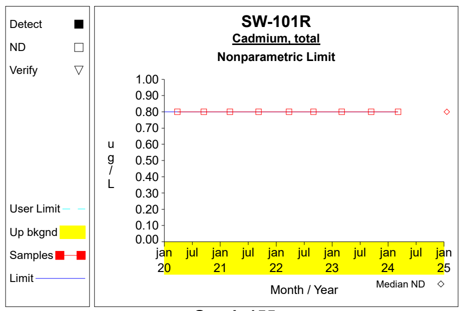
Graph 152



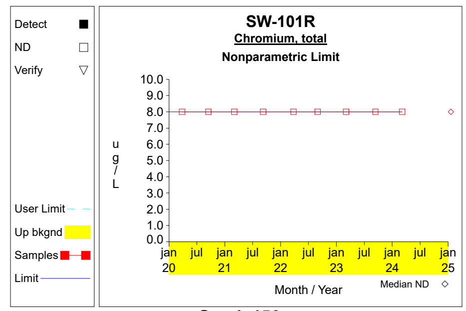
Graph 153



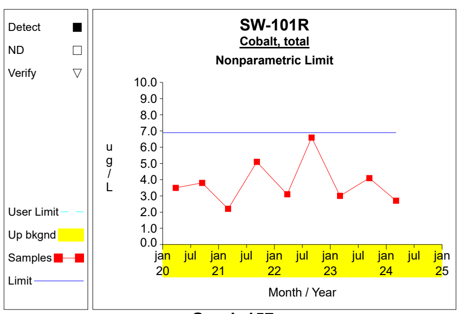
Graph 154



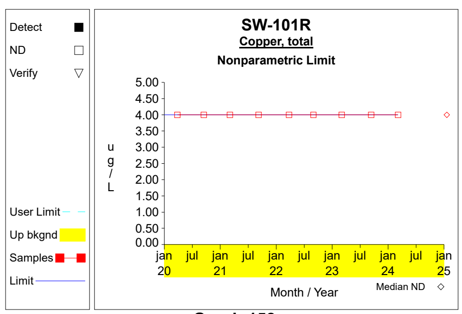
Graph 155



Graph 156



Graph 157



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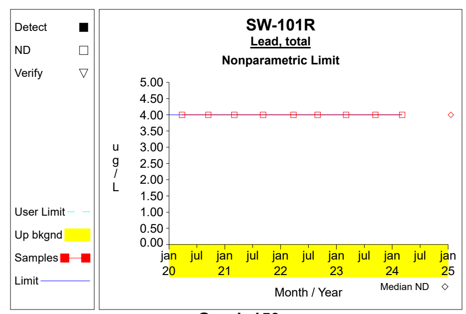
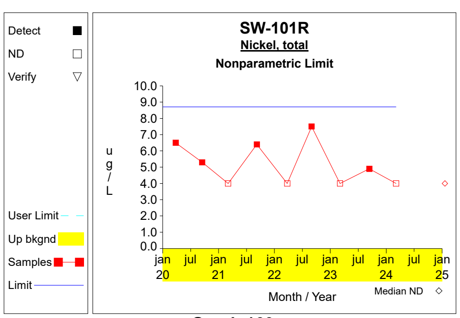
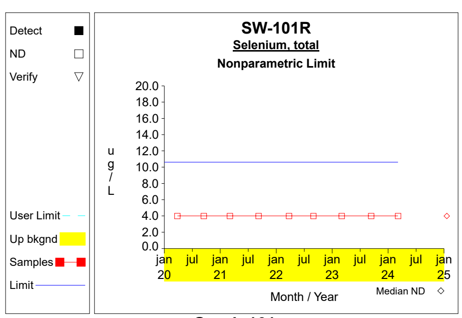


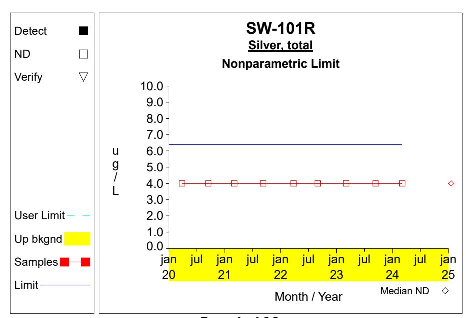
Graph 159



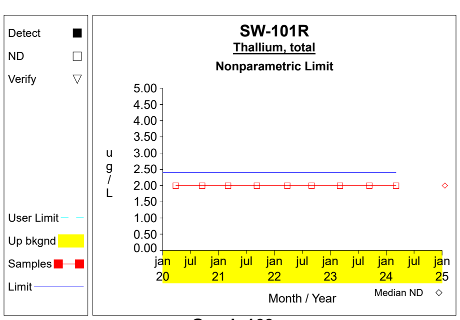
Graph 160



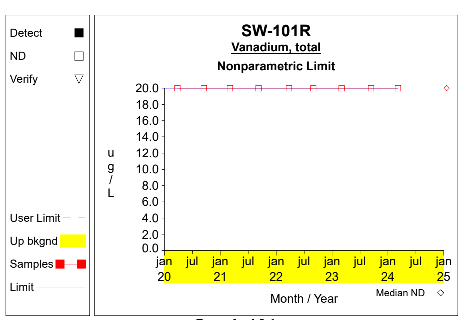
Graph 161



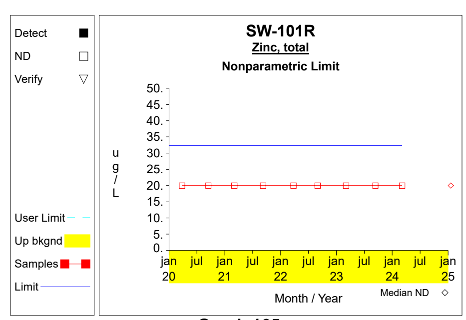
Graph 162



Graph 163

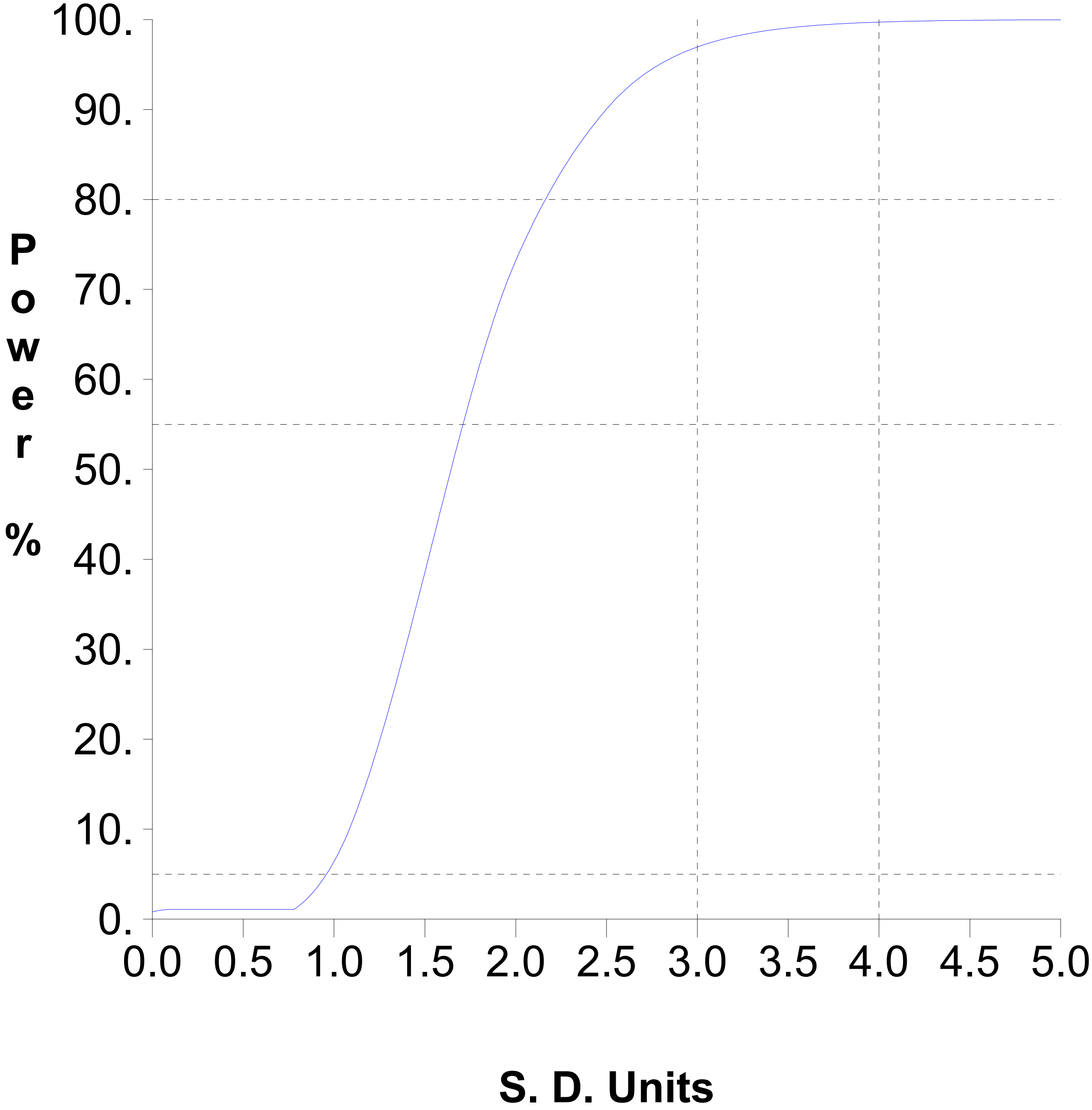


Graph 164



Graph 165

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



Attachment C

95% LCLs for Trace Metal Exceedances

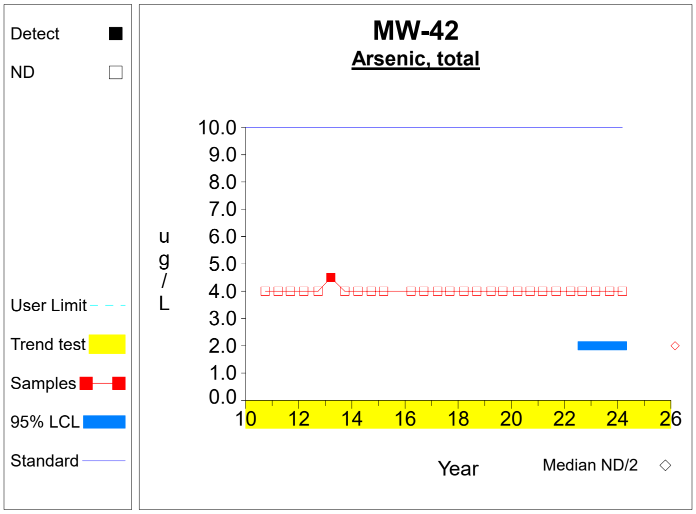
Table 1

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

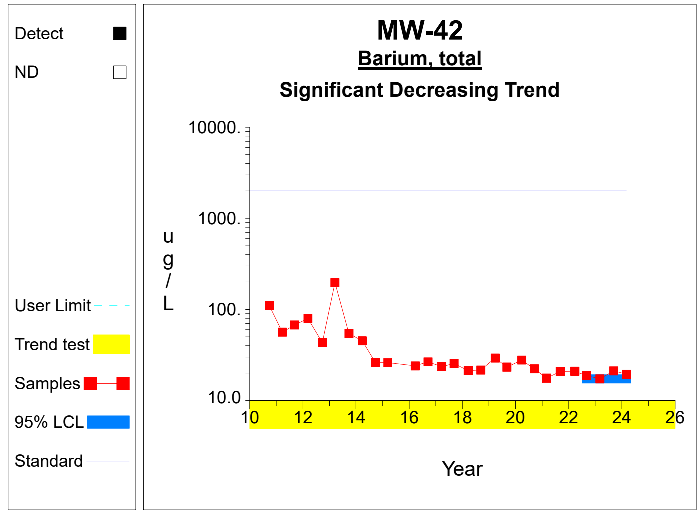
Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend
Arsenic, total	ug/L	MW-42	4	2.000	0.000	1.176	2.000	2.000	10.000	
Barium, total	ug/L	MW-42	4	19.175	1.613	1.176	17.277	21.073	2000.000	dec
Cobalt, total	ug/L	MW-42	4	1.925	2.024	1.176	0.000	4.306	2.100	
Nickel, total	ug/L	MW-42	4	3.575	1.823	1.176	1.431	5.719	100.000	
Arsenic, total	ug/L	MW-58	4	2.000	0.000	1.176	2.000	2.000	10.000	
Barium, total	ug/L	MW-58	4	22.625	0.929	1.176	21.533	23.717	2000.000	dec
Cobalt, total	ug/L	MW-58	4	0.400	0.000	1.176	0.400	0.400	2.100	
Nickel, total	ug/L	MW-58	4	15.200	1.194	1.176	13.795	16.605	100.000	
Arsenic, total	ug/L	MW-60	4	2.000	0.000	1.176	2.000	2.000	10.000	
Barium, total	ug/L	MW-60	4	248.500	59.017	1.176	179.079	317.921	2000.000	
Cobalt, total	ug/L	MW-60	4	3.600	3.144	1.176	0.000	7.299	2.100	
Nickel, total	ug/L	MW-60	4	21.400	19.060	1.176	0.000	43.820	100.000	
Arsenic, total	ug/L	MW-61	4	2.000	0.000	1.176	2.000	2.000	10.000	
Barium, total	ug/L	MW-61	4	49.375	4.484	1.176	44.101	54.649	2000.000	
Cobalt, total	ug/L	MW-61	4	0.500	0.200	1.176	0.265	0.735	2.100	
Nickel, total	ug/L	MW-61	4	6.725	5.867	1.176	0.000	13.626	100.000	
Arsenic, total	ug/L	MW-62R	4	2.000	0.000	1.176	2.000	2.000	10.000	
Barium, total	ug/L	MW-62R	4	1072.500	68.496	1.176	991.929	1153.071	2000.000	inc
Cobalt, total	ug/L	MW-62R	4	0.400	0.000	1.176	0.400	0.400	2.100	
Nickel, total	ug/L	MW-62R	4	2.000	0.000	1.176	2.000	2.000	100.000	
Arsenic, total	ug/L	MW-80	4	62.150	118.573	1.176	0.000	201.626	10.000	
Barium, total	ug/L	MW-80	4	246.000	210.778	1.176	0.000	493.936	2000.000	dec
Cobalt, total	ug/L	MW-80	4	2.650	3.178	1.176	0.000	6.388	2.100	
Nickel, total	ug/L	MW-80	4	3.525	3.050	1.176	0.000	7.113	100.000	dec
Arsenic, total	ug/L	SW-101R	4	4.125	1.563	1.176	2.287	5.963	10.000	
Barium, total	ug/L	SW-101R	4	255.000	12.675	1.176	240.090	269.910	2000.000	
Cobalt, total	ug/L	SW-101R	4	4.100	1.772	1.176	2.016	6.184	2.100	
Nickel, total	ug/L	SW-101R	4	4.100	2.647	1.176	0.986	7.214	100.000	

* - Insufficient Data
** - Significant Exceedance
LCL = Lower Confidence Limit
UCL = Upper Confidence Limit

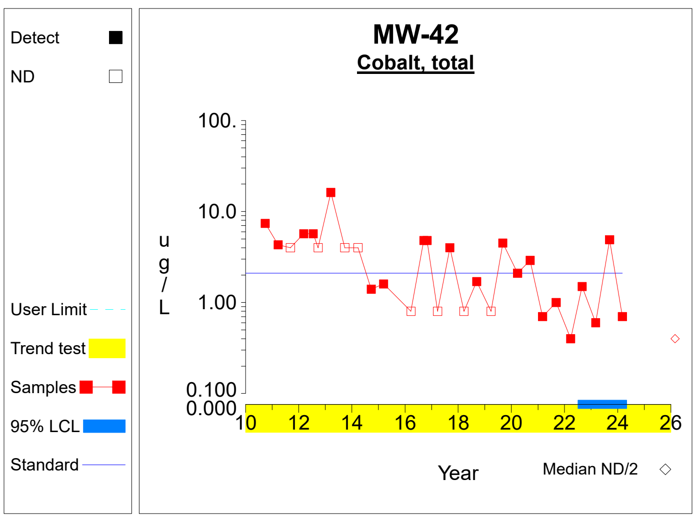
Confidence Limits (Assessment)



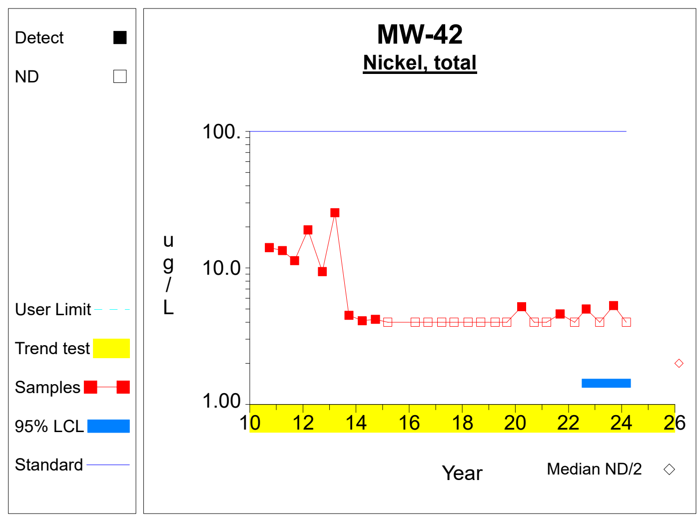
Graph 1



Graph 2

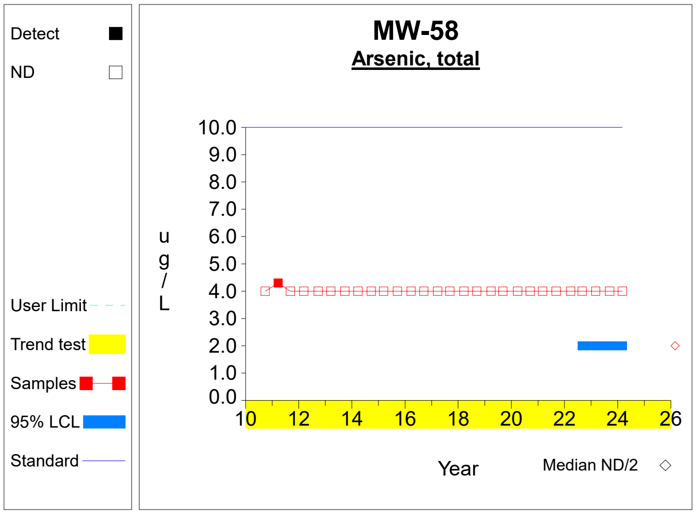


Graph 3

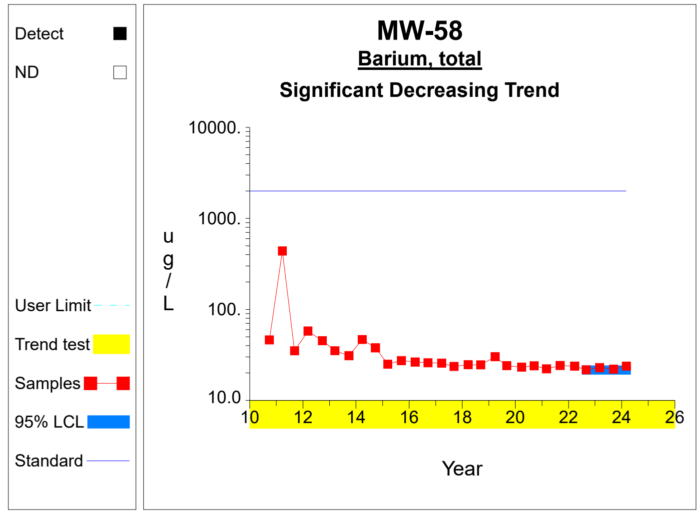


Graph 4

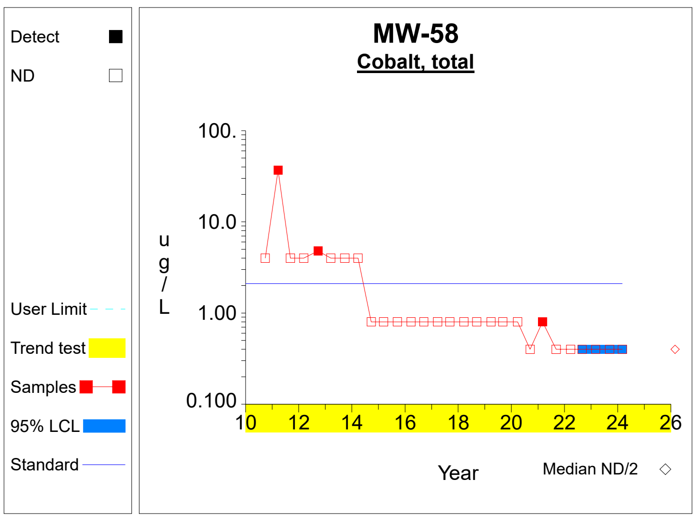
Confidence Limits (Assessment)



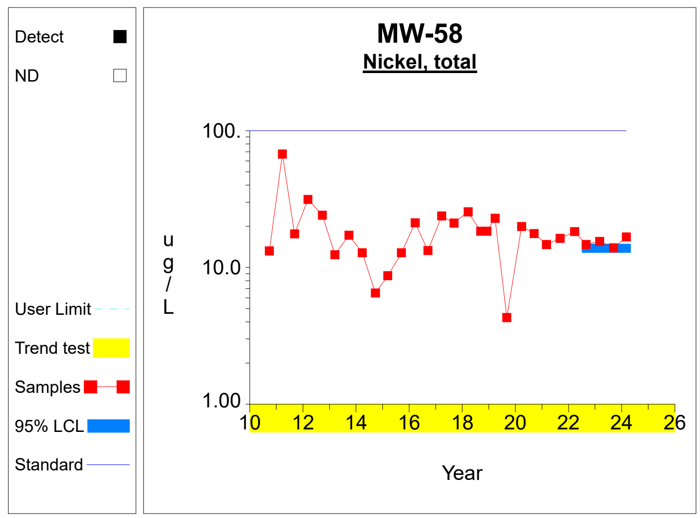
Graph 5



Graph 6

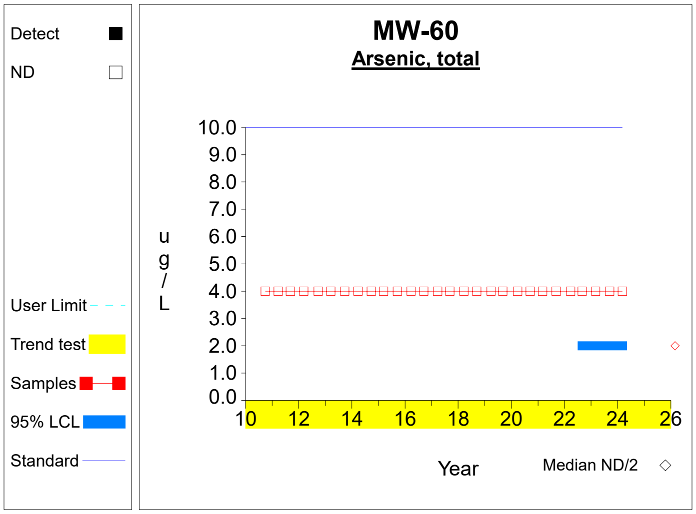


Graph 7

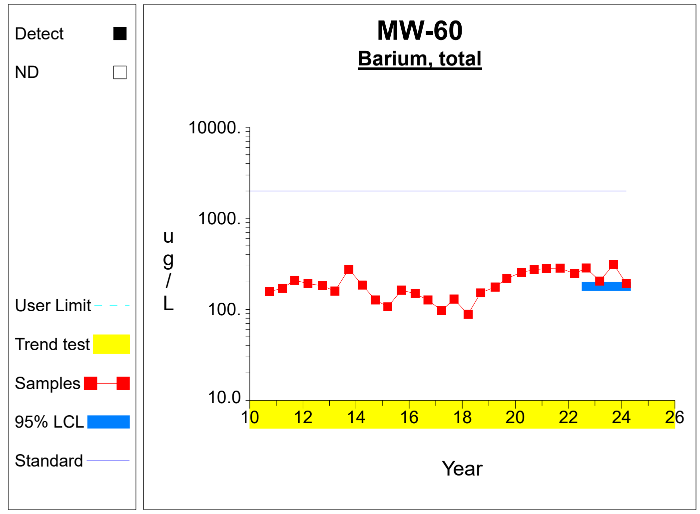


Graph 8

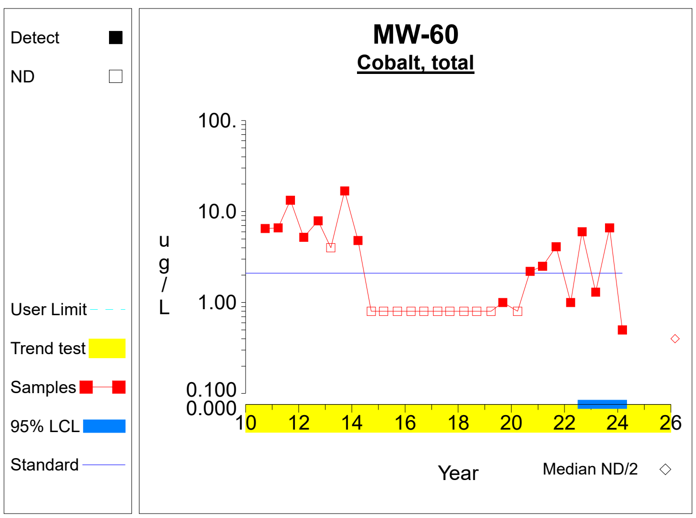
Confidence Limits (Assessment)



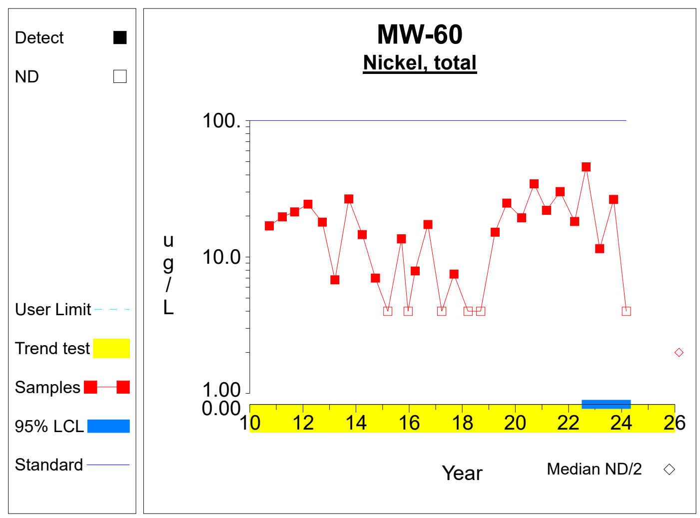
Graph 9



Graph 10

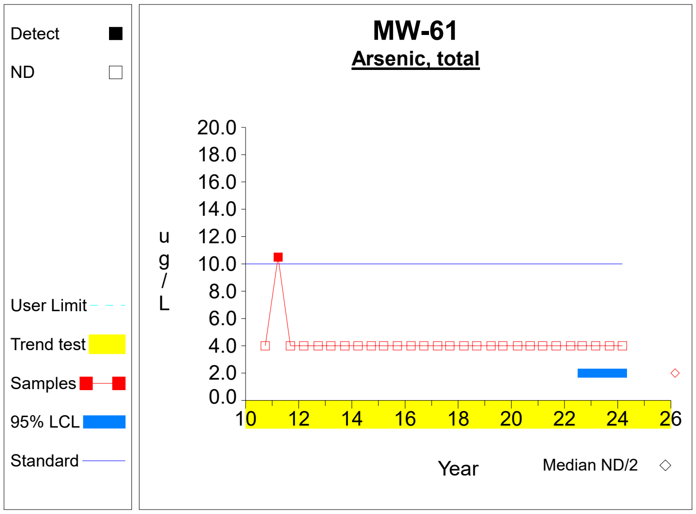


Graph 11

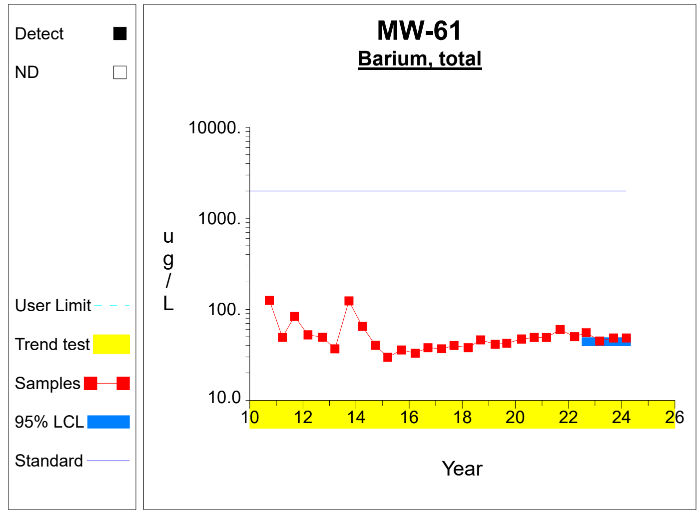


Graph 12

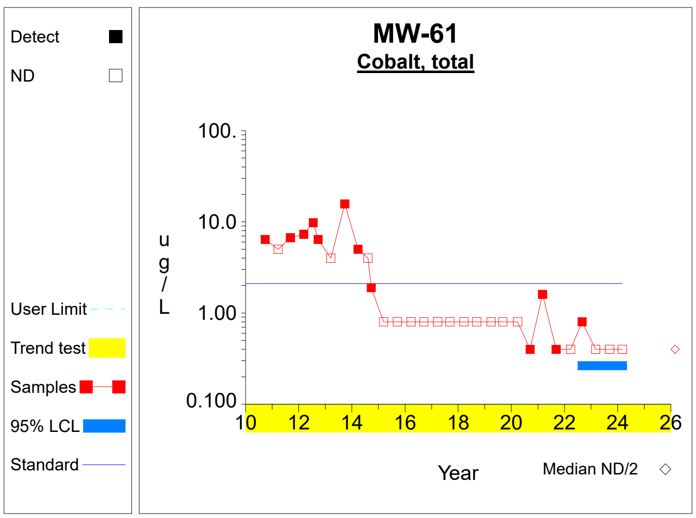
Confidence Limits (Assessment)



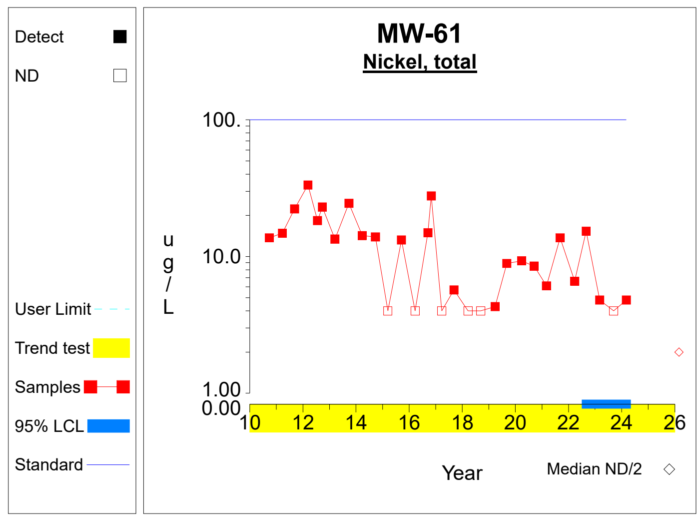
Graph 13



Graph 14

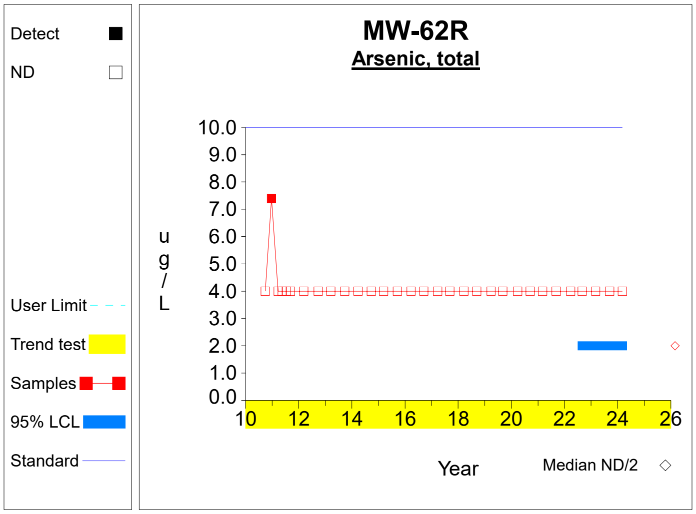


Graph 15

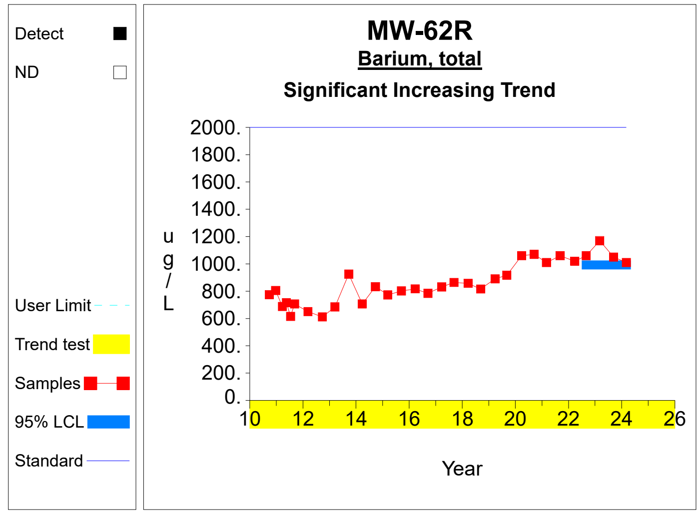


Graph 16

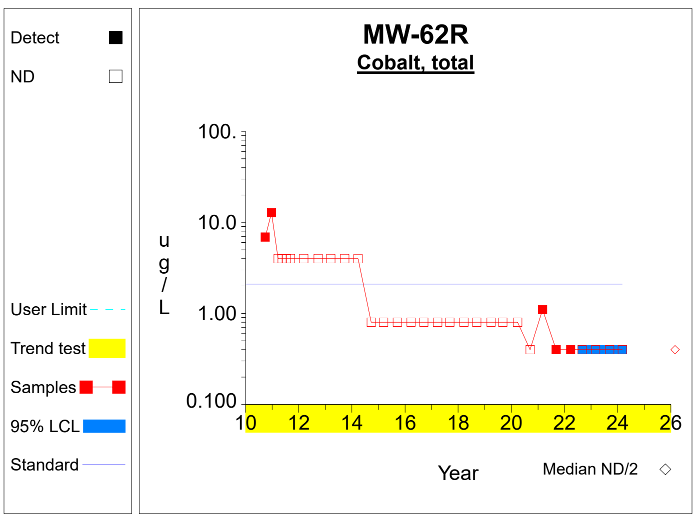
Confidence Limits (Assessment)



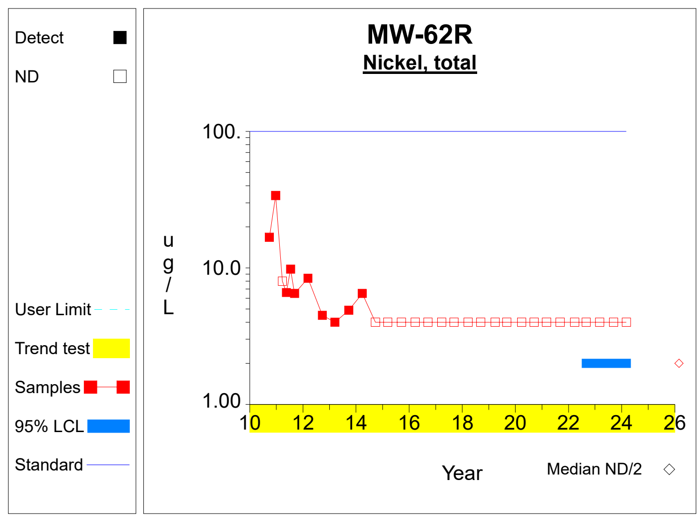
Graph 17



Graph 18

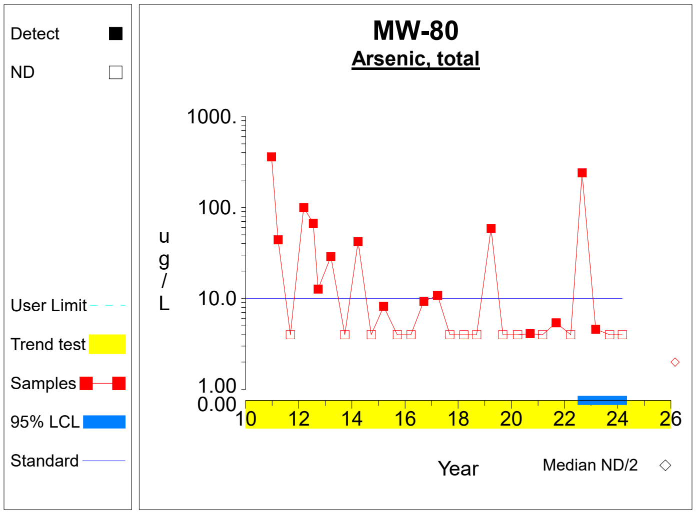


Graph 19

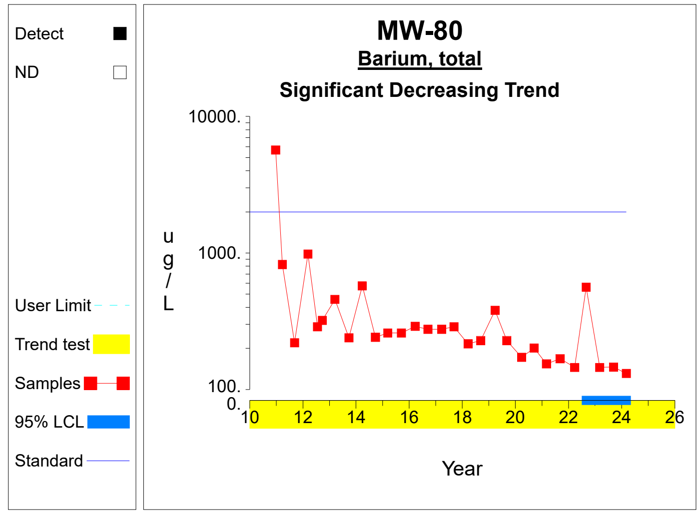


Graph 20

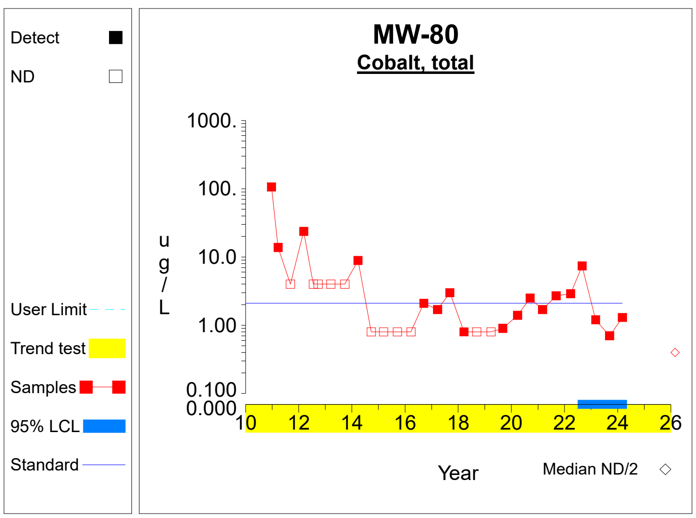
Confidence Limits (Assessment)



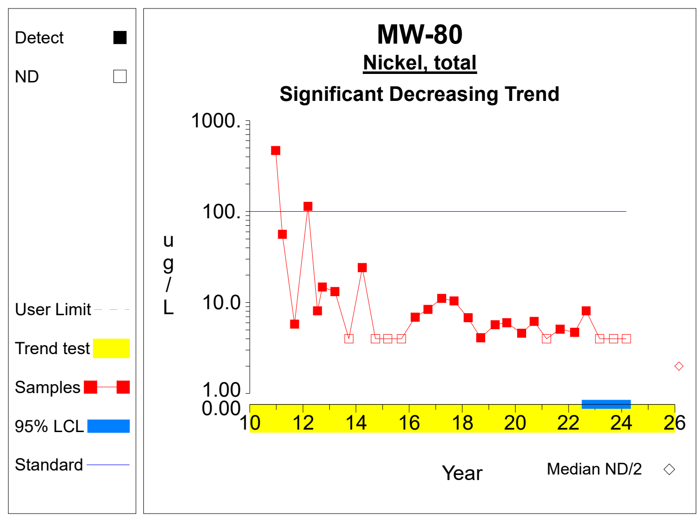
Graph 21



Graph 22

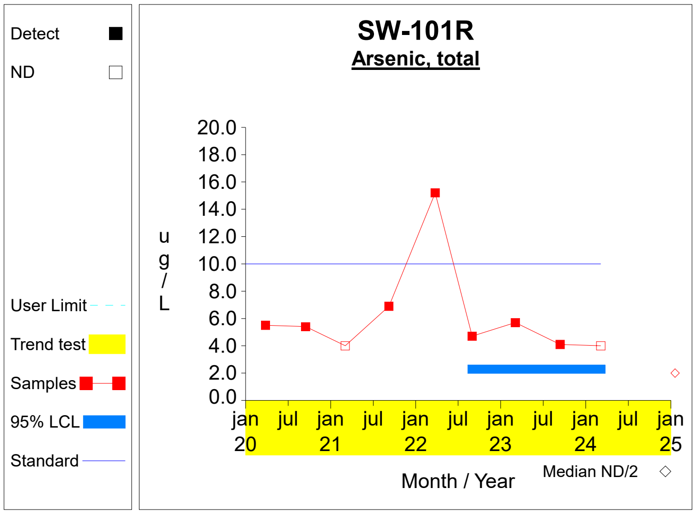


Graph 23

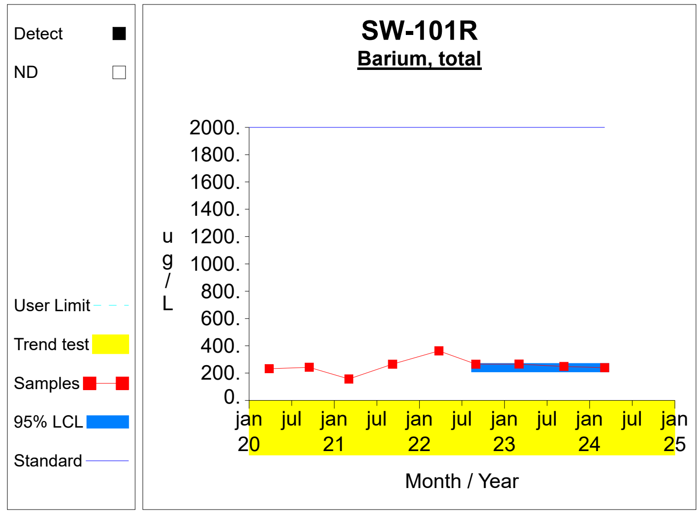


Graph 24

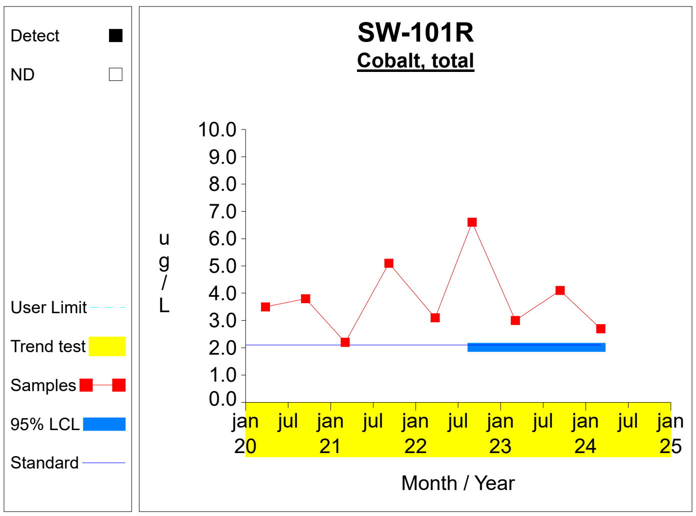
Confidence Limits (Assessment)



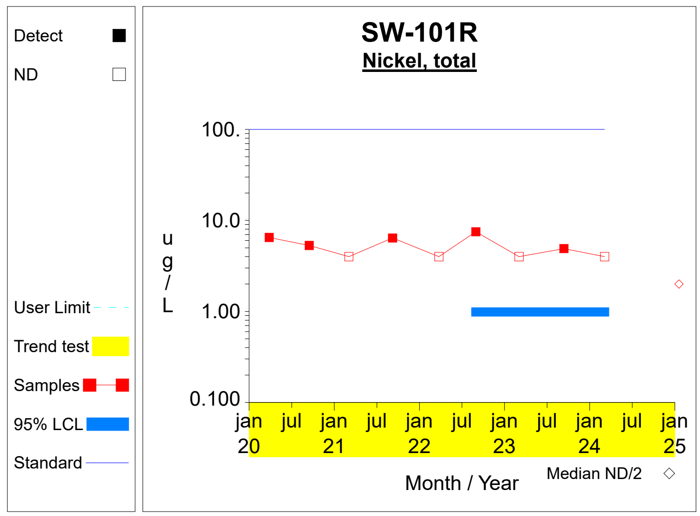
Graph 25



Graph 26



Graph 27



Graph 28

Attachment D

Summary Tables and Graphs for the Interwell Comparisons – Old Landfill

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Antimony, total	ug/L	MW-39	09/24/2014	ND	2.0000		
Antimony, total	ug/L	MW-39	12/05/2014	ND	2.0000		
Antimony, total	ug/L	MW-39	03/11/2015	ND	2.0000		
Antimony, total	ug/L	MW-39	06/16/2015	ND	2.0000		
Antimony, total	ug/L	MW-39	09/17/2015	ND	2.0000		
Antimony, total	ug/L	MW-39	03/22/2016	ND	2.0000		
Antimony, total	ug/L	MW-39	09/15/2016	ND	2.0000		
Antimony, total	ug/L	MW-39	03/23/2017	ND	2.0000		
Antimony, total	ug/L	MW-39	09/08/2017	ND	2.0000		
Antimony, total	ug/L	MW-39	03/19/2018	ND	2.0000		
Antimony, total	ug/L	MW-39	09/11/2018	ND	2.0000		
Antimony, total	ug/L	MW-39	03/26/2019	ND	2.0000		
Antimony, total	ug/L	MW-39	09/04/2019	ND	2.0000		
Antimony, total	ug/L	MW-39	03/26/2020	ND	2.0000		
Antimony, total	ug/L	MW-39	09/15/2020	ND	2.0000		
Antimony, total	ug/L	MW-39	03/02/2021	ND	2.0000		
Antimony, total	ug/L	MW-39	09/07/2021	ND	2.0000		
Antimony, total	ug/L	MW-39	03/24/2022	ND	2.0000		
Antimony, total	ug/L	MW-39	08/31/2022	ND	2.0000		
Antimony, total	ug/L	MW-39	03/02/2023	ND	2.0000		
Antimony, total	ug/L	MW-39	09/12/2023	ND	2.0000		
Antimony, total	ug/L	MW-39	03/04/2024	ND	2.0000		
Arsenic, total	ug/L	MW-39	09/24/2014	ND	4.0000		
Arsenic, total	ug/L	MW-39	12/05/2014	ND	4.0000		
Arsenic, total	ug/L	MW-39	03/11/2015	ND	4.0000		
Arsenic, total	ug/L	MW-39	06/16/2015	ND	4.0000		
Arsenic, total	ug/L	MW-39	09/17/2015	ND	4.0000		
Arsenic, total	ug/L	MW-39	03/22/2016	ND	4.0000		
Arsenic, total	ug/L	MW-39	09/15/2016	ND	4.0000		
Arsenic, total	ug/L	MW-39	03/23/2017	ND	4.0000		
Arsenic, total	ug/L	MW-39	09/08/2017	ND	4.0000		
Arsenic, total	ug/L	MW-39	03/19/2018	ND	4.0000		
Arsenic, total	ug/L	MW-39	09/11/2018	ND	4.0000		
Arsenic, total	ug/L	MW-39	03/26/2019	ND	4.0000		
Arsenic, total	ug/L	MW-39	09/04/2019	ND	4.0000		
Arsenic, total	ug/L	MW-39	03/26/2020	ND	4.0000		
Arsenic, total	ug/L	MW-39	09/15/2020	ND	4.0000		
Arsenic, total	ug/L	MW-39	03/02/2021	ND	4.0000		
Arsenic, total	ug/L	MW-39	09/07/2021	ND	4.0000		
Arsenic, total	ug/L	MW-39	03/24/2022	ND	4.0000		
Arsenic, total	ug/L	MW-39	08/31/2022	ND	4.0000		
Arsenic, total	ug/L	MW-39	03/02/2023	ND	4.0000		
Arsenic, total	ug/L	MW-39	09/12/2023	ND	4.0000		
Arsenic, total	ug/L	MW-39	03/04/2024	ND	4.0000		
Barium, total	ug/L	MW-39	09/24/2014		60.6000		
Barium, total	ug/L	MW-39	12/05/2014		139.0000		
Barium, total	ug/L	MW-39	03/11/2015		136.0000		
Barium, total	ug/L	MW-39	06/16/2015		148.0000		
Barium, total	ug/L	MW-39	09/17/2015		128.0000		
Barium, total	ug/L	MW-39	03/22/2016		123.0000		
Barium, total	ug/L	MW-39	09/15/2016		103.0000		
Barium, total	ug/L	MW-39	03/23/2017		129.0000		
Barium, total	ug/L	MW-39	09/08/2017		117.0000		
Barium, total	ug/L	MW-39	03/19/2018		131.0000		
Barium, total	ug/L	MW-39	09/11/2018		114.0000		
Barium, total	ug/L	MW-39	03/26/2019		121.0000		
Barium, total	ug/L	MW-39	09/04/2019		138.0000		
Barium, total	ug/L	MW-39	03/26/2020		150.0000		
Barium, total	ug/L	MW-39	09/15/2020		136.0000		
Barium, total	ug/L	MW-39	03/02/2021		125.0000		
Barium, total	ug/L	MW-39	09/07/2021		141.0000		
Barium, total	ug/L	MW-39	03/24/2022		137.0000		
Barium, total	ug/L	MW-39	08/31/2022		132.0000		
Barium, total	ug/L	MW-39	03/02/2023		134.0000		
Barium, total	ug/L	MW-39	09/12/2023		133.0000		
Barium, total	ug/L	MW-39	03/04/2024		128.0000		
Beryllium, total	ug/L	MW-39	09/24/2014	ND	4.0000		
Beryllium, total	ug/L	MW-39	12/05/2014	ND	4.0000		
Beryllium, total	ug/L	MW-39	03/11/2015	ND	4.0000		
Beryllium, total	ug/L	MW-39	06/16/2015	ND	4.0000		
Beryllium, total	ug/L	MW-39	09/17/2015	ND	4.0000		
Beryllium, total	ug/L	MW-39	03/22/2016	ND	4.0000		
Beryllium, total	ug/L	MW-39	09/15/2016	ND	4.0000		
Beryllium, total	ug/L	MW-39	03/23/2017	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-39	09/08/2017	ND	4.0000		
Beryllium, total	ug/L	MW-39	03/19/2018	ND	4.0000		
Beryllium, total	ug/L	MW-39	09/11/2018	ND	4.0000		
Beryllium, total	ug/L	MW-39	03/26/2019	ND	4.0000		
Beryllium, total	ug/L	MW-39	09/04/2019	ND	4.0000		
Beryllium, total	ug/L	MW-39	03/26/2020	ND	4.0000		
Beryllium, total	ug/L	MW-39	09/15/2020	ND	4.0000		
Beryllium, total	ug/L	MW-39	03/02/2021	ND	4.0000		
Beryllium, total	ug/L	MW-39	09/07/2021	ND	4.0000		
Beryllium, total	ug/L	MW-39	03/24/2022	ND	4.0000		
Beryllium, total	ug/L	MW-39	08/31/2022	ND	4.0000		
Beryllium, total	ug/L	MW-39	03/02/2023	ND	4.0000		
Beryllium, total	ug/L	MW-39	09/12/2023	ND	4.0000		
Beryllium, total	ug/L	MW-39	03/04/2024	ND	4.0000		
Cadmium, total	ug/L	MW-39	09/24/2014	ND	0.8000		
Cadmium, total	ug/L	MW-39	12/05/2014	ND	0.8000		
Cadmium, total	ug/L	MW-39	03/11/2015	ND	0.8000		
Cadmium, total	ug/L	MW-39	06/16/2015	ND	0.8000		
Cadmium, total	ug/L	MW-39	09/17/2015	ND	0.8000		
Cadmium, total	ug/L	MW-39	03/22/2016	ND	0.8000		
Cadmium, total	ug/L	MW-39	09/15/2016	ND	0.8000		
Cadmium, total	ug/L	MW-39	03/23/2017	ND	0.8000		
Cadmium, total	ug/L	MW-39	09/08/2017	ND	0.8000		
Cadmium, total	ug/L	MW-39	03/19/2018	ND	0.8000		
Cadmium, total	ug/L	MW-39	09/11/2018	ND	0.8000		
Cadmium, total	ug/L	MW-39	03/26/2019	ND	0.8000		
Cadmium, total	ug/L	MW-39	09/04/2019	ND	0.8000		
Cadmium, total	ug/L	MW-39	03/26/2020	ND	0.8000		
Cadmium, total	ug/L	MW-39	09/15/2020	ND	0.8000		
Cadmium, total	ug/L	MW-39	03/02/2021	ND	0.8000		
Cadmium, total	ug/L	MW-39	09/07/2021	ND	0.8000		
Cadmium, total	ug/L	MW-39	03/24/2022	ND	0.8000		
Cadmium, total	ug/L	MW-39	08/31/2022	ND	0.8000		
Cadmium, total	ug/L	MW-39	03/02/2023	ND	0.8000		
Cadmium, total	ug/L	MW-39	09/12/2023	ND	0.8000		
Cadmium, total	ug/L	MW-39	03/04/2024	ND	0.8000		
Chromium, total	ug/L	MW-39	09/24/2014	ND	8.0000		
Chromium, total	ug/L	MW-39	12/05/2014	ND	8.0000		
Chromium, total	ug/L	MW-39	03/11/2015	ND	8.0000		
Chromium, total	ug/L	MW-39	06/16/2015	ND	8.0000		
Chromium, total	ug/L	MW-39	09/17/2015	ND	8.0000		
Chromium, total	ug/L	MW-39	03/22/2016	ND	8.0000		
Chromium, total	ug/L	MW-39	09/15/2016	ND	8.0000		
Chromium, total	ug/L	MW-39	03/23/2017	ND	8.0000		
Chromium, total	ug/L	MW-39	09/08/2017	ND	8.0000		
Chromium, total	ug/L	MW-39	03/19/2018	ND	8.0000		
Chromium, total	ug/L	MW-39	09/11/2018	ND	8.0000		
Chromium, total	ug/L	MW-39	03/26/2019	ND	8.0000		
Chromium, total	ug/L	MW-39	09/04/2019	ND	8.0000		
Chromium, total	ug/L	MW-39	03/26/2020	ND	8.0000		
Chromium, total	ug/L	MW-39	09/15/2020	ND	8.0000		
Chromium, total	ug/L	MW-39	03/02/2021	ND	8.0000		
Chromium, total	ug/L	MW-39	09/07/2021	ND	8.0000		
Chromium, total	ug/L	MW-39	03/24/2022	ND	8.0000		
Chromium, total	ug/L	MW-39	08/31/2022	ND	8.0000		
Chromium, total	ug/L	MW-39	03/02/2023	ND	8.0000		
Chromium, total	ug/L	MW-39	09/12/2023	ND	8.0000		
Chromium, total	ug/L	MW-39	03/04/2024	ND	8.0000		
Cobalt, total	ug/L	MW-39	09/24/2014	ND	0.8000		
Cobalt, total	ug/L	MW-39	12/05/2014	ND	0.8000		
Cobalt, total	ug/L	MW-39	03/11/2015	ND	0.8000		
Cobalt, total	ug/L	MW-39	06/16/2015	ND	0.8000		
Cobalt, total	ug/L	MW-39	09/17/2015	ND	0.8000		
Cobalt, total	ug/L	MW-39	03/22/2016	ND	0.8000		
Cobalt, total	ug/L	MW-39	09/15/2016	ND	0.8000		
Cobalt, total	ug/L	MW-39	03/23/2017	ND	0.8000		
Cobalt, total	ug/L	MW-39	09/08/2017	ND	0.8000		
Cobalt, total	ug/L	MW-39	03/19/2018	ND	0.8000		
Cobalt, total	ug/L	MW-39	09/11/2018	ND	0.8000		
Cobalt, total	ug/L	MW-39	03/26/2019	ND	0.8000		
Cobalt, total	ug/L	MW-39	09/04/2019	ND	0.8000		
Cobalt, total	ug/L	MW-39	03/26/2020	ND	0.8000		
Cobalt, total	ug/L	MW-39	09/15/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-39	03/02/2021		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	
Cobalt, total	ug/L	MW-39	09/07/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-39	03/24/2022	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-39	08/31/2022		0.8000		
Cobalt, total	ug/L	MW-39	03/02/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-39	09/12/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-39	03/04/2024	ND	0.4000	0.8000	**
Copper, total	ug/L	MW-39	09/24/2014	ND	4.0000		
Copper, total	ug/L	MW-39	12/05/2014	ND	4.0000		
Copper, total	ug/L	MW-39	03/11/2015	ND	4.0000		
Copper, total	ug/L	MW-39	06/16/2015	ND	4.0000		
Copper, total	ug/L	MW-39	09/17/2015	ND	4.0000		
Copper, total	ug/L	MW-39	03/22/2016	ND	4.0000		
Copper, total	ug/L	MW-39	09/15/2016	ND	4.0000		
Copper, total	ug/L	MW-39	03/23/2017	ND	4.0000		
Copper, total	ug/L	MW-39	09/08/2017	ND	4.0000		
Copper, total	ug/L	MW-39	03/19/2018	ND	4.0000		
Copper, total	ug/L	MW-39	09/11/2018	ND	4.0000		
Copper, total	ug/L	MW-39	03/26/2019	ND	4.0000		
Copper, total	ug/L	MW-39	09/04/2019	ND	4.0000		
Copper, total	ug/L	MW-39	03/26/2020	ND	4.0000		
Copper, total	ug/L	MW-39	09/15/2020	ND	4.0000		
Copper, total	ug/L	MW-39	03/02/2021	ND	4.0000		
Copper, total	ug/L	MW-39	09/07/2021	ND	4.0000		
Copper, total	ug/L	MW-39	03/24/2022	ND	4.0000		
Copper, total	ug/L	MW-39	08/31/2022	ND	4.0000		
Copper, total	ug/L	MW-39	03/02/2023	ND	4.0000		
Copper, total	ug/L	MW-39	09/12/2023	ND	4.0000		
Copper, total	ug/L	MW-39	03/04/2024	ND	4.0000		
Lead, total	ug/L	MW-39	09/24/2014	ND	4.0000		
Lead, total	ug/L	MW-39	12/05/2014	ND	4.0000		
Lead, total	ug/L	MW-39	03/11/2015	ND	4.0000		
Lead, total	ug/L	MW-39	06/16/2015	ND	4.0000		
Lead, total	ug/L	MW-39	09/17/2015	ND	4.0000		
Lead, total	ug/L	MW-39	03/22/2016	ND	4.0000		
Lead, total	ug/L	MW-39	09/15/2016	ND	4.0000		
Lead, total	ug/L	MW-39	03/23/2017	ND	4.0000		
Lead, total	ug/L	MW-39	09/08/2017	ND	4.0000		
Lead, total	ug/L	MW-39	03/19/2018	ND	4.0000		
Lead, total	ug/L	MW-39	09/11/2018	ND	4.0000		
Lead, total	ug/L	MW-39	03/26/2019	ND	4.0000		
Lead, total	ug/L	MW-39	09/04/2019	ND	4.0000		
Lead, total	ug/L	MW-39	03/26/2020	ND	4.0000		
Lead, total	ug/L	MW-39	09/15/2020	ND	4.0000		
Lead, total	ug/L	MW-39	03/02/2021	ND	4.0000		
Lead, total	ug/L	MW-39	09/07/2021	ND	4.0000		
Lead, total	ug/L	MW-39	03/24/2022	ND	4.0000		
Lead, total	ug/L	MW-39	08/31/2022	ND	4.0000		
Lead, total	ug/L	MW-39	03/02/2023	ND	4.0000		
Lead, total	ug/L	MW-39	09/12/2023	ND	4.0000		
Lead, total	ug/L	MW-39	03/04/2024	ND	4.0000		
Nickel, total	ug/L	MW-39	09/24/2014	ND	4.0000		
Nickel, total	ug/L	MW-39	12/05/2014	ND	4.0000		
Nickel, total	ug/L	MW-39	03/11/2015	ND	4.0000		
Nickel, total	ug/L	MW-39	06/16/2015	ND	4.0000		
Nickel, total	ug/L	MW-39	09/17/2015	ND	4.0000		
Nickel, total	ug/L	MW-39	03/22/2016	ND	4.0000		
Nickel, total	ug/L	MW-39	09/15/2016	ND	4.0000		
Nickel, total	ug/L	MW-39	03/23/2017	ND	4.0000		
Nickel, total	ug/L	MW-39	09/08/2017	ND	4.0000		
Nickel, total	ug/L	MW-39	03/19/2018	ND	4.0000		
Nickel, total	ug/L	MW-39	09/11/2018	ND	4.0000		
Nickel, total	ug/L	MW-39	03/26/2019	ND	4.0000		
Nickel, total	ug/L	MW-39	09/04/2019	ND	4.0000		
Nickel, total	ug/L	MW-39	03/26/2020	ND	4.0000		
Nickel, total	ug/L	MW-39	09/15/2020	ND	4.0000		
Nickel, total	ug/L	MW-39	03/02/2021	ND	4.0000		
Nickel, total	ug/L	MW-39	09/07/2021	ND	4.0000		
Nickel, total	ug/L	MW-39	03/24/2022	ND	4.0000		
Nickel, total	ug/L	MW-39	08/31/2022	ND	4.0000		
Nickel, total	ug/L	MW-39	03/02/2023	ND	4.0000		
Nickel, total	ug/L	MW-39	09/12/2023	ND	4.0000		
Nickel, total	ug/L	MW-39	03/04/2024	ND	4.0000		
Selenium, total	ug/L	MW-39	09/24/2014	ND	4.0000		
Selenium, total	ug/L	MW-39	12/05/2014	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-39	03/11/2015	ND	4.0000		
Selenium, total	ug/L	MW-39	06/16/2015	ND	4.0000		
Selenium, total	ug/L	MW-39	09/17/2015	ND	4.0000		
Selenium, total	ug/L	MW-39	03/22/2016	ND	4.0000		
Selenium, total	ug/L	MW-39	09/15/2016	ND	4.0000		
Selenium, total	ug/L	MW-39	03/23/2017	ND	4.0000		
Selenium, total	ug/L	MW-39	09/08/2017	ND	4.0000		
Selenium, total	ug/L	MW-39	03/19/2018	ND	4.0000		
Selenium, total	ug/L	MW-39	09/11/2018	ND	4.0000		
Selenium, total	ug/L	MW-39	03/26/2019	ND	4.0000		
Selenium, total	ug/L	MW-39	09/04/2019	ND	4.0000		
Selenium, total	ug/L	MW-39	03/26/2020	ND	4.0000		
Selenium, total	ug/L	MW-39	09/15/2020	ND	4.0000		
Selenium, total	ug/L	MW-39	03/02/2021	ND	4.0000		
Selenium, total	ug/L	MW-39	09/07/2021	ND	4.0000		
Selenium, total	ug/L	MW-39	03/24/2022	ND	4.0000		
Selenium, total	ug/L	MW-39	08/31/2022	ND	4.0000		
Selenium, total	ug/L	MW-39	03/02/2023	ND	4.0000		
Selenium, total	ug/L	MW-39	09/12/2023	ND	4.0000		
Selenium, total	ug/L	MW-39	03/04/2024	ND	4.0000		
Silver, total	ug/L	MW-39	09/24/2014	ND	4.0000		
Silver, total	ug/L	MW-39	12/05/2014	ND	4.0000		
Silver, total	ug/L	MW-39	03/11/2015	ND	4.0000		
Silver, total	ug/L	MW-39	06/16/2015	ND	4.0000		
Silver, total	ug/L	MW-39	09/17/2015	ND	4.0000		
Silver, total	ug/L	MW-39	03/22/2016	ND	4.0000		
Silver, total	ug/L	MW-39	09/15/2016		6.4000		
Silver, total	ug/L	MW-39	03/23/2017	ND	4.0000		
Silver, total	ug/L	MW-39	09/08/2017	ND	4.0000		
Silver, total	ug/L	MW-39	03/19/2018	ND	4.0000		
Silver, total	ug/L	MW-39	09/11/2018	ND	4.0000		
Silver, total	ug/L	MW-39	03/26/2019	ND	4.0000		
Silver, total	ug/L	MW-39	09/04/2019	ND	4.0000		
Silver, total	ug/L	MW-39	03/26/2020	ND	4.0000		
Silver, total	ug/L	MW-39	09/15/2020	ND	4.0000		
Silver, total	ug/L	MW-39	03/02/2021	ND	4.0000		
Silver, total	ug/L	MW-39	09/07/2021	ND	4.0000		
Silver, total	ug/L	MW-39	03/24/2022	ND	4.0000		
Silver, total	ug/L	MW-39	08/31/2022	ND	4.0000		
Silver, total	ug/L	MW-39	03/02/2023	ND	4.0000		
Silver, total	ug/L	MW-39	09/12/2023	ND	4.0000		
Silver, total	ug/L	MW-39	03/04/2024	ND	4.0000		
Thallium, total	ug/L	MW-39	09/24/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	12/05/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	03/11/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	06/16/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	09/17/2015		2.4000		
Thallium, total	ug/L	MW-39	03/22/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	09/15/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	03/23/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	09/08/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	03/19/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	09/11/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	03/26/2019	ND	2.0000		
Thallium, total	ug/L	MW-39	09/04/2019	ND	2.0000		
Thallium, total	ug/L	MW-39	03/26/2020	ND	2.0000		
Thallium, total	ug/L	MW-39	09/15/2020	ND	2.0000		
Thallium, total	ug/L	MW-39	03/02/2021	ND	2.0000		
Thallium, total	ug/L	MW-39	09/07/2021	ND	2.0000		
Thallium, total	ug/L	MW-39	03/24/2022	ND	2.0000		
Thallium, total	ug/L	MW-39	08/31/2022	ND	2.0000		
Thallium, total	ug/L	MW-39	03/02/2023	ND	2.0000		
Thallium, total	ug/L	MW-39	09/12/2023	ND	2.0000		
Thallium, total	ug/L	MW-39	03/04/2024	ND	2.0000		
Vanadium, total	ug/L	MW-39	09/24/2014	ND	20.0000		
Vanadium, total	ug/L	MW-39	12/05/2014	ND	20.0000		
Vanadium, total	ug/L	MW-39	03/11/2015	ND	20.0000		
Vanadium, total	ug/L	MW-39	06/16/2015	ND	20.0000		
Vanadium, total	ug/L	MW-39	09/17/2015	ND	20.0000		
Vanadium, total	ug/L	MW-39	03/22/2016	ND	20.0000		
Vanadium, total	ug/L	MW-39	09/15/2016	ND	20.0000		
Vanadium, total	ug/L	MW-39	03/23/2017	ND	20.0000		
Vanadium, total	ug/L	MW-39	09/08/2017	ND	20.0000		
Vanadium, total	ug/L	MW-39	03/19/2018	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-39	09/11/2018	ND	20.0000		
Vanadium, total	ug/L	MW-39	03/26/2019	ND	20.0000		
Vanadium, total	ug/L	MW-39	09/04/2019	ND	20.0000		
Vanadium, total	ug/L	MW-39	03/26/2020	ND	20.0000		
Vanadium, total	ug/L	MW-39	09/15/2020	ND	20.0000		
Vanadium, total	ug/L	MW-39	03/02/2021	ND	20.0000		
Vanadium, total	ug/L	MW-39	09/07/2021	ND	20.0000		
Vanadium, total	ug/L	MW-39	03/24/2022	ND	20.0000		
Vanadium, total	ug/L	MW-39	08/31/2022	ND	20.0000		
Vanadium, total	ug/L	MW-39	03/02/2023	ND	20.0000		
Vanadium, total	ug/L	MW-39	09/12/2023	ND	20.0000		
Vanadium, total	ug/L	MW-39	03/04/2024	ND	20.0000		
Zinc, total	ug/L	MW-39	09/24/2014	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	12/05/2014	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	03/11/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	06/16/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	09/17/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	03/22/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	09/15/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	03/23/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	09/08/2017	ND	20.0000		
Zinc, total	ug/L	MW-39	03/19/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	09/11/2018	ND	20.0000		
Zinc, total	ug/L	MW-39	03/26/2019		24.6000		
Zinc, total	ug/L	MW-39	09/04/2019	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	03/26/2020	ND	20.0000		
Zinc, total	ug/L	MW-39	09/15/2020	ND	20.0000		
Zinc, total	ug/L	MW-39	03/02/2021	ND	20.0000		
Zinc, total	ug/L	MW-39	09/07/2021	ND	20.0000		
Zinc, total	ug/L	MW-39	03/24/2022	ND	20.0000		
Zinc, total	ug/L	MW-39	08/31/2022	ND	20.0000		
Zinc, total	ug/L	MW-39	03/02/2023	ND	20.0000		
Zinc, total	ug/L	MW-39	09/12/2023	ND	20.0000		
Zinc, total	ug/L	MW-39	03/04/2024	ND	20.0000		
Antimony, total	ug/L	MW-48	09/24/2014	ND	2.0000		
Antimony, total	ug/L	MW-48	12/05/2014	ND	2.0000		
Antimony, total	ug/L	MW-48	03/11/2015	ND	2.0000		
Antimony, total	ug/L	MW-48	06/16/2015	ND	2.0000		
Antimony, total	ug/L	MW-48	09/16/2015	ND	2.0000		
Antimony, total	ug/L	MW-48	03/22/2016	ND	2.0000		
Antimony, total	ug/L	MW-48	09/14/2016	ND	2.0000		
Antimony, total	ug/L	MW-48	03/23/2017	ND	2.0000		
Antimony, total	ug/L	MW-48	09/08/2017	ND	2.0000		
Antimony, total	ug/L	MW-48	03/19/2018	ND	2.0000		
Antimony, total	ug/L	MW-48	09/11/2018	ND	2.0000		
Antimony, total	ug/L	MW-48	03/26/2019	ND	2.0000		
Antimony, total	ug/L	MW-48	09/04/2019	ND	2.0000		
Antimony, total	ug/L	MW-48	03/26/2020	ND	2.0000		
Antimony, total	ug/L	MW-48	09/15/2020	ND	2.0000		
Antimony, total	ug/L	MW-48	03/02/2021	ND	2.0000		
Antimony, total	ug/L	MW-48	09/07/2021	ND	2.0000		
Antimony, total	ug/L	MW-48	03/24/2022	ND	2.0000		
Antimony, total	ug/L	MW-48	08/31/2022	ND	2.0000		
Antimony, total	ug/L	MW-48	03/02/2023	ND	2.0000		
Antimony, total	ug/L	MW-48	09/12/2023	ND	2.0000		
Antimony, total	ug/L	MW-48	03/04/2024	ND	2.0000		
Arsenic, total	ug/L	MW-48	09/24/2014	ND	4.0000		
Arsenic, total	ug/L	MW-48	12/05/2014	ND	4.0000		
Arsenic, total	ug/L	MW-48	03/11/2015	ND	4.0000		
Arsenic, total	ug/L	MW-48	06/16/2015	ND	4.0000		
Arsenic, total	ug/L	MW-48	09/16/2015	ND	4.0000		
Arsenic, total	ug/L	MW-48	03/22/2016	ND	4.0000		
Arsenic, total	ug/L	MW-48	09/14/2016	ND	4.0000		
Arsenic, total	ug/L	MW-48	03/23/2017	ND	4.0000		
Arsenic, total	ug/L	MW-48	09/08/2017	ND	4.0000		
Arsenic, total	ug/L	MW-48	03/19/2018	ND	4.0000		
Arsenic, total	ug/L	MW-48	09/11/2018	ND	4.0000		
Arsenic, total	ug/L	MW-48	03/26/2019	ND	4.0000		
Arsenic, total	ug/L	MW-48	09/04/2019	ND	4.0000		
Arsenic, total	ug/L	MW-48	03/26/2020	ND	4.0000		
Arsenic, total	ug/L	MW-48	09/15/2020	ND	4.0000		
Arsenic, total	ug/L	MW-48	03/02/2021	ND	4.0000		
Arsenic, total	ug/L	MW-48	09/07/2021	ND	4.0000		
Arsenic, total	ug/L	MW-48	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-48	08/31/2022	ND	4.0000		
Arsenic, total	ug/L	MW-48	03/02/2023	ND	4.0000		
Arsenic, total	ug/L	MW-48	09/12/2023	ND	4.0000		
Arsenic, total	ug/L	MW-48	03/04/2024	ND	4.0000		
Barium, total	ug/L	MW-48	09/24/2014		181.0000		
Barium, total	ug/L	MW-48	12/05/2014		168.0000		
Barium, total	ug/L	MW-48	03/11/2015		143.0000		
Barium, total	ug/L	MW-48	06/16/2015		161.0000		
Barium, total	ug/L	MW-48	09/16/2015		150.0000		
Barium, total	ug/L	MW-48	03/22/2016		153.0000		
Barium, total	ug/L	MW-48	09/14/2016		140.0000		
Barium, total	ug/L	MW-48	03/23/2017		146.0000		
Barium, total	ug/L	MW-48	09/08/2017		171.0000		
Barium, total	ug/L	MW-48	03/19/2018		145.0000		
Barium, total	ug/L	MW-48	09/11/2018		151.0000		
Barium, total	ug/L	MW-48	03/26/2019		153.0000		
Barium, total	ug/L	MW-48	09/04/2019		160.0000		
Barium, total	ug/L	MW-48	03/26/2020		156.0000		
Barium, total	ug/L	MW-48	09/15/2020		152.0000		
Barium, total	ug/L	MW-48	03/02/2021		159.0000		
Barium, total	ug/L	MW-48	09/07/2021		149.0000		
Barium, total	ug/L	MW-48	03/24/2022		143.0000		
Barium, total	ug/L	MW-48	08/31/2022		157.0000		
Barium, total	ug/L	MW-48	03/02/2023		149.0000		
Barium, total	ug/L	MW-48	09/12/2023		168.0000		
Barium, total	ug/L	MW-48	03/04/2024		149.0000		
Beryllium, total	ug/L	MW-48	09/24/2014	ND	4.0000		
Beryllium, total	ug/L	MW-48	12/05/2014	ND	4.0000		
Beryllium, total	ug/L	MW-48	03/11/2015	ND	4.0000		
Beryllium, total	ug/L	MW-48	06/16/2015	ND	4.0000		
Beryllium, total	ug/L	MW-48	09/16/2015	ND	4.0000		
Beryllium, total	ug/L	MW-48	03/22/2016	ND	4.0000		
Beryllium, total	ug/L	MW-48	09/14/2016	ND	4.0000		
Beryllium, total	ug/L	MW-48	03/23/2017	ND	4.0000		
Beryllium, total	ug/L	MW-48	09/08/2017	ND	4.0000		
Beryllium, total	ug/L	MW-48	03/19/2018	ND	4.0000		
Beryllium, total	ug/L	MW-48	09/11/2018	ND	4.0000		
Beryllium, total	ug/L	MW-48	03/26/2019	ND	4.0000		
Beryllium, total	ug/L	MW-48	09/04/2019	ND	4.0000		
Beryllium, total	ug/L	MW-48	03/26/2020	ND	4.0000		
Beryllium, total	ug/L	MW-48	09/15/2020	ND	4.0000		
Beryllium, total	ug/L	MW-48	03/02/2021	ND	4.0000		
Beryllium, total	ug/L	MW-48	09/07/2021	ND	4.0000		
Beryllium, total	ug/L	MW-48	03/24/2022	ND	4.0000		
Beryllium, total	ug/L	MW-48	08/31/2022	ND	4.0000		
Beryllium, total	ug/L	MW-48	03/02/2023	ND	4.0000		
Beryllium, total	ug/L	MW-48	09/12/2023	ND	4.0000		
Beryllium, total	ug/L	MW-48	03/04/2024	ND	4.0000		
Cadmium, total	ug/L	MW-48	09/24/2014	ND	0.8000		
Cadmium, total	ug/L	MW-48	12/05/2014	ND	0.8000		
Cadmium, total	ug/L	MW-48	03/11/2015	ND	0.8000		
Cadmium, total	ug/L	MW-48	06/16/2015	ND	0.8000		
Cadmium, total	ug/L	MW-48	09/16/2015	ND	0.8000		
Cadmium, total	ug/L	MW-48	03/22/2016	ND	0.8000		
Cadmium, total	ug/L	MW-48	09/14/2016	ND	0.8000		
Cadmium, total	ug/L	MW-48	03/23/2017	ND	0.8000		
Cadmium, total	ug/L	MW-48	09/08/2017	ND	0.8000		
Cadmium, total	ug/L	MW-48	03/19/2018	ND	0.8000		
Cadmium, total	ug/L	MW-48	09/11/2018	ND	0.8000		
Cadmium, total	ug/L	MW-48	03/26/2019	ND	0.8000		
Cadmium, total	ug/L	MW-48	09/04/2019	ND	0.8000		
Cadmium, total	ug/L	MW-48	03/26/2020	ND	0.8000		
Cadmium, total	ug/L	MW-48	09/15/2020	ND	0.8000		
Cadmium, total	ug/L	MW-48	03/02/2021	ND	0.8000		
Cadmium, total	ug/L	MW-48	09/07/2021	ND	0.8000		
Cadmium, total	ug/L	MW-48	03/24/2022	ND	0.8000		
Cadmium, total	ug/L	MW-48	08/31/2022	ND	0.8000		
Cadmium, total	ug/L	MW-48	03/02/2023	ND	0.8000		
Cadmium, total	ug/L	MW-48	09/12/2023	ND	0.8000		
Cadmium, total	ug/L	MW-48	03/04/2024	ND	0.8000		
Chromium, total	ug/L	MW-48	09/24/2014	ND	8.0000		
Chromium, total	ug/L	MW-48	12/05/2014	ND	8.0000		
Chromium, total	ug/L	MW-48	03/11/2015	ND	8.0000		
Chromium, total	ug/L	MW-48	06/16/2015	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-48	09/16/2015	ND	8.0000		
Chromium, total	ug/L	MW-48	03/22/2016	ND	8.0000		
Chromium, total	ug/L	MW-48	09/14/2016	ND	8.0000		
Chromium, total	ug/L	MW-48	03/23/2017	ND	8.0000		
Chromium, total	ug/L	MW-48	09/08/2017	ND	8.0000		
Chromium, total	ug/L	MW-48	03/19/2018	ND	8.0000		
Chromium, total	ug/L	MW-48	09/11/2018	ND	8.0000		
Chromium, total	ug/L	MW-48	03/26/2019	ND	8.0000		
Chromium, total	ug/L	MW-48	09/04/2019	ND	8.0000		
Chromium, total	ug/L	MW-48	03/26/2020	ND	8.0000		
Chromium, total	ug/L	MW-48	09/15/2020	ND	8.0000		
Chromium, total	ug/L	MW-48	03/02/2021	ND	8.0000		
Chromium, total	ug/L	MW-48	09/07/2021	ND	8.0000		
Chromium, total	ug/L	MW-48	03/24/2022	ND	8.0000		
Chromium, total	ug/L	MW-48	08/31/2022	ND	8.0000		
Chromium, total	ug/L	MW-48	03/02/2023	ND	8.0000		
Chromium, total	ug/L	MW-48	09/12/2023	ND	8.0000		
Chromium, total	ug/L	MW-48	03/04/2024	ND	8.0000		
Cobalt, total	ug/L	MW-48	09/24/2014	ND	0.8000		
Cobalt, total	ug/L	MW-48	12/05/2014	ND	0.8000		
Cobalt, total	ug/L	MW-48	03/11/2015	ND	0.8000		
Cobalt, total	ug/L	MW-48	06/16/2015	ND	0.8000		
Cobalt, total	ug/L	MW-48	09/16/2015	ND	0.8000		
Cobalt, total	ug/L	MW-48	03/22/2016	ND	0.8000		
Cobalt, total	ug/L	MW-48	09/14/2016	ND	0.8000		
Cobalt, total	ug/L	MW-48	03/23/2017	ND	0.8000		
Cobalt, total	ug/L	MW-48	09/08/2017	ND	0.8000		
Cobalt, total	ug/L	MW-48	03/19/2018	ND	0.8000		
Cobalt, total	ug/L	MW-48	09/11/2018	ND	0.8000		
Cobalt, total	ug/L	MW-48	03/26/2019	ND	0.8000		
Cobalt, total	ug/L	MW-48	09/04/2019	ND	0.8000		
Cobalt, total	ug/L	MW-48	03/26/2020	ND	0.8000		
Cobalt, total	ug/L	MW-48	09/15/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-48	03/02/2021		0.9000		
Cobalt, total	ug/L	MW-48	09/07/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-48	03/24/2022		0.4000		
Cobalt, total	ug/L	MW-48	08/31/2022	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-48	03/02/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-48	09/12/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-48	03/04/2024	ND	0.4000	0.8000	**
Copper, total	ug/L	MW-48	09/24/2014	ND	4.0000		
Copper, total	ug/L	MW-48	12/05/2014	ND	4.0000		
Copper, total	ug/L	MW-48	03/11/2015	ND	4.0000		
Copper, total	ug/L	MW-48	06/16/2015	ND	4.0000		
Copper, total	ug/L	MW-48	09/16/2015	ND	4.0000		
Copper, total	ug/L	MW-48	03/22/2016	ND	4.0000		
Copper, total	ug/L	MW-48	09/14/2016	ND	4.0000		
Copper, total	ug/L	MW-48	03/23/2017	ND	4.0000		
Copper, total	ug/L	MW-48	09/08/2017	ND	4.0000		
Copper, total	ug/L	MW-48	03/19/2018	ND	4.0000		
Copper, total	ug/L	MW-48	09/11/2018	ND	4.0000		
Copper, total	ug/L	MW-48	03/26/2019	ND	4.0000		
Copper, total	ug/L	MW-48	09/04/2019	ND	4.0000		
Copper, total	ug/L	MW-48	03/26/2020	ND	4.0000		
Copper, total	ug/L	MW-48	09/15/2020	ND	4.0000		
Copper, total	ug/L	MW-48	03/02/2021	ND	4.0000		
Copper, total	ug/L	MW-48	09/07/2021	ND	4.0000		
Copper, total	ug/L	MW-48	03/24/2022	ND	4.0000		
Copper, total	ug/L	MW-48	08/31/2022	ND	4.0000		
Copper, total	ug/L	MW-48	03/02/2023	ND	4.0000		
Copper, total	ug/L	MW-48	09/12/2023	ND	4.0000		
Copper, total	ug/L	MW-48	03/04/2024	ND	4.0000		
Lead, total	ug/L	MW-48	09/24/2014	ND	4.0000		
Lead, total	ug/L	MW-48	12/05/2014	ND	4.0000		
Lead, total	ug/L	MW-48	03/11/2015	ND	4.0000		
Lead, total	ug/L	MW-48	06/16/2015	ND	4.0000		
Lead, total	ug/L	MW-48	09/16/2015	ND	4.0000		
Lead, total	ug/L	MW-48	03/22/2016	ND	4.0000		
Lead, total	ug/L	MW-48	09/14/2016	ND	4.0000		
Lead, total	ug/L	MW-48	03/23/2017	ND	4.0000		
Lead, total	ug/L	MW-48	09/08/2017	ND	4.0000		
Lead, total	ug/L	MW-48	03/19/2018	ND	4.0000		
Lead, total	ug/L	MW-48	09/11/2018	ND	4.0000		
Lead, total	ug/L	MW-48	03/26/2019	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-48	09/04/2019	ND	4.0000		
Lead, total	ug/L	MW-48	03/26/2020	ND	4.0000		
Lead, total	ug/L	MW-48	09/15/2020	ND	4.0000		
Lead, total	ug/L	MW-48	03/02/2021	ND	4.0000		
Lead, total	ug/L	MW-48	09/07/2021	ND	4.0000		
Lead, total	ug/L	MW-48	03/24/2022	ND	4.0000		
Lead, total	ug/L	MW-48	08/31/2022	ND	4.0000		
Lead, total	ug/L	MW-48	03/02/2023	ND	4.0000		
Lead, total	ug/L	MW-48	09/12/2023	ND	4.0000		
Lead, total	ug/L	MW-48	03/04/2024	ND	4.0000		
Nickel, total	ug/L	MW-48	09/24/2014	ND	4.0000		
Nickel, total	ug/L	MW-48	12/05/2014	ND	4.0000		
Nickel, total	ug/L	MW-48	03/11/2015	ND	4.0000		
Nickel, total	ug/L	MW-48	06/16/2015	ND	4.0000		
Nickel, total	ug/L	MW-48	09/16/2015	ND	4.0000		
Nickel, total	ug/L	MW-48	03/22/2016	ND	4.0000		
Nickel, total	ug/L	MW-48	09/14/2016	ND	4.0000		
Nickel, total	ug/L	MW-48	03/23/2017	ND	4.0000		
Nickel, total	ug/L	MW-48	09/08/2017	ND	4.0000		
Nickel, total	ug/L	MW-48	03/19/2018	ND	4.0000		
Nickel, total	ug/L	MW-48	09/11/2018	ND	4.0000		
Nickel, total	ug/L	MW-48	03/26/2019	ND	4.0000		
Nickel, total	ug/L	MW-48	09/04/2019	ND	4.0000		
Nickel, total	ug/L	MW-48	03/26/2020	ND	4.0000		
Nickel, total	ug/L	MW-48	09/15/2020	ND	4.0000		
Nickel, total	ug/L	MW-48	03/02/2021	ND	4.0000		
Nickel, total	ug/L	MW-48	09/07/2021	ND	4.0000		
Nickel, total	ug/L	MW-48	03/24/2022	ND	4.0000		
Nickel, total	ug/L	MW-48	08/31/2022	ND	4.0000		
Nickel, total	ug/L	MW-48	03/02/2023	ND	4.0000		
Nickel, total	ug/L	MW-48	09/12/2023	ND	4.0000		
Nickel, total	ug/L	MW-48	03/04/2024	ND	4.0000		
Selenium, total	ug/L	MW-48	09/24/2014	ND	4.0000		
Selenium, total	ug/L	MW-48	12/05/2014	ND	4.0000		
Selenium, total	ug/L	MW-48	03/11/2015	ND	4.0000		
Selenium, total	ug/L	MW-48	06/16/2015	ND	4.0000		
Selenium, total	ug/L	MW-48	09/16/2015	ND	4.0000		
Selenium, total	ug/L	MW-48	03/22/2016	ND	4.0000		
Selenium, total	ug/L	MW-48	09/14/2016	ND	4.0000		
Selenium, total	ug/L	MW-48	03/23/2017	ND	4.0000		
Selenium, total	ug/L	MW-48	09/08/2017	ND	4.0000		
Selenium, total	ug/L	MW-48	03/19/2018	ND	4.0000		
Selenium, total	ug/L	MW-48	09/11/2018	ND	4.0000		
Selenium, total	ug/L	MW-48	03/26/2019	ND	4.0000		
Selenium, total	ug/L	MW-48	09/04/2019	ND	4.0000		
Selenium, total	ug/L	MW-48	03/26/2020	ND	4.0000		
Selenium, total	ug/L	MW-48	09/15/2020	ND	4.0000		
Selenium, total	ug/L	MW-48	03/02/2021	ND	4.0000		
Selenium, total	ug/L	MW-48	09/07/2021	ND	4.0000		
Selenium, total	ug/L	MW-48	03/24/2022	ND	4.0000		
Selenium, total	ug/L	MW-48	08/31/2022	ND	4.0000		
Selenium, total	ug/L	MW-48	03/02/2023	ND	4.0000		
Selenium, total	ug/L	MW-48	09/12/2023	ND	4.0000		
Selenium, total	ug/L	MW-48	03/04/2024	ND	4.0000		
Silver, total	ug/L	MW-48	09/24/2014	ND	4.0000		
Silver, total	ug/L	MW-48	12/05/2014	ND	4.0000		
Silver, total	ug/L	MW-48	03/11/2015	ND	4.0000		
Silver, total	ug/L	MW-48	06/16/2015	ND	4.0000		
Silver, total	ug/L	MW-48	09/16/2015	ND	4.0000		
Silver, total	ug/L	MW-48	03/22/2016	ND	4.0000		
Silver, total	ug/L	MW-48	09/14/2016	ND	4.0000		
Silver, total	ug/L	MW-48	03/23/2017	ND	4.0000		
Silver, total	ug/L	MW-48	09/08/2017	ND	4.0000		
Silver, total	ug/L	MW-48	03/19/2018	ND	4.0000		
Silver, total	ug/L	MW-48	09/11/2018	ND	4.0000		
Silver, total	ug/L	MW-48	03/26/2019	ND	4.0000		
Silver, total	ug/L	MW-48	09/04/2019	ND	4.0000		
Silver, total	ug/L	MW-48	03/26/2020	ND	4.0000		
Silver, total	ug/L	MW-48	09/15/2020	ND	4.0000		
Silver, total	ug/L	MW-48	03/02/2021	ND	4.0000		
Silver, total	ug/L	MW-48	09/07/2021	ND	4.0000		
Silver, total	ug/L	MW-48	03/24/2022	ND	4.0000		
Silver, total	ug/L	MW-48	08/31/2022	ND	4.0000		
Silver, total	ug/L	MW-48	03/02/2023	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-48	09/12/2023	ND	4.0000		
Silver, total	ug/L	MW-48	03/04/2024	ND	4.0000		
Thallium, total	ug/L	MW-48	09/24/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-48	12/05/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-48	03/11/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-48	06/16/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-48	09/16/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-48	03/22/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-48	09/14/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-48	03/23/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-48	09/08/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-48	03/19/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-48	09/11/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-48	03/26/2019	ND	2.0000		
Thallium, total	ug/L	MW-48	09/04/2019	ND	2.0000		
Thallium, total	ug/L	MW-48	03/26/2020	ND	2.0000		
Thallium, total	ug/L	MW-48	09/15/2020	ND	2.0000		
Thallium, total	ug/L	MW-48	03/02/2021	ND	2.0000		
Thallium, total	ug/L	MW-48	09/07/2021	ND	2.0000		
Thallium, total	ug/L	MW-48	03/24/2022	ND	2.0000		
Thallium, total	ug/L	MW-48	08/31/2022	ND	2.0000		
Thallium, total	ug/L	MW-48	03/02/2023	ND	2.0000		
Thallium, total	ug/L	MW-48	09/12/2023	ND	2.0000		
Thallium, total	ug/L	MW-48	03/04/2024	ND	2.0000		
Vanadium, total	ug/L	MW-48	09/24/2014	ND	20.0000		
Vanadium, total	ug/L	MW-48	12/05/2014	ND	20.0000		
Vanadium, total	ug/L	MW-48	03/11/2015	ND	20.0000		
Vanadium, total	ug/L	MW-48	06/16/2015	ND	20.0000		
Vanadium, total	ug/L	MW-48	09/16/2015	ND	20.0000		
Vanadium, total	ug/L	MW-48	03/22/2016	ND	20.0000		
Vanadium, total	ug/L	MW-48	09/14/2016	ND	20.0000		
Vanadium, total	ug/L	MW-48	03/23/2017	ND	20.0000		
Vanadium, total	ug/L	MW-48	09/08/2017	ND	20.0000		
Vanadium, total	ug/L	MW-48	03/19/2018	ND	20.0000		
Vanadium, total	ug/L	MW-48	09/11/2018	ND	20.0000		
Vanadium, total	ug/L	MW-48	03/26/2019	ND	20.0000		
Vanadium, total	ug/L	MW-48	09/04/2019	ND	20.0000		
Vanadium, total	ug/L	MW-48	03/26/2020	ND	20.0000		
Vanadium, total	ug/L	MW-48	09/15/2020	ND	20.0000		
Vanadium, total	ug/L	MW-48	03/02/2021	ND	20.0000		
Vanadium, total	ug/L	MW-48	09/07/2021	ND	20.0000		
Vanadium, total	ug/L	MW-48	03/24/2022	ND	20.0000		
Vanadium, total	ug/L	MW-48	08/31/2022	ND	20.0000		
Vanadium, total	ug/L	MW-48	03/02/2023	ND	20.0000		
Vanadium, total	ug/L	MW-48	09/12/2023	ND	20.0000		
Vanadium, total	ug/L	MW-48	03/04/2024	ND	20.0000		
Zinc, total	ug/L	MW-48	09/24/2014	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-48	12/05/2014	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-48	03/11/2015		32.3000		
Zinc, total	ug/L	MW-48	06/16/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-48	09/16/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-48	03/22/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-48	09/14/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-48	03/23/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-48	09/08/2017	ND	20.0000		
Zinc, total	ug/L	MW-48	03/19/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-48	09/11/2018	ND	20.0000		
Zinc, total	ug/L	MW-48	03/26/2019	ND	20.0000		
Zinc, total	ug/L	MW-48	09/04/2019	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-48	03/26/2020	ND	20.0000		
Zinc, total	ug/L	MW-48	09/15/2020	ND	20.0000		
Zinc, total	ug/L	MW-48	03/02/2021	ND	20.0000		
Zinc, total	ug/L	MW-48	09/07/2021	ND	20.0000		
Zinc, total	ug/L	MW-48	03/24/2022	ND	20.0000		
Zinc, total	ug/L	MW-48	08/31/2022	ND	20.0000		
Zinc, total	ug/L	MW-48	03/02/2023	ND	20.0000		
Zinc, total	ug/L	MW-48	09/12/2023	ND	20.0000		
Zinc, total	ug/L	MW-48	03/04/2024	ND	20.0000		
Antimony, total	ug/L	MW-78	09/24/2014	ND	2.0000		
Antimony, total	ug/L	MW-78	12/05/2014	ND	2.0000		
Antimony, total	ug/L	MW-78	03/11/2015	ND	2.0000		
Antimony, total	ug/L	MW-78	06/16/2015	ND	2.0000		
Antimony, total	ug/L	MW-78	09/16/2015	ND	2.0000		
Antimony, total	ug/L	MW-78	03/22/2016	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	
Antimony, total	ug/L	MW-78	09/15/2016	ND	2.0000		
Antimony, total	ug/L	MW-78	03/23/2017	ND	2.0000		
Antimony, total	ug/L	MW-78	09/08/2017	ND	2.0000		
Antimony, total	ug/L	MW-78	03/19/2018	ND	2.0000		
Antimony, total	ug/L	MW-78	09/11/2018	ND	2.0000		
Antimony, total	ug/L	MW-78	03/26/2019	ND	2.0000		
Antimony, total	ug/L	MW-78	09/04/2019	ND	2.0000		
Antimony, total	ug/L	MW-78	03/26/2020	ND	2.0000		
Antimony, total	ug/L	MW-78	09/15/2020	ND	2.0000		
Antimony, total	ug/L	MW-78	03/02/2021	ND	2.0000		
Antimony, total	ug/L	MW-78	09/07/2021	ND	2.0000		
Antimony, total	ug/L	MW-78	03/24/2022	ND	2.0000		
Antimony, total	ug/L	MW-78	08/31/2022	ND	2.0000		
Antimony, total	ug/L	MW-78	03/02/2023	ND	2.0000		
Antimony, total	ug/L	MW-78	09/12/2023	ND	2.0000		
Antimony, total	ug/L	MW-78	03/04/2024	ND	2.0000		
Arsenic, total	ug/L	MW-78	09/24/2014	ND	4.0000		
Arsenic, total	ug/L	MW-78	12/05/2014	ND	4.0000		
Arsenic, total	ug/L	MW-78	03/11/2015	ND	4.0000		
Arsenic, total	ug/L	MW-78	06/16/2015	ND	4.0000		
Arsenic, total	ug/L	MW-78	09/16/2015	ND	4.0000		
Arsenic, total	ug/L	MW-78	03/22/2016	ND	4.0000		
Arsenic, total	ug/L	MW-78	09/15/2016	ND	4.0000		
Arsenic, total	ug/L	MW-78	03/23/2017	ND	4.0000		
Arsenic, total	ug/L	MW-78	09/08/2017	ND	4.0000		
Arsenic, total	ug/L	MW-78	03/19/2018	ND	4.0000		
Arsenic, total	ug/L	MW-78	09/11/2018	ND	4.0000		
Arsenic, total	ug/L	MW-78	03/26/2019	ND	4.0000		
Arsenic, total	ug/L	MW-78	09/04/2019	ND	4.0000		
Arsenic, total	ug/L	MW-78	03/26/2020	ND	4.0000		
Arsenic, total	ug/L	MW-78	09/15/2020	ND	4.0000		
Arsenic, total	ug/L	MW-78	03/02/2021	ND	4.0000		
Arsenic, total	ug/L	MW-78	09/07/2021	ND	4.0000		
Arsenic, total	ug/L	MW-78	03/24/2022	ND	4.0000		
Arsenic, total	ug/L	MW-78	08/31/2022	ND	4.0000		
Arsenic, total	ug/L	MW-78	03/02/2023	ND	4.0000		
Arsenic, total	ug/L	MW-78	09/12/2023	ND	4.0000		
Arsenic, total	ug/L	MW-78	03/04/2024	ND	4.0000		
Barium, total	ug/L	MW-78	09/24/2014		304.0000		
Barium, total	ug/L	MW-78	12/05/2014		291.0000		
Barium, total	ug/L	MW-78	03/11/2015		304.0000		
Barium, total	ug/L	MW-78	06/16/2015		329.0000		
Barium, total	ug/L	MW-78	09/16/2015		298.0000		
Barium, total	ug/L	MW-78	03/22/2016		309.0000		
Barium, total	ug/L	MW-78	09/15/2016		311.0000		
Barium, total	ug/L	MW-78	03/23/2017		307.0000		
Barium, total	ug/L	MW-78	09/08/2017		357.0000		
Barium, total	ug/L	MW-78	03/19/2018		320.0000		
Barium, total	ug/L	MW-78	09/11/2018		295.0000		
Barium, total	ug/L	MW-78	03/26/2019		285.0000		
Barium, total	ug/L	MW-78	09/04/2019		332.0000		
Barium, total	ug/L	MW-78	03/26/2020		304.0000		
Barium, total	ug/L	MW-78	09/15/2020		319.0000		
Barium, total	ug/L	MW-78	03/02/2021		304.0000		
Barium, total	ug/L	MW-78	09/07/2021		332.0000		
Barium, total	ug/L	MW-78	03/24/2022		291.0000		
Barium, total	ug/L	MW-78	08/31/2022		340.0000		
Barium, total	ug/L	MW-78	03/02/2023		345.0000		
Barium, total	ug/L	MW-78	09/12/2023		309.0000		
Barium, total	ug/L	MW-78	03/04/2024		341.0000		
Beryllium, total	ug/L	MW-78	09/24/2014	ND	4.0000		
Beryllium, total	ug/L	MW-78	12/05/2014	ND	4.0000		
Beryllium, total	ug/L	MW-78	03/11/2015	ND	4.0000		
Beryllium, total	ug/L	MW-78	06/16/2015	ND	4.0000		
Beryllium, total	ug/L	MW-78	09/16/2015	ND	4.0000		
Beryllium, total	ug/L	MW-78	03/22/2016	ND	4.0000		
Beryllium, total	ug/L	MW-78	09/15/2016	ND	4.0000		
Beryllium, total	ug/L	MW-78	03/23/2017	ND	4.0000		
Beryllium, total	ug/L	MW-78	09/08/2017	ND	4.0000		
Beryllium, total	ug/L	MW-78	03/19/2018	ND	4.0000		
Beryllium, total	ug/L	MW-78	09/11/2018	ND	4.0000		
Beryllium, total	ug/L	MW-78	03/26/2019	ND	4.0000		
Beryllium, total	ug/L	MW-78	09/04/2019	ND	4.0000		
Beryllium, total	ug/L	MW-78	03/26/2020	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-78	09/15/2020	ND	4.0000		
Beryllium, total	ug/L	MW-78	03/02/2021	ND	4.0000		
Beryllium, total	ug/L	MW-78	09/07/2021	ND	4.0000		
Beryllium, total	ug/L	MW-78	03/24/2022	ND	4.0000		
Beryllium, total	ug/L	MW-78	08/31/2022	ND	4.0000		
Beryllium, total	ug/L	MW-78	03/02/2023	ND	4.0000		
Beryllium, total	ug/L	MW-78	09/12/2023	ND	4.0000		
Beryllium, total	ug/L	MW-78	03/04/2024	ND	4.0000		
Cadmium, total	ug/L	MW-78	09/24/2014	ND	0.8000		
Cadmium, total	ug/L	MW-78	12/05/2014	ND	0.8000		
Cadmium, total	ug/L	MW-78	03/11/2015	ND	0.8000		
Cadmium, total	ug/L	MW-78	06/16/2015	ND	0.8000		
Cadmium, total	ug/L	MW-78	09/16/2015	ND	0.8000		
Cadmium, total	ug/L	MW-78	03/22/2016	ND	0.8000		
Cadmium, total	ug/L	MW-78	09/15/2016	ND	0.8000		
Cadmium, total	ug/L	MW-78	03/23/2017	ND	0.8000		
Cadmium, total	ug/L	MW-78	09/08/2017	ND	0.8000		
Cadmium, total	ug/L	MW-78	03/19/2018	ND	0.8000		
Cadmium, total	ug/L	MW-78	09/11/2018	ND	0.8000		
Cadmium, total	ug/L	MW-78	03/26/2019	ND	0.8000		
Cadmium, total	ug/L	MW-78	09/04/2019	ND	0.8000		
Cadmium, total	ug/L	MW-78	03/26/2020	ND	0.8000		
Cadmium, total	ug/L	MW-78	09/15/2020	ND	0.8000		
Cadmium, total	ug/L	MW-78	03/02/2021	ND	0.8000		
Cadmium, total	ug/L	MW-78	09/07/2021	ND	0.8000		
Cadmium, total	ug/L	MW-78	03/24/2022	ND	0.8000		
Cadmium, total	ug/L	MW-78	08/31/2022	ND	0.8000		
Cadmium, total	ug/L	MW-78	03/02/2023	ND	0.8000		
Cadmium, total	ug/L	MW-78	09/12/2023	ND	0.8000		
Cadmium, total	ug/L	MW-78	03/04/2024	ND	0.8000		
Chromium, total	ug/L	MW-78	09/24/2014	ND	8.0000		
Chromium, total	ug/L	MW-78	12/05/2014	ND	8.0000		
Chromium, total	ug/L	MW-78	03/11/2015	ND	8.0000		
Chromium, total	ug/L	MW-78	06/16/2015	ND	8.0000		
Chromium, total	ug/L	MW-78	09/16/2015	ND	8.0000		
Chromium, total	ug/L	MW-78	03/22/2016	ND	8.0000		
Chromium, total	ug/L	MW-78	09/15/2016	ND	8.0000		
Chromium, total	ug/L	MW-78	03/23/2017	ND	8.0000		
Chromium, total	ug/L	MW-78	09/08/2017	ND	8.0000		
Chromium, total	ug/L	MW-78	03/19/2018	ND	8.0000		
Chromium, total	ug/L	MW-78	09/11/2018	ND	8.0000		
Chromium, total	ug/L	MW-78	03/26/2019	ND	8.0000		
Chromium, total	ug/L	MW-78	09/04/2019	ND	8.0000		
Chromium, total	ug/L	MW-78	03/26/2020	ND	8.0000		
Chromium, total	ug/L	MW-78	09/15/2020	ND	8.0000		
Chromium, total	ug/L	MW-78	03/02/2021	ND	8.0000		
Chromium, total	ug/L	MW-78	09/07/2021	ND	8.0000		
Chromium, total	ug/L	MW-78	03/24/2022	ND	8.0000		
Chromium, total	ug/L	MW-78	08/31/2022	ND	8.0000		
Chromium, total	ug/L	MW-78	03/02/2023	ND	8.0000		
Chromium, total	ug/L	MW-78	09/12/2023	ND	8.0000		
Chromium, total	ug/L	MW-78	03/04/2024	ND	8.0000		
Cobalt, total	ug/L	MW-78	09/24/2014	ND	0.8000		
Cobalt, total	ug/L	MW-78	12/05/2014	ND	0.8000		
Cobalt, total	ug/L	MW-78	03/11/2015	ND	0.8000		
Cobalt, total	ug/L	MW-78	06/16/2015	ND	0.8000		
Cobalt, total	ug/L	MW-78	09/16/2015	ND	0.8000		
Cobalt, total	ug/L	MW-78	03/22/2016	ND	0.8000		
Cobalt, total	ug/L	MW-78	09/15/2016	ND	0.8000		
Cobalt, total	ug/L	MW-78	03/23/2017	ND	0.8000		
Cobalt, total	ug/L	MW-78	09/08/2017	ND	0.8000		
Cobalt, total	ug/L	MW-78	03/19/2018	ND	0.8000		
Cobalt, total	ug/L	MW-78	09/11/2018	ND	0.8000		
Cobalt, total	ug/L	MW-78	03/26/2019	ND	0.8000		
Cobalt, total	ug/L	MW-78	09/04/2019	ND	0.8000		
Cobalt, total	ug/L	MW-78	03/26/2020	ND	0.8000		
Cobalt, total	ug/L	MW-78	09/15/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-78	03/02/2021		1.0000		
Cobalt, total	ug/L	MW-78	09/07/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-78	03/24/2022	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-78	08/31/2022	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-78	03/02/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-78	09/12/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-78	03/04/2024	ND	0.4000	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	
Copper, total	ug/L	MW-78	09/24/2014	ND	4.0000		
Copper, total	ug/L	MW-78	12/05/2014	ND	4.0000		
Copper, total	ug/L	MW-78	03/11/2015	ND	4.0000		
Copper, total	ug/L	MW-78	06/16/2015	ND	4.0000		
Copper, total	ug/L	MW-78	09/16/2015	ND	4.0000		
Copper, total	ug/L	MW-78	03/22/2016	ND	4.0000		
Copper, total	ug/L	MW-78	09/15/2016	ND	4.0000		
Copper, total	ug/L	MW-78	03/23/2017	ND	4.0000		
Copper, total	ug/L	MW-78	09/08/2017	ND	4.0000		
Copper, total	ug/L	MW-78	03/19/2018	ND	4.0000		
Copper, total	ug/L	MW-78	09/11/2018	ND	4.0000		
Copper, total	ug/L	MW-78	03/26/2019	ND	4.0000		
Copper, total	ug/L	MW-78	09/04/2019	ND	4.0000		
Copper, total	ug/L	MW-78	03/26/2020	ND	4.0000		
Copper, total	ug/L	MW-78	09/15/2020	ND	4.0000		
Copper, total	ug/L	MW-78	03/02/2021	ND	4.0000		
Copper, total	ug/L	MW-78	09/07/2021	ND	4.0000		
Copper, total	ug/L	MW-78	03/24/2022	ND	4.0000		
Copper, total	ug/L	MW-78	08/31/2022	ND	4.0000		
Copper, total	ug/L	MW-78	03/02/2023	ND	4.0000		
Copper, total	ug/L	MW-78	09/12/2023	ND	4.0000		
Copper, total	ug/L	MW-78	03/04/2024	ND	4.0000		
Lead, total	ug/L	MW-78	09/24/2014	ND	4.0000		
Lead, total	ug/L	MW-78	12/05/2014	ND	4.0000		
Lead, total	ug/L	MW-78	03/11/2015	ND	4.0000		
Lead, total	ug/L	MW-78	06/16/2015	ND	4.0000		
Lead, total	ug/L	MW-78	09/16/2015	ND	4.0000		
Lead, total	ug/L	MW-78	03/22/2016	ND	4.0000		
Lead, total	ug/L	MW-78	09/15/2016	ND	4.0000		
Lead, total	ug/L	MW-78	03/23/2017	ND	4.0000		
Lead, total	ug/L	MW-78	09/08/2017	ND	4.0000		
Lead, total	ug/L	MW-78	03/19/2018	ND	4.0000		
Lead, total	ug/L	MW-78	09/11/2018	ND	4.0000		
Lead, total	ug/L	MW-78	03/26/2019	ND	4.0000		
Lead, total	ug/L	MW-78	09/04/2019	ND	4.0000		
Lead, total	ug/L	MW-78	03/26/2020	ND	4.0000		
Lead, total	ug/L	MW-78	09/15/2020	ND	4.0000		
Lead, total	ug/L	MW-78	03/02/2021	ND	4.0000		
Lead, total	ug/L	MW-78	09/07/2021	ND	4.0000		
Lead, total	ug/L	MW-78	03/24/2022	ND	4.0000		
Lead, total	ug/L	MW-78	08/31/2022	ND	4.0000		
Lead, total	ug/L	MW-78	03/02/2023	ND	4.0000		
Lead, total	ug/L	MW-78	09/12/2023	ND	4.0000		
Lead, total	ug/L	MW-78	03/04/2024	ND	4.0000		
Nickel, total	ug/L	MW-78	09/24/2014	ND	4.0000		
Nickel, total	ug/L	MW-78	12/05/2014	ND	4.0000		
Nickel, total	ug/L	MW-78	03/11/2015	ND	4.0000		
Nickel, total	ug/L	MW-78	06/16/2015	ND	4.0000		
Nickel, total	ug/L	MW-78	09/16/2015	ND	4.0000		
Nickel, total	ug/L	MW-78	03/22/2016	ND	4.0000		
Nickel, total	ug/L	MW-78	09/15/2016	ND	4.0000		
Nickel, total	ug/L	MW-78	03/23/2017	ND	4.0000		
Nickel, total	ug/L	MW-78	09/08/2017	ND	4.0000		
Nickel, total	ug/L	MW-78	03/19/2018	ND	4.0000		
Nickel, total	ug/L	MW-78	09/11/2018	ND	4.0000		
Nickel, total	ug/L	MW-78	03/26/2019	ND	4.0000		
Nickel, total	ug/L	MW-78	09/04/2019	ND	4.0000		
Nickel, total	ug/L	MW-78	03/26/2020	ND	4.0000		
Nickel, total	ug/L	MW-78	09/15/2020	ND	4.0000		
Nickel, total	ug/L	MW-78	03/02/2021	ND	4.0000		
Nickel, total	ug/L	MW-78	09/07/2021	ND	4.0000		
Nickel, total	ug/L	MW-78	03/24/2022	ND	4.0000		
Nickel, total	ug/L	MW-78	08/31/2022	ND	4.0000		
Nickel, total	ug/L	MW-78	03/02/2023	ND	4.0000		
Nickel, total	ug/L	MW-78	09/12/2023	ND	4.0000		
Nickel, total	ug/L	MW-78	03/04/2024	ND	4.0000		
Selenium, total	ug/L	MW-78	09/24/2014		5.4000		
Selenium, total	ug/L	MW-78	12/05/2014		5.6000		
Selenium, total	ug/L	MW-78	03/11/2015		6.5000		
Selenium, total	ug/L	MW-78	06/16/2015		8.6000		
Selenium, total	ug/L	MW-78	09/16/2015		8.1000		
Selenium, total	ug/L	MW-78	03/22/2016		8.9000		
Selenium, total	ug/L	MW-78	09/15/2016		9.4000		
Selenium, total	ug/L	MW-78	03/23/2017		10.6000		

* - 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-78	09/08/2017		6.9000		
Selenium, total	ug/L	MW-78	03/19/2018		8.3000		
Selenium, total	ug/L	MW-78	09/11/2018		5.6000		
Selenium, total	ug/L	MW-78	03/26/2019		9.5000		
Selenium, total	ug/L	MW-78	09/04/2019		6.8000		
Selenium, total	ug/L	MW-78	03/26/2020		5.4000		
Selenium, total	ug/L	MW-78	09/15/2020		8.5000		
Selenium, total	ug/L	MW-78	03/02/2021		9.4000		
Selenium, total	ug/L	MW-78	09/07/2021		4.9000		
Selenium, total	ug/L	MW-78	03/24/2022		6.3000		
Selenium, total	ug/L	MW-78	08/31/2022		6.2000		
Selenium, total	ug/L	MW-78	03/02/2023		7.9000		
Selenium, total	ug/L	MW-78	09/12/2023		5.8000		
Selenium, total	ug/L	MW-78	03/04/2024		5.7000		
Silver, total	ug/L	MW-78	09/24/2014	ND	4.0000		
Silver, total	ug/L	MW-78	12/05/2014	ND	4.0000		
Silver, total	ug/L	MW-78	03/11/2015	ND	4.0000		
Silver, total	ug/L	MW-78	06/16/2015	ND	4.0000		
Silver, total	ug/L	MW-78	09/16/2015	ND	4.0000		
Silver, total	ug/L	MW-78	03/22/2016	ND	4.0000		
Silver, total	ug/L	MW-78	09/15/2016	ND	4.0000		
Silver, total	ug/L	MW-78	03/23/2017	ND	4.0000		
Silver, total	ug/L	MW-78	09/08/2017	ND	4.0000		
Silver, total	ug/L	MW-78	03/19/2018	ND	4.0000		
Silver, total	ug/L	MW-78	09/11/2018	ND	4.0000		
Silver, total	ug/L	MW-78	03/26/2019	ND	4.0000		
Silver, total	ug/L	MW-78	09/04/2019	ND	4.0000		
Silver, total	ug/L	MW-78	03/26/2020	ND	4.0000		
Silver, total	ug/L	MW-78	09/15/2020	ND	4.0000		
Silver, total	ug/L	MW-78	03/02/2021	ND	4.0000		
Silver, total	ug/L	MW-78	09/07/2021	ND	4.0000		
Silver, total	ug/L	MW-78	03/24/2022	ND	4.0000		
Silver, total	ug/L	MW-78	08/31/2022	ND	4.0000		
Silver, total	ug/L	MW-78	03/02/2023	ND	4.0000		
Silver, total	ug/L	MW-78	09/12/2023	ND	4.0000		
Silver, total	ug/L	MW-78	03/04/2024	ND	4.0000		
Thallium, total	ug/L	MW-78	09/24/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-78	12/05/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-78	03/11/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-78	06/16/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-78	09/16/2015	ND	1.0000	2.0000	**
Thallium, total	ug/L	MW-78	03/22/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-78	09/15/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-78	03/23/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-78	09/08/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-78	03/19/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-78	09/11/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-78	03/26/2019	ND	2.0000		
Thallium, total	ug/L	MW-78	09/04/2019	ND	2.0000		
Thallium, total	ug/L	MW-78	03/26/2020	ND	2.0000		
Thallium, total	ug/L	MW-78	09/15/2020	ND	2.0000		
Thallium, total	ug/L	MW-78	03/02/2021	ND	2.0000		
Thallium, total	ug/L	MW-78	09/07/2021	ND	2.0000		
Thallium, total	ug/L	MW-78	03/24/2022	ND	2.0000		
Thallium, total	ug/L	MW-78	08/31/2022	ND	2.0000		
Thallium, total	ug/L	MW-78	03/02/2023	ND	2.0000		
Thallium, total	ug/L	MW-78	09/12/2023	ND	2.0000		
Thallium, total	ug/L	MW-78	03/04/2024	ND	2.0000		
Vanadium, total	ug/L	MW-78	09/24/2014	ND	20.0000		
Vanadium, total	ug/L	MW-78	12/05/2014	ND	20.0000		
Vanadium, total	ug/L	MW-78	03/11/2015	ND	20.0000		
Vanadium, total	ug/L	MW-78	06/16/2015	ND	20.0000		
Vanadium, total	ug/L	MW-78	09/16/2015	ND	20.0000		
Vanadium, total	ug/L	MW-78	03/22/2016	ND	20.0000		
Vanadium, total	ug/L	MW-78	09/15/2016	ND	20.0000		
Vanadium, total	ug/L	MW-78	03/23/2017	ND	20.0000		
Vanadium, total	ug/L	MW-78	09/08/2017	ND	20.0000		
Vanadium, total	ug/L	MW-78	03/19/2018	ND	20.0000		
Vanadium, total	ug/L	MW-78	09/11/2018	ND	20.0000		
Vanadium, total	ug/L	MW-78	03/26/2019	ND	20.0000		
Vanadium, total	ug/L	MW-78	09/04/2019	ND	20.0000		
Vanadium, total	ug/L	MW-78	03/26/2020	ND	20.0000		
Vanadium, total	ug/L	MW-78	09/15/2020	ND	20.0000		
Vanadium, total	ug/L	MW-78	03/02/2021	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-78	09/07/2021	ND	20.0000		
Vanadium, total	ug/L	MW-78	03/24/2022	ND	20.0000		
Vanadium, total	ug/L	MW-78	08/31/2022	ND	20.0000		
Vanadium, total	ug/L	MW-78	03/02/2023	ND	20.0000		
Vanadium, total	ug/L	MW-78	09/12/2023	ND	20.0000		
Vanadium, total	ug/L	MW-78	03/04/2024	ND	20.0000		
Zinc, total	ug/L	MW-78	09/24/2014		10.7000		
Zinc, total	ug/L	MW-78	12/05/2014	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-78	03/11/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-78	06/16/2015		8.4000		
Zinc, total	ug/L	MW-78	09/16/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-78	03/22/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-78	09/15/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-78	03/23/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-78	09/08/2017	ND	20.0000		
Zinc, total	ug/L	MW-78	03/19/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-78	09/11/2018	ND	20.0000		
Zinc, total	ug/L	MW-78	03/26/2019	ND	20.0000		
Zinc, total	ug/L	MW-78	09/04/2019		17.6000		
Zinc, total	ug/L	MW-78	03/26/2020	ND	20.0000		
Zinc, total	ug/L	MW-78	09/15/2020	ND	20.0000		
Zinc, total	ug/L	MW-78	03/02/2021	ND	20.0000		
Zinc, total	ug/L	MW-78	09/07/2021	ND	20.0000		
Zinc, total	ug/L	MW-78	03/24/2022	ND	20.0000		
Zinc, total	ug/L	MW-78	08/31/2022	ND	20.0000		
Zinc, total	ug/L	MW-78	03/02/2023	ND	20.0000		
Zinc, total	ug/L	MW-78	09/12/2023	ND	20.0000		
Zinc, total	ug/L	MW-78	03/04/2024	ND	20.0000		
Antimony, total	ug/L	SW-101	09/14/2016	ND	2.0000		
Antimony, total	ug/L	SW-101	03/23/2017	ND	2.0000		
Antimony, total	ug/L	SW-101	09/08/2017	ND	2.0000		
Antimony, total	ug/L	SW-101	03/19/2018	ND	2.0000		
Antimony, total	ug/L	SW-101	09/11/2018	ND	2.0000		
Antimony, total	ug/L	SW-101	03/26/2019	ND	2.0000		
Antimony, total	ug/L	SW-101	09/04/2019	ND	2.0000		
Arsenic, total	ug/L	SW-101	09/14/2016	ND	4.0000		
Arsenic, total	ug/L	SW-101	03/23/2017	ND	4.0000		
Arsenic, total	ug/L	SW-101	09/08/2017	ND	4.0000		
Arsenic, total	ug/L	SW-101	03/19/2018		4.4000		
Arsenic, total	ug/L	SW-101	09/11/2018	ND	4.0000		
Arsenic, total	ug/L	SW-101	03/26/2019	ND	4.0000		
Arsenic, total	ug/L	SW-101	09/04/2019		7.3000		
Barium, total	ug/L	SW-101	09/14/2016		188.0000		
Barium, total	ug/L	SW-101	03/23/2017		233.0000		
Barium, total	ug/L	SW-101	09/08/2017		272.0000		
Barium, total	ug/L	SW-101	03/19/2018		162.0000		
Barium, total	ug/L	SW-101	09/11/2018		127.0000		
Barium, total	ug/L	SW-101	03/26/2019		160.0000		
Barium, total	ug/L	SW-101	09/04/2019		256.0000		
Beryllium, total	ug/L	SW-101	09/14/2016	ND	4.0000		
Beryllium, total	ug/L	SW-101	03/23/2017	ND	4.0000		
Beryllium, total	ug/L	SW-101	09/08/2017	ND	4.0000		
Beryllium, total	ug/L	SW-101	03/19/2018	ND	4.0000		
Beryllium, total	ug/L	SW-101	09/11/2018	ND	4.0000		
Beryllium, total	ug/L	SW-101	03/26/2019	ND	4.0000		
Beryllium, total	ug/L	SW-101	09/04/2019	ND	4.0000		
Cadmium, total	ug/L	SW-101	09/14/2016	ND	0.8000		
Cadmium, total	ug/L	SW-101	03/23/2017	ND	0.8000		
Cadmium, total	ug/L	SW-101	09/08/2017	ND	0.8000		
Cadmium, total	ug/L	SW-101	03/19/2018	ND	0.8000		
Cadmium, total	ug/L	SW-101	09/11/2018	ND	0.8000		
Cadmium, total	ug/L	SW-101	03/26/2019	ND	0.8000		
Cadmium, total	ug/L	SW-101	09/04/2019	ND	0.8000		
Chromium, total	ug/L	SW-101	09/14/2016	ND	8.0000		
Chromium, total	ug/L	SW-101	03/23/2017	ND	8.0000		
Chromium, total	ug/L	SW-101	09/08/2017	ND	8.0000		
Chromium, total	ug/L	SW-101	03/19/2018	ND	8.0000		
Chromium, total	ug/L	SW-101	09/11/2018	ND	8.0000		
Chromium, total	ug/L	SW-101	03/26/2019	ND	8.0000		
Chromium, total	ug/L	SW-101	09/04/2019	ND	8.0000		
Cobalt, total	ug/L	SW-101	09/14/2016		4.5000		
Cobalt, total	ug/L	SW-101	03/23/2017		4.2000		
Cobalt, total	ug/L	SW-101	09/08/2017		6.9000		
Cobalt, total	ug/L	SW-101	03/19/2018		2.3000		

*   - Outlier for that well and constituent.
** - ND value replaced with median RL.
*** - ND value replaced with manual RL.
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Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Cobalt, total	ug/L	SW-101	09/11/2018		1.9000		
Cobalt, total	ug/L	SW-101	03/26/2019		1.8000		
Cobalt, total	ug/L	SW-101	09/04/2019		5.9000		
Copper, total	ug/L	SW-101	09/14/2016	ND	4.0000		
Copper, total	ug/L	SW-101	03/23/2017	ND	4.0000		
Copper, total	ug/L	SW-101	09/08/2017	ND	4.0000		
Copper, total	ug/L	SW-101	03/19/2018	ND	4.0000		
Copper, total	ug/L	SW-101	09/11/2018	ND	4.0000		
Copper, total	ug/L	SW-101	03/26/2019	ND	4.0000		
Copper, total	ug/L	SW-101	09/04/2019	ND	4.0000		
Lead, total	ug/L	SW-101	09/14/2016	ND	4.0000		
Lead, total	ug/L	SW-101	03/23/2017	ND	4.0000		
Lead, total	ug/L	SW-101	09/08/2017	ND	4.0000		
Lead, total	ug/L	SW-101	03/19/2018	ND	4.0000		
Lead, total	ug/L	SW-101	09/11/2018	ND	4.0000		
Lead, total	ug/L	SW-101	03/26/2019	ND	4.0000		
Lead, total	ug/L	SW-101	09/04/2019	ND	4.0000		
Nickel, total	ug/L	SW-101	09/14/2016		8.7000		
Nickel, total	ug/L	SW-101	03/23/2017		5.4000		
Nickel, total	ug/L	SW-101	09/08/2017		8.6000		
Nickel, total	ug/L	SW-101	03/19/2018	ND	4.0000		
Nickel, total	ug/L	SW-101	09/11/2018	ND	4.0000		
Nickel, total	ug/L	SW-101	03/26/2019		4.2000		
Nickel, total	ug/L	SW-101	09/04/2019		7.5000		
Selenium, total	ug/L	SW-101	09/14/2016	ND	4.0000		
Selenium, total	ug/L	SW-101	03/23/2017	ND	4.0000		
Selenium, total	ug/L	SW-101	09/08/2017	ND	4.0000		
Selenium, total	ug/L	SW-101	03/19/2018	ND	4.0000		
Selenium, total	ug/L	SW-101	09/11/2018	ND	4.0000		
Selenium, total	ug/L	SW-101	03/26/2019	ND	4.0000		
Selenium, total	ug/L	SW-101	09/04/2019	ND	4.0000		
Silver, total	ug/L	SW-101	09/14/2016	ND	4.0000		
Silver, total	ug/L	SW-101	03/23/2017	ND	4.0000		
Silver, total	ug/L	SW-101	09/08/2017	ND	4.0000		
Silver, total	ug/L	SW-101	03/19/2018	ND	4.0000		
Silver, total	ug/L	SW-101	09/11/2018	ND	8.0000	4.0000	**
Silver, total	ug/L	SW-101	03/26/2019	ND	4.0000		
Silver, total	ug/L	SW-101	09/04/2019	ND	4.0000		
Thallium, total	ug/L	SW-101	09/14/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	SW-101	03/23/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	SW-101	09/08/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	SW-101	03/19/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	SW-101	09/11/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	SW-101	03/26/2019	ND	2.0000		
Thallium, total	ug/L	SW-101	09/04/2019	ND	2.0000		
Vanadium, total	ug/L	SW-101	09/14/2016	ND	20.0000		
Vanadium, total	ug/L	SW-101	03/23/2017	ND	20.0000		
Vanadium, total	ug/L	SW-101	09/08/2017	ND	20.0000		
Vanadium, total	ug/L	SW-101	03/19/2018	ND	20.0000		
Vanadium, total	ug/L	SW-101	09/11/2018	ND	20.0000		
Vanadium, total	ug/L	SW-101	03/26/2019	ND	20.0000		
Vanadium, total	ug/L	SW-101	09/04/2019	ND	20.0000		
Zinc, total	ug/L	SW-101	09/14/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	SW-101	03/23/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	SW-101	09/08/2017	ND	20.0000		
Zinc, total	ug/L	SW-101	03/19/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	SW-101	09/11/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	SW-101	03/26/2019	ND	20.0000		
Zinc, total	ug/L	SW-101	09/04/2019	ND	8.0000	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-44	03/04/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-44	03/04/2024		4.1000	**	7.3000
Barium, total	ug/L	MW-44	03/04/2024		126.0000		357.0000
Beryllium, total	ug/L	MW-44	03/04/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-44	03/04/2024	ND	0.8000		0.8000
Chromium, total	ug/L	MW-44	03/04/2024	ND	8.0000		8.0000
Cobalt, total	ug/L	MW-44	03/04/2024		9.7000	***	6.9000
Copper, total	ug/L	MW-44	03/04/2024	ND	4.0000		4.0000
Lead, total	ug/L	MW-44	03/04/2024	ND	4.0000		4.0000
Nickel, total	ug/L	MW-44	03/04/2024		10.0000	***	8.7000
Selenium, total	ug/L	MW-44	03/04/2024	ND	4.0000		10.6000
Silver, total	ug/L	MW-44	03/04/2024	ND	4.0000		6.4000
Thallium, total	ug/L	MW-44	03/04/2024	ND	2.0000		2.4000
Vanadium, total	ug/L	MW-44	03/04/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-44	03/04/2024	ND	20.0000		32.3000
Antimony, total	ug/L	MW-56	03/04/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-56	03/04/2024	ND	4.0000		7.3000
Barium, total	ug/L	MW-56	03/04/2024		23.5000		357.0000
Beryllium, total	ug/L	MW-56	03/04/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-56	03/04/2024	ND	0.8000		0.8000
Chromium, total	ug/L	MW-56	03/04/2024	ND	8.0000		8.0000
Cobalt, total	ug/L	MW-56	03/04/2024		0.6000		6.9000
Copper, total	ug/L	MW-56	03/04/2024	ND	4.0000		4.0000
Lead, total	ug/L	MW-56	03/04/2024		14.6000	*	4.0000
Nickel, total	ug/L	MW-56	03/04/2024		4.7000	**	8.7000
Selenium, total	ug/L	MW-56	03/04/2024	ND	4.0000		10.6000
Silver, total	ug/L	MW-56	03/04/2024	ND	4.0000		6.4000
Thallium, total	ug/L	MW-56	03/04/2024	ND	2.0000		2.4000
Vanadium, total	ug/L	MW-56	03/04/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-56	03/04/2024	ND	20.0000		32.3000
Antimony, total	ug/L	MW-57	03/04/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-57	03/04/2024	ND	4.0000		7.3000
Barium, total	ug/L	MW-57	03/04/2024		250.0000	**	357.0000
Beryllium, total	ug/L	MW-57	03/04/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-57	03/04/2024	ND	0.8000		0.8000
Chromium, total	ug/L	MW-57	03/04/2024	ND	8.0000		8.0000
Cobalt, total	ug/L	MW-57	03/04/2024		0.4000		6.9000
Copper, total	ug/L	MW-57	03/04/2024	ND	4.0000		4.0000
Lead, total	ug/L	MW-57	03/04/2024	ND	4.0000		4.0000
Nickel, total	ug/L	MW-57	03/04/2024	ND	4.0000		8.7000
Selenium, total	ug/L	MW-57	03/04/2024	ND	4.0000		10.6000
Silver, total	ug/L	MW-57	03/04/2024	ND	4.0000		6.4000
Thallium, total	ug/L	MW-57	03/04/2024	ND	2.0000		2.4000
Vanadium, total	ug/L	MW-57	03/04/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-57	03/04/2024	ND	20.0000		32.3000
Antimony, total	ug/L	MW-64	03/04/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-64	03/04/2024		29.6000	***	7.3000
Barium, total	ug/L	MW-64	03/04/2024		68.5000		357.0000
Beryllium, total	ug/L	MW-64	03/04/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-64	03/04/2024	ND	0.8000		0.8000
Chromium, total	ug/L	MW-64	03/04/2024	ND	8.0000		8.0000
Cobalt, total	ug/L	MW-64	03/04/2024		12.0000	***	6.9000
Copper, total	ug/L	MW-64	03/04/2024	ND	4.0000		4.0000
Lead, total	ug/L	MW-64	03/04/2024	ND	4.0000		4.0000
Nickel, total	ug/L	MW-64	03/04/2024		32.0000	***	8.7000
Selenium, total	ug/L	MW-64	03/04/2024	ND	4.0000		10.6000
Silver, total	ug/L	MW-64	03/04/2024	ND	4.0000		6.4000
Thallium, total	ug/L	MW-64	03/04/2024	ND	2.0000		2.4000
Vanadium, total	ug/L	MW-64	03/04/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-64	03/04/2024		51.4000	*	32.3000
Antimony, total	ug/L	MW-65	03/04/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-65	03/04/2024		6.7000		7.3000
Barium, total	ug/L	MW-65	03/04/2024		30.0000		357.0000
Beryllium, total	ug/L	MW-65	03/04/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-65	03/04/2024	ND	0.8000		0.8000
Chromium, total	ug/L	MW-65	03/04/2024	ND	8.0000		8.0000
Cobalt, total	ug/L	MW-65	03/04/2024		9.2000	*	6.9000
Copper, total	ug/L	MW-65	03/04/2024	ND	4.0000		4.0000
Lead, total	ug/L	MW-65	03/04/2024	ND	4.0000		4.0000
Nickel, total	ug/L	MW-65	03/04/2024		14.9000	*	8.7000
Selenium, total	ug/L	MW-65	03/04/2024	ND	4.0000		10.6000
Silver, total	ug/L	MW-65	03/04/2024	ND	4.0000		6.4000

* - 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 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Thallium, total	ug/L	MW-65	03/04/2024	ND	2.0000		2.4000
Vanadium, total	ug/L	MW-65	03/04/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-65	03/04/2024		21.5000		32.3000

* - 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	Upgradient Detect	Upgradient N	Upgradient Proportion	Downgradient Detect	Downgradient N	Downgradient Proportion
Antimony, total	0	73	0.000	0	75	0.000
Arsenic, total	2	73	0.027	36	76	0.474
Barium, total	73	73	1.000	79	79	1.000
Beryllium, total	0	73	0.000	0	75	0.000
Cadmium, total	0	73	0.000	0	75	0.000
Chromium, total	0	73	0.000	0	75	0.000
Cobalt, total	12	73	0.164	65	76	0.855
Copper, total	0	73	0.000	9	76	0.118
Lead, total	0	73	0.000	1	75	0.013
Nickel, total	5	73	0.068	59	76	0.776
Selenium, total	22	73	0.301	1	75	0.013
Silver, total	1	73	0.014	0	75	0.000
Thallium, total	1	73	0.014	0	75	0.000
Vanadium, total	0	73	0.000	0	75	0.000
Zinc, total	5	73	0.068	18	75	0.240

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	0	73	0.000									nonpar
Arsenic, total	2	73	0.027									nonpar
Barium, total	73	73	1.000	2.565	2.759					2.326	non-norm	nonpar
Beryllium, total	0	73	0.000									nonpar
Cadmium, total	0	73	0.000									nonpar
Chromium, total	0	73	0.000									nonpar
Cobalt, total	12	73	0.164	0.421	0.600					2.326	normal	nonpar
Copper, total	0	73	0.000									nonpar
Lead, total	0	73	0.000									nonpar
Nickel, total	5	73	0.068	0.460	0.593					2.326	normal	nonpar
Selenium, total	22	73	0.301	1.190	0.968					2.326	normal	nonpar
Silver, total	1	73	0.014									nonpar
Thallium, total	1	73	0.014									nonpar
Vanadium, total	0	73	0.000									nonpar
Zinc, total	5	73	0.068	0.090	0.311					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	0	73					2.0000	nonpar	***	0.99
Arsenic, total	ug/L	2	73					7.3000	nonpar		0.99
Barium, total	ug/L	73	73					357.0000	nonpar		0.99
Beryllium, total	ug/L	0	73					4.0000	nonpar	***	0.99
Cadmium, total	ug/L	0	73					0.8000	nonpar	***	0.99
Chromium, total	ug/L	0	73					8.0000	nonpar	***	0.99
Cobalt, total	ug/L	12	73					6.9000	nonpar		0.99
Copper, total	ug/L	0	73					4.0000	nonpar	***	0.99
Lead, total	ug/L	0	73					4.0000	nonpar	***	0.99
Nickel, total	ug/L	5	73					8.7000	nonpar		0.99
Selenium, total	ug/L	22	73					10.6000	nonpar		0.99
Silver, total	ug/L	1	73					6.4000	nonpar		0.99
Thallium, total	ug/L	1	73					2.4000	nonpar		0.99
Vanadium, total	ug/L	0	73					20.0000	nonpar	***	0.99
Zinc, total	ug/L	5	73					32.3000	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-44	09/14/2016	ND	4.0000		7.3000
Arsenic, total	ug/L	MW-44	09/08/2017		5.6000		7.3000
Arsenic, total	ug/L	MW-44	12/05/2017	ND	4.0000		7.3000
Arsenic, total	ug/L	MW-44	03/19/2018	ND	4.0000		7.3000
Arsenic, total	ug/L	MW-44	09/11/2018	ND	4.0000		7.3000
Arsenic, total	ug/L	MW-44	03/26/2019		6.6000		7.3000
Arsenic, total	ug/L	MW-44	09/04/2019		7.9000	*	7.3000
Arsenic, total	ug/L	MW-44	03/26/2020	ND	4.0000		7.3000
Arsenic, total	ug/L	MW-44	09/15/2020		13.1000	*	7.3000
Arsenic, total	ug/L	MW-44	03/02/2021	ND	4.0000		7.3000
Arsenic, total	ug/L	MW-44	09/07/2021		9.4000	*	7.3000
Arsenic, total	ug/L	MW-44	03/24/2022		7.6000	*	7.3000
Arsenic, total	ug/L	MW-44	08/31/2022		10.0000	*	7.3000
Arsenic, total	ug/L	MW-44	03/02/2023	ND	4.0000		7.3000
Arsenic, total	ug/L	MW-44	09/12/2023		10.8000	*	7.3000
Arsenic, total	ug/L	MW-44	03/04/2024		4.1000		7.3000
Cobalt, total	ug/L	MW-44	09/14/2016		6.3000		6.9000
Cobalt, total	ug/L	MW-44	09/08/2017		7.3000	*	6.9000
Cobalt, total	ug/L	MW-44	12/05/2017		8.7000	*	6.9000
Cobalt, total	ug/L	MW-44	03/19/2018		8.9000	*	6.9000
Cobalt, total	ug/L	MW-44	09/11/2018		8.4000	*	6.9000
Cobalt, total	ug/L	MW-44	03/26/2019		10.2000	*	6.9000
Cobalt, total	ug/L	MW-44	09/04/2019		8.7000	*	6.9000
Cobalt, total	ug/L	MW-44	03/26/2020		9.2000	*	6.9000
Cobalt, total	ug/L	MW-44	09/15/2020		14.5000	*	6.9000
Cobalt, total	ug/L	MW-44	03/02/2021		8.8000	*	6.9000
Cobalt, total	ug/L	MW-44	09/07/2021		8.1000	*	6.9000
Cobalt, total	ug/L	MW-44	03/24/2022		11.0000	*	6.9000
Cobalt, total	ug/L	MW-44	08/31/2022		11.6000	*	6.9000
Cobalt, total	ug/L	MW-44	03/02/2023		8.8000	*	6.9000
Cobalt, total	ug/L	MW-44	09/12/2023		10.7000	*	6.9000
Cobalt, total	ug/L	MW-44	03/04/2024		9.7000	*	6.9000
Nickel, total	ug/L	MW-44	09/14/2016		17.3000	*	8.7000
Nickel, total	ug/L	MW-44	09/08/2017		16.0000	*	8.7000
Nickel, total	ug/L	MW-44	03/19/2018		12.7000	*	8.7000
Nickel, total	ug/L	MW-44	09/11/2018		12.8000	*	8.7000
Nickel, total	ug/L	MW-44	03/26/2019		11.9000	*	8.7000
Nickel, total	ug/L	MW-44	09/04/2019		11.7000	*	8.7000
Nickel, total	ug/L	MW-44	03/26/2020		13.2000	*	8.7000
Nickel, total	ug/L	MW-44	09/15/2020		26.2000	*	8.7000
Nickel, total	ug/L	MW-44	03/02/2021		9.7000	*	8.7000
Nickel, total	ug/L	MW-44	09/07/2021		13.2000	*	8.7000
Nickel, total	ug/L	MW-44	03/24/2022		12.2000	*	8.7000
Nickel, total	ug/L	MW-44	08/31/2022		13.5000	*	8.7000
Nickel, total	ug/L	MW-44	03/02/2023		10.0000	*	8.7000
Nickel, total	ug/L	MW-44	09/12/2023		13.2000	*	8.7000
Nickel, total	ug/L	MW-44	03/04/2024		10.0000	*	8.7000
Lead, total	ug/L	MW-56	09/14/2016	ND	4.0000		4.0000
Lead, total	ug/L	MW-56	09/08/2017	ND	4.0000		4.0000
Lead, total	ug/L	MW-56	03/19/2018	ND	4.0000		4.0000
Lead, total	ug/L	MW-56	09/11/2018	ND	4.0000		4.0000
Lead, total	ug/L	MW-56	03/26/2019	ND	4.0000		4.0000
Lead, total	ug/L	MW-56	09/04/2019	ND	4.0000		4.0000
Lead, total	ug/L	MW-56	03/26/2020	ND	4.0000		4.0000
Lead, total	ug/L	MW-56	09/15/2020	ND	4.0000		4.0000
Lead, total	ug/L	MW-56	03/02/2021	ND	4.0000		4.0000
Lead, total	ug/L	MW-56	09/07/2021	ND	4.0000		4.0000
Lead, total	ug/L	MW-56	03/24/2022	ND	4.0000		4.0000
Lead, total	ug/L	MW-56	08/31/2022	ND	4.0000		4.0000
Lead, total	ug/L	MW-56	03/02/2023	ND	4.0000		4.0000
Lead, total	ug/L	MW-56	09/12/2023	ND	4.0000		4.0000
Lead, total	ug/L	MW-56	03/04/2024		14.6000	*	4.0000
Nickel, total	ug/L	MW-56	09/14/2016		12.2000	*	8.7000
Nickel, total	ug/L	MW-56	09/08/2017		13.8000	*	8.7000
Nickel, total	ug/L	MW-56	12/05/2017		14.0000	*	8.7000
Nickel, total	ug/L	MW-56	03/19/2018	ND	4.0000		8.7000
Nickel, total	ug/L	MW-56	09/11/2018	ND	4.0000		8.7000
Nickel, total	ug/L	MW-56	03/26/2019	ND	4.0000		8.7000
Nickel, total	ug/L	MW-56	09/04/2019		7.0000		8.7000
Nickel, total	ug/L	MW-56	03/26/2020	ND	4.0000		8.7000
Nickel, total	ug/L	MW-56	09/15/2020		10.9000	*	8.7000

* - Significantly increased over background.
** - Detect at limit for 100% NDs in background (NPPL only).
*** - Manual exclusion.
ND = Not Detected, Result = detection limit.

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
Nickel, total	ug/L	MW-56	03/02/2021	ND	4.0000		8.7000
Nickel, total	ug/L	MW-56	09/07/2021		13.1000	*	8.7000
Nickel, total	ug/L	MW-56	03/24/2022	ND	4.0000		8.7000
Nickel, total	ug/L	MW-56	08/31/2022		10.1000	*	8.7000
Nickel, total	ug/L	MW-56	03/02/2023	ND	4.0000		8.7000
Nickel, total	ug/L	MW-56	09/12/2023		9.6000	*	8.7000
Nickel, total	ug/L	MW-56	03/04/2024		4.7000		8.7000
Barium, total	ug/L	MW-57	09/14/2016		301.0000		357.0000
Barium, total	ug/L	MW-57	09/08/2017		563.0000	*	357.0000
Barium, total	ug/L	MW-57	12/05/2017		398.0000	*	357.0000
Barium, total	ug/L	MW-57	03/19/2018		279.0000		357.0000
Barium, total	ug/L	MW-57	09/11/2018		189.0000		357.0000
Barium, total	ug/L	MW-57	03/26/2019		287.0000		357.0000
Barium, total	ug/L	MW-57	09/04/2019		344.0000		357.0000
Barium, total	ug/L	MW-57	03/26/2020		513.0000	*	357.0000
Barium, total	ug/L	MW-57	06/18/2020		301.0000		357.0000
Barium, total	ug/L	MW-57	09/15/2020		517.0000	*	357.0000
Barium, total	ug/L	MW-57	12/03/2020		388.0000	*	357.0000
Barium, total	ug/L	MW-57	03/02/2021		112.0000		357.0000
Barium, total	ug/L	MW-57	09/07/2021		507.0000	*	357.0000
Barium, total	ug/L	MW-57	12/03/2021		362.0000	*	357.0000
Barium, total	ug/L	MW-57	03/24/2022		317.0000		357.0000
Barium, total	ug/L	MW-57	08/31/2022		509.0000	*	357.0000
Barium, total	ug/L	MW-57	03/02/2023		254.0000		357.0000
Barium, total	ug/L	MW-57	09/12/2023		445.0000	*	357.0000
Barium, total	ug/L	MW-57	03/04/2024		250.0000		357.0000
Arsenic, total	ug/L	MW-64	09/14/2016		21.6000	*	7.3000
Arsenic, total	ug/L	MW-64	09/08/2017		7.9000	*	7.3000
Arsenic, total	ug/L	MW-64	03/19/2018		19.3000	*	7.3000
Arsenic, total	ug/L	MW-64	09/11/2018		24.2000	*	7.3000
Arsenic, total	ug/L	MW-64	03/26/2019		40.2000	*	7.3000
Arsenic, total	ug/L	MW-64	09/04/2019		22.2000	*	7.3000
Arsenic, total	ug/L	MW-64	03/26/2020		40.3000	*	7.3000
Arsenic, total	ug/L	MW-64	09/15/2020		21.1000	*	7.3000
Arsenic, total	ug/L	MW-64	03/02/2021		20.2000	*	7.3000
Arsenic, total	ug/L	MW-64	09/07/2021		25.2000	*	7.3000
Arsenic, total	ug/L	MW-64	03/24/2022		19.2000	*	7.3000
Arsenic, total	ug/L	MW-64	08/31/2022		27.4000	*	7.3000
Arsenic, total	ug/L	MW-64	03/02/2023		26.4000	*	7.3000
Arsenic, total	ug/L	MW-64	09/12/2023		23.1000	*	7.3000
Arsenic, total	ug/L	MW-64	03/04/2024		29.6000	*	7.3000
Cobalt, total	ug/L	MW-64	09/14/2016		27.0000	*	6.9000
Cobalt, total	ug/L	MW-64	09/08/2017		34.4000	*	6.9000
Cobalt, total	ug/L	MW-64	03/19/2018		19.1000	*	6.9000
Cobalt, total	ug/L	MW-64	09/11/2018		25.1000	*	6.9000
Cobalt, total	ug/L	MW-64	03/26/2019		16.1000	*	6.9000
Cobalt, total	ug/L	MW-64	09/04/2019		23.0000	*	6.9000
Cobalt, total	ug/L	MW-64	03/26/2020		14.7000	*	6.9000
Cobalt, total	ug/L	MW-64	09/15/2020		20.8000	*	6.9000
Cobalt, total	ug/L	MW-64	03/02/2021		14.6000	*	6.9000
Cobalt, total	ug/L	MW-64	09/07/2021		21.0000	*	6.9000
Cobalt, total	ug/L	MW-64	03/24/2022		11.8000	*	6.9000
Cobalt, total	ug/L	MW-64	08/31/2022		21.6000	*	6.9000
Cobalt, total	ug/L	MW-64	03/02/2023		11.0000	*	6.9000
Cobalt, total	ug/L	MW-64	09/12/2023		18.7000	*	6.9000
Cobalt, total	ug/L	MW-64	03/04/2024		12.0000	*	6.9000
Nickel, total	ug/L	MW-64	09/14/2016		56.3000	*	8.7000
Nickel, total	ug/L	MW-64	09/08/2017		73.1000	*	8.7000
Nickel, total	ug/L	MW-64	03/19/2018		46.2000	*	8.7000
Nickel, total	ug/L	MW-64	09/11/2018		55.4000	*	8.7000
Nickel, total	ug/L	MW-64	03/26/2019		41.6000	*	8.7000
Nickel, total	ug/L	MW-64	09/04/2019		45.9000	*	8.7000
Nickel, total	ug/L	MW-64	03/26/2020		39.4000	*	8.7000
Nickel, total	ug/L	MW-64	09/15/2020		46.6000	*	8.7000
Nickel, total	ug/L	MW-64	03/02/2021		35.4000	*	8.7000
Nickel, total	ug/L	MW-64	09/07/2021		49.9000	*	8.7000
Nickel, total	ug/L	MW-64	03/24/2022		33.0000	*	8.7000
Nickel, total	ug/L	MW-64	08/31/2022		49.9000	*	8.7000
Nickel, total	ug/L	MW-64	03/02/2023		30.6000	*	8.7000
Nickel, total	ug/L	MW-64	09/12/2023		43.1000	*	8.7000
Nickel, total	ug/L	MW-64	03/04/2024		32.0000	*	8.7000

* - Significantly increased over background.
** - Detect at limit for 100% NDs in background (NPPL only).
*** - Manual exclusion.
ND = Not Detected, Result = detection limit.

Table 8

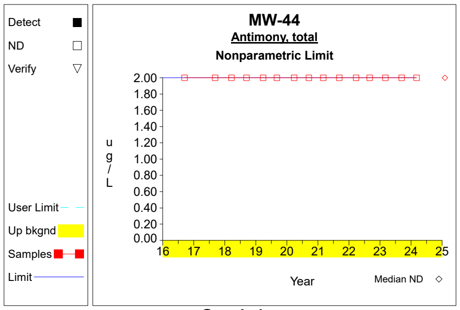
Historical Downgradient Data for Constituent-Well Combinations that Failed the Current Statistical Evaluation or are in Verification Resampling Mode

Constituent	Units	Well	Date		Result		Pred. Limit
Zinc, total	ug/L	MW-64	09/14/2016		11.1000		32.3000
Zinc, total	ug/L	MW-64	09/08/2017	ND	20.0000		32.3000
Zinc, total	ug/L	MW-64	03/19/2018	ND	8.0000		32.3000
Zinc, total	ug/L	MW-64	09/11/2018		8.2000		32.3000
Zinc, total	ug/L	MW-64	03/26/2019		62.6000	*	32.3000
Zinc, total	ug/L	MW-64	09/04/2019	ND	8.0000		32.3000
Zinc, total	ug/L	MW-64	03/26/2020	ND	20.0000		32.3000
Zinc, total	ug/L	MW-64	09/15/2020	ND	20.0000		32.3000
Zinc, total	ug/L	MW-64	03/02/2021	ND	20.0000		32.3000
Zinc, total	ug/L	MW-64	09/07/2021	ND	20.0000		32.3000
Zinc, total	ug/L	MW-64	03/24/2022	ND	20.0000		32.3000
Zinc, total	ug/L	MW-64	08/31/2022	ND	20.0000		32.3000
Zinc, total	ug/L	MW-64	03/02/2023	ND	20.0000		32.3000
Zinc, total	ug/L	MW-64	09/12/2023	ND	20.0000		32.3000
Zinc, total	ug/L	MW-64	03/04/2024		51.4000	*	32.3000
Cobalt, total	ug/L	MW-65	09/14/2016		10.7000	*	6.9000
Cobalt, total	ug/L	MW-65	09/08/2017		3.1000		6.9000
Cobalt, total	ug/L	MW-65	03/19/2018		8.8000	*	6.9000
Cobalt, total	ug/L	MW-65	09/11/2018		11.3000	*	6.9000
Cobalt, total	ug/L	MW-65	03/26/2019		10.0000	*	6.9000
Cobalt, total	ug/L	MW-65	09/04/2019		3.7000		6.9000
Cobalt, total	ug/L	MW-65	03/26/2020		1.6000		6.9000
Cobalt, total	ug/L	MW-65	09/15/2020		2.7000		6.9000
Cobalt, total	ug/L	MW-65	03/02/2021		3.2000		6.9000
Cobalt, total	ug/L	MW-65	09/07/2021		2.1000		6.9000
Cobalt, total	ug/L	MW-65	03/24/2022		0.7000		6.9000
Cobalt, total	ug/L	MW-65	08/31/2022		5.5000		6.9000
Cobalt, total	ug/L	MW-65	03/02/2023		9.3000	*	6.9000
Cobalt, total	ug/L	MW-65	09/12/2023		5.2000		6.9000
Cobalt, total	ug/L	MW-65	03/04/2024		9.2000	*	6.9000
Nickel, total	ug/L	MW-65	09/14/2016		28.2000	*	8.7000
Nickel, total	ug/L	MW-65	09/08/2017		10.9000	*	8.7000
Nickel, total	ug/L	MW-65	03/19/2018		15.3000	*	8.7000
Nickel, total	ug/L	MW-65	09/11/2018		24.8000	*	8.7000
Nickel, total	ug/L	MW-65	03/26/2019		12.3000	*	8.7000
Nickel, total	ug/L	MW-65	09/04/2019		9.2000	*	8.7000
Nickel, total	ug/L	MW-65	03/26/2020		7.6000		8.7000
Nickel, total	ug/L	MW-65	09/15/2020		5.8000		8.7000
Nickel, total	ug/L	MW-65	03/02/2021		7.4000		8.7000
Nickel, total	ug/L	MW-65	09/07/2021		4.5000		8.7000
Nickel, total	ug/L	MW-65	03/24/2022	ND	4.0000		8.7000
Nickel, total	ug/L	MW-65	08/31/2022		13.0000	*	8.7000
Nickel, total	ug/L	MW-65	03/02/2023		20.7000	*	8.7000
Nickel, total	ug/L	MW-65	09/12/2023		7.3000		8.7000
Nickel, total	ug/L	MW-65	03/04/2024		14.9000	*	8.7000

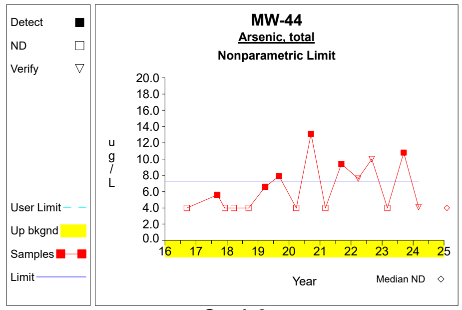
* - Significantly increased over background.
** - Detect at limit for 100% NDs in background (NPPL only).
*** - Manual exclusion.
ND = Not Detected, Result = detection limit.

Newton [OLDLF] March 2024

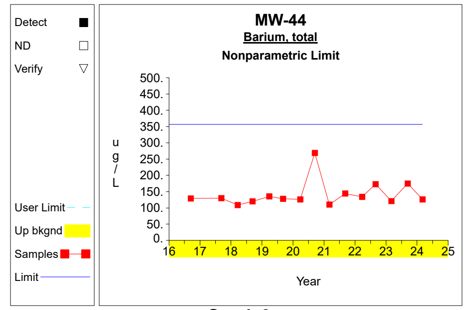
Up vs. Down Prediction Limits



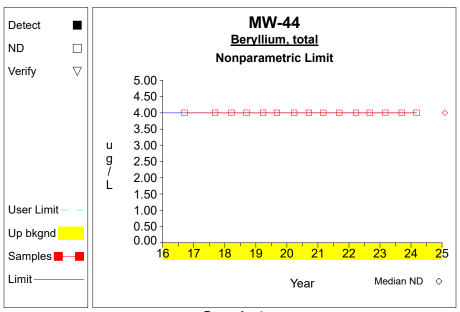
Graph 1



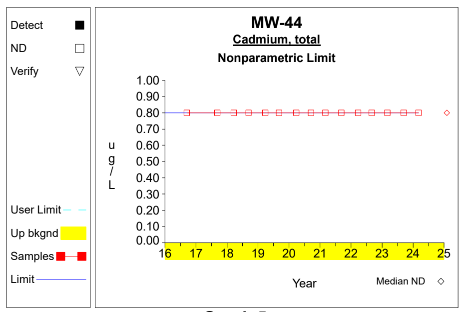
Graph 2



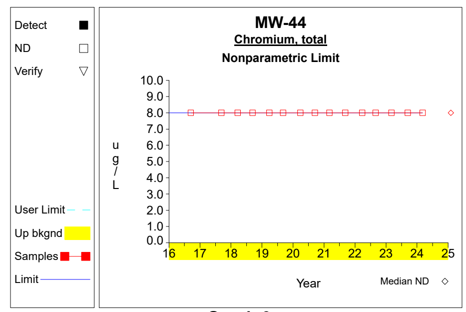
Graph 3



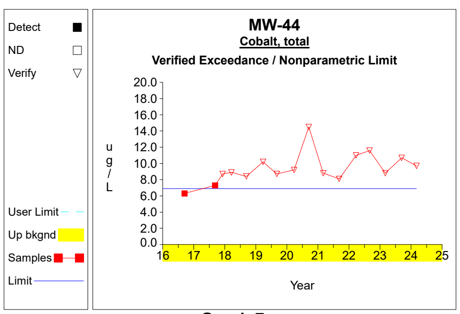
Graph 4



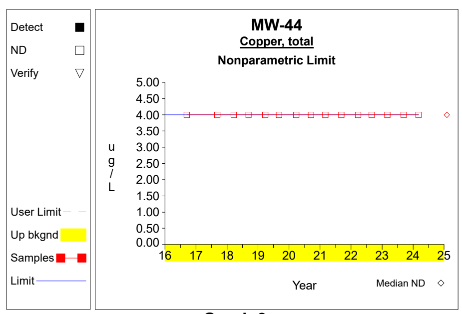
Graph 5



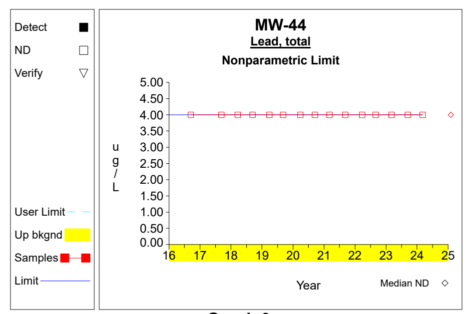
Graph 6



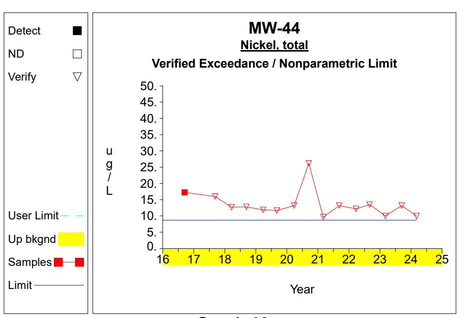
Graph 7



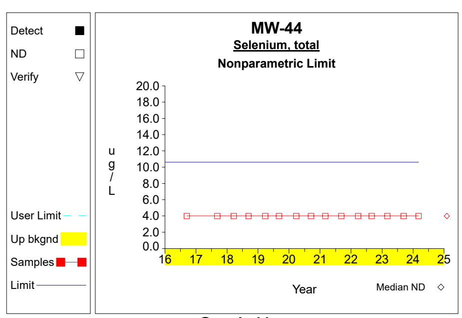
Graph 8



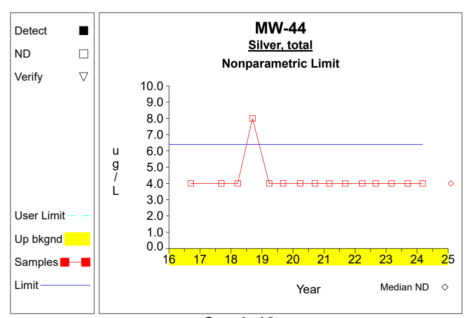
Graph 9



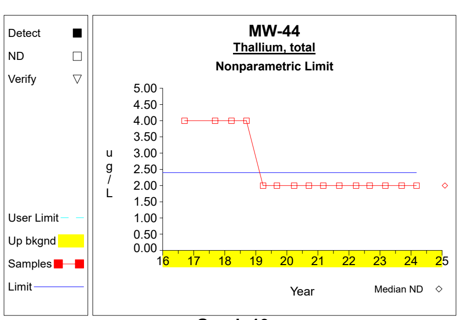
Graph 10



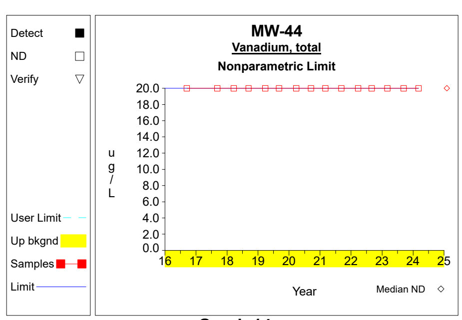
Graph 11



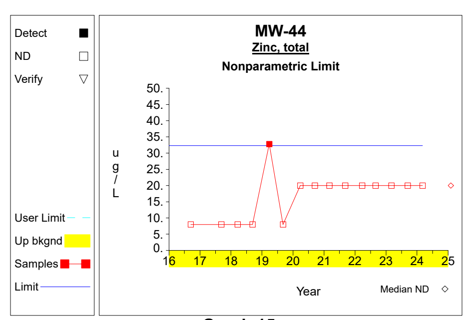
Graph 12



Graph 13



Graph 14



Graph 15

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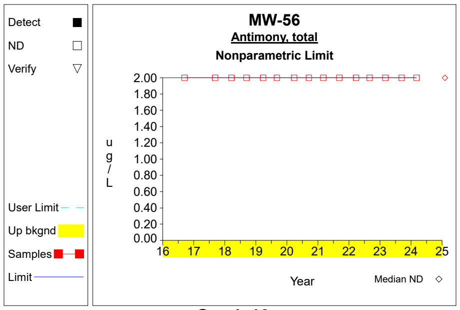
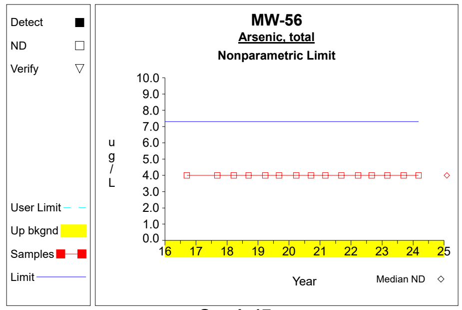
Newton [OLDLF] March 2024

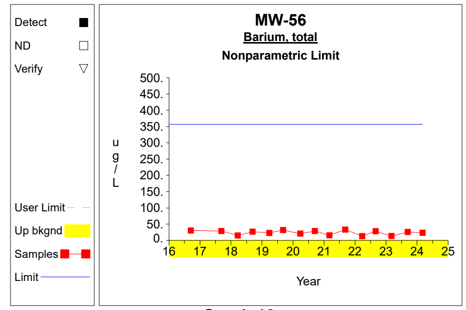
Up vs. Down Prediction Limits



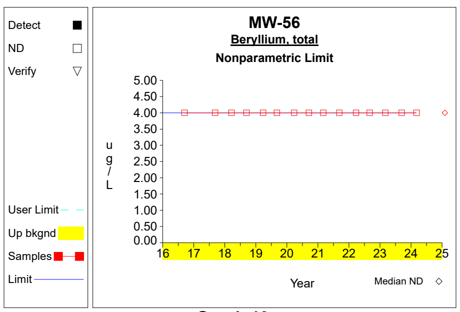
Graph 16



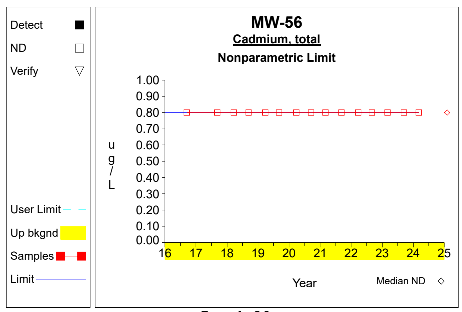
Graph 17



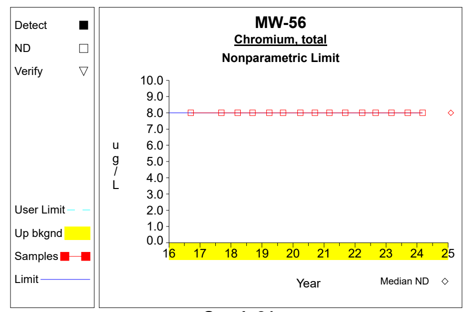
Graph 18



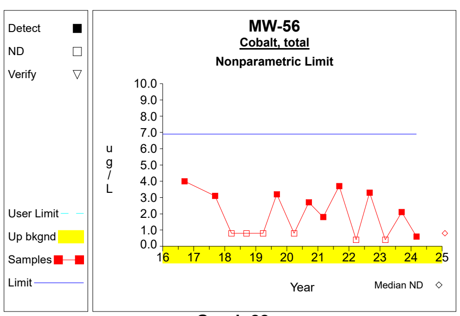
Graph 19



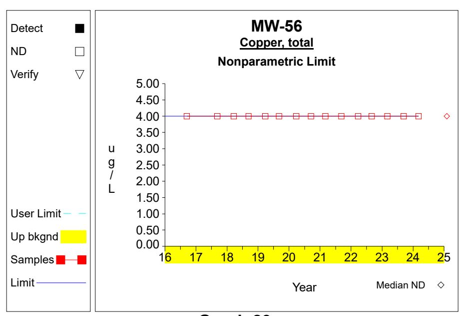
Graph 20



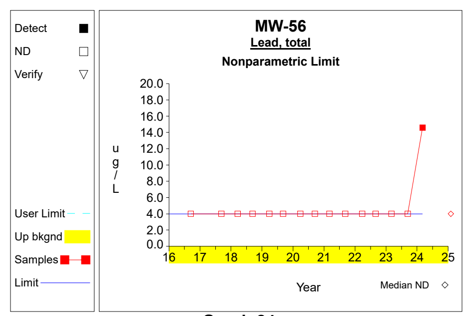
Graph 21



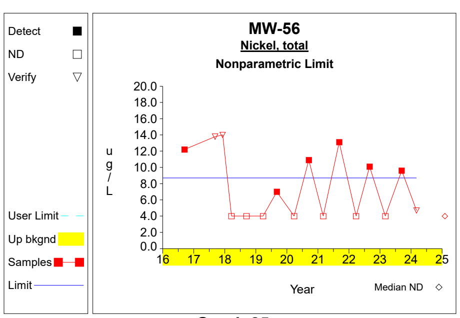
Graph 22



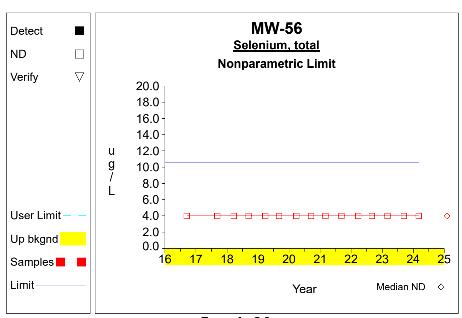
Graph 23



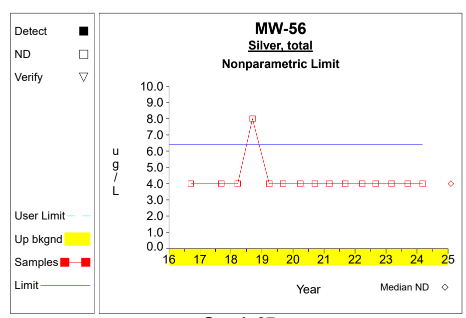
Graph 24



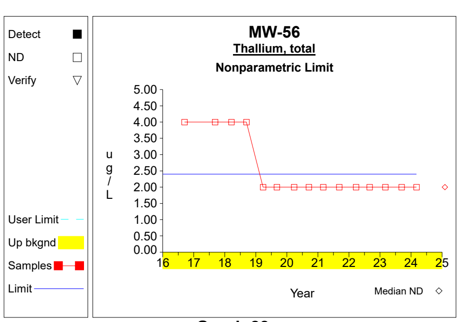
Graph 25



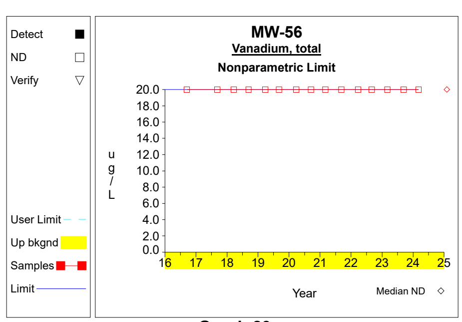
Graph 26



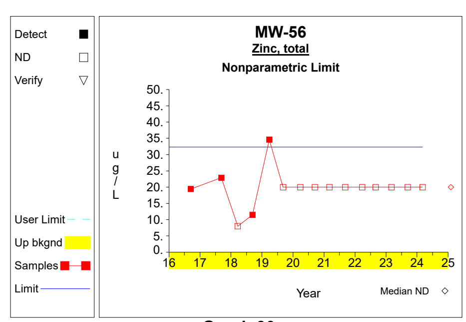
Graph 27



Graph 28



Graph 29



Graph 30

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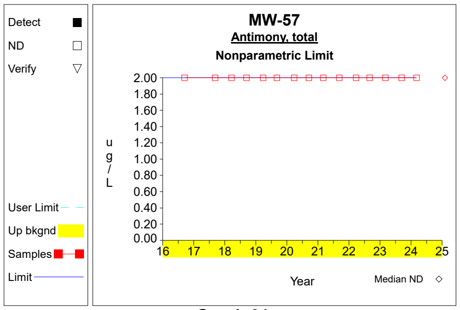
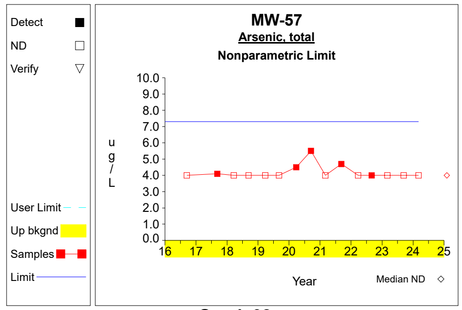
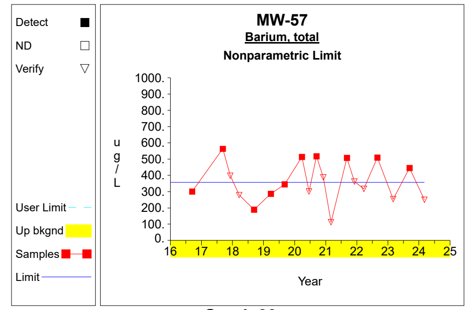
Up vs. Down Prediction Limits



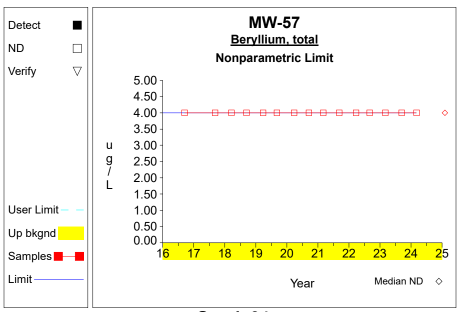
Graph 31



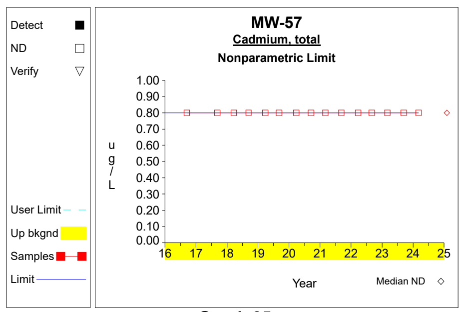
Graph 32



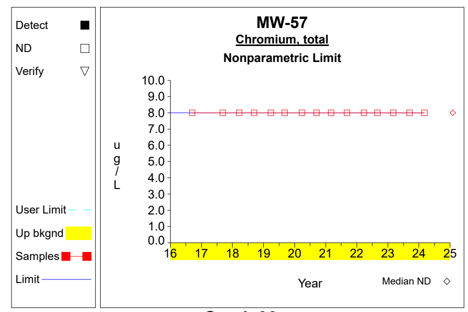
Graph 33



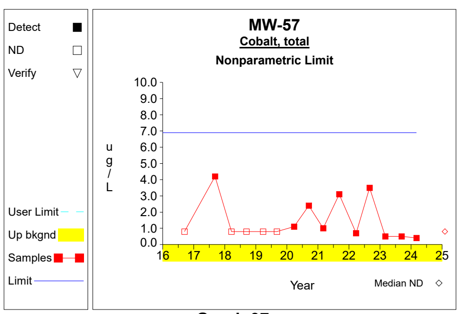
Graph 34



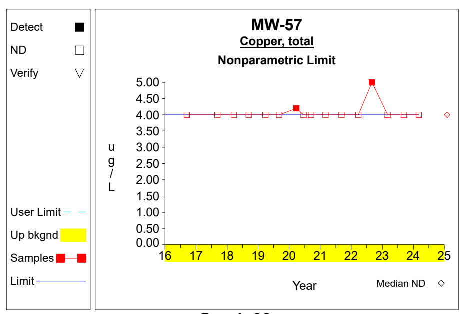
Graph 35



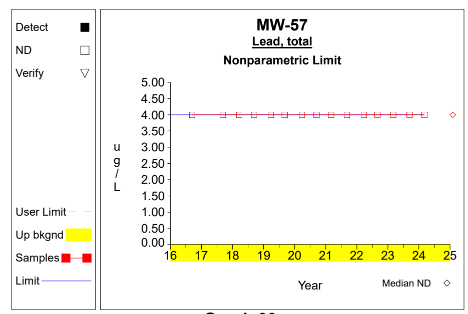
Graph 36



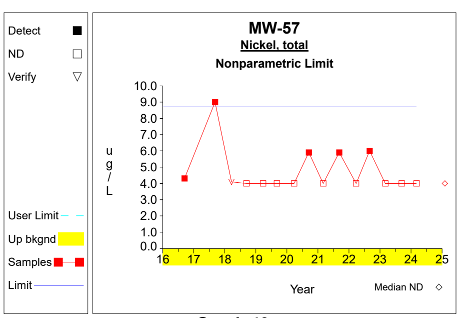
Graph 37



Graph 38



Graph 39



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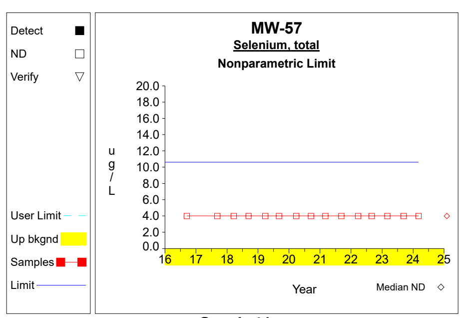

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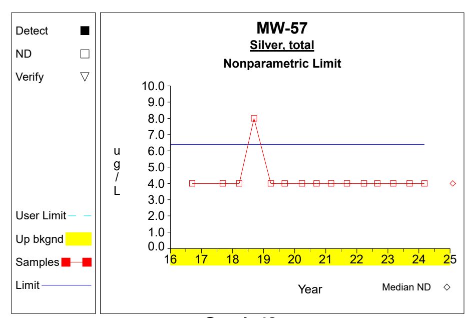

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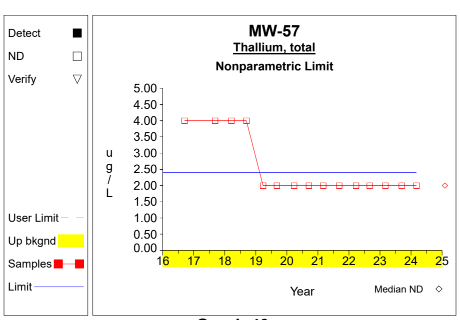
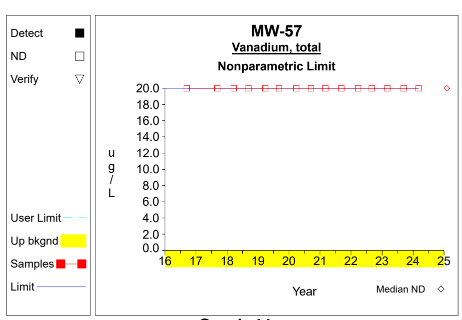
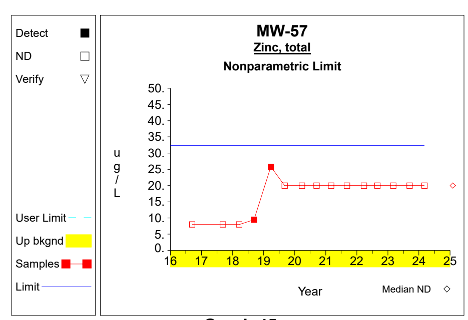


Graph 43

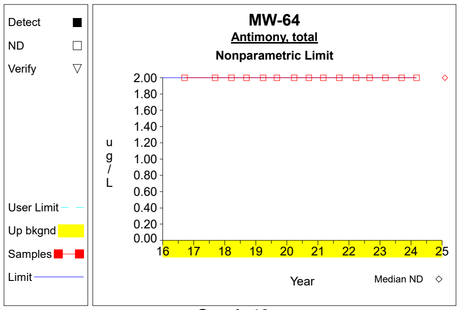


Graph 44



Graph 45

Up vs. Down Prediction Limits



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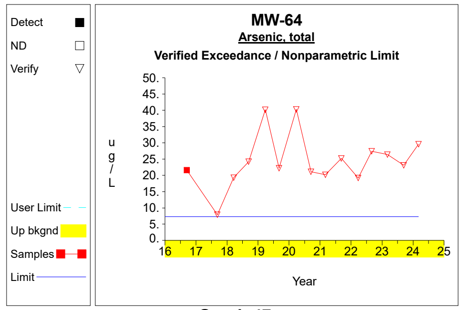
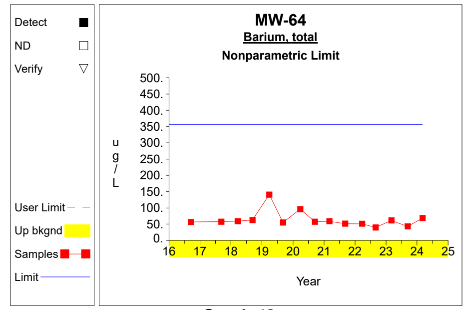


Graph 47



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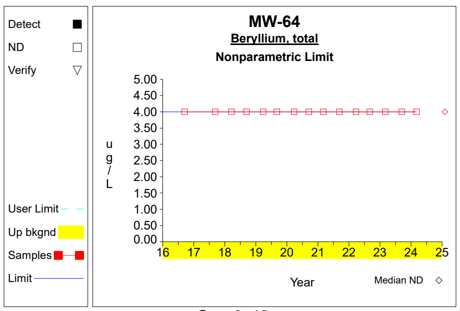

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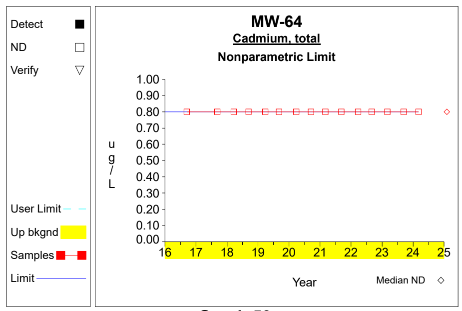

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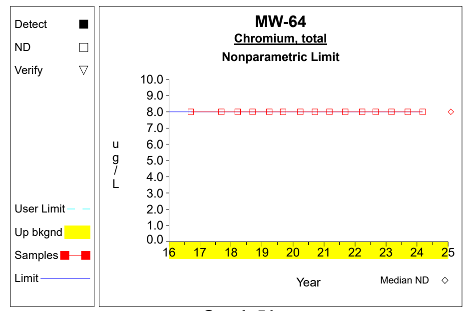

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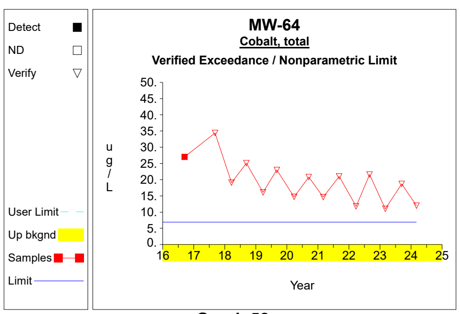

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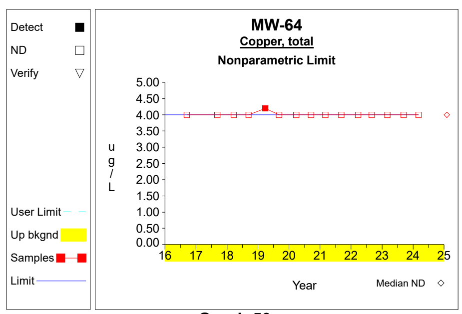

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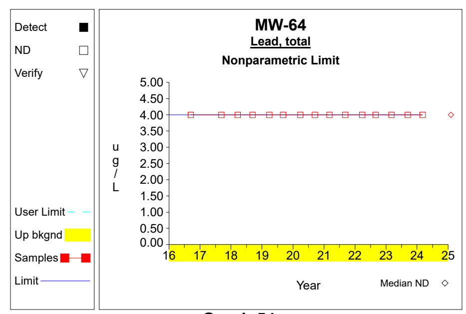

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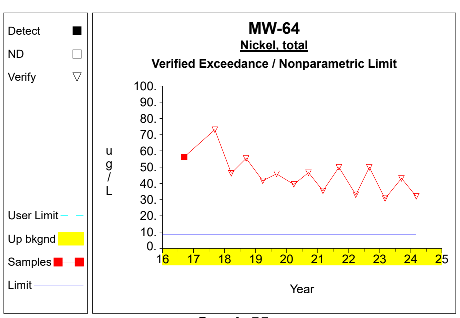

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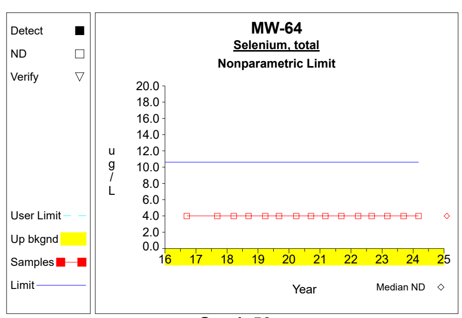

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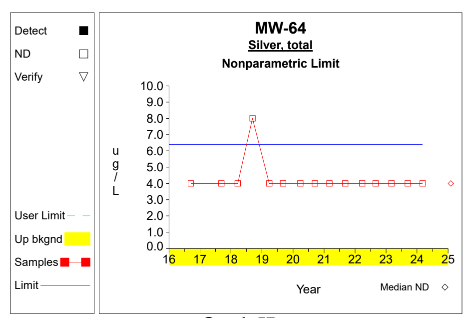

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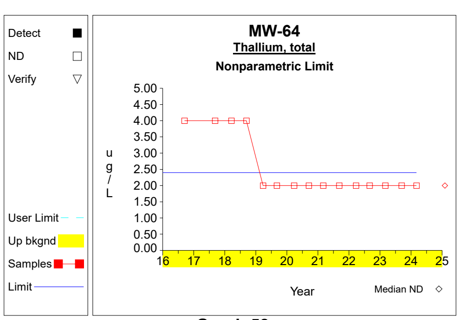

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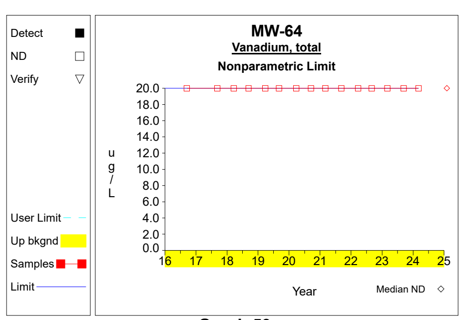
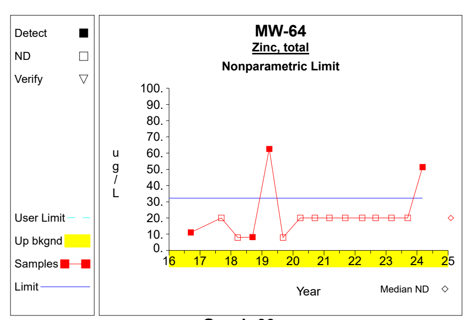


Graph 59



Graph 60

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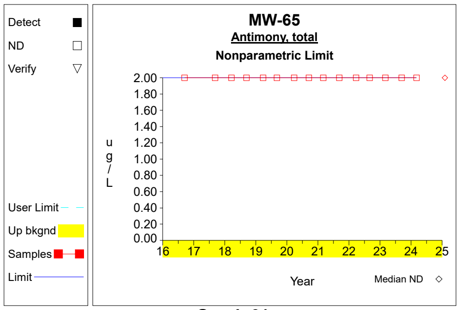
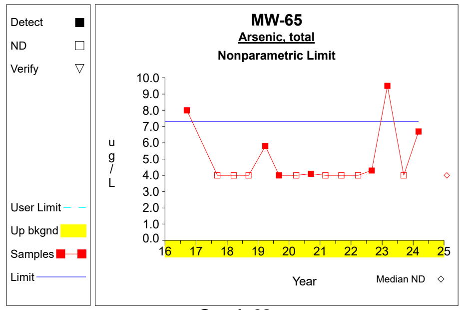
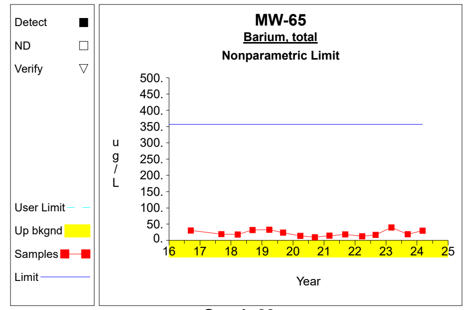
Up vs. Down Prediction Limits



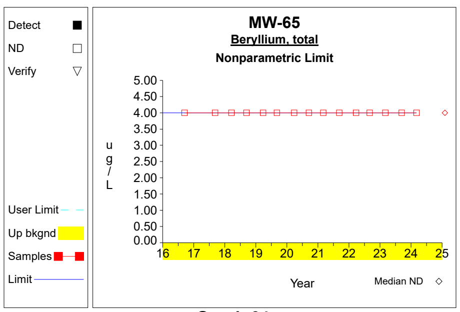
Graph 61



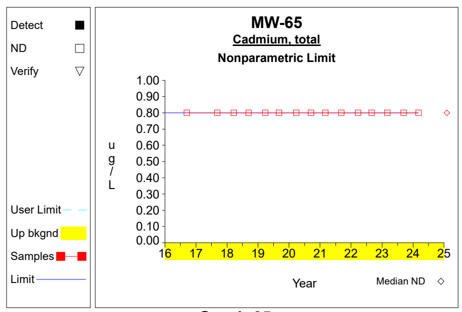
Graph 62



Graph 63



Graph 64



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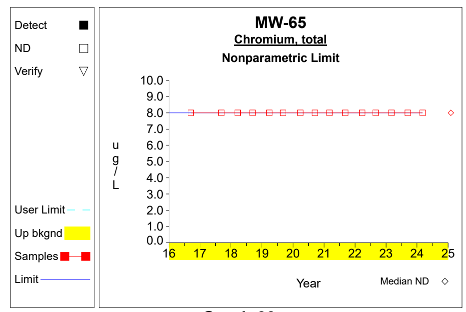
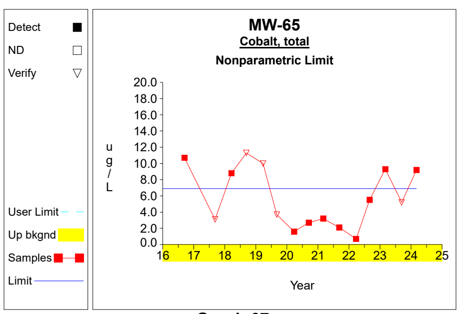
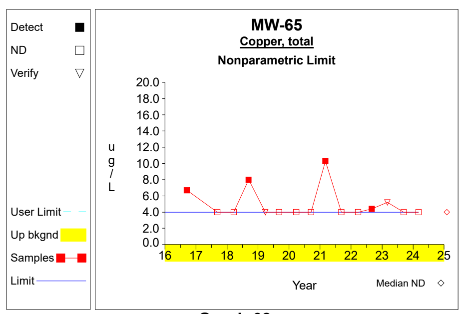


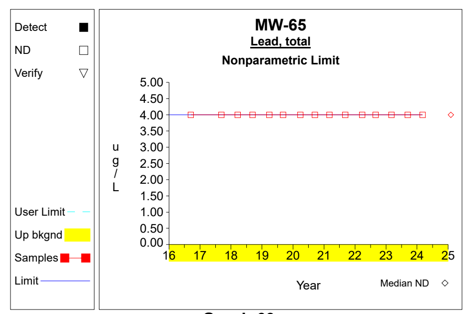
Graph 66



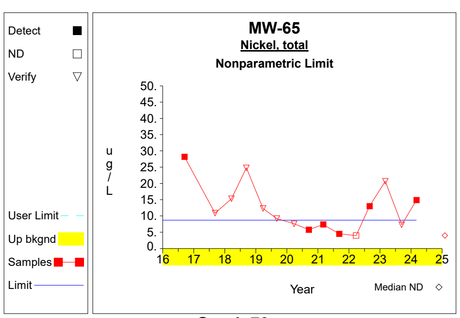
Graph 67



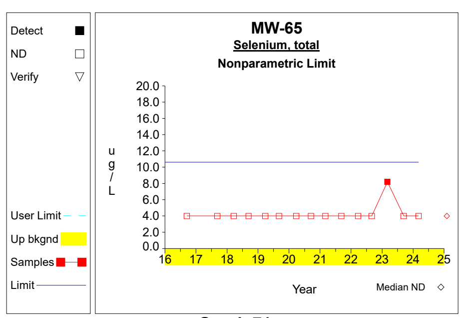
Graph 68



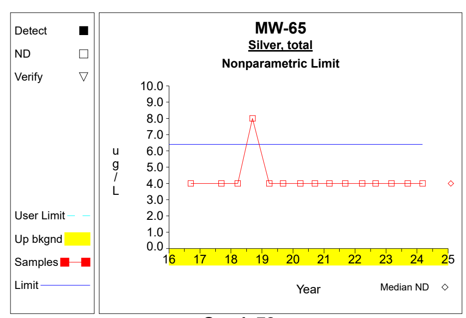
Graph 69



Graph 70



Graph 71



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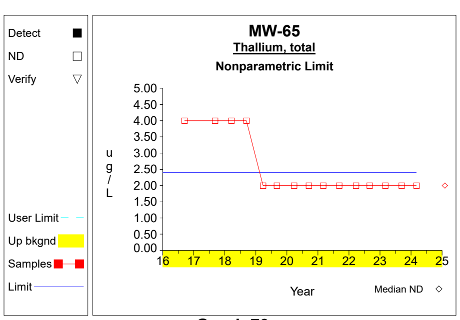
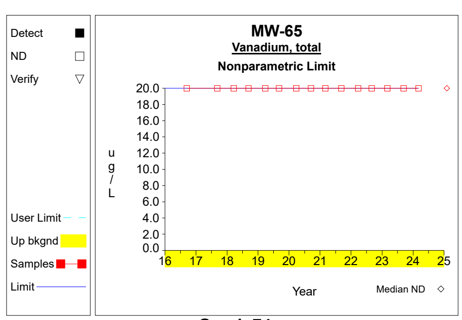
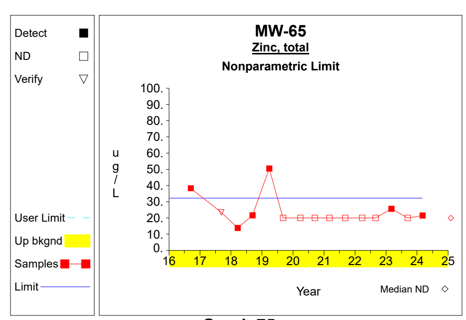


Graph 73



Graph 74



Graph 75

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

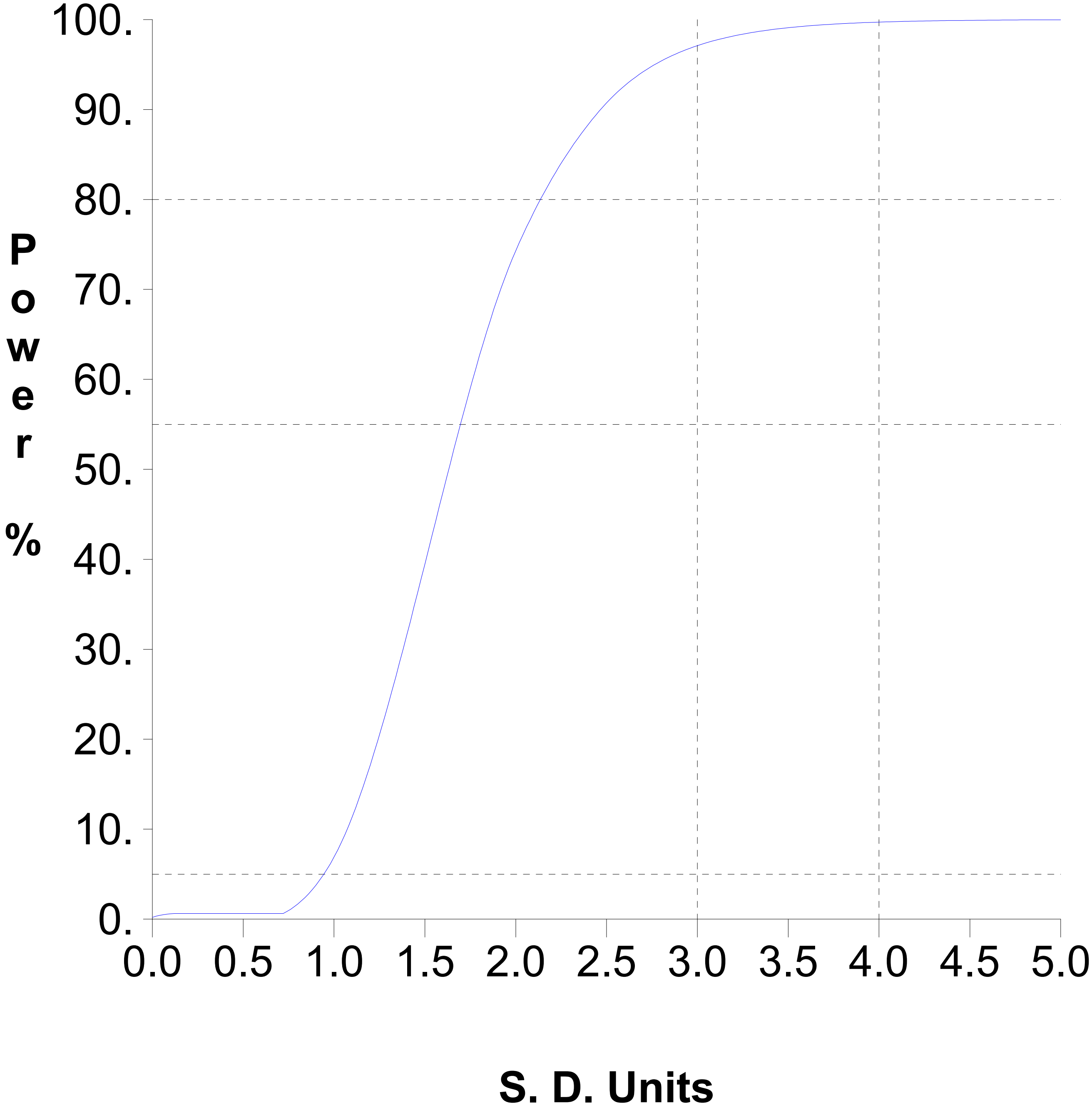

Table 1

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-44	4	6.725	4.342	1.176	1.618	11.832	10.000		
Barium, total	ug/L	MW-44	4	148.750	29.239	1.176	114.357	183.143	2000.000		
Cobalt, total	ug/L	MW-44	4	10.200	1.214	1.176	8.772	11.628	2.100		**
Copper, total	ug/L	MW-44	4	2.000	0.000	1.176	2.000	2.000	1300.000		
Lead, total	ug/L	MW-44	4	2.000	0.000	1.176	2.000	2.000	15.000		
Nickel, total	ug/L	MW-44	4	11.675	1.938	1.176	9.395	13.955	100.000		
Zinc, total	ug/L	MW-44	4	10.000	0.000	1.176	10.000	10.000	2000.000		
Arsenic, total	ug/L	MW-56	4	2.000	0.000	1.176	2.000	2.000	10.000		
Barium, total	ug/L	MW-56	4	22.925	6.431	1.176	15.360	30.490	2000.000		
Cobalt, total	ug/L	MW-56	4	1.600	1.364	1.176	0.000	3.204	2.100		
Copper, total	ug/L	MW-56	4	2.000	0.000	1.176	2.000	2.000	1300.000		
Lead, total	ug/L	MW-56	4	5.150	6.300	1.176	0.000	12.561	15.000		
Nickel, total	ug/L	MW-56	4	6.600	3.917	1.176	1.993	11.207	100.000		
Zinc, total	ug/L	MW-56	4	10.000	0.000	1.176	10.000	10.000	2000.000		
Arsenic, total	ug/L	MW-57	4	2.500	1.000	1.176	1.324	3.676	10.000		
Barium, total	ug/L	MW-57	4	364.500	132.515	1.176	208.624	520.376	2000.000		
Cobalt, total	ug/L	MW-57	4	1.225	1.517	1.176	0.000	3.010	2.100		
Copper, total	ug/L	MW-57	4	2.750	1.500	1.176	0.986	4.514	1300.000		
Lead, total	ug/L	MW-57	4	2.000	0.000	1.176	2.000	2.000	15.000		
Nickel, total	ug/L	MW-57	4	3.000	2.000	1.176	0.647	5.353	100.000		
Zinc, total	ug/L	MW-57	4	10.000	0.000	1.176	10.000	10.000	2000.000		
Arsenic, total	ug/L	MW-64	4	26.625	2.704	1.176	23.445	29.805	10.000		**
Barium, total	ug/L	MW-64	4	53.250	13.788	1.176	37.031	69.469	2000.000		
Cobalt, total	ug/L	MW-64	4	15.825	5.149	1.176	9.769	21.881	2.100	dec	**
Copper, total	ug/L	MW-64	4	2.000	0.000	1.176	2.000	2.000	1300.000		
Lead, total	ug/L	MW-64	4	2.000	0.000	1.176	2.000	2.000	15.000		
Nickel, total	ug/L	MW-64	4	38.900	9.222	1.176	28.052	49.748	100.000	dec	
Zinc, total	ug/L	MW-64	4	20.350	20.700	1.176	0.000	44.699	2000.000		
Arsenic, total	ug/L	MW-65	4	5.625	3.218	1.176	1.840	9.410	10.000		
Barium, total	ug/L	MW-65	4	26.475	10.626	1.176	13.976	38.974	2000.000		
Cobalt, total	ug/L	MW-65	4	7.300	2.255	1.176	4.647	9.953	2.100		**
Copper, total	ug/L	MW-65	4	3.400	1.649	1.176	1.460	5.340	1300.000		
Lead, total	ug/L	MW-65	4	2.000	0.000	1.176	2.000	2.000	15.000		
Nickel, total	ug/L	MW-65	4	13.975	5.525	1.176	7.476	20.474	100.000		
Zinc, total	ug/L	MW-65	4	16.800	8.037	1.176	7.346	26.254	2000.000		

*   - Insufficient Data
** - Significant Exceedance
LCL = Lower Confidence Limit
UCL = Upper Confidence Limit

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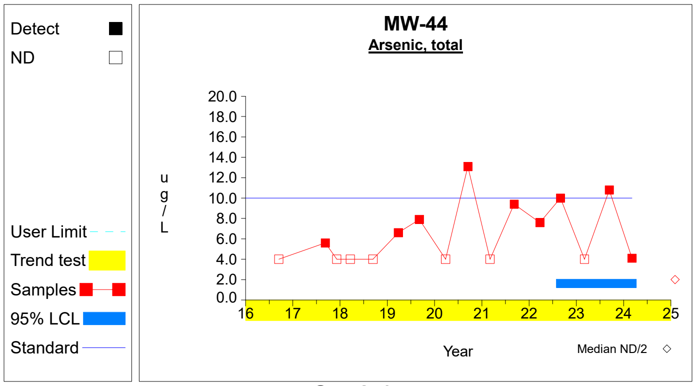
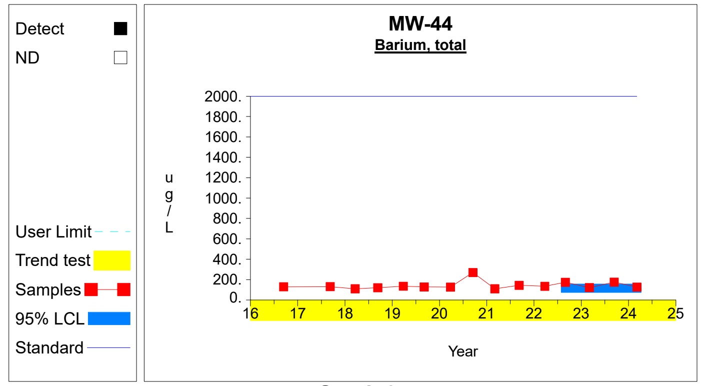
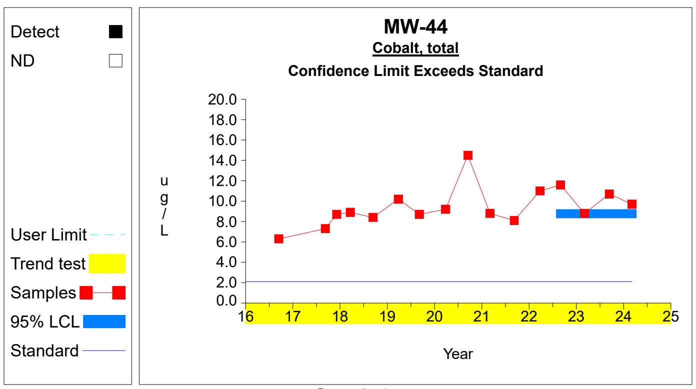
Confidence Limits (Assessment)



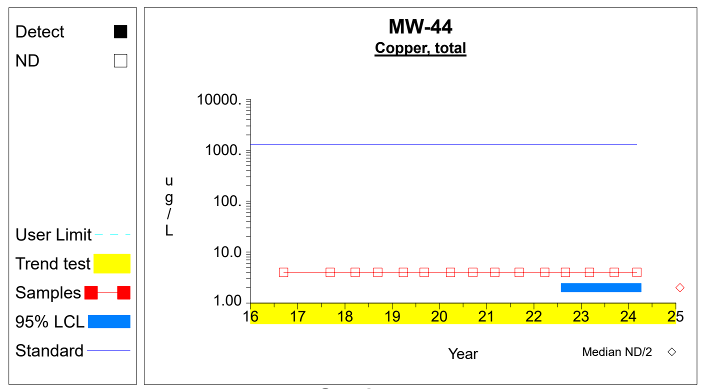
Graph 1



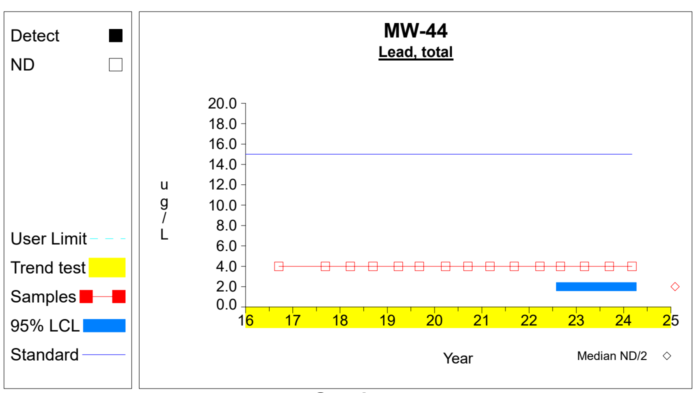
Graph 2



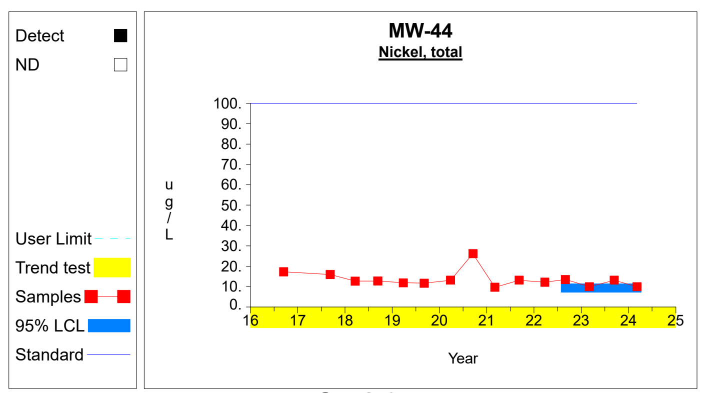
Graph 3



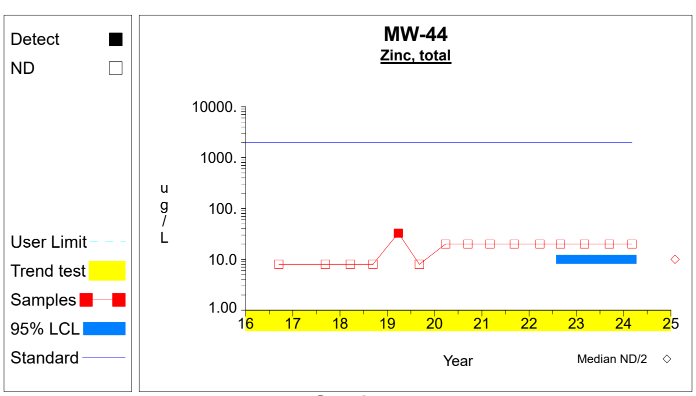
Graph 4



Graph 5



Graph 6



Graph 7

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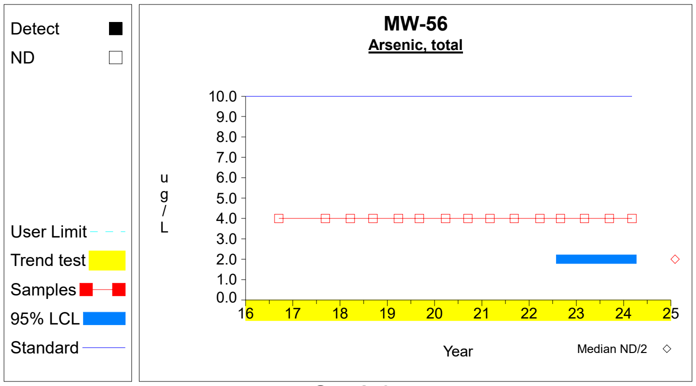
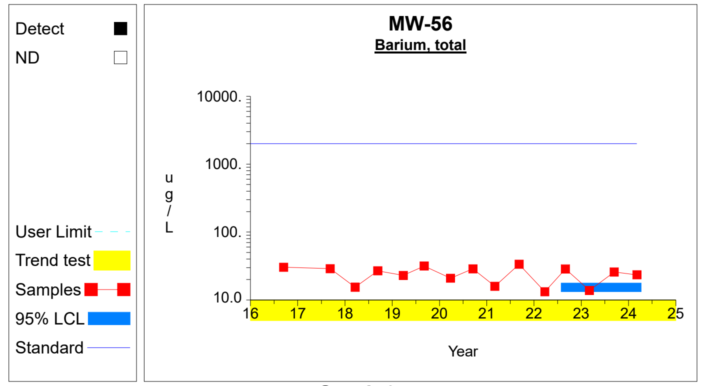
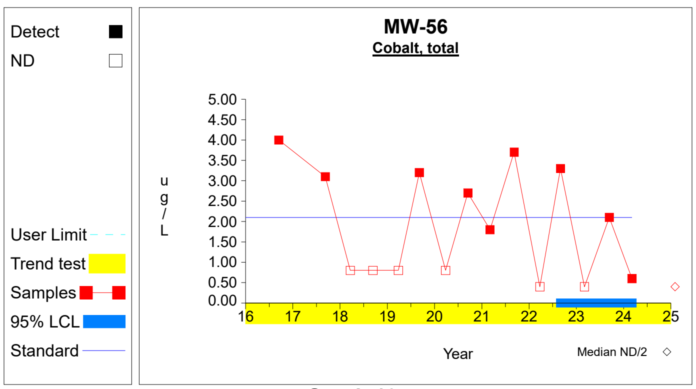
Confidence Limits (Assessment)



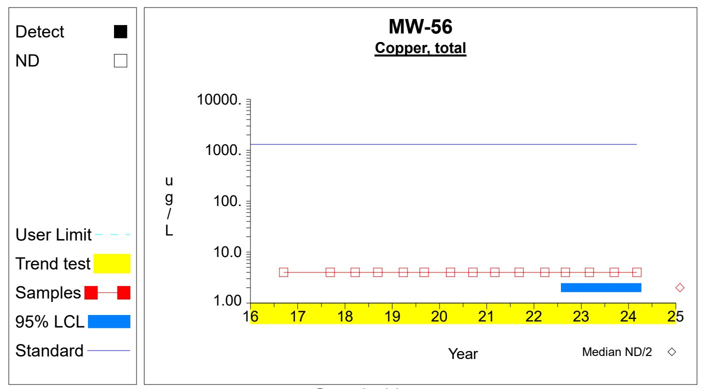
Graph 8



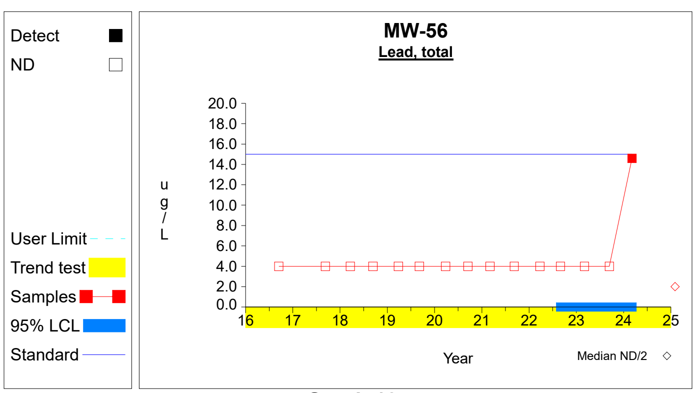
Graph 9



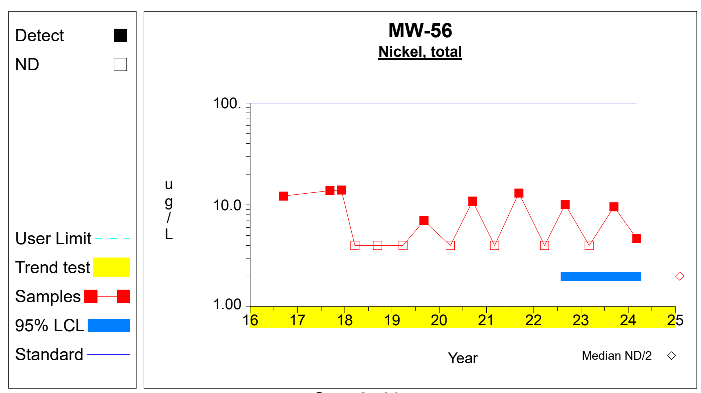
Graph 10



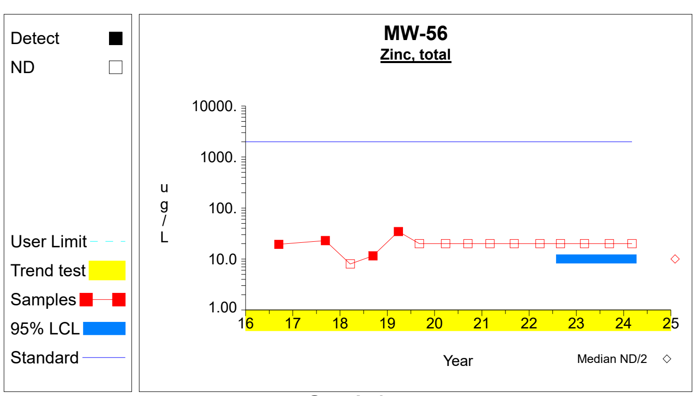
Graph 11



Graph 12

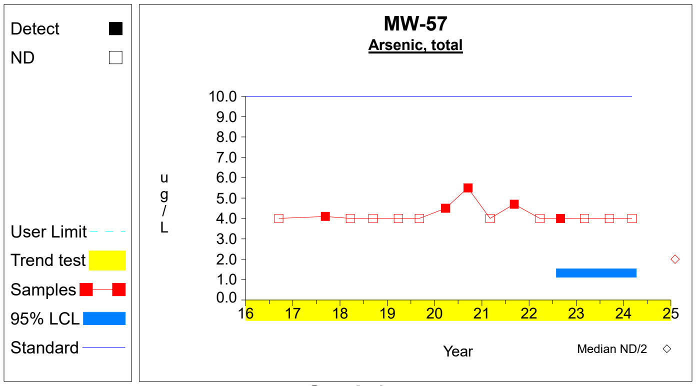


Graph 13

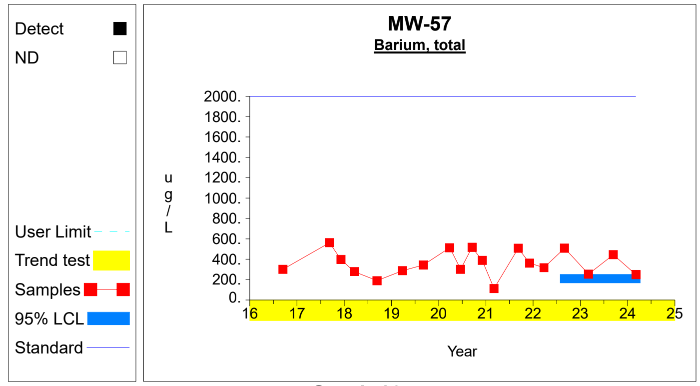


Graph 14

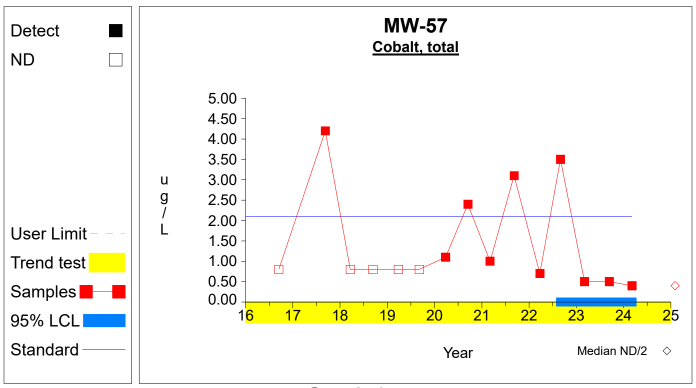
Confidence Limits (Assessment)



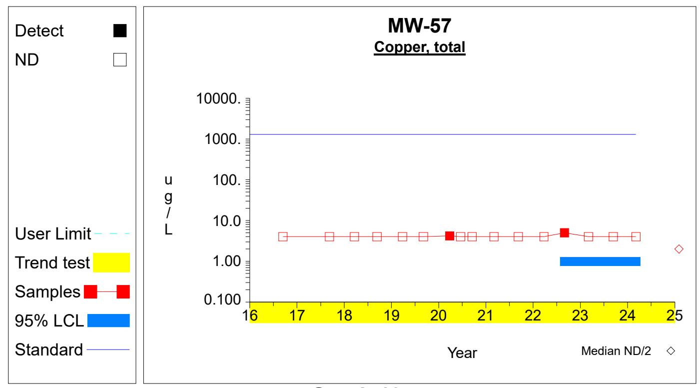
Graph 15



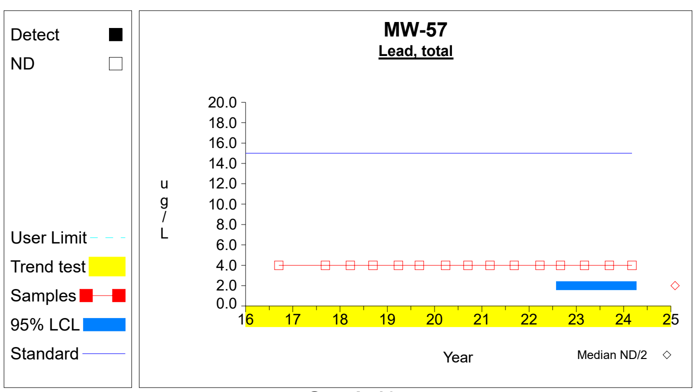
Graph 16



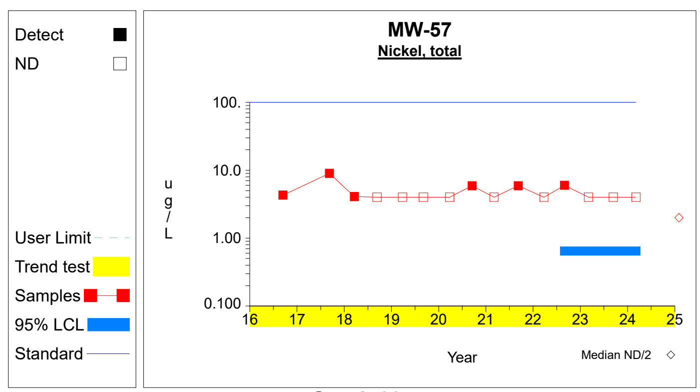
Graph 17



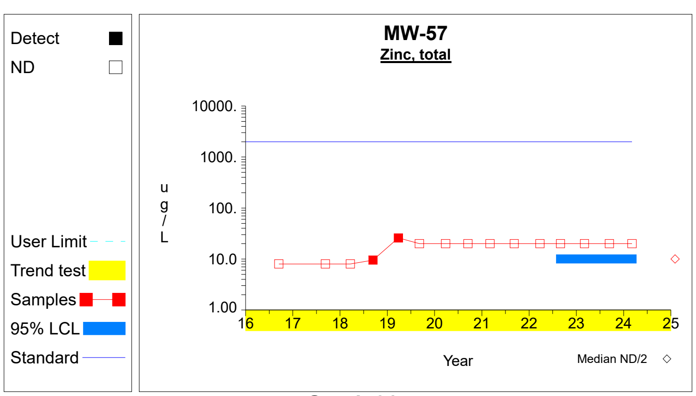
Graph 18



Graph 19

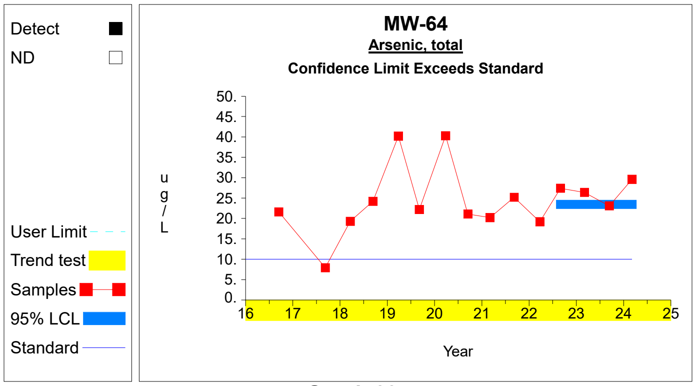


Graph 20

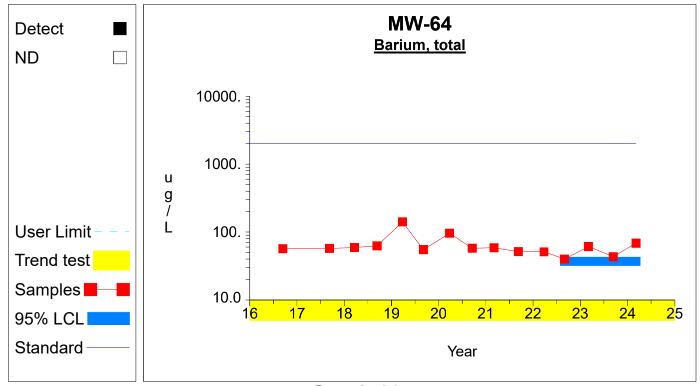


Graph 21

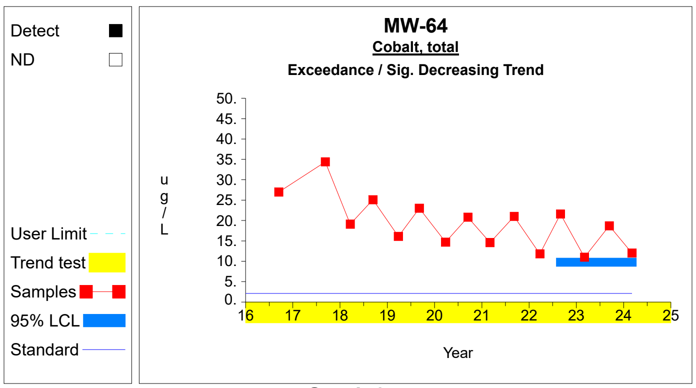
Confidence Limits (Assessment)



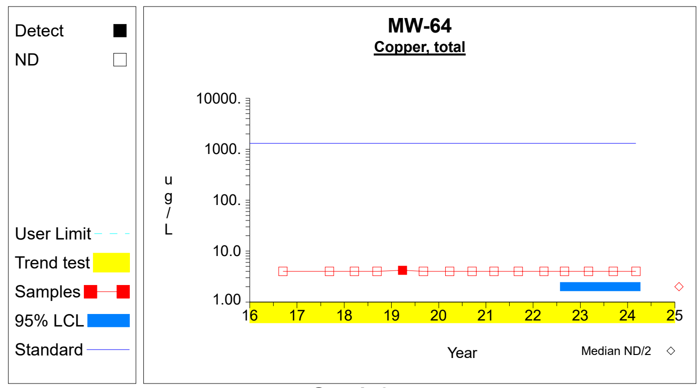
Graph 22



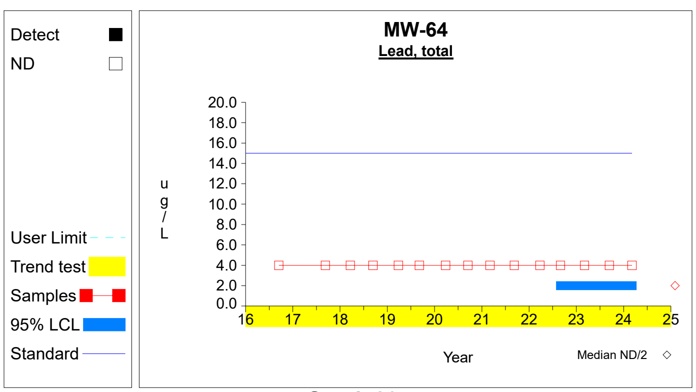
Graph 23



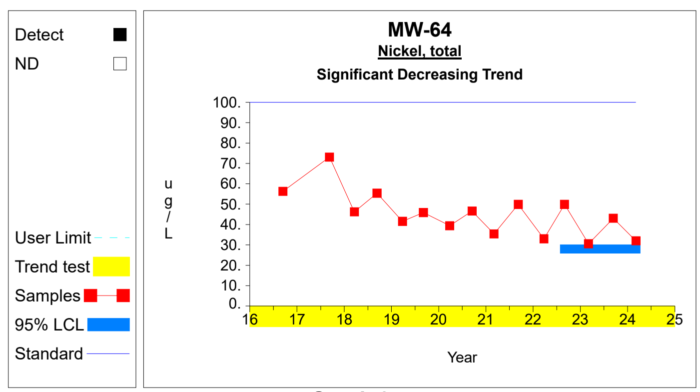
Graph 24



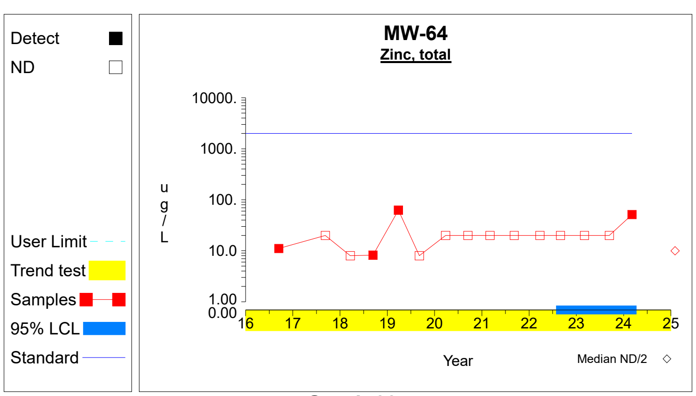
Graph 25



Graph 26

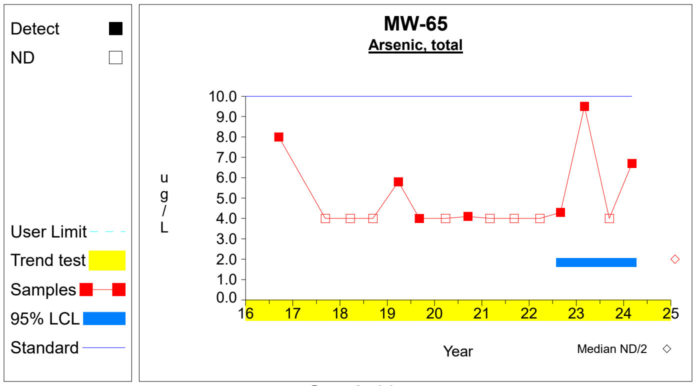


Graph 27

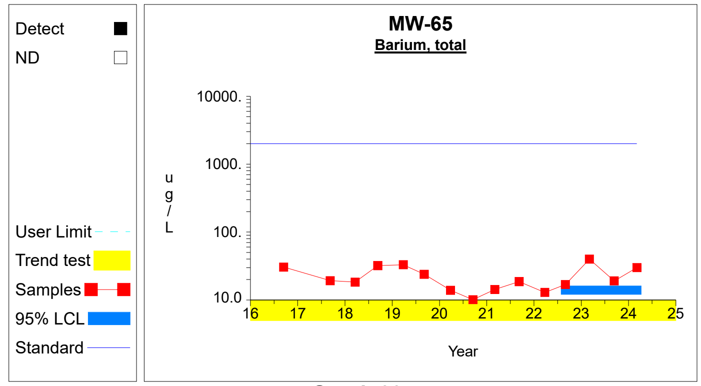


Graph 28

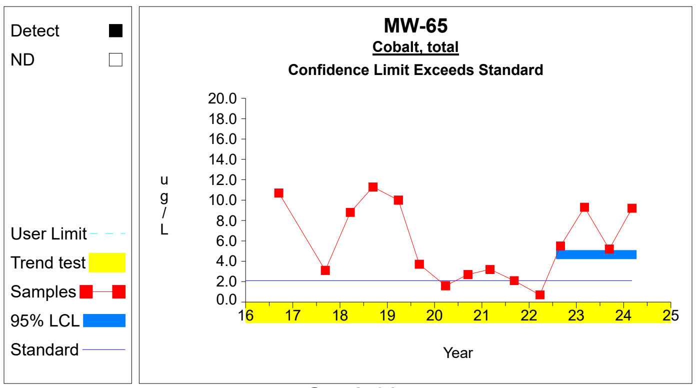
Confidence Limits (Assessment)



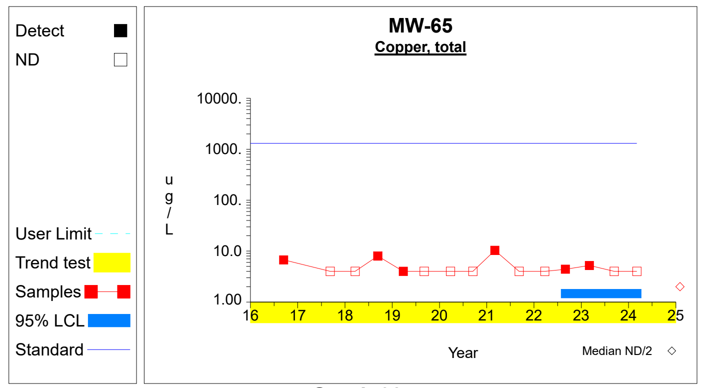
Graph 29



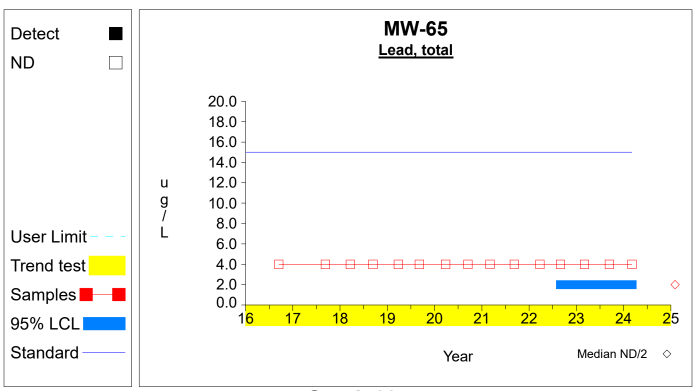
Graph 30



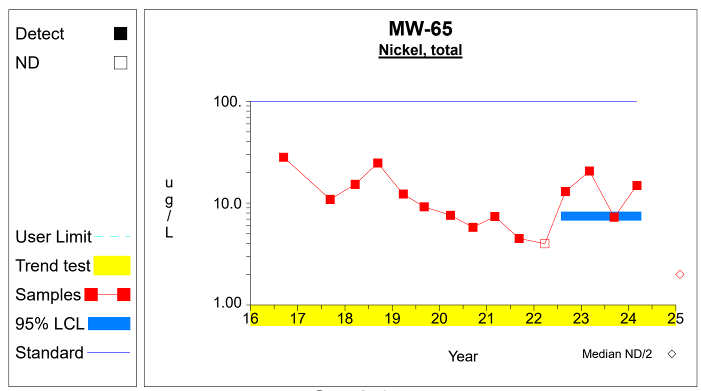
Graph 31



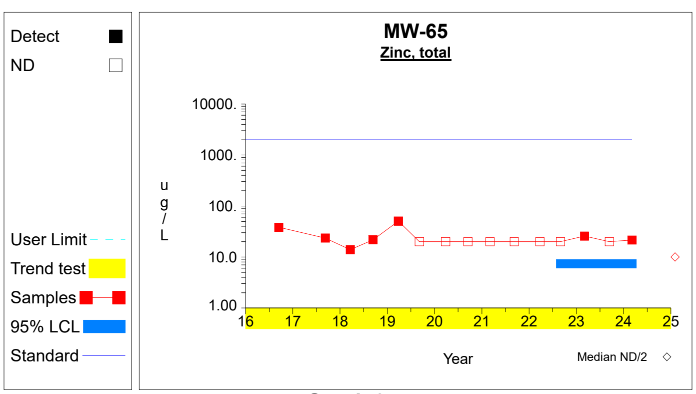
Graph 32



Graph 33



Graph 34



Graph 35

Attachment E

Historical Summary of the VOCs Detected

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
1,1-dichloroethane	GWD-1	9/08/2011		1	1	ug/L
Acetone	GWD-1	9/16/2008		66.7	20.0	ug/L
Chloroethane	GWD-1	3/06/2009		1.0	1.0	ug/L
Chloroethane	GWD-1	3/29/2010		1.4	1.0	ug/L
Chloroethane	GWD-1	9/08/2011		1.6	1.0	ug/L
Chloroethane	GWD-1	9/25/2012		1.0	1.0	ug/L
Cis-1,2-dichloroethylene	GWD-1	3/29/2010		1.4	1.0	ug/L
Cis-1,2-dichloroethylene	GWD-1	9/28/2010		1.4	1.0	ug/L
Cis-1,2-dichloroethylene	GWD-1	3/22/2011		1.2	1.0	ug/L
Cis-1,2-dichloroethylene	GWD-1	9/08/2011		1.7	1.0	ug/L
Cis-1,2-dichloroethylene	GWD-1	9/25/2012		1.1	1.0	ug/L
Vinyl chloride	GWD-1	3/29/2010		1.4	1.0	ug/L
Vinyl chloride	GWD-1	9/28/2010		1.0	1.0	ug/L
Vinyl chloride	GWD-1	3/22/2011		1.1	1.0	ug/L
Vinyl chloride	GWD-1	9/08/2011		1.2	1.0	ug/L
Trichlorofluoromethane	MW-39	9/25/2013		9	1	ug/L
1,1-dichloroethane	MW-41	9/27/2010		18.6	1.0	ug/L
1,1-dichloroethane	MW-41	3/23/2011		16.0	1.0	ug/L
1,1-dichloroethane	MW-41	9/08/2011		22.5	1.0	ug/L
1,1-dichloroethane	MW-41	3/09/2012		14.7	1.0	ug/L
1,1-dichloroethane	MW-41	9/25/2012		16.4	1.0	ug/L
1,1-dichloroethane	MW-41	3/15/2013		16.0	1.0	ug/L
1,1-dichloroethane	MW-41	9/25/2013		16.8	1.0	ug/L
1,1-dichloroethane	MW-41	3/25/2014		16.0	1.0	ug/L
1,1-dichloroethane	MW-41	9/24/2014		19.3	1.0	ug/L
1,1-dichloroethane	MW-41	3/11/2015		23.1	1.0	ug/L
1,1-dichloroethane	MW-41	9/16/2015		24.9	1.0	ug/L
1,1-dichloroethane	MW-41	3/22/2016		24.1	1.0	ug/L
1,1-dichloroethane	MW-41	9/15/2016		26.2	1.0	ug/L
1,1-dichloroethane	MW-41	3/23/2017		24.4	1.0	ug/L
1,1-dichloroethane	MW-41	9/08/2017		23.4	1.0	ug/L
1,1-dichloroethane	MW-41	3/19/2018		26.7	1.0	ug/L
1,1-dichloroethane	MW-41	9/11/2018		24.6	1.0	ug/L
1,1-dichloroethane	MW-41	3/26/2019		24.6	1.0	ug/L
1,1-dichloroethane	MW-41	9/04/2019		26.3	1.0	ug/L
1,1-dichloroethane	MW-41	3/26/2020		30.8	1.0	ug/L
1,1-dichloroethane	MW-41	9/15/2020		25.8	1.0	ug/L
1,1-dichloroethane	MW-41	3/02/2021		24.5	1.0	ug/L
1,1-dichloroethane	MW-41	9/07/2021		24.4	1.0	ug/L
1,1-dichloroethane	MW-41	3/24/2022		25.1	1.0	ug/L
1,1-dichloroethane	MW-41	8/31/2022		22.0	1.0	ug/L
1,1-dichloroethane	MW-41	3/02/2023		23.9	1.0	ug/L
1,1-dichloroethane	MW-41	9/12/2023		23.0	1.0	ug/L
1,1-dichloroethane	MW-41	3/04/2024		19.0	1.0	ug/L
1,2-dichloropropane	MW-41	3/26/2020		1.2	1.0	ug/L
1,2-dichloropropane	MW-41	3/02/2023		1.0	1.0	ug/L
Bis(2-ethylhexyl) phthalate	MW-41	3/09/2012		22	8	ug/L
Bis(2-ethylhexyl) phthalate	MW-41	3/25/2014		83	10	ug/L
Bis(2-ethylhexyl) phthalate	MW-41	9/16/2015		10	10	ug/L
Bis(2-ethylhexyl) phthalate	MW-41	3/26/2020		8	6	ug/L
Chloroethane	MW-41	3/26/2019		1.1	1.0	ug/L
Chloroethane	MW-41	3/26/2020		1.0	1.0	ug/L
Chloroethane	MW-41	9/07/2021		1.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-41	9/08/2011		1.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-41	9/24/2014		1.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-41	3/11/2015		2.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-41	9/16/2015		2.3	1.0	ug/L
Cis-1,2-dichloroethylene	MW-41	3/22/2016		2.5	1.0	ug/L
Cis-1,2-dichloroethylene	MW-41	9/15/2016		2.7	1.0	ug/L
Cis-1,2-dichloroethylene	MW-41	3/23/2017		2.7	1.0	ug/L
Cis-1,2-dichloroethylene	MW-41	9/08/2017		2.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-41	3/19/2018		2.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-41	9/11/2018		2.6	1.0	ug/L
Cis-1,2-dichloroethylene	MW-41	3/26/2019		3.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-41	9/04/2019		3.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-41	3/26/2020		5.3	1.0	ug/L
Cis-1,2-dichloroethylene	MW-41	9/15/2020		5.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-41	3/02/2021		4.6	1.0	ug/L
Cis-1,2-dichloroethylene	MW-41	9/07/2021		4.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-41	3/24/2022		4.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-41	8/31/2022		4.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-41	3/02/2023		4.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-41	9/12/2023		3.6	1.0	ug/L
Cis-1,2-dichloroethylene	MW-41	3/04/2024		2.4	1.0	ug/L
Tetrachloroethylene	MW-41	9/11/2018		1	1	ug/L
Trichloroethylene	MW-41	9/11/2018		1.1	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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
2,4,5-t	MW-42	3/19/2018		5.0	.5	ug/L
Bis(2-ethylhexyl) phthalate	MW-42	3/02/2023		6	6	ug/L
Acetone	MW-44	9/08/2017		20	10	ug/L
Acetone	MW-45	3/02/2021		21.1	10.0	ug/L
Tetrachloroethylene	MW-48	3/04/2024		2.3	1.0	ug/L
1,1-dichloroethane	MW-56	9/14/2016		5.0	1.0	ug/L
1,1-dichloroethane	MW-56	9/08/2017		10.4	1.0	ug/L
1,1-dichloroethane	MW-56	9/04/2019		4.7	1.0	ug/L
1,1-dichloroethane	MW-56	9/15/2020		6.9	1.0	ug/L
1,1-dichloroethane	MW-56	9/07/2021		8.4	1.0	ug/L
1,1-dichloroethane	MW-56	8/31/2022		7.4	1.0	ug/L
1,1-dichloroethane	MW-56	9/12/2023		4.0	1.0	ug/L
1,1-dichloroethane	MW-56	3/04/2024		1.7	1.0	ug/L
Benzene	MW-56	3/11/1992		7.8	5.0	ug/L
Benzene	MW-56	6/30/1992		1.4	1.0	ug/L
Benzene	MW-56	9/24/1992		9.7	5.0	ug/L
Benzene	MW-56	12/29/1992		8.3	5.0	ug/L
Benzene	MW-56	9/26/1995		10.0	5.0	ug/L
Benzene	MW-56	12/13/1995		11.3	5.0	ug/L
Benzene	MW-56	3/20/1996		11.1	5.0	ug/L
Benzene	MW-56	6/19/1996		11.7	5.0	ug/L
Benzene	MW-56	9/06/1996		9.6	5.0	ug/L
Benzene	MW-56	3/27/1997		10.4	5.0	ug/L
Benzene	MW-56	9/10/1997		11.3	5.0	ug/L
Benzene	MW-56	1/20/1998		9.6	5.0	ug/L
Benzene	MW-56	3/23/1998		5.9	5.0	ug/L
Benzene	MW-56	9/08/1998		9.1	5.0	ug/L
Benzene	MW-56	3/19/1999		7.4	5.0	ug/L
Benzene	MW-56	9/03/1999		7.6	5.0	ug/L
Benzene	MW-56	3/24/2000		9.5	5.0	ug/L
Benzene	MW-56	9/15/2000		7.1	5.0	ug/L
Benzene	MW-56	9/04/2001		6.4	5.0	ug/L
Benzene	MW-56	9/12/2002		7.1	5.0	ug/L
Benzene	MW-56	3/21/2003		5.8	5.0	ug/L
Benzene	MW-56	9/20/2003		5.9	5.0	ug/L
Benzene	MW-56	3/24/2004		.4	.3	ug/L
Benzene	MW-56	9/13/2005		5.8	5.0	ug/L
Benzene	MW-56	9/01/2006		5.3	5.0	ug/L
Benzene	MW-56	9/25/2007		2.3	1.0	ug/L
Benzene	MW-56	9/08/2017		1.4	1.0	ug/L
Benzene	MW-56	9/07/2021		1.0	1.0	ug/L
Chlorobenzene	MW-56	12/13/1995		5.6	5.0	ug/L
Chlorobenzene	MW-56	3/20/1996		4.7	1.0	ug/L
Chlorobenzene	MW-56	6/19/1996		4.7	1.0	ug/L
Chlorobenzene	MW-56	9/06/1996		4.4	1.0	ug/L
Chlorobenzene	MW-56	3/27/1997		5.0	1.0	ug/L
Chlorobenzene	MW-56	1/20/1998		4.8	1.0	ug/L
Chlorobenzene	MW-56	9/08/1998		5.1	5.0	ug/L
Chlorobenzene	MW-56	3/19/1999		4.6	1.0	ug/L
Chlorobenzene	MW-56	9/03/1999		5.1	5.0	ug/L
Chlorobenzene	MW-56	3/24/2000		7.0	5.0	ug/L
Chlorobenzene	MW-56	9/15/2000		5.2	5.0	ug/L
Chlorobenzene	MW-56	9/04/2001		5.4	5.0	ug/L
Chlorobenzene	MW-56	9/12/2002		4.8	1.0	ug/L
Chlorobenzene	MW-56	3/21/2003		5.3	5.0	ug/L
Chlorobenzene	MW-56	9/20/2003		4.5	1.0	ug/L
Chlorobenzene	MW-56	3/24/2004		.5	.3	ug/L
Chlorobenzene	MW-56	9/11/2004		4.1	1.0	ug/L
Chlorobenzene	MW-56	9/13/2005		4.3	1.0	ug/L
Chlorobenzene	MW-56	9/01/2006		3.7	1.0	ug/L
Chlorobenzene	MW-56	9/25/2007		1.3	1.0	ug/L
Cis-1,2-dichloroethylene	MW-56	12/13/1995		113.0	5.0	ug/L
Cis-1,2-dichloroethylene	MW-56	3/20/1996		118.0	5.0	ug/L
Cis-1,2-dichloroethylene	MW-56	6/19/1996		101.0	5.0	ug/L
Cis-1,2-dichloroethylene	MW-56	9/06/1996		86.5	5.0	ug/L
Cis-1,2-dichloroethylene	MW-56	3/27/1997		71.4	5.0	ug/L
Cis-1,2-dichloroethylene	MW-56	9/10/1997		61.3	5.0	ug/L
Cis-1,2-dichloroethylene	MW-56	1/20/1998		42.7	5.0	ug/L
Cis-1,2-dichloroethylene	MW-56	3/23/1998		27.0	5.0	ug/L
Cis-1,2-dichloroethylene	MW-56	9/08/1998		26.6	5.0	ug/L
Cis-1,2-dichloroethylene	MW-56	3/19/1999		18.6	5.0	ug/L
Cis-1,2-dichloroethylene	MW-56	9/03/1999		13.1	5.0	ug/L
Cis-1,2-dichloroethylene	MW-56	3/24/2000		8.6	5.0	ug/L
Cis-1,2-dichloroethylene	MW-56	9/15/2000		6.2	5.0	ug/L
Trans-1,2-dichloroethylene	MW-56	12/13/1995		3.7	1.0	ug/L
Trans-1,2-dichloroethylene	MW-56	3/20/1996		4.4	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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Trans-1,2-dichloroethylene	MW-56	9/06/1996		3.2	1.0	ug/L
Trans-1,2-dichloroethylene	MW-56	3/27/1997		3.2	1.0	ug/L
Trans-1,2-dichloroethylene	MW-56	9/10/1997		3.0	1.0	ug/L
Trans-1,2-dichloroethylene	MW-56	1/20/1998		2.6	1.0	ug/L
Trans-1,2-dichloroethylene	MW-56	9/08/1998		2.0	1.0	ug/L
Trans-1,2-dichloroethylene	MW-56	3/19/1999		1.1	1.0	ug/L
Trans-1,2-dichloroethylene	MW-56	9/03/1999		1.8	1.0	ug/L
Trans-1,2-dichloroethylene	MW-56	3/24/2000		1.8	1.0	ug/L
Trans-1,2-dichloroethylene	MW-56	9/15/2000		1.3	1.0	ug/L
Trans-1,2-dichloroethylene	MW-56	9/12/2002		1.1	1.0	ug/L
Vinyl chloride	MW-56	12/13/1995		299.0	2.0	ug/L
Vinyl chloride	MW-56	3/20/1996		286.0	2.0	ug/L
Vinyl chloride	MW-56	6/19/1996		287.0	2.0	ug/L
Vinyl chloride	MW-56	9/06/1996		255.0	2.0	ug/L
Vinyl chloride	MW-56	3/27/1997		200.4	2.0	ug/L
Vinyl chloride	MW-56	9/10/1997		195.0	2.0	ug/L
Vinyl chloride	MW-56	1/20/1998		174.0	2.0	ug/L
Vinyl chloride	MW-56	3/23/1998		99.8	2.0	ug/L
Vinyl chloride	MW-56	9/08/1998		126.0	2.0	ug/L
Vinyl chloride	MW-56	3/19/1999		63.8	2.0	ug/L
Vinyl chloride	MW-56	9/03/1999		43.0	2.0	ug/L
Vinyl chloride	MW-56	3/24/2000		47.9	2.0	ug/L
Vinyl chloride	MW-56	9/15/2000		25.8	2.0	ug/L
Vinyl chloride	MW-56	9/04/2001		9.4	2.0	ug/L
Vinyl chloride	MW-56	9/12/2002		4.5	2.0	ug/L
Vinyl chloride	MW-56	9/20/2003		4.5	2.0	ug/L
Vinyl chloride	MW-56	3/24/2004		.4	.2	ug/L
Vinyl chloride	MW-56	9/11/2004		3.2	2.0	ug/L
Vinyl chloride	MW-56	9/13/2005		2.7	2.0	ug/L
Vinyl chloride	MW-56	9/01/2006		10.2	2.0	ug/L
Vinyl chloride	MW-56	9/25/2007		2.1	2.0	ug/L
Vinyl chloride	MW-56	9/24/2013		3.3	1.0	ug/L
Vinyl chloride	MW-56	9/14/2016		2.8	1.0	ug/L
Vinyl chloride	MW-56	9/08/2017		4.2	1.0	ug/L
Vinyl chloride	MW-56	9/15/2020		1.9	1.0	ug/L
Vinyl chloride	MW-56	9/07/2021		2.2	1.0	ug/L
Acetone	MW-57	9/08/2017		18.2	10.0	ug/L
Bis(2-ethylhexyl) phthalate	MW-57	3/02/2023		7	6	ug/L
Bis(2-ethylhexyl) phthalate	MW-58	3/26/2020		6	6	ug/L
Cis-1,2-dichloroethylene	MW-58	9/27/2010		14.3	1.0	ug/L
Cis-1,2-dichloroethylene	MW-58	3/23/2011		16.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-58	9/08/2011		16.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-58	3/09/2012		12.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-58	9/25/2012		14.5	1.0	ug/L
Cis-1,2-dichloroethylene	MW-58	3/15/2013		10.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-58	9/25/2013		7.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-58	3/25/2014		8.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-58	9/24/2014		3.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW-58	3/11/2015		5.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW-58	9/17/2015		5.3	1.0	ug/L
Cis-1,2-dichloroethylene	MW-58	3/22/2016		4.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-58	9/15/2016		5.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW-58	3/23/2017		4.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW-58	9/08/2017		5.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-58	3/19/2018		4.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-58	9/11/2018		3.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-58	3/26/2019		2.7	1.0	ug/L
Cis-1,2-dichloroethylene	MW-58	9/04/2019		3.6	1.0	ug/L
Cis-1,2-dichloroethylene	MW-58	3/26/2020		2.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW-58	9/15/2020		2.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-58	3/02/2021		1.7	1.0	ug/L
Cis-1,2-dichloroethylene	MW-58	9/07/2021		2.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-58	3/24/2022		1.7	1.0	ug/L
Cis-1,2-dichloroethylene	MW-58	8/31/2022		1.7	1.0	ug/L
Cis-1,2-dichloroethylene	MW-58	3/02/2023		1.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW-58	9/12/2023		1.7	1.0	ug/L
Cis-1,2-dichloroethylene	MW-58	3/04/2024		1.0	1.0	ug/L
Bis(2-ethylhexyl) phthalate	MW-59	3/26/2019		15	6	ug/L
Bis(2-ethylhexyl) phthalate	MW-59	12/04/2019		6	6	ug/L
Bis(2-ethylhexyl) phthalate	MW-62R	9/25/2012		18	8	ug/L
Bis(2-ethylhexyl) phthalate	MW-62R	9/24/2013		19	10	ug/L
Trichlorofluoromethane	MW-62R	9/28/2010		5.3	1.0	ug/L
Trichlorofluoromethane	MW-62R	12/22/2010		3.1	1.0	ug/L
Trichlorofluoromethane	MW-62R	5/17/2011		3.2	1.0	ug/L
Trichlorofluoromethane	MW-62R	7/14/2011		2.1	1.0	ug/L
Trichlorofluoromethane	MW-62R	9/08/2011		6.1	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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Trichlorofluoromethane	MW-62R	3/09/2012		4.2	1.0	ug/L
Trichlorofluoromethane	MW-62R	9/25/2012		4.7	1.0	ug/L
Trichlorofluoromethane	MW-62R	3/15/2013		5.1	1.0	ug/L
Trichlorofluoromethane	MW-62R	3/25/2014		7.1	1.0	ug/L
Trichlorofluoromethane	MW-62R	9/24/2014		8.6	1.0	ug/L
Trichlorofluoromethane	MW-62R	3/11/2015		8.8	1.0	ug/L
Trichlorofluoromethane	MW-62R	9/16/2015		6.3	1.0	ug/L
Trichlorofluoromethane	MW-62R	3/22/2016		5.5	1.0	ug/L
Trichlorofluoromethane	MW-62R	9/15/2016		6.5	1.0	ug/L
Trichlorofluoromethane	MW-62R	3/23/2017		6.0	1.0	ug/L
Trichlorofluoromethane	MW-62R	9/08/2017		5.1	1.0	ug/L
Trichlorofluoromethane	MW-62R	3/19/2018		4.8	1.0	ug/L
Trichlorofluoromethane	MW-62R	9/11/2018		5.1	1.0	ug/L
Trichlorofluoromethane	MW-62R	3/26/2019		3.4	1.0	ug/L
Trichlorofluoromethane	MW-62R	9/04/2019		3.4	1.0	ug/L
Trichlorofluoromethane	MW-62R	3/26/2020		2.2	1.0	ug/L
Trichlorofluoromethane	MW-62R	9/15/2020		1.7	1.0	ug/L
Trichlorofluoromethane	MW-62R	3/02/2021		2.0	1.0	ug/L
Trichlorofluoromethane	MW-62R	9/07/2021		1.3	1.0	ug/L
Trichlorofluoromethane	MW-62R	8/31/2022		1.6	1.0	ug/L
Trichlorofluoromethane	MW-62R	3/02/2023		1.9	1.0	ug/L
Trichlorofluoromethane	MW-62R	9/12/2023		1.4	1.0	ug/L
Trichlorofluoromethane	MW-62R	3/04/2024		1.0	1.0	ug/L
1,1-dichloroethane	MW-64	9/14/2016		1.9	1.0	ug/L
1,1-dichloroethane	MW-64	9/08/2017		2.0	1.0	ug/L
1,1-dichloroethane	MW-64	3/19/2018		2.6	1.0	ug/L
1,1-dichloroethane	MW-64	9/11/2018		1.2	1.0	ug/L
1,1-dichloroethane	MW-64	3/26/2019		2.4	1.0	ug/L
1,1-dichloroethane	MW-64	9/04/2019		2.3	1.0	ug/L
1,1-dichloroethane	MW-64	3/26/2020		2.4	1.0	ug/L
1,1-dichloroethane	MW-64	9/15/2020		1.8	1.0	ug/L
1,1-dichloroethane	MW-64	3/02/2021		2.7	1.0	ug/L
1,1-dichloroethane	MW-64	9/07/2021		1.6	1.0	ug/L
1,1-dichloroethane	MW-64	3/24/2022		2.1	1.0	ug/L
1,1-dichloroethane	MW-64	8/31/2022		1.6	1.0	ug/L
1,1-dichloroethane	MW-64	3/02/2023		2.3	1.0	ug/L
1,1-dichloroethane	MW-64	9/12/2023		1.8	1.0	ug/L
1,1-dichloroethane	MW-64	3/04/2024		1.5	1.0	ug/L
Benzene	MW-64	9/03/1999		1.4	1.0	ug/L
Benzene	MW-64	3/24/2000		2.1	1.0	ug/L
Benzene	MW-64	9/15/2000		1.1	1.0	ug/L
Benzene	MW-64	3/20/2001		1.4	1.0	ug/L
Benzene	MW-64	3/20/2002		1.8	1.0	ug/L
Benzene	MW-64	9/12/2002		2.1	1.0	ug/L
Benzene	MW-64	3/21/2003		1.9	1.0	ug/L
Benzene	MW-64	9/20/2003		1.8	1.0	ug/L
Benzene	MW-64	3/24/2004		1.8	1.0	ug/L
Benzene	MW-64	3/03/2005		1.6	1.0	ug/L
Benzene	MW-64	9/13/2005		1.5	1.0	ug/L
Benzene	MW-64	3/16/2006		1.4	1.0	ug/L
Benzene	MW-64	9/01/2006		1.5	1.0	ug/L
Benzene	MW-64	3/27/2007		1.1	1.0	ug/L
Benzene	MW-64	9/25/2007		1.0	.3	ug/L
Benzene	MW-64	3/20/2008		1.0	.3	ug/L
Benzene	MW-64	3/20/2008		1.0	1.0	ug/L
Benzene	MW-64	9/16/2008		1.0	1.0	ug/L
Chlorobenzene	MW-64	9/03/1999		1.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-64	3/23/1998		19.8	5.0	ug/L
Cis-1,2-dichloroethylene	MW-64	9/08/1998		28.2	5.0	ug/L
Cis-1,2-dichloroethylene	MW-64	3/19/1999		46.5	5.0	ug/L
Cis-1,2-dichloroethylene	MW-64	9/03/1999		34.2	5.0	ug/L
Cis-1,2-dichloroethylene	MW-64	3/24/2000		82.1	5.0	ug/L
Cis-1,2-dichloroethylene	MW-64	9/15/2000		43.8	5.0	ug/L
Cis-1,2-dichloroethylene	MW-64	3/20/2001		56.4	5.0	ug/L
Cis-1,2-dichloroethylene	MW-64	9/04/2001		67.0	5.0	ug/L
Cis-1,2-dichloroethylene	MW-64	3/20/2002		82.1	5.0	ug/L
Cis-1,2-dichloroethylene	MW-64	9/14/2016		36.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-64	9/08/2017		23.7	1.0	ug/L
Cis-1,2-dichloroethylene	MW-64	3/19/2018		17.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-64	9/11/2018		15.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-64	3/26/2019		9.7	1.0	ug/L
Cis-1,2-dichloroethylene	MW-64	9/04/2019		8.3	1.0	ug/L
Cis-1,2-dichloroethylene	MW-64	3/26/2020		4.6	1.0	ug/L
Cis-1,2-dichloroethylene	MW-64	9/15/2020		6.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-64	3/02/2021		7.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-64	9/07/2021		7.4	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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Cis-1,2-dichloroethylene	MW-64	3/24/2022		3.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-64	8/31/2022		5.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-64	3/02/2023		3.3	1.0	ug/L
Cis-1,2-dichloroethylene	MW-64	9/12/2023		4.5	1.0	ug/L
Cis-1,2-dichloroethylene	MW-64	3/04/2024		2.4	1.0	ug/L
Trans-1,2-dichloroethylene	MW-64	9/15/2000		1.1	1.0	ug/L
Trans-1,2-dichloroethylene	MW-64	3/20/2001		1.4	1.0	ug/L
Trans-1,2-dichloroethylene	MW-64	3/20/2002		2.0	1.0	ug/L
Trans-1,2-dichloroethylene	MW-64	9/12/2002		2.4	1.0	ug/L
Vinyl chloride	MW-64	1/20/1998		7.4	2.0	ug/L
Vinyl chloride	MW-64	3/23/1998		8.0	2.0	ug/L
Vinyl chloride	MW-64	9/08/1998		12.0	2.0	ug/L
Vinyl chloride	MW-64	3/19/1999		17.8	2.0	ug/L
Vinyl chloride	MW-64	9/03/1999		12.1	2.0	ug/L
Vinyl chloride	MW-64	3/24/2000		59.8	2.0	ug/L
Vinyl chloride	MW-64	9/15/2000		19.7	2.0	ug/L
Vinyl chloride	MW-64	3/20/2001		35.4	2.0	ug/L
Vinyl chloride	MW-64	9/04/2001		35.6	2.0	ug/L
Vinyl chloride	MW-64	3/20/2002		44.3	2.0	ug/L
Vinyl chloride	MW-64	9/12/2002		51.8	2.0	ug/L
Vinyl chloride	MW-64	3/21/2003		56.1	2.0	ug/L
Vinyl chloride	MW-64	9/20/2003		57.0	2.0	ug/L
Vinyl chloride	MW-64	3/24/2004		65.8	2.0	ug/L
Vinyl chloride	MW-64	9/11/2004		65.8	2.0	ug/L
Vinyl chloride	MW-64	3/03/2005		81.3	2.0	ug/L
Vinyl chloride	MW-64	9/13/2005		85.2	2.0	ug/L
Vinyl chloride	MW-64	3/16/2006		103.0	2.0	ug/L
Vinyl chloride	MW-64	9/01/2006		122.0	2.0	ug/L
Vinyl chloride	MW-64	3/27/2007		87.5	2.0	ug/L
Vinyl chloride	MW-64	9/25/2007		74.4	2.0	ug/L
Vinyl chloride	MW-64	3/20/2008		61.9	1.0	ug/L
Vinyl chloride	MW-64	3/20/2008		61.9	2.0	ug/L
Vinyl chloride	MW-64	9/16/2008		77.9	1.0	ug/L
Vinyl chloride	MW-64	9/16/2008		77.9	2.0	ug/L
Vinyl chloride	MW-64	3/06/2009		45.9	1.0	ug/L
Vinyl chloride	MW-64	9/13/2009		42.5	1.0	ug/L
Vinyl chloride	MW-64	9/24/2013		70.6	1.0	ug/L
Vinyl chloride	MW-64	9/25/2014		38.9	1.0	ug/L
Vinyl chloride	MW-64	3/25/2015		20.0	1.0	ug/L
Vinyl chloride	MW-64	9/16/2015		20.1	1.0	ug/L
Vinyl chloride	MW-64	9/14/2016		23.7	1.0	ug/L
Vinyl chloride	MW-64	3/23/2017		14.3	1.0	ug/L
Vinyl chloride	MW-64	9/08/2017		17.4	1.0	ug/L
Vinyl chloride	MW-64	3/19/2018		14.4	1.0	ug/L
Vinyl chloride	MW-64	9/11/2018		7.9	1.0	ug/L
Vinyl chloride	MW-64	3/26/2019		7.0	1.0	ug/L
Vinyl chloride	MW-64	9/04/2019		5.6	1.0	ug/L
Vinyl chloride	MW-64	3/26/2020		3.7	1.0	ug/L
Vinyl chloride	MW-64	9/15/2020		5.6	1.0	ug/L
Vinyl chloride	MW-64	3/02/2021		3.4	1.0	ug/L
Vinyl chloride	MW-64	9/07/2021		2.6	1.0	ug/L
Vinyl chloride	MW-64	3/24/2022		1.6	1.0	ug/L
Vinyl chloride	MW-64	8/31/2022		1.7	1.0	ug/L
Vinyl chloride	MW-64	3/02/2023		1.9	1.0	ug/L
Vinyl chloride	MW-64	9/12/2023		1.8	1.0	ug/L
Vinyl chloride	MW-64	3/04/2024		2.7	1.0	ug/L
Vinyl chloride	MW-65	9/16/2008		1.2	1.0	ug/L
Vinyl chloride	MW-65	9/16/2008		1.2	1.0	ug/L
Vinyl chloride	MW-65	9/24/2013		3.1	1.0	ug/L
Carbon disulfide	MW-79	12/22/2010		1	1	ug/L
Trichlorofluoromethane	MW-79	3/24/2022		1.6	1.0	ug/L
Cis-1,2-dichloroethylene	SW-101	3/23/2017		1.4	1.0	ug/L
Cis-1,2-dichloroethylene	SW-101	3/26/2019		2.8	1.0	ug/L
Cis-1,2-dichloroethylene	SW-101	9/04/2019		2.9	1.0	ug/L
Cis-1,2-dichloroethylene	SW-101	12/04/2019		3.6	1.0	ug/L
Vinyl chloride	SW-101	9/04/2019		1.6	1.0	ug/L
Cis-1,2-dichloroethylene	SW-101R	3/26/2020		2.6	1.0	ug/L
Cis-1,2-dichloroethylene	SW-101R	9/15/2020		1.8	1.0	ug/L
Cis-1,2-dichloroethylene	SW-101R	3/02/2021		2.1	1.0	ug/L
Cis-1,2-dichloroethylene	SW-101R	9/07/2021		5.9	1.0	ug/L
Cis-1,2-dichloroethylene	SW-101R	3/24/2022		5.5	1.0	ug/L
Cis-1,2-dichloroethylene	SW-101R	8/31/2022		6.1	1.0	ug/L
Cis-1,2-dichloroethylene	SW-101R	3/02/2023		5.9	1.0	ug/L
Cis-1,2-dichloroethylene	SW-101R	9/12/2023		6.0	1.0	ug/L
Cis-1,2-dichloroethylene	SW-101R	3/04/2024		4.0	1.0	ug/L
Vinyl chloride	SW-101R	9/15/2020		1.8	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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Vinyl chloride	SW-101R	3/02/2021		1.8	1.0	ug/L
Vinyl chloride	SW-101R	9/07/2021		4.6	1.0	ug/L
Vinyl chloride	SW-101R	3/24/2022		6.5	1.0	ug/L
Vinyl chloride	SW-101R	8/31/2022		3.9	1.0	ug/L
Vinyl chloride	SW-101R	3/02/2023		5.9	1.0	ug/L
Vinyl chloride	SW-101R	9/12/2023		4.4	1.0	ug/L
Vinyl chloride	SW-101R	3/04/2024		5.3	1.0	ug/L
Cis-1,2-dichloroethylene	SW-103	12/13/1995		5.3	5.0	ug/L
Cis-1,2-dichloroethylene	SW-103	3/20/1996		1.1	1.0	ug/L
Cis-1,2-dichloroethylene	SW-103	3/27/1997		1.1	1.0	ug/L
Cis-1,2-dichloroethylene	SW-103	3/20/2002		1.4	1.0	ug/L
Vinyl chloride	SW-103	12/13/1995		6.2	2.0	ug/L

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

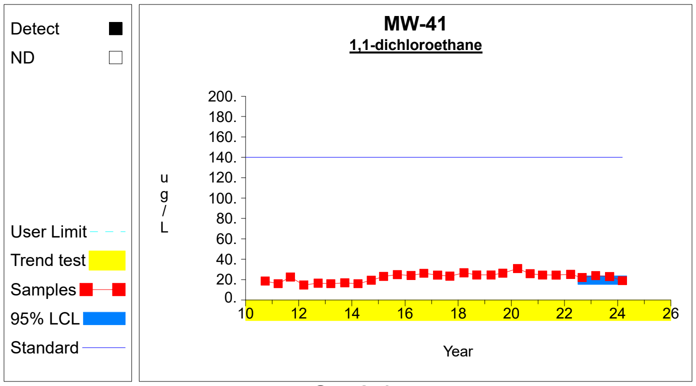
Table 1

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-41	4	21.975	2.130	1.176	19.470	24.480	140.000		
1,2-dichloropropane	ug/L	MW-41	4	0.625	0.250	1.176	0.331	0.919	5.000		
Bis(2-ethylhexyl) phthalate	ug/L	MW-41	4	5.750	1.500	1.176	3.986	7.514	6.000		
Cis-1,2-dichloroethylene	ug/L	MW-41	4	3.525	0.780	1.176	2.607	4.443	70.000	inc	
Tetrachloroethylene	ug/L	MW-41	4	0.500	0.000	1.176	0.500	0.500	5.000		
Trichlorofluoromethane	ug/L	MW-41	4	0.500	0.000	1.176	0.500	0.500	2000.000		
Vinyl chloride	ug/L	MW-41	4	0.500	0.000	1.176	0.500	0.500	2.000		
1,1-dichloroethane	ug/L	MW-42	4	0.500	0.000	1.176	0.500	0.500	140.000		
1,2-dichloropropane	ug/L	MW-42	4	0.500	0.000	1.176	0.500	0.500	5.000		
Bis(2-ethylhexyl) phthalate	ug/L	MW-42	3								*
Cis-1,2-dichloroethylene	ug/L	MW-42	4	0.500	0.000	1.176	0.500	0.500	70.000		
Tetrachloroethylene	ug/L	MW-42	4	0.500	0.000	1.176	0.500	0.500	5.000		
Trichlorofluoromethane	ug/L	MW-42	4	0.500	0.000	1.176	0.500	0.500	2000.000		
Vinyl chloride	ug/L	MW-42	4	0.500	0.000	1.176	0.500	0.500	2.000		
1,1-dichloroethane	ug/L	MW-48	4	0.500	0.000	1.176	0.500	0.500	140.000		
1,2-dichloropropane	ug/L	MW-48	4	0.500	0.000	1.176	0.500	0.500	5.000		
Bis(2-ethylhexyl) phthalate	ug/L	MW-48	0								*
Cis-1,2-dichloroethylene	ug/L	MW-48	4	0.500	0.000	1.176	0.500	0.500	70.000		
Tetrachloroethylene	ug/L	MW-48	4	0.950	0.900	1.176	0.000	2.009	5.000		
Trichlorofluoromethane	ug/L	MW-48	4	0.500	0.000	1.176	0.500	0.500	2000.000		
Vinyl chloride	ug/L	MW-48	4	0.500	0.000	1.176	0.500	0.500	2.000		
1,1-dichloroethane	ug/L	MW-56	4	3.400	3.036	1.176	0.000	6.972	140.000		
1,2-dichloropropane	ug/L	MW-56	4	0.500	0.000	1.176	0.500	0.500	5.000		
Bis(2-ethylhexyl) phthalate	ug/L	MW-56	2								*
Cis-1,2-dichloroethylene	ug/L	MW-56	4	0.500	0.000	1.176	0.500	0.500	70.000		
Tetrachloroethylene	ug/L	MW-56	4	0.500	0.000	1.176	0.500	0.500	5.000		
Trichlorofluoromethane	ug/L	MW-56	4	0.500	0.000	1.176	0.500	0.500	2000.000		
Vinyl chloride	ug/L	MW-56	4	0.500	0.000	1.176	0.500	0.500	2.000		
1,1-dichloroethane	ug/L	MW-58	4	0.500	0.000	1.176	0.500	0.500	140.000		
1,2-dichloropropane	ug/L	MW-58	4	0.500	0.000	1.176	0.500	0.500	5.000		
Bis(2-ethylhexyl) phthalate	ug/L	MW-58	4	4.500	1.000	1.176	3.324	5.676	6.000		
Cis-1,2-dichloroethylene	ug/L	MW-58	4	1.550	0.370	1.176	1.115	1.985	70.000	dec	
Tetrachloroethylene	ug/L	MW-58	4	0.500	0.000	1.176	0.500	0.500	5.000		
Trichlorofluoromethane	ug/L	MW-58	4	0.500	0.000	1.176	0.500	0.500	2000.000		
Vinyl chloride	ug/L	MW-58	4	0.500	0.000	1.176	0.500	0.500	2.000		
1,1-dichloroethane	ug/L	MW-62R	4	0.500	0.000	1.176	0.500	0.500	140.000		
1,2-dichloropropane	ug/L	MW-62R	4	0.500	0.000	1.176	0.500	0.500	5.000		
Bis(2-ethylhexyl) phthalate	ug/L	MW-62R	4	5.000	0.000	1.176	5.000	5.000	6.000		
Cis-1,2-dichloroethylene	ug/L	MW-62R	4	0.500	0.000	1.176	0.500	0.500	70.000		
Tetrachloroethylene	ug/L	MW-62R	4	0.500	0.000	1.176	0.500	0.500	5.000		
Trichlorofluoromethane	ug/L	MW-62R	4	1.475	0.377	1.176	1.031	1.919	2000.000		
Vinyl chloride	ug/L	MW-62R	4	0.500	0.000	1.176	0.500	0.500	2.000		
1,1-dichloroethane	ug/L	MW-64	4	1.800	0.356	1.176	1.381	2.219	140.000		
1,2-dichloropropane	ug/L	MW-64	4	0.500	0.000	1.176	0.500	0.500	5.000		
Bis(2-ethylhexyl) phthalate	ug/L	MW-64	2								*
Cis-1,2-dichloroethylene	ug/L	MW-64	4	3.900	1.319	1.176	2.348	5.452	70.000	dec	
Tetrachloroethylene	ug/L	MW-64	4	0.500	0.000	1.176	0.500	0.500	5.000		
Trichlorofluoromethane	ug/L	MW-64	4	0.500	0.000	1.176	0.500	0.500	2000.000		
Vinyl chloride	ug/L	MW-64	4	2.025	0.457	1.176	1.487	2.563	2.000	dec	
1,1-dichloroethane	ug/L	SW-101R	4	0.500	0.000	1.176	0.500	0.500	140.000		
1,2-dichloropropane	ug/L	SW-101R	4	0.500	0.000	1.176	0.500	0.500	5.000		
Bis(2-ethylhexyl) phthalate	ug/L	SW-101R	2								*
Cis-1,2-dichloroethylene	ug/L	SW-101R	4	5.500	1.003	1.176	4.320	6.680	70.000		
Tetrachloroethylene	ug/L	SW-101R	4	0.500	0.000	1.176	0.500	0.500	5.000		
Trichlorofluoromethane	ug/L	SW-101R	4	0.500	0.000	1.176	0.500	0.500	2000.000		
Vinyl chloride	ug/L	SW-101R	4	4.875	0.896	1.176	3.821	5.929	2.000		**

* - Insufficient Data
** - Significant Exceedance
LCL = Lower Confidence Limit
UCL = Upper Confidence Limit

Confidence Limits (Assessment)



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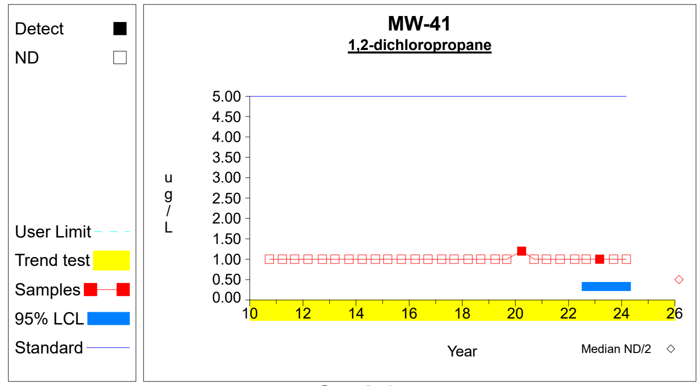

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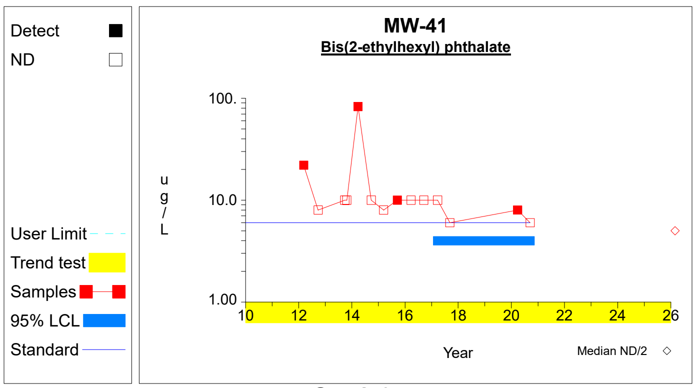

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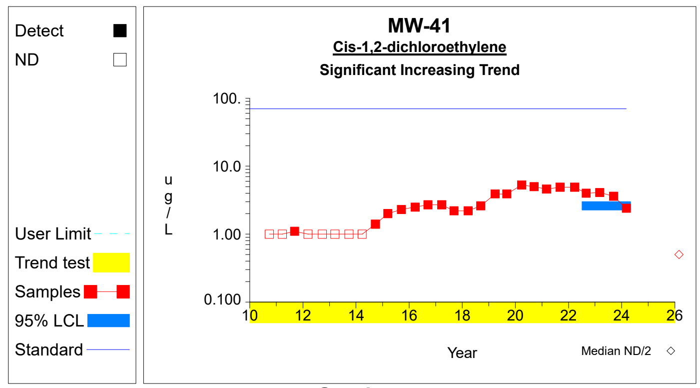

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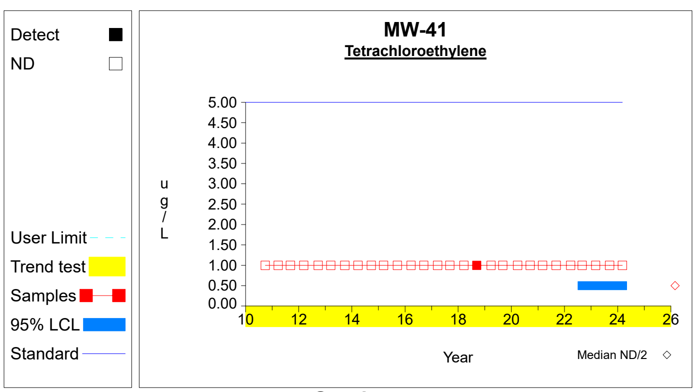

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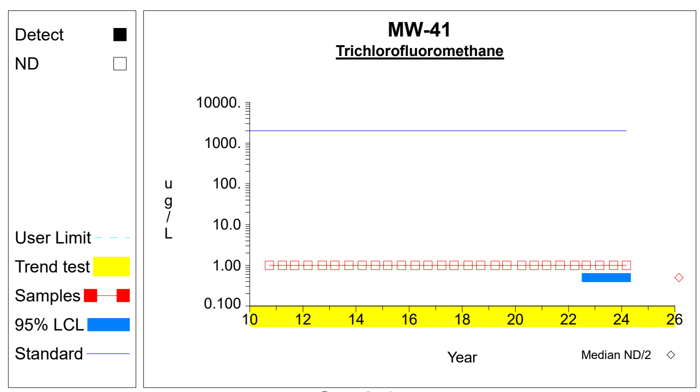

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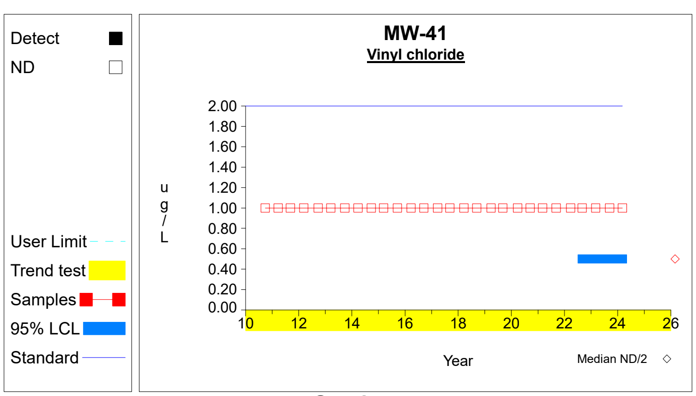

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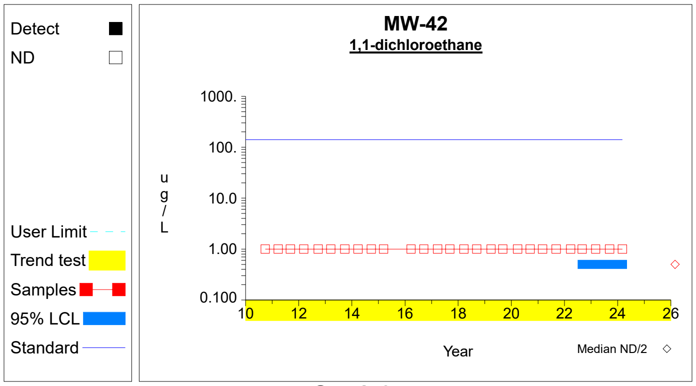

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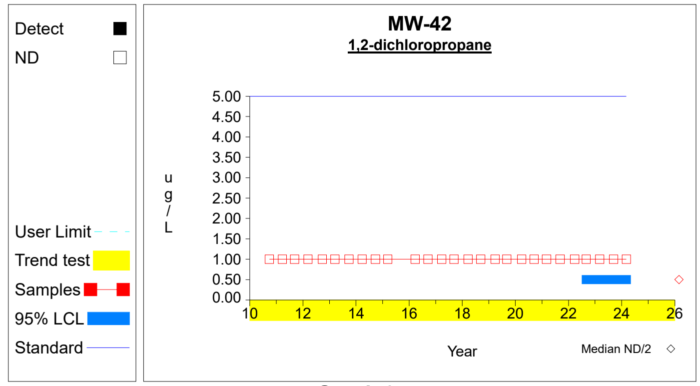

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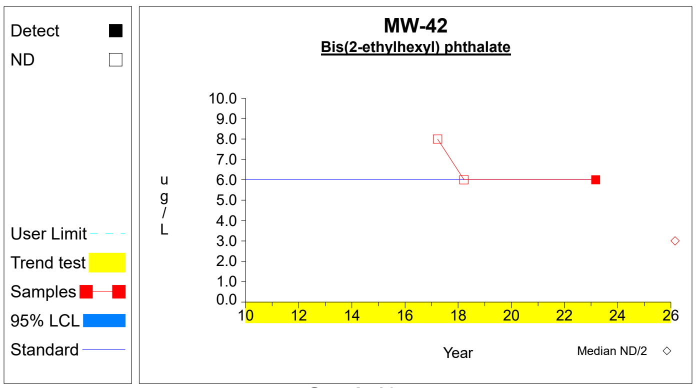

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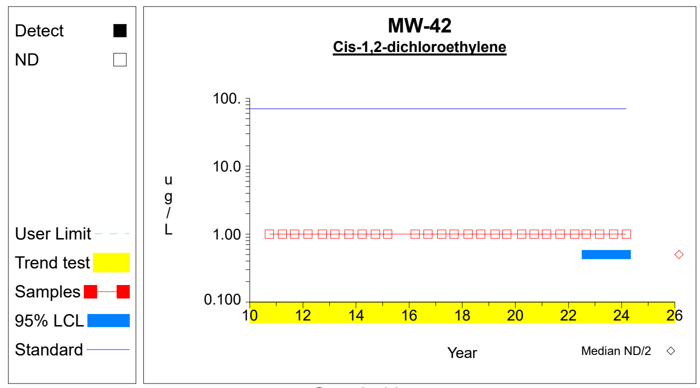

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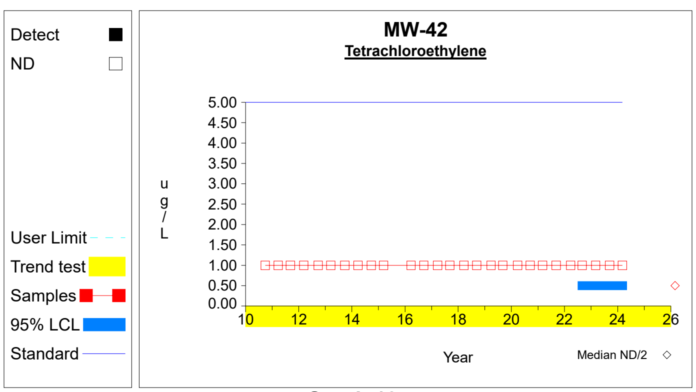

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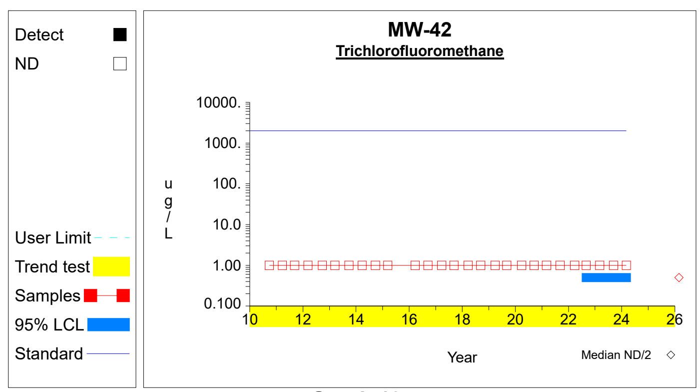

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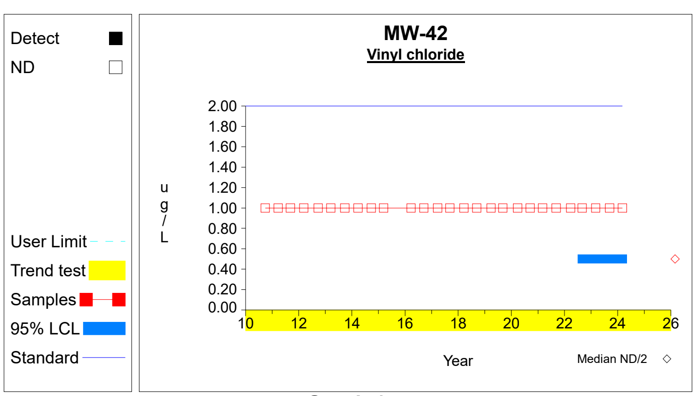
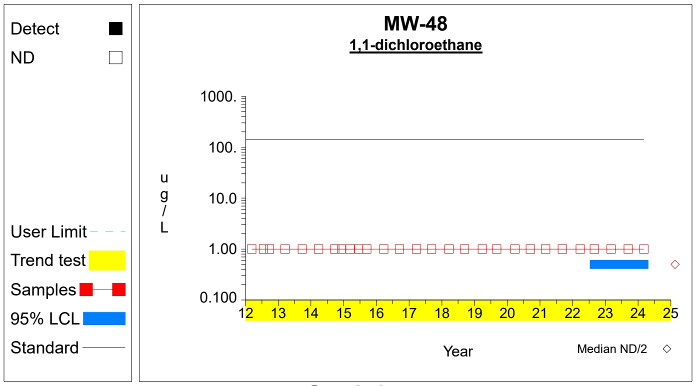


Graph 14

Confidence Limits (Assessment)



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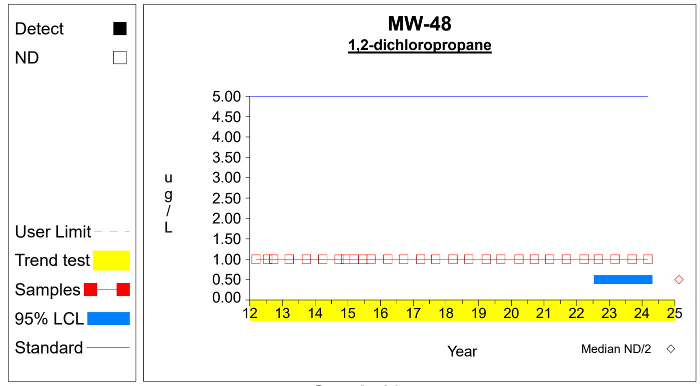

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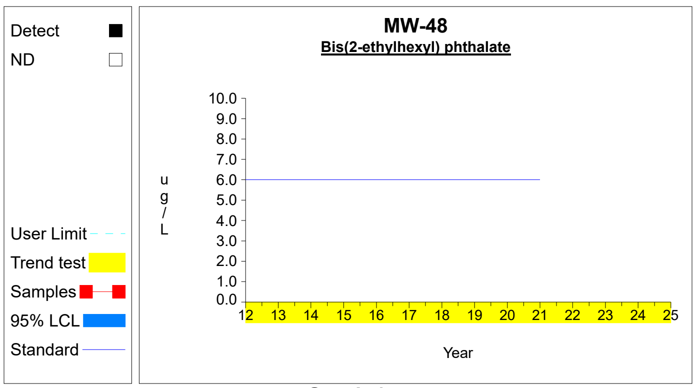

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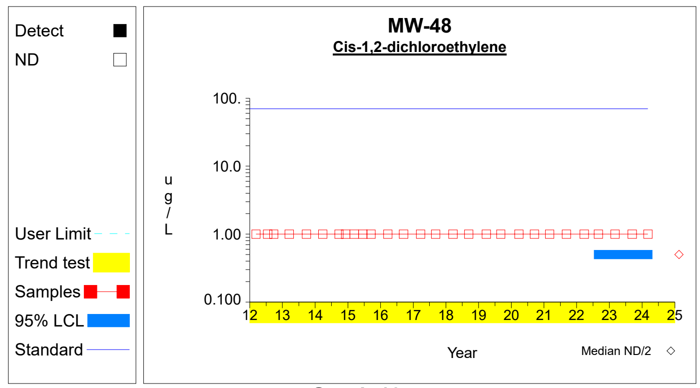

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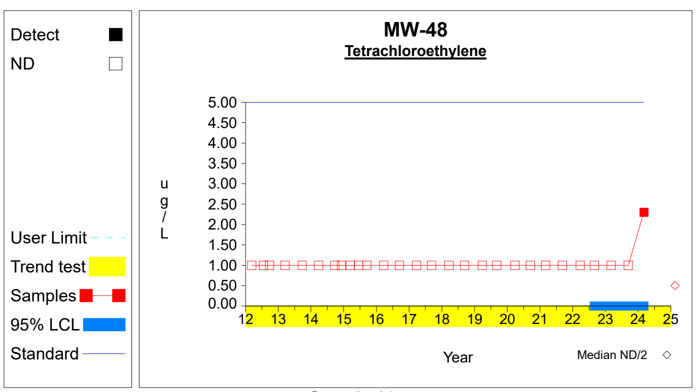

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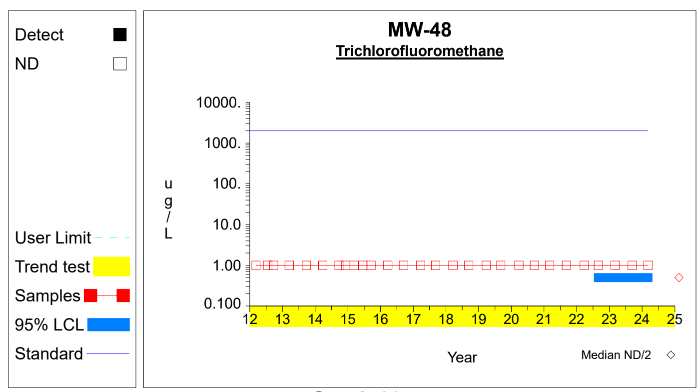

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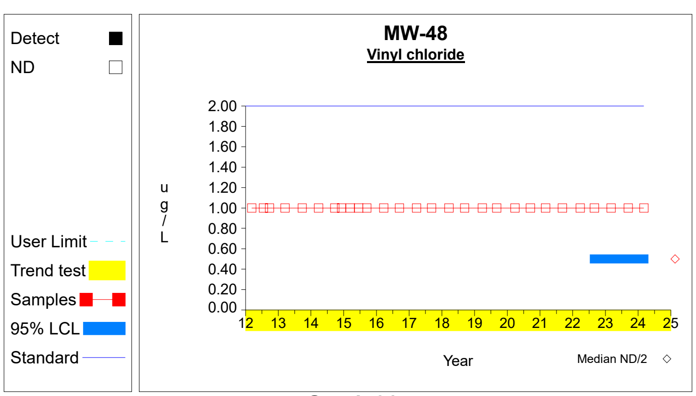
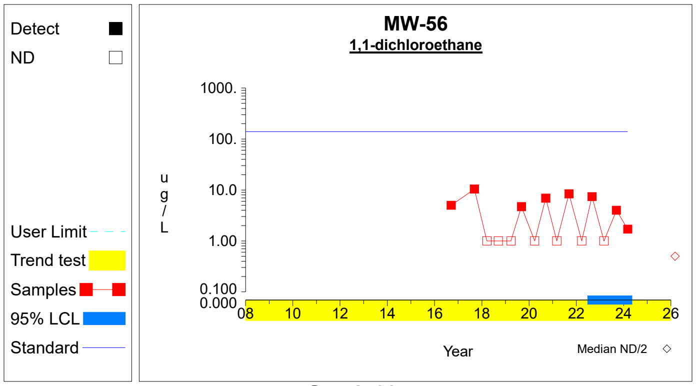


Graph 21

Confidence Limits (Assessment)



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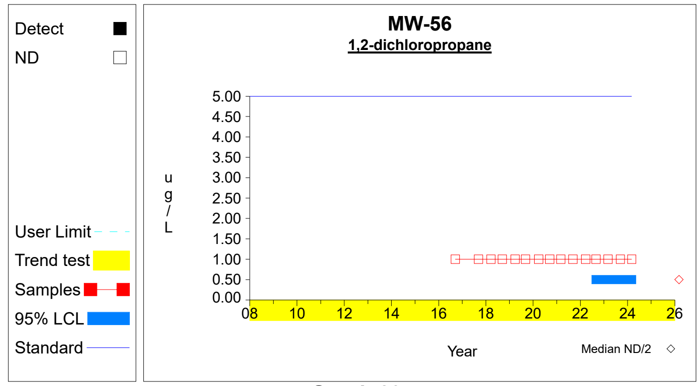

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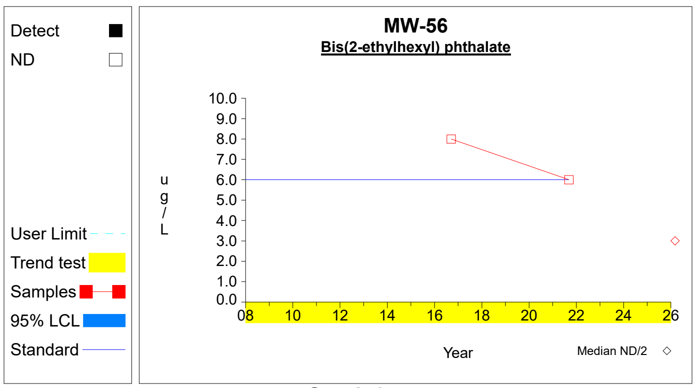

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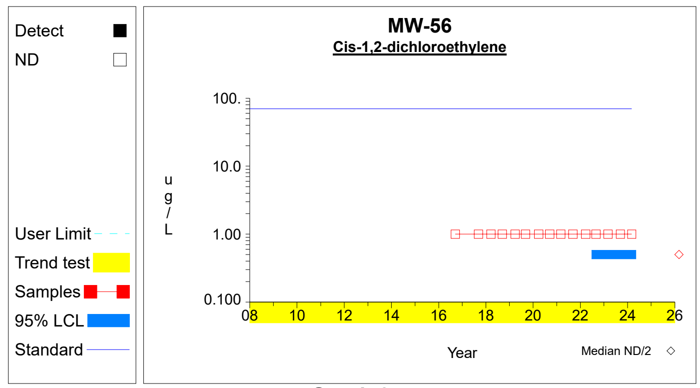

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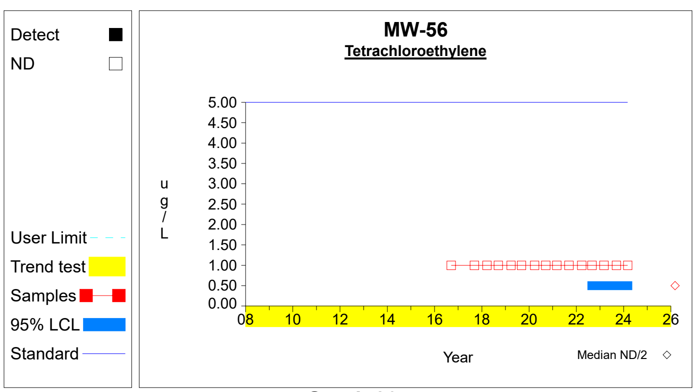

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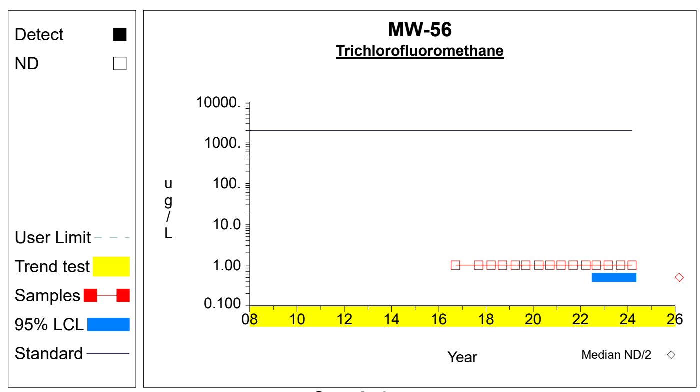

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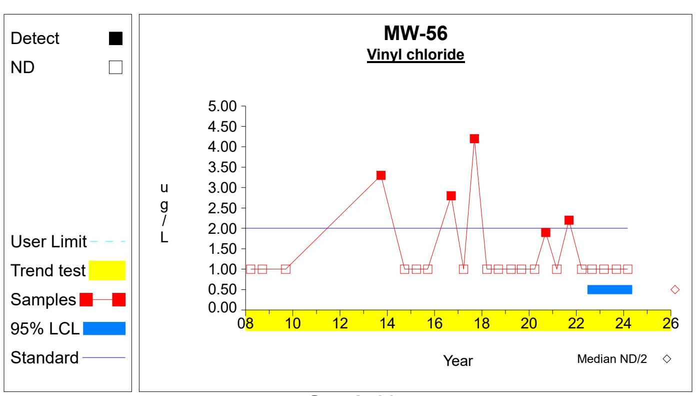
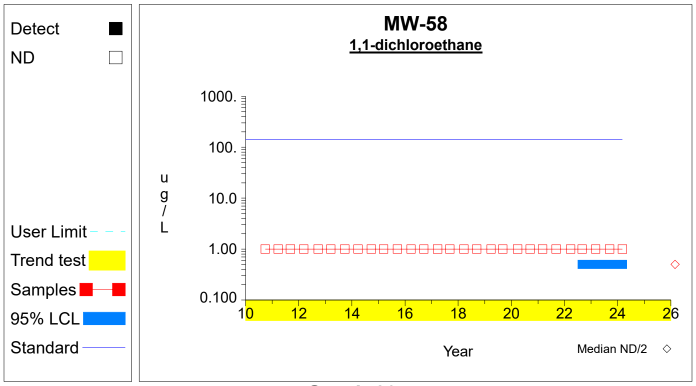


Graph 28

Confidence Limits (Assessment)



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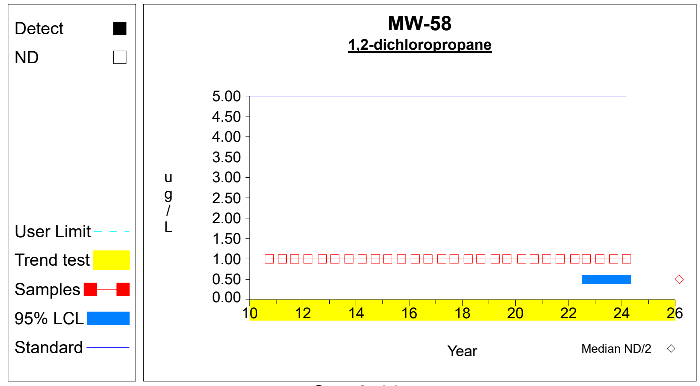

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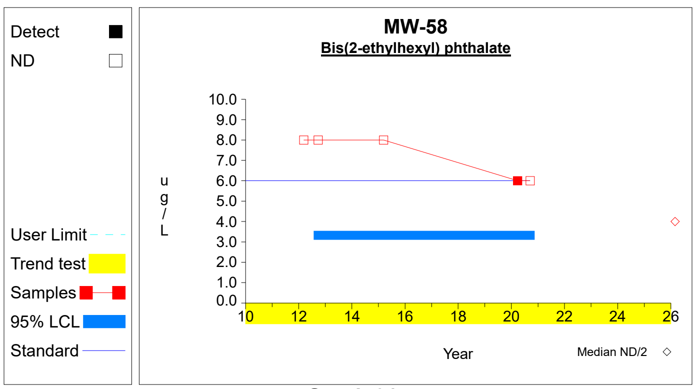

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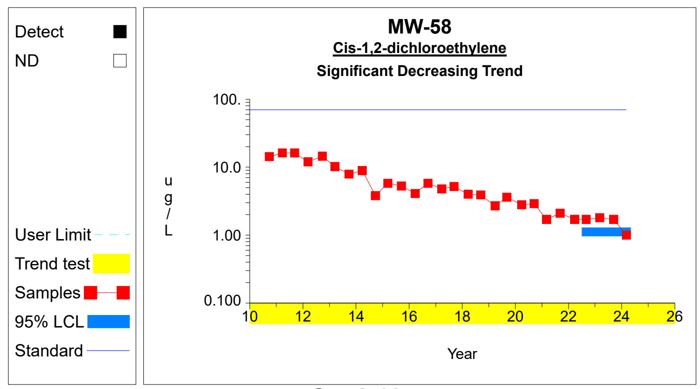

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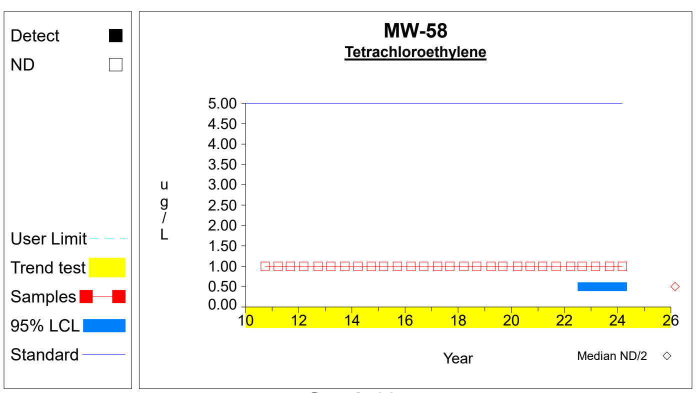

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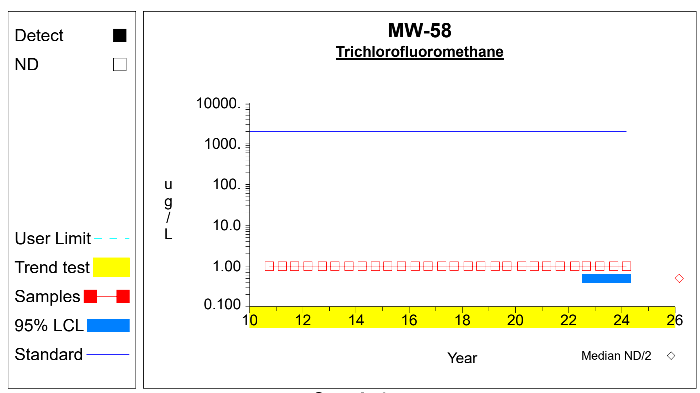

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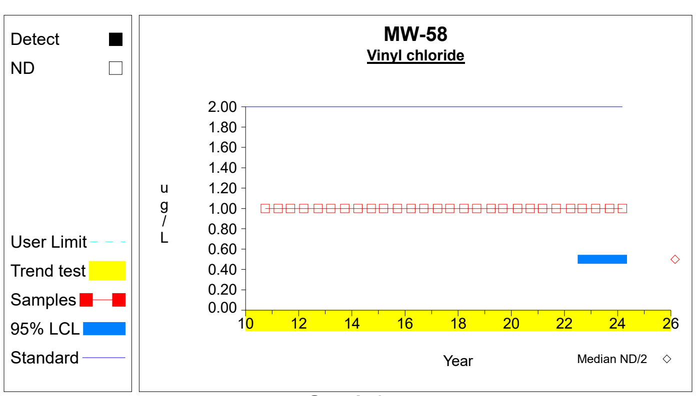

Graph 35

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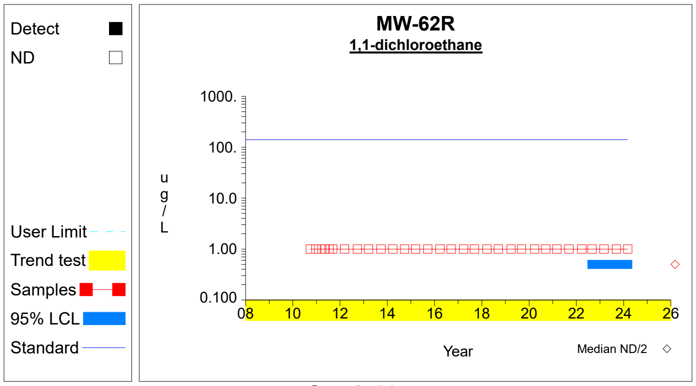

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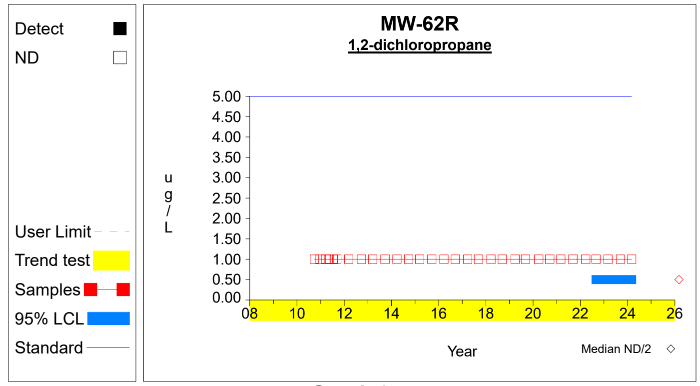

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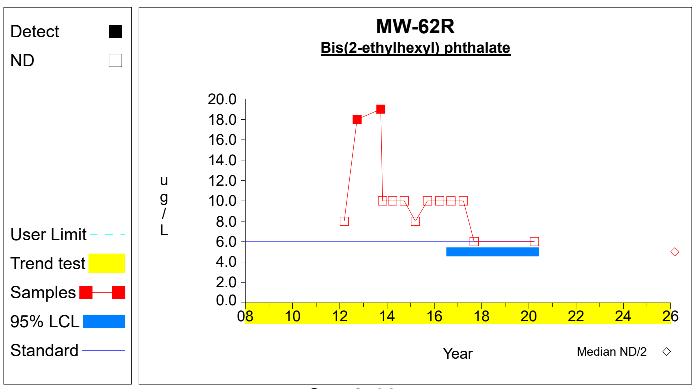

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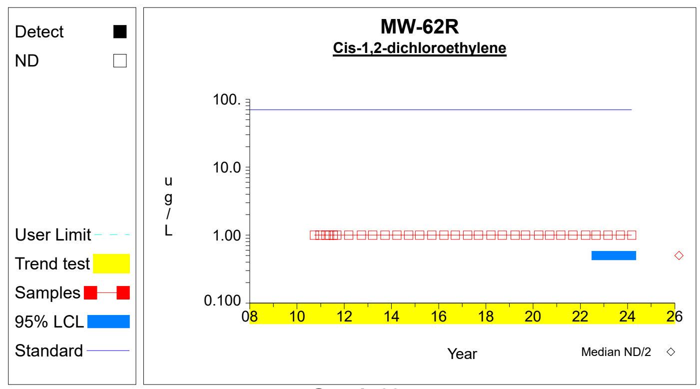

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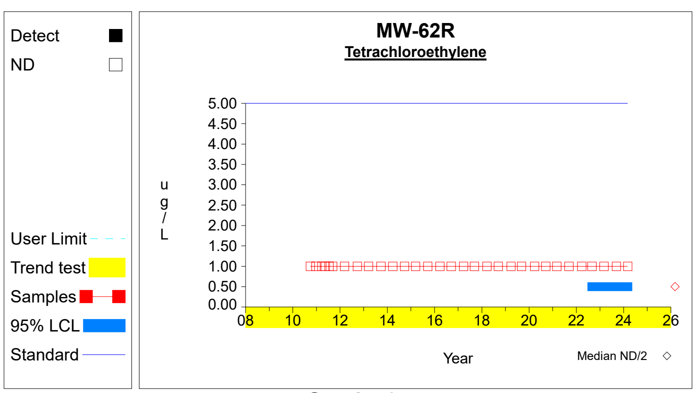

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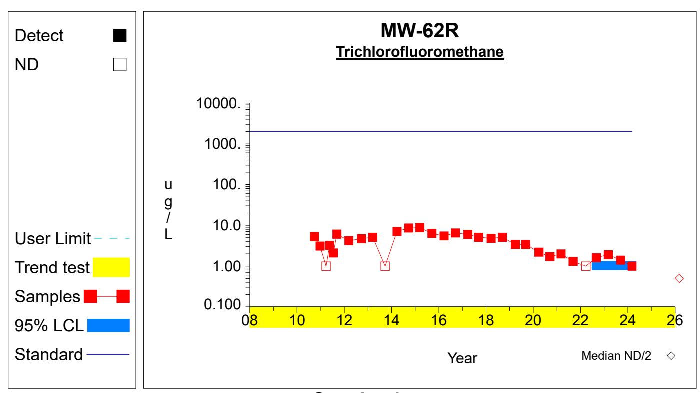

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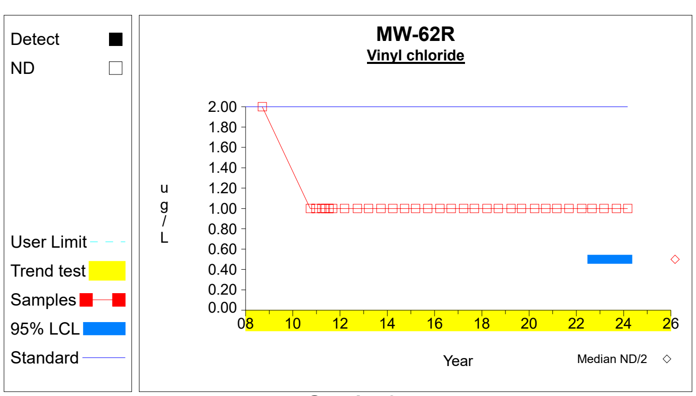
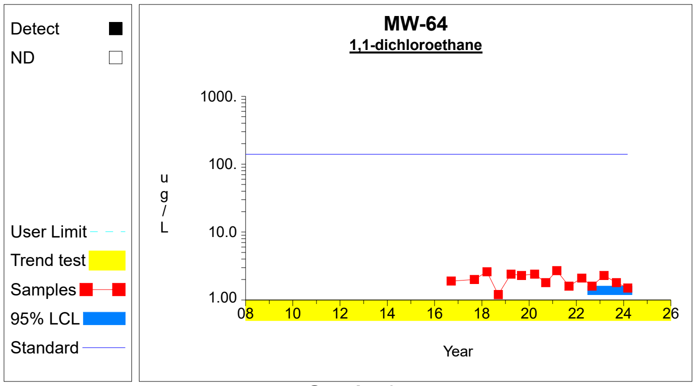


Graph 42

Confidence Limits (Assessment)



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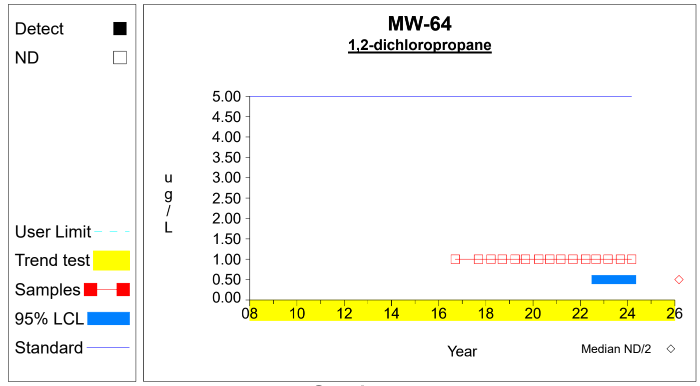

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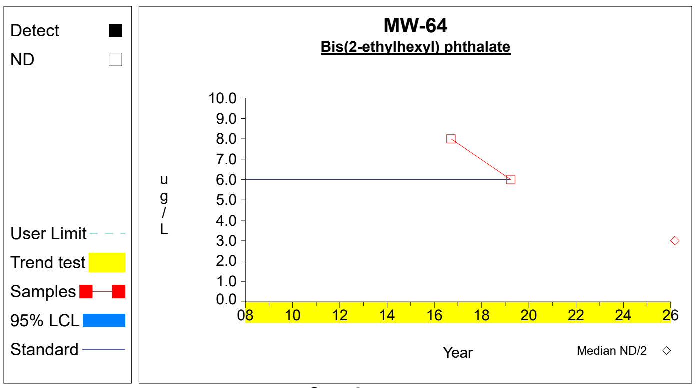

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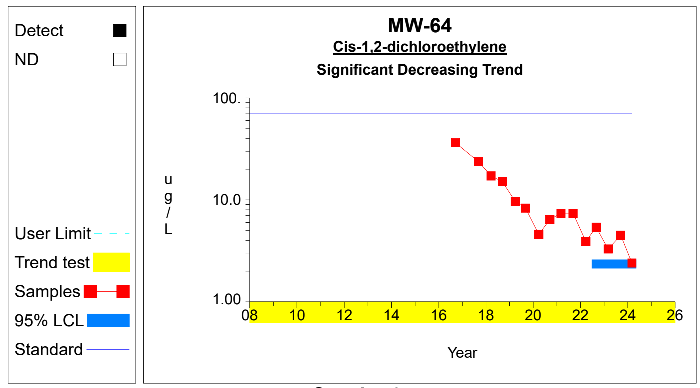

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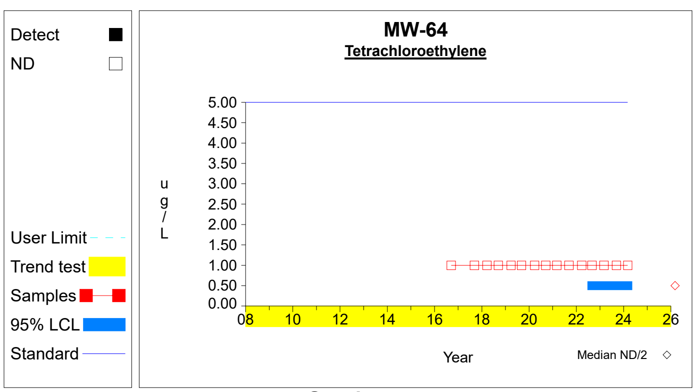

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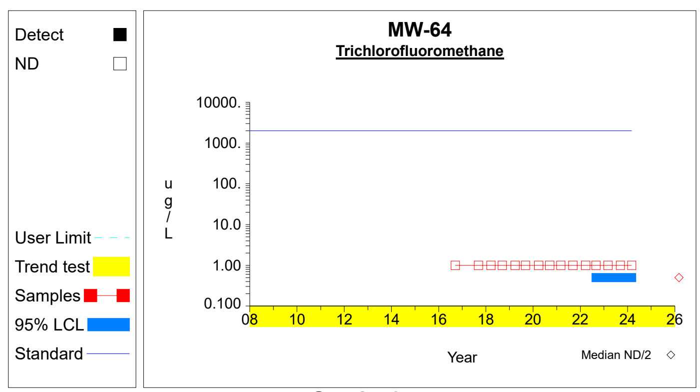

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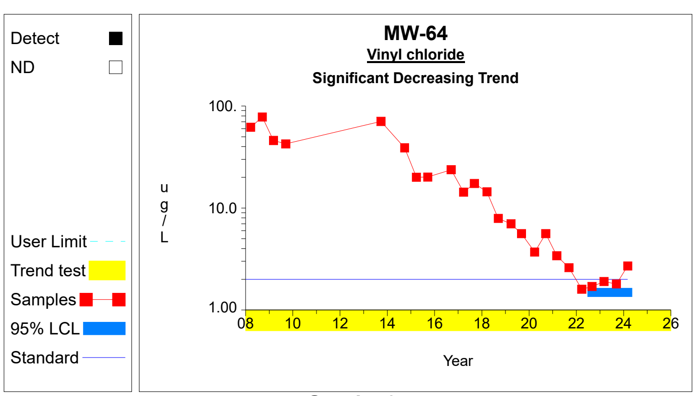
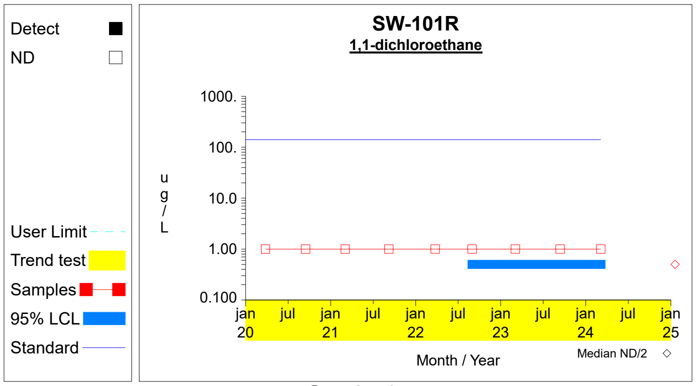


Graph 49

Confidence Limits (Assessment)



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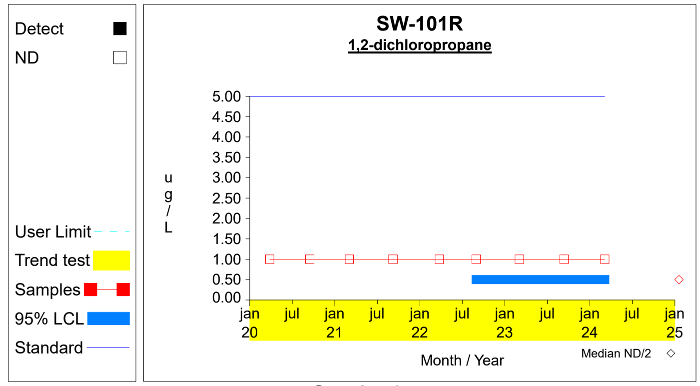

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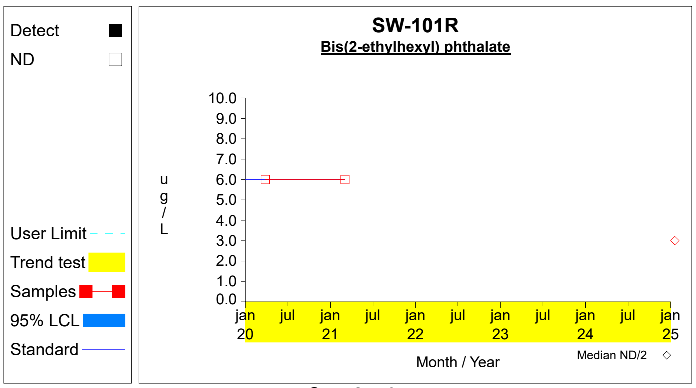

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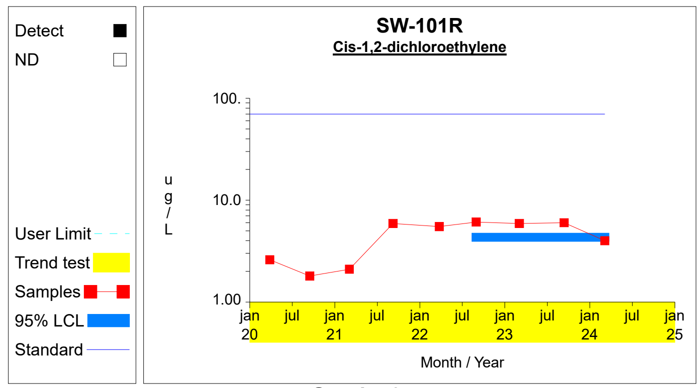

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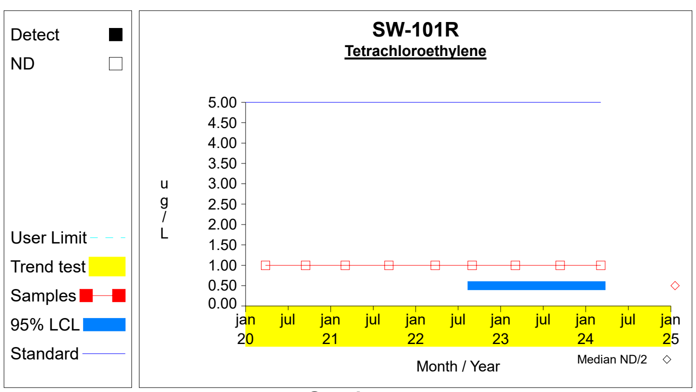

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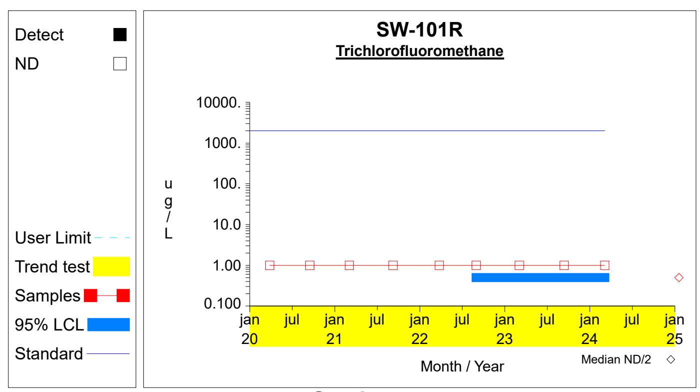

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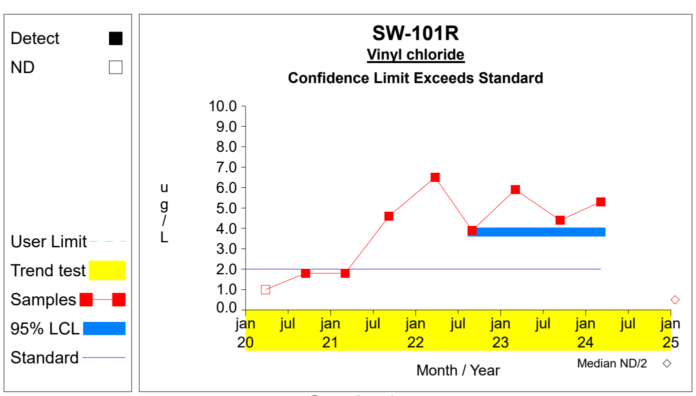


Graph 56

APPENDIX D.2 –Fall Statistical Evaluation

GROUND WATER STATISTICS

FOR THE

NEWTON SANITARY LANDFILL

Second Semi-Annual Monitoring Event in 2024

Prepared for:
City of Newton Sanitary Landfill
3202 Ia-14
Newton, Jasper County, IA

Prepared by:
Jeffrey A. Holmgren
Otter Creek Environmental Services, LLC
40W565 Foxwick Court
Elgin, IL 60124
(847) 464-1355

October 2024

INTRODUCTION

This report summarizes the results of the statistical analysis used to evaluate the ground water quality data obtained during the second semi-annual monitoring event in 2024 at the Newton Sanitary Landfill in Newton, Jasper County, Iowa. The statistical plan was 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 method is described and applied to the Newton Landfill data. The statistical plan conforms with IAC 567, Chapter 113.10, USEPA guidance document ("*Statistical Analysis of Ground-Water Monitoring Data at RCRA Facilities, Unified Guidance*", March 2009), and the American Society for Testing and Materials (ASTM) standard D6312-98, *Developing Appropriate Statistical Approaches for Ground-Water Detection Monitoring Programs*.

Ground Water Monitoring Program

The groundwater monitoring network for Newton Sanitary Landfill includes GWD-1, MW-36, MW-39, MW-41, MW-42, MW-48, MW-58, MW-59, MW-60, MW-61, MW-62R, MW-78, MW-79, and MW-80. Each of the groundwater monitoring wells is to be 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 in Table 1 below.

Table 1: Detection monitoring constituents listed in Appendix I of IAC 567, Chapter 113.

Organic Compounds:

Acetone	*trans*-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	*cis*-1,2-Dichloroethene	1,1,2,2-Tetrachloroethane
Bromoform	*trans*-1,2-Dichloroethene	Tetrachloroethene
Carbon disulfide	1,2-Dichloropropane	Toluene
Carbon tetrachloride	*cis*-1,3-Dichloropropene	1,1,1-Trichloroethane
Chlorobenzene	*trans*-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 2024 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 was applied to the Newton Landfill data using the DUMPStat® statistical program. 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.

<u>Results of the Interwell Statistics</u>

The prior background data used in the statistical analysis included the ground water data collected from ground water wells MW-62R and MW-78. Since there were verified detections of trichlorofluoromethane at MW-62R, it was recommended that MW-62R not be used as a background well. In its' place, MW-48 and MW-39 were added as background points. Additionally, SW-101 was approved as a background point. The background data used in this statistical analysis includes the ground water data collected from ground water wells MW-39, MW-48, MW-78, and SW-101 during the period from September 2014 through the current data. A summary of the background data from monitoring wells MW-39, MW-48, MW-78, and SW-101 used to determine the site prediction limits are 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-36, MW-41, MW-42, MW-58, MW-59, MW-60, MW-61, MW-62R, MW-79, MW-80, and SW-101R compared to the site prediction limits. Prediction limit exceedances are flagged with asterisks. For the most current data, the current site prediction limit exceedances are summarized in the table below.

Trace Metal Prediction Limit Exceedances during the Second Semi-Annual Monitoring Event in 2024

Well	Trace Metal Detected	Result, µg/L	Prediction Limit, µg/L	Prediction Limit Type	Verified/ Awaiting verification	Ground Water Standard, µg/L
MW-58	Nickel	12.6	8.7000	Nonparametric	Verified	100[a]
MW-60	Nickel	29.2	8.7000	Nonparametric	Awaiting verification	100[a]
MW-61	Copper	5.0	4.0000	Nonparametric	Awaiting verification	1300[b]
MW-62R	Barium	945	357.0000	Nonparametric	Verified	2000[a]

a – USEPA MCL
b – Iowa Statewide Standard

The detection frequencies of the parameters in the up and down gradient monitoring wells are summarized in Table 3. With the exception of barium, these constituents are rarely detected in the upgradient wells. With the detection frequencies being less than 50% for all but barium, nonparametric site prediction limits are used for those trace metals.

Table 4 summarizes the results of the Shapiro-Wilk test. The background barium data are normally distributed so barium uses a normal site prediction limit. Table 5 is a summary of the statistics and prediction limits determined for the metals. 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 3 standard deviation unit increases over background.

The past and present verified trace metal exceedances were evaluated against the ground water protection standards (GWPS) using confidence limits calculated in accordance with the Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, USEPA, March 2009. 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 95% LCL for cobalt at SW-101R (2.625 µg/L) exceeds the GWPS of 2.1 µg/L. The 95% LCLs calculated for the remainder of the metals which exceeded site prediction limits are below the respective GWPS (Attachment C).

<u>Results of the Interwell Statistics – Old Landfill</u>

The current ground water data from monitoring wells MW-44, MW-56, MW-57, MW-64, and MW-65 was compared to site prediction limits established from monitoring wells MW-39, MW-48, MW-78, and SW-

101. A summary of the background data from monitoring wells MW-39, MW-48, MW-78, and SW-101 used to determine the site prediction limits are 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-44, MW-56, MW-57, MW-64, and MW-65 compared to the site prediction limits. Prediction limit exceedances are flagged with asterisks. For the most current data, the current site prediction limit exceedances are summarized in the table below.

Trace Metal Prediction Limit Exceedances during the Second Semi-Annual Monitoring Event in 2024

Well	Trace Metal Detected	Result, µg/L	Prediction Limit, µg/L	Prediction Limit Type	Verified/ Awaiting verification	Ground Water Standard, µg/L
MW-44	Arsenic	11.9	7.3000	Nonparametric	Awaiting verification	10[a]
	Cobalt	10.3	6.9000	Nonparametric	Verified	2.1[b]
	Nickel	10.9	8.7000	Nonparametric	Verified	100[a]
MW-64	Arsenic	30.6	7.3000	Nonparametric	Verified	10[a]
	Cobalt	17.9	6.9000	Nonparametric	Verified	2.1[b]
	Nickel	42.6	8.7000	Nonparametric	Verified	100[a]
MW-65	Arsenic	7.9	7.3000	Nonparametric	Awaiting verification	10[a]
	Copper	8.7	4.0000	Nonparametric	Awaiting verification	1300[b]
	Nickel	13.5	8.7000	Nonparametric	Verified	100[a]

a – USEPA MCL
b – Iowa Statewide Standard

The detection frequencies of the parameters in the up and down gradient monitoring wells are summarized in Table 3. With the exception of barium, these constituents are rarely detected in the upgradient wells. With the detection frequencies being less than 50% for all but barium, nonparametric site prediction limits are used for those trace metals.

Table 4 summarizes the results of the Shapiro-Wilk test. The background barium data are normally distributed so barium uses a normal site prediction limit. Table 5 is a summary of the statistics and prediction limits determined for the metals. 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 3 standard deviation unit increases over background.

The past and present verified trace metal exceedances were evaluated against the ground water protection standards (GWPS) using confidence limits.

The 95% LCL for cobalt at MW-44 (8.903 μg/L) exceeds the GWPS of 2.1 μg/L.
The 95% LCL for arsenic at MW-64 (23.432 μg/L) exceeds the GWPS of 10 μg/L.
The 95% LCL for cobalt at MW-64 (10.241 μg/L) exceeds the GWPS of 2.1 μg/L.
The 95% LCL for cobalt at MW-65 (3.304 μg/L) exceeds the GWPS of 2.1 μg/L.

The 95% LCLs calculated for the remainder of the metals which exceeded site prediction limits are below the respective 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 Newton Landfill during the second semi-annual monitoring event in 2024 are summarized below. Historical VOC detections are summarized in Attachment E.

VOCs detected during the Second Semi-Annual Monitoring Event in 2024

Well	VOC Detected	Result, μg/L	Reporting Limit, μg/L	Verified/ Awaiting Verification	Ground Water Standard
MW-41	1,1-Dichloroethane	22.0	1	Verified	140[b]
	1,2-Dichloropropane	1.0	1	Awaiting Verification	5[a]
	cis-1,2-Dichloroethene	3.1	1	Verified	70[a]
PECS-1	Toluene	1.8	1	Awaiting Verification	1000[a]
SW-101R	*cis*-1,2-Dichloroethene	3.4	1	Verified	70[a]
	Vinyl chloride	3.1	1	Verified	2[a]

a - USEPA MCL, b – Iowa Statewide Standard

VOCs detected during the Second Semi-Annual Monitoring Event in 2024 – Old Landfill

Well	VOC Detected	Result, μg/L	Reporting Limit, μg/L	Verified/ Awaiting Verification	Ground Water Standard
MW-56	1,1-Dichloroethane	2.6	1	Verified	140[b]
MW-64	1,1-Dichloroethane	1.7	1	Verified	140[b]
	cis-1,2-Dichloroethene	4.1	1	Verified	70[a]
	Vinyl chloride	1.7	1	Verified	2[a]

a - USEPA MCL, b – Iowa Statewide Standard

The verified VOC detections were evaluated against the ground water protection standards (GWPS) using confidence limits calculated in accordance with the Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, USEPA, March 2009. 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 95% LCL for vinyl chloride at SW-101R (3.243 μg/L) exceeds the GWPS of 2 μg/L. The 95% LCLs calculated for the remainder of verified VOCs are below the respective GWPS

CONCLUSIONS

This report summarizes the statistical analyses used to evaluate the ground water data obtained during the second semi-annual monitoring event in 2024 at Newton Sanitary Landfill. The ground water data was compared to background using prediction limits. There are verified site prediction limit exceedances for nickel at MW-58, barium at MW-62R, cobalt and nickel at MW-44, arsenic, cobalt, and nickel at MW-64, and nickel at MW-65.

The VOC data obtained during the second semi-annual monitoring event in 2024 were compared to MCLs or PQLs. There were verified detections of 1,1-dichloroethane and *cis*-1,2-dichloroethene at MW-41; *cis*-1,2-dichloroethene and vinyl chloride at SW-101R; 1,1-dichloroethane at MW-56; and 1,1-dichloroethane, *cis*-1,2-dichloroethene, and vinyl chloride at MW-64.

Attachment A

Summary of the Data obtained during the Second Semi-Annual Monitoring Event in 2024

Table 1

Analytical Data Summary for 9/23/2024

Constituents	Units	MW-36	MW-39	MW-41	MW-42	MW-44	MW-48	MW-56	MW-57	MW-58	MW-59	MW-60
1,1,1,2-tetrachloroethane	ug/L	<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
1,1,2,2-tetrachloroethane	ug/L	<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-dichloroethane	ug/L	<1.0	<1.0	22.0	<1.0	<1.0	<1.0	2.6	<1.0	<1.0	<1.0	<1.0
1,1-dichloroethylene	ug/L	<1	<1	<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	<1
1,2-dibromo-3-chloropropane	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2-dibromoethane	ug/L	<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
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Antimony, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	ug/L	<4.0	<4.0	<4.0	<4.0	11.9	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Barium, total	ug/L	125.0	119.0	69.4	19.3	142.0	148.0	39.2	302.0	20.9	25.2	238.0
Benzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bromochloromethane	ug/L	<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
Bromoform	ug/L	<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
Cadmium, total	ug/L	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	ug/L	<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
Chlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	ug/L	<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
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	ug/L	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethylene	ug/L	<1.0	<1.0	3.1	<1.0	<1.0	<1.0	<1.0	<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
Cobalt, total	ug/L	<.4	<.4	<.4	1.6	10.3	<.4	2.5	1.0	<.4	<.4	1.3
Copper, total	ug/L	<4.0	<4.0	<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	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Methyl iodide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	ug/L	<4.0	<4.0	<4.0	4.8	10.9	<4.0	7.3	4.6	12.6	<4.0	29.2
Selenium, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Silver, total	ug/L	<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
Tetrachloroethylene	ug/L	<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
Toluene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trans-1,2-dichloroethylene	ug/L	<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
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	ug/L	<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
Vanadium, total	ug/L	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Xylenes, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	21.0	<20.0	<20.0

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

Table 1

Analytical Data Summary for 9/23/2024

Constituents	MW-61	MW-62R	MW-64	MW-65	MW-78	MW-79	MW-80	PECS-1	SW-101R	SW-102	SW-103
1,1,1,2-tetrachloroethane	<1	<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
1,1,2,2-tetrachloroethane	<1	<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
1,1-dichloroethane	<1.0	<1.0	1.7	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-dichloroethylene	<1	<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
1,2-dibromo-3-chloropropane	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Antimony, total	<2	<2	<2	<2	<2	<2	<2		<2	<2	<2
Arsenic, total	<4.0	<4.0	30.6	7.9	<4.0	<4.0	<4.0		4.7	4.3	<4.0
Barium, total	51.7	945.0	52.8	35.4	284.0	64.7	135.0		236.0	190.0	141.0
Benzene	<1	<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	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.8	<.8		<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<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-dichloroethylene	<1.0	<1.0	4.1	<1.0	<1.0	<1.0	<1.0	<1.0	3.4	<1.0	<1.0
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	<.4	<.4	17.9	3.4	<.4	<.4	.8		3.9	1.1	.6
Copper, total	5.0	<4.0	<4.0	8.7	<4.0	<4.0	<4.0		<4.0	<4.0	<4.0
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	<4	<4	<4	<4	<4	<4	<4		<4	<4	<4
Methyl iodide	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	5.6	<4.0	42.6	13.5	<4.0	<4.0	<4.0		4.7	<4.0	4.5
Selenium, total	<4.0	<4.0	<4.0	<4.0	4.1	<4.0	<4.0		<4.0	<4.0	<4.0
Silver, total	<4	<4	<4	<4	<4	<4	<4		<4	<4	<4
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2	<2	<2	<2		<2	<2	<2
Toluene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.8	<1.0	<1.0	<1.0
Trans-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<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	<5
Trichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<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	<5
Vinyl chloride	<1.0	<1.0	1.7	<1.0	<1.0	<1.0	<1.0	<1.0	3.1	<1.0	<1.0
Xylenes, total	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	<20.0	<20.0	21.5	29.4	<20.0	<20.0	<20.0		<20.0	<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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Antimony, total	ug/L	MW-39	09/24/2014	ND	2.0000		
Antimony, total	ug/L	MW-39	12/05/2014	ND	2.0000		
Antimony, total	ug/L	MW-39	03/11/2015	ND	2.0000		
Antimony, total	ug/L	MW-39	06/16/2015	ND	2.0000		
Antimony, total	ug/L	MW-39	09/17/2015	ND	2.0000		
Antimony, total	ug/L	MW-39	03/22/2016	ND	2.0000		
Antimony, total	ug/L	MW-39	09/15/2016	ND	2.0000		
Antimony, total	ug/L	MW-39	03/23/2017	ND	2.0000		
Antimony, total	ug/L	MW-39	09/08/2017	ND	2.0000		
Antimony, total	ug/L	MW-39	03/19/2018	ND	2.0000		
Antimony, total	ug/L	MW-39	09/11/2018	ND	2.0000		
Antimony, total	ug/L	MW-39	03/26/2019	ND	2.0000		
Antimony, total	ug/L	MW-39	09/04/2019	ND	2.0000		
Antimony, total	ug/L	MW-39	03/26/2020	ND	2.0000		
Antimony, total	ug/L	MW-39	09/15/2020	ND	2.0000		
Antimony, total	ug/L	MW-39	03/02/2021	ND	2.0000		
Antimony, total	ug/L	MW-39	09/07/2021	ND	2.0000		
Antimony, total	ug/L	MW-39	03/24/2022	ND	2.0000		
Antimony, total	ug/L	MW-39	08/31/2022	ND	2.0000		
Antimony, total	ug/L	MW-39	03/02/2023	ND	2.0000		
Antimony, total	ug/L	MW-39	09/12/2023	ND	2.0000		
Antimony, total	ug/L	MW-39	03/04/2024	ND	2.0000		
Antimony, total	ug/L	MW-39	09/23/2024	ND	2.0000		
Arsenic, total	ug/L	MW-39	09/24/2014	ND	4.0000		
Arsenic, total	ug/L	MW-39	12/05/2014	ND	4.0000		
Arsenic, total	ug/L	MW-39	03/11/2015	ND	4.0000		
Arsenic, total	ug/L	MW-39	06/16/2015	ND	4.0000		
Arsenic, total	ug/L	MW-39	09/17/2015	ND	4.0000		
Arsenic, total	ug/L	MW-39	03/22/2016	ND	4.0000		
Arsenic, total	ug/L	MW-39	09/15/2016	ND	4.0000		
Arsenic, total	ug/L	MW-39	03/23/2017	ND	4.0000		
Arsenic, total	ug/L	MW-39	09/08/2017	ND	4.0000		
Arsenic, total	ug/L	MW-39	03/19/2018	ND	4.0000		
Arsenic, total	ug/L	MW-39	09/11/2018	ND	4.0000		
Arsenic, total	ug/L	MW-39	03/26/2019	ND	4.0000		
Arsenic, total	ug/L	MW-39	09/04/2019	ND	4.0000		
Arsenic, total	ug/L	MW-39	03/26/2020	ND	4.0000		
Arsenic, total	ug/L	MW-39	09/15/2020	ND	4.0000		
Arsenic, total	ug/L	MW-39	03/02/2021	ND	4.0000		
Arsenic, total	ug/L	MW-39	09/07/2021	ND	4.0000		
Arsenic, total	ug/L	MW-39	03/24/2022	ND	4.0000		
Arsenic, total	ug/L	MW-39	08/31/2022	ND	4.0000		
Arsenic, total	ug/L	MW-39	03/02/2023	ND	4.0000		
Arsenic, total	ug/L	MW-39	09/12/2023	ND	4.0000		
Arsenic, total	ug/L	MW-39	03/04/2024	ND	4.0000		
Arsenic, total	ug/L	MW-39	09/23/2024	ND	4.0000		
Barium, total	ug/L	MW-39	09/24/2014		60.6000		
Barium, total	ug/L	MW-39	12/05/2014		139.0000		
Barium, total	ug/L	MW-39	03/11/2015		136.0000		
Barium, total	ug/L	MW-39	06/16/2015		148.0000		
Barium, total	ug/L	MW-39	09/17/2015		128.0000		
Barium, total	ug/L	MW-39	03/22/2016		123.0000		
Barium, total	ug/L	MW-39	09/15/2016		103.0000		
Barium, total	ug/L	MW-39	03/23/2017		129.0000		
Barium, total	ug/L	MW-39	09/08/2017		117.0000		
Barium, total	ug/L	MW-39	03/19/2018		131.0000		
Barium, total	ug/L	MW-39	09/11/2018		114.0000		
Barium, total	ug/L	MW-39	03/26/2019		121.0000		
Barium, total	ug/L	MW-39	09/04/2019		138.0000		
Barium, total	ug/L	MW-39	03/26/2020		150.0000		
Barium, total	ug/L	MW-39	09/15/2020		136.0000		
Barium, total	ug/L	MW-39	03/02/2021		125.0000		
Barium, total	ug/L	MW-39	09/07/2021		141.0000		
Barium, total	ug/L	MW-39	03/24/2022		137.0000		
Barium, total	ug/L	MW-39	08/31/2022		132.0000		
Barium, total	ug/L	MW-39	03/02/2023		134.0000		
Barium, total	ug/L	MW-39	09/12/2023		133.0000		
Barium, total	ug/L	MW-39	03/04/2024		128.0000		
Barium, total	ug/L	MW-39	09/23/2024		119.0000		
Beryllium, total	ug/L	MW-39	09/24/2014	ND	4.0000		
Beryllium, total	ug/L	MW-39	12/05/2014	ND	4.0000		
Beryllium, total	ug/L	MW-39	03/11/2015	ND	4.0000		
Beryllium, total	ug/L	MW-39	06/16/2015	ND	4.0000		
Beryllium, total	ug/L	MW-39	09/17/2015	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-39	03/22/2016	ND	4.0000		
Beryllium, total	ug/L	MW-39	09/15/2016	ND	4.0000		
Beryllium, total	ug/L	MW-39	03/23/2017	ND	4.0000		
Beryllium, total	ug/L	MW-39	09/08/2017	ND	4.0000		
Beryllium, total	ug/L	MW-39	03/19/2018	ND	4.0000		
Beryllium, total	ug/L	MW-39	09/11/2018	ND	4.0000		
Beryllium, total	ug/L	MW-39	03/26/2019	ND	4.0000		
Beryllium, total	ug/L	MW-39	09/04/2019	ND	4.0000		
Beryllium, total	ug/L	MW-39	03/26/2020	ND	4.0000		
Beryllium, total	ug/L	MW-39	09/15/2020	ND	4.0000		
Beryllium, total	ug/L	MW-39	03/02/2021	ND	4.0000		
Beryllium, total	ug/L	MW-39	09/07/2021	ND	4.0000		
Beryllium, total	ug/L	MW-39	03/24/2022	ND	4.0000		
Beryllium, total	ug/L	MW-39	08/31/2022	ND	4.0000		
Beryllium, total	ug/L	MW-39	03/02/2023	ND	4.0000		
Beryllium, total	ug/L	MW-39	09/12/2023	ND	4.0000		
Beryllium, total	ug/L	MW-39	03/04/2024	ND	4.0000		
Beryllium, total	ug/L	MW-39	09/23/2024	ND	4.0000		
Cadmium, total	ug/L	MW-39	09/24/2014	ND	0.8000		
Cadmium, total	ug/L	MW-39	12/05/2014	ND	0.8000		
Cadmium, total	ug/L	MW-39	03/11/2015	ND	0.8000		
Cadmium, total	ug/L	MW-39	06/16/2015	ND	0.8000		
Cadmium, total	ug/L	MW-39	09/17/2015	ND	0.8000		
Cadmium, total	ug/L	MW-39	03/22/2016	ND	0.8000		
Cadmium, total	ug/L	MW-39	09/15/2016	ND	0.8000		
Cadmium, total	ug/L	MW-39	03/23/2017	ND	0.8000		
Cadmium, total	ug/L	MW-39	09/08/2017	ND	0.8000		
Cadmium, total	ug/L	MW-39	03/19/2018	ND	0.8000		
Cadmium, total	ug/L	MW-39	09/11/2018	ND	0.8000		
Cadmium, total	ug/L	MW-39	03/26/2019	ND	0.8000		
Cadmium, total	ug/L	MW-39	09/04/2019	ND	0.8000		
Cadmium, total	ug/L	MW-39	03/26/2020	ND	0.8000		
Cadmium, total	ug/L	MW-39	09/15/2020	ND	0.8000		
Cadmium, total	ug/L	MW-39	03/02/2021	ND	0.8000		
Cadmium, total	ug/L	MW-39	09/07/2021	ND	0.8000		
Cadmium, total	ug/L	MW-39	03/24/2022	ND	0.8000		
Cadmium, total	ug/L	MW-39	08/31/2022	ND	0.8000		
Cadmium, total	ug/L	MW-39	03/02/2023	ND	0.8000		
Cadmium, total	ug/L	MW-39	09/12/2023	ND	0.8000		
Cadmium, total	ug/L	MW-39	03/04/2024	ND	0.8000		
Cadmium, total	ug/L	MW-39	09/23/2024	ND	0.8000		
Chromium, total	ug/L	MW-39	09/24/2014	ND	8.0000		
Chromium, total	ug/L	MW-39	12/05/2014	ND	8.0000		
Chromium, total	ug/L	MW-39	03/11/2015	ND	8.0000		
Chromium, total	ug/L	MW-39	06/16/2015	ND	8.0000		
Chromium, total	ug/L	MW-39	09/17/2015	ND	8.0000		
Chromium, total	ug/L	MW-39	03/22/2016	ND	8.0000		
Chromium, total	ug/L	MW-39	09/15/2016	ND	8.0000		
Chromium, total	ug/L	MW-39	03/23/2017	ND	8.0000		
Chromium, total	ug/L	MW-39	09/08/2017	ND	8.0000		
Chromium, total	ug/L	MW-39	03/19/2018	ND	8.0000		
Chromium, total	ug/L	MW-39	09/11/2018	ND	8.0000		
Chromium, total	ug/L	MW-39	03/26/2019	ND	8.0000		
Chromium, total	ug/L	MW-39	09/04/2019	ND	8.0000		
Chromium, total	ug/L	MW-39	03/26/2020	ND	8.0000		
Chromium, total	ug/L	MW-39	09/15/2020	ND	8.0000		
Chromium, total	ug/L	MW-39	03/02/2021	ND	8.0000		
Chromium, total	ug/L	MW-39	09/07/2021	ND	8.0000		
Chromium, total	ug/L	MW-39	03/24/2022	ND	8.0000		
Chromium, total	ug/L	MW-39	08/31/2022	ND	8.0000		
Chromium, total	ug/L	MW-39	03/02/2023	ND	8.0000		
Chromium, total	ug/L	MW-39	09/12/2023	ND	8.0000		
Chromium, total	ug/L	MW-39	03/04/2024	ND	8.0000		
Chromium, total	ug/L	MW-39	09/23/2024	ND	8.0000		
Cobalt, total	ug/L	MW-39	09/24/2014	ND	0.8000		
Cobalt, total	ug/L	MW-39	12/05/2014	ND	0.8000		
Cobalt, total	ug/L	MW-39	03/11/2015	ND	0.8000		
Cobalt, total	ug/L	MW-39	06/16/2015	ND	0.8000		
Cobalt, total	ug/L	MW-39	09/17/2015	ND	0.8000		
Cobalt, total	ug/L	MW-39	03/22/2016	ND	0.8000		
Cobalt, total	ug/L	MW-39	09/15/2016	ND	0.8000		
Cobalt, total	ug/L	MW-39	03/23/2017	ND	0.8000		
Cobalt, total	ug/L	MW-39	09/08/2017	ND	0.8000		
Cobalt, total	ug/L	MW-39	03/19/2018	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	
Cobalt, total	ug/L	MW-39	09/11/2018	ND	0.8000		
Cobalt, total	ug/L	MW-39	03/26/2019	ND	0.8000		
Cobalt, total	ug/L	MW-39	09/04/2019	ND	0.8000		
Cobalt, total	ug/L	MW-39	03/26/2020	ND	0.8000		
Cobalt, total	ug/L	MW-39	09/15/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-39	03/02/2021		0.8000		
Cobalt, total	ug/L	MW-39	09/07/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-39	03/24/2022	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-39	08/31/2022		0.8000		
Cobalt, total	ug/L	MW-39	03/02/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-39	09/12/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-39	03/04/2024	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-39	09/23/2024	ND	0.4000	0.8000	**
Copper, total	ug/L	MW-39	09/24/2014	ND	4.0000		
Copper, total	ug/L	MW-39	12/05/2014	ND	4.0000		
Copper, total	ug/L	MW-39	03/11/2015	ND	4.0000		
Copper, total	ug/L	MW-39	06/16/2015	ND	4.0000		
Copper, total	ug/L	MW-39	09/17/2015	ND	4.0000		
Copper, total	ug/L	MW-39	03/22/2016	ND	4.0000		
Copper, total	ug/L	MW-39	09/15/2016	ND	4.0000		
Copper, total	ug/L	MW-39	03/23/2017	ND	4.0000		
Copper, total	ug/L	MW-39	09/08/2017	ND	4.0000		
Copper, total	ug/L	MW-39	03/19/2018	ND	4.0000		
Copper, total	ug/L	MW-39	09/11/2018	ND	4.0000		
Copper, total	ug/L	MW-39	03/26/2019	ND	4.0000		
Copper, total	ug/L	MW-39	09/04/2019	ND	4.0000		
Copper, total	ug/L	MW-39	03/26/2020	ND	4.0000		
Copper, total	ug/L	MW-39	09/15/2020	ND	4.0000		
Copper, total	ug/L	MW-39	03/02/2021	ND	4.0000		
Copper, total	ug/L	MW-39	09/07/2021	ND	4.0000		
Copper, total	ug/L	MW-39	03/24/2022	ND	4.0000		
Copper, total	ug/L	MW-39	08/31/2022	ND	4.0000		
Copper, total	ug/L	MW-39	03/02/2023	ND	4.0000		
Copper, total	ug/L	MW-39	09/12/2023	ND	4.0000		
Copper, total	ug/L	MW-39	03/04/2024	ND	4.0000		
Copper, total	ug/L	MW-39	09/23/2024	ND	4.0000		
Lead, total	ug/L	MW-39	09/24/2014	ND	4.0000		
Lead, total	ug/L	MW-39	12/05/2014	ND	4.0000		
Lead, total	ug/L	MW-39	03/11/2015	ND	4.0000		
Lead, total	ug/L	MW-39	06/16/2015	ND	4.0000		
Lead, total	ug/L	MW-39	09/17/2015	ND	4.0000		
Lead, total	ug/L	MW-39	03/22/2016	ND	4.0000		
Lead, total	ug/L	MW-39	09/15/2016	ND	4.0000		
Lead, total	ug/L	MW-39	03/23/2017	ND	4.0000		
Lead, total	ug/L	MW-39	09/08/2017	ND	4.0000		
Lead, total	ug/L	MW-39	03/19/2018	ND	4.0000		
Lead, total	ug/L	MW-39	09/11/2018	ND	4.0000		
Lead, total	ug/L	MW-39	03/26/2019	ND	4.0000		
Lead, total	ug/L	MW-39	09/04/2019	ND	4.0000		
Lead, total	ug/L	MW-39	03/26/2020	ND	4.0000		
Lead, total	ug/L	MW-39	09/15/2020	ND	4.0000		
Lead, total	ug/L	MW-39	03/02/2021	ND	4.0000		
Lead, total	ug/L	MW-39	09/07/2021	ND	4.0000		
Lead, total	ug/L	MW-39	03/24/2022	ND	4.0000		
Lead, total	ug/L	MW-39	08/31/2022	ND	4.0000		
Lead, total	ug/L	MW-39	03/02/2023	ND	4.0000		
Lead, total	ug/L	MW-39	09/12/2023	ND	4.0000		
Lead, total	ug/L	MW-39	03/04/2024	ND	4.0000		
Lead, total	ug/L	MW-39	09/23/2024	ND	4.0000		
Nickel, total	ug/L	MW-39	09/24/2014	ND	4.0000		
Nickel, total	ug/L	MW-39	12/05/2014	ND	4.0000		
Nickel, total	ug/L	MW-39	03/11/2015	ND	4.0000		
Nickel, total	ug/L	MW-39	06/16/2015	ND	4.0000		
Nickel, total	ug/L	MW-39	09/17/2015	ND	4.0000		
Nickel, total	ug/L	MW-39	03/22/2016	ND	4.0000		
Nickel, total	ug/L	MW-39	09/15/2016	ND	4.0000		
Nickel, total	ug/L	MW-39	03/23/2017	ND	4.0000		
Nickel, total	ug/L	MW-39	09/08/2017	ND	4.0000		
Nickel, total	ug/L	MW-39	03/19/2018	ND	4.0000		
Nickel, total	ug/L	MW-39	09/11/2018	ND	4.0000		
Nickel, total	ug/L	MW-39	03/26/2019	ND	4.0000		
Nickel, total	ug/L	MW-39	09/04/2019	ND	4.0000		
Nickel, total	ug/L	MW-39	03/26/2020	ND	4.0000		
Nickel, total	ug/L	MW-39	09/15/2020	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	
Nickel, total	ug/L	MW-39	03/02/2021	ND	4.0000		
Nickel, total	ug/L	MW-39	09/07/2021	ND	4.0000		
Nickel, total	ug/L	MW-39	03/24/2022	ND	4.0000		
Nickel, total	ug/L	MW-39	08/31/2022	ND	4.0000		
Nickel, total	ug/L	MW-39	03/02/2023	ND	4.0000		
Nickel, total	ug/L	MW-39	09/12/2023	ND	4.0000		
Nickel, total	ug/L	MW-39	03/04/2024	ND	4.0000		
Nickel, total	ug/L	MW-39	09/23/2024	ND	4.0000		
Selenium, total	ug/L	MW-39	09/24/2014	ND	4.0000		
Selenium, total	ug/L	MW-39	12/05/2014	ND	4.0000		
Selenium, total	ug/L	MW-39	03/11/2015	ND	4.0000		
Selenium, total	ug/L	MW-39	06/16/2015	ND	4.0000		
Selenium, total	ug/L	MW-39	09/17/2015	ND	4.0000		
Selenium, total	ug/L	MW-39	03/22/2016	ND	4.0000		
Selenium, total	ug/L	MW-39	09/15/2016	ND	4.0000		
Selenium, total	ug/L	MW-39	03/23/2017	ND	4.0000		
Selenium, total	ug/L	MW-39	09/08/2017	ND	4.0000		
Selenium, total	ug/L	MW-39	03/19/2018	ND	4.0000		
Selenium, total	ug/L	MW-39	09/11/2018	ND	4.0000		
Selenium, total	ug/L	MW-39	03/26/2019	ND	4.0000		
Selenium, total	ug/L	MW-39	09/04/2019	ND	4.0000		
Selenium, total	ug/L	MW-39	03/26/2020	ND	4.0000		
Selenium, total	ug/L	MW-39	09/15/2020	ND	4.0000		
Selenium, total	ug/L	MW-39	03/02/2021	ND	4.0000		
Selenium, total	ug/L	MW-39	09/07/2021	ND	4.0000		
Selenium, total	ug/L	MW-39	03/24/2022	ND	4.0000		
Selenium, total	ug/L	MW-39	08/31/2022	ND	4.0000		
Selenium, total	ug/L	MW-39	03/02/2023	ND	4.0000		
Selenium, total	ug/L	MW-39	09/12/2023	ND	4.0000		
Selenium, total	ug/L	MW-39	03/04/2024	ND	4.0000		
Selenium, total	ug/L	MW-39	09/23/2024	ND	4.0000		
Silver, total	ug/L	MW-39	09/24/2014	ND	4.0000		
Silver, total	ug/L	MW-39	12/05/2014	ND	4.0000		
Silver, total	ug/L	MW-39	03/11/2015	ND	4.0000		
Silver, total	ug/L	MW-39	06/16/2015	ND	4.0000		
Silver, total	ug/L	MW-39	09/17/2015	ND	4.0000		
Silver, total	ug/L	MW-39	03/22/2016	ND	4.0000		
Silver, total	ug/L	MW-39	09/15/2016		6.4000		
Silver, total	ug/L	MW-39	03/23/2017	ND	4.0000		
Silver, total	ug/L	MW-39	09/08/2017	ND	4.0000		
Silver, total	ug/L	MW-39	03/19/2018	ND	4.0000		
Silver, total	ug/L	MW-39	09/11/2018	ND	4.0000		
Silver, total	ug/L	MW-39	03/26/2019	ND	4.0000		
Silver, total	ug/L	MW-39	09/04/2019	ND	4.0000		
Silver, total	ug/L	MW-39	03/26/2020	ND	4.0000		
Silver, total	ug/L	MW-39	09/15/2020	ND	4.0000		
Silver, total	ug/L	MW-39	03/02/2021	ND	4.0000		
Silver, total	ug/L	MW-39	09/07/2021	ND	4.0000		
Silver, total	ug/L	MW-39	03/24/2022	ND	4.0000		
Silver, total	ug/L	MW-39	08/31/2022	ND	4.0000		
Silver, total	ug/L	MW-39	03/02/2023	ND	4.0000		
Silver, total	ug/L	MW-39	09/12/2023	ND	4.0000		
Silver, total	ug/L	MW-39	03/04/2024	ND	4.0000		
Silver, total	ug/L	MW-39	09/23/2024	ND	4.0000		
Thallium, total	ug/L	MW-39	09/24/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	12/05/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	03/11/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	06/16/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	09/17/2015		2.4000		
Thallium, total	ug/L	MW-39	03/22/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	09/15/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	03/23/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	09/08/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	03/19/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	09/11/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	03/26/2019	ND	2.0000		
Thallium, total	ug/L	MW-39	09/04/2019	ND	2.0000		
Thallium, total	ug/L	MW-39	03/26/2020	ND	2.0000		
Thallium, total	ug/L	MW-39	09/15/2020	ND	2.0000		
Thallium, total	ug/L	MW-39	03/02/2021	ND	2.0000		
Thallium, total	ug/L	MW-39	09/07/2021	ND	2.0000		
Thallium, total	ug/L	MW-39	03/24/2022	ND	2.0000		
Thallium, total	ug/L	MW-39	08/31/2022	ND	2.0000		
Thallium, total	ug/L	MW-39	03/02/2023	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-39	09/12/2023	ND	2.0000		
Thallium, total	ug/L	MW-39	03/04/2024	ND	2.0000		
Thallium, total	ug/L	MW-39	09/23/2024	ND	2.0000		
Vanadium, total	ug/L	MW-39	09/24/2014	ND	20.0000		
Vanadium, total	ug/L	MW-39	12/05/2014	ND	20.0000		
Vanadium, total	ug/L	MW-39	03/11/2015	ND	20.0000		
Vanadium, total	ug/L	MW-39	06/16/2015	ND	20.0000		
Vanadium, total	ug/L	MW-39	09/17/2015	ND	20.0000		
Vanadium, total	ug/L	MW-39	03/22/2016	ND	20.0000		
Vanadium, total	ug/L	MW-39	09/15/2016	ND	20.0000		
Vanadium, total	ug/L	MW-39	03/23/2017	ND	20.0000		
Vanadium, total	ug/L	MW-39	09/08/2017	ND	20.0000		
Vanadium, total	ug/L	MW-39	03/19/2018	ND	20.0000		
Vanadium, total	ug/L	MW-39	09/11/2018	ND	20.0000		
Vanadium, total	ug/L	MW-39	03/26/2019	ND	20.0000		
Vanadium, total	ug/L	MW-39	09/04/2019	ND	20.0000		
Vanadium, total	ug/L	MW-39	03/26/2020	ND	20.0000		
Vanadium, total	ug/L	MW-39	09/15/2020	ND	20.0000		
Vanadium, total	ug/L	MW-39	03/02/2021	ND	20.0000		
Vanadium, total	ug/L	MW-39	09/07/2021	ND	20.0000		
Vanadium, total	ug/L	MW-39	03/24/2022	ND	20.0000		
Vanadium, total	ug/L	MW-39	08/31/2022	ND	20.0000		
Vanadium, total	ug/L	MW-39	03/02/2023	ND	20.0000		
Vanadium, total	ug/L	MW-39	09/12/2023	ND	20.0000		
Vanadium, total	ug/L	MW-39	03/04/2024	ND	20.0000		
Vanadium, total	ug/L	MW-39	09/23/2024	ND	20.0000		
Zinc, total	ug/L	MW-39	09/24/2014	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	12/05/2014	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	03/11/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	06/16/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	09/17/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	03/22/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	09/15/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	03/23/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	09/08/2017	ND	20.0000		
Zinc, total	ug/L	MW-39	03/19/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	09/11/2018	ND	20.0000		
Zinc, total	ug/L	MW-39	03/26/2019		24.6000		
Zinc, total	ug/L	MW-39	09/04/2019	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	03/26/2020	ND	20.0000		
Zinc, total	ug/L	MW-39	09/15/2020	ND	20.0000		
Zinc, total	ug/L	MW-39	03/02/2021	ND	20.0000		
Zinc, total	ug/L	MW-39	09/07/2021	ND	20.0000		
Zinc, total	ug/L	MW-39	03/24/2022	ND	20.0000		
Zinc, total	ug/L	MW-39	08/31/2022	ND	20.0000		
Zinc, total	ug/L	MW-39	03/02/2023	ND	20.0000		
Zinc, total	ug/L	MW-39	09/12/2023	ND	20.0000		
Zinc, total	ug/L	MW-39	03/04/2024	ND	20.0000		
Zinc, total	ug/L	MW-39	09/23/2024	ND	20.0000		
Antimony, total	ug/L	MW-48	09/24/2014	ND	2.0000		
Antimony, total	ug/L	MW-48	12/05/2014	ND	2.0000		
Antimony, total	ug/L	MW-48	03/11/2015	ND	2.0000		
Antimony, total	ug/L	MW-48	06/16/2015	ND	2.0000		
Antimony, total	ug/L	MW-48	09/16/2015	ND	2.0000		
Antimony, total	ug/L	MW-48	03/22/2016	ND	2.0000		
Antimony, total	ug/L	MW-48	09/14/2016	ND	2.0000		
Antimony, total	ug/L	MW-48	03/23/2017	ND	2.0000		
Antimony, total	ug/L	MW-48	09/08/2017	ND	2.0000		
Antimony, total	ug/L	MW-48	03/19/2018	ND	2.0000		
Antimony, total	ug/L	MW-48	09/11/2018	ND	2.0000		
Antimony, total	ug/L	MW-48	03/26/2019	ND	2.0000		
Antimony, total	ug/L	MW-48	09/04/2019	ND	2.0000		
Antimony, total	ug/L	MW-48	03/26/2020	ND	2.0000		
Antimony, total	ug/L	MW-48	09/15/2020	ND	2.0000		
Antimony, total	ug/L	MW-48	03/02/2021	ND	2.0000		
Antimony, total	ug/L	MW-48	09/07/2021	ND	2.0000		
Antimony, total	ug/L	MW-48	03/24/2022	ND	2.0000		
Antimony, total	ug/L	MW-48	08/31/2022	ND	2.0000		
Antimony, total	ug/L	MW-48	03/02/2023	ND	2.0000		
Antimony, total	ug/L	MW-48	09/12/2023	ND	2.0000		
Antimony, total	ug/L	MW-48	03/04/2024	ND	2.0000		
Antimony, total	ug/L	MW-48	09/23/2024	ND	2.0000		
Arsenic, total	ug/L	MW-48	09/24/2014	ND	4.0000		
Arsenic, total	ug/L	MW-48	12/05/2014	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	
Arsenic, total	ug/L	MW-48	03/11/2015	ND	4.0000		
Arsenic, total	ug/L	MW-48	06/16/2015	ND	4.0000		
Arsenic, total	ug/L	MW-48	09/16/2015	ND	4.0000		
Arsenic, total	ug/L	MW-48	03/22/2016	ND	4.0000		
Arsenic, total	ug/L	MW-48	09/14/2016	ND	4.0000		
Arsenic, total	ug/L	MW-48	03/23/2017	ND	4.0000		
Arsenic, total	ug/L	MW-48	09/08/2017	ND	4.0000		
Arsenic, total	ug/L	MW-48	03/19/2018	ND	4.0000		
Arsenic, total	ug/L	MW-48	09/11/2018	ND	4.0000		
Arsenic, total	ug/L	MW-48	03/26/2019	ND	4.0000		
Arsenic, total	ug/L	MW-48	09/04/2019	ND	4.0000		
Arsenic, total	ug/L	MW-48	03/26/2020	ND	4.0000		
Arsenic, total	ug/L	MW-48	09/15/2020	ND	4.0000		
Arsenic, total	ug/L	MW-48	03/02/2021	ND	4.0000		
Arsenic, total	ug/L	MW-48	09/07/2021	ND	4.0000		
Arsenic, total	ug/L	MW-48	03/24/2022	ND	4.0000		
Arsenic, total	ug/L	MW-48	08/31/2022	ND	4.0000		
Arsenic, total	ug/L	MW-48	03/02/2023	ND	4.0000		
Arsenic, total	ug/L	MW-48	09/12/2023	ND	4.0000		
Arsenic, total	ug/L	MW-48	03/04/2024	ND	4.0000		
Arsenic, total	ug/L	MW-48	09/23/2024	ND	4.0000		
Barium, total	ug/L	MW-48	09/24/2014		181.0000		
Barium, total	ug/L	MW-48	12/05/2014		168.0000		
Barium, total	ug/L	MW-48	03/11/2015		143.0000		
Barium, total	ug/L	MW-48	06/16/2015		161.0000		
Barium, total	ug/L	MW-48	09/16/2015		150.0000		
Barium, total	ug/L	MW-48	03/22/2016		153.0000		
Barium, total	ug/L	MW-48	09/14/2016		140.0000		
Barium, total	ug/L	MW-48	03/23/2017		146.0000		
Barium, total	ug/L	MW-48	09/08/2017		171.0000		
Barium, total	ug/L	MW-48	03/19/2018		145.0000		
Barium, total	ug/L	MW-48	09/11/2018		151.0000		
Barium, total	ug/L	MW-48	03/26/2019		153.0000		
Barium, total	ug/L	MW-48	09/04/2019		160.0000		
Barium, total	ug/L	MW-48	03/26/2020		156.0000		
Barium, total	ug/L	MW-48	09/15/2020		152.0000		
Barium, total	ug/L	MW-48	03/02/2021		159.0000		
Barium, total	ug/L	MW-48	09/07/2021		149.0000		
Barium, total	ug/L	MW-48	03/24/2022		143.0000		
Barium, total	ug/L	MW-48	08/31/2022		157.0000		
Barium, total	ug/L	MW-48	03/02/2023		149.0000		
Barium, total	ug/L	MW-48	09/12/2023		168.0000		
Barium, total	ug/L	MW-48	03/04/2024		149.0000		
Barium, total	ug/L	MW-48	09/23/2024		148.0000		
Beryllium, total	ug/L	MW-48	09/24/2014	ND	4.0000		
Beryllium, total	ug/L	MW-48	12/05/2014	ND	4.0000		
Beryllium, total	ug/L	MW-48	03/11/2015	ND	4.0000		
Beryllium, total	ug/L	MW-48	06/16/2015	ND	4.0000		
Beryllium, total	ug/L	MW-48	09/16/2015	ND	4.0000		
Beryllium, total	ug/L	MW-48	03/22/2016	ND	4.0000		
Beryllium, total	ug/L	MW-48	09/14/2016	ND	4.0000		
Beryllium, total	ug/L	MW-48	03/23/2017	ND	4.0000		
Beryllium, total	ug/L	MW-48	09/08/2017	ND	4.0000		
Beryllium, total	ug/L	MW-48	03/19/2018	ND	4.0000		
Beryllium, total	ug/L	MW-48	09/11/2018	ND	4.0000		
Beryllium, total	ug/L	MW-48	03/26/2019	ND	4.0000		
Beryllium, total	ug/L	MW-48	09/04/2019	ND	4.0000		
Beryllium, total	ug/L	MW-48	03/26/2020	ND	4.0000		
Beryllium, total	ug/L	MW-48	09/15/2020	ND	4.0000		
Beryllium, total	ug/L	MW-48	03/02/2021	ND	4.0000		
Beryllium, total	ug/L	MW-48	09/07/2021	ND	4.0000		
Beryllium, total	ug/L	MW-48	03/24/2022	ND	4.0000		
Beryllium, total	ug/L	MW-48	08/31/2022	ND	4.0000		
Beryllium, total	ug/L	MW-48	03/02/2023	ND	4.0000		
Beryllium, total	ug/L	MW-48	09/12/2023	ND	4.0000		
Beryllium, total	ug/L	MW-48	03/04/2024	ND	4.0000		
Beryllium, total	ug/L	MW-48	09/23/2024	ND	4.0000		
Cadmium, total	ug/L	MW-48	09/24/2014	ND	0.8000		
Cadmium, total	ug/L	MW-48	12/05/2014	ND	0.8000		
Cadmium, total	ug/L	MW-48	03/11/2015	ND	0.8000		
Cadmium, total	ug/L	MW-48	06/16/2015	ND	0.8000		
Cadmium, total	ug/L	MW-48	09/16/2015	ND	0.8000		
Cadmium, total	ug/L	MW-48	03/22/2016	ND	0.8000		
Cadmium, total	ug/L	MW-48	09/14/2016	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-48	03/23/2017	ND	0.8000		
Cadmium, total	ug/L	MW-48	09/08/2017	ND	0.8000		
Cadmium, total	ug/L	MW-48	03/19/2018	ND	0.8000		
Cadmium, total	ug/L	MW-48	09/11/2018	ND	0.8000		
Cadmium, total	ug/L	MW-48	03/26/2019	ND	0.8000		
Cadmium, total	ug/L	MW-48	09/04/2019	ND	0.8000		
Cadmium, total	ug/L	MW-48	03/26/2020	ND	0.8000		
Cadmium, total	ug/L	MW-48	09/15/2020	ND	0.8000		
Cadmium, total	ug/L	MW-48	03/02/2021	ND	0.8000		
Cadmium, total	ug/L	MW-48	09/07/2021	ND	0.8000		
Cadmium, total	ug/L	MW-48	03/24/2022	ND	0.8000		
Cadmium, total	ug/L	MW-48	08/31/2022	ND	0.8000		
Cadmium, total	ug/L	MW-48	03/02/2023	ND	0.8000		
Cadmium, total	ug/L	MW-48	09/12/2023	ND	0.8000		
Cadmium, total	ug/L	MW-48	03/04/2024	ND	0.8000		
Cadmium, total	ug/L	MW-48	09/23/2024	ND	0.8000		
Chromium, total	ug/L	MW-48	09/24/2014	ND	8.0000		
Chromium, total	ug/L	MW-48	12/05/2014	ND	8.0000		
Chromium, total	ug/L	MW-48	03/11/2015	ND	8.0000		
Chromium, total	ug/L	MW-48	06/16/2015	ND	8.0000		
Chromium, total	ug/L	MW-48	09/16/2015	ND	8.0000		
Chromium, total	ug/L	MW-48	03/22/2016	ND	8.0000		
Chromium, total	ug/L	MW-48	09/14/2016	ND	8.0000		
Chromium, total	ug/L	MW-48	03/23/2017	ND	8.0000		
Chromium, total	ug/L	MW-48	09/08/2017	ND	8.0000		
Chromium, total	ug/L	MW-48	03/19/2018	ND	8.0000		
Chromium, total	ug/L	MW-48	09/11/2018	ND	8.0000		
Chromium, total	ug/L	MW-48	03/26/2019	ND	8.0000		
Chromium, total	ug/L	MW-48	09/04/2019	ND	8.0000		
Chromium, total	ug/L	MW-48	03/26/2020	ND	8.0000		
Chromium, total	ug/L	MW-48	09/15/2020	ND	8.0000		
Chromium, total	ug/L	MW-48	03/02/2021	ND	8.0000		
Chromium, total	ug/L	MW-48	09/07/2021	ND	8.0000		
Chromium, total	ug/L	MW-48	03/24/2022	ND	8.0000		
Chromium, total	ug/L	MW-48	08/31/2022	ND	8.0000		
Chromium, total	ug/L	MW-48	03/02/2023	ND	8.0000		
Chromium, total	ug/L	MW-48	09/12/2023	ND	8.0000		
Chromium, total	ug/L	MW-48	03/04/2024	ND	8.0000		
Chromium, total	ug/L	MW-48	09/23/2024	ND	8.0000		
Cobalt, total	ug/L	MW-48	09/24/2014	ND	0.8000		
Cobalt, total	ug/L	MW-48	12/05/2014	ND	0.8000		
Cobalt, total	ug/L	MW-48	03/11/2015	ND	0.8000		
Cobalt, total	ug/L	MW-48	06/16/2015	ND	0.8000		
Cobalt, total	ug/L	MW-48	09/16/2015	ND	0.8000		
Cobalt, total	ug/L	MW-48	03/22/2016	ND	0.8000		
Cobalt, total	ug/L	MW-48	09/14/2016	ND	0.8000		
Cobalt, total	ug/L	MW-48	03/23/2017	ND	0.8000		
Cobalt, total	ug/L	MW-48	09/08/2017	ND	0.8000		
Cobalt, total	ug/L	MW-48	03/19/2018	ND	0.8000		
Cobalt, total	ug/L	MW-48	09/11/2018	ND	0.8000		
Cobalt, total	ug/L	MW-48	03/26/2019	ND	0.8000		
Cobalt, total	ug/L	MW-48	09/04/2019	ND	0.8000		
Cobalt, total	ug/L	MW-48	03/26/2020	ND	0.8000		
Cobalt, total	ug/L	MW-48	09/15/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-48	03/02/2021		0.9000		
Cobalt, total	ug/L	MW-48	09/07/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-48	03/24/2022		0.4000		
Cobalt, total	ug/L	MW-48	08/31/2022	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-48	03/02/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-48	09/12/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-48	03/04/2024	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-48	09/23/2024	ND	0.4000	0.8000	**
Copper, total	ug/L	MW-48	09/24/2014	ND	4.0000		
Copper, total	ug/L	MW-48	12/05/2014	ND	4.0000		
Copper, total	ug/L	MW-48	03/11/2015	ND	4.0000		
Copper, total	ug/L	MW-48	06/16/2015	ND	4.0000		
Copper, total	ug/L	MW-48	09/16/2015	ND	4.0000		
Copper, total	ug/L	MW-48	03/22/2016	ND	4.0000		
Copper, total	ug/L	MW-48	09/14/2016	ND	4.0000		
Copper, total	ug/L	MW-48	03/23/2017	ND	4.0000		
Copper, total	ug/L	MW-48	09/08/2017	ND	4.0000		
Copper, total	ug/L	MW-48	03/19/2018	ND	4.0000		
Copper, total	ug/L	MW-48	09/11/2018	ND	4.0000		
Copper, total	ug/L	MW-48	03/26/2019	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	
Copper, total	ug/L	MW-48	09/04/2019	ND	4.0000		
Copper, total	ug/L	MW-48	03/26/2020	ND	4.0000		
Copper, total	ug/L	MW-48	09/15/2020	ND	4.0000		
Copper, total	ug/L	MW-48	03/02/2021	ND	4.0000		
Copper, total	ug/L	MW-48	09/07/2021	ND	4.0000		
Copper, total	ug/L	MW-48	03/24/2022	ND	4.0000		
Copper, total	ug/L	MW-48	08/31/2022	ND	4.0000		
Copper, total	ug/L	MW-48	03/02/2023	ND	4.0000		
Copper, total	ug/L	MW-48	09/12/2023	ND	4.0000		
Copper, total	ug/L	MW-48	03/04/2024	ND	4.0000		
Copper, total	ug/L	MW-48	09/23/2024	ND	4.0000		
Lead, total	ug/L	MW-48	09/24/2014	ND	4.0000		
Lead, total	ug/L	MW-48	12/05/2014	ND	4.0000		
Lead, total	ug/L	MW-48	03/11/2015	ND	4.0000		
Lead, total	ug/L	MW-48	06/16/2015	ND	4.0000		
Lead, total	ug/L	MW-48	09/16/2015	ND	4.0000		
Lead, total	ug/L	MW-48	03/22/2016	ND	4.0000		
Lead, total	ug/L	MW-48	09/14/2016	ND	4.0000		
Lead, total	ug/L	MW-48	03/23/2017	ND	4.0000		
Lead, total	ug/L	MW-48	09/08/2017	ND	4.0000		
Lead, total	ug/L	MW-48	03/19/2018	ND	4.0000		
Lead, total	ug/L	MW-48	09/11/2018	ND	4.0000		
Lead, total	ug/L	MW-48	03/26/2019	ND	4.0000		
Lead, total	ug/L	MW-48	09/04/2019	ND	4.0000		
Lead, total	ug/L	MW-48	03/26/2020	ND	4.0000		
Lead, total	ug/L	MW-48	09/15/2020	ND	4.0000		
Lead, total	ug/L	MW-48	03/02/2021	ND	4.0000		
Lead, total	ug/L	MW-48	09/07/2021	ND	4.0000		
Lead, total	ug/L	MW-48	03/24/2022	ND	4.0000		
Lead, total	ug/L	MW-48	08/31/2022	ND	4.0000		
Lead, total	ug/L	MW-48	03/02/2023	ND	4.0000		
Lead, total	ug/L	MW-48	09/12/2023	ND	4.0000		
Lead, total	ug/L	MW-48	03/04/2024	ND	4.0000		
Lead, total	ug/L	MW-48	09/23/2024	ND	4.0000		
Nickel, total	ug/L	MW-48	09/24/2014	ND	4.0000		
Nickel, total	ug/L	MW-48	12/05/2014	ND	4.0000		
Nickel, total	ug/L	MW-48	03/11/2015	ND	4.0000		
Nickel, total	ug/L	MW-48	06/16/2015	ND	4.0000		
Nickel, total	ug/L	MW-48	09/16/2015	ND	4.0000		
Nickel, total	ug/L	MW-48	03/22/2016	ND	4.0000		
Nickel, total	ug/L	MW-48	09/14/2016	ND	4.0000		
Nickel, total	ug/L	MW-48	03/23/2017	ND	4.0000		
Nickel, total	ug/L	MW-48	09/08/2017	ND	4.0000		
Nickel, total	ug/L	MW-48	03/19/2018	ND	4.0000		
Nickel, total	ug/L	MW-48	09/11/2018	ND	4.0000		
Nickel, total	ug/L	MW-48	03/26/2019	ND	4.0000		
Nickel, total	ug/L	MW-48	09/04/2019	ND	4.0000		
Nickel, total	ug/L	MW-48	03/26/2020	ND	4.0000		
Nickel, total	ug/L	MW-48	09/15/2020	ND	4.0000		
Nickel, total	ug/L	MW-48	03/02/2021	ND	4.0000		
Nickel, total	ug/L	MW-48	09/07/2021	ND	4.0000		
Nickel, total	ug/L	MW-48	03/24/2022	ND	4.0000		
Nickel, total	ug/L	MW-48	08/31/2022	ND	4.0000		
Nickel, total	ug/L	MW-48	03/02/2023	ND	4.0000		
Nickel, total	ug/L	MW-48	09/12/2023	ND	4.0000		
Nickel, total	ug/L	MW-48	03/04/2024	ND	4.0000		
Nickel, total	ug/L	MW-48	09/23/2024	ND	4.0000		
Selenium, total	ug/L	MW-48	09/24/2014	ND	4.0000		
Selenium, total	ug/L	MW-48	12/05/2014	ND	4.0000		
Selenium, total	ug/L	MW-48	03/11/2015	ND	4.0000		
Selenium, total	ug/L	MW-48	06/16/2015	ND	4.0000		
Selenium, total	ug/L	MW-48	09/16/2015	ND	4.0000		
Selenium, total	ug/L	MW-48	03/22/2016	ND	4.0000		
Selenium, total	ug/L	MW-48	09/14/2016	ND	4.0000		
Selenium, total	ug/L	MW-48	03/23/2017	ND	4.0000		
Selenium, total	ug/L	MW-48	09/08/2017	ND	4.0000		
Selenium, total	ug/L	MW-48	03/19/2018	ND	4.0000		
Selenium, total	ug/L	MW-48	09/11/2018	ND	4.0000		
Selenium, total	ug/L	MW-48	03/26/2019	ND	4.0000		
Selenium, total	ug/L	MW-48	09/04/2019	ND	4.0000		
Selenium, total	ug/L	MW-48	03/26/2020	ND	4.0000		
Selenium, total	ug/L	MW-48	09/15/2020	ND	4.0000		
Selenium, total	ug/L	MW-48	03/02/2021	ND	4.0000		
Selenium, total	ug/L	MW-48	09/07/2021	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-48	03/24/2022	ND	4.0000		
Selenium, total	ug/L	MW-48	08/31/2022	ND	4.0000		
Selenium, total	ug/L	MW-48	03/02/2023	ND	4.0000		
Selenium, total	ug/L	MW-48	09/12/2023	ND	4.0000		
Selenium, total	ug/L	MW-48	03/04/2024	ND	4.0000		
Selenium, total	ug/L	MW-48	09/23/2024	ND	4.0000		
Silver, total	ug/L	MW-48	09/24/2014	ND	4.0000		
Silver, total	ug/L	MW-48	12/05/2014	ND	4.0000		
Silver, total	ug/L	MW-48	03/11/2015	ND	4.0000		
Silver, total	ug/L	MW-48	06/16/2015	ND	4.0000		
Silver, total	ug/L	MW-48	09/16/2015	ND	4.0000		
Silver, total	ug/L	MW-48	03/22/2016	ND	4.0000		
Silver, total	ug/L	MW-48	09/14/2016	ND	4.0000		
Silver, total	ug/L	MW-48	03/23/2017	ND	4.0000		
Silver, total	ug/L	MW-48	09/08/2017	ND	4.0000		
Silver, total	ug/L	MW-48	03/19/2018	ND	4.0000		
Silver, total	ug/L	MW-48	09/11/2018	ND	4.0000		
Silver, total	ug/L	MW-48	03/26/2019	ND	4.0000		
Silver, total	ug/L	MW-48	09/04/2019	ND	4.0000		
Silver, total	ug/L	MW-48	03/26/2020	ND	4.0000		
Silver, total	ug/L	MW-48	09/15/2020	ND	4.0000		
Silver, total	ug/L	MW-48	03/02/2021	ND	4.0000		
Silver, total	ug/L	MW-48	09/07/2021	ND	4.0000		
Silver, total	ug/L	MW-48	03/24/2022	ND	4.0000		
Silver, total	ug/L	MW-48	08/31/2022	ND	4.0000		
Silver, total	ug/L	MW-48	03/02/2023	ND	4.0000		
Silver, total	ug/L	MW-48	09/12/2023	ND	4.0000		
Silver, total	ug/L	MW-48	03/04/2024	ND	4.0000		
Silver, total	ug/L	MW-48	09/23/2024	ND	4.0000		
Thallium, total	ug/L	MW-48	09/24/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-48	12/05/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-48	03/11/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-48	06/16/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-48	09/16/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-48	03/22/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-48	09/14/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-48	03/23/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-48	09/08/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-48	03/19/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-48	09/11/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-48	03/26/2019	ND	2.0000		
Thallium, total	ug/L	MW-48	09/04/2019	ND	2.0000		
Thallium, total	ug/L	MW-48	03/26/2020	ND	2.0000		
Thallium, total	ug/L	MW-48	09/15/2020	ND	2.0000		
Thallium, total	ug/L	MW-48	03/02/2021	ND	2.0000		
Thallium, total	ug/L	MW-48	09/07/2021	ND	2.0000		
Thallium, total	ug/L	MW-48	03/24/2022	ND	2.0000		
Thallium, total	ug/L	MW-48	08/31/2022	ND	2.0000		
Thallium, total	ug/L	MW-48	03/02/2023	ND	2.0000		
Thallium, total	ug/L	MW-48	09/12/2023	ND	2.0000		
Thallium, total	ug/L	MW-48	03/04/2024	ND	2.0000		
Thallium, total	ug/L	MW-48	09/23/2024	ND	2.0000		
Vanadium, total	ug/L	MW-48	09/24/2014	ND	20.0000		
Vanadium, total	ug/L	MW-48	12/05/2014	ND	20.0000		
Vanadium, total	ug/L	MW-48	03/11/2015	ND	20.0000		
Vanadium, total	ug/L	MW-48	06/16/2015	ND	20.0000		
Vanadium, total	ug/L	MW-48	09/16/2015	ND	20.0000		
Vanadium, total	ug/L	MW-48	03/22/2016	ND	20.0000		
Vanadium, total	ug/L	MW-48	09/14/2016	ND	20.0000		
Vanadium, total	ug/L	MW-48	03/23/2017	ND	20.0000		
Vanadium, total	ug/L	MW-48	09/08/2017	ND	20.0000		
Vanadium, total	ug/L	MW-48	03/19/2018	ND	20.0000		
Vanadium, total	ug/L	MW-48	09/11/2018	ND	20.0000		
Vanadium, total	ug/L	MW-48	03/26/2019	ND	20.0000		
Vanadium, total	ug/L	MW-48	09/04/2019	ND	20.0000		
Vanadium, total	ug/L	MW-48	03/26/2020	ND	20.0000		
Vanadium, total	ug/L	MW-48	09/15/2020	ND	20.0000		
Vanadium, total	ug/L	MW-48	03/02/2021	ND	20.0000		
Vanadium, total	ug/L	MW-48	09/07/2021	ND	20.0000		
Vanadium, total	ug/L	MW-48	03/24/2022	ND	20.0000		
Vanadium, total	ug/L	MW-48	08/31/2022	ND	20.0000		
Vanadium, total	ug/L	MW-48	03/02/2023	ND	20.0000		
Vanadium, total	ug/L	MW-48	09/12/2023	ND	20.0000		
Vanadium, total	ug/L	MW-48	03/04/2024	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-48	09/23/2024	ND	20.0000		
Zinc, total	ug/L	MW-48	09/24/2014	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-48	12/05/2014	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-48	03/11/2015		32.3000		
Zinc, total	ug/L	MW-48	06/16/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-48	09/16/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-48	03/22/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-48	09/14/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-48	03/23/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-48	09/08/2017	ND	20.0000		
Zinc, total	ug/L	MW-48	03/19/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-48	09/11/2018	ND	20.0000		
Zinc, total	ug/L	MW-48	03/26/2019	ND	20.0000		
Zinc, total	ug/L	MW-48	09/04/2019	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-48	03/26/2020	ND	20.0000		
Zinc, total	ug/L	MW-48	09/15/2020	ND	20.0000		
Zinc, total	ug/L	MW-48	03/02/2021	ND	20.0000		
Zinc, total	ug/L	MW-48	09/07/2021	ND	20.0000		
Zinc, total	ug/L	MW-48	03/24/2022	ND	20.0000		
Zinc, total	ug/L	MW-48	08/31/2022	ND	20.0000		
Zinc, total	ug/L	MW-48	03/02/2023	ND	20.0000		
Zinc, total	ug/L	MW-48	09/12/2023	ND	20.0000		
Zinc, total	ug/L	MW-48	03/04/2024	ND	20.0000		
Zinc, total	ug/L	MW-48	09/23/2024	ND	20.0000		
Antimony, total	ug/L	MW-78	09/24/2014	ND	2.0000		
Antimony, total	ug/L	MW-78	12/05/2014	ND	2.0000		
Antimony, total	ug/L	MW-78	03/11/2015	ND	2.0000		
Antimony, total	ug/L	MW-78	06/16/2015	ND	2.0000		
Antimony, total	ug/L	MW-78	09/16/2015	ND	2.0000		
Antimony, total	ug/L	MW-78	03/22/2016	ND	2.0000		
Antimony, total	ug/L	MW-78	09/15/2016	ND	2.0000		
Antimony, total	ug/L	MW-78	03/23/2017	ND	2.0000		
Antimony, total	ug/L	MW-78	09/08/2017	ND	2.0000		
Antimony, total	ug/L	MW-78	03/19/2018	ND	2.0000		
Antimony, total	ug/L	MW-78	09/11/2018	ND	2.0000		
Antimony, total	ug/L	MW-78	03/26/2019	ND	2.0000		
Antimony, total	ug/L	MW-78	09/04/2019	ND	2.0000		
Antimony, total	ug/L	MW-78	03/26/2020	ND	2.0000		
Antimony, total	ug/L	MW-78	09/15/2020	ND	2.0000		
Antimony, total	ug/L	MW-78	03/02/2021	ND	2.0000		
Antimony, total	ug/L	MW-78	09/07/2021	ND	2.0000		
Antimony, total	ug/L	MW-78	03/24/2022	ND	2.0000		
Antimony, total	ug/L	MW-78	08/31/2022	ND	2.0000		
Antimony, total	ug/L	MW-78	03/02/2023	ND	2.0000		
Antimony, total	ug/L	MW-78	09/12/2023	ND	2.0000		
Antimony, total	ug/L	MW-78	03/04/2024	ND	2.0000		
Antimony, total	ug/L	MW-78	09/23/2024	ND	2.0000		
Arsenic, total	ug/L	MW-78	09/24/2014	ND	4.0000		
Arsenic, total	ug/L	MW-78	12/05/2014	ND	4.0000		
Arsenic, total	ug/L	MW-78	03/11/2015	ND	4.0000		
Arsenic, total	ug/L	MW-78	06/16/2015	ND	4.0000		
Arsenic, total	ug/L	MW-78	09/16/2015	ND	4.0000		
Arsenic, total	ug/L	MW-78	03/22/2016	ND	4.0000		
Arsenic, total	ug/L	MW-78	09/15/2016	ND	4.0000		
Arsenic, total	ug/L	MW-78	03/23/2017	ND	4.0000		
Arsenic, total	ug/L	MW-78	09/08/2017	ND	4.0000		
Arsenic, total	ug/L	MW-78	03/19/2018	ND	4.0000		
Arsenic, total	ug/L	MW-78	09/11/2018	ND	4.0000		
Arsenic, total	ug/L	MW-78	03/26/2019	ND	4.0000		
Arsenic, total	ug/L	MW-78	09/04/2019	ND	4.0000		
Arsenic, total	ug/L	MW-78	03/26/2020	ND	4.0000		
Arsenic, total	ug/L	MW-78	09/15/2020	ND	4.0000		
Arsenic, total	ug/L	MW-78	03/02/2021	ND	4.0000		
Arsenic, total	ug/L	MW-78	09/07/2021	ND	4.0000		
Arsenic, total	ug/L	MW-78	03/24/2022	ND	4.0000		
Arsenic, total	ug/L	MW-78	08/31/2022	ND	4.0000		
Arsenic, total	ug/L	MW-78	03/02/2023	ND	4.0000		
Arsenic, total	ug/L	MW-78	09/12/2023	ND	4.0000		
Arsenic, total	ug/L	MW-78	03/04/2024	ND	4.0000		
Arsenic, total	ug/L	MW-78	09/23/2024	ND	4.0000		
Barium, total	ug/L	MW-78	09/24/2014		304.0000		
Barium, total	ug/L	MW-78	12/05/2014		291.0000		
Barium, total	ug/L	MW-78	03/11/2015		304.0000		
Barium, total	ug/L	MW-78	06/16/2015		329.0000		

*   - 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	
Barium, total	ug/L	MW-78	09/16/2015		298.0000		
Barium, total	ug/L	MW-78	03/22/2016		309.0000		
Barium, total	ug/L	MW-78	09/15/2016		311.0000		
Barium, total	ug/L	MW-78	03/23/2017		307.0000		
Barium, total	ug/L	MW-78	09/08/2017		357.0000		
Barium, total	ug/L	MW-78	03/19/2018		320.0000		
Barium, total	ug/L	MW-78	09/11/2018		295.0000		
Barium, total	ug/L	MW-78	03/26/2019		285.0000		
Barium, total	ug/L	MW-78	09/04/2019		332.0000		
Barium, total	ug/L	MW-78	03/26/2020		304.0000		
Barium, total	ug/L	MW-78	09/15/2020		319.0000		
Barium, total	ug/L	MW-78	03/02/2021		304.0000		
Barium, total	ug/L	MW-78	09/07/2021		332.0000		
Barium, total	ug/L	MW-78	03/24/2022		291.0000		
Barium, total	ug/L	MW-78	08/31/2022		340.0000		
Barium, total	ug/L	MW-78	03/02/2023		345.0000		
Barium, total	ug/L	MW-78	09/12/2023		309.0000		
Barium, total	ug/L	MW-78	03/04/2024		341.0000		
Barium, total	ug/L	MW-78	09/23/2024		284.0000		
Beryllium, total	ug/L	MW-78	09/24/2014	ND	4.0000		
Beryllium, total	ug/L	MW-78	12/05/2014	ND	4.0000		
Beryllium, total	ug/L	MW-78	03/11/2015	ND	4.0000		
Beryllium, total	ug/L	MW-78	06/16/2015	ND	4.0000		
Beryllium, total	ug/L	MW-78	09/16/2015	ND	4.0000		
Beryllium, total	ug/L	MW-78	03/22/2016	ND	4.0000		
Beryllium, total	ug/L	MW-78	09/15/2016	ND	4.0000		
Beryllium, total	ug/L	MW-78	03/23/2017	ND	4.0000		
Beryllium, total	ug/L	MW-78	09/08/2017	ND	4.0000		
Beryllium, total	ug/L	MW-78	03/19/2018	ND	4.0000		
Beryllium, total	ug/L	MW-78	09/11/2018	ND	4.0000		
Beryllium, total	ug/L	MW-78	03/26/2019	ND	4.0000		
Beryllium, total	ug/L	MW-78	09/04/2019	ND	4.0000		
Beryllium, total	ug/L	MW-78	03/26/2020	ND	4.0000		
Beryllium, total	ug/L	MW-78	09/15/2020	ND	4.0000		
Beryllium, total	ug/L	MW-78	03/02/2021	ND	4.0000		
Beryllium, total	ug/L	MW-78	09/07/2021	ND	4.0000		
Beryllium, total	ug/L	MW-78	03/24/2022	ND	4.0000		
Beryllium, total	ug/L	MW-78	08/31/2022	ND	4.0000		
Beryllium, total	ug/L	MW-78	03/02/2023	ND	4.0000		
Beryllium, total	ug/L	MW-78	09/12/2023	ND	4.0000		
Beryllium, total	ug/L	MW-78	03/04/2024	ND	4.0000		
Beryllium, total	ug/L	MW-78	09/23/2024	ND	4.0000		
Cadmium, total	ug/L	MW-78	09/24/2014	ND	0.8000		
Cadmium, total	ug/L	MW-78	12/05/2014	ND	0.8000		
Cadmium, total	ug/L	MW-78	03/11/2015	ND	0.8000		
Cadmium, total	ug/L	MW-78	06/16/2015	ND	0.8000		
Cadmium, total	ug/L	MW-78	09/16/2015	ND	0.8000		
Cadmium, total	ug/L	MW-78	03/22/2016	ND	0.8000		
Cadmium, total	ug/L	MW-78	09/15/2016	ND	0.8000		
Cadmium, total	ug/L	MW-78	03/23/2017	ND	0.8000		
Cadmium, total	ug/L	MW-78	09/08/2017	ND	0.8000		
Cadmium, total	ug/L	MW-78	03/19/2018	ND	0.8000		
Cadmium, total	ug/L	MW-78	09/11/2018	ND	0.8000		
Cadmium, total	ug/L	MW-78	03/26/2019	ND	0.8000		
Cadmium, total	ug/L	MW-78	09/04/2019	ND	0.8000		
Cadmium, total	ug/L	MW-78	03/26/2020	ND	0.8000		
Cadmium, total	ug/L	MW-78	09/15/2020	ND	0.8000		
Cadmium, total	ug/L	MW-78	03/02/2021	ND	0.8000		
Cadmium, total	ug/L	MW-78	09/07/2021	ND	0.8000		
Cadmium, total	ug/L	MW-78	03/24/2022	ND	0.8000		
Cadmium, total	ug/L	MW-78	08/31/2022	ND	0.8000		
Cadmium, total	ug/L	MW-78	03/02/2023	ND	0.8000		
Cadmium, total	ug/L	MW-78	09/12/2023	ND	0.8000		
Cadmium, total	ug/L	MW-78	03/04/2024	ND	0.8000		
Cadmium, total	ug/L	MW-78	09/23/2024	ND	0.8000		
Chromium, total	ug/L	MW-78	09/24/2014	ND	8.0000		
Chromium, total	ug/L	MW-78	12/05/2014	ND	8.0000		
Chromium, total	ug/L	MW-78	03/11/2015	ND	8.0000		
Chromium, total	ug/L	MW-78	06/16/2015	ND	8.0000		
Chromium, total	ug/L	MW-78	09/16/2015	ND	8.0000		
Chromium, total	ug/L	MW-78	03/22/2016	ND	8.0000		
Chromium, total	ug/L	MW-78	09/15/2016	ND	8.0000		
Chromium, total	ug/L	MW-78	03/23/2017	ND	8.0000		
Chromium, total	ug/L	MW-78	09/08/2017	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-78	03/19/2018	ND	8.0000		
Chromium, total	ug/L	MW-78	09/11/2018	ND	8.0000		
Chromium, total	ug/L	MW-78	03/26/2019	ND	8.0000		
Chromium, total	ug/L	MW-78	09/04/2019	ND	8.0000		
Chromium, total	ug/L	MW-78	03/26/2020	ND	8.0000		
Chromium, total	ug/L	MW-78	09/15/2020	ND	8.0000		
Chromium, total	ug/L	MW-78	03/02/2021	ND	8.0000		
Chromium, total	ug/L	MW-78	09/07/2021	ND	8.0000		
Chromium, total	ug/L	MW-78	03/24/2022	ND	8.0000		
Chromium, total	ug/L	MW-78	08/31/2022	ND	8.0000		
Chromium, total	ug/L	MW-78	03/02/2023	ND	8.0000		
Chromium, total	ug/L	MW-78	09/12/2023	ND	8.0000		
Chromium, total	ug/L	MW-78	03/04/2024	ND	8.0000		
Chromium, total	ug/L	MW-78	09/23/2024	ND	8.0000		
Cobalt, total	ug/L	MW-78	09/24/2014	ND	0.8000		
Cobalt, total	ug/L	MW-78	12/05/2014	ND	0.8000		
Cobalt, total	ug/L	MW-78	03/11/2015	ND	0.8000		
Cobalt, total	ug/L	MW-78	06/16/2015	ND	0.8000		
Cobalt, total	ug/L	MW-78	09/16/2015	ND	0.8000		
Cobalt, total	ug/L	MW-78	03/22/2016	ND	0.8000		
Cobalt, total	ug/L	MW-78	09/15/2016	ND	0.8000		
Cobalt, total	ug/L	MW-78	03/23/2017	ND	0.8000		
Cobalt, total	ug/L	MW-78	09/08/2017	ND	0.8000		
Cobalt, total	ug/L	MW-78	03/19/2018	ND	0.8000		
Cobalt, total	ug/L	MW-78	09/11/2018	ND	0.8000		
Cobalt, total	ug/L	MW-78	03/26/2019	ND	0.8000		
Cobalt, total	ug/L	MW-78	09/04/2019	ND	0.8000		
Cobalt, total	ug/L	MW-78	03/26/2020	ND	0.8000		
Cobalt, total	ug/L	MW-78	09/15/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-78	03/02/2021		1.0000		
Cobalt, total	ug/L	MW-78	09/07/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-78	03/24/2022	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-78	08/31/2022	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-78	03/02/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-78	09/12/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-78	03/04/2024	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-78	09/23/2024	ND	0.4000	0.8000	**
Copper, total	ug/L	MW-78	09/24/2014	ND	4.0000		
Copper, total	ug/L	MW-78	12/05/2014	ND	4.0000		
Copper, total	ug/L	MW-78	03/11/2015	ND	4.0000		
Copper, total	ug/L	MW-78	06/16/2015	ND	4.0000		
Copper, total	ug/L	MW-78	09/16/2015	ND	4.0000		
Copper, total	ug/L	MW-78	03/22/2016	ND	4.0000		
Copper, total	ug/L	MW-78	09/15/2016	ND	4.0000		
Copper, total	ug/L	MW-78	03/23/2017	ND	4.0000		
Copper, total	ug/L	MW-78	09/08/2017	ND	4.0000		
Copper, total	ug/L	MW-78	03/19/2018	ND	4.0000		
Copper, total	ug/L	MW-78	09/11/2018	ND	4.0000		
Copper, total	ug/L	MW-78	03/26/2019	ND	4.0000		
Copper, total	ug/L	MW-78	09/04/2019	ND	4.0000		
Copper, total	ug/L	MW-78	03/26/2020	ND	4.0000		
Copper, total	ug/L	MW-78	09/15/2020	ND	4.0000		
Copper, total	ug/L	MW-78	03/02/2021	ND	4.0000		
Copper, total	ug/L	MW-78	09/07/2021	ND	4.0000		
Copper, total	ug/L	MW-78	03/24/2022	ND	4.0000		
Copper, total	ug/L	MW-78	08/31/2022	ND	4.0000		
Copper, total	ug/L	MW-78	03/02/2023	ND	4.0000		
Copper, total	ug/L	MW-78	09/12/2023	ND	4.0000		
Copper, total	ug/L	MW-78	03/04/2024	ND	4.0000		
Copper, total	ug/L	MW-78	09/23/2024	ND	4.0000		
Lead, total	ug/L	MW-78	09/24/2014	ND	4.0000		
Lead, total	ug/L	MW-78	12/05/2014	ND	4.0000		
Lead, total	ug/L	MW-78	03/11/2015	ND	4.0000		
Lead, total	ug/L	MW-78	06/16/2015	ND	4.0000		
Lead, total	ug/L	MW-78	09/16/2015	ND	4.0000		
Lead, total	ug/L	MW-78	03/22/2016	ND	4.0000		
Lead, total	ug/L	MW-78	09/15/2016	ND	4.0000		
Lead, total	ug/L	MW-78	03/23/2017	ND	4.0000		
Lead, total	ug/L	MW-78	09/08/2017	ND	4.0000		
Lead, total	ug/L	MW-78	03/19/2018	ND	4.0000		
Lead, total	ug/L	MW-78	09/11/2018	ND	4.0000		
Lead, total	ug/L	MW-78	03/26/2019	ND	4.0000		
Lead, total	ug/L	MW-78	09/04/2019	ND	4.0000		
Lead, total	ug/L	MW-78	03/26/2020	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-78	09/15/2020	ND	4.0000		
Lead, total	ug/L	MW-78	03/02/2021	ND	4.0000		
Lead, total	ug/L	MW-78	09/07/2021	ND	4.0000		
Lead, total	ug/L	MW-78	03/24/2022	ND	4.0000		
Lead, total	ug/L	MW-78	08/31/2022	ND	4.0000		
Lead, total	ug/L	MW-78	03/02/2023	ND	4.0000		
Lead, total	ug/L	MW-78	09/12/2023	ND	4.0000		
Lead, total	ug/L	MW-78	03/04/2024	ND	4.0000		
Lead, total	ug/L	MW-78	09/23/2024	ND	4.0000		
Nickel, total	ug/L	MW-78	09/24/2014	ND	4.0000		
Nickel, total	ug/L	MW-78	12/05/2014	ND	4.0000		
Nickel, total	ug/L	MW-78	03/11/2015	ND	4.0000		
Nickel, total	ug/L	MW-78	06/16/2015	ND	4.0000		
Nickel, total	ug/L	MW-78	09/16/2015	ND	4.0000		
Nickel, total	ug/L	MW-78	03/22/2016	ND	4.0000		
Nickel, total	ug/L	MW-78	09/15/2016	ND	4.0000		
Nickel, total	ug/L	MW-78	03/23/2017	ND	4.0000		
Nickel, total	ug/L	MW-78	09/08/2017	ND	4.0000		
Nickel, total	ug/L	MW-78	03/19/2018	ND	4.0000		
Nickel, total	ug/L	MW-78	09/11/2018	ND	4.0000		
Nickel, total	ug/L	MW-78	03/26/2019	ND	4.0000		
Nickel, total	ug/L	MW-78	09/04/2019	ND	4.0000		
Nickel, total	ug/L	MW-78	03/26/2020	ND	4.0000		
Nickel, total	ug/L	MW-78	09/15/2020	ND	4.0000		
Nickel, total	ug/L	MW-78	03/02/2021	ND	4.0000		
Nickel, total	ug/L	MW-78	09/07/2021	ND	4.0000		
Nickel, total	ug/L	MW-78	03/24/2022	ND	4.0000		
Nickel, total	ug/L	MW-78	08/31/2022	ND	4.0000		
Nickel, total	ug/L	MW-78	03/02/2023	ND	4.0000		
Nickel, total	ug/L	MW-78	09/12/2023	ND	4.0000		
Nickel, total	ug/L	MW-78	03/04/2024	ND	4.0000		
Nickel, total	ug/L	MW-78	09/23/2024	ND	4.0000		
Selenium, total	ug/L	MW-78	09/24/2014		5.4000		
Selenium, total	ug/L	MW-78	12/05/2014		5.6000		
Selenium, total	ug/L	MW-78	03/11/2015		6.5000		
Selenium, total	ug/L	MW-78	06/16/2015		8.6000		
Selenium, total	ug/L	MW-78	09/16/2015		8.1000		
Selenium, total	ug/L	MW-78	03/22/2016		8.9000		
Selenium, total	ug/L	MW-78	09/15/2016		9.4000		
Selenium, total	ug/L	MW-78	03/23/2017		10.6000		
Selenium, total	ug/L	MW-78	09/08/2017		6.9000		
Selenium, total	ug/L	MW-78	03/19/2018		8.3000		
Selenium, total	ug/L	MW-78	09/11/2018		5.6000		
Selenium, total	ug/L	MW-78	03/26/2019		9.5000		
Selenium, total	ug/L	MW-78	09/04/2019		6.8000		
Selenium, total	ug/L	MW-78	03/26/2020		5.4000		
Selenium, total	ug/L	MW-78	09/15/2020		8.5000		
Selenium, total	ug/L	MW-78	03/02/2021		9.4000		
Selenium, total	ug/L	MW-78	09/07/2021		4.9000		
Selenium, total	ug/L	MW-78	03/24/2022		6.3000		
Selenium, total	ug/L	MW-78	08/31/2022		6.2000		
Selenium, total	ug/L	MW-78	03/02/2023		7.9000		
Selenium, total	ug/L	MW-78	09/12/2023		5.8000		
Selenium, total	ug/L	MW-78	03/04/2024		5.7000		
Selenium, total	ug/L	MW-78	09/23/2024		4.1000		
Silver, total	ug/L	MW-78	09/24/2014	ND	4.0000		
Silver, total	ug/L	MW-78	12/05/2014	ND	4.0000		
Silver, total	ug/L	MW-78	03/11/2015	ND	4.0000		
Silver, total	ug/L	MW-78	06/16/2015	ND	4.0000		
Silver, total	ug/L	MW-78	09/16/2015	ND	4.0000		
Silver, total	ug/L	MW-78	03/22/2016	ND	4.0000		
Silver, total	ug/L	MW-78	09/15/2016	ND	4.0000		
Silver, total	ug/L	MW-78	03/23/2017	ND	4.0000		
Silver, total	ug/L	MW-78	09/08/2017	ND	4.0000		
Silver, total	ug/L	MW-78	03/19/2018	ND	4.0000		
Silver, total	ug/L	MW-78	09/11/2018	ND	4.0000		
Silver, total	ug/L	MW-78	03/26/2019	ND	4.0000		
Silver, total	ug/L	MW-78	09/04/2019	ND	4.0000		
Silver, total	ug/L	MW-78	03/26/2020	ND	4.0000		
Silver, total	ug/L	MW-78	09/15/2020	ND	4.0000		
Silver, total	ug/L	MW-78	03/02/2021	ND	4.0000		
Silver, total	ug/L	MW-78	09/07/2021	ND	4.0000		
Silver, total	ug/L	MW-78	03/24/2022	ND	4.0000		
Silver, total	ug/L	MW-78	08/31/2022	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	
Silver, total	ug/L	MW-78	03/02/2023	ND	4.0000		
Silver, total	ug/L	MW-78	09/12/2023	ND	4.0000		
Silver, total	ug/L	MW-78	03/04/2024	ND	4.0000		
Silver, total	ug/L	MW-78	09/23/2024	ND	4.0000		
Thallium, total	ug/L	MW-78	09/24/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-78	12/05/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-78	03/11/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-78	06/16/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-78	09/16/2015	ND	1.0000	2.0000	**
Thallium, total	ug/L	MW-78	03/22/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-78	09/15/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-78	03/23/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-78	09/08/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-78	03/19/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-78	09/11/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-78	03/26/2019	ND	2.0000		
Thallium, total	ug/L	MW-78	09/04/2019	ND	2.0000		
Thallium, total	ug/L	MW-78	03/26/2020	ND	2.0000		
Thallium, total	ug/L	MW-78	09/15/2020	ND	2.0000		
Thallium, total	ug/L	MW-78	03/02/2021	ND	2.0000		
Thallium, total	ug/L	MW-78	09/07/2021	ND	2.0000		
Thallium, total	ug/L	MW-78	03/24/2022	ND	2.0000		
Thallium, total	ug/L	MW-78	08/31/2022	ND	2.0000		
Thallium, total	ug/L	MW-78	03/02/2023	ND	2.0000		
Thallium, total	ug/L	MW-78	09/12/2023	ND	2.0000		
Thallium, total	ug/L	MW-78	03/04/2024	ND	2.0000		
Thallium, total	ug/L	MW-78	09/23/2024	ND	2.0000		
Vanadium, total	ug/L	MW-78	09/24/2014	ND	20.0000		
Vanadium, total	ug/L	MW-78	12/05/2014	ND	20.0000		
Vanadium, total	ug/L	MW-78	03/11/2015	ND	20.0000		
Vanadium, total	ug/L	MW-78	06/16/2015	ND	20.0000		
Vanadium, total	ug/L	MW-78	09/16/2015	ND	20.0000		
Vanadium, total	ug/L	MW-78	03/22/2016	ND	20.0000		
Vanadium, total	ug/L	MW-78	09/15/2016	ND	20.0000		
Vanadium, total	ug/L	MW-78	03/23/2017	ND	20.0000		
Vanadium, total	ug/L	MW-78	09/08/2017	ND	20.0000		
Vanadium, total	ug/L	MW-78	03/19/2018	ND	20.0000		
Vanadium, total	ug/L	MW-78	09/11/2018	ND	20.0000		
Vanadium, total	ug/L	MW-78	03/26/2019	ND	20.0000		
Vanadium, total	ug/L	MW-78	09/04/2019	ND	20.0000		
Vanadium, total	ug/L	MW-78	03/26/2020	ND	20.0000		
Vanadium, total	ug/L	MW-78	09/15/2020	ND	20.0000		
Vanadium, total	ug/L	MW-78	03/02/2021	ND	20.0000		
Vanadium, total	ug/L	MW-78	09/07/2021	ND	20.0000		
Vanadium, total	ug/L	MW-78	03/24/2022	ND	20.0000		
Vanadium, total	ug/L	MW-78	08/31/2022	ND	20.0000		
Vanadium, total	ug/L	MW-78	03/02/2023	ND	20.0000		
Vanadium, total	ug/L	MW-78	09/12/2023	ND	20.0000		
Vanadium, total	ug/L	MW-78	03/04/2024	ND	20.0000		
Vanadium, total	ug/L	MW-78	09/23/2024	ND	20.0000		
Zinc, total	ug/L	MW-78	09/24/2014		10.7000		
Zinc, total	ug/L	MW-78	12/05/2014	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-78	03/11/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-78	06/16/2015		8.4000		
Zinc, total	ug/L	MW-78	09/16/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-78	03/22/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-78	09/15/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-78	03/23/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-78	09/08/2017	ND	20.0000		
Zinc, total	ug/L	MW-78	03/19/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-78	09/11/2018	ND	20.0000		
Zinc, total	ug/L	MW-78	03/26/2019	ND	20.0000		
Zinc, total	ug/L	MW-78	09/04/2019		17.6000		
Zinc, total	ug/L	MW-78	03/26/2020	ND	20.0000		
Zinc, total	ug/L	MW-78	09/15/2020	ND	20.0000		
Zinc, total	ug/L	MW-78	03/02/2021	ND	20.0000		
Zinc, total	ug/L	MW-78	09/07/2021	ND	20.0000		
Zinc, total	ug/L	MW-78	03/24/2022	ND	20.0000		
Zinc, total	ug/L	MW-78	08/31/2022	ND	20.0000		
Zinc, total	ug/L	MW-78	03/02/2023	ND	20.0000		
Zinc, total	ug/L	MW-78	09/12/2023	ND	20.0000		
Zinc, total	ug/L	MW-78	03/04/2024	ND	20.0000		
Zinc, total	ug/L	MW-78	09/23/2024	ND	20.0000		
Antimony, total	ug/L	SW-101	09/14/2016	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	
Antimony, total	ug/L	SW-101	03/23/2017	ND	2.0000		
Antimony, total	ug/L	SW-101	09/08/2017	ND	2.0000		
Antimony, total	ug/L	SW-101	03/19/2018	ND	2.0000		
Antimony, total	ug/L	SW-101	09/11/2018	ND	2.0000		
Antimony, total	ug/L	SW-101	03/26/2019	ND	2.0000		
Antimony, total	ug/L	SW-101	09/04/2019	ND	2.0000		
Arsenic, total	ug/L	SW-101	09/14/2016	ND	4.0000		
Arsenic, total	ug/L	SW-101	03/23/2017	ND	4.0000		
Arsenic, total	ug/L	SW-101	09/08/2017	ND	4.0000		
Arsenic, total	ug/L	SW-101	03/19/2018		4.4000		
Arsenic, total	ug/L	SW-101	09/11/2018	ND	4.0000		
Arsenic, total	ug/L	SW-101	03/26/2019	ND	4.0000		
Arsenic, total	ug/L	SW-101	09/04/2019		7.3000		
Barium, total	ug/L	SW-101	09/14/2016		188.0000		
Barium, total	ug/L	SW-101	03/23/2017		233.0000		
Barium, total	ug/L	SW-101	09/08/2017		272.0000		
Barium, total	ug/L	SW-101	03/19/2018		162.0000		
Barium, total	ug/L	SW-101	09/11/2018		127.0000		
Barium, total	ug/L	SW-101	03/26/2019		160.0000		
Barium, total	ug/L	SW-101	09/04/2019		256.0000		
Beryllium, total	ug/L	SW-101	09/14/2016	ND	4.0000		
Beryllium, total	ug/L	SW-101	03/23/2017	ND	4.0000		
Beryllium, total	ug/L	SW-101	09/08/2017	ND	4.0000		
Beryllium, total	ug/L	SW-101	03/19/2018	ND	4.0000		
Beryllium, total	ug/L	SW-101	09/11/2018	ND	4.0000		
Beryllium, total	ug/L	SW-101	03/26/2019	ND	4.0000		
Beryllium, total	ug/L	SW-101	09/04/2019	ND	4.0000		
Cadmium, total	ug/L	SW-101	09/14/2016	ND	0.8000		
Cadmium, total	ug/L	SW-101	03/23/2017	ND	0.8000		
Cadmium, total	ug/L	SW-101	09/08/2017	ND	0.8000		
Cadmium, total	ug/L	SW-101	03/19/2018	ND	0.8000		
Cadmium, total	ug/L	SW-101	09/11/2018	ND	0.8000		
Cadmium, total	ug/L	SW-101	03/26/2019	ND	0.8000		
Cadmium, total	ug/L	SW-101	09/04/2019	ND	0.8000		
Chromium, total	ug/L	SW-101	09/14/2016	ND	8.0000		
Chromium, total	ug/L	SW-101	03/23/2017	ND	8.0000		
Chromium, total	ug/L	SW-101	09/08/2017	ND	8.0000		
Chromium, total	ug/L	SW-101	03/19/2018	ND	8.0000		
Chromium, total	ug/L	SW-101	09/11/2018	ND	8.0000		
Chromium, total	ug/L	SW-101	03/26/2019	ND	8.0000		
Chromium, total	ug/L	SW-101	09/04/2019	ND	8.0000		
Cobalt, total	ug/L	SW-101	09/14/2016		4.5000		
Cobalt, total	ug/L	SW-101	03/23/2017		4.2000		
Cobalt, total	ug/L	SW-101	09/08/2017		6.9000		
Cobalt, total	ug/L	SW-101	03/19/2018		2.3000		
Cobalt, total	ug/L	SW-101	09/11/2018		1.9000		
Cobalt, total	ug/L	SW-101	03/26/2019		1.8000		
Cobalt, total	ug/L	SW-101	09/04/2019		5.9000		
Copper, total	ug/L	SW-101	09/14/2016	ND	4.0000		
Copper, total	ug/L	SW-101	03/23/2017	ND	4.0000		
Copper, total	ug/L	SW-101	09/08/2017	ND	4.0000		
Copper, total	ug/L	SW-101	03/19/2018	ND	4.0000		
Copper, total	ug/L	SW-101	09/11/2018	ND	4.0000		
Copper, total	ug/L	SW-101	03/26/2019	ND	4.0000		
Copper, total	ug/L	SW-101	09/04/2019	ND	4.0000		
Lead, total	ug/L	SW-101	09/14/2016	ND	4.0000		
Lead, total	ug/L	SW-101	03/23/2017	ND	4.0000		
Lead, total	ug/L	SW-101	09/08/2017	ND	4.0000		
Lead, total	ug/L	SW-101	03/19/2018	ND	4.0000		
Lead, total	ug/L	SW-101	09/11/2018	ND	4.0000		
Lead, total	ug/L	SW-101	03/26/2019	ND	4.0000		
Lead, total	ug/L	SW-101	09/04/2019	ND	4.0000		
Nickel, total	ug/L	SW-101	09/14/2016		8.7000		
Nickel, total	ug/L	SW-101	03/23/2017		5.4000		
Nickel, total	ug/L	SW-101	09/08/2017		8.6000		
Nickel, total	ug/L	SW-101	03/19/2018	ND	4.0000		
Nickel, total	ug/L	SW-101	09/11/2018	ND	4.0000		
Nickel, total	ug/L	SW-101	03/26/2019		4.2000		
Nickel, total	ug/L	SW-101	09/04/2019		7.5000		
Selenium, total	ug/L	SW-101	09/14/2016	ND	4.0000		
Selenium, total	ug/L	SW-101	03/23/2017	ND	4.0000		
Selenium, total	ug/L	SW-101	09/08/2017	ND	4.0000		
Selenium, total	ug/L	SW-101	03/19/2018	ND	4.0000		
Selenium, total	ug/L	SW-101	09/11/2018	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	SW-101	03/26/2019	ND	4.0000		
Selenium, total	ug/L	SW-101	09/04/2019	ND	4.0000		
Silver, total	ug/L	SW-101	09/14/2016	ND	4.0000		
Silver, total	ug/L	SW-101	03/23/2017	ND	4.0000		
Silver, total	ug/L	SW-101	09/08/2017	ND	4.0000		
Silver, total	ug/L	SW-101	03/19/2018	ND	4.0000		
Silver, total	ug/L	SW-101	09/11/2018	ND	8.0000	4.0000	**
Silver, total	ug/L	SW-101	03/26/2019	ND	4.0000		
Silver, total	ug/L	SW-101	09/04/2019	ND	4.0000		
Thallium, total	ug/L	SW-101	09/14/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	SW-101	03/23/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	SW-101	09/08/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	SW-101	03/19/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	SW-101	09/11/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	SW-101	03/26/2019	ND	2.0000		
Thallium, total	ug/L	SW-101	09/04/2019	ND	2.0000		
Vanadium, total	ug/L	SW-101	09/14/2016	ND	20.0000		
Vanadium, total	ug/L	SW-101	03/23/2017	ND	20.0000		
Vanadium, total	ug/L	SW-101	09/08/2017	ND	20.0000		
Vanadium, total	ug/L	SW-101	03/19/2018	ND	20.0000		
Vanadium, total	ug/L	SW-101	09/11/2018	ND	20.0000		
Vanadium, total	ug/L	SW-101	03/26/2019	ND	20.0000		
Vanadium, total	ug/L	SW-101	09/04/2019	ND	20.0000		
Zinc, total	ug/L	SW-101	09/14/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	SW-101	03/23/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	SW-101	09/08/2017	ND	20.0000		
Zinc, total	ug/L	SW-101	03/19/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	SW-101	09/11/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	SW-101	03/26/2019	ND	20.0000		
Zinc, total	ug/L	SW-101	09/04/2019	ND	8.0000	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-36	09/23/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-36	09/23/2024	ND	4.0000		7.3000
Barium, total	ug/L	MW-36	09/23/2024		125.0000		357.0000
Beryllium, total	ug/L	MW-36	09/23/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-36	09/23/2024	ND	0.8000		0.8000
Chromium, total	ug/L	MW-36	09/23/2024	ND	8.0000		8.0000
Cobalt, total	ug/L	MW-36	09/23/2024	ND	0.4000		6.9000
Copper, total	ug/L	MW-36	09/23/2024	ND	4.0000		4.0000
Lead, total	ug/L	MW-36	09/23/2024	ND	4.0000		4.0000
Nickel, total	ug/L	MW-36	09/23/2024	ND	4.0000		8.7000
Selenium, total	ug/L	MW-36	09/23/2024	ND	4.0000		10.6000
Silver, total	ug/L	MW-36	09/23/2024	ND	4.0000		6.4000
Thallium, total	ug/L	MW-36	09/23/2024	ND	2.0000		2.4000
Vanadium, total	ug/L	MW-36	09/23/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-36	09/23/2024	ND	20.0000		32.3000
Antimony, total	ug/L	MW-41	09/23/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-41	09/23/2024	ND	4.0000		7.3000
Barium, total	ug/L	MW-41	09/23/2024		69.4000		357.0000
Beryllium, total	ug/L	MW-41	09/23/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-41	09/23/2024	ND	0.8000		0.8000
Chromium, total	ug/L	MW-41	09/23/2024	ND	8.0000		8.0000
Cobalt, total	ug/L	MW-41	09/23/2024	ND	0.4000		6.9000
Copper, total	ug/L	MW-41	09/23/2024	ND	4.0000		4.0000
Lead, total	ug/L	MW-41	09/23/2024	ND	4.0000		4.0000
Nickel, total	ug/L	MW-41	09/23/2024	ND	4.0000		8.7000
Selenium, total	ug/L	MW-41	09/23/2024	ND	4.0000		10.6000
Silver, total	ug/L	MW-41	09/23/2024	ND	4.0000		6.4000
Thallium, total	ug/L	MW-41	09/23/2024	ND	2.0000		2.4000
Vanadium, total	ug/L	MW-41	09/23/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-41	09/23/2024	ND	20.0000		32.3000
Antimony, total	ug/L	MW-42	09/23/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-42	09/23/2024	ND	4.0000		7.3000
Barium, total	ug/L	MW-42	09/23/2024		19.3000		357.0000
Beryllium, total	ug/L	MW-42	09/23/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-42	09/23/2024	ND	0.8000		0.8000
Chromium, total	ug/L	MW-42	09/23/2024	ND	8.0000		8.0000
Cobalt, total	ug/L	MW-42	09/23/2024		1.6000		6.9000
Copper, total	ug/L	MW-42	09/23/2024	ND	4.0000		4.0000
Lead, total	ug/L	MW-42	09/23/2024	ND	4.0000		4.0000
Nickel, total	ug/L	MW-42	09/23/2024		4.8000		8.7000
Selenium, total	ug/L	MW-42	09/23/2024	ND	4.0000		10.6000
Silver, total	ug/L	MW-42	09/23/2024	ND	4.0000		6.4000
Thallium, total	ug/L	MW-42	09/23/2024	ND	2.0000		2.4000
Vanadium, total	ug/L	MW-42	09/23/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-42	09/23/2024	ND	20.0000		32.3000
Antimony, total	ug/L	MW-58	09/23/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-58	09/23/2024	ND	4.0000		7.3000
Barium, total	ug/L	MW-58	09/23/2024		20.9000		357.0000
Beryllium, total	ug/L	MW-58	09/23/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-58	09/23/2024	ND	0.8000		0.8000
Chromium, total	ug/L	MW-58	09/23/2024	ND	8.0000		8.0000
Cobalt, total	ug/L	MW-58	09/23/2024	ND	0.4000		6.9000
Copper, total	ug/L	MW-58	09/23/2024	ND	4.0000		4.0000
Lead, total	ug/L	MW-58	09/23/2024	ND	4.0000		4.0000
Nickel, total	ug/L	MW-58	09/23/2024		12.6000	***	8.7000
Selenium, total	ug/L	MW-58	09/23/2024	ND	4.0000		10.6000
Silver, total	ug/L	MW-58	09/23/2024	ND	4.0000		6.4000
Thallium, total	ug/L	MW-58	09/23/2024	ND	2.0000		2.4000
Vanadium, total	ug/L	MW-58	09/23/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-58	09/23/2024		21.0000		32.3000
Antimony, total	ug/L	MW-59	09/23/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-59	09/23/2024	ND	4.0000		7.3000
Barium, total	ug/L	MW-59	09/23/2024		25.2000		357.0000
Beryllium, total	ug/L	MW-59	09/23/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-59	09/23/2024	ND	0.8000		0.8000
Chromium, total	ug/L	MW-59	09/23/2024	ND	8.0000		8.0000
Cobalt, total	ug/L	MW-59	09/23/2024	ND	0.4000		6.9000
Copper, total	ug/L	MW-59	09/23/2024	ND	4.0000		4.0000
Lead, total	ug/L	MW-59	09/23/2024	ND	4.0000		4.0000
Nickel, total	ug/L	MW-59	09/23/2024	ND	4.0000		8.7000
Selenium, total	ug/L	MW-59	09/23/2024	ND	4.0000		10.6000
Silver, total	ug/L	MW-59	09/23/2024	ND	4.0000		6.4000

* - 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 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Thallium, total	ug/L	MW-59	09/23/2024	ND	2.0000		2.4000
Vanadium, total	ug/L	MW-59	09/23/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-59	09/23/2024	ND	20.0000		32.3000
Antimony, total	ug/L	MW-60	09/23/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-60	09/23/2024	ND	4.0000		7.3000
Barium, total	ug/L	MW-60	09/23/2024		238.0000		357.0000
Beryllium, total	ug/L	MW-60	09/23/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-60	09/23/2024	ND	0.8000		0.8000
Chromium, total	ug/L	MW-60	09/23/2024	ND	8.0000		8.0000
Cobalt, total	ug/L	MW-60	09/23/2024		1.3000		6.9000
Copper, total	ug/L	MW-60	09/23/2024	ND	4.0000		4.0000
Lead, total	ug/L	MW-60	09/23/2024	ND	4.0000		4.0000
Nickel, total	ug/L	MW-60	09/23/2024		29.2000	*	8.7000
Selenium, total	ug/L	MW-60	09/23/2024	ND	4.0000		10.6000
Silver, total	ug/L	MW-60	09/23/2024	ND	4.0000		6.4000
Thallium, total	ug/L	MW-60	09/23/2024	ND	2.0000		2.4000
Vanadium, total	ug/L	MW-60	09/23/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-60	09/23/2024	ND	20.0000		32.3000
Antimony, total	ug/L	MW-61	09/23/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-61	09/23/2024	ND	4.0000		7.3000
Barium, total	ug/L	MW-61	09/23/2024		51.7000		357.0000
Beryllium, total	ug/L	MW-61	09/23/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-61	09/23/2024	ND	0.8000		0.8000
Chromium, total	ug/L	MW-61	09/23/2024	ND	8.0000		8.0000
Cobalt, total	ug/L	MW-61	09/23/2024	ND	0.4000		6.9000
Copper, total	ug/L	MW-61	09/23/2024		5.0000	*	4.0000
Lead, total	ug/L	MW-61	09/23/2024	ND	4.0000		4.0000
Nickel, total	ug/L	MW-61	09/23/2024		5.6000		8.7000
Selenium, total	ug/L	MW-61	09/23/2024	ND	4.0000		10.6000
Silver, total	ug/L	MW-61	09/23/2024	ND	4.0000		6.4000
Thallium, total	ug/L	MW-61	09/23/2024	ND	2.0000		2.4000
Vanadium, total	ug/L	MW-61	09/23/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-61	09/23/2024	ND	20.0000		32.3000
Antimony, total	ug/L	MW-62R	09/23/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-62R	09/23/2024	ND	4.0000		7.3000
Barium, total	ug/L	MW-62R	09/23/2024		945.0000	***	357.0000
Beryllium, total	ug/L	MW-62R	09/23/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-62R	09/23/2024	ND	0.8000		0.8000
Chromium, total	ug/L	MW-62R	09/23/2024	ND	8.0000		8.0000
Cobalt, total	ug/L	MW-62R	09/23/2024	ND	0.4000		6.9000
Copper, total	ug/L	MW-62R	09/23/2024	ND	4.0000		4.0000
Lead, total	ug/L	MW-62R	09/23/2024	ND	4.0000		4.0000
Nickel, total	ug/L	MW-62R	09/23/2024	ND	4.0000		8.7000
Selenium, total	ug/L	MW-62R	09/23/2024	ND	4.0000		10.6000
Silver, total	ug/L	MW-62R	09/23/2024	ND	4.0000		6.4000
Thallium, total	ug/L	MW-62R	09/23/2024	ND	2.0000		2.4000
Vanadium, total	ug/L	MW-62R	09/23/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-62R	09/23/2024	ND	20.0000		32.3000
Antimony, total	ug/L	MW-79	09/23/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-79	09/23/2024	ND	4.0000		7.3000
Barium, total	ug/L	MW-79	09/23/2024		64.7000		357.0000
Beryllium, total	ug/L	MW-79	09/23/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-79	09/23/2024	ND	0.8000		0.8000
Chromium, total	ug/L	MW-79	09/23/2024	ND	8.0000		8.0000
Cobalt, total	ug/L	MW-79	09/23/2024	ND	0.4000		6.9000
Copper, total	ug/L	MW-79	09/23/2024	ND	4.0000		4.0000
Lead, total	ug/L	MW-79	09/23/2024	ND	4.0000		4.0000
Nickel, total	ug/L	MW-79	09/23/2024	ND	4.0000		8.7000
Selenium, total	ug/L	MW-79	09/23/2024	ND	4.0000		10.6000
Silver, total	ug/L	MW-79	09/23/2024	ND	4.0000		6.4000
Thallium, total	ug/L	MW-79	09/23/2024	ND	2.0000		2.4000
Vanadium, total	ug/L	MW-79	09/23/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-79	09/23/2024	ND	20.0000		32.3000
Antimony, total	ug/L	MW-80	09/23/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-80	09/23/2024	ND	4.0000		7.3000
Barium, total	ug/L	MW-80	09/23/2024		135.0000		357.0000
Beryllium, total	ug/L	MW-80	09/23/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-80	09/23/2024	ND	0.8000		0.8000
Chromium, total	ug/L	MW-80	09/23/2024	ND	8.0000		8.0000
Cobalt, total	ug/L	MW-80	09/23/2024		0.8000		6.9000
Copper, total	ug/L	MW-80	09/23/2024	ND	4.0000		4.0000
Lead, total	ug/L	MW-80	09/23/2024	ND	4.0000		4.0000

* - 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 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Nickel, total	ug/L	MW-80	09/23/2024	ND	4.0000		8.7000
Selenium, total	ug/L	MW-80	09/23/2024	ND	4.0000		10.6000
Silver, total	ug/L	MW-80	09/23/2024	ND	4.0000		6.4000
Thallium, total	ug/L	MW-80	09/23/2024	ND	2.0000		2.4000
Vanadium, total	ug/L	MW-80	09/23/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-80	09/23/2024	ND	20.0000		32.3000
Antimony, total	ug/L	SW-101R	09/23/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	SW-101R	09/23/2024		4.7000		7.3000
Barium, total	ug/L	SW-101R	09/23/2024		236.0000		357.0000
Beryllium, total	ug/L	SW-101R	09/23/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	SW-101R	09/23/2024	ND	0.8000		0.8000
Chromium, total	ug/L	SW-101R	09/23/2024	ND	8.0000		8.0000
Cobalt, total	ug/L	SW-101R	09/23/2024		3.9000		6.9000
Copper, total	ug/L	SW-101R	09/23/2024	ND	4.0000		4.0000
Lead, total	ug/L	SW-101R	09/23/2024	ND	4.0000		4.0000
Nickel, total	ug/L	SW-101R	09/23/2024		4.7000		8.7000
Selenium, total	ug/L	SW-101R	09/23/2024	ND	4.0000		10.6000
Silver, total	ug/L	SW-101R	09/23/2024	ND	4.0000		6.4000
Thallium, total	ug/L	SW-101R	09/23/2024	ND	2.0000		2.4000
Vanadium, total	ug/L	SW-101R	09/23/2024	ND	20.0000		20.0000
Zinc, total	ug/L	SW-101R	09/23/2024	ND	20.0000		32.3000

* - 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	Upgradient Detect	Upgradient N	Upgradient Proportion	Downgradient Detect	Downgradient N	Downgradient Proportion
Antimony, total	0	76	0.000	2	305	0.007
Arsenic, total	2	76	0.026	30	305	0.098
Barium, total	76	76	1.000	304	304	1.000
Beryllium, total	0	76	0.000	3	304	0.010
Cadmium, total	0	76	0.000	13	304	0.043
Chromium, total	0	76	0.000	13	305	0.043
Cobalt, total	12	76	0.158	98	309	0.317
Copper, total	0	76	0.000	57	308	0.185
Lead, total	0	76	0.000	20	304	0.066
Nickel, total	5	76	0.066	172	309	0.557
Selenium, total	23	76	0.303	23	304	0.076
Silver, total	1	76	0.013	1	304	0.003
Thallium, total	1	76	0.013	0	304	0.000
Vanadium, total	0	76	0.000	11	305	0.036
Zinc, total	5	76	0.066	77	306	0.252

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	0	76	0.000									nonpar
Arsenic, total	2	76	0.026									nonpar
Barium, total	76	76	1.000	2.661	2.898					2.326	non-norm	nonpar
Beryllium, total	0	76	0.000									nonpar
Cadmium, total	0	76	0.000									nonpar
Chromium, total	0	76	0.000									nonpar
Cobalt, total	12	76	0.158	0.421	0.600					2.326	normal	nonpar
Copper, total	0	76	0.000									nonpar
Lead, total	0	76	0.000									nonpar
Nickel, total	5	76	0.066	0.460	0.593					2.326	normal	nonpar
Selenium, total	23	76	0.303	0.468	0.181					2.326	normal	nonpar
Silver, total	1	76	0.013									nonpar
Thallium, total	1	76	0.013									nonpar
Vanadium, total	0	76	0.000									nonpar
Zinc, total	5	76	0.066	0.090	0.311					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	0	76					2.0000	nonpar	***	0.99
Arsenic, total	ug/L	2	76					7.3000	nonpar		0.99
Barium, total	ug/L	76	76					357.0000	nonpar		0.99
Beryllium, total	ug/L	0	76					4.0000	nonpar	***	0.99
Cadmium, total	ug/L	0	76					0.8000	nonpar	***	0.99
Chromium, total	ug/L	0	76					8.0000	nonpar	***	0.99
Cobalt, total	ug/L	12	76					6.9000	nonpar		0.99
Copper, total	ug/L	0	76					4.0000	nonpar	***	0.99
Lead, total	ug/L	0	76					4.0000	nonpar	***	0.99
Nickel, total	ug/L	5	76					8.7000	nonpar		0.99
Selenium, total	ug/L	23	76					10.6000	nonpar		0.99
Silver, total	ug/L	1	76					6.4000	nonpar		0.99
Thallium, total	ug/L	1	76					2.4000	nonpar		0.99
Vanadium, total	ug/L	0	76					20.0000	nonpar	***	0.99
Zinc, total	ug/L	5	76					32.3000	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
Nickel, total	ug/L	MW-58	09/27/2010		13.2000	*	8.7000
Nickel, total	ug/L	MW-58	03/23/2011		67.5000	*	8.7000
Nickel, total	ug/L	MW-58	09/08/2011		17.6000	*	8.7000
Nickel, total	ug/L	MW-58	03/09/2012		31.4000	*	8.7000
Nickel, total	ug/L	MW-58	09/25/2012		24.1000	*	8.7000
Nickel, total	ug/L	MW-58	03/15/2013		12.4000	*	8.7000
Nickel, total	ug/L	MW-58	09/25/2013		17.2000	*	8.7000
Nickel, total	ug/L	MW-58	03/25/2014		12.8000	*	8.7000
Nickel, total	ug/L	MW-58	09/24/2014		6.5000		8.7000
Nickel, total	ug/L	MW-58	03/11/2015		8.7000		8.7000
Nickel, total	ug/L	MW-58	09/17/2015		12.8000	*	8.7000
Nickel, total	ug/L	MW-58	03/22/2016		21.2000	*	8.7000
Nickel, total	ug/L	MW-58	09/15/2016		13.3000	*	8.7000
Nickel, total	ug/L	MW-58	03/23/2017		23.8000	*	8.7000
Nickel, total	ug/L	MW-58	09/08/2017		21.1000	*	8.7000
Nickel, total	ug/L	MW-58	03/19/2018		25.5000	*	8.7000
Nickel, total	ug/L	MW-58	09/11/2018		18.4000	*	8.7000
Nickel, total	ug/L	MW-58	12/05/2018		18.4000	*	8.7000
Nickel, total	ug/L	MW-58	03/26/2019		22.9000	*	8.7000
Nickel, total	ug/L	MW-58	09/04/2019		4.3000		8.7000
Nickel, total	ug/L	MW-58	03/26/2020		19.9000	*	8.7000
Nickel, total	ug/L	MW-58	09/15/2020		17.7000	*	8.7000
Nickel, total	ug/L	MW-58	03/02/2021		14.7000	*	8.7000
Nickel, total	ug/L	MW-58	09/07/2021		16.3000	*	8.7000
Nickel, total	ug/L	MW-58	03/24/2022		18.3000	*	8.7000
Nickel, total	ug/L	MW-58	08/31/2022		14.7000	*	8.7000
Nickel, total	ug/L	MW-58	03/02/2023		15.5000	*	8.7000
Nickel, total	ug/L	MW-58	09/12/2023		13.9000	*	8.7000
Nickel, total	ug/L	MW-58	03/04/2024		16.7000	*	8.7000
Nickel, total	ug/L	MW-58	09/23/2024		12.6000	*	8.7000
Nickel, total	ug/L	MW-60	09/28/2010		16.9000	*	8.7000
Nickel, total	ug/L	MW-60	03/23/2011		19.7000	*	8.7000
Nickel, total	ug/L	MW-60	09/08/2011		21.4000	*	8.7000
Nickel, total	ug/L	MW-60	03/09/2012		24.4000	*	8.7000
Nickel, total	ug/L	MW-60	09/25/2012		18.0000	*	8.7000
Nickel, total	ug/L	MW-60	03/15/2013		6.8000		8.7000
Nickel, total	ug/L	MW-60	09/24/2013		26.6000	*	8.7000
Nickel, total	ug/L	MW-60	03/25/2014		14.6000	*	8.7000
Nickel, total	ug/L	MW-60	09/24/2014		7.0000		8.7000
Nickel, total	ug/L	MW-60	03/11/2015	ND	4.0000		8.7000
Nickel, total	ug/L	MW-60	09/17/2015		13.6000	*	8.7000
Nickel, total	ug/L	MW-60	12/17/2015	ND	4.0000		8.7000
Nickel, total	ug/L	MW-60	03/22/2016		7.9000		8.7000
Nickel, total	ug/L	MW-60	09/15/2016		17.3000	*	8.7000
Nickel, total	ug/L	MW-60	03/23/2017	ND	4.0000		8.7000
Nickel, total	ug/L	MW-60	09/08/2017		7.5000		8.7000
Nickel, total	ug/L	MW-60	03/19/2018	ND	4.0000		8.7000
Nickel, total	ug/L	MW-60	09/11/2018	ND	4.0000		8.7000
Nickel, total	ug/L	MW-60	03/26/2019		15.2000	*	8.7000
Nickel, total	ug/L	MW-60	09/04/2019		24.8000	*	8.7000
Nickel, total	ug/L	MW-60	03/26/2020		19.4000	*	8.7000
Nickel, total	ug/L	MW-60	09/15/2020		34.4000	*	8.7000
Nickel, total	ug/L	MW-60	03/02/2021		22.0000	*	8.7000
Nickel, total	ug/L	MW-60	09/07/2021		30.1000	*	8.7000
Nickel, total	ug/L	MW-60	03/24/2022		18.2000	*	8.7000
Nickel, total	ug/L	MW-60	08/31/2022		45.7000	*	8.7000
Nickel, total	ug/L	MW-60	03/02/2023		11.5000	*	8.7000
Nickel, total	ug/L	MW-60	09/12/2023		26.4000	*	8.7000
Nickel, total	ug/L	MW-60	03/04/2024	ND	4.0000		8.7000
Nickel, total	ug/L	MW-60	09/23/2024		29.2000	*	8.7000
Copper, total	ug/L	MW-61	09/28/2010		5.8000	*	4.0000
Copper, total	ug/L	MW-61	03/23/2011	ND	5.0000		4.0000
Copper, total	ug/L	MW-61	09/08/2011	ND	4.0000		4.0000
Copper, total	ug/L	MW-61	03/09/2012	ND	4.0000		4.0000
Copper, total	ug/L	MW-61	09/25/2012	ND	4.0000		4.0000
Copper, total	ug/L	MW-61	03/15/2013	ND	4.0000		4.0000
Copper, total	ug/L	MW-61	09/25/2013		10.5000	*	4.0000
Copper, total	ug/L	MW-61	03/25/2014		4.2000	*	4.0000
Copper, total	ug/L	MW-61	09/24/2014	ND	4.0000		4.0000
Copper, total	ug/L	MW-61	03/11/2015	ND	4.0000		4.0000
Copper, total	ug/L	MW-61	09/17/2015		13.1000	*	4.0000

* - Significantly increased over background.
** - Detect at limit for 100% NDs in background (NPPL only).
*** - Manual exclusion.
ND = Not Detected, Result = detection limit.

Table 8

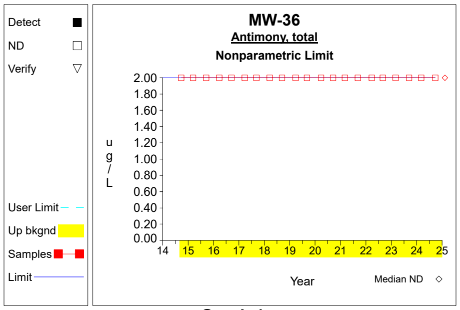
Historical Downgradient Data for Constituent-Well Combinations that Failed the Current Statistical Evaluation or are in Verification Resampling Mode

Constituent	Units	Well	Date		Result		Pred. Limit
Copper, total	ug/L	MW-61	12/17/2015	ND	4.0000		4.0000
Copper, total	ug/L	MW-61	03/22/2016	ND	4.0000		4.0000
Copper, total	ug/L	MW-61	09/15/2016	ND	4.0000		4.0000
Copper, total	ug/L	MW-61	03/23/2017	ND	4.0000		4.0000
Copper, total	ug/L	MW-61	09/08/2017	ND	4.0000		4.0000
Copper, total	ug/L	MW-61	03/19/2018	ND	4.0000		4.0000
Copper, total	ug/L	MW-61	09/11/2018	ND	4.0000		4.0000
Copper, total	ug/L	MW-61	03/26/2019	ND	4.0000		4.0000
Copper, total	ug/L	MW-61	09/04/2019	ND	4.0000		4.0000
Copper, total	ug/L	MW-61	03/26/2020	ND	4.0000		4.0000
Copper, total	ug/L	MW-61	09/15/2020	ND	4.0000		4.0000
Copper, total	ug/L	MW-61	03/02/2021	ND	4.0000		4.0000
Copper, total	ug/L	MW-61	09/07/2021	ND	4.0000		4.0000
Copper, total	ug/L	MW-61	03/24/2022	ND	4.0000		4.0000
Copper, total	ug/L	MW-61	08/31/2022	ND	4.0000		4.0000
Copper, total	ug/L	MW-61	03/02/2023	ND	4.0000		4.0000
Copper, total	ug/L	MW-61	09/12/2023	ND	4.0000		4.0000
Copper, total	ug/L	MW-61	03/04/2024	ND	4.0000		4.0000
Copper, total	ug/L	MW-61	09/23/2024		5.0000	*	4.0000
Barium, total	ug/L	MW-62R	09/28/2010		775.0000	*	357.0000
Barium, total	ug/L	MW-62R	12/22/2010		805.0000	*	357.0000
Barium, total	ug/L	MW-62R	03/23/2011		688.0000	*	357.0000
Barium, total	ug/L	MW-62R	05/17/2011		716.0000	*	357.0000
Barium, total	ug/L	MW-62R	07/14/2011		615.0000	*	357.0000
Barium, total	ug/L	MW-62R	09/08/2011		706.0000	*	357.0000
Barium, total	ug/L	MW-62R	03/09/2012		651.0000	*	357.0000
Barium, total	ug/L	MW-62R	09/25/2012		612.0000	*	357.0000
Barium, total	ug/L	MW-62R	03/15/2013		685.0000	*	357.0000
Barium, total	ug/L	MW-62R	09/24/2013		925.0000	*	357.0000
Barium, total	ug/L	MW-62R	03/25/2014		706.0000	*	357.0000
Barium, total	ug/L	MW-62R	09/24/2014		833.0000	*	357.0000
Barium, total	ug/L	MW-62R	03/11/2015		773.0000	*	357.0000
Barium, total	ug/L	MW-62R	09/16/2015		802.0000	*	357.0000
Barium, total	ug/L	MW-62R	03/22/2016		817.0000	*	357.0000
Barium, total	ug/L	MW-62R	09/15/2016		784.0000	*	357.0000
Barium, total	ug/L	MW-62R	03/23/2017		831.0000	*	357.0000
Barium, total	ug/L	MW-62R	09/08/2017		864.0000	*	357.0000
Barium, total	ug/L	MW-62R	03/19/2018		858.0000	*	357.0000
Barium, total	ug/L	MW-62R	09/11/2018		816.0000	*	357.0000
Barium, total	ug/L	MW-62R	03/26/2019		891.0000	*	357.0000
Barium, total	ug/L	MW-62R	09/04/2019		917.0000	*	357.0000
Barium, total	ug/L	MW-62R	03/26/2020		1060.0000	*	357.0000
Barium, total	ug/L	MW-62R	09/15/2020		1070.0000	*	357.0000
Barium, total	ug/L	MW-62R	03/02/2021		1010.0000	*	357.0000
Barium, total	ug/L	MW-62R	09/07/2021		1060.0000	*	357.0000
Barium, total	ug/L	MW-62R	03/24/2022		1020.0000	*	357.0000
Barium, total	ug/L	MW-62R	08/31/2022		1060.0000	*	357.0000
Barium, total	ug/L	MW-62R	03/02/2023		1170.0000	*	357.0000
Barium, total	ug/L	MW-62R	09/12/2023		1050.0000	*	357.0000
Barium, total	ug/L	MW-62R	03/04/2024		1010.0000	*	357.0000
Barium, total	ug/L	MW-62R	09/23/2024		945.0000	*	357.0000

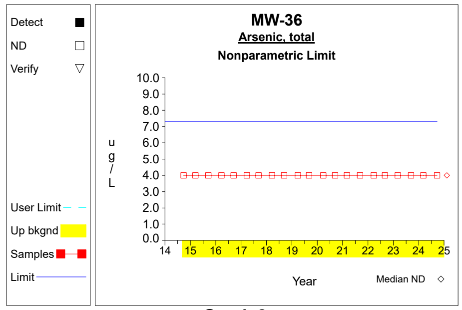
* - Significantly increased over background.
** - Detect at limit for 100% NDs in background (NPPL only).
*** - Manual exclusion.
ND = Not Detected, Result = detection limit.

Newton [GW] October 2024

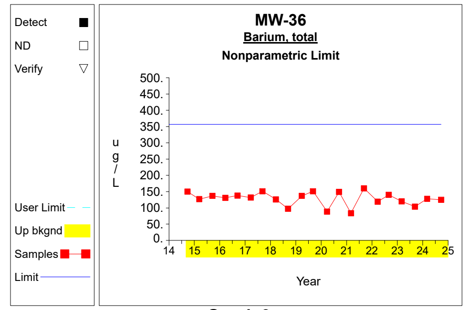
Up vs. Down Prediction Limits



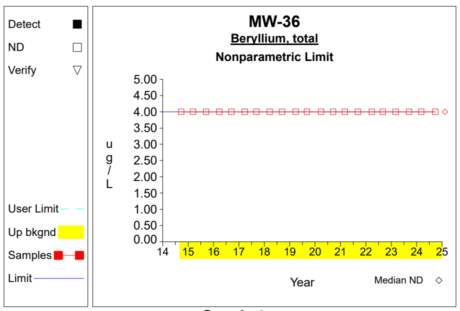
Graph 1



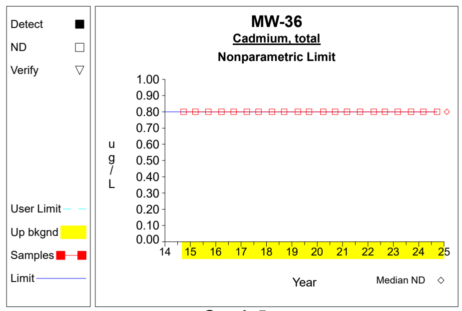
Graph 2



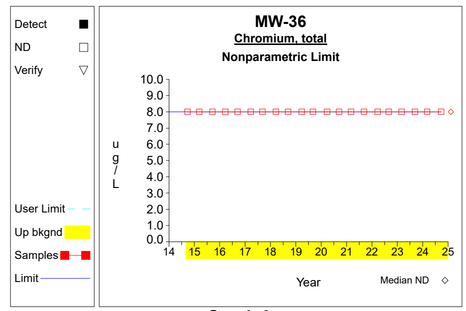
Graph 3



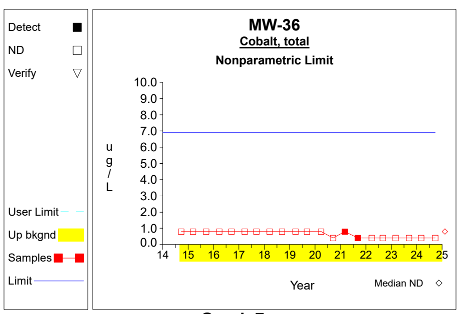
Graph 4



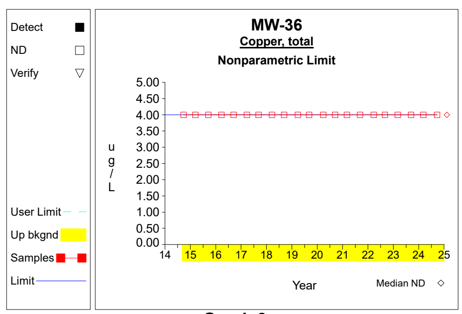
Graph 5



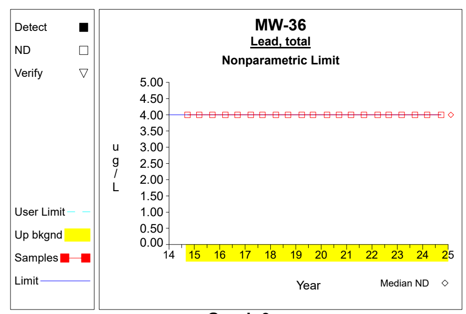
Graph 6



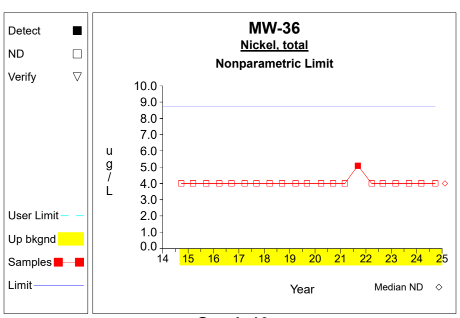
Graph 7



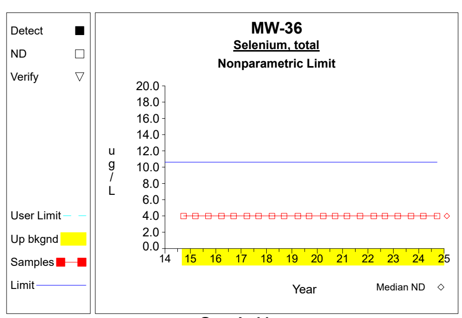
Graph 8



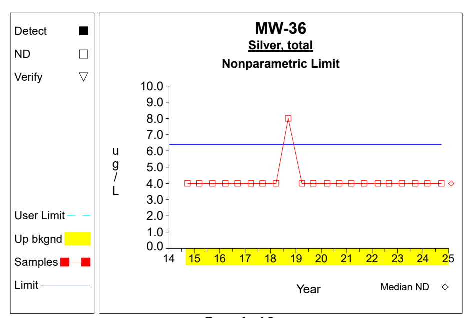
Graph 9



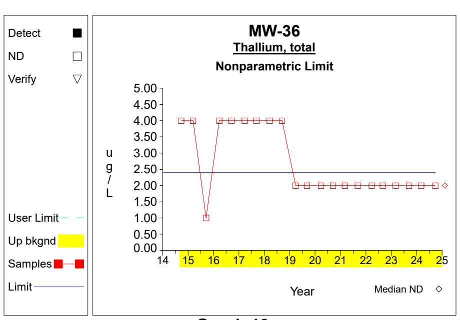
Graph 10



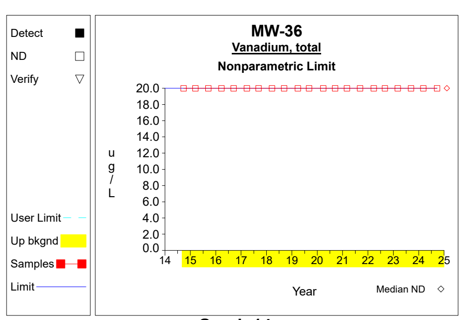
Graph 11



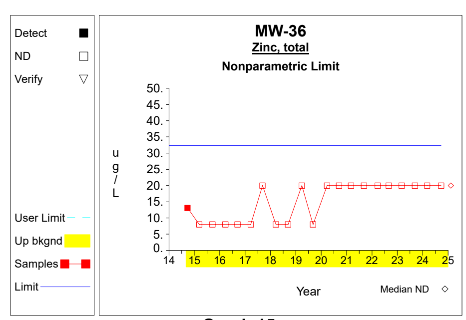
Graph 12



Graph 13



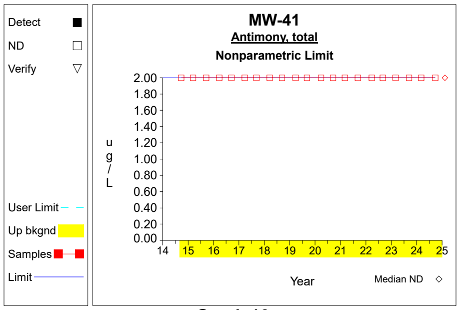
Graph 14



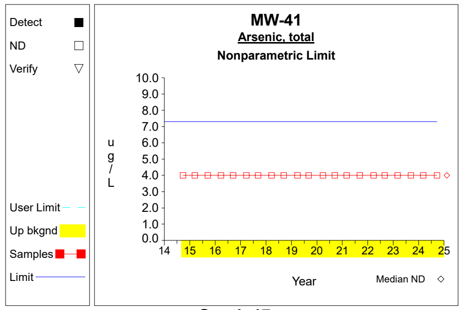
Graph 15

Prepared by: Otter Creek Environmental

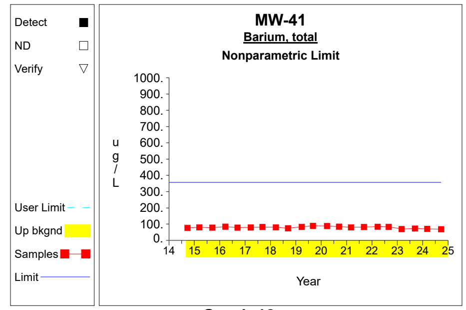
Up vs. Down Prediction Limits



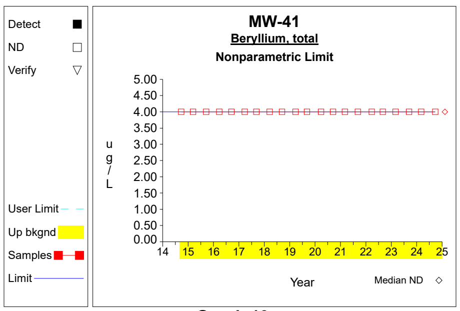
Graph 16



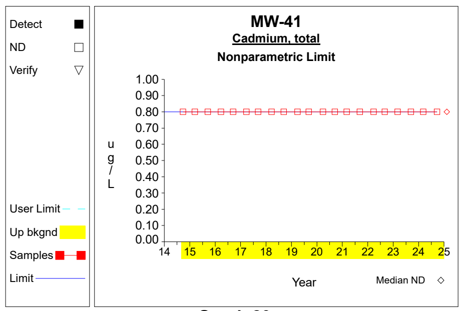
Graph 17



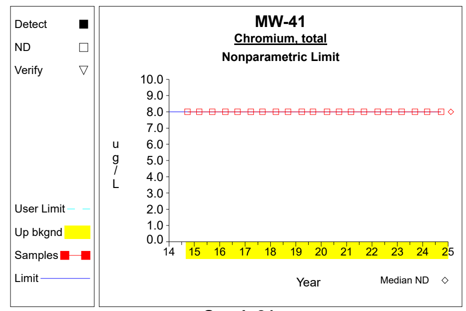
Graph 18



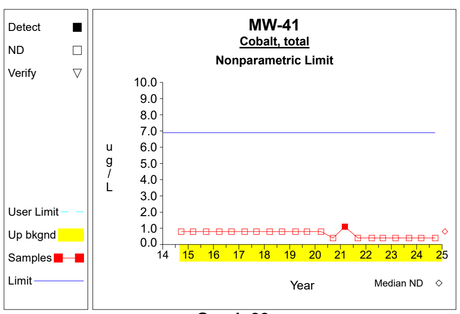
Graph 19



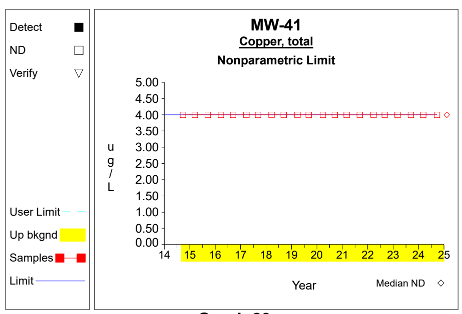
Graph 20



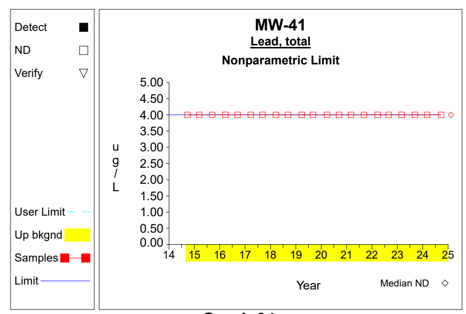
Graph 21



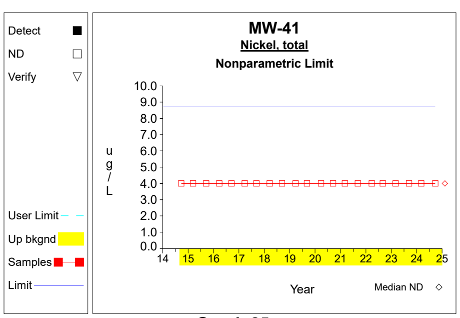
Graph 22



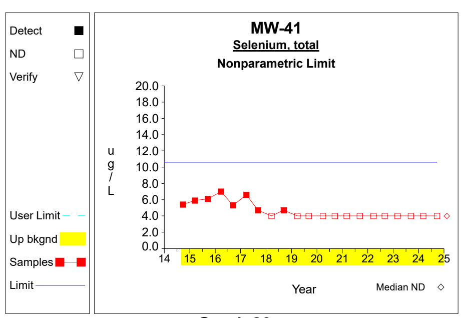
Graph 23



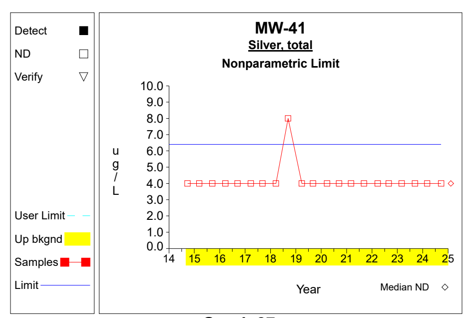
Graph 24



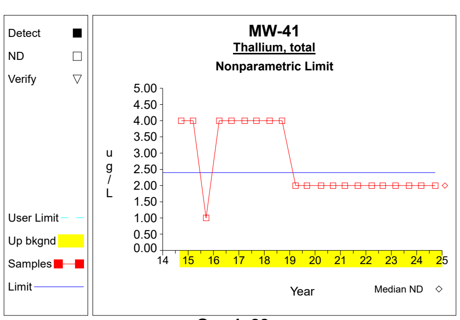
Graph 25



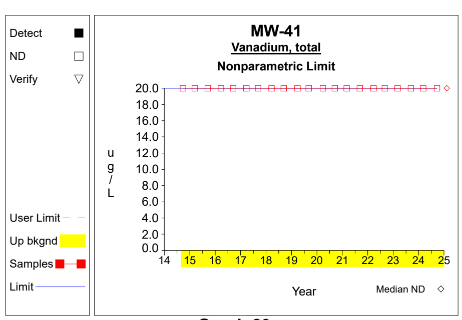
Graph 26



Graph 27



Graph 28



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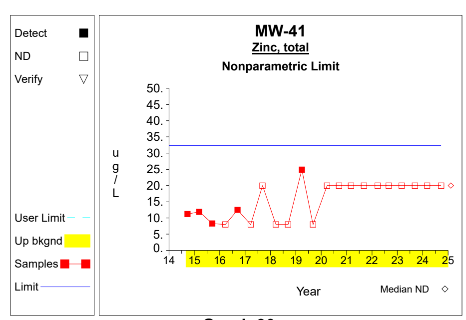

Graph 30

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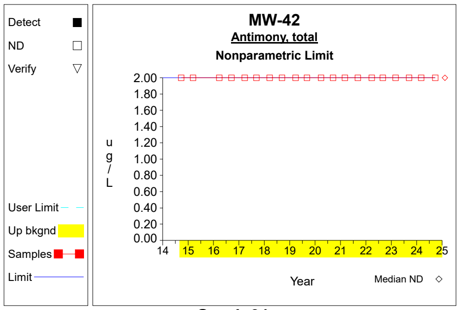
Up vs. Down Prediction Limits



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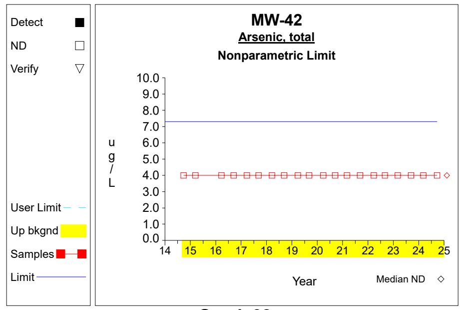

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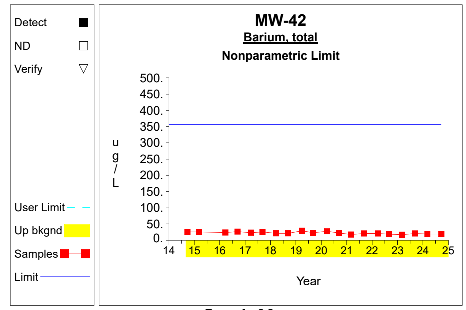

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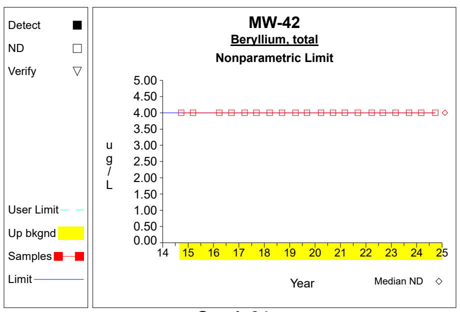

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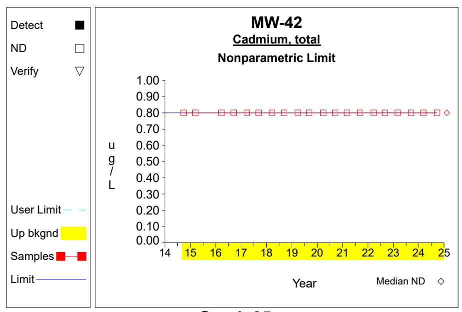

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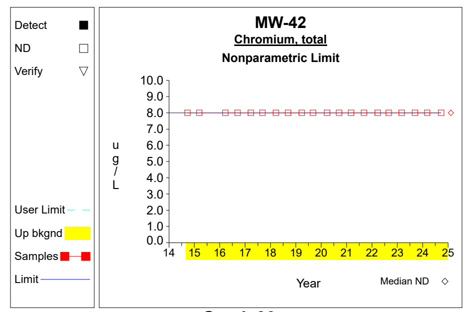

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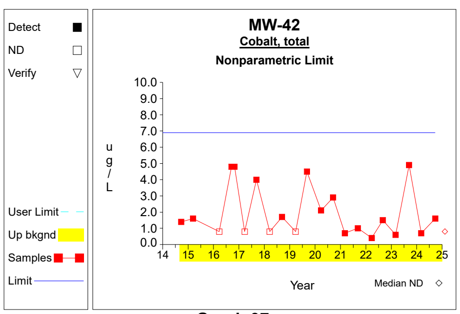

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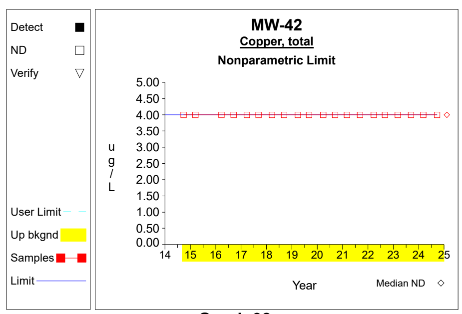

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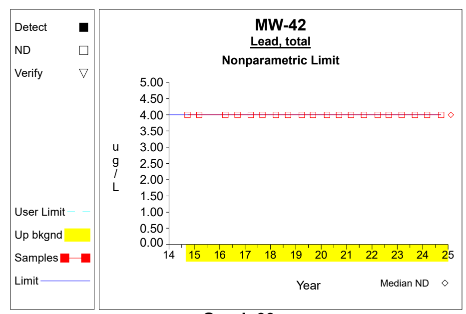

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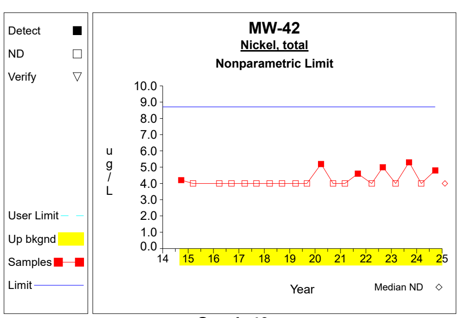

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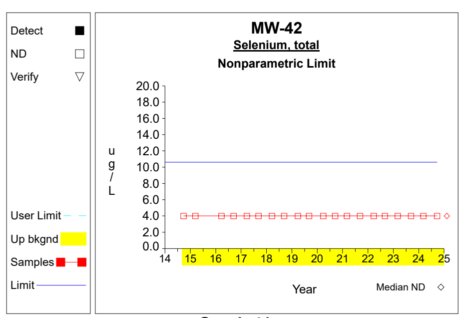

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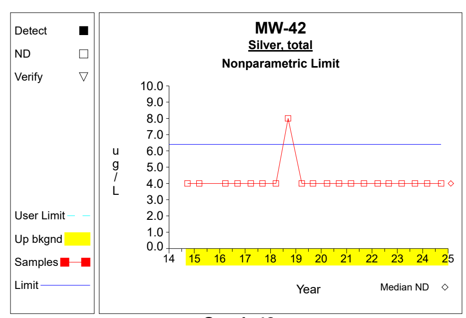

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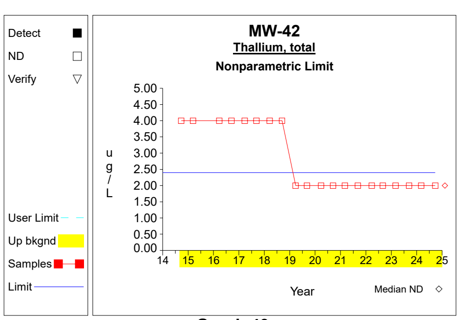

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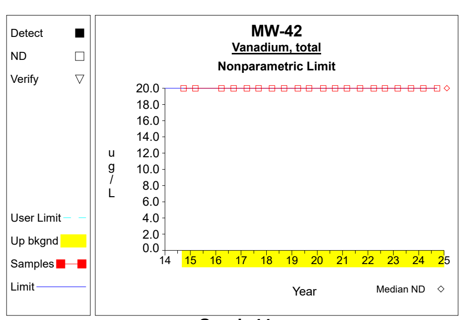

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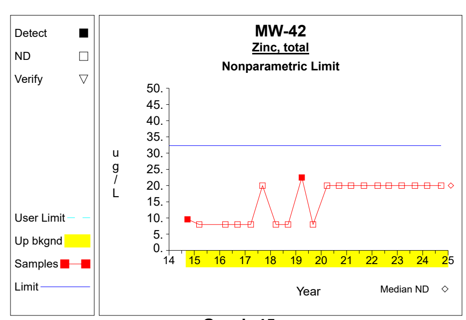

Graph 45

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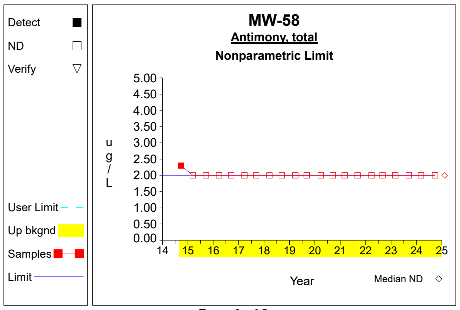
Up vs. Down Prediction Limits



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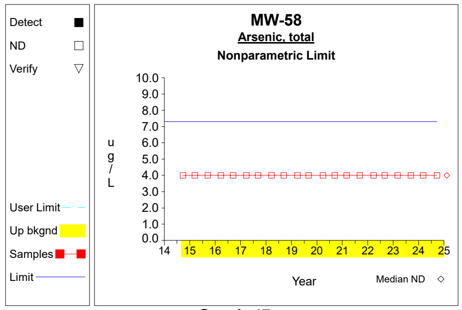
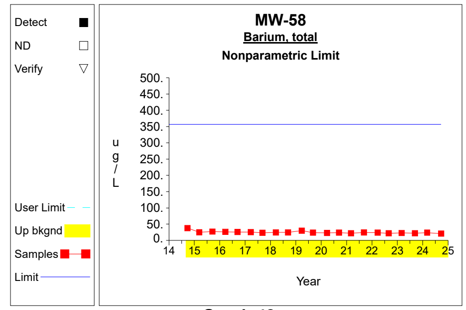
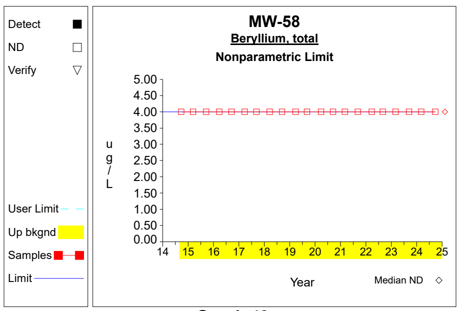


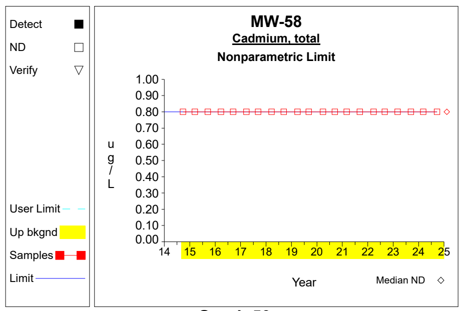
Graph 47



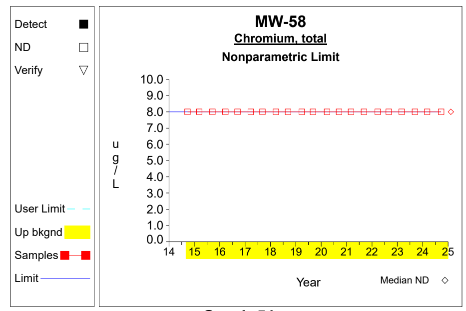
Graph 48



Graph 49



Graph 50



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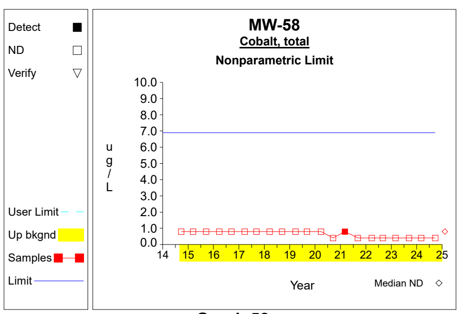

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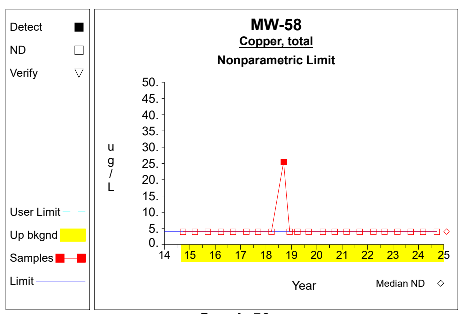

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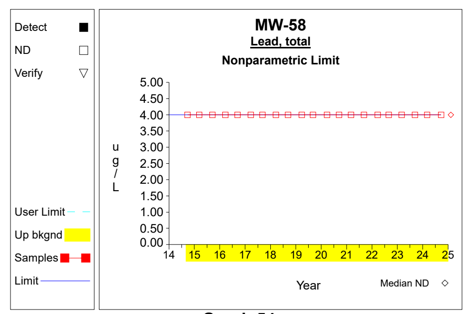

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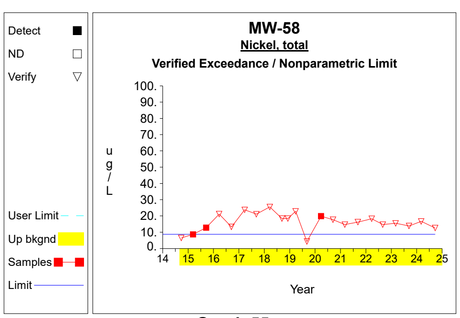

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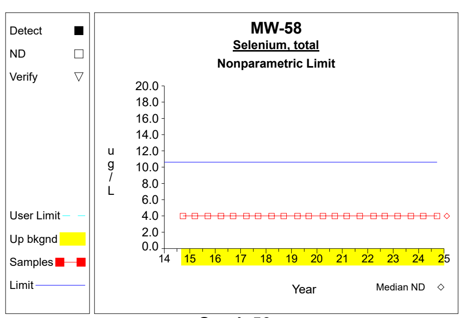

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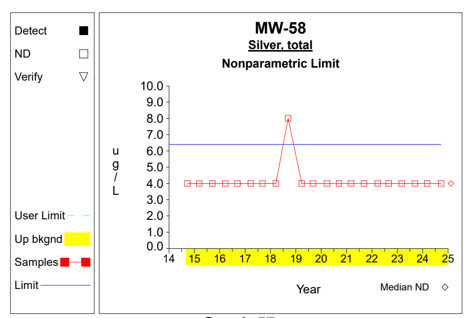

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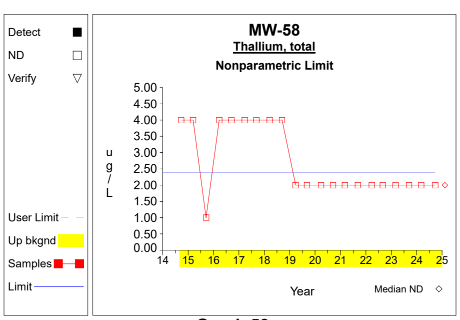

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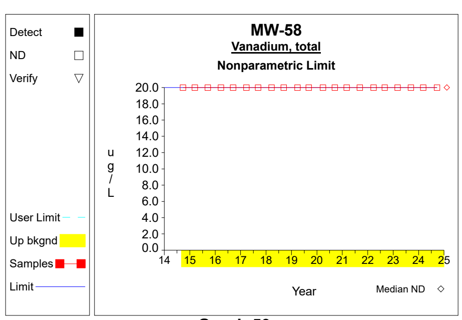

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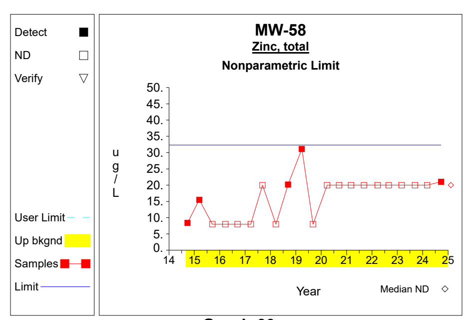

Graph 60

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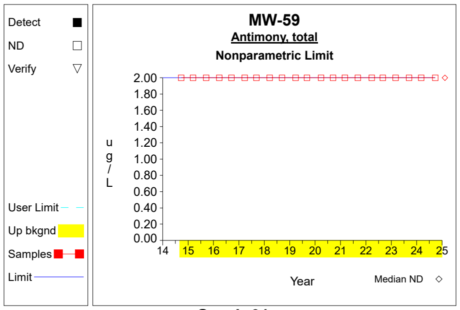
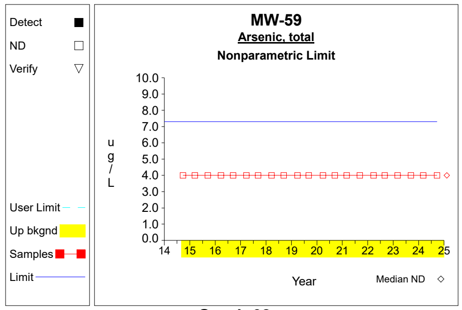
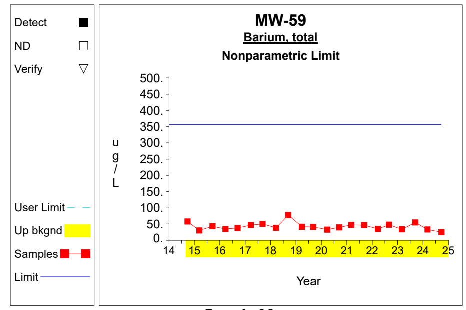
Up vs. Down Prediction Limits



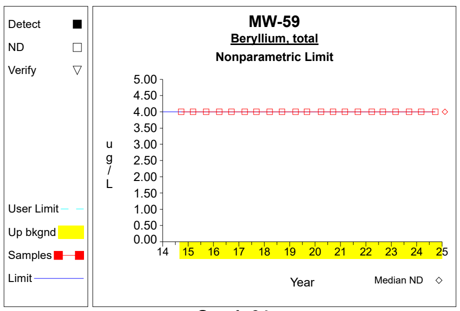
Graph 61



Graph 62



Graph 63



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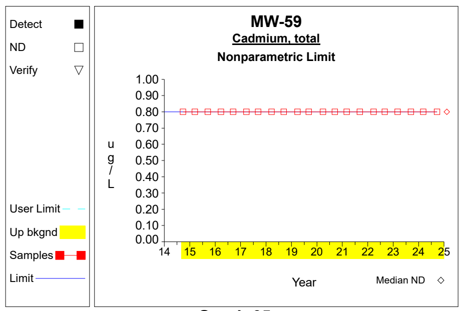

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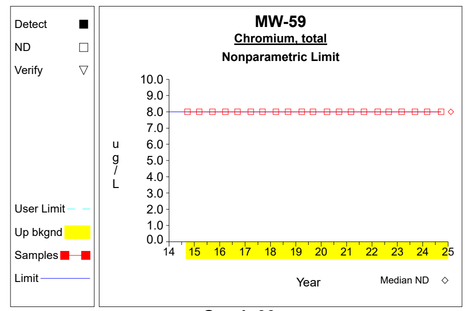

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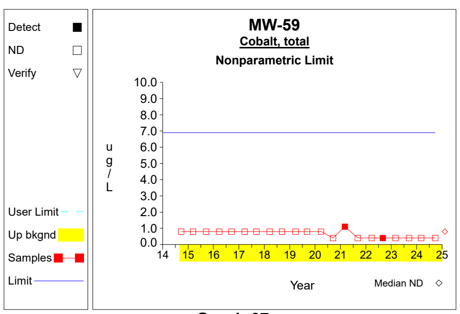

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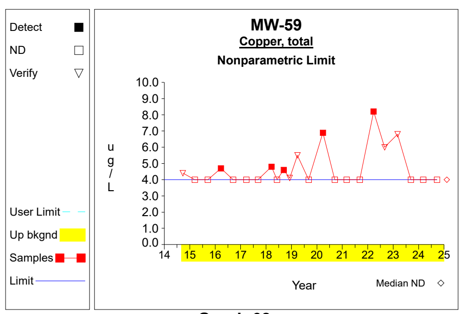

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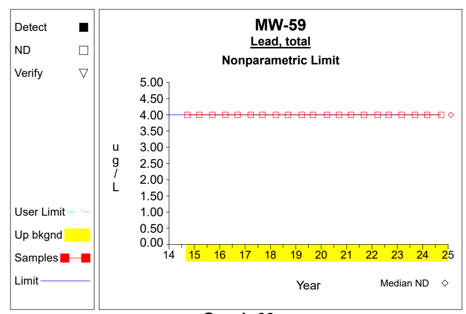
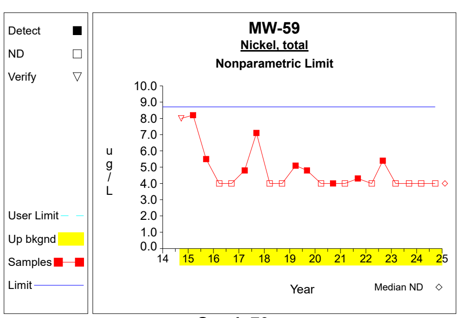


Graph 69



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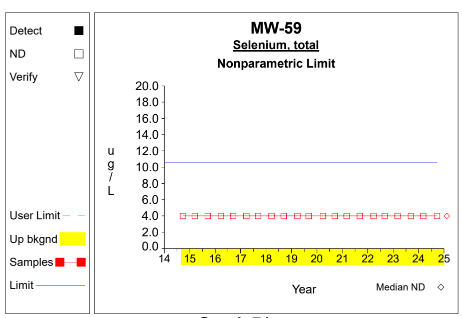

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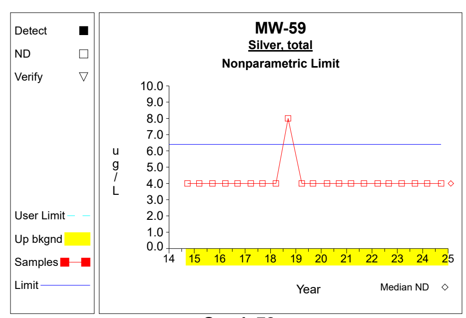

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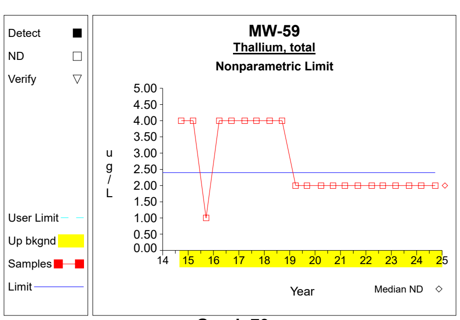

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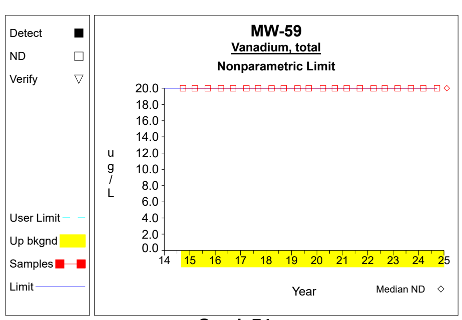

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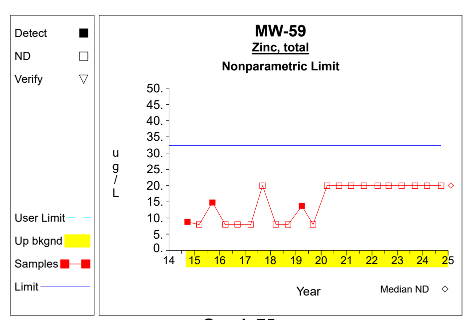
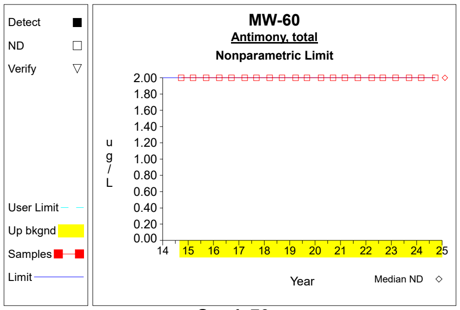


Graph 75

Up vs. Down Prediction Limits



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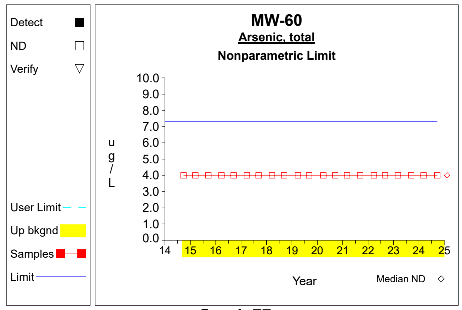
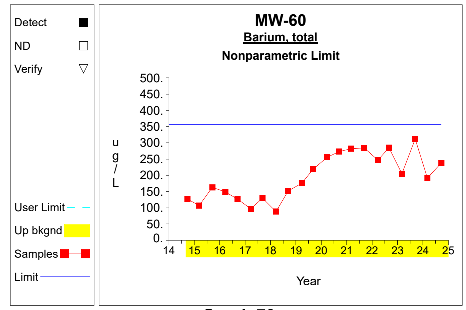


Graph 77



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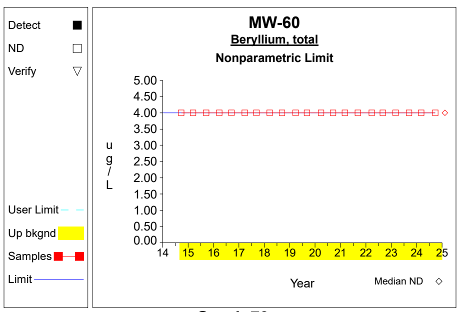

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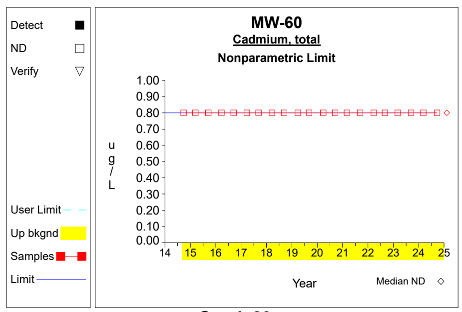

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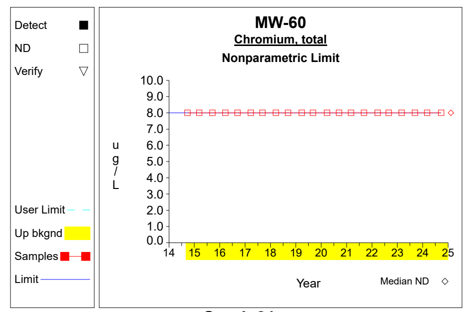

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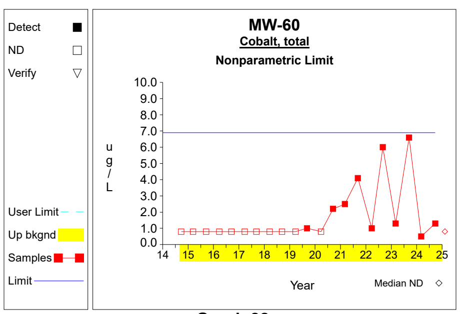
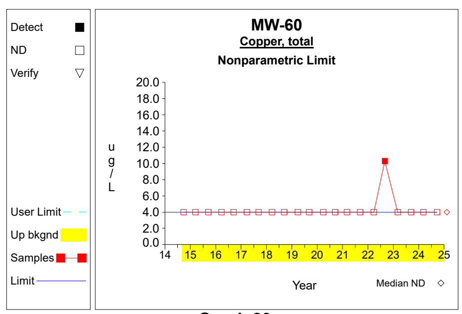


Graph 82



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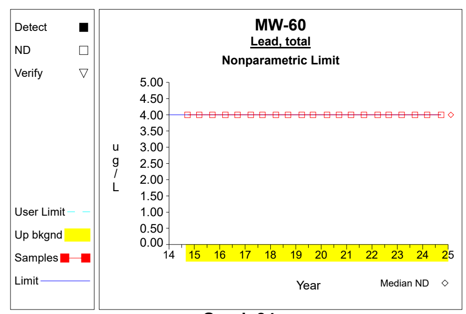

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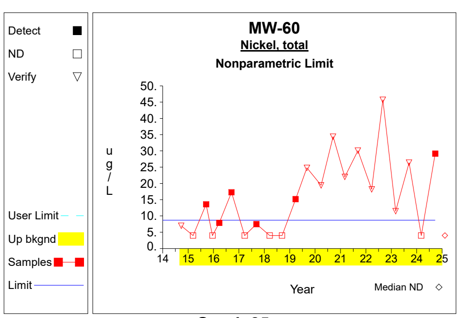
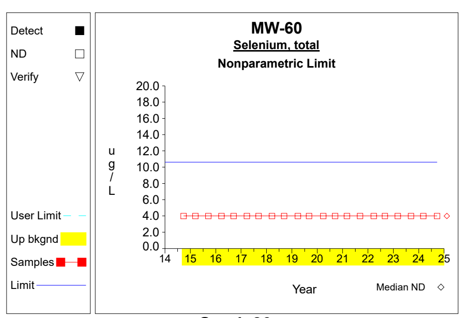


Graph 85



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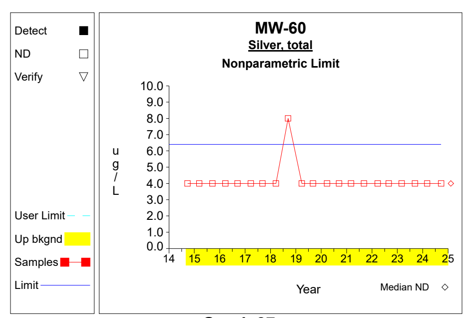

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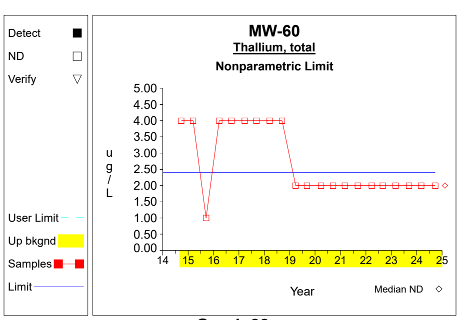

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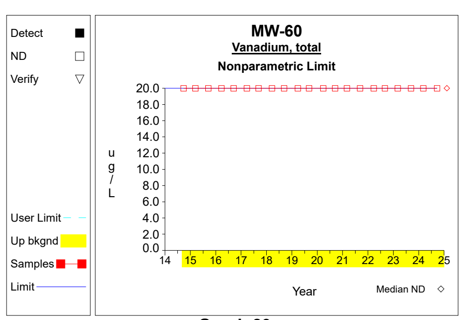

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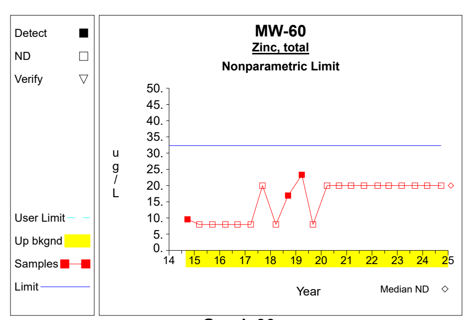

Graph 90

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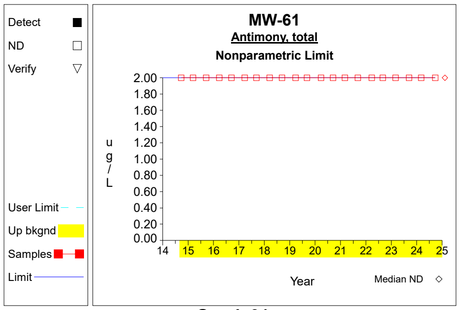
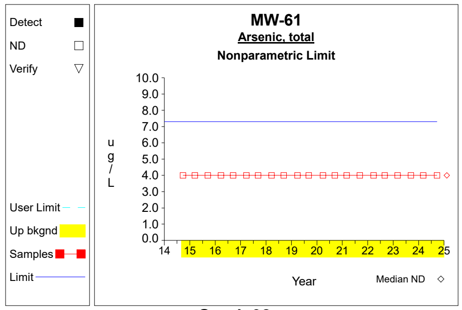
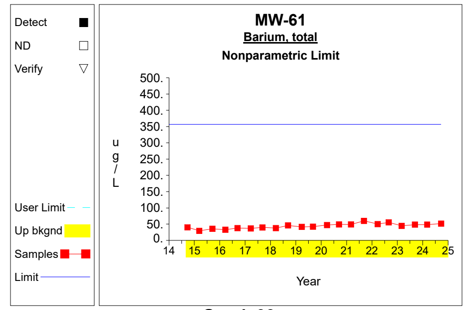
Up vs. Down Prediction Limits



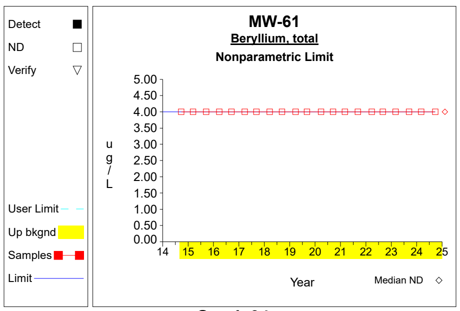
Graph 91



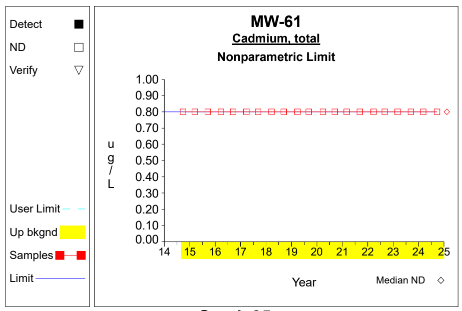
Graph 92



Graph 93



Graph 94



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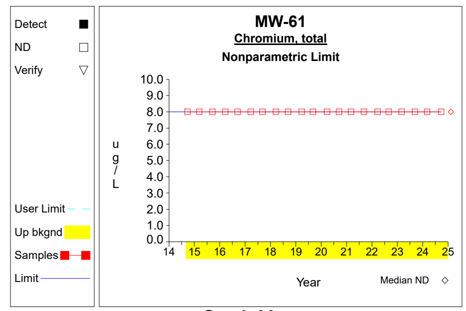

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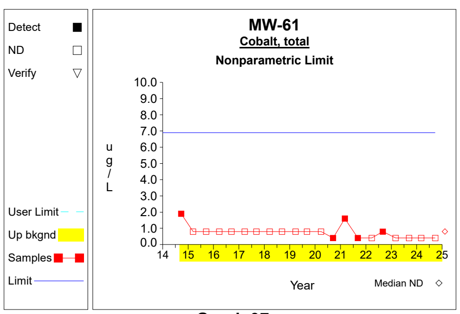

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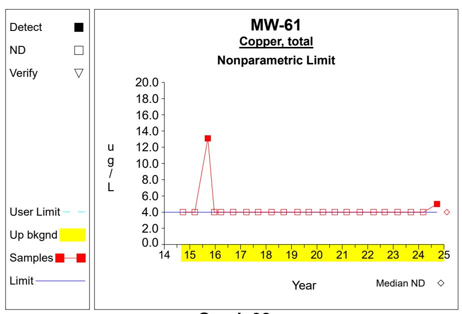
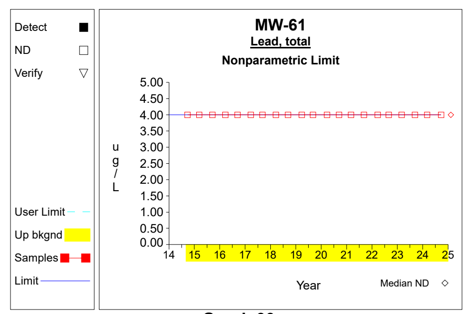


Graph 98



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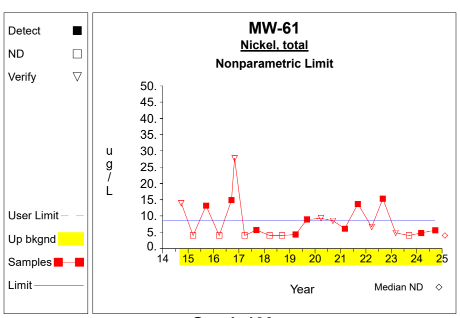
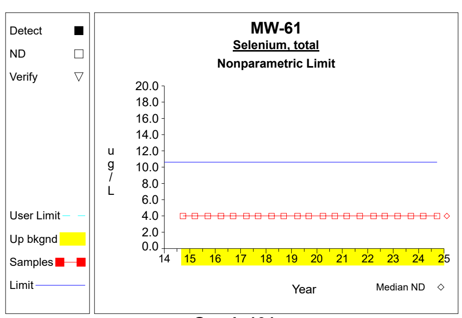
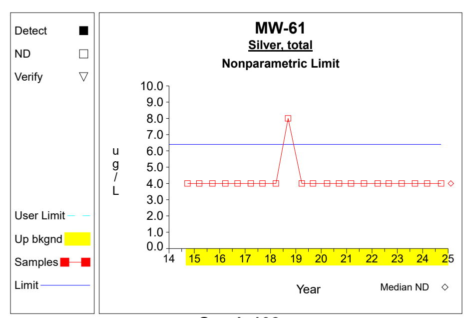


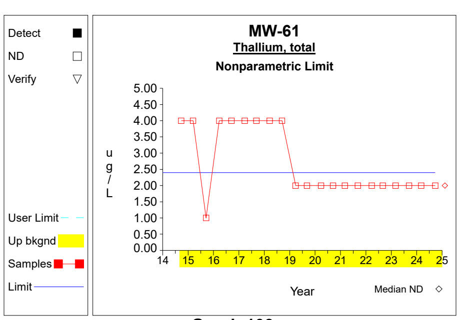
Graph 100



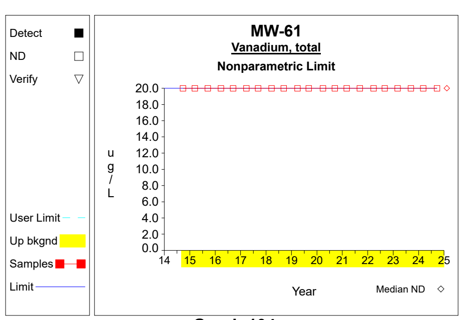
Graph 101



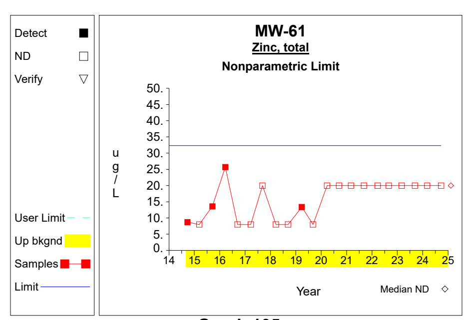
Graph 102



Graph 103



Graph 104



Graph 105

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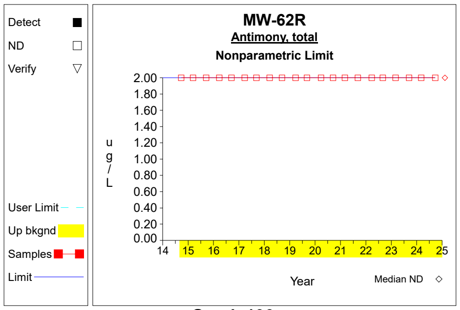
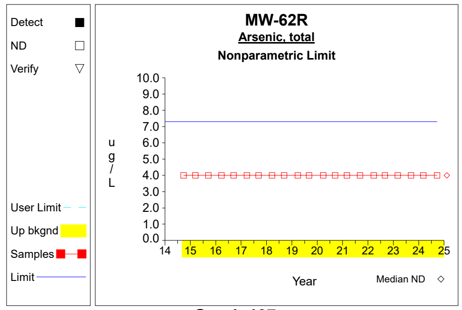
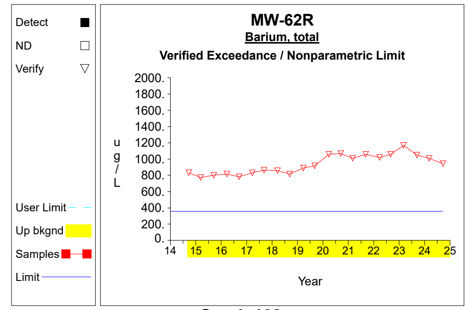
Up vs. Down Prediction Limits



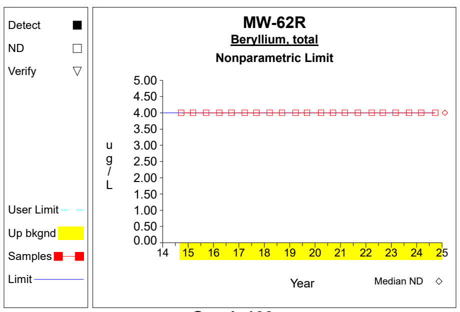
Graph 106



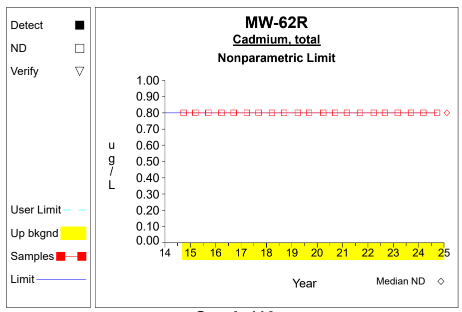
Graph 107



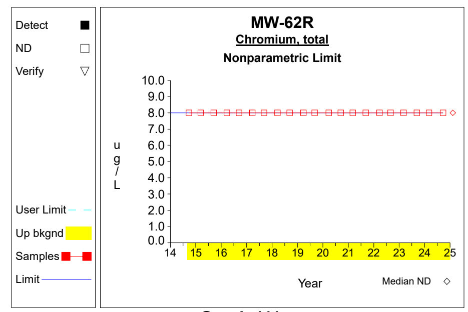
Graph 108



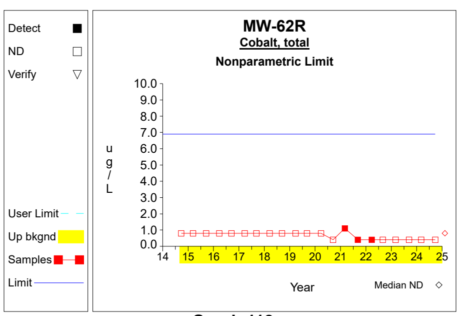
Graph 109



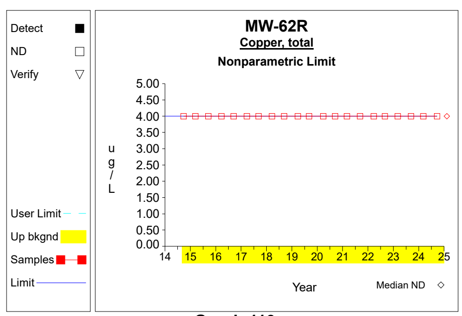
Graph 110



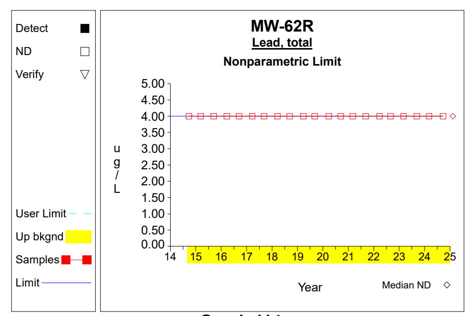
Graph 111



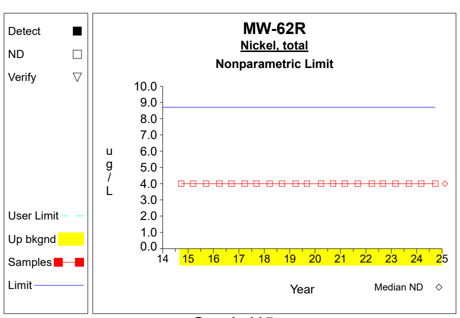
Graph 112



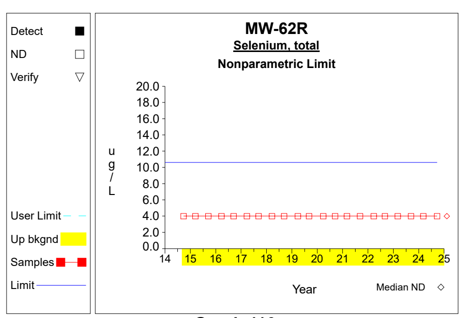
Graph 113



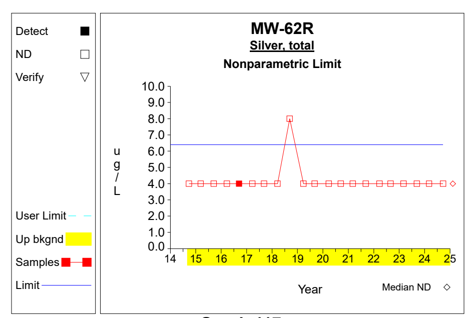
Graph 114



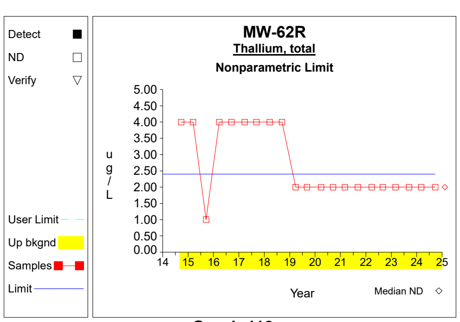
Graph 115



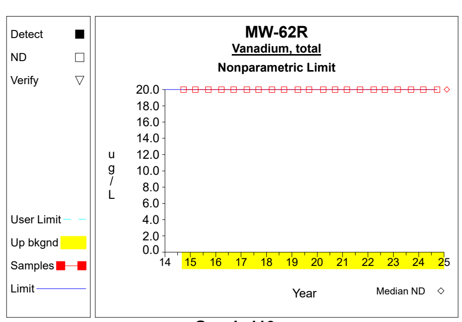
Graph 116



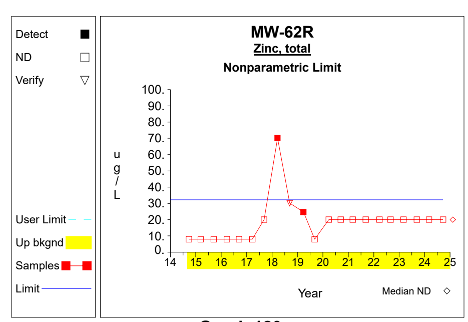
Graph 117



Graph 118



Graph 119



Graph 120

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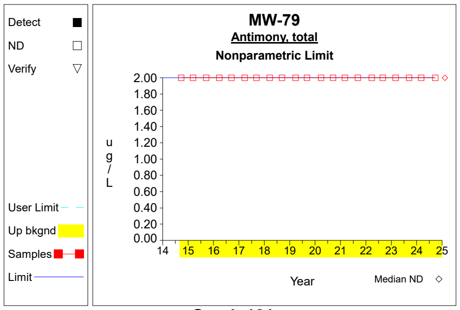
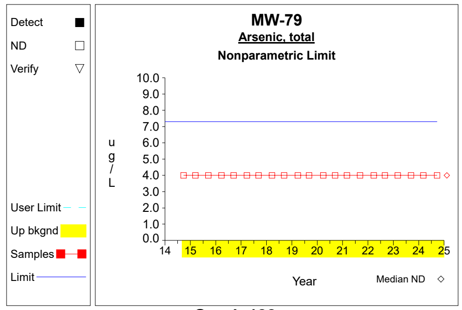
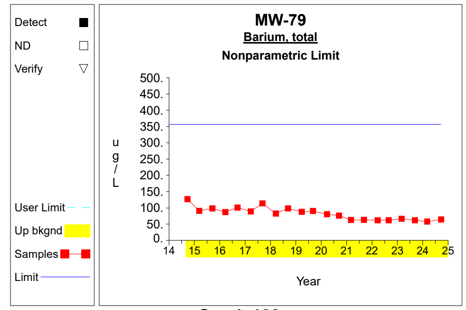
Up vs. Down Prediction Limits



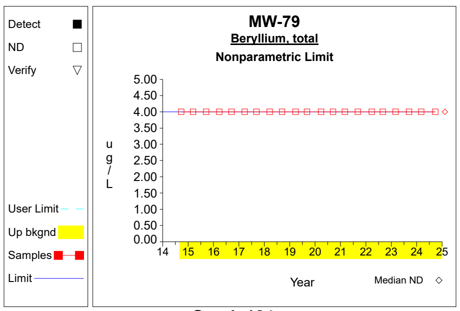
Graph 121



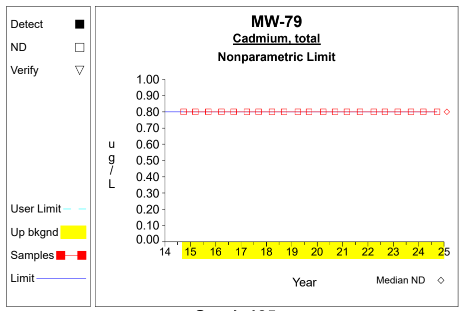
Graph 122



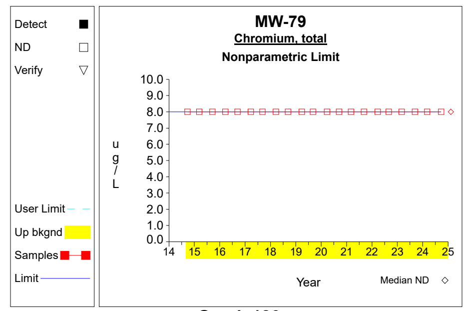
Graph 123



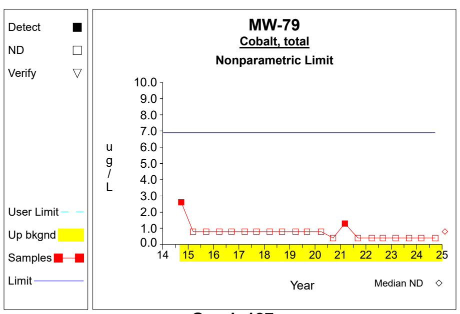
Graph 124



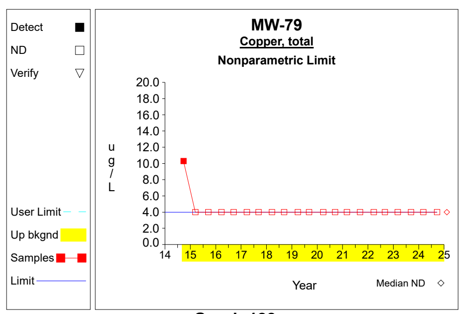
Graph 125



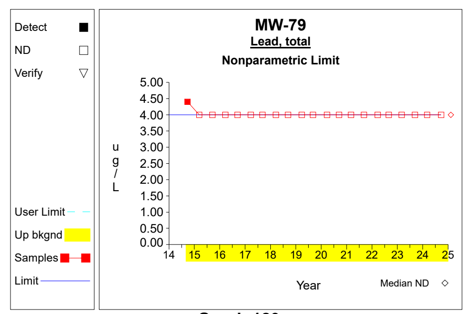
Graph 126



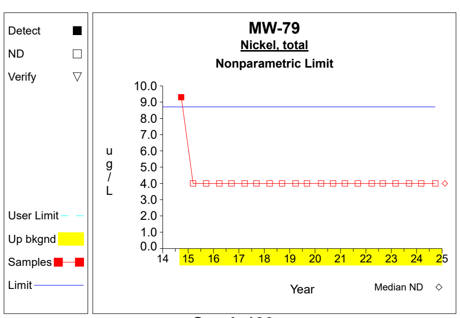
Graph 127



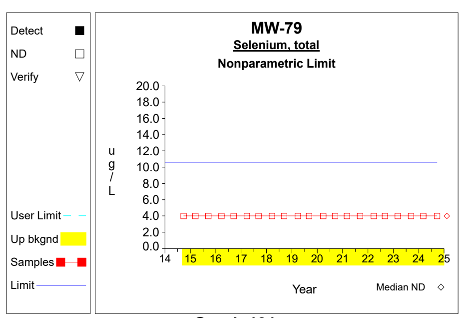
Graph 128



Graph 129



Graph 130



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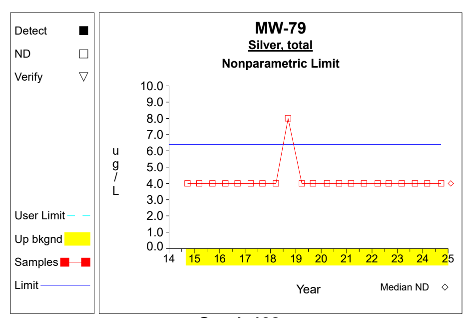
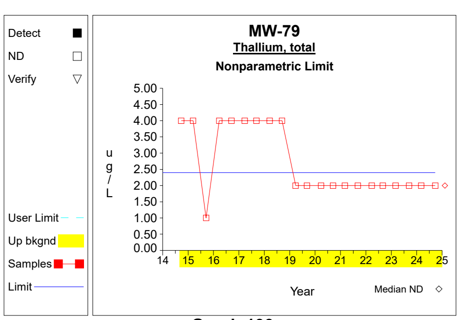
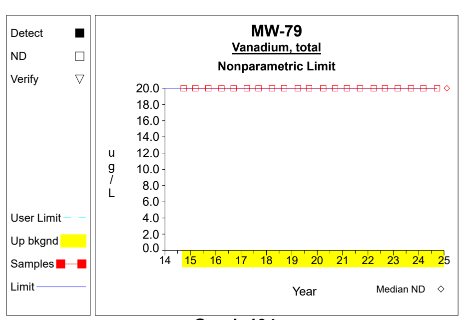


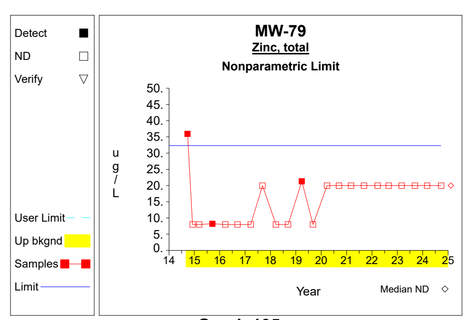
Graph 132



Graph 133



Graph 134



Graph 135

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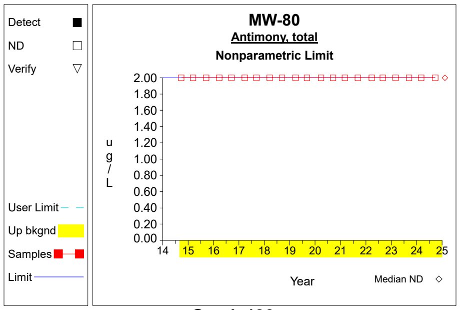
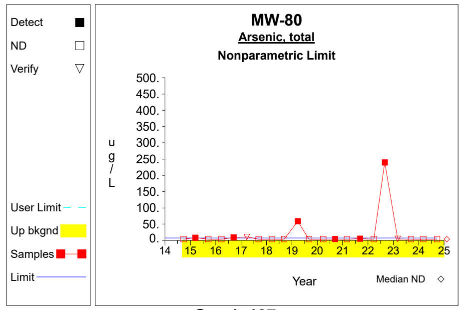
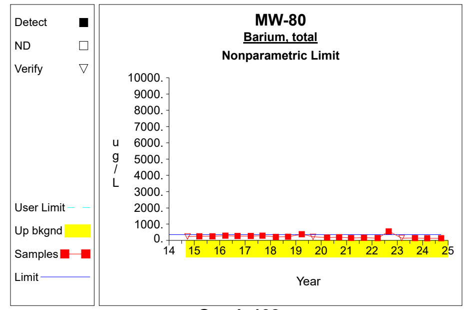
Up vs. Down Prediction Limits



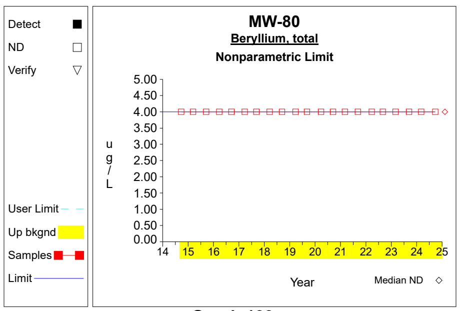
Graph 136



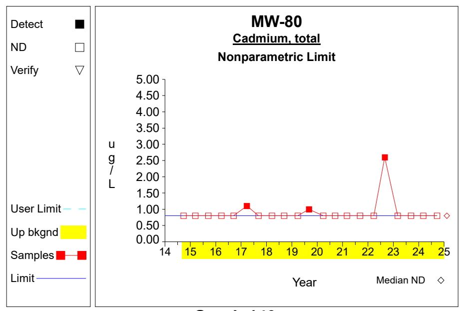
Graph 137



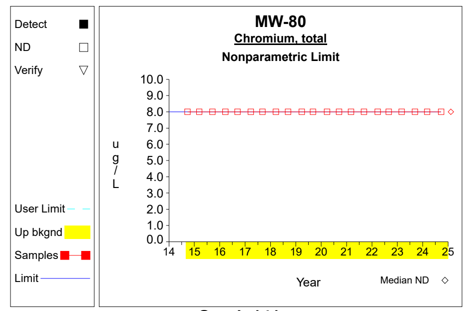
Graph 138



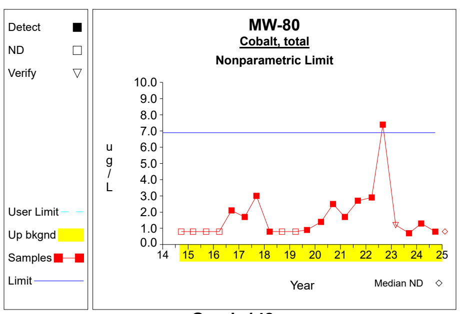
Graph 139



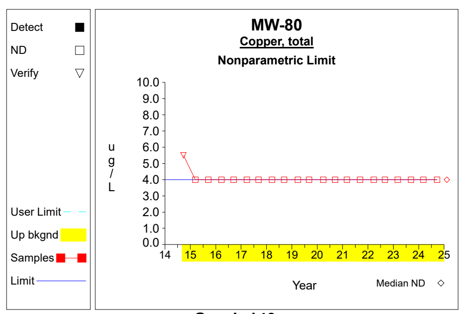
Graph 140



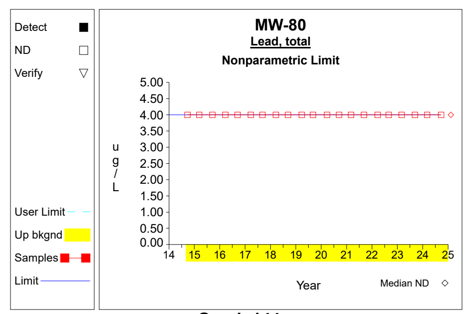
Graph 141



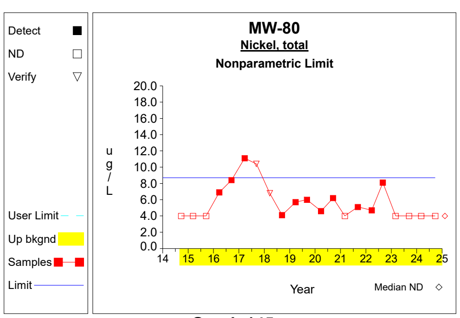
Graph 142



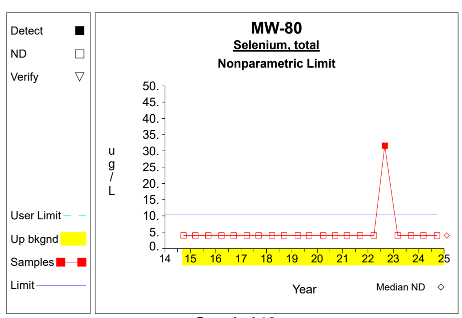
Graph 143



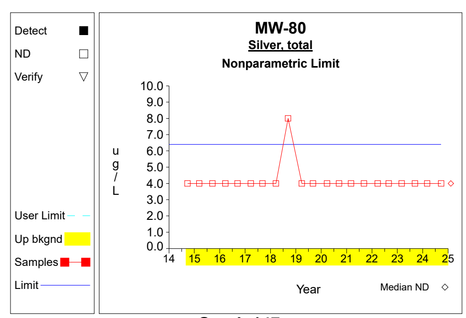
Graph 144



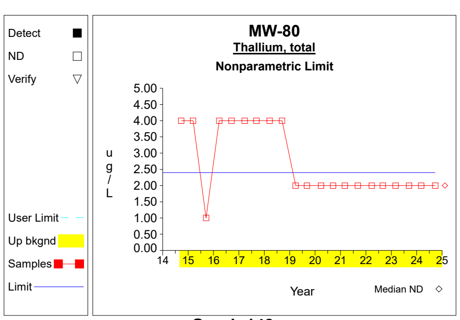
Graph 145



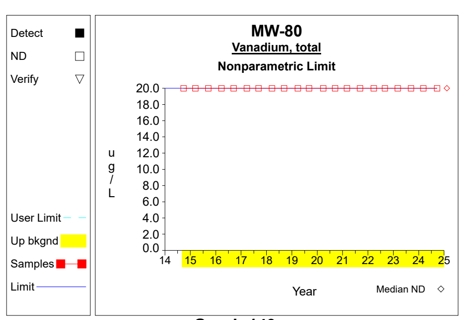
Graph 146



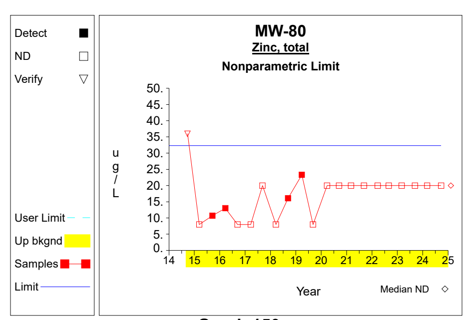
Graph 147



Graph 148

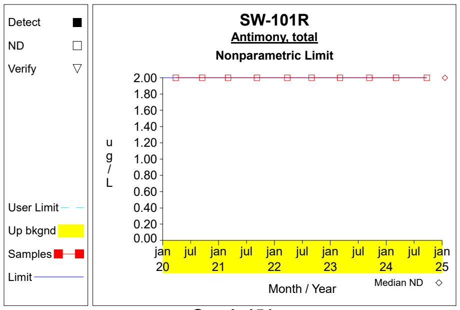


Graph 149

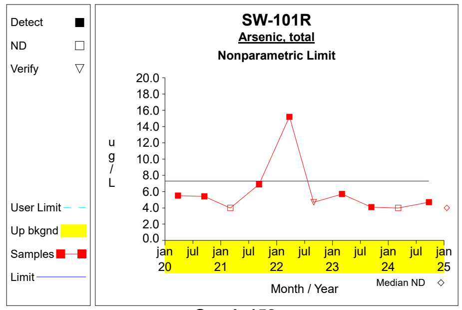


Graph 150

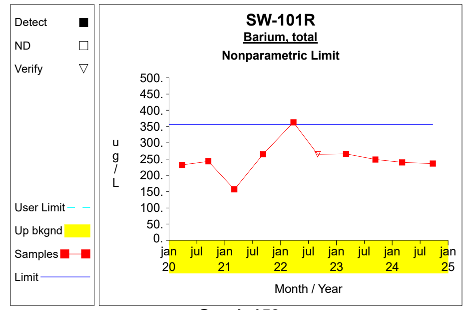
Up vs. Down Prediction Limits



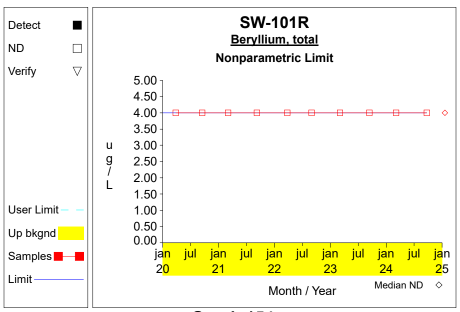
Graph 151



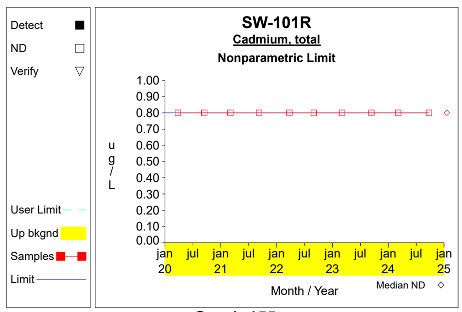
Graph 152



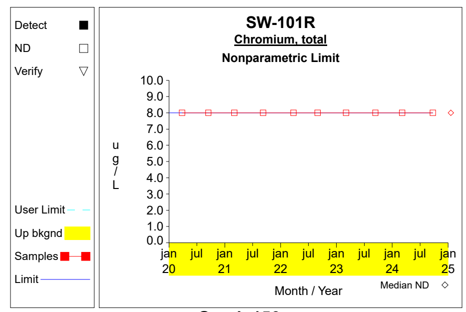
Graph 153



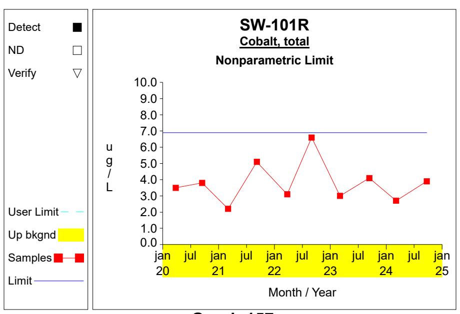
Graph 154



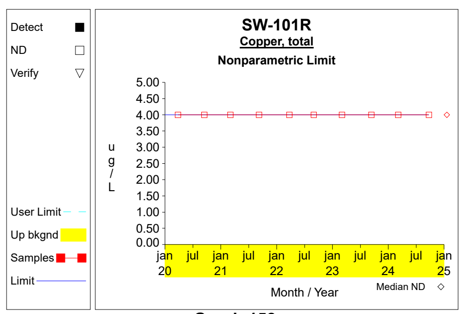
Graph 155



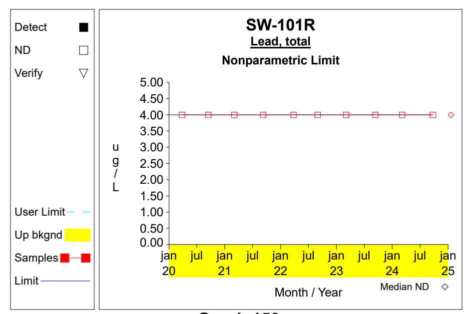
Graph 156



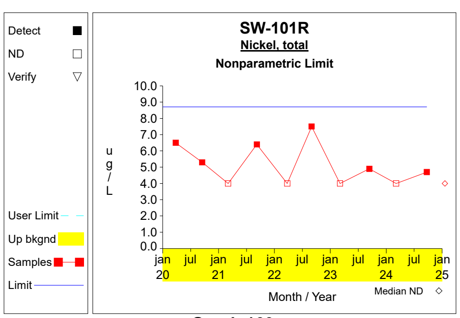
Graph 157



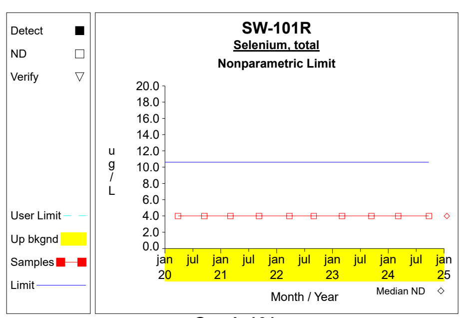
Graph 158



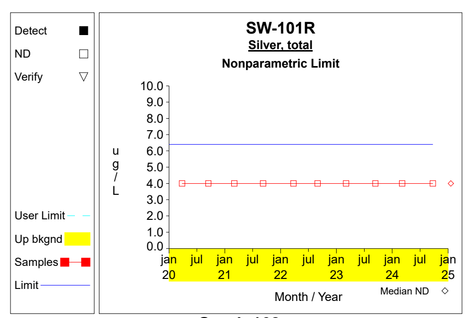
Graph 159



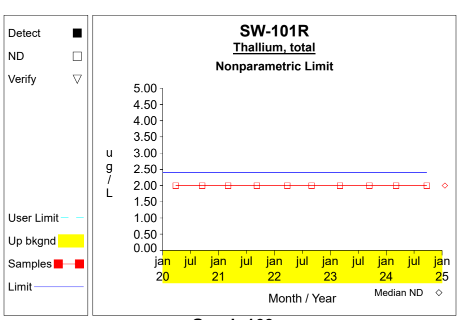
Graph 160



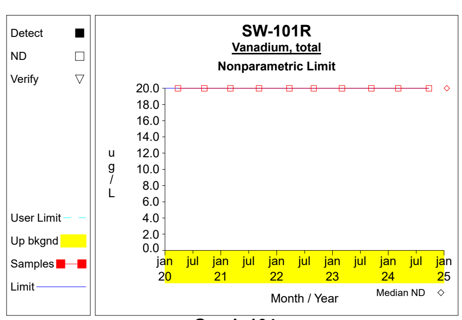
Graph 161



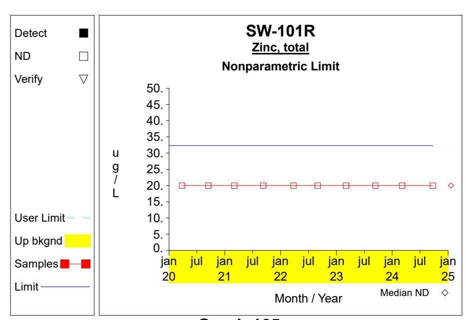
Graph 162



Graph 163



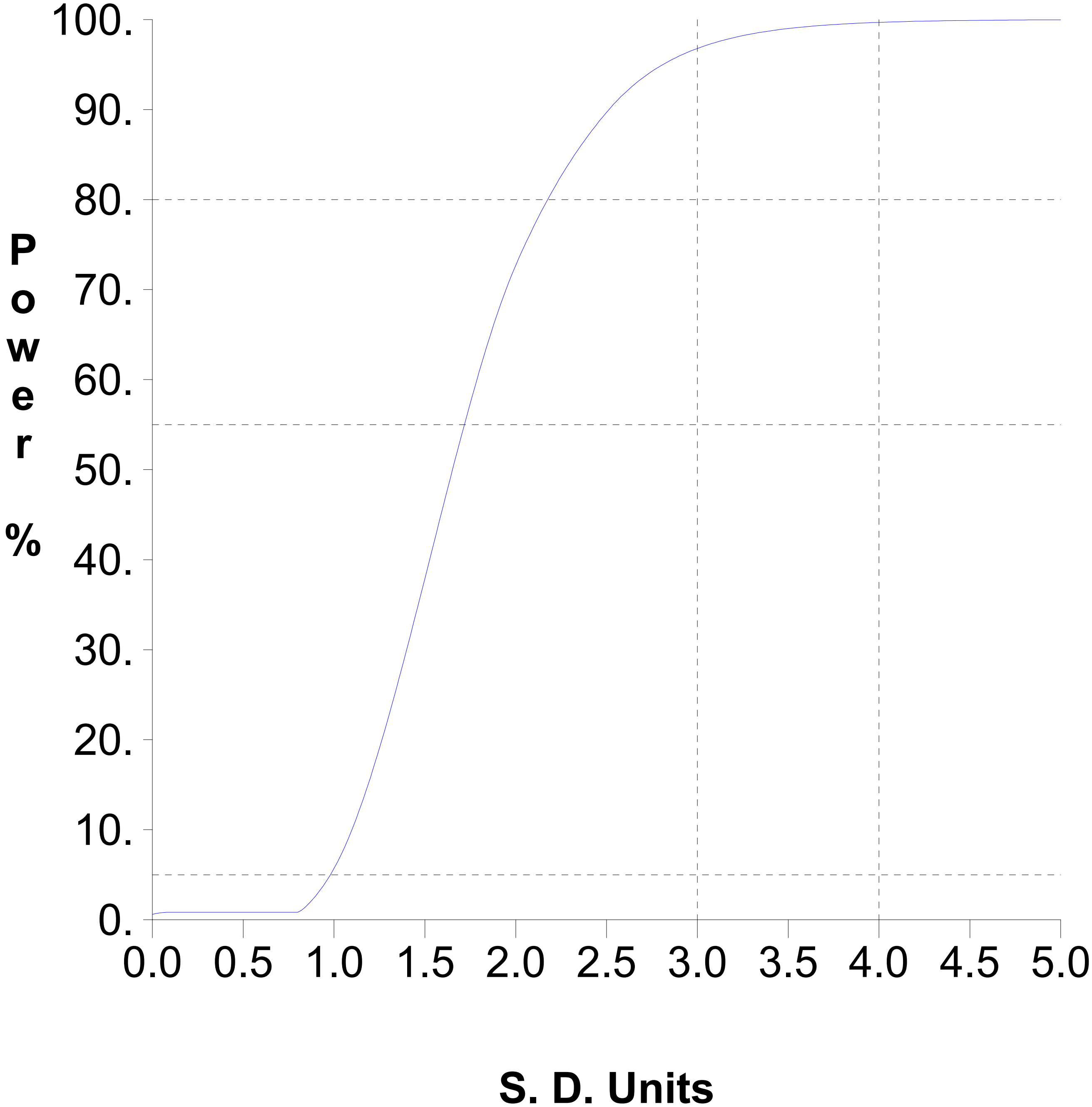
Graph 164



Graph 165

Prepared by: Otter Creek Environmental

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

Step	Equation	Description
1	PL = median(X)	Compute nonparametric prediction limit as median reporting limit in background.
	= **2.0**	
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

Step	Equation	Description
1	PL = max(X)	Compute nonparametric prediction limit as largest background measurement.
	= **7.3**	
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

Step	Equation	Description
1	PL = max(X)	Compute nonparametric prediction limit as largest background measurement.
	= **357.0**	
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

Step	Equation	Description
1	PL = median(X)	Compute nonparametric prediction limit as median reporting limit in background.
	= **4.0**	
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

Step	Equation	Description
1	PL = median(X) = **0.8**	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
Chromium, total (ug/L)
Nonparametric Prediction Limit

Step	Equation	Description
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)
Nonparametric Prediction Limit

Step	Equation	Description
1	PL = max(X) = **6.9**	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
Copper, total (ug/L)
Nonparametric Prediction Limit

Step	Equation	Description
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
Lead, total (ug/L)
Nonparametric Prediction Limit

Step	Equation	Description
1	PL = median(X)	Compute nonparametric prediction limit as median reporting limit in background.
	= **4.0**	
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)
Nonparametric Prediction Limit

Step	Equation	Description
1	PL = max(X)	Compute nonparametric prediction limit as largest background measurement.
	= **8.7**	
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

Step	Equation	Description
1	PL = max(X)	Compute nonparametric prediction limit as largest background measurement.
	= **10.6**	
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

Step	Equation	Description
1	PL = max(X)	Compute nonparametric prediction limit as largest background measurement.
	= **6.4**	
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

Step	Equation	Description
1	PL = max(X) = **2.4**	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

Step	Equation	Description
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

Step	Equation	Description
1	PL = max(X) = **32.3**	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).

Attachment C

95% LCLs for Trace Metal Exceedances

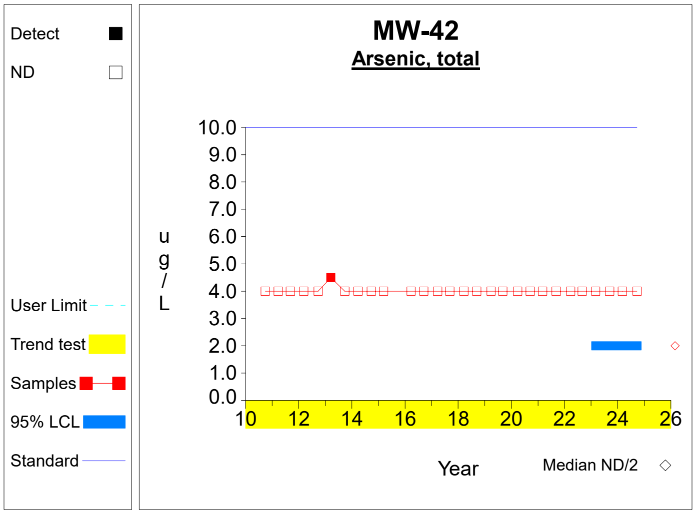
Table 1

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

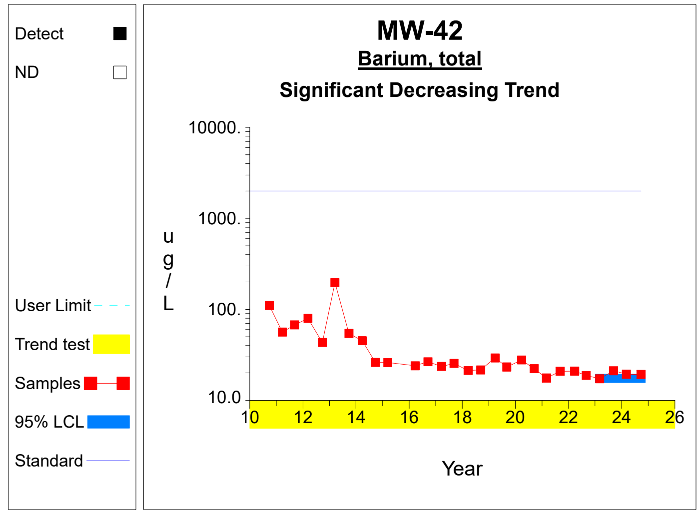
Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend	
Arsenic, total	ug/L	MW-42	4	2.000	0.000	1.176	2.000	2.000	10.000		
Barium, total	ug/L	MW-42	4	19.300	1.594	1.176	17.425	21.175	2000.000	dec	
Cobalt, total	ug/L	MW-42	4	1.950	2.017	1.176	0.000	4.323	2.100		
Copper, total	ug/L	MW-42	4	2.000	0.000	1.176	2.000	2.000	1300.000		
Nickel, total	ug/L	MW-42	4	3.525	1.773	1.176	1.440	5.610	100.000		
Arsenic, total	ug/L	MW-58	4	2.000	0.000	1.176	2.000	2.000	10.000		
Barium, total	ug/L	MW-58	4	22.425	1.231	1.176	20.977	23.873	2000.000	dec	
Cobalt, total	ug/L	MW-58	4	0.400	0.000	1.176	0.400	0.400	2.100		
Copper, total	ug/L	MW-58	4	2.000	0.000	1.176	2.000	2.000	1300.000		
Nickel, total	ug/L	MW-58	4	14.675	1.797	1.176	12.561	16.789	100.000		
Arsenic, total	ug/L	MW-60	4	2.000	0.000	1.176	2.000	2.000	10.000		
Barium, total	ug/L	MW-60	4	236.750	53.773	1.176	173.497	300.003	2000.000		
Cobalt, total	ug/L	MW-60	4	2.425	2.809	1.176	0.000	5.729	2.100		
Copper, total	ug/L	MW-60	4	2.000	0.000	1.176	2.000	2.000	1300.000		
Nickel, total	ug/L	MW-60	4	17.275	12.808	1.176	2.209	32.341	100.000		
Arsenic, total	ug/L	MW-61	4	2.000	0.000	1.176	2.000	2.000	10.000		
Barium, total	ug/L	MW-61	4	48.400	2.778	1.176	45.132	51.668	2000.000		
Cobalt, total	ug/L	MW-61	4	0.400	0.000	1.176	0.400	0.400	2.100		
Copper, total	ug/L	MW-61	4	2.750	1.500	1.176	0.986	4.514	1300.000		
Nickel, total	ug/L	MW-61	4	4.300	1.579	1.176	2.443	6.157	100.000		
Arsenic, total	ug/L	MW-62R	4	2.000	0.000	1.176	2.000	2.000	10.000		
Barium, total	ug/L	MW-62R	4	1043.750	94.637	1.176	932.429	1155.071	2000.000	inc	
Cobalt, total	ug/L	MW-62R	4	0.400	0.000	1.176	0.400	0.400	2.100		
Copper, total	ug/L	MW-62R	4	2.000	0.000	1.176	2.000	2.000	1300.000		
Nickel, total	ug/L	MW-62R	4	2.000	0.000	1.176	2.000	2.000	100.000		
Arsenic, total	ug/L	MW-80	4	2.650	1.300	1.176	1.121	4.179	10.000		
Barium, total	ug/L	MW-80	4	139.250	7.411	1.176	130.533	147.967	2000.000	dec	
Cobalt, total	ug/L	MW-80	4	1.000	0.294	1.176	0.654	1.346	2.100		
Copper, total	ug/L	MW-80	4	2.000	0.000	1.176	2.000	2.000	1300.000		
Nickel, total	ug/L	MW-80	4	2.000	0.000	1.176	2.000	2.000	100.000	dec	
Arsenic, total	ug/L	SW-101R	4	4.125	1.563	1.176	2.287	5.963	10.000		
Barium, total	ug/L	SW-101R	4	247.750	13.326	1.176	232.075	263.425	2000.000		
Cobalt, total	ug/L	SW-101R	4	3.425	0.680	1.176	2.625	4.225	2.100		**
Copper, total	ug/L	SW-101R	4	2.000	0.000	1.176	2.000	2.000	1300.000		
Nickel, total	ug/L	SW-101R	4	3.400	1.619	1.176	1.496	5.304	100.000		

* - Insufficient Data
** - Significant Exceedance
LCL = Lower Confidence Limit
UCL = Upper Confidence Limit

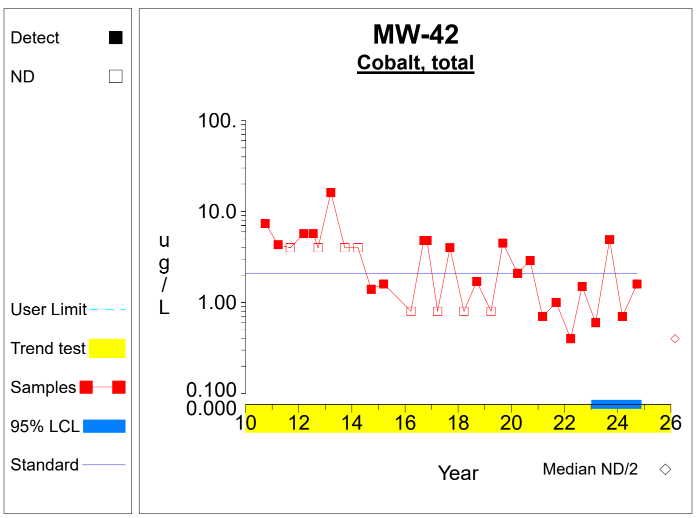
Confidence Limits (Assessment)



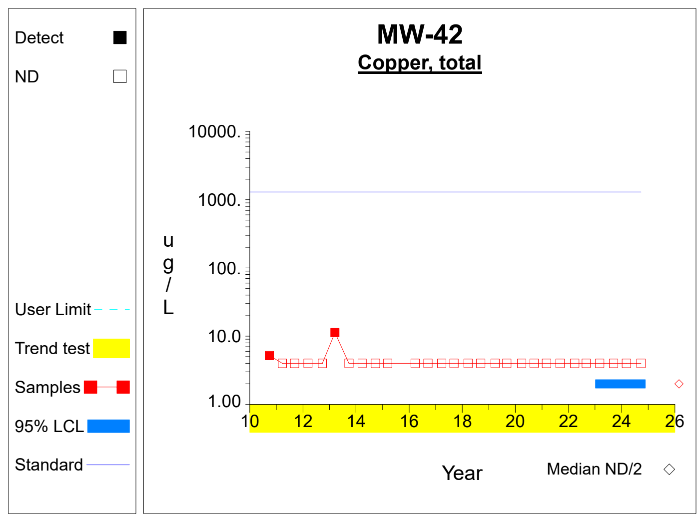
Graph 1



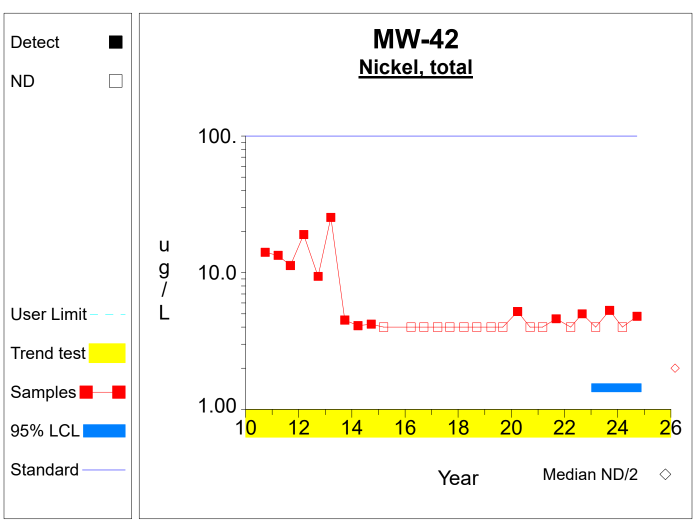
Graph 2



Graph 3

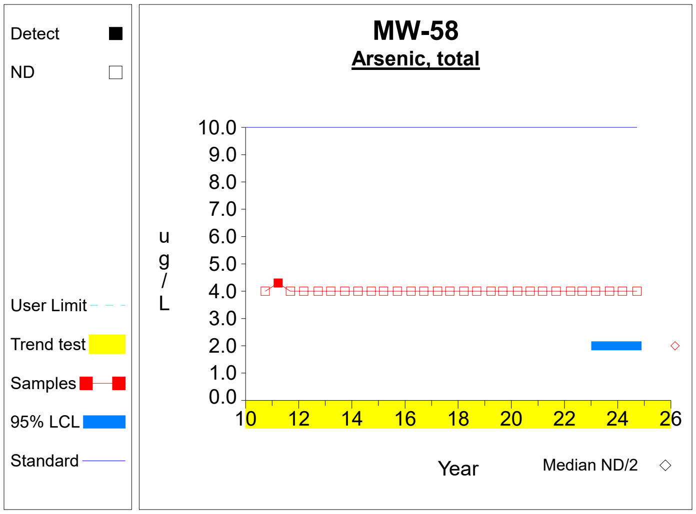


Graph 4

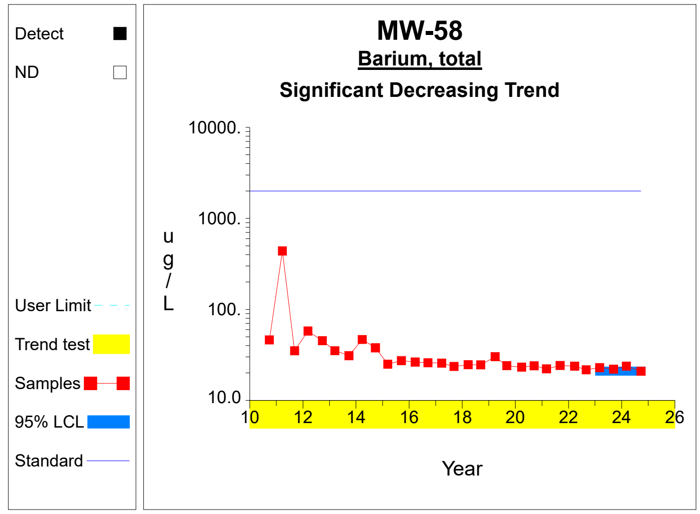


Graph 5

Confidence Limits (Assessment)



Graph 6



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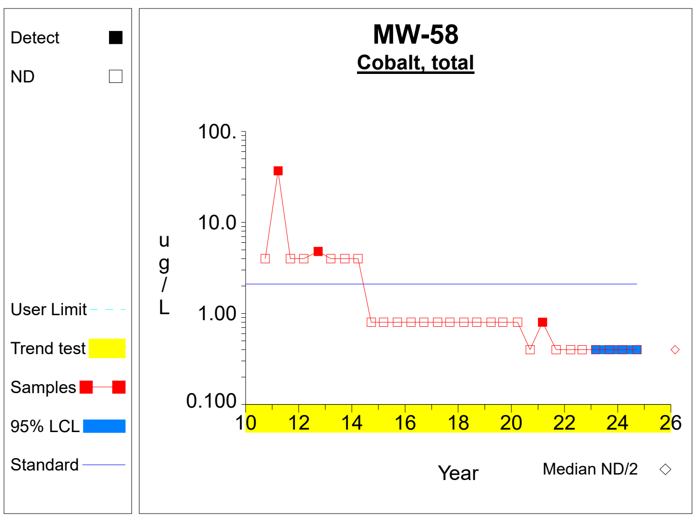

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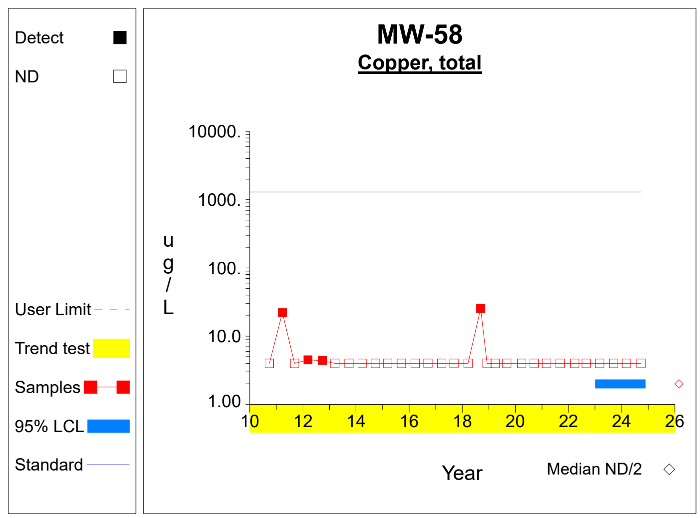
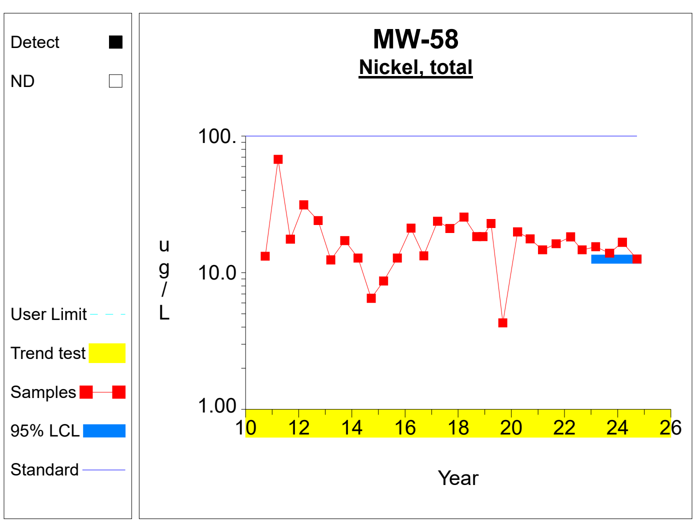
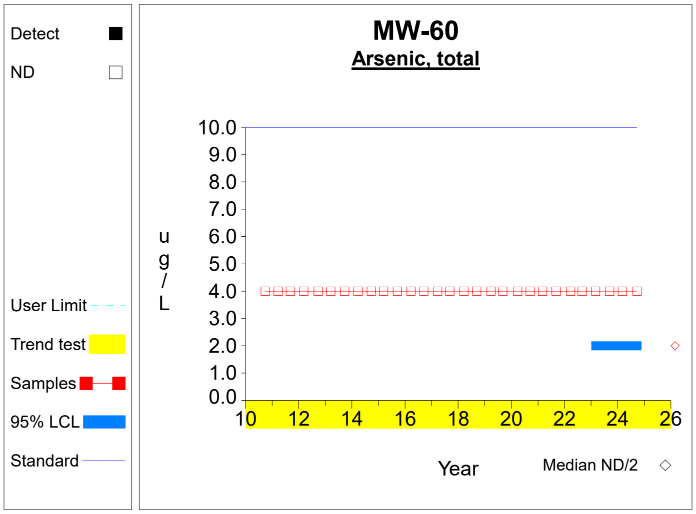


Graph 9



Graph 10

Confidence Limits (Assessment)



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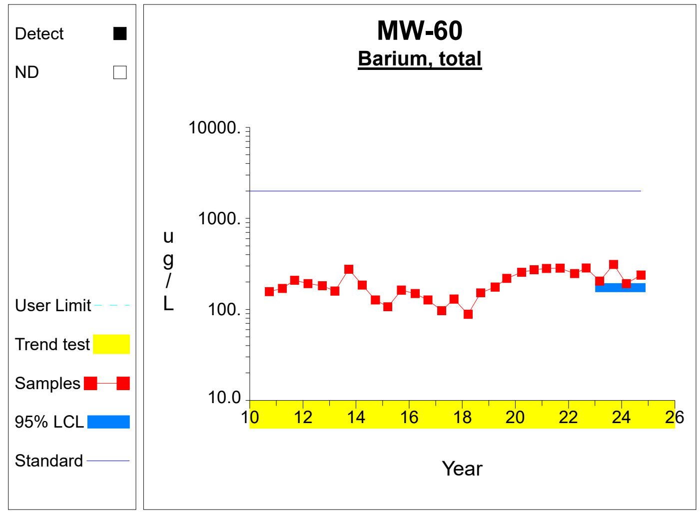

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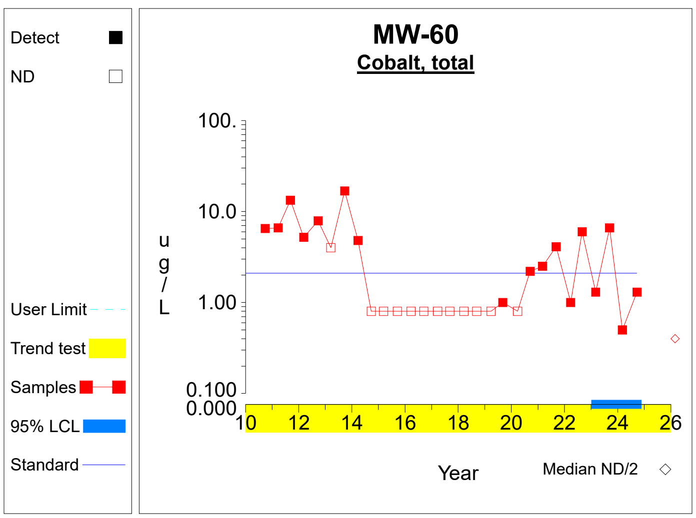
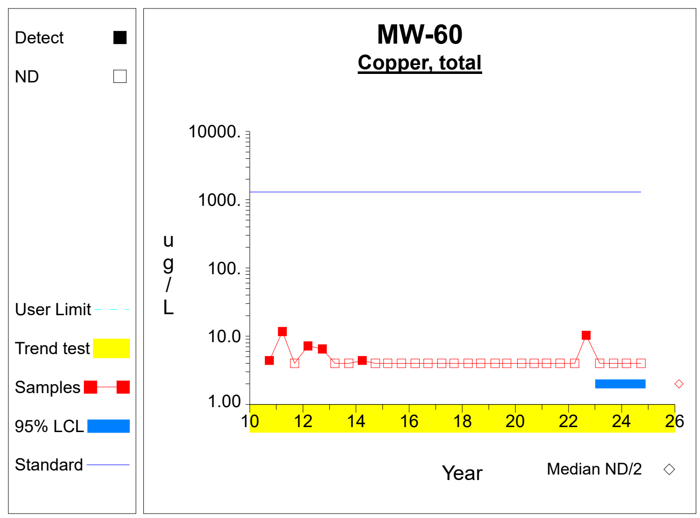
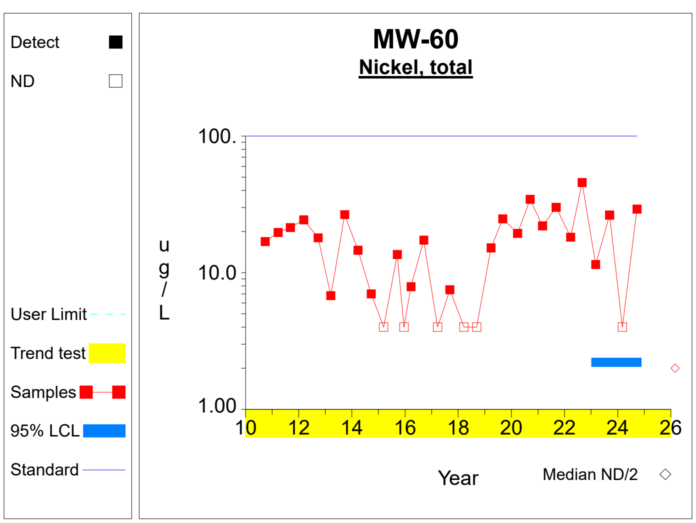


Graph 13



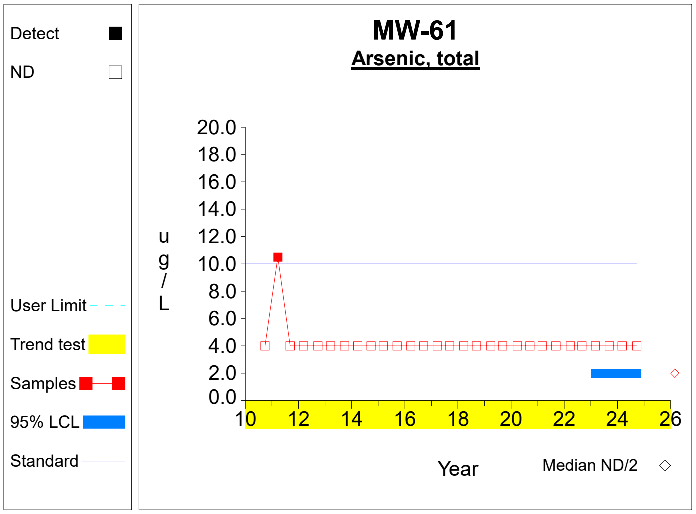
Graph 14



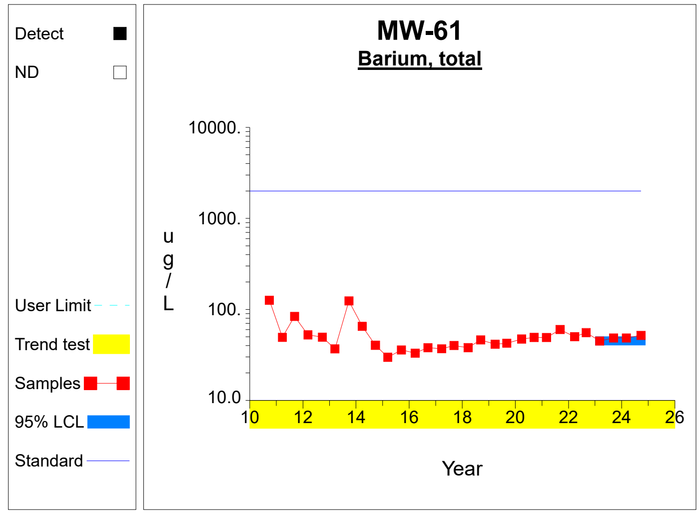
Graph 15

Prepared by: Otter Creek Environmental

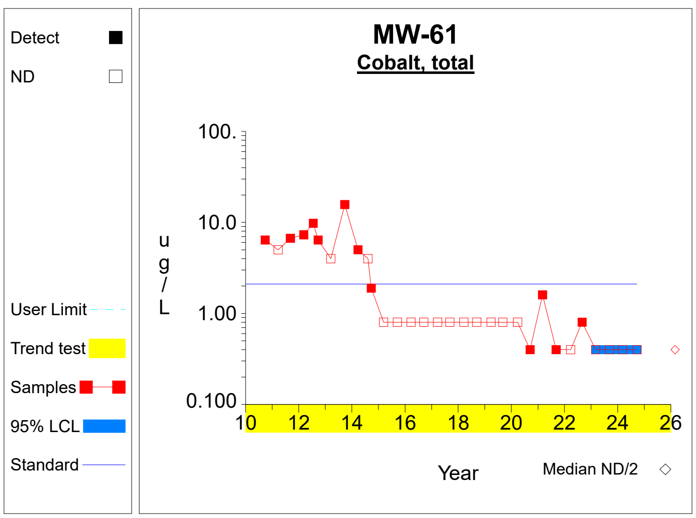
Confidence Limits (Assessment)



Graph 16



Graph 17



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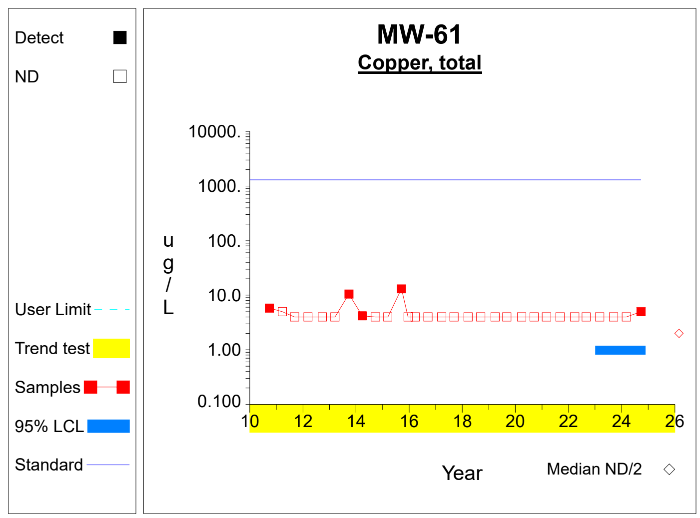
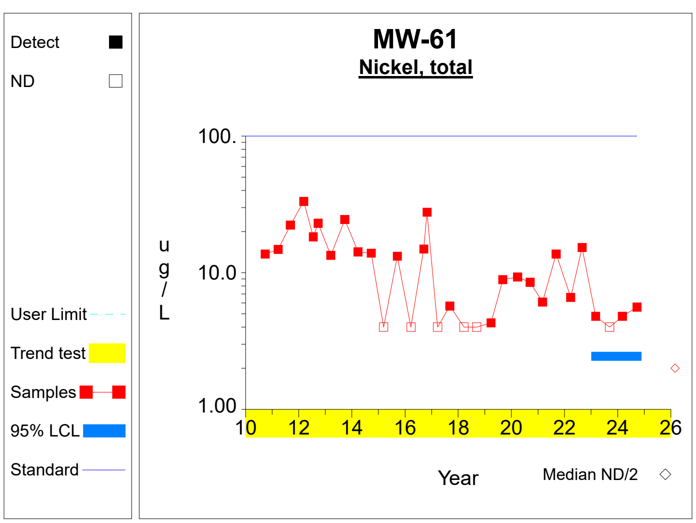
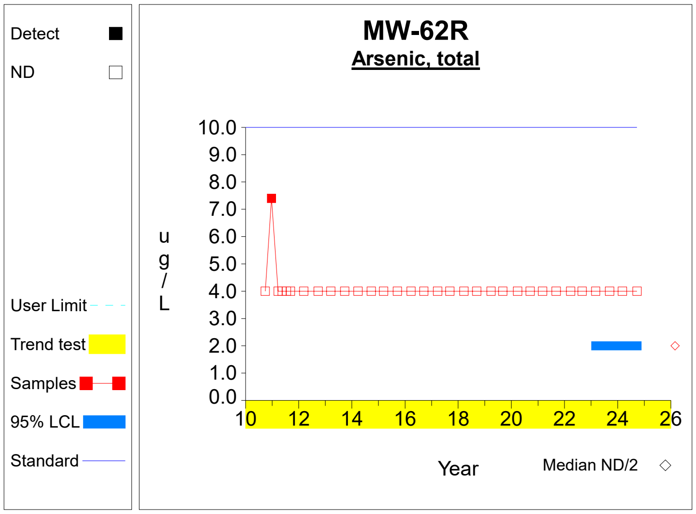


Graph 19

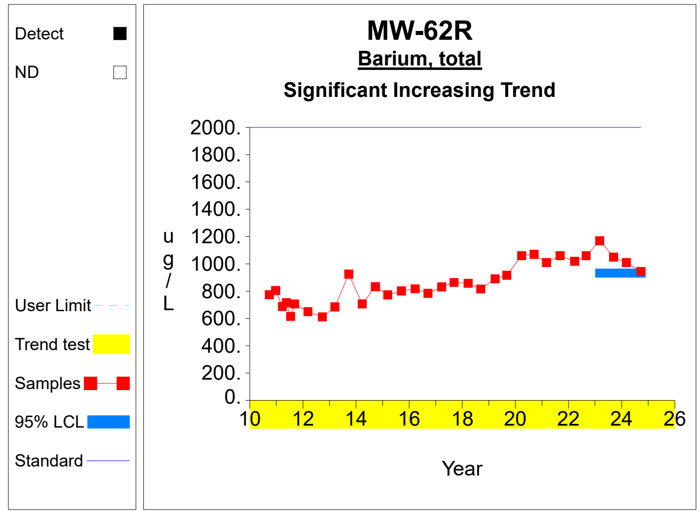


Graph 20

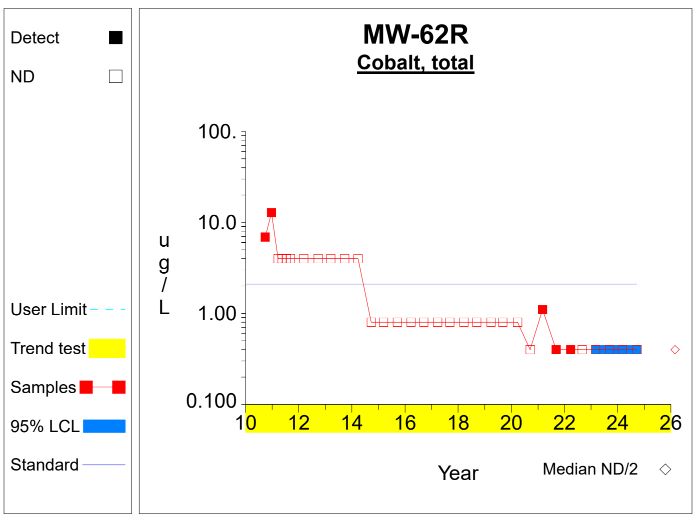
Confidence Limits (Assessment)



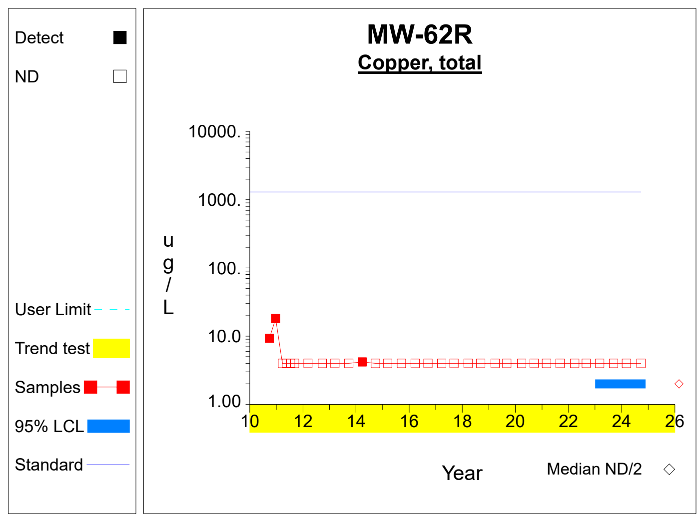
Graph 21



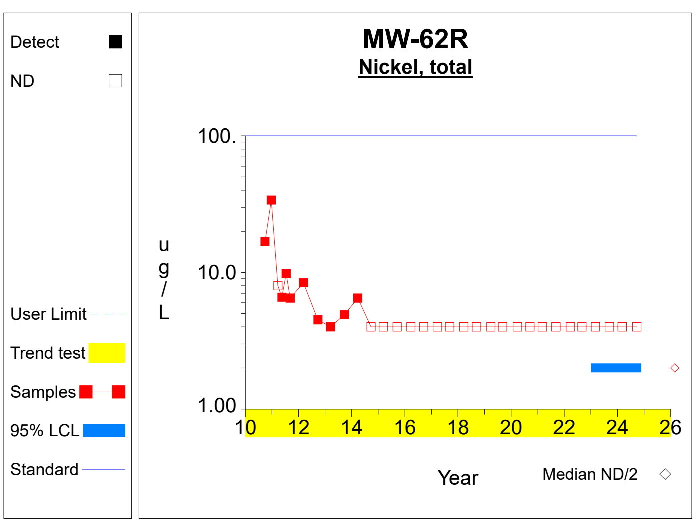
Graph 22



Graph 23

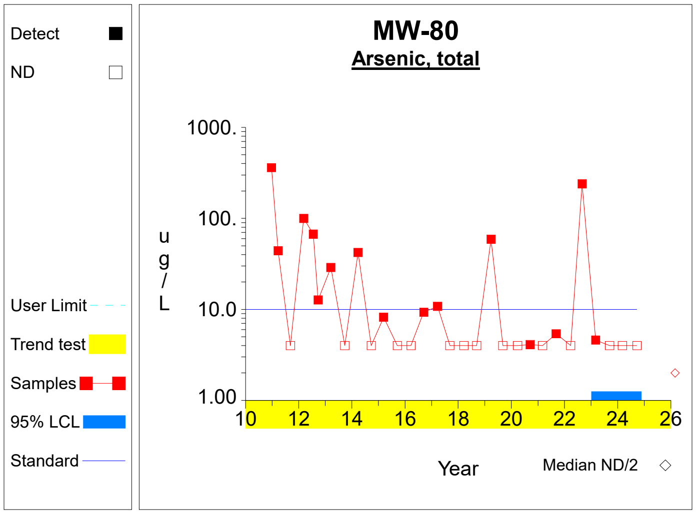


Graph 24

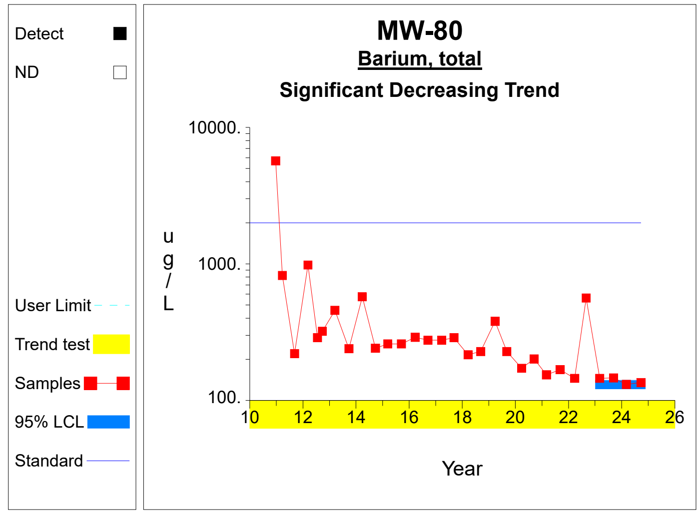


Graph 25

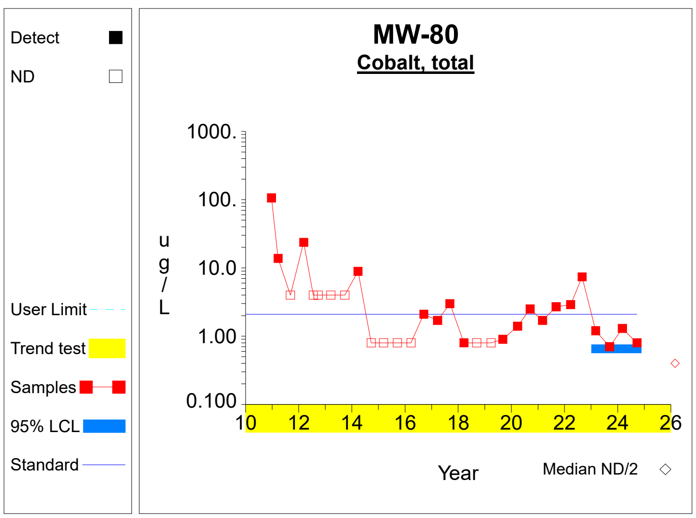
Confidence Limits (Assessment)



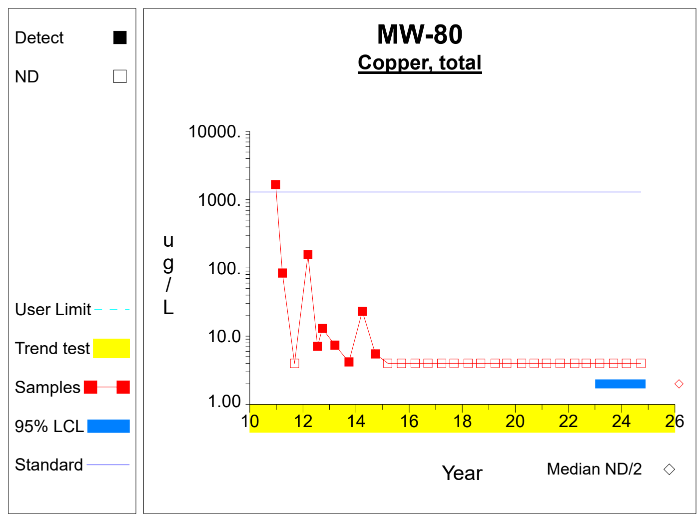
Graph 26



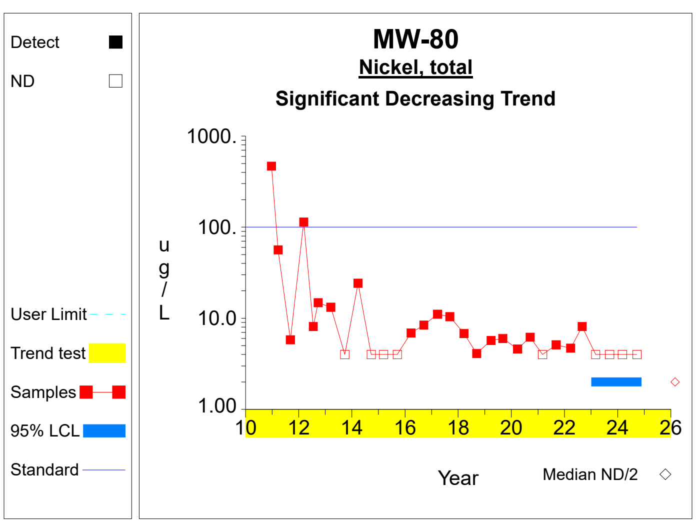
Graph 27



Graph 28

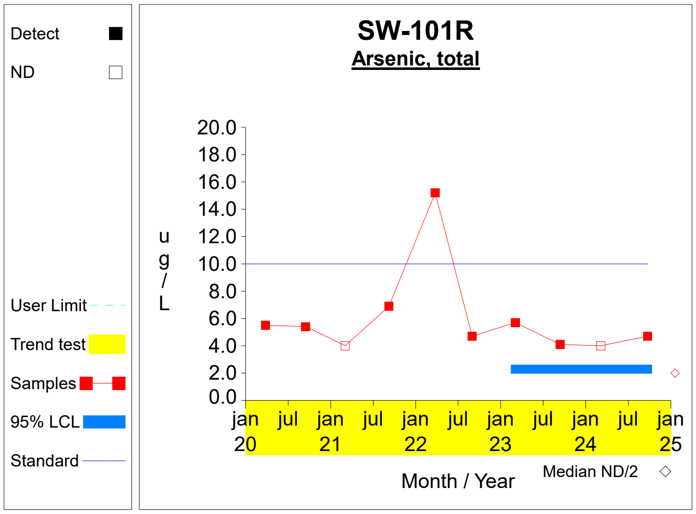


Graph 29

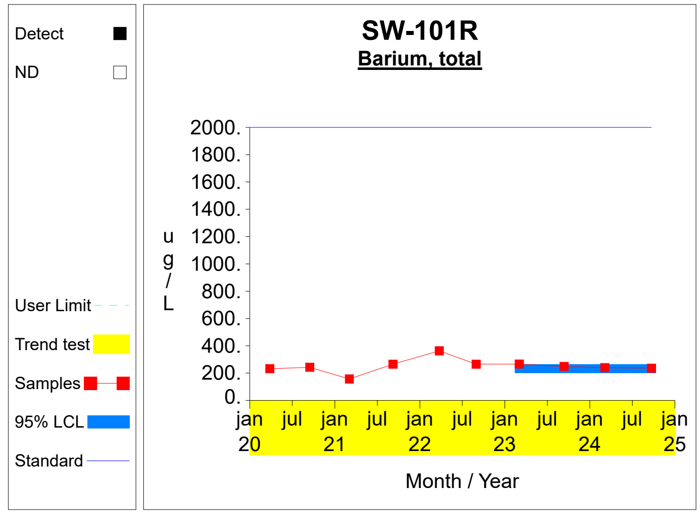


Graph 30

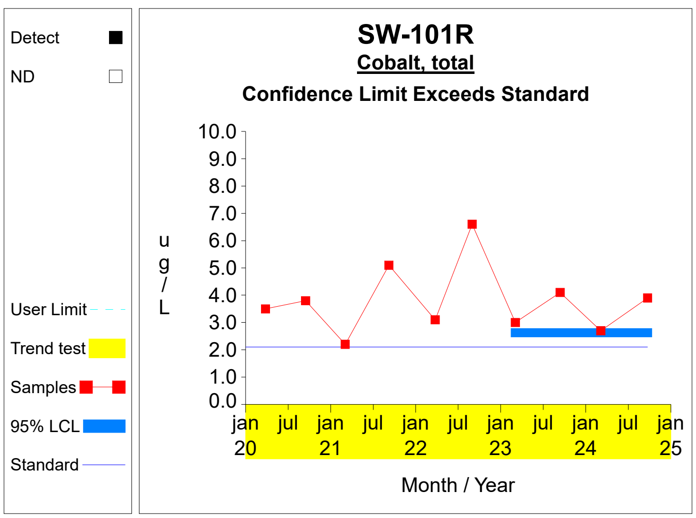
Confidence Limits (Assessment)



Graph 31



Graph 32



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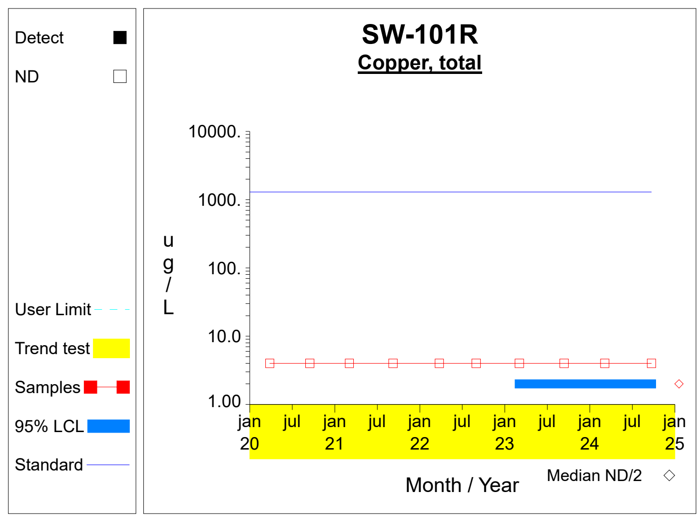
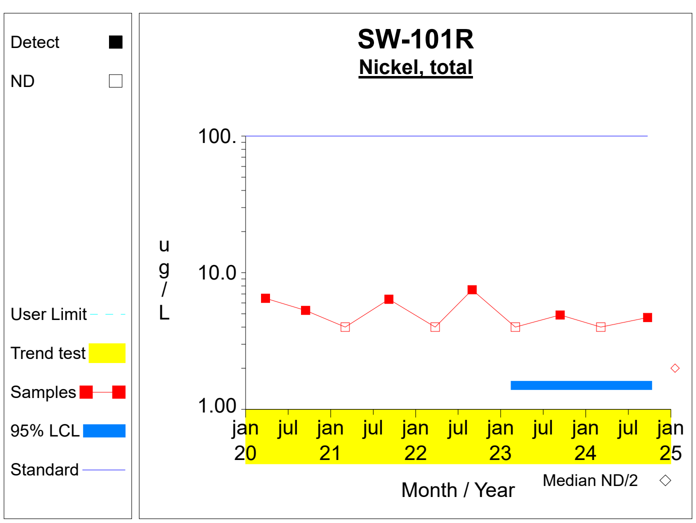


Graph 34



Graph 35

Worksheet 6 - Assessment Monitoring
Arsenic, total (ug/L) at MW-42

Step	Equation	Description
1	$\bar{X} = \mathbf{sum[X]} / \mathbf{N}$ $= \mathbf{8.0} / \mathbf{4}$ $= \mathbf{2.0}$	Compute the mean of the last 4 measurements.
2	$S = ((\mathbf{sum[X^2]} - \mathbf{sum[X]}^2/\mathbf{N}) / (\mathbf{N}-1))^{½}$ $= ((\mathbf{16.0} - \mathbf{64.0/4}) / (\mathbf{4}-1))^{½}$ $= \mathbf{0.0}$	Compute sd of the last 4 measurements.
3	$LCL = \bar{\mathbf{X}} - \mathbf{tS}/\mathbf{N}^{½}$ $= \mathbf{2.0} - \mathbf{2.353} * \mathbf{0.0/4}^{½}$ $= \mathbf{2.0}$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$UCL = \bar{\mathbf{X}} + \mathbf{tS}/\mathbf{N}^{½}$ $= \mathbf{2.0} + \mathbf{2.353} * \mathbf{0.0/4}^{½}$ $= \mathbf{2.0}$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = \mathbf{N} * (\mathbf{N}-1) / 2$ $= \mathbf{28} * (\mathbf{28}-1) / 2$ $= \mathbf{378}$	Number of sample pairs during trend detection period.
6	$S = \mathbf{0.0}$	Sen's estimator of trend.
7	$var(S) = \mathbf{261.0}$	Variance estimate for slope.
8	$M(S) = (\mathbf{N'} \pm \mathbf{Z}_{.995} * \mathbf{var(S)}^{½}) / 2$ $= (\mathbf{378} \pm \mathbf{2.576} * \mathbf{261.0}^{½}) / 2$ $= [\ \mathbf{168.192}, \mathbf{209.808}\ ]$	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	$CL(S) = [\ \mathbf{0.0}, \mathbf{0.0}\ ]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Barium, total (ug/L) at MW-42

Step	Equation	Description
1	$\bar{X}$ = **sum[X] / N** = **77.2 / 4** = **19.3**	Compute the mean of the last 4 measurements.
2	$S = ((\mathbf{sum[X^2]} - \mathbf{sum[X]}^2/\mathbf{N}) / (\mathbf{N}-1))^{1/2}$ $= ((\mathbf{1497.58} - \mathbf{5959.84/4}) / (\mathbf{4}-1))^{1/2}$ = **1.594**	Compute sd of the last 4 measurements.
3	$LCL = \bar{X} - tS/N^{1/2}$ $= \mathbf{19.3 - 2.353 * 1.594/4}^{1/2}$ = **17.425**	Compute lower confidence limit for the mean of the last 4 measurements.
4	$UCL = \bar{X} + tS/N^{1/2}$ $= \mathbf{19.3 + 2.353 * 1.594/4}^{1/2}$ = **21.175**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **28** * (**28**-1) / 2 = **378**	Number of sample pairs during trend detection period.
6	S = **-2.565**	Sen's estimator of trend.
7	var(S) = **2562.0**	Variance estimate for slope.
8	$M(S) = (\mathbf{N'} \pm \mathbf{Z}_{.995} * \mathbf{var(S)}^{1/2}) / 2$ $= (\mathbf{378} \pm \mathbf{2.576} * \mathbf{2562.0}^{1/2}) / 2$ = [**123.806**, **254.194**]	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) = [**-4.774**, **-0.969**]	Two-sided confidence interval for slope.
10	UCL(S) < 0	**Significant decreasing trend.**

Worksheet 6 - Assessment Monitoring
Cobalt, total (ug/L) at MW-42

Step	Equation	Description
1	$\bar{X}$ = **sum[X]** / **N** = **7.8** / **4** = **1.95**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2] - sum[X]^2/N**) / (**N**-1))^{½} = ((**27.42** - **60.84/4**) / (**4**-1))^{½} = **2.017**	Compute sd of the last 4 measurements.
3	LCL = **$\bar{X}$ - tS/N**^{½} = **1.95** - **2.353** * **2.017/4**^{½} = **0.0**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = **$\bar{X}$ + tS/N**^{½} = **1.95** + **2.353** * **2.017/4**^{½} = **4.323**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **30** * (**30**-1) / 2 = **435**	Number of sample pairs during trend detection period.
6	S = **-0.05**	Sen's estimator of trend.
7	var(S) = **3045.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**435** ± **2.576** * **3045.667**^{½}) / 2 = [**146.418**, **288.582**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.472**, **0.056**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Copper, total (ug/L) at MW-42

Step	Equation	Description
1	$\overline{X} = \mathbf{sum[X]} / \mathbf{N}$ $= \mathbf{8.0} / \mathbf{4}$ $= \mathbf{2.0}$	Compute the mean of the last 4 measurements.
2	$S = ((\mathbf{sum[X^2]} - \mathbf{sum[X]}^2/\mathbf{N}) / (\mathbf{N}-1))^{1/2}$ $= ((\mathbf{16.0} - \mathbf{64.0}/\mathbf{4}) / (\mathbf{4}-1))^{1/2}$ $= \mathbf{0.0}$	Compute sd of the last 4 measurements.
3	$LCL = \overline{\mathbf{X}} - \mathbf{tS}/\mathbf{N}^{1/2}$ $= \mathbf{2.0} - \mathbf{2.353} * \mathbf{0.0}/\mathbf{4}^{1/2}$ $= \mathbf{2.0}$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$UCL = \overline{\mathbf{X}} + \mathbf{tS}/\mathbf{N}^{1/2}$ $= \mathbf{2.0} + \mathbf{2.353} * \mathbf{0.0}/\mathbf{4}^{1/2}$ $= \mathbf{2.0}$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = \mathbf{N} * (\mathbf{N}-1) / 2$ $= \mathbf{28} * (\mathbf{28}-1) / 2$ $= \mathbf{378}$	Number of sample pairs during trend detection period.
6	$S = \mathbf{0.0}$	Sen's estimator of trend.
7	$var(S) = \mathbf{503.667}$	Variance estimate for slope.
8	$M(S) = (\mathbf{N'} \pm \mathbf{Z}_{.995} * \mathbf{var(S)}^{1/2}) / 2$ $= (\mathbf{378} \pm \mathbf{2.576} * \mathbf{503.667}^{1/2}) / 2$ $= [\ \mathbf{160.094}, \mathbf{217.906}\ ]$	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	$CL(S) = [\ \mathbf{0.0}, \mathbf{0.0}\ ]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Nickel, total (ug/L) at MW-42

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **14.1** / **4** = **3.525**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))$^{1/2}$ = ((**59.13** - **198.81**/**4**) / (**4**-1))$^{1/2}$ = **1.773**	Compute sd of the last 4 measurements.
3	LCL = **$\overline{X}$** - **tS**/**N**$^{1/2}$ = **3.525** - **2.353** * **1.773**/**4**$^{1/2}$ = **1.44**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = **$\overline{X}$** + **tS**/**N**$^{1/2}$ = **3.525** + **2.353** * **1.773**/**4**$^{1/2}$ = **5.61**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **28** * (**28**-1) / 2 = **378**	Number of sample pairs during trend detection period.
6	S = **-0.279**	Sen's estimator of trend.
7	var(S) = **2228.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**$^{1/2}$) / 2 = (**378** ± **2.576** * **2228.333**$^{1/2}$) / 2 = [**128.2**, **249.8**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.925**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Arsenic, total (ug/L) at MW-58

Step	Equation	Description
1	$\bar{X} = \mathbf{sum[X]} / \mathbf{N}$ $= \mathbf{8.0} / \mathbf{4}$ $= \mathbf{2.0}$	Compute the mean of the last 4 measurements.
2	$S = ((\mathbf{sum[X^2]} - \mathbf{sum[X]}^2/\mathbf{N}) / (\mathbf{N}-1))^{1/2}$ $= ((\mathbf{16.0} - \mathbf{64.0}/\mathbf{4}) / (\mathbf{4}-1))^{1/2}$ $= \mathbf{0.0}$	Compute sd of the last 4 measurements.
3	$LCL = \bar{\mathbf{X}} - \mathbf{tS}/\mathbf{N}^{1/2}$ $= \mathbf{2.0} - \mathbf{2.353} * \mathbf{0.0}/\mathbf{4}^{1/2}$ $= \mathbf{2.0}$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$UCL = \bar{\mathbf{X}} + \mathbf{tS}/\mathbf{N}^{1/2}$ $= \mathbf{2.0} + \mathbf{2.353} * \mathbf{0.0}/\mathbf{4}^{1/2}$ $= \mathbf{2.0}$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = \mathbf{N} * (\mathbf{N}-1) / 2$ $= \mathbf{29} * (\mathbf{29}-1) / 2$ $= \mathbf{406}$	Number of sample pairs during trend detection period.
6	$S = \mathbf{0.0}$	Sen's estimator of trend.
7	$var(S) = \mathbf{280.0}$	Variance estimate for slope.
8	$M(S) = (\mathbf{N'} \pm \mathbf{Z}_{.995} * \mathbf{var(S)}^{1/2}) / 2$ $= (\mathbf{406} \pm \mathbf{2.576} * \mathbf{280.0}^{1/2}) / 2$ $= [\ \mathbf{181.448}, \mathbf{224.552}\ ]$	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	$CL(S) = [\ \mathbf{0.0}, \mathbf{0.0}\ ]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Barium, total (ug/L) at MW-58

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **89.7** / **4** = **22.425**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]^2**/**N**) / (**N**-1))^{½} = ((**2016.07** - **8046.09**/**4**) / (**4**-1))^{½} = **1.231**	Compute sd of the last 4 measurements.
3	LCL = $\overline{X}$ - **tS**/**N**^{½} = **22.425** - **2.353** * **1.231**/**4**^{½} = **20.977**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\overline{X}$ + **tS**/**N**^{½} = **22.425** + **2.353** * **1.231**/**4**^{½} = **23.873**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **29** * (**29**-1) / 2 = **406**	Number of sample pairs during trend detection period.
6	S = **-1.237**	Sen's estimator of trend.
7	var(S) = **2841.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**406** ± **2.576** * **2841.0**^{½}) / 2 = [**134.348**, **271.652**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-2.333**, **-0.653**]	Two-sided confidence interval for slope.
10	UCL(S) < 0	**Significant decreasing trend.**

Worksheet 6 - Assessment Monitoring
Cobalt, total (ug/L) at MW-58

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.6** / **4** = **0.4**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2] - sum[X]^2/N**) / (**N**-1))^{½} = ((**0.64** - **2.56**/**4**) / (**4**-1))^{½} = **4.21**x**10^{-9}**	Compute sd of the last 4 measurements.
3	LCL = **$\overline{X}$** - **tS**/**N**^{½} = **0.4** - **2.353** * **4.21**x**10^{-9}**/**4**^{½} = **0.4**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = **$\overline{X}$** + **tS**/**N**^{½} = **0.4** + **2.353** * **4.21**x**10^{-9}**/**4**^{½} = **0.4**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **29** * (**29**-1) / 2 = **406**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **783.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**406** ± **2.576** * **783.667**^{½}) / 2 = [**166.944**, **239.056**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Copper, total (ug/L) at MW-58

Step	Equation	Description
1	$\bar{X}$ = **sum[X]** / **N** = **8.0** / **4** = **2.0**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2] - sum[X]^2/N**) / (**N**-1))$^{1/2}$ = ((**16.0** - **64.0/4**) / (**4**-1))$^{1/2}$ = **0.0**	Compute sd of the last 4 measurements.
3	LCL = **$\bar{X}$ - tS/N**$^{1/2}$ = **2.0** - **2.353** * **0.0/4**$^{1/2}$ = **2.0**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = **$\bar{X}$ + tS/N**$^{1/2}$ = **2.0** + **2.353** * **0.0/4**$^{1/2}$ = **2.0**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **30** * (**30**-1) / 2 = **435**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **1083.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**$^{1/2}$) / 2 = (**435** ± **2.576** * **1083.333**$^{1/2}$) / 2 = [**175.107**, **259.893**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Nickel, total (ug/L) at MW-58

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **58.7** / **4** = **14.675**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]^2**/**N**) / (**N**-1))^{½} = ((**871.11** - **3445.69**/**4**) / (**4**-1))^{½} = **1.797**	Compute sd of the last 4 measurements.
3	LCL = **$\overline{X}$** - **tS**/**N**^{½} = **14.675** - **2.353** * **1.797**/**4**^{½} = **12.561**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = **$\overline{X}$** + **tS**/**N**^{½} = **14.675** + **2.353** * **1.797**/**4**^{½} = **16.789**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **30** * (**30**-1) / 2 = **435**	Number of sample pairs during trend detection period.
6	S = **-0.336**	Sen's estimator of trend.
7	var(S) = **3138.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**435** ± **2.576** * **3138.667**^{½}) / 2 = [**145.341**, **289.659**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-1.27**, **0.391**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Arsenic, total (ug/L) at MW-60

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **8.0** / **4** = **2.0**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))$^{1/2}$ = ((**16.0** - **64.0**/**4**) / (**4**-1))$^{1/2}$ = **0.0**	Compute sd of the last 4 measurements.
3	LCL = $\overline{X}$ - **tS**/**N**$^{1/2}$ = **2.0** - **2.353** * **0.0**/**4**$^{1/2}$ = **2.0**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\overline{X}$ + **tS**/**N**$^{1/2}$ = **2.0** + **2.353** * **0.0**/**4**$^{1/2}$ = **2.0**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **29** * (**29**-1) / 2 = **406**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**$^{1/2}$) / 2 = (**406** ± **2.576** * **0.0**$^{1/2}$) / 2 = [**203.0**, **203.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Barium, total (ug/L) at MW-60

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **947.0** / **4** = **236.75**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))$^{1/2}$ = ((**232877.0** - **896809.0/4**) / (**4**-1))$^{1/2}$ = **53.773**	Compute sd of the last 4 measurements.
3	LCL = **$\overline{X}$ - tS/N**$^{1/2}$ = **236.75 - 2.353** * **53.773/4**$^{1/2}$ = **173.497**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = **$\overline{X}$** + **tS/N**$^{1/2}$ = **236.75** + **2.353** * **53.773/4**$^{1/2}$ = **300.003**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **29** * (**29**-1) / 2 = **406**	Number of sample pairs during trend detection period.
6	S = **7.601**	Sen's estimator of trend.
7	var(S) = **2840.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**$^{1/2}$) / 2 = (**406** ± **2.576** * **2840.0**$^{1/2}$) / 2 = [**134.36**, **271.64**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-1.424**, **13.88**]	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-60

Step	Equation	Description
1	$\bar{X}$ = **sum[X]** / **N** = **9.7** / **4** = **2.425**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X²] - sum[X]²/N**) / (**N**-1))^{½} = ((**47.19 - 94.09/4**) / (**4**-1))^{½} = **2.809**	Compute sd of the last 4 measurements.
3	LCL = **$\bar{X}$ - tS/N**^{½} = **2.425 - 2.353 * 2.809/4**^{½} = **0.0**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = **$\bar{X}$ + tS/N**^{½} = **2.425 + 2.353 * 2.809/4**^{½} = **5.729**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **29** * (**29**-1) / 2 = **406**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **2626.333**	Variance estimate for slope.
8	M(S) = (**N' ± $Z_{.995}$ * var(S)**^{½}) / 2 = (**406 ± 2.576 * 2626.333**^{½}) / 2 = [**136.993**, **269.007**]	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) = [**-0.509**, **0.092**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Copper, total (ug/L) at MW-60

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **8.0** / **4** = **2.0**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))$^{1/2}$ = ((**16.0** - **64.0**/**4**) / (**4**-1))$^{1/2}$ = **0.0**	Compute sd of the last 4 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**$^{1/2}$ = **2.0** - **2.353** * **0.0**/**4**$^{1/2}$ = **2.0**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**$^{1/2}$ = **2.0** + **2.353** * **0.0**/**4**$^{1/2}$ = **2.0**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **29** * (**29**-1) / 2 = **406**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **1407.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**$^{1/2}$) / 2 = (**406** ± **2.576** * **1407.333**$^{1/2}$) / 2 = [**154.681**, **251.319**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Nickel, total (ug/L) at MW-60

Step	Equation	Description
1	$\bar{X}$ = **sum[X]** / **N** = **69.1** / **4** = **17.275**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]^2**/**N**) / (**N**-1))^{½} = ((**1685.85** - **4774.81**/**4**) / (**4**-1))^{½} = **12.808**	Compute sd of the last 4 measurements.
3	LCL = **$\bar{X}$** - **tS**/**N**^{½} = **17.275** - **2.353** * **12.808**/**4**^{½} = **2.209**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = **$\bar{X}$** + **tS**/**N**^{½} = **17.275** + **2.353** * **12.808**/**4**^{½} = **32.341**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **30** * (**30**-1) / 2 = **435**	Number of sample pairs during trend detection period.
6	S = **0.44**	Sen's estimator of trend.
7	var(S) = **3113.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **$Z_{.995}$** * **var(S)**^{½}) / 2 = (**435** ± **2.576** * **3113.333**^{½}) / 2 = [**145.633**, **289.367**]	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) = [**-0.947**, **2.189**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Arsenic, total (ug/L) at MW-61

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **8.0** / **4** = **2.0**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2] - sum[X]^2/N**) / (**N**-1))$^{1/2}$ = ((**16.0** - **64.0/4**) / (**4**-1))$^{1/2}$ = **0.0**	Compute sd of the last 4 measurements.
3	LCL = **$\overline{X}$ - tS/N**$^{1/2}$ = **2.0** - **2.353** * **0.0/4**$^{1/2}$ = **2.0**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = **$\overline{X}$ + tS/N**$^{1/2}$ = **2.0** + **2.353** * **0.0/4**$^{1/2}$ = **2.0**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **29** * (**29**-1) / 2 = **406**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **280.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**$^{1/2}$) / 2 = (**406** ± **2.576** * **280.0**$^{1/2}$) / 2 = [**181.448**, **224.552**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Barium, total (ug/L) at MW-61

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **193.6** / **4** = **48.4**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2] - sum[X]^2/N**) / (**N**-1))$^{1/2}$ = ((**9393.4 - 37480.96/4**) / (**4**-1))$^{1/2}$ = **2.778**	Compute sd of the last 4 measurements.
3	LCL = **$\overline{X}$ - tS/N**$^{1/2}$ = **48.4 - 2.353 * 2.778/4**$^{1/2}$ = **45.132**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = **$\overline{X}$ + tS/N**$^{1/2}$ = **48.4 + 2.353 * 2.778/4**$^{1/2}$ = **51.668**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **29** * (**29**-1) / 2 = **406**	Number of sample pairs during trend detection period.
6	S = **0.353**	Sen's estimator of trend.
7	var(S) = **2841.0**	Variance estimate for slope.
8	M(S) = (**N' ± Z**$_{.995}$ * **var(S)**$^{1/2}$) / 2 = (**406 ± 2.576 * 2841.0**$^{1/2}$) / 2 = [**134.348**, **271.652**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-1.923**, **1.683**]	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-61

Step	Equation	Description
1	$\bar{X}$ = **sum[X]** / **N** = **1.6** / **4** = **0.4**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2] - sum[X]^2/N**) / (**N**-1))^{½} = ((**0.64** - **2.56/4**) / (**4**-1))^{½} = **4.21**x**10^{-9}**	Compute sd of the last 4 measurements.
3	LCL = **$\bar{X}$** - **tS**/**N**^{½} = **0.4** - **2.353** * **4.21**x**10^{-9}**/**4**^{½} = **0.4**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = **$\bar{X}$** + **tS**/**N**^{½} = **0.4** + **2.353** * **4.21**x**10^{-9}**/**4**^{½} = **0.4**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **31** * (**31**-1) / 2 = **465**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **2364.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**465** ± **2.576** * **2364.0**^{½}) / 2 = [**169.876**, **295.124**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.483**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Copper, total (ug/L) at MW-61

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N**	Compute the mean of the last 4 measurements.
	= **11.0** / **4**	
	= **2.75**	
2	S = ((**sum[X^2]** - **sum[X]^2**/**N**) / (**N**-1))$^{1/2}$	Compute sd of the last 4 measurements.
	= ((**37.0** - **121.0**/**4**) / (**4**-1))$^{1/2}$	
	= **1.5**	
3	LCL = **$\overline{X}$** - **tS**/**N**$^{1/2}$	Compute lower confidence limit for the mean of the last 4 measurements.
	= **2.75** - **2.353** * **1.5**/**4**$^{1/2}$	
	= **0.986**	
4	UCL = **$\overline{X}$** + **tS**/**N**$^{1/2}$	Compute upper confidence limit for the mean of the last 4 measurements.
	= **2.75** + **2.353** * **1.5**/**4**$^{1/2}$	
	= **4.514**	
5	N' = **N** * (**N**-1) / 2	Number of sample pairs during trend detection period.
	= **30** * (**30**-1) / 2	
	= **435**	
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **1308.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **$Z_{.995}$** * **var(S)**$^{1/2}$) / 2	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.
	= (**435** ± **2.576** * **1308.333**$^{1/2}$) / 2	
	= [**170.912**, **264.088**]	
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Nickel, total (ug/L) at MW-61

Step	Equation	Description
1	$\bar{X}$ = **sum[X]** / **N** = **17.2** / **4** = **4.3**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2] - sum[X]^2/N**) / (**N**-1))^{½} = ((**81.44 - 295.84/4**) / (**4**-1))^{½} = **1.579**	Compute sd of the last 4 measurements.
3	LCL = **$\bar{X}$ - tS/N**^{½} = **4.3** - **2.353** * **1.579/4**^{½} = **2.443**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = **$\bar{X}$ + tS/N**^{½} = **4.3** + **2.353** * **1.579/4**^{½} = **6.157**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **31** * (**31**-1) / 2 = **465**	Number of sample pairs during trend detection period.
6	S = **-0.945**	Sen's estimator of trend.
7	var(S) = **3431.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**465** ± **2.576** * **3431.333**^{½}) / 2 = [**157.052**, **307.948**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-1.818**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Arsenic, total (ug/L) at MW-62R

Step	Equation	Description
1	$\bar{X} = \mathbf{sum[X]} / \mathbf{N}$ $= \mathbf{8.0} / \mathbf{4}$ $= \mathbf{2.0}$	Compute the mean of the last 4 measurements.
2	$S = ((\mathbf{sum[X^2] - sum[X]^2/N}) / (\mathbf{N}-1))^{1/2}$ $= ((\mathbf{16.0 - 64.0/4}) / (\mathbf{4}-1))^{1/2}$ $= \mathbf{0.0}$	Compute sd of the last 4 measurements.
3	$LCL = \bar{\mathbf{X}} - \mathbf{tS/N}^{1/2}$ $= \mathbf{2.0} - \mathbf{2.353} * \mathbf{0.0/4}^{1/2}$ $= \mathbf{2.0}$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$UCL = \bar{\mathbf{X}} + \mathbf{tS/N}^{1/2}$ $= \mathbf{2.0} + \mathbf{2.353} * \mathbf{0.0/4}^{1/2}$ $= \mathbf{2.0}$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = \mathbf{N} * (\mathbf{N}-1) / 2$ $= \mathbf{32} * (\mathbf{32}-1) / 2$ $= \mathbf{496}$	Number of sample pairs during trend detection period.
6	$S = \mathbf{0.0}$	Sen's estimator of trend.
7	$var(S) = \mathbf{341.0}$	Variance estimate for slope.
8	$M(S) = (\mathbf{N'} \pm \mathbf{Z}_{.995} * \mathbf{var(S)}^{1/2}) / 2$ $= (\mathbf{496} \pm \mathbf{2.576} * \mathbf{341.0}^{1/2}) / 2$ $= [\ \mathbf{224.216}, \mathbf{271.784}\ ]$	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	$CL(S) = [\ \mathbf{0.0}, \mathbf{0.0}\ ]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Barium, total (ug/L) at MW-62R

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4175.0** / **4** = **1043.75**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]^2**/**N**) / (**N**-1))$^{1/2}$ = ((**4.38**x**10^6** - **1.74**x**10^7**/**4**) / (**4**-1))$^{1/2}$ = **94.637**	Compute sd of the last 4 measurements.
3	LCL = **$\overline{X}$** - **tS**/**N**$^{1/2}$ = **1043.75** - **2.353** * **94.637**/**4**$^{1/2}$ = **932.429**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = **$\overline{X}$** + **tS**/**N**$^{1/2}$ = **1043.75** + **2.353** * **94.637**/**4**$^{1/2}$ = **1155.071**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **32** * (**32**-1) / 2 = **496**	Number of sample pairs during trend detection period.
6	S = **29.987**	Sen's estimator of trend.
7	var(S) = **3797.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**$^{1/2}$) / 2 = (**496** ± **2.576** * **3797.0**$^{1/2}$) / 2 = [**168.634**, **327.366**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**20.763**, **39.125**]	Two-sided confidence interval for slope.
10	LCL(S) > 0	**Significant increasing trend.**

Worksheet 6 - Assessment Monitoring
Cobalt, total (ug/L) at MW-62R

Step	Equation	Description
1	$\bar{X}$ = **sum[X]** / **N** = **1.6** / **4** = **0.4**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2] - sum[X]^2/N**) / (**N**-1))$^{1/2}$ = ((**0.64** - **2.56/4**) / (**4**-1))$^{1/2}$ = **4.21x10^{-9}**	Compute sd of the last 4 measurements.
3	LCL = $\bar{X}$ - **tS/N**$^{1/2}$ = **0.4** - **2.353** * **4.21x10^{-9}/4**$^{1/2}$ = **0.4**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\bar{X}$ + **tS/N**$^{1/2}$ = **0.4** + **2.353** * **4.21x10^{-9}/4**$^{1/2}$ = **0.4**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **32** * (**32**-1) / 2 = **496**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **960.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**$^{1/2}$) / 2 = (**496** ± **2.576** * **960.667**$^{1/2}$) / 2 = [**208.079**, **287.921**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Copper, total (ug/L) at MW-62R

Step	Equation	Description
1	$\bar{X} = \mathbf{sum[X]} / \mathbf{N}$ $= \mathbf{8.0} / \mathbf{4}$ $= \mathbf{2.0}$	Compute the mean of the last 4 measurements.
2	$S = ((\mathbf{sum[X^2]} - \mathbf{sum[X]}^2/\mathbf{N}) / (\mathbf{N}-1))^{1/2}$ $= ((\mathbf{16.0} - \mathbf{64.0/4}) / (\mathbf{4}-1))^{1/2}$ $= \mathbf{0.0}$	Compute sd of the last 4 measurements.
3	$LCL = \bar{X} - tS/N^{1/2}$ $= \mathbf{2.0} - \mathbf{2.353} * \mathbf{0.0/4}^{1/2}$ $= \mathbf{2.0}$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$UCL = \bar{X} + tS/N^{1/2}$ $= \mathbf{2.0} + \mathbf{2.353} * \mathbf{0.0/4}^{1/2}$ $= \mathbf{2.0}$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = \mathbf{N} * (\mathbf{N}-1) / 2$ $= \mathbf{32} * (\mathbf{32}-1) / 2$ $= \mathbf{496}$	Number of sample pairs during trend detection period.
6	$S = \mathbf{0.0}$	Sen's estimator of trend.
7	$var(S) = \mathbf{960.667}$	Variance estimate for slope.
8	$M(S) = (\mathbf{N'} \pm \mathbf{Z}_{.995} * \mathbf{var(S)}^{1/2}) / 2$ $= (\mathbf{496} \pm \mathbf{2.576} * \mathbf{960.667}^{1/2}) / 2$ $= [\ \mathbf{208.079}, \mathbf{287.921}\ ]$	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	$CL(S) = [\ \mathbf{0.0}, \mathbf{0.0}\ ]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Nickel, total (ug/L) at MW-62R

Step	Equation	Description
1	$\bar{X}$ = **sum[X]** / **N** = **8.0** / **4** = **2.0**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2] - sum[X]^2**/**N**) / (**N**-1))^{½} = ((**16.0** - **64.0**/**4**) / (**4**-1))^{½} = **0.0**	Compute sd of the last 4 measurements.
3	LCL = **$\bar{X}$** - **tS**/**N**^{½} = **2.0** - **2.353** * **0.0**/**4**^{½} = **2.0**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = **$\bar{X}$** + **tS**/**N**^{½} = **2.0** + **2.353** * **0.0**/**4**^{½} = **2.0**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **32** * (**32**-1) / 2 = **496**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **2544.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**496** ± **2.576** * **2544.0**^{½}) / 2 = [**183.036**, **312.964**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.503**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Arsenic, total (ug/L) at MW-80

Step	Equation	Description
1	$\bar{X} = \textbf{sum[X]} / \textbf{N}$ $= \textbf{10.6} / \textbf{4}$ $= \textbf{2.65}$	Compute the mean of the last 4 measurements.
2	$S = ((\textbf{sum[X}^2\textbf{]} - \textbf{sum[X]}^2/\textbf{N}) / (\textbf{N}-1))^{1/2}$ $= ((\textbf{33.16} - \textbf{112.36}/\textbf{4}) / (\textbf{4}-1))^{1/2}$ $= \textbf{1.3}$	Compute sd of the last 4 measurements.
3	$LCL = \bar{X} - tS/N^{1/2}$ $= \textbf{2.65} - \textbf{2.353} * \textbf{1.3}/\textbf{4}^{1/2}$ $= \textbf{1.121}$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$UCL = \bar{X} + tS/N^{1/2}$ $= \textbf{2.65} + \textbf{2.353} * \textbf{1.3}/\textbf{4}^{1/2}$ $= \textbf{4.179}$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = \textbf{N} * (\textbf{N}-1) / 2$ $= \textbf{30} * (\textbf{30}-1) / 2$ $= \textbf{435}$	Number of sample pairs during trend detection period.
6	$S = \textbf{-0.729}$	Sen's estimator of trend.
7	$var(S) = \textbf{2733.333}$	Variance estimate for slope.
8	$M(S) = (\textbf{N'} \pm \textbf{Z}_{.995} * \textbf{var(S)}^{1/2}) / 2$ $= (\textbf{435} \pm \textbf{2.576} * \textbf{2733.333}^{1/2}) / 2$ $= [\ \textbf{150.162}, \textbf{284.838}\ ]$	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	$CL(S) = [\ \textbf{-3.834}, \textbf{0.0}\ ]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Barium, total (ug/L) at MW-80

Step	Equation	Description
1	$\bar{X} = \mathbf{sum[X]} / \mathbf{N}$ $= \mathbf{557.0} / \mathbf{4}$ $= \mathbf{139.25}$	Compute the mean of the last 4 measurements.
2	$S = ((\mathbf{sum[X^2]} - \mathbf{sum[X]}^2/\mathbf{N}) / (\mathbf{N}-1))^{1/2}$ $= ((\mathbf{77727.0} - \mathbf{310249.0/4}) / (\mathbf{4}-1))^{1/2}$ $= \mathbf{7.411}$	Compute sd of the last 4 measurements.
3	$LCL = \bar{\mathbf{X}} - \mathbf{tS/N}^{1/2}$ $= \mathbf{139.25 - 2.353 * 7.411/4}^{1/2}$ $= \mathbf{130.533}$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$UCL = \bar{\mathbf{X}} + \mathbf{tS/N}^{1/2}$ $= \mathbf{139.25 + 2.353 * 7.411/4}^{1/2}$ $= \mathbf{147.967}$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = \mathbf{N} * (\mathbf{N}-1) / 2$ $= \mathbf{30} * (\mathbf{30}-1) / 2$ $= \mathbf{435}$	Number of sample pairs during trend detection period.
6	$S = \mathbf{-18.389}$	Sen's estimator of trend.
7	$var(S) = \mathbf{3136.667}$	Variance estimate for slope.
8	$M(S) = (\mathbf{N'} \pm \mathbf{Z}_{.995} * \mathbf{var(S)}^{1/2}) / 2$ $= (\mathbf{435} \pm \mathbf{2.576} * \mathbf{3136.667}^{1/2}) / 2$ $= [\ \mathbf{145.364}, \mathbf{289.636}\ ]$	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	$CL(S) = [\ \mathbf{-34.563}, \mathbf{-10.504}\ ]$	Two-sided confidence interval for slope.
10	$UCL(S) < 0$	**Significant decreasing trend.**

Worksheet 6 - Assessment Monitoring
Cobalt, total (ug/L) at MW-80

Step	Equation	Description
1	$\bar{X}$ = **sum[X]** / **N** = **4.0** / **4** = **1.0**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2] - sum[X]^2/N**) / (**N**-1))^{½} = ((**4.26** - **16.0/4**) / (**4**-1))^{½} = **0.294**	Compute sd of the last 4 measurements.
3	LCL = **$\bar{X}$ - tS/N^{½}** = **1.0** - **2.353** * **0.294/4^{½}** = **0.654**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = **$\bar{X}$ + tS/N^{½}** = **1.0** + **2.353** * **0.294/4^{½}** = **1.346**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **30** * (**30**-1) / 2 = **435**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **2974.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**435** ± **2.576** * **2974.667**^{½}) / 2 = [**147.252**, **287.748**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.202**, **0.117**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Copper, total (ug/L) at MW-80

Step	Equation	Description
1	$\bar{X}$ = **sum[X]** / **N** = **8.0** / **4** = **2.0**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))$^{1/2}$ = ((**16.0** - **64.0**/**4**) / (**4**-1))$^{1/2}$ = **0.0**	Compute sd of the last 4 measurements.
3	LCL = **$\bar{X}$** - **tS/N**$^{1/2}$ = **2.0** - **2.353** * **0.0/4**$^{1/2}$ = **2.0**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = **$\bar{X}$** + **tS/N**$^{1/2}$ = **2.0** + **2.353** * **0.0/4**$^{1/2}$ = **2.0**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **30** * (**30**-1) / 2 = **435**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **2045.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**$^{1/2}$) / 2 = (**435** ± **2.576** * **2045.0**$^{1/2}$) / 2 = [**159.254**, **275.746**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.775**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Nickel, total (ug/L) at MW-80

Step	Equation	Description
1	$\bar{X}$ = **sum[X]** / **N** = **8.0** / **4** = **2.0**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2] - sum[X]^2/N**) / (**N**-1))^{½} = ((**16.0** - **64.0/4**) / (**4**-1))^{½} = **0.0**	Compute sd of the last 4 measurements.
3	LCL = **$\bar{X}$ - tS/N**^{½} = **2.0** - **2.353** * **0.0/4**^{½} = **2.0**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = **$\bar{X}$ + tS/N**^{½} = **2.0** + **2.353** * **0.0/4**^{½} = **2.0**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **30** * (**30**-1) / 2 = **435**	Number of sample pairs during trend detection period.
6	S = **-0.915**	Sen's estimator of trend.
7	var(S) = **3048.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**435** ± **2.576** * **3048.667**^{½}) / 2 = [**146.383**, **288.617**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-1.762**, **-0.146**]	Two-sided confidence interval for slope.
10	UCL(S) < 0	**Significant decreasing trend.**

Worksheet 6 - Assessment Monitoring
Arsenic, total (ug/L) at SW-101R

Step	Equation	Description
1	$\bar{X} = \mathbf{sum[X]} / \mathbf{N}$ $= \mathbf{16.5} / \mathbf{4}$ $= \mathbf{4.125}$	Compute the mean of the last 4 measurements.
2	$S = ((\mathbf{sum[X^2]} - \mathbf{sum[X]^2/N}) / (\mathbf{N}-1))^{1/2}$ $= ((\mathbf{75.39} - \mathbf{272.25/4}) / (\mathbf{4}-1))^{1/2}$ $= \mathbf{1.563}$	Compute sd of the last 4 measurements.
3	$LCL = \bar{\mathbf{X}} - \mathbf{tS/N}^{1/2}$ $= \mathbf{4.125} - \mathbf{2.353} * \mathbf{1.563/4}^{1/2}$ $= \mathbf{2.287}$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$UCL = \bar{\mathbf{X}} + \mathbf{tS/N}^{1/2}$ $= \mathbf{4.125} + \mathbf{2.353} * \mathbf{1.563/4}^{1/2}$ $= \mathbf{5.963}$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = \mathbf{N} * (\mathbf{N}-1) / 2$ $= \mathbf{10} * (\mathbf{10}-1) / 2$ $= \mathbf{45}$	Number of sample pairs during trend detection period.
6	$S = \mathbf{-0.357}$	Sen's estimator of trend.
7	$var(S) = \mathbf{123.0}$	Variance estimate for slope.
8	$M(S) = (\mathbf{N'} \pm \mathbf{Z}_{.995} * \mathbf{var(S)}^{1/2}) / 2$ $= (\mathbf{45} \pm \mathbf{2.576} * \mathbf{123.0}^{1/2}) / 2$ $= [\ \mathbf{8.215}, \mathbf{36.785}\ ]$	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	$CL(S) = [\ \mathbf{-3.737}, \mathbf{1.744}\ ]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Barium, total (ug/L) at SW-101R

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **991.0** / **4** = **247.75**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]^2**/**N**) / (**N**-1))$^{1/2}$ = ((**246053.0** - **982081.0**/**4**) / (**4**-1))$^{1/2}$ = **13.326**	Compute sd of the last 4 measurements.
3	LCL = $\overline{X}$ - **tS**/**N**$^{1/2}$ = **247.75** - **2.353** * **13.326**/**4**$^{1/2}$ = **232.075**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\overline{X}$ + **tS**/**N**$^{1/2}$ = **247.75** + **2.353** * **13.326**/**4**$^{1/2}$ = **263.425**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **10** * (**10**-1) / 2 = **45**	Number of sample pairs during trend detection period.
6	S = **0.675**	Sen's estimator of trend.
7	var(S) = **124.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**$^{1/2}$) / 2 = (**45** ± **2.576** * **124.0**$^{1/2}$) / 2 = [**8.157**, **36.843**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-31.011**, **26.915**]	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 SW-101R

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **13.7** / **4** = **3.425**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))$^{1/2}$ = ((**48.31** - **187.69**/**4**) / (**4**-1))$^{1/2}$ = **0.68**	Compute sd of the last 4 measurements.
3	LCL = $\overline{X}$ - **tS**/**N**$^{1/2}$ = **3.425** - **2.353** * **0.68**/**4**$^{1/2}$ = **2.625**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\overline{X}$ + **tS**/**N**$^{1/2}$ = **3.425** + **2.353** * **0.68**/**4**$^{1/2}$ = **4.225**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **10** * (**10**-1) / 2 = **45**	Number of sample pairs during trend detection period.
6	S = **0.025**	Sen's estimator of trend.
7	var(S) = **125.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**$^{1/2}$) / 2 = (**45** ± **2.576** * **125.0**$^{1/2}$) / 2 = [**8.1**, **36.9**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-1.386**, **1.258**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Copper, total (ug/L) at SW-101R

Step	Equation	Description
1	$\overline{X} = \mathbf{sum[X]} / \mathbf{N}$ $= \mathbf{8.0} / \mathbf{4}$ $= \mathbf{2.0}$	Compute the mean of the last 4 measurements.
2	$S = ((\mathbf{sum[X^2]} - \mathbf{sum[X]}^2/\mathbf{N}) / (\mathbf{N}-1))^{1/2}$ $= ((\mathbf{16.0} - \mathbf{64.0/4}) / (\mathbf{4}-1))^{1/2}$ $= \mathbf{0.0}$	Compute sd of the last 4 measurements.
3	$LCL = \mathbf{\overline{X} - tS/N}^{1/2}$ $= \mathbf{2.0} - \mathbf{2.353} * \mathbf{0.0/4}^{1/2}$ $= \mathbf{2.0}$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$UCL = \mathbf{\overline{X} + tS/N}^{1/2}$ $= \mathbf{2.0} + \mathbf{2.353} * \mathbf{0.0/4}^{1/2}$ $= \mathbf{2.0}$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = \mathbf{N} * (\mathbf{N}-1) / 2$ $= \mathbf{10} * (\mathbf{10}-1) / 2$ $= \mathbf{45}$	Number of sample pairs during trend detection period.
6	$S = \mathbf{0.0}$	Sen's estimator of trend.
7	$var(S) = \mathbf{0.0}$	Variance estimate for slope.
8	$M(S) = (\mathbf{N'} \pm \mathbf{Z}_{.995} * \mathbf{var(S)}^{1/2}) / 2$ $= (\mathbf{45} \pm \mathbf{2.576} * \mathbf{0.0}^{1/2}) / 2$ $= [\ \mathbf{22.5}, \mathbf{22.5}\ ]$	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	$CL(S) = [\ \mathbf{0.0}, \mathbf{0.0}\ ]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Nickel, total (ug/L) at SW-101R

Step	Equation	Description
1	$\bar{X}$ = **sum[X]** / **N** = **13.6** / **4** = **3.4**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]^2**/**N**) / (**N**-1))^{½} = ((**54.1** - **184.96**/**4**) / (**4**-1))^{½} = **1.619**	Compute sd of the last 4 measurements.
3	LCL = **$\bar{X}$** - **tS**/**N**^{½} = **3.4** - **2.353** * **1.619**/**4**^{½} = **1.496**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = **$\bar{X}$** + **tS**/**N**^{½} = **3.4** + **2.353** * **1.619**/**4**^{½} = **5.304**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **10** * (**10**-1) / 2 = **45**	Number of sample pairs during trend detection period.
6	S = **-0.149**	Sen's estimator of trend.
7	var(S) = **116.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**45** ± **2.576** * **116.333**^{½}) / 2 = [**8.608**, **36.392**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-2.526**, **1.124**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Attachment D

Summary Tables and Graphs for the Interwell Comparisons – Old Landfill

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Antimony, total	ug/L	MW-39	09/24/2014	ND	2.0000		
Antimony, total	ug/L	MW-39	12/05/2014	ND	2.0000		
Antimony, total	ug/L	MW-39	03/11/2015	ND	2.0000		
Antimony, total	ug/L	MW-39	06/16/2015	ND	2.0000		
Antimony, total	ug/L	MW-39	09/17/2015	ND	2.0000		
Antimony, total	ug/L	MW-39	03/22/2016	ND	2.0000		
Antimony, total	ug/L	MW-39	09/15/2016	ND	2.0000		
Antimony, total	ug/L	MW-39	03/23/2017	ND	2.0000		
Antimony, total	ug/L	MW-39	09/08/2017	ND	2.0000		
Antimony, total	ug/L	MW-39	03/19/2018	ND	2.0000		
Antimony, total	ug/L	MW-39	09/11/2018	ND	2.0000		
Antimony, total	ug/L	MW-39	03/26/2019	ND	2.0000		
Antimony, total	ug/L	MW-39	09/04/2019	ND	2.0000		
Antimony, total	ug/L	MW-39	03/26/2020	ND	2.0000		
Antimony, total	ug/L	MW-39	09/15/2020	ND	2.0000		
Antimony, total	ug/L	MW-39	03/02/2021	ND	2.0000		
Antimony, total	ug/L	MW-39	09/07/2021	ND	2.0000		
Antimony, total	ug/L	MW-39	03/24/2022	ND	2.0000		
Antimony, total	ug/L	MW-39	08/31/2022	ND	2.0000		
Antimony, total	ug/L	MW-39	03/02/2023	ND	2.0000		
Antimony, total	ug/L	MW-39	09/12/2023	ND	2.0000		
Antimony, total	ug/L	MW-39	03/04/2024	ND	2.0000		
Antimony, total	ug/L	MW-39	09/23/2024	ND	2.0000		
Arsenic, total	ug/L	MW-39	09/24/2014	ND	4.0000		
Arsenic, total	ug/L	MW-39	12/05/2014	ND	4.0000		
Arsenic, total	ug/L	MW-39	03/11/2015	ND	4.0000		
Arsenic, total	ug/L	MW-39	06/16/2015	ND	4.0000		
Arsenic, total	ug/L	MW-39	09/17/2015	ND	4.0000		
Arsenic, total	ug/L	MW-39	03/22/2016	ND	4.0000		
Arsenic, total	ug/L	MW-39	09/15/2016	ND	4.0000		
Arsenic, total	ug/L	MW-39	03/23/2017	ND	4.0000		
Arsenic, total	ug/L	MW-39	09/08/2017	ND	4.0000		
Arsenic, total	ug/L	MW-39	03/19/2018	ND	4.0000		
Arsenic, total	ug/L	MW-39	09/11/2018	ND	4.0000		
Arsenic, total	ug/L	MW-39	03/26/2019	ND	4.0000		
Arsenic, total	ug/L	MW-39	09/04/2019	ND	4.0000		
Arsenic, total	ug/L	MW-39	03/26/2020	ND	4.0000		
Arsenic, total	ug/L	MW-39	09/15/2020	ND	4.0000		
Arsenic, total	ug/L	MW-39	03/02/2021	ND	4.0000		
Arsenic, total	ug/L	MW-39	09/07/2021	ND	4.0000		
Arsenic, total	ug/L	MW-39	03/24/2022	ND	4.0000		
Arsenic, total	ug/L	MW-39	08/31/2022	ND	4.0000		
Arsenic, total	ug/L	MW-39	03/02/2023	ND	4.0000		
Arsenic, total	ug/L	MW-39	09/12/2023	ND	4.0000		
Arsenic, total	ug/L	MW-39	03/04/2024	ND	4.0000		
Arsenic, total	ug/L	MW-39	09/23/2024	ND	4.0000		
Barium, total	ug/L	MW-39	09/24/2014		60.6000		
Barium, total	ug/L	MW-39	12/05/2014		139.0000		
Barium, total	ug/L	MW-39	03/11/2015		136.0000		
Barium, total	ug/L	MW-39	06/16/2015		148.0000		
Barium, total	ug/L	MW-39	09/17/2015		128.0000		
Barium, total	ug/L	MW-39	03/22/2016		123.0000		
Barium, total	ug/L	MW-39	09/15/2016		103.0000		
Barium, total	ug/L	MW-39	03/23/2017		129.0000		
Barium, total	ug/L	MW-39	09/08/2017		117.0000		
Barium, total	ug/L	MW-39	03/19/2018		131.0000		
Barium, total	ug/L	MW-39	09/11/2018		114.0000		
Barium, total	ug/L	MW-39	03/26/2019		121.0000		
Barium, total	ug/L	MW-39	09/04/2019		138.0000		
Barium, total	ug/L	MW-39	03/26/2020		150.0000		
Barium, total	ug/L	MW-39	09/15/2020		136.0000		
Barium, total	ug/L	MW-39	03/02/2021		125.0000		
Barium, total	ug/L	MW-39	09/07/2021		141.0000		
Barium, total	ug/L	MW-39	03/24/2022		137.0000		
Barium, total	ug/L	MW-39	08/31/2022		132.0000		
Barium, total	ug/L	MW-39	03/02/2023		134.0000		
Barium, total	ug/L	MW-39	09/12/2023		133.0000		
Barium, total	ug/L	MW-39	03/04/2024		128.0000		
Barium, total	ug/L	MW-39	09/23/2024		119.0000		
Beryllium, total	ug/L	MW-39	09/24/2014	ND	4.0000		
Beryllium, total	ug/L	MW-39	12/05/2014	ND	4.0000		
Beryllium, total	ug/L	MW-39	03/11/2015	ND	4.0000		
Beryllium, total	ug/L	MW-39	06/16/2015	ND	4.0000		
Beryllium, total	ug/L	MW-39	09/17/2015	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-39	03/22/2016	ND	4.0000		
Beryllium, total	ug/L	MW-39	09/15/2016	ND	4.0000		
Beryllium, total	ug/L	MW-39	03/23/2017	ND	4.0000		
Beryllium, total	ug/L	MW-39	09/08/2017	ND	4.0000		
Beryllium, total	ug/L	MW-39	03/19/2018	ND	4.0000		
Beryllium, total	ug/L	MW-39	09/11/2018	ND	4.0000		
Beryllium, total	ug/L	MW-39	03/26/2019	ND	4.0000		
Beryllium, total	ug/L	MW-39	09/04/2019	ND	4.0000		
Beryllium, total	ug/L	MW-39	03/26/2020	ND	4.0000		
Beryllium, total	ug/L	MW-39	09/15/2020	ND	4.0000		
Beryllium, total	ug/L	MW-39	03/02/2021	ND	4.0000		
Beryllium, total	ug/L	MW-39	09/07/2021	ND	4.0000		
Beryllium, total	ug/L	MW-39	03/24/2022	ND	4.0000		
Beryllium, total	ug/L	MW-39	08/31/2022	ND	4.0000		
Beryllium, total	ug/L	MW-39	03/02/2023	ND	4.0000		
Beryllium, total	ug/L	MW-39	09/12/2023	ND	4.0000		
Beryllium, total	ug/L	MW-39	03/04/2024	ND	4.0000		
Beryllium, total	ug/L	MW-39	09/23/2024	ND	4.0000		
Cadmium, total	ug/L	MW-39	09/24/2014	ND	0.8000		
Cadmium, total	ug/L	MW-39	12/05/2014	ND	0.8000		
Cadmium, total	ug/L	MW-39	03/11/2015	ND	0.8000		
Cadmium, total	ug/L	MW-39	06/16/2015	ND	0.8000		
Cadmium, total	ug/L	MW-39	09/17/2015	ND	0.8000		
Cadmium, total	ug/L	MW-39	03/22/2016	ND	0.8000		
Cadmium, total	ug/L	MW-39	09/15/2016	ND	0.8000		
Cadmium, total	ug/L	MW-39	03/23/2017	ND	0.8000		
Cadmium, total	ug/L	MW-39	09/08/2017	ND	0.8000		
Cadmium, total	ug/L	MW-39	03/19/2018	ND	0.8000		
Cadmium, total	ug/L	MW-39	09/11/2018	ND	0.8000		
Cadmium, total	ug/L	MW-39	03/26/2019	ND	0.8000		
Cadmium, total	ug/L	MW-39	09/04/2019	ND	0.8000		
Cadmium, total	ug/L	MW-39	03/26/2020	ND	0.8000		
Cadmium, total	ug/L	MW-39	09/15/2020	ND	0.8000		
Cadmium, total	ug/L	MW-39	03/02/2021	ND	0.8000		
Cadmium, total	ug/L	MW-39	09/07/2021	ND	0.8000		
Cadmium, total	ug/L	MW-39	03/24/2022	ND	0.8000		
Cadmium, total	ug/L	MW-39	08/31/2022	ND	0.8000		
Cadmium, total	ug/L	MW-39	03/02/2023	ND	0.8000		
Cadmium, total	ug/L	MW-39	09/12/2023	ND	0.8000		
Cadmium, total	ug/L	MW-39	03/04/2024	ND	0.8000		
Cadmium, total	ug/L	MW-39	09/23/2024	ND	0.8000		
Chromium, total	ug/L	MW-39	09/24/2014	ND	8.0000		
Chromium, total	ug/L	MW-39	12/05/2014	ND	8.0000		
Chromium, total	ug/L	MW-39	03/11/2015	ND	8.0000		
Chromium, total	ug/L	MW-39	06/16/2015	ND	8.0000		
Chromium, total	ug/L	MW-39	09/17/2015	ND	8.0000		
Chromium, total	ug/L	MW-39	03/22/2016	ND	8.0000		
Chromium, total	ug/L	MW-39	09/15/2016	ND	8.0000		
Chromium, total	ug/L	MW-39	03/23/2017	ND	8.0000		
Chromium, total	ug/L	MW-39	09/08/2017	ND	8.0000		
Chromium, total	ug/L	MW-39	03/19/2018	ND	8.0000		
Chromium, total	ug/L	MW-39	09/11/2018	ND	8.0000		
Chromium, total	ug/L	MW-39	03/26/2019	ND	8.0000		
Chromium, total	ug/L	MW-39	09/04/2019	ND	8.0000		
Chromium, total	ug/L	MW-39	03/26/2020	ND	8.0000		
Chromium, total	ug/L	MW-39	09/15/2020	ND	8.0000		
Chromium, total	ug/L	MW-39	03/02/2021	ND	8.0000		
Chromium, total	ug/L	MW-39	09/07/2021	ND	8.0000		
Chromium, total	ug/L	MW-39	03/24/2022	ND	8.0000		
Chromium, total	ug/L	MW-39	08/31/2022	ND	8.0000		
Chromium, total	ug/L	MW-39	03/02/2023	ND	8.0000		
Chromium, total	ug/L	MW-39	09/12/2023	ND	8.0000		
Chromium, total	ug/L	MW-39	03/04/2024	ND	8.0000		
Chromium, total	ug/L	MW-39	09/23/2024	ND	8.0000		
Cobalt, total	ug/L	MW-39	09/24/2014	ND	0.8000		
Cobalt, total	ug/L	MW-39	12/05/2014	ND	0.8000		
Cobalt, total	ug/L	MW-39	03/11/2015	ND	0.8000		
Cobalt, total	ug/L	MW-39	06/16/2015	ND	0.8000		
Cobalt, total	ug/L	MW-39	09/17/2015	ND	0.8000		
Cobalt, total	ug/L	MW-39	03/22/2016	ND	0.8000		
Cobalt, total	ug/L	MW-39	09/15/2016	ND	0.8000		
Cobalt, total	ug/L	MW-39	03/23/2017	ND	0.8000		
Cobalt, total	ug/L	MW-39	09/08/2017	ND	0.8000		
Cobalt, total	ug/L	MW-39	03/19/2018	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	
Cobalt, total	ug/L	MW-39	09/11/2018	ND	0.8000		
Cobalt, total	ug/L	MW-39	03/26/2019	ND	0.8000		
Cobalt, total	ug/L	MW-39	09/04/2019	ND	0.8000		
Cobalt, total	ug/L	MW-39	03/26/2020	ND	0.8000		
Cobalt, total	ug/L	MW-39	09/15/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-39	03/02/2021		0.8000		
Cobalt, total	ug/L	MW-39	09/07/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-39	03/24/2022	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-39	08/31/2022		0.8000		
Cobalt, total	ug/L	MW-39	03/02/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-39	09/12/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-39	03/04/2024	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-39	09/23/2024	ND	0.4000	0.8000	**
Copper, total	ug/L	MW-39	09/24/2014	ND	4.0000		
Copper, total	ug/L	MW-39	12/05/2014	ND	4.0000		
Copper, total	ug/L	MW-39	03/11/2015	ND	4.0000		
Copper, total	ug/L	MW-39	06/16/2015	ND	4.0000		
Copper, total	ug/L	MW-39	09/17/2015	ND	4.0000		
Copper, total	ug/L	MW-39	03/22/2016	ND	4.0000		
Copper, total	ug/L	MW-39	09/15/2016	ND	4.0000		
Copper, total	ug/L	MW-39	03/23/2017	ND	4.0000		
Copper, total	ug/L	MW-39	09/08/2017	ND	4.0000		
Copper, total	ug/L	MW-39	03/19/2018	ND	4.0000		
Copper, total	ug/L	MW-39	09/11/2018	ND	4.0000		
Copper, total	ug/L	MW-39	03/26/2019	ND	4.0000		
Copper, total	ug/L	MW-39	09/04/2019	ND	4.0000		
Copper, total	ug/L	MW-39	03/26/2020	ND	4.0000		
Copper, total	ug/L	MW-39	09/15/2020	ND	4.0000		
Copper, total	ug/L	MW-39	03/02/2021	ND	4.0000		
Copper, total	ug/L	MW-39	09/07/2021	ND	4.0000		
Copper, total	ug/L	MW-39	03/24/2022	ND	4.0000		
Copper, total	ug/L	MW-39	08/31/2022	ND	4.0000		
Copper, total	ug/L	MW-39	03/02/2023	ND	4.0000		
Copper, total	ug/L	MW-39	09/12/2023	ND	4.0000		
Copper, total	ug/L	MW-39	03/04/2024	ND	4.0000		
Copper, total	ug/L	MW-39	09/23/2024	ND	4.0000		
Lead, total	ug/L	MW-39	09/24/2014	ND	4.0000		
Lead, total	ug/L	MW-39	12/05/2014	ND	4.0000		
Lead, total	ug/L	MW-39	03/11/2015	ND	4.0000		
Lead, total	ug/L	MW-39	06/16/2015	ND	4.0000		
Lead, total	ug/L	MW-39	09/17/2015	ND	4.0000		
Lead, total	ug/L	MW-39	03/22/2016	ND	4.0000		
Lead, total	ug/L	MW-39	09/15/2016	ND	4.0000		
Lead, total	ug/L	MW-39	03/23/2017	ND	4.0000		
Lead, total	ug/L	MW-39	09/08/2017	ND	4.0000		
Lead, total	ug/L	MW-39	03/19/2018	ND	4.0000		
Lead, total	ug/L	MW-39	09/11/2018	ND	4.0000		
Lead, total	ug/L	MW-39	03/26/2019	ND	4.0000		
Lead, total	ug/L	MW-39	09/04/2019	ND	4.0000		
Lead, total	ug/L	MW-39	03/26/2020	ND	4.0000		
Lead, total	ug/L	MW-39	09/15/2020	ND	4.0000		
Lead, total	ug/L	MW-39	03/02/2021	ND	4.0000		
Lead, total	ug/L	MW-39	09/07/2021	ND	4.0000		
Lead, total	ug/L	MW-39	03/24/2022	ND	4.0000		
Lead, total	ug/L	MW-39	08/31/2022	ND	4.0000		
Lead, total	ug/L	MW-39	03/02/2023	ND	4.0000		
Lead, total	ug/L	MW-39	09/12/2023	ND	4.0000		
Lead, total	ug/L	MW-39	03/04/2024	ND	4.0000		
Lead, total	ug/L	MW-39	09/23/2024	ND	4.0000		
Nickel, total	ug/L	MW-39	09/24/2014	ND	4.0000		
Nickel, total	ug/L	MW-39	12/05/2014	ND	4.0000		
Nickel, total	ug/L	MW-39	03/11/2015	ND	4.0000		
Nickel, total	ug/L	MW-39	06/16/2015	ND	4.0000		
Nickel, total	ug/L	MW-39	09/17/2015	ND	4.0000		
Nickel, total	ug/L	MW-39	03/22/2016	ND	4.0000		
Nickel, total	ug/L	MW-39	09/15/2016	ND	4.0000		
Nickel, total	ug/L	MW-39	03/23/2017	ND	4.0000		
Nickel, total	ug/L	MW-39	09/08/2017	ND	4.0000		
Nickel, total	ug/L	MW-39	03/19/2018	ND	4.0000		
Nickel, total	ug/L	MW-39	09/11/2018	ND	4.0000		
Nickel, total	ug/L	MW-39	03/26/2019	ND	4.0000		
Nickel, total	ug/L	MW-39	09/04/2019	ND	4.0000		
Nickel, total	ug/L	MW-39	03/26/2020	ND	4.0000		
Nickel, total	ug/L	MW-39	09/15/2020	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	
Nickel, total	ug/L	MW-39	03/02/2021	ND	4.0000		
Nickel, total	ug/L	MW-39	09/07/2021	ND	4.0000		
Nickel, total	ug/L	MW-39	03/24/2022	ND	4.0000		
Nickel, total	ug/L	MW-39	08/31/2022	ND	4.0000		
Nickel, total	ug/L	MW-39	03/02/2023	ND	4.0000		
Nickel, total	ug/L	MW-39	09/12/2023	ND	4.0000		
Nickel, total	ug/L	MW-39	03/04/2024	ND	4.0000		
Nickel, total	ug/L	MW-39	09/23/2024	ND	4.0000		
Selenium, total	ug/L	MW-39	09/24/2014	ND	4.0000		
Selenium, total	ug/L	MW-39	12/05/2014	ND	4.0000		
Selenium, total	ug/L	MW-39	03/11/2015	ND	4.0000		
Selenium, total	ug/L	MW-39	06/16/2015	ND	4.0000		
Selenium, total	ug/L	MW-39	09/17/2015	ND	4.0000		
Selenium, total	ug/L	MW-39	03/22/2016	ND	4.0000		
Selenium, total	ug/L	MW-39	09/15/2016	ND	4.0000		
Selenium, total	ug/L	MW-39	03/23/2017	ND	4.0000		
Selenium, total	ug/L	MW-39	09/08/2017	ND	4.0000		
Selenium, total	ug/L	MW-39	03/19/2018	ND	4.0000		
Selenium, total	ug/L	MW-39	09/11/2018	ND	4.0000		
Selenium, total	ug/L	MW-39	03/26/2019	ND	4.0000		
Selenium, total	ug/L	MW-39	09/04/2019	ND	4.0000		
Selenium, total	ug/L	MW-39	03/26/2020	ND	4.0000		
Selenium, total	ug/L	MW-39	09/15/2020	ND	4.0000		
Selenium, total	ug/L	MW-39	03/02/2021	ND	4.0000		
Selenium, total	ug/L	MW-39	09/07/2021	ND	4.0000		
Selenium, total	ug/L	MW-39	03/24/2022	ND	4.0000		
Selenium, total	ug/L	MW-39	08/31/2022	ND	4.0000		
Selenium, total	ug/L	MW-39	03/02/2023	ND	4.0000		
Selenium, total	ug/L	MW-39	09/12/2023	ND	4.0000		
Selenium, total	ug/L	MW-39	03/04/2024	ND	4.0000		
Selenium, total	ug/L	MW-39	09/23/2024	ND	4.0000		
Silver, total	ug/L	MW-39	09/24/2014	ND	4.0000		
Silver, total	ug/L	MW-39	12/05/2014	ND	4.0000		
Silver, total	ug/L	MW-39	03/11/2015	ND	4.0000		
Silver, total	ug/L	MW-39	06/16/2015	ND	4.0000		
Silver, total	ug/L	MW-39	09/17/2015	ND	4.0000		
Silver, total	ug/L	MW-39	03/22/2016	ND	4.0000		
Silver, total	ug/L	MW-39	09/15/2016		6.4000		
Silver, total	ug/L	MW-39	03/23/2017	ND	4.0000		
Silver, total	ug/L	MW-39	09/08/2017	ND	4.0000		
Silver, total	ug/L	MW-39	03/19/2018	ND	4.0000		
Silver, total	ug/L	MW-39	09/11/2018	ND	4.0000		
Silver, total	ug/L	MW-39	03/26/2019	ND	4.0000		
Silver, total	ug/L	MW-39	09/04/2019	ND	4.0000		
Silver, total	ug/L	MW-39	03/26/2020	ND	4.0000		
Silver, total	ug/L	MW-39	09/15/2020	ND	4.0000		
Silver, total	ug/L	MW-39	03/02/2021	ND	4.0000		
Silver, total	ug/L	MW-39	09/07/2021	ND	4.0000		
Silver, total	ug/L	MW-39	03/24/2022	ND	4.0000		
Silver, total	ug/L	MW-39	08/31/2022	ND	4.0000		
Silver, total	ug/L	MW-39	03/02/2023	ND	4.0000		
Silver, total	ug/L	MW-39	09/12/2023	ND	4.0000		
Silver, total	ug/L	MW-39	03/04/2024	ND	4.0000		
Silver, total	ug/L	MW-39	09/23/2024	ND	4.0000		
Thallium, total	ug/L	MW-39	09/24/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	12/05/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	03/11/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	06/16/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	09/17/2015		2.4000		
Thallium, total	ug/L	MW-39	03/22/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	09/15/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	03/23/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	09/08/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	03/19/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	09/11/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	03/26/2019	ND	2.0000		
Thallium, total	ug/L	MW-39	09/04/2019	ND	2.0000		
Thallium, total	ug/L	MW-39	03/26/2020	ND	2.0000		
Thallium, total	ug/L	MW-39	09/15/2020	ND	2.0000		
Thallium, total	ug/L	MW-39	03/02/2021	ND	2.0000		
Thallium, total	ug/L	MW-39	09/07/2021	ND	2.0000		
Thallium, total	ug/L	MW-39	03/24/2022	ND	2.0000		
Thallium, total	ug/L	MW-39	08/31/2022	ND	2.0000		
Thallium, total	ug/L	MW-39	03/02/2023	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-39	09/12/2023	ND	2.0000		
Thallium, total	ug/L	MW-39	03/04/2024	ND	2.0000		
Thallium, total	ug/L	MW-39	09/23/2024	ND	2.0000		
Vanadium, total	ug/L	MW-39	09/24/2014	ND	20.0000		
Vanadium, total	ug/L	MW-39	12/05/2014	ND	20.0000		
Vanadium, total	ug/L	MW-39	03/11/2015	ND	20.0000		
Vanadium, total	ug/L	MW-39	06/16/2015	ND	20.0000		
Vanadium, total	ug/L	MW-39	09/17/2015	ND	20.0000		
Vanadium, total	ug/L	MW-39	03/22/2016	ND	20.0000		
Vanadium, total	ug/L	MW-39	09/15/2016	ND	20.0000		
Vanadium, total	ug/L	MW-39	03/23/2017	ND	20.0000		
Vanadium, total	ug/L	MW-39	09/08/2017	ND	20.0000		
Vanadium, total	ug/L	MW-39	03/19/2018	ND	20.0000		
Vanadium, total	ug/L	MW-39	09/11/2018	ND	20.0000		
Vanadium, total	ug/L	MW-39	03/26/2019	ND	20.0000		
Vanadium, total	ug/L	MW-39	09/04/2019	ND	20.0000		
Vanadium, total	ug/L	MW-39	03/26/2020	ND	20.0000		
Vanadium, total	ug/L	MW-39	09/15/2020	ND	20.0000		
Vanadium, total	ug/L	MW-39	03/02/2021	ND	20.0000		
Vanadium, total	ug/L	MW-39	09/07/2021	ND	20.0000		
Vanadium, total	ug/L	MW-39	03/24/2022	ND	20.0000		
Vanadium, total	ug/L	MW-39	08/31/2022	ND	20.0000		
Vanadium, total	ug/L	MW-39	03/02/2023	ND	20.0000		
Vanadium, total	ug/L	MW-39	09/12/2023	ND	20.0000		
Vanadium, total	ug/L	MW-39	03/04/2024	ND	20.0000		
Vanadium, total	ug/L	MW-39	09/23/2024	ND	20.0000		
Zinc, total	ug/L	MW-39	09/24/2014	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	12/05/2014	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	03/11/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	06/16/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	09/17/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	03/22/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	09/15/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	03/23/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	09/08/2017	ND	20.0000		
Zinc, total	ug/L	MW-39	03/19/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	09/11/2018	ND	20.0000		
Zinc, total	ug/L	MW-39	03/26/2019		24.6000		
Zinc, total	ug/L	MW-39	09/04/2019	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	03/26/2020	ND	20.0000		
Zinc, total	ug/L	MW-39	09/15/2020	ND	20.0000		
Zinc, total	ug/L	MW-39	03/02/2021	ND	20.0000		
Zinc, total	ug/L	MW-39	09/07/2021	ND	20.0000		
Zinc, total	ug/L	MW-39	03/24/2022	ND	20.0000		
Zinc, total	ug/L	MW-39	08/31/2022	ND	20.0000		
Zinc, total	ug/L	MW-39	03/02/2023	ND	20.0000		
Zinc, total	ug/L	MW-39	09/12/2023	ND	20.0000		
Zinc, total	ug/L	MW-39	03/04/2024	ND	20.0000		
Zinc, total	ug/L	MW-39	09/23/2024	ND	20.0000		
Antimony, total	ug/L	MW-48	09/24/2014	ND	2.0000		
Antimony, total	ug/L	MW-48	12/05/2014	ND	2.0000		
Antimony, total	ug/L	MW-48	03/11/2015	ND	2.0000		
Antimony, total	ug/L	MW-48	06/16/2015	ND	2.0000		
Antimony, total	ug/L	MW-48	09/16/2015	ND	2.0000		
Antimony, total	ug/L	MW-48	03/22/2016	ND	2.0000		
Antimony, total	ug/L	MW-48	09/14/2016	ND	2.0000		
Antimony, total	ug/L	MW-48	03/23/2017	ND	2.0000		
Antimony, total	ug/L	MW-48	09/08/2017	ND	2.0000		
Antimony, total	ug/L	MW-48	03/19/2018	ND	2.0000		
Antimony, total	ug/L	MW-48	09/11/2018	ND	2.0000		
Antimony, total	ug/L	MW-48	03/26/2019	ND	2.0000		
Antimony, total	ug/L	MW-48	09/04/2019	ND	2.0000		
Antimony, total	ug/L	MW-48	03/26/2020	ND	2.0000		
Antimony, total	ug/L	MW-48	09/15/2020	ND	2.0000		
Antimony, total	ug/L	MW-48	03/02/2021	ND	2.0000		
Antimony, total	ug/L	MW-48	09/07/2021	ND	2.0000		
Antimony, total	ug/L	MW-48	03/24/2022	ND	2.0000		
Antimony, total	ug/L	MW-48	08/31/2022	ND	2.0000		
Antimony, total	ug/L	MW-48	03/02/2023	ND	2.0000		
Antimony, total	ug/L	MW-48	09/12/2023	ND	2.0000		
Antimony, total	ug/L	MW-48	03/04/2024	ND	2.0000		
Antimony, total	ug/L	MW-48	09/23/2024	ND	2.0000		
Arsenic, total	ug/L	MW-48	09/24/2014	ND	4.0000		
Arsenic, total	ug/L	MW-48	12/05/2014	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	
Arsenic, total	ug/L	MW-48	03/11/2015	ND	4.0000		
Arsenic, total	ug/L	MW-48	06/16/2015	ND	4.0000		
Arsenic, total	ug/L	MW-48	09/16/2015	ND	4.0000		
Arsenic, total	ug/L	MW-48	03/22/2016	ND	4.0000		
Arsenic, total	ug/L	MW-48	09/14/2016	ND	4.0000		
Arsenic, total	ug/L	MW-48	03/23/2017	ND	4.0000		
Arsenic, total	ug/L	MW-48	09/08/2017	ND	4.0000		
Arsenic, total	ug/L	MW-48	03/19/2018	ND	4.0000		
Arsenic, total	ug/L	MW-48	09/11/2018	ND	4.0000		
Arsenic, total	ug/L	MW-48	03/26/2019	ND	4.0000		
Arsenic, total	ug/L	MW-48	09/04/2019	ND	4.0000		
Arsenic, total	ug/L	MW-48	03/26/2020	ND	4.0000		
Arsenic, total	ug/L	MW-48	09/15/2020	ND	4.0000		
Arsenic, total	ug/L	MW-48	03/02/2021	ND	4.0000		
Arsenic, total	ug/L	MW-48	09/07/2021	ND	4.0000		
Arsenic, total	ug/L	MW-48	03/24/2022	ND	4.0000		
Arsenic, total	ug/L	MW-48	08/31/2022	ND	4.0000		
Arsenic, total	ug/L	MW-48	03/02/2023	ND	4.0000		
Arsenic, total	ug/L	MW-48	09/12/2023	ND	4.0000		
Arsenic, total	ug/L	MW-48	03/04/2024	ND	4.0000		
Arsenic, total	ug/L	MW-48	09/23/2024	ND	4.0000		
Barium, total	ug/L	MW-48	09/24/2014		181.0000		
Barium, total	ug/L	MW-48	12/05/2014		168.0000		
Barium, total	ug/L	MW-48	03/11/2015		143.0000		
Barium, total	ug/L	MW-48	06/16/2015		161.0000		
Barium, total	ug/L	MW-48	09/16/2015		150.0000		
Barium, total	ug/L	MW-48	03/22/2016		153.0000		
Barium, total	ug/L	MW-48	09/14/2016		140.0000		
Barium, total	ug/L	MW-48	03/23/2017		146.0000		
Barium, total	ug/L	MW-48	09/08/2017		171.0000		
Barium, total	ug/L	MW-48	03/19/2018		145.0000		
Barium, total	ug/L	MW-48	09/11/2018		151.0000		
Barium, total	ug/L	MW-48	03/26/2019		153.0000		
Barium, total	ug/L	MW-48	09/04/2019		160.0000		
Barium, total	ug/L	MW-48	03/26/2020		156.0000		
Barium, total	ug/L	MW-48	09/15/2020		152.0000		
Barium, total	ug/L	MW-48	03/02/2021		159.0000		
Barium, total	ug/L	MW-48	09/07/2021		149.0000		
Barium, total	ug/L	MW-48	03/24/2022		143.0000		
Barium, total	ug/L	MW-48	08/31/2022		157.0000		
Barium, total	ug/L	MW-48	03/02/2023		149.0000		
Barium, total	ug/L	MW-48	09/12/2023		168.0000		
Barium, total	ug/L	MW-48	03/04/2024		149.0000		
Barium, total	ug/L	MW-48	09/23/2024		148.0000		
Beryllium, total	ug/L	MW-48	09/24/2014	ND	4.0000		
Beryllium, total	ug/L	MW-48	12/05/2014	ND	4.0000		
Beryllium, total	ug/L	MW-48	03/11/2015	ND	4.0000		
Beryllium, total	ug/L	MW-48	06/16/2015	ND	4.0000		
Beryllium, total	ug/L	MW-48	09/16/2015	ND	4.0000		
Beryllium, total	ug/L	MW-48	03/22/2016	ND	4.0000		
Beryllium, total	ug/L	MW-48	09/14/2016	ND	4.0000		
Beryllium, total	ug/L	MW-48	03/23/2017	ND	4.0000		
Beryllium, total	ug/L	MW-48	09/08/2017	ND	4.0000		
Beryllium, total	ug/L	MW-48	03/19/2018	ND	4.0000		
Beryllium, total	ug/L	MW-48	09/11/2018	ND	4.0000		
Beryllium, total	ug/L	MW-48	03/26/2019	ND	4.0000		
Beryllium, total	ug/L	MW-48	09/04/2019	ND	4.0000		
Beryllium, total	ug/L	MW-48	03/26/2020	ND	4.0000		
Beryllium, total	ug/L	MW-48	09/15/2020	ND	4.0000		
Beryllium, total	ug/L	MW-48	03/02/2021	ND	4.0000		
Beryllium, total	ug/L	MW-48	09/07/2021	ND	4.0000		
Beryllium, total	ug/L	MW-48	03/24/2022	ND	4.0000		
Beryllium, total	ug/L	MW-48	08/31/2022	ND	4.0000		
Beryllium, total	ug/L	MW-48	03/02/2023	ND	4.0000		
Beryllium, total	ug/L	MW-48	09/12/2023	ND	4.0000		
Beryllium, total	ug/L	MW-48	03/04/2024	ND	4.0000		
Beryllium, total	ug/L	MW-48	09/23/2024	ND	4.0000		
Cadmium, total	ug/L	MW-48	09/24/2014	ND	0.8000		
Cadmium, total	ug/L	MW-48	12/05/2014	ND	0.8000		
Cadmium, total	ug/L	MW-48	03/11/2015	ND	0.8000		
Cadmium, total	ug/L	MW-48	06/16/2015	ND	0.8000		
Cadmium, total	ug/L	MW-48	09/16/2015	ND	0.8000		
Cadmium, total	ug/L	MW-48	03/22/2016	ND	0.8000		
Cadmium, total	ug/L	MW-48	09/14/2016	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-48	03/23/2017	ND	0.8000		
Cadmium, total	ug/L	MW-48	09/08/2017	ND	0.8000		
Cadmium, total	ug/L	MW-48	03/19/2018	ND	0.8000		
Cadmium, total	ug/L	MW-48	09/11/2018	ND	0.8000		
Cadmium, total	ug/L	MW-48	03/26/2019	ND	0.8000		
Cadmium, total	ug/L	MW-48	09/04/2019	ND	0.8000		
Cadmium, total	ug/L	MW-48	03/26/2020	ND	0.8000		
Cadmium, total	ug/L	MW-48	09/15/2020	ND	0.8000		
Cadmium, total	ug/L	MW-48	03/02/2021	ND	0.8000		
Cadmium, total	ug/L	MW-48	09/07/2021	ND	0.8000		
Cadmium, total	ug/L	MW-48	03/24/2022	ND	0.8000		
Cadmium, total	ug/L	MW-48	08/31/2022	ND	0.8000		
Cadmium, total	ug/L	MW-48	03/02/2023	ND	0.8000		
Cadmium, total	ug/L	MW-48	09/12/2023	ND	0.8000		
Cadmium, total	ug/L	MW-48	03/04/2024	ND	0.8000		
Cadmium, total	ug/L	MW-48	09/23/2024	ND	0.8000		
Chromium, total	ug/L	MW-48	09/24/2014	ND	8.0000		
Chromium, total	ug/L	MW-48	12/05/2014	ND	8.0000		
Chromium, total	ug/L	MW-48	03/11/2015	ND	8.0000		
Chromium, total	ug/L	MW-48	06/16/2015	ND	8.0000		
Chromium, total	ug/L	MW-48	09/16/2015	ND	8.0000		
Chromium, total	ug/L	MW-48	03/22/2016	ND	8.0000		
Chromium, total	ug/L	MW-48	09/14/2016	ND	8.0000		
Chromium, total	ug/L	MW-48	03/23/2017	ND	8.0000		
Chromium, total	ug/L	MW-48	09/08/2017	ND	8.0000		
Chromium, total	ug/L	MW-48	03/19/2018	ND	8.0000		
Chromium, total	ug/L	MW-48	09/11/2018	ND	8.0000		
Chromium, total	ug/L	MW-48	03/26/2019	ND	8.0000		
Chromium, total	ug/L	MW-48	09/04/2019	ND	8.0000		
Chromium, total	ug/L	MW-48	03/26/2020	ND	8.0000		
Chromium, total	ug/L	MW-48	09/15/2020	ND	8.0000		
Chromium, total	ug/L	MW-48	03/02/2021	ND	8.0000		
Chromium, total	ug/L	MW-48	09/07/2021	ND	8.0000		
Chromium, total	ug/L	MW-48	03/24/2022	ND	8.0000		
Chromium, total	ug/L	MW-48	08/31/2022	ND	8.0000		
Chromium, total	ug/L	MW-48	03/02/2023	ND	8.0000		
Chromium, total	ug/L	MW-48	09/12/2023	ND	8.0000		
Chromium, total	ug/L	MW-48	03/04/2024	ND	8.0000		
Chromium, total	ug/L	MW-48	09/23/2024	ND	8.0000		
Cobalt, total	ug/L	MW-48	09/24/2014	ND	0.8000		
Cobalt, total	ug/L	MW-48	12/05/2014	ND	0.8000		
Cobalt, total	ug/L	MW-48	03/11/2015	ND	0.8000		
Cobalt, total	ug/L	MW-48	06/16/2015	ND	0.8000		
Cobalt, total	ug/L	MW-48	09/16/2015	ND	0.8000		
Cobalt, total	ug/L	MW-48	03/22/2016	ND	0.8000		
Cobalt, total	ug/L	MW-48	09/14/2016	ND	0.8000		
Cobalt, total	ug/L	MW-48	03/23/2017	ND	0.8000		
Cobalt, total	ug/L	MW-48	09/08/2017	ND	0.8000		
Cobalt, total	ug/L	MW-48	03/19/2018	ND	0.8000		
Cobalt, total	ug/L	MW-48	09/11/2018	ND	0.8000		
Cobalt, total	ug/L	MW-48	03/26/2019	ND	0.8000		
Cobalt, total	ug/L	MW-48	09/04/2019	ND	0.8000		
Cobalt, total	ug/L	MW-48	03/26/2020	ND	0.8000		
Cobalt, total	ug/L	MW-48	09/15/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-48	03/02/2021		0.9000		
Cobalt, total	ug/L	MW-48	09/07/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-48	03/24/2022		0.4000		
Cobalt, total	ug/L	MW-48	08/31/2022	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-48	03/02/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-48	09/12/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-48	03/04/2024	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-48	09/23/2024	ND	0.4000	0.8000	**
Copper, total	ug/L	MW-48	09/24/2014	ND	4.0000		
Copper, total	ug/L	MW-48	12/05/2014	ND	4.0000		
Copper, total	ug/L	MW-48	03/11/2015	ND	4.0000		
Copper, total	ug/L	MW-48	06/16/2015	ND	4.0000		
Copper, total	ug/L	MW-48	09/16/2015	ND	4.0000		
Copper, total	ug/L	MW-48	03/22/2016	ND	4.0000		
Copper, total	ug/L	MW-48	09/14/2016	ND	4.0000		
Copper, total	ug/L	MW-48	03/23/2017	ND	4.0000		
Copper, total	ug/L	MW-48	09/08/2017	ND	4.0000		
Copper, total	ug/L	MW-48	03/19/2018	ND	4.0000		
Copper, total	ug/L	MW-48	09/11/2018	ND	4.0000		
Copper, total	ug/L	MW-48	03/26/2019	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	
Copper, total	ug/L	MW-48	09/04/2019	ND	4.0000		
Copper, total	ug/L	MW-48	03/26/2020	ND	4.0000		
Copper, total	ug/L	MW-48	09/15/2020	ND	4.0000		
Copper, total	ug/L	MW-48	03/02/2021	ND	4.0000		
Copper, total	ug/L	MW-48	09/07/2021	ND	4.0000		
Copper, total	ug/L	MW-48	03/24/2022	ND	4.0000		
Copper, total	ug/L	MW-48	08/31/2022	ND	4.0000		
Copper, total	ug/L	MW-48	03/02/2023	ND	4.0000		
Copper, total	ug/L	MW-48	09/12/2023	ND	4.0000		
Copper, total	ug/L	MW-48	03/04/2024	ND	4.0000		
Copper, total	ug/L	MW-48	09/23/2024	ND	4.0000		
Lead, total	ug/L	MW-48	09/24/2014	ND	4.0000		
Lead, total	ug/L	MW-48	12/05/2014	ND	4.0000		
Lead, total	ug/L	MW-48	03/11/2015	ND	4.0000		
Lead, total	ug/L	MW-48	06/16/2015	ND	4.0000		
Lead, total	ug/L	MW-48	09/16/2015	ND	4.0000		
Lead, total	ug/L	MW-48	03/22/2016	ND	4.0000		
Lead, total	ug/L	MW-48	09/14/2016	ND	4.0000		
Lead, total	ug/L	MW-48	03/23/2017	ND	4.0000		
Lead, total	ug/L	MW-48	09/08/2017	ND	4.0000		
Lead, total	ug/L	MW-48	03/19/2018	ND	4.0000		
Lead, total	ug/L	MW-48	09/11/2018	ND	4.0000		
Lead, total	ug/L	MW-48	03/26/2019	ND	4.0000		
Lead, total	ug/L	MW-48	09/04/2019	ND	4.0000		
Lead, total	ug/L	MW-48	03/26/2020	ND	4.0000		
Lead, total	ug/L	MW-48	09/15/2020	ND	4.0000		
Lead, total	ug/L	MW-48	03/02/2021	ND	4.0000		
Lead, total	ug/L	MW-48	09/07/2021	ND	4.0000		
Lead, total	ug/L	MW-48	03/24/2022	ND	4.0000		
Lead, total	ug/L	MW-48	08/31/2022	ND	4.0000		
Lead, total	ug/L	MW-48	03/02/2023	ND	4.0000		
Lead, total	ug/L	MW-48	09/12/2023	ND	4.0000		
Lead, total	ug/L	MW-48	03/04/2024	ND	4.0000		
Lead, total	ug/L	MW-48	09/23/2024	ND	4.0000		
Nickel, total	ug/L	MW-48	09/24/2014	ND	4.0000		
Nickel, total	ug/L	MW-48	12/05/2014	ND	4.0000		
Nickel, total	ug/L	MW-48	03/11/2015	ND	4.0000		
Nickel, total	ug/L	MW-48	06/16/2015	ND	4.0000		
Nickel, total	ug/L	MW-48	09/16/2015	ND	4.0000		
Nickel, total	ug/L	MW-48	03/22/2016	ND	4.0000		
Nickel, total	ug/L	MW-48	09/14/2016	ND	4.0000		
Nickel, total	ug/L	MW-48	03/23/2017	ND	4.0000		
Nickel, total	ug/L	MW-48	09/08/2017	ND	4.0000		
Nickel, total	ug/L	MW-48	03/19/2018	ND	4.0000		
Nickel, total	ug/L	MW-48	09/11/2018	ND	4.0000		
Nickel, total	ug/L	MW-48	03/26/2019	ND	4.0000		
Nickel, total	ug/L	MW-48	09/04/2019	ND	4.0000		
Nickel, total	ug/L	MW-48	03/26/2020	ND	4.0000		
Nickel, total	ug/L	MW-48	09/15/2020	ND	4.0000		
Nickel, total	ug/L	MW-48	03/02/2021	ND	4.0000		
Nickel, total	ug/L	MW-48	09/07/2021	ND	4.0000		
Nickel, total	ug/L	MW-48	03/24/2022	ND	4.0000		
Nickel, total	ug/L	MW-48	08/31/2022	ND	4.0000		
Nickel, total	ug/L	MW-48	03/02/2023	ND	4.0000		
Nickel, total	ug/L	MW-48	09/12/2023	ND	4.0000		
Nickel, total	ug/L	MW-48	03/04/2024	ND	4.0000		
Nickel, total	ug/L	MW-48	09/23/2024	ND	4.0000		
Selenium, total	ug/L	MW-48	09/24/2014	ND	4.0000		
Selenium, total	ug/L	MW-48	12/05/2014	ND	4.0000		
Selenium, total	ug/L	MW-48	03/11/2015	ND	4.0000		
Selenium, total	ug/L	MW-48	06/16/2015	ND	4.0000		
Selenium, total	ug/L	MW-48	09/16/2015	ND	4.0000		
Selenium, total	ug/L	MW-48	03/22/2016	ND	4.0000		
Selenium, total	ug/L	MW-48	09/14/2016	ND	4.0000		
Selenium, total	ug/L	MW-48	03/23/2017	ND	4.0000		
Selenium, total	ug/L	MW-48	09/08/2017	ND	4.0000		
Selenium, total	ug/L	MW-48	03/19/2018	ND	4.0000		
Selenium, total	ug/L	MW-48	09/11/2018	ND	4.0000		
Selenium, total	ug/L	MW-48	03/26/2019	ND	4.0000		
Selenium, total	ug/L	MW-48	09/04/2019	ND	4.0000		
Selenium, total	ug/L	MW-48	03/26/2020	ND	4.0000		
Selenium, total	ug/L	MW-48	09/15/2020	ND	4.0000		
Selenium, total	ug/L	MW-48	03/02/2021	ND	4.0000		
Selenium, total	ug/L	MW-48	09/07/2021	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-48	03/24/2022	ND	4.0000		
Selenium, total	ug/L	MW-48	08/31/2022	ND	4.0000		
Selenium, total	ug/L	MW-48	03/02/2023	ND	4.0000		
Selenium, total	ug/L	MW-48	09/12/2023	ND	4.0000		
Selenium, total	ug/L	MW-48	03/04/2024	ND	4.0000		
Selenium, total	ug/L	MW-48	09/23/2024	ND	4.0000		
Silver, total	ug/L	MW-48	09/24/2014	ND	4.0000		
Silver, total	ug/L	MW-48	12/05/2014	ND	4.0000		
Silver, total	ug/L	MW-48	03/11/2015	ND	4.0000		
Silver, total	ug/L	MW-48	06/16/2015	ND	4.0000		
Silver, total	ug/L	MW-48	09/16/2015	ND	4.0000		
Silver, total	ug/L	MW-48	03/22/2016	ND	4.0000		
Silver, total	ug/L	MW-48	09/14/2016	ND	4.0000		
Silver, total	ug/L	MW-48	03/23/2017	ND	4.0000		
Silver, total	ug/L	MW-48	09/08/2017	ND	4.0000		
Silver, total	ug/L	MW-48	03/19/2018	ND	4.0000		
Silver, total	ug/L	MW-48	09/11/2018	ND	4.0000		
Silver, total	ug/L	MW-48	03/26/2019	ND	4.0000		
Silver, total	ug/L	MW-48	09/04/2019	ND	4.0000		
Silver, total	ug/L	MW-48	03/26/2020	ND	4.0000		
Silver, total	ug/L	MW-48	09/15/2020	ND	4.0000		
Silver, total	ug/L	MW-48	03/02/2021	ND	4.0000		
Silver, total	ug/L	MW-48	09/07/2021	ND	4.0000		
Silver, total	ug/L	MW-48	03/24/2022	ND	4.0000		
Silver, total	ug/L	MW-48	08/31/2022	ND	4.0000		
Silver, total	ug/L	MW-48	03/02/2023	ND	4.0000		
Silver, total	ug/L	MW-48	09/12/2023	ND	4.0000		
Silver, total	ug/L	MW-48	03/04/2024	ND	4.0000		
Silver, total	ug/L	MW-48	09/23/2024	ND	4.0000		
Thallium, total	ug/L	MW-48	09/24/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-48	12/05/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-48	03/11/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-48	06/16/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-48	09/16/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-48	03/22/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-48	09/14/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-48	03/23/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-48	09/08/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-48	03/19/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-48	09/11/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-48	03/26/2019	ND	2.0000		
Thallium, total	ug/L	MW-48	09/04/2019	ND	2.0000		
Thallium, total	ug/L	MW-48	03/26/2020	ND	2.0000		
Thallium, total	ug/L	MW-48	09/15/2020	ND	2.0000		
Thallium, total	ug/L	MW-48	03/02/2021	ND	2.0000		
Thallium, total	ug/L	MW-48	09/07/2021	ND	2.0000		
Thallium, total	ug/L	MW-48	03/24/2022	ND	2.0000		
Thallium, total	ug/L	MW-48	08/31/2022	ND	2.0000		
Thallium, total	ug/L	MW-48	03/02/2023	ND	2.0000		
Thallium, total	ug/L	MW-48	09/12/2023	ND	2.0000		
Thallium, total	ug/L	MW-48	03/04/2024	ND	2.0000		
Thallium, total	ug/L	MW-48	09/23/2024	ND	2.0000		
Vanadium, total	ug/L	MW-48	09/24/2014	ND	20.0000		
Vanadium, total	ug/L	MW-48	12/05/2014	ND	20.0000		
Vanadium, total	ug/L	MW-48	03/11/2015	ND	20.0000		
Vanadium, total	ug/L	MW-48	06/16/2015	ND	20.0000		
Vanadium, total	ug/L	MW-48	09/16/2015	ND	20.0000		
Vanadium, total	ug/L	MW-48	03/22/2016	ND	20.0000		
Vanadium, total	ug/L	MW-48	09/14/2016	ND	20.0000		
Vanadium, total	ug/L	MW-48	03/23/2017	ND	20.0000		
Vanadium, total	ug/L	MW-48	09/08/2017	ND	20.0000		
Vanadium, total	ug/L	MW-48	03/19/2018	ND	20.0000		
Vanadium, total	ug/L	MW-48	09/11/2018	ND	20.0000		
Vanadium, total	ug/L	MW-48	03/26/2019	ND	20.0000		
Vanadium, total	ug/L	MW-48	09/04/2019	ND	20.0000		
Vanadium, total	ug/L	MW-48	03/26/2020	ND	20.0000		
Vanadium, total	ug/L	MW-48	09/15/2020	ND	20.0000		
Vanadium, total	ug/L	MW-48	03/02/2021	ND	20.0000		
Vanadium, total	ug/L	MW-48	09/07/2021	ND	20.0000		
Vanadium, total	ug/L	MW-48	03/24/2022	ND	20.0000		
Vanadium, total	ug/L	MW-48	08/31/2022	ND	20.0000		
Vanadium, total	ug/L	MW-48	03/02/2023	ND	20.0000		
Vanadium, total	ug/L	MW-48	09/12/2023	ND	20.0000		
Vanadium, total	ug/L	MW-48	03/04/2024	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-48	09/23/2024	ND	20.0000		
Zinc, total	ug/L	MW-48	09/24/2014	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-48	12/05/2014	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-48	03/11/2015		32.3000		
Zinc, total	ug/L	MW-48	06/16/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-48	09/16/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-48	03/22/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-48	09/14/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-48	03/23/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-48	09/08/2017	ND	20.0000		
Zinc, total	ug/L	MW-48	03/19/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-48	09/11/2018	ND	20.0000		
Zinc, total	ug/L	MW-48	03/26/2019	ND	20.0000		
Zinc, total	ug/L	MW-48	09/04/2019	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-48	03/26/2020	ND	20.0000		
Zinc, total	ug/L	MW-48	09/15/2020	ND	20.0000		
Zinc, total	ug/L	MW-48	03/02/2021	ND	20.0000		
Zinc, total	ug/L	MW-48	09/07/2021	ND	20.0000		
Zinc, total	ug/L	MW-48	03/24/2022	ND	20.0000		
Zinc, total	ug/L	MW-48	08/31/2022	ND	20.0000		
Zinc, total	ug/L	MW-48	03/02/2023	ND	20.0000		
Zinc, total	ug/L	MW-48	09/12/2023	ND	20.0000		
Zinc, total	ug/L	MW-48	03/04/2024	ND	20.0000		
Zinc, total	ug/L	MW-48	09/23/2024	ND	20.0000		
Antimony, total	ug/L	MW-78	09/24/2014	ND	2.0000		
Antimony, total	ug/L	MW-78	12/05/2014	ND	2.0000		
Antimony, total	ug/L	MW-78	03/11/2015	ND	2.0000		
Antimony, total	ug/L	MW-78	06/16/2015	ND	2.0000		
Antimony, total	ug/L	MW-78	09/16/2015	ND	2.0000		
Antimony, total	ug/L	MW-78	03/22/2016	ND	2.0000		
Antimony, total	ug/L	MW-78	09/15/2016	ND	2.0000		
Antimony, total	ug/L	MW-78	03/23/2017	ND	2.0000		
Antimony, total	ug/L	MW-78	09/08/2017	ND	2.0000		
Antimony, total	ug/L	MW-78	03/19/2018	ND	2.0000		
Antimony, total	ug/L	MW-78	09/11/2018	ND	2.0000		
Antimony, total	ug/L	MW-78	03/26/2019	ND	2.0000		
Antimony, total	ug/L	MW-78	09/04/2019	ND	2.0000		
Antimony, total	ug/L	MW-78	03/26/2020	ND	2.0000		
Antimony, total	ug/L	MW-78	09/15/2020	ND	2.0000		
Antimony, total	ug/L	MW-78	03/02/2021	ND	2.0000		
Antimony, total	ug/L	MW-78	09/07/2021	ND	2.0000		
Antimony, total	ug/L	MW-78	03/24/2022	ND	2.0000		
Antimony, total	ug/L	MW-78	08/31/2022	ND	2.0000		
Antimony, total	ug/L	MW-78	03/02/2023	ND	2.0000		
Antimony, total	ug/L	MW-78	09/12/2023	ND	2.0000		
Antimony, total	ug/L	MW-78	03/04/2024	ND	2.0000		
Antimony, total	ug/L	MW-78	09/23/2024	ND	2.0000		
Arsenic, total	ug/L	MW-78	09/24/2014	ND	4.0000		
Arsenic, total	ug/L	MW-78	12/05/2014	ND	4.0000		
Arsenic, total	ug/L	MW-78	03/11/2015	ND	4.0000		
Arsenic, total	ug/L	MW-78	06/16/2015	ND	4.0000		
Arsenic, total	ug/L	MW-78	09/16/2015	ND	4.0000		
Arsenic, total	ug/L	MW-78	03/22/2016	ND	4.0000		
Arsenic, total	ug/L	MW-78	09/15/2016	ND	4.0000		
Arsenic, total	ug/L	MW-78	03/23/2017	ND	4.0000		
Arsenic, total	ug/L	MW-78	09/08/2017	ND	4.0000		
Arsenic, total	ug/L	MW-78	03/19/2018	ND	4.0000		
Arsenic, total	ug/L	MW-78	09/11/2018	ND	4.0000		
Arsenic, total	ug/L	MW-78	03/26/2019	ND	4.0000		
Arsenic, total	ug/L	MW-78	09/04/2019	ND	4.0000		
Arsenic, total	ug/L	MW-78	03/26/2020	ND	4.0000		
Arsenic, total	ug/L	MW-78	09/15/2020	ND	4.0000		
Arsenic, total	ug/L	MW-78	03/02/2021	ND	4.0000		
Arsenic, total	ug/L	MW-78	09/07/2021	ND	4.0000		
Arsenic, total	ug/L	MW-78	03/24/2022	ND	4.0000		
Arsenic, total	ug/L	MW-78	08/31/2022	ND	4.0000		
Arsenic, total	ug/L	MW-78	03/02/2023	ND	4.0000		
Arsenic, total	ug/L	MW-78	09/12/2023	ND	4.0000		
Arsenic, total	ug/L	MW-78	03/04/2024	ND	4.0000		
Arsenic, total	ug/L	MW-78	09/23/2024	ND	4.0000		
Barium, total	ug/L	MW-78	09/24/2014		304.0000		
Barium, total	ug/L	MW-78	12/05/2014		291.0000		
Barium, total	ug/L	MW-78	03/11/2015		304.0000		
Barium, total	ug/L	MW-78	06/16/2015		329.0000		

* - 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	
Barium, total	ug/L	MW-78	09/16/2015		298.0000		
Barium, total	ug/L	MW-78	03/22/2016		309.0000		
Barium, total	ug/L	MW-78	09/15/2016		311.0000		
Barium, total	ug/L	MW-78	03/23/2017		307.0000		
Barium, total	ug/L	MW-78	09/08/2017		357.0000		
Barium, total	ug/L	MW-78	03/19/2018		320.0000		
Barium, total	ug/L	MW-78	09/11/2018		295.0000		
Barium, total	ug/L	MW-78	03/26/2019		285.0000		
Barium, total	ug/L	MW-78	09/04/2019		332.0000		
Barium, total	ug/L	MW-78	03/26/2020		304.0000		
Barium, total	ug/L	MW-78	09/15/2020		319.0000		
Barium, total	ug/L	MW-78	03/02/2021		304.0000		
Barium, total	ug/L	MW-78	09/07/2021		332.0000		
Barium, total	ug/L	MW-78	03/24/2022		291.0000		
Barium, total	ug/L	MW-78	08/31/2022		340.0000		
Barium, total	ug/L	MW-78	03/02/2023		345.0000		
Barium, total	ug/L	MW-78	09/12/2023		309.0000		
Barium, total	ug/L	MW-78	03/04/2024		341.0000		
Barium, total	ug/L	MW-78	09/23/2024		284.0000		
Beryllium, total	ug/L	MW-78	09/24/2014	ND	4.0000		
Beryllium, total	ug/L	MW-78	12/05/2014	ND	4.0000		
Beryllium, total	ug/L	MW-78	03/11/2015	ND	4.0000		
Beryllium, total	ug/L	MW-78	06/16/2015	ND	4.0000		
Beryllium, total	ug/L	MW-78	09/16/2015	ND	4.0000		
Beryllium, total	ug/L	MW-78	03/22/2016	ND	4.0000		
Beryllium, total	ug/L	MW-78	09/15/2016	ND	4.0000		
Beryllium, total	ug/L	MW-78	03/23/2017	ND	4.0000		
Beryllium, total	ug/L	MW-78	09/08/2017	ND	4.0000		
Beryllium, total	ug/L	MW-78	03/19/2018	ND	4.0000		
Beryllium, total	ug/L	MW-78	09/11/2018	ND	4.0000		
Beryllium, total	ug/L	MW-78	03/26/2019	ND	4.0000		
Beryllium, total	ug/L	MW-78	09/04/2019	ND	4.0000		
Beryllium, total	ug/L	MW-78	03/26/2020	ND	4.0000		
Beryllium, total	ug/L	MW-78	09/15/2020	ND	4.0000		
Beryllium, total	ug/L	MW-78	03/02/2021	ND	4.0000		
Beryllium, total	ug/L	MW-78	09/07/2021	ND	4.0000		
Beryllium, total	ug/L	MW-78	03/24/2022	ND	4.0000		
Beryllium, total	ug/L	MW-78	08/31/2022	ND	4.0000		
Beryllium, total	ug/L	MW-78	03/02/2023	ND	4.0000		
Beryllium, total	ug/L	MW-78	09/12/2023	ND	4.0000		
Beryllium, total	ug/L	MW-78	03/04/2024	ND	4.0000		
Beryllium, total	ug/L	MW-78	09/23/2024	ND	4.0000		
Cadmium, total	ug/L	MW-78	09/24/2014	ND	0.8000		
Cadmium, total	ug/L	MW-78	12/05/2014	ND	0.8000		
Cadmium, total	ug/L	MW-78	03/11/2015	ND	0.8000		
Cadmium, total	ug/L	MW-78	06/16/2015	ND	0.8000		
Cadmium, total	ug/L	MW-78	09/16/2015	ND	0.8000		
Cadmium, total	ug/L	MW-78	03/22/2016	ND	0.8000		
Cadmium, total	ug/L	MW-78	09/15/2016	ND	0.8000		
Cadmium, total	ug/L	MW-78	03/23/2017	ND	0.8000		
Cadmium, total	ug/L	MW-78	09/08/2017	ND	0.8000		
Cadmium, total	ug/L	MW-78	03/19/2018	ND	0.8000		
Cadmium, total	ug/L	MW-78	09/11/2018	ND	0.8000		
Cadmium, total	ug/L	MW-78	03/26/2019	ND	0.8000		
Cadmium, total	ug/L	MW-78	09/04/2019	ND	0.8000		
Cadmium, total	ug/L	MW-78	03/26/2020	ND	0.8000		
Cadmium, total	ug/L	MW-78	09/15/2020	ND	0.8000		
Cadmium, total	ug/L	MW-78	03/02/2021	ND	0.8000		
Cadmium, total	ug/L	MW-78	09/07/2021	ND	0.8000		
Cadmium, total	ug/L	MW-78	03/24/2022	ND	0.8000		
Cadmium, total	ug/L	MW-78	08/31/2022	ND	0.8000		
Cadmium, total	ug/L	MW-78	03/02/2023	ND	0.8000		
Cadmium, total	ug/L	MW-78	09/12/2023	ND	0.8000		
Cadmium, total	ug/L	MW-78	03/04/2024	ND	0.8000		
Cadmium, total	ug/L	MW-78	09/23/2024	ND	0.8000		
Chromium, total	ug/L	MW-78	09/24/2014	ND	8.0000		
Chromium, total	ug/L	MW-78	12/05/2014	ND	8.0000		
Chromium, total	ug/L	MW-78	03/11/2015	ND	8.0000		
Chromium, total	ug/L	MW-78	06/16/2015	ND	8.0000		
Chromium, total	ug/L	MW-78	09/16/2015	ND	8.0000		
Chromium, total	ug/L	MW-78	03/22/2016	ND	8.0000		
Chromium, total	ug/L	MW-78	09/15/2016	ND	8.0000		
Chromium, total	ug/L	MW-78	03/23/2017	ND	8.0000		
Chromium, total	ug/L	MW-78	09/08/2017	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-78	03/19/2018	ND	8.0000		
Chromium, total	ug/L	MW-78	09/11/2018	ND	8.0000		
Chromium, total	ug/L	MW-78	03/26/2019	ND	8.0000		
Chromium, total	ug/L	MW-78	09/04/2019	ND	8.0000		
Chromium, total	ug/L	MW-78	03/26/2020	ND	8.0000		
Chromium, total	ug/L	MW-78	09/15/2020	ND	8.0000		
Chromium, total	ug/L	MW-78	03/02/2021	ND	8.0000		
Chromium, total	ug/L	MW-78	09/07/2021	ND	8.0000		
Chromium, total	ug/L	MW-78	03/24/2022	ND	8.0000		
Chromium, total	ug/L	MW-78	08/31/2022	ND	8.0000		
Chromium, total	ug/L	MW-78	03/02/2023	ND	8.0000		
Chromium, total	ug/L	MW-78	09/12/2023	ND	8.0000		
Chromium, total	ug/L	MW-78	03/04/2024	ND	8.0000		
Chromium, total	ug/L	MW-78	09/23/2024	ND	8.0000		
Cobalt, total	ug/L	MW-78	09/24/2014	ND	0.8000		
Cobalt, total	ug/L	MW-78	12/05/2014	ND	0.8000		
Cobalt, total	ug/L	MW-78	03/11/2015	ND	0.8000		
Cobalt, total	ug/L	MW-78	06/16/2015	ND	0.8000		
Cobalt, total	ug/L	MW-78	09/16/2015	ND	0.8000		
Cobalt, total	ug/L	MW-78	03/22/2016	ND	0.8000		
Cobalt, total	ug/L	MW-78	09/15/2016	ND	0.8000		
Cobalt, total	ug/L	MW-78	03/23/2017	ND	0.8000		
Cobalt, total	ug/L	MW-78	09/08/2017	ND	0.8000		
Cobalt, total	ug/L	MW-78	03/19/2018	ND	0.8000		
Cobalt, total	ug/L	MW-78	09/11/2018	ND	0.8000		
Cobalt, total	ug/L	MW-78	03/26/2019	ND	0.8000		
Cobalt, total	ug/L	MW-78	09/04/2019	ND	0.8000		
Cobalt, total	ug/L	MW-78	03/26/2020	ND	0.8000		
Cobalt, total	ug/L	MW-78	09/15/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-78	03/02/2021		1.0000		
Cobalt, total	ug/L	MW-78	09/07/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-78	03/24/2022	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-78	08/31/2022	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-78	03/02/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-78	09/12/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-78	03/04/2024	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-78	09/23/2024	ND	0.4000	0.8000	**
Copper, total	ug/L	MW-78	09/24/2014	ND	4.0000		
Copper, total	ug/L	MW-78	12/05/2014	ND	4.0000		
Copper, total	ug/L	MW-78	03/11/2015	ND	4.0000		
Copper, total	ug/L	MW-78	06/16/2015	ND	4.0000		
Copper, total	ug/L	MW-78	09/16/2015	ND	4.0000		
Copper, total	ug/L	MW-78	03/22/2016	ND	4.0000		
Copper, total	ug/L	MW-78	09/15/2016	ND	4.0000		
Copper, total	ug/L	MW-78	03/23/2017	ND	4.0000		
Copper, total	ug/L	MW-78	09/08/2017	ND	4.0000		
Copper, total	ug/L	MW-78	03/19/2018	ND	4.0000		
Copper, total	ug/L	MW-78	09/11/2018	ND	4.0000		
Copper, total	ug/L	MW-78	03/26/2019	ND	4.0000		
Copper, total	ug/L	MW-78	09/04/2019	ND	4.0000		
Copper, total	ug/L	MW-78	03/26/2020	ND	4.0000		
Copper, total	ug/L	MW-78	09/15/2020	ND	4.0000		
Copper, total	ug/L	MW-78	03/02/2021	ND	4.0000		
Copper, total	ug/L	MW-78	09/07/2021	ND	4.0000		
Copper, total	ug/L	MW-78	03/24/2022	ND	4.0000		
Copper, total	ug/L	MW-78	08/31/2022	ND	4.0000		
Copper, total	ug/L	MW-78	03/02/2023	ND	4.0000		
Copper, total	ug/L	MW-78	09/12/2023	ND	4.0000		
Copper, total	ug/L	MW-78	03/04/2024	ND	4.0000		
Copper, total	ug/L	MW-78	09/23/2024	ND	4.0000		
Lead, total	ug/L	MW-78	09/24/2014	ND	4.0000		
Lead, total	ug/L	MW-78	12/05/2014	ND	4.0000		
Lead, total	ug/L	MW-78	03/11/2015	ND	4.0000		
Lead, total	ug/L	MW-78	06/16/2015	ND	4.0000		
Lead, total	ug/L	MW-78	09/16/2015	ND	4.0000		
Lead, total	ug/L	MW-78	03/22/2016	ND	4.0000		
Lead, total	ug/L	MW-78	09/15/2016	ND	4.0000		
Lead, total	ug/L	MW-78	03/23/2017	ND	4.0000		
Lead, total	ug/L	MW-78	09/08/2017	ND	4.0000		
Lead, total	ug/L	MW-78	03/19/2018	ND	4.0000		
Lead, total	ug/L	MW-78	09/11/2018	ND	4.0000		
Lead, total	ug/L	MW-78	03/26/2019	ND	4.0000		
Lead, total	ug/L	MW-78	09/04/2019	ND	4.0000		
Lead, total	ug/L	MW-78	03/26/2020	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-78	09/15/2020	ND	4.0000		
Lead, total	ug/L	MW-78	03/02/2021	ND	4.0000		
Lead, total	ug/L	MW-78	09/07/2021	ND	4.0000		
Lead, total	ug/L	MW-78	03/24/2022	ND	4.0000		
Lead, total	ug/L	MW-78	08/31/2022	ND	4.0000		
Lead, total	ug/L	MW-78	03/02/2023	ND	4.0000		
Lead, total	ug/L	MW-78	09/12/2023	ND	4.0000		
Lead, total	ug/L	MW-78	03/04/2024	ND	4.0000		
Lead, total	ug/L	MW-78	09/23/2024	ND	4.0000		
Nickel, total	ug/L	MW-78	09/24/2014	ND	4.0000		
Nickel, total	ug/L	MW-78	12/05/2014	ND	4.0000		
Nickel, total	ug/L	MW-78	03/11/2015	ND	4.0000		
Nickel, total	ug/L	MW-78	06/16/2015	ND	4.0000		
Nickel, total	ug/L	MW-78	09/16/2015	ND	4.0000		
Nickel, total	ug/L	MW-78	03/22/2016	ND	4.0000		
Nickel, total	ug/L	MW-78	09/15/2016	ND	4.0000		
Nickel, total	ug/L	MW-78	03/23/2017	ND	4.0000		
Nickel, total	ug/L	MW-78	09/08/2017	ND	4.0000		
Nickel, total	ug/L	MW-78	03/19/2018	ND	4.0000		
Nickel, total	ug/L	MW-78	09/11/2018	ND	4.0000		
Nickel, total	ug/L	MW-78	03/26/2019	ND	4.0000		
Nickel, total	ug/L	MW-78	09/04/2019	ND	4.0000		
Nickel, total	ug/L	MW-78	03/26/2020	ND	4.0000		
Nickel, total	ug/L	MW-78	09/15/2020	ND	4.0000		
Nickel, total	ug/L	MW-78	03/02/2021	ND	4.0000		
Nickel, total	ug/L	MW-78	09/07/2021	ND	4.0000		
Nickel, total	ug/L	MW-78	03/24/2022	ND	4.0000		
Nickel, total	ug/L	MW-78	08/31/2022	ND	4.0000		
Nickel, total	ug/L	MW-78	03/02/2023	ND	4.0000		
Nickel, total	ug/L	MW-78	09/12/2023	ND	4.0000		
Nickel, total	ug/L	MW-78	03/04/2024	ND	4.0000		
Nickel, total	ug/L	MW-78	09/23/2024	ND	4.0000		
Selenium, total	ug/L	MW-78	09/24/2014		5.4000		
Selenium, total	ug/L	MW-78	12/05/2014		5.6000		
Selenium, total	ug/L	MW-78	03/11/2015		6.5000		
Selenium, total	ug/L	MW-78	06/16/2015		8.6000		
Selenium, total	ug/L	MW-78	09/16/2015		8.1000		
Selenium, total	ug/L	MW-78	03/22/2016		8.9000		
Selenium, total	ug/L	MW-78	09/15/2016		9.4000		
Selenium, total	ug/L	MW-78	03/23/2017		10.6000		
Selenium, total	ug/L	MW-78	09/08/2017		6.9000		
Selenium, total	ug/L	MW-78	03/19/2018		8.3000		
Selenium, total	ug/L	MW-78	09/11/2018		5.6000		
Selenium, total	ug/L	MW-78	03/26/2019		9.5000		
Selenium, total	ug/L	MW-78	09/04/2019		6.8000		
Selenium, total	ug/L	MW-78	03/26/2020		5.4000		
Selenium, total	ug/L	MW-78	09/15/2020		8.5000		
Selenium, total	ug/L	MW-78	03/02/2021		9.4000		
Selenium, total	ug/L	MW-78	09/07/2021		4.9000		
Selenium, total	ug/L	MW-78	03/24/2022		6.3000		
Selenium, total	ug/L	MW-78	08/31/2022		6.2000		
Selenium, total	ug/L	MW-78	03/02/2023		7.9000		
Selenium, total	ug/L	MW-78	09/12/2023		5.8000		
Selenium, total	ug/L	MW-78	03/04/2024		5.7000		
Selenium, total	ug/L	MW-78	09/23/2024		4.1000		
Silver, total	ug/L	MW-78	09/24/2014	ND	4.0000		
Silver, total	ug/L	MW-78	12/05/2014	ND	4.0000		
Silver, total	ug/L	MW-78	03/11/2015	ND	4.0000		
Silver, total	ug/L	MW-78	06/16/2015	ND	4.0000		
Silver, total	ug/L	MW-78	09/16/2015	ND	4.0000		
Silver, total	ug/L	MW-78	03/22/2016	ND	4.0000		
Silver, total	ug/L	MW-78	09/15/2016	ND	4.0000		
Silver, total	ug/L	MW-78	03/23/2017	ND	4.0000		
Silver, total	ug/L	MW-78	09/08/2017	ND	4.0000		
Silver, total	ug/L	MW-78	03/19/2018	ND	4.0000		
Silver, total	ug/L	MW-78	09/11/2018	ND	4.0000		
Silver, total	ug/L	MW-78	03/26/2019	ND	4.0000		
Silver, total	ug/L	MW-78	09/04/2019	ND	4.0000		
Silver, total	ug/L	MW-78	03/26/2020	ND	4.0000		
Silver, total	ug/L	MW-78	09/15/2020	ND	4.0000		
Silver, total	ug/L	MW-78	03/02/2021	ND	4.0000		
Silver, total	ug/L	MW-78	09/07/2021	ND	4.0000		
Silver, total	ug/L	MW-78	03/24/2022	ND	4.0000		
Silver, total	ug/L	MW-78	08/31/2022	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	
Silver, total	ug/L	MW-78	03/02/2023	ND	4.0000		
Silver, total	ug/L	MW-78	09/12/2023	ND	4.0000		
Silver, total	ug/L	MW-78	03/04/2024	ND	4.0000		
Silver, total	ug/L	MW-78	09/23/2024	ND	4.0000		
Thallium, total	ug/L	MW-78	09/24/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-78	12/05/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-78	03/11/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-78	06/16/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-78	09/16/2015	ND	1.0000	2.0000	**
Thallium, total	ug/L	MW-78	03/22/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-78	09/15/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-78	03/23/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-78	09/08/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-78	03/19/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-78	09/11/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-78	03/26/2019	ND	2.0000		
Thallium, total	ug/L	MW-78	09/04/2019	ND	2.0000		
Thallium, total	ug/L	MW-78	03/26/2020	ND	2.0000		
Thallium, total	ug/L	MW-78	09/15/2020	ND	2.0000		
Thallium, total	ug/L	MW-78	03/02/2021	ND	2.0000		
Thallium, total	ug/L	MW-78	09/07/2021	ND	2.0000		
Thallium, total	ug/L	MW-78	03/24/2022	ND	2.0000		
Thallium, total	ug/L	MW-78	08/31/2022	ND	2.0000		
Thallium, total	ug/L	MW-78	03/02/2023	ND	2.0000		
Thallium, total	ug/L	MW-78	09/12/2023	ND	2.0000		
Thallium, total	ug/L	MW-78	03/04/2024	ND	2.0000		
Thallium, total	ug/L	MW-78	09/23/2024	ND	2.0000		
Vanadium, total	ug/L	MW-78	09/24/2014	ND	20.0000		
Vanadium, total	ug/L	MW-78	12/05/2014	ND	20.0000		
Vanadium, total	ug/L	MW-78	03/11/2015	ND	20.0000		
Vanadium, total	ug/L	MW-78	06/16/2015	ND	20.0000		
Vanadium, total	ug/L	MW-78	09/16/2015	ND	20.0000		
Vanadium, total	ug/L	MW-78	03/22/2016	ND	20.0000		
Vanadium, total	ug/L	MW-78	09/15/2016	ND	20.0000		
Vanadium, total	ug/L	MW-78	03/23/2017	ND	20.0000		
Vanadium, total	ug/L	MW-78	09/08/2017	ND	20.0000		
Vanadium, total	ug/L	MW-78	03/19/2018	ND	20.0000		
Vanadium, total	ug/L	MW-78	09/11/2018	ND	20.0000		
Vanadium, total	ug/L	MW-78	03/26/2019	ND	20.0000		
Vanadium, total	ug/L	MW-78	09/04/2019	ND	20.0000		
Vanadium, total	ug/L	MW-78	03/26/2020	ND	20.0000		
Vanadium, total	ug/L	MW-78	09/15/2020	ND	20.0000		
Vanadium, total	ug/L	MW-78	03/02/2021	ND	20.0000		
Vanadium, total	ug/L	MW-78	09/07/2021	ND	20.0000		
Vanadium, total	ug/L	MW-78	03/24/2022	ND	20.0000		
Vanadium, total	ug/L	MW-78	08/31/2022	ND	20.0000		
Vanadium, total	ug/L	MW-78	03/02/2023	ND	20.0000		
Vanadium, total	ug/L	MW-78	09/12/2023	ND	20.0000		
Vanadium, total	ug/L	MW-78	03/04/2024	ND	20.0000		
Vanadium, total	ug/L	MW-78	09/23/2024	ND	20.0000		
Zinc, total	ug/L	MW-78	09/24/2014		10.7000		
Zinc, total	ug/L	MW-78	12/05/2014	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-78	03/11/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-78	06/16/2015		8.4000		
Zinc, total	ug/L	MW-78	09/16/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-78	03/22/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-78	09/15/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-78	03/23/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-78	09/08/2017	ND	20.0000		
Zinc, total	ug/L	MW-78	03/19/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-78	09/11/2018	ND	20.0000		
Zinc, total	ug/L	MW-78	03/26/2019	ND	20.0000		
Zinc, total	ug/L	MW-78	09/04/2019		17.6000		
Zinc, total	ug/L	MW-78	03/26/2020	ND	20.0000		
Zinc, total	ug/L	MW-78	09/15/2020	ND	20.0000		
Zinc, total	ug/L	MW-78	03/02/2021	ND	20.0000		
Zinc, total	ug/L	MW-78	09/07/2021	ND	20.0000		
Zinc, total	ug/L	MW-78	03/24/2022	ND	20.0000		
Zinc, total	ug/L	MW-78	08/31/2022	ND	20.0000		
Zinc, total	ug/L	MW-78	03/02/2023	ND	20.0000		
Zinc, total	ug/L	MW-78	09/12/2023	ND	20.0000		
Zinc, total	ug/L	MW-78	03/04/2024	ND	20.0000		
Zinc, total	ug/L	MW-78	09/23/2024	ND	20.0000		
Antimony, total	ug/L	SW-101	09/14/2016	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	
Antimony, total	ug/L	SW-101	03/23/2017	ND	2.0000		
Antimony, total	ug/L	SW-101	09/08/2017	ND	2.0000		
Antimony, total	ug/L	SW-101	03/19/2018	ND	2.0000		
Antimony, total	ug/L	SW-101	09/11/2018	ND	2.0000		
Antimony, total	ug/L	SW-101	03/26/2019	ND	2.0000		
Antimony, total	ug/L	SW-101	09/04/2019	ND	2.0000		
Arsenic, total	ug/L	SW-101	09/14/2016	ND	4.0000		
Arsenic, total	ug/L	SW-101	03/23/2017	ND	4.0000		
Arsenic, total	ug/L	SW-101	09/08/2017	ND	4.0000		
Arsenic, total	ug/L	SW-101	03/19/2018		4.4000		
Arsenic, total	ug/L	SW-101	09/11/2018	ND	4.0000		
Arsenic, total	ug/L	SW-101	03/26/2019	ND	4.0000		
Arsenic, total	ug/L	SW-101	09/04/2019		7.3000		
Barium, total	ug/L	SW-101	09/14/2016		188.0000		
Barium, total	ug/L	SW-101	03/23/2017		233.0000		
Barium, total	ug/L	SW-101	09/08/2017		272.0000		
Barium, total	ug/L	SW-101	03/19/2018		162.0000		
Barium, total	ug/L	SW-101	09/11/2018		127.0000		
Barium, total	ug/L	SW-101	03/26/2019		160.0000		
Barium, total	ug/L	SW-101	09/04/2019		256.0000		
Beryllium, total	ug/L	SW-101	09/14/2016	ND	4.0000		
Beryllium, total	ug/L	SW-101	03/23/2017	ND	4.0000		
Beryllium, total	ug/L	SW-101	09/08/2017	ND	4.0000		
Beryllium, total	ug/L	SW-101	03/19/2018	ND	4.0000		
Beryllium, total	ug/L	SW-101	09/11/2018	ND	4.0000		
Beryllium, total	ug/L	SW-101	03/26/2019	ND	4.0000		
Beryllium, total	ug/L	SW-101	09/04/2019	ND	4.0000		
Cadmium, total	ug/L	SW-101	09/14/2016	ND	0.8000		
Cadmium, total	ug/L	SW-101	03/23/2017	ND	0.8000		
Cadmium, total	ug/L	SW-101	09/08/2017	ND	0.8000		
Cadmium, total	ug/L	SW-101	03/19/2018	ND	0.8000		
Cadmium, total	ug/L	SW-101	09/11/2018	ND	0.8000		
Cadmium, total	ug/L	SW-101	03/26/2019	ND	0.8000		
Cadmium, total	ug/L	SW-101	09/04/2019	ND	0.8000		
Chromium, total	ug/L	SW-101	09/14/2016	ND	8.0000		
Chromium, total	ug/L	SW-101	03/23/2017	ND	8.0000		
Chromium, total	ug/L	SW-101	09/08/2017	ND	8.0000		
Chromium, total	ug/L	SW-101	03/19/2018	ND	8.0000		
Chromium, total	ug/L	SW-101	09/11/2018	ND	8.0000		
Chromium, total	ug/L	SW-101	03/26/2019	ND	8.0000		
Chromium, total	ug/L	SW-101	09/04/2019	ND	8.0000		
Cobalt, total	ug/L	SW-101	09/14/2016		4.5000		
Cobalt, total	ug/L	SW-101	03/23/2017		4.2000		
Cobalt, total	ug/L	SW-101	09/08/2017		6.9000		
Cobalt, total	ug/L	SW-101	03/19/2018		2.3000		
Cobalt, total	ug/L	SW-101	09/11/2018		1.9000		
Cobalt, total	ug/L	SW-101	03/26/2019		1.8000		
Cobalt, total	ug/L	SW-101	09/04/2019		5.9000		
Copper, total	ug/L	SW-101	09/14/2016	ND	4.0000		
Copper, total	ug/L	SW-101	03/23/2017	ND	4.0000		
Copper, total	ug/L	SW-101	09/08/2017	ND	4.0000		
Copper, total	ug/L	SW-101	03/19/2018	ND	4.0000		
Copper, total	ug/L	SW-101	09/11/2018	ND	4.0000		
Copper, total	ug/L	SW-101	03/26/2019	ND	4.0000		
Copper, total	ug/L	SW-101	09/04/2019	ND	4.0000		
Lead, total	ug/L	SW-101	09/14/2016	ND	4.0000		
Lead, total	ug/L	SW-101	03/23/2017	ND	4.0000		
Lead, total	ug/L	SW-101	09/08/2017	ND	4.0000		
Lead, total	ug/L	SW-101	03/19/2018	ND	4.0000		
Lead, total	ug/L	SW-101	09/11/2018	ND	4.0000		
Lead, total	ug/L	SW-101	03/26/2019	ND	4.0000		
Lead, total	ug/L	SW-101	09/04/2019	ND	4.0000		
Nickel, total	ug/L	SW-101	09/14/2016		8.7000		
Nickel, total	ug/L	SW-101	03/23/2017		5.4000		
Nickel, total	ug/L	SW-101	09/08/2017		8.6000		
Nickel, total	ug/L	SW-101	03/19/2018	ND	4.0000		
Nickel, total	ug/L	SW-101	09/11/2018	ND	4.0000		
Nickel, total	ug/L	SW-101	03/26/2019		4.2000		
Nickel, total	ug/L	SW-101	09/04/2019		7.5000		
Selenium, total	ug/L	SW-101	09/14/2016	ND	4.0000		
Selenium, total	ug/L	SW-101	03/23/2017	ND	4.0000		
Selenium, total	ug/L	SW-101	09/08/2017	ND	4.0000		
Selenium, total	ug/L	SW-101	03/19/2018	ND	4.0000		
Selenium, total	ug/L	SW-101	09/11/2018	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	SW-101	03/26/2019	ND	4.0000		
Selenium, total	ug/L	SW-101	09/04/2019	ND	4.0000		
Silver, total	ug/L	SW-101	09/14/2016	ND	4.0000		
Silver, total	ug/L	SW-101	03/23/2017	ND	4.0000		
Silver, total	ug/L	SW-101	09/08/2017	ND	4.0000		
Silver, total	ug/L	SW-101	03/19/2018	ND	4.0000		
Silver, total	ug/L	SW-101	09/11/2018	ND	8.0000	4.0000	**
Silver, total	ug/L	SW-101	03/26/2019	ND	4.0000		
Silver, total	ug/L	SW-101	09/04/2019	ND	4.0000		
Thallium, total	ug/L	SW-101	09/14/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	SW-101	03/23/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	SW-101	09/08/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	SW-101	03/19/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	SW-101	09/11/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	SW-101	03/26/2019	ND	2.0000		
Thallium, total	ug/L	SW-101	09/04/2019	ND	2.0000		
Vanadium, total	ug/L	SW-101	09/14/2016	ND	20.0000		
Vanadium, total	ug/L	SW-101	03/23/2017	ND	20.0000		
Vanadium, total	ug/L	SW-101	09/08/2017	ND	20.0000		
Vanadium, total	ug/L	SW-101	03/19/2018	ND	20.0000		
Vanadium, total	ug/L	SW-101	09/11/2018	ND	20.0000		
Vanadium, total	ug/L	SW-101	03/26/2019	ND	20.0000		
Vanadium, total	ug/L	SW-101	09/04/2019	ND	20.0000		
Zinc, total	ug/L	SW-101	09/14/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	SW-101	03/23/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	SW-101	09/08/2017	ND	20.0000		
Zinc, total	ug/L	SW-101	03/19/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	SW-101	09/11/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	SW-101	03/26/2019	ND	20.0000		
Zinc, total	ug/L	SW-101	09/04/2019	ND	8.0000	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-44	09/23/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-44	09/23/2024		11.9000	*	7.3000
Barium, total	ug/L	MW-44	09/23/2024		142.0000		357.0000
Beryllium, total	ug/L	MW-44	09/23/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-44	09/23/2024	ND	0.8000		0.8000
Chromium, total	ug/L	MW-44	09/23/2024	ND	8.0000		8.0000
Cobalt, total	ug/L	MW-44	09/23/2024		10.3000	***	6.9000
Copper, total	ug/L	MW-44	09/23/2024	ND	4.0000		4.0000
Lead, total	ug/L	MW-44	09/23/2024	ND	4.0000		4.0000
Nickel, total	ug/L	MW-44	09/23/2024		10.9000	***	8.7000
Selenium, total	ug/L	MW-44	09/23/2024	ND	4.0000		10.6000
Silver, total	ug/L	MW-44	09/23/2024	ND	4.0000		6.4000
Thallium, total	ug/L	MW-44	09/23/2024	ND	2.0000		2.4000
Vanadium, total	ug/L	MW-44	09/23/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-44	09/23/2024	ND	20.0000		32.3000
Antimony, total	ug/L	MW-56	09/23/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-56	09/23/2024	ND	4.0000		7.3000
Barium, total	ug/L	MW-56	09/23/2024		39.2000		357.0000
Beryllium, total	ug/L	MW-56	09/23/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-56	09/23/2024	ND	0.8000		0.8000
Chromium, total	ug/L	MW-56	09/23/2024	ND	8.0000		8.0000
Cobalt, total	ug/L	MW-56	09/23/2024		2.5000		6.9000
Copper, total	ug/L	MW-56	09/23/2024	ND	4.0000		4.0000
Lead, total	ug/L	MW-56	09/23/2024	ND	4.0000	**	4.0000
Nickel, total	ug/L	MW-56	09/23/2024		7.3000		8.7000
Selenium, total	ug/L	MW-56	09/23/2024	ND	4.0000		10.6000
Silver, total	ug/L	MW-56	09/23/2024	ND	4.0000		6.4000
Thallium, total	ug/L	MW-56	09/23/2024	ND	2.0000		2.4000
Vanadium, total	ug/L	MW-56	09/23/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-56	09/23/2024	ND	20.0000		32.3000
Antimony, total	ug/L	MW-57	09/23/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-57	09/23/2024	ND	4.0000		7.3000
Barium, total	ug/L	MW-57	09/23/2024		302.0000		357.0000
Beryllium, total	ug/L	MW-57	09/23/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-57	09/23/2024	ND	0.8000		0.8000
Chromium, total	ug/L	MW-57	09/23/2024	ND	8.0000		8.0000
Cobalt, total	ug/L	MW-57	09/23/2024		1.0000		6.9000
Copper, total	ug/L	MW-57	09/23/2024	ND	4.0000		4.0000
Lead, total	ug/L	MW-57	09/23/2024	ND	4.0000		4.0000
Nickel, total	ug/L	MW-57	09/23/2024		4.6000		8.7000
Selenium, total	ug/L	MW-57	09/23/2024	ND	4.0000		10.6000
Silver, total	ug/L	MW-57	09/23/2024	ND	4.0000		6.4000
Thallium, total	ug/L	MW-57	09/23/2024	ND	2.0000		2.4000
Vanadium, total	ug/L	MW-57	09/23/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-57	09/23/2024	ND	20.0000		32.3000
Antimony, total	ug/L	MW-64	09/23/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-64	09/23/2024		30.6000	***	7.3000
Barium, total	ug/L	MW-64	09/23/2024		52.8000		357.0000
Beryllium, total	ug/L	MW-64	09/23/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-64	09/23/2024	ND	0.8000		0.8000
Chromium, total	ug/L	MW-64	09/23/2024	ND	8.0000		8.0000
Cobalt, total	ug/L	MW-64	09/23/2024		17.9000	***	6.9000
Copper, total	ug/L	MW-64	09/23/2024	ND	4.0000		4.0000
Lead, total	ug/L	MW-64	09/23/2024	ND	4.0000		4.0000
Nickel, total	ug/L	MW-64	09/23/2024		42.6000	***	8.7000
Selenium, total	ug/L	MW-64	09/23/2024	ND	4.0000		10.6000
Silver, total	ug/L	MW-64	09/23/2024	ND	4.0000		6.4000
Thallium, total	ug/L	MW-64	09/23/2024	ND	2.0000		2.4000
Vanadium, total	ug/L	MW-64	09/23/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-64	09/23/2024		21.5000	**	32.3000
Antimony, total	ug/L	MW-65	09/23/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-65	09/23/2024		7.9000	*	7.3000
Barium, total	ug/L	MW-65	09/23/2024		35.4000		357.0000
Beryllium, total	ug/L	MW-65	09/23/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-65	09/23/2024	ND	0.8000		0.8000
Chromium, total	ug/L	MW-65	09/23/2024	ND	8.0000		8.0000
Cobalt, total	ug/L	MW-65	09/23/2024		3.4000	**	6.9000
Copper, total	ug/L	MW-65	09/23/2024		8.7000	*	4.0000
Lead, total	ug/L	MW-65	09/23/2024	ND	4.0000		4.0000
Nickel, total	ug/L	MW-65	09/23/2024		13.5000	***	8.7000
Selenium, total	ug/L	MW-65	09/23/2024	ND	4.0000		10.6000
Silver, total	ug/L	MW-65	09/23/2024	ND	4.0000		6.4000

* - 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 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Thallium, total	ug/L	MW-65	09/23/2024	ND	2.0000		2.4000
Vanadium, total	ug/L	MW-65	09/23/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-65	09/23/2024		29.4000		32.3000

* - 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	Upgradient Detect	Upgradient N	Upgradient Proportion	Downgradient Detect	Downgradient N	Downgradient Proportion
Antimony, total	0	76	0.000	0	80	0.000
Arsenic, total	2	76	0.026	39	81	0.481
Barium, total	76	76	1.000	84	84	1.000
Beryllium, total	0	76	0.000	0	80	0.000
Cadmium, total	0	76	0.000	0	80	0.000
Chromium, total	0	76	0.000	0	80	0.000
Cobalt, total	12	76	0.158	70	81	0.864
Copper, total	0	76	0.000	10	81	0.123
Lead, total	0	76	0.000	1	80	0.013
Nickel, total	5	76	0.066	64	81	0.790
Selenium, total	23	76	0.303	1	80	0.013
Silver, total	1	76	0.013	0	80	0.000
Thallium, total	1	76	0.013	0	80	0.000
Vanadium, total	0	76	0.000	0	80	0.000
Zinc, total	5	76	0.066	20	80	0.250

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	0	76	0.000									nonpar
Arsenic, total	2	76	0.026									nonpar
Barium, total	76	76	1.000	2.661	2.898					2.326	non-norm	nonpar
Beryllium, total	0	76	0.000									nonpar
Cadmium, total	0	76	0.000									nonpar
Chromium, total	0	76	0.000									nonpar
Cobalt, total	12	76	0.158	0.421	0.600					2.326	normal	nonpar
Copper, total	0	76	0.000									nonpar
Lead, total	0	76	0.000									nonpar
Nickel, total	5	76	0.066	0.460	0.593					2.326	normal	nonpar
Selenium, total	23	76	0.303	0.468	0.181					2.326	normal	nonpar
Silver, total	1	76	0.013									nonpar
Thallium, total	1	76	0.013									nonpar
Vanadium, total	0	76	0.000									nonpar
Zinc, total	5	76	0.066	0.090	0.311					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	0	76					2.0000	nonpar	***	0.99
Arsenic, total	ug/L	2	76					7.3000	nonpar		0.99
Barium, total	ug/L	76	76					357.0000	nonpar		0.99
Beryllium, total	ug/L	0	76					4.0000	nonpar	***	0.99
Cadmium, total	ug/L	0	76					0.8000	nonpar	***	0.99
Chromium, total	ug/L	0	76					8.0000	nonpar	***	0.99
Cobalt, total	ug/L	12	76					6.9000	nonpar		0.99
Copper, total	ug/L	0	76					4.0000	nonpar	***	0.99
Lead, total	ug/L	0	76					4.0000	nonpar	***	0.99
Nickel, total	ug/L	5	76					8.7000	nonpar		0.99
Selenium, total	ug/L	23	76					10.6000	nonpar		0.99
Silver, total	ug/L	1	76					6.4000	nonpar		0.99
Thallium, total	ug/L	1	76					2.4000	nonpar		0.99
Vanadium, total	ug/L	0	76					20.0000	nonpar	***	0.99
Zinc, total	ug/L	5	76					32.3000	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-44	09/14/2016	ND	4.0000		7.3000
Arsenic, total	ug/L	MW-44	09/08/2017		5.6000		7.3000
Arsenic, total	ug/L	MW-44	12/05/2017	ND	4.0000		7.3000
Arsenic, total	ug/L	MW-44	03/19/2018	ND	4.0000		7.3000
Arsenic, total	ug/L	MW-44	09/11/2018	ND	4.0000		7.3000
Arsenic, total	ug/L	MW-44	03/26/2019		6.6000		7.3000
Arsenic, total	ug/L	MW-44	09/04/2019		7.9000	*	7.3000
Arsenic, total	ug/L	MW-44	03/26/2020	ND	4.0000		7.3000
Arsenic, total	ug/L	MW-44	09/15/2020		13.1000	*	7.3000
Arsenic, total	ug/L	MW-44	03/02/2021	ND	4.0000		7.3000
Arsenic, total	ug/L	MW-44	09/07/2021		9.4000	*	7.3000
Arsenic, total	ug/L	MW-44	03/24/2022		7.6000	*	7.3000
Arsenic, total	ug/L	MW-44	08/31/2022		10.0000	*	7.3000
Arsenic, total	ug/L	MW-44	03/02/2023	ND	4.0000		7.3000
Arsenic, total	ug/L	MW-44	09/12/2023		10.8000	*	7.3000
Arsenic, total	ug/L	MW-44	03/04/2024		4.1000		7.3000
Arsenic, total	ug/L	MW-44	09/23/2024		11.9000	*	7.3000
Cobalt, total	ug/L	MW-44	09/14/2016		6.3000		6.9000
Cobalt, total	ug/L	MW-44	09/08/2017		7.3000	*	6.9000
Cobalt, total	ug/L	MW-44	12/05/2017		8.7000	*	6.9000
Cobalt, total	ug/L	MW-44	03/19/2018		8.9000	*	6.9000
Cobalt, total	ug/L	MW-44	09/11/2018		8.4000	*	6.9000
Cobalt, total	ug/L	MW-44	03/26/2019		10.2000	*	6.9000
Cobalt, total	ug/L	MW-44	09/04/2019		8.7000	*	6.9000
Cobalt, total	ug/L	MW-44	03/26/2020		9.2000	*	6.9000
Cobalt, total	ug/L	MW-44	09/15/2020		14.5000	*	6.9000
Cobalt, total	ug/L	MW-44	03/02/2021		8.8000	*	6.9000
Cobalt, total	ug/L	MW-44	09/07/2021		8.1000	*	6.9000
Cobalt, total	ug/L	MW-44	03/24/2022		11.0000	*	6.9000
Cobalt, total	ug/L	MW-44	08/31/2022		11.6000	*	6.9000
Cobalt, total	ug/L	MW-44	03/02/2023		8.8000	*	6.9000
Cobalt, total	ug/L	MW-44	09/12/2023		10.7000	*	6.9000
Cobalt, total	ug/L	MW-44	03/04/2024		9.7000	*	6.9000
Cobalt, total	ug/L	MW-44	09/23/2024		10.3000	*	6.9000
Nickel, total	ug/L	MW-44	09/14/2016		17.3000	*	8.7000
Nickel, total	ug/L	MW-44	09/08/2017		16.0000	*	8.7000
Nickel, total	ug/L	MW-44	03/19/2018		12.7000	*	8.7000
Nickel, total	ug/L	MW-44	09/11/2018		12.8000	*	8.7000
Nickel, total	ug/L	MW-44	03/26/2019		11.9000	*	8.7000
Nickel, total	ug/L	MW-44	09/04/2019		11.7000	*	8.7000
Nickel, total	ug/L	MW-44	03/26/2020		13.2000	*	8.7000
Nickel, total	ug/L	MW-44	09/15/2020		26.2000	*	8.7000
Nickel, total	ug/L	MW-44	03/02/2021		9.7000	*	8.7000
Nickel, total	ug/L	MW-44	09/07/2021		13.2000	*	8.7000
Nickel, total	ug/L	MW-44	03/24/2022		12.2000	*	8.7000
Nickel, total	ug/L	MW-44	08/31/2022		13.5000	*	8.7000
Nickel, total	ug/L	MW-44	03/02/2023		10.0000	*	8.7000
Nickel, total	ug/L	MW-44	09/12/2023		13.2000	*	8.7000
Nickel, total	ug/L	MW-44	03/04/2024		10.0000	*	8.7000
Nickel, total	ug/L	MW-44	09/23/2024		10.9000	*	8.7000
Lead, total	ug/L	MW-56	09/14/2016	ND	4.0000		4.0000
Lead, total	ug/L	MW-56	09/08/2017	ND	4.0000		4.0000
Lead, total	ug/L	MW-56	03/19/2018	ND	4.0000		4.0000
Lead, total	ug/L	MW-56	09/11/2018	ND	4.0000		4.0000
Lead, total	ug/L	MW-56	03/26/2019	ND	4.0000		4.0000
Lead, total	ug/L	MW-56	09/04/2019	ND	4.0000		4.0000
Lead, total	ug/L	MW-56	03/26/2020	ND	4.0000		4.0000
Lead, total	ug/L	MW-56	09/15/2020	ND	4.0000		4.0000
Lead, total	ug/L	MW-56	03/02/2021	ND	4.0000		4.0000
Lead, total	ug/L	MW-56	09/07/2021	ND	4.0000		4.0000
Lead, total	ug/L	MW-56	03/24/2022	ND	4.0000		4.0000
Lead, total	ug/L	MW-56	08/31/2022	ND	4.0000		4.0000
Lead, total	ug/L	MW-56	03/02/2023	ND	4.0000		4.0000
Lead, total	ug/L	MW-56	09/12/2023	ND	4.0000		4.0000
Lead, total	ug/L	MW-56	03/04/2024		14.6000	*	4.0000
Lead, total	ug/L	MW-56	09/23/2024	ND	4.0000		4.0000
Arsenic, total	ug/L	MW-64	09/14/2016		21.6000	*	7.3000
Arsenic, total	ug/L	MW-64	09/08/2017		7.9000	*	7.3000
Arsenic, total	ug/L	MW-64	03/19/2018		19.3000	*	7.3000
Arsenic, total	ug/L	MW-64	09/11/2018		24.2000	*	7.3000
Arsenic, total	ug/L	MW-64	03/26/2019		40.2000	*	7.3000

*   - Significantly increased over background.
** - Detect at limit for 100% NDs in background (NPPL only).
*** - Manual exclusion.
ND = Not Detected, Result = detection limit.

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-64	09/04/2019		22.2000	*	7.3000
Arsenic, total	ug/L	MW-64	03/26/2020		40.3000	*	7.3000
Arsenic, total	ug/L	MW-64	09/15/2020		21.1000	*	7.3000
Arsenic, total	ug/L	MW-64	03/02/2021		20.2000	*	7.3000
Arsenic, total	ug/L	MW-64	09/07/2021		25.2000	*	7.3000
Arsenic, total	ug/L	MW-64	03/24/2022		19.2000	*	7.3000
Arsenic, total	ug/L	MW-64	08/31/2022		27.4000	*	7.3000
Arsenic, total	ug/L	MW-64	03/02/2023		26.4000	*	7.3000
Arsenic, total	ug/L	MW-64	09/12/2023		23.1000	*	7.3000
Arsenic, total	ug/L	MW-64	03/04/2024		29.6000	*	7.3000
Arsenic, total	ug/L	MW-64	09/23/2024		30.6000	*	7.3000
Cobalt, total	ug/L	MW-64	09/14/2016		27.0000	*	6.9000
Cobalt, total	ug/L	MW-64	09/08/2017		34.4000	*	6.9000
Cobalt, total	ug/L	MW-64	03/19/2018		19.1000	*	6.9000
Cobalt, total	ug/L	MW-64	09/11/2018		25.1000	*	6.9000
Cobalt, total	ug/L	MW-64	03/26/2019		16.1000	*	6.9000
Cobalt, total	ug/L	MW-64	09/04/2019		23.0000	*	6.9000
Cobalt, total	ug/L	MW-64	03/26/2020		14.7000	*	6.9000
Cobalt, total	ug/L	MW-64	09/15/2020		20.8000	*	6.9000
Cobalt, total	ug/L	MW-64	03/02/2021		14.6000	*	6.9000
Cobalt, total	ug/L	MW-64	09/07/2021		21.0000	*	6.9000
Cobalt, total	ug/L	MW-64	03/24/2022		11.8000	*	6.9000
Cobalt, total	ug/L	MW-64	08/31/2022		21.6000	*	6.9000
Cobalt, total	ug/L	MW-64	03/02/2023		11.0000	*	6.9000
Cobalt, total	ug/L	MW-64	09/12/2023		18.7000	*	6.9000
Cobalt, total	ug/L	MW-64	03/04/2024		12.0000	*	6.9000
Cobalt, total	ug/L	MW-64	09/23/2024		17.9000	*	6.9000
Nickel, total	ug/L	MW-64	09/14/2016		56.3000	*	8.7000
Nickel, total	ug/L	MW-64	09/08/2017		73.1000	*	8.7000
Nickel, total	ug/L	MW-64	03/19/2018		46.2000	*	8.7000
Nickel, total	ug/L	MW-64	09/11/2018		55.4000	*	8.7000
Nickel, total	ug/L	MW-64	03/26/2019		41.6000	*	8.7000
Nickel, total	ug/L	MW-64	09/04/2019		45.9000	*	8.7000
Nickel, total	ug/L	MW-64	03/26/2020		39.4000	*	8.7000
Nickel, total	ug/L	MW-64	09/15/2020		46.6000	*	8.7000
Nickel, total	ug/L	MW-64	03/02/2021		35.4000	*	8.7000
Nickel, total	ug/L	MW-64	09/07/2021		49.9000	*	8.7000
Nickel, total	ug/L	MW-64	03/24/2022		33.0000	*	8.7000
Nickel, total	ug/L	MW-64	08/31/2022		49.9000	*	8.7000
Nickel, total	ug/L	MW-64	03/02/2023		30.6000	*	8.7000
Nickel, total	ug/L	MW-64	09/12/2023		43.1000	*	8.7000
Nickel, total	ug/L	MW-64	03/04/2024		32.0000	*	8.7000
Nickel, total	ug/L	MW-64	09/23/2024		42.6000	*	8.7000
Zinc, total	ug/L	MW-64	09/14/2016		11.1000		32.3000
Zinc, total	ug/L	MW-64	09/08/2017	ND	20.0000		32.3000
Zinc, total	ug/L	MW-64	03/19/2018	ND	8.0000		32.3000
Zinc, total	ug/L	MW-64	09/11/2018		8.2000		32.3000
Zinc, total	ug/L	MW-64	03/26/2019		62.6000	*	32.3000
Zinc, total	ug/L	MW-64	09/04/2019	ND	8.0000		32.3000
Zinc, total	ug/L	MW-64	03/26/2020	ND	20.0000		32.3000
Zinc, total	ug/L	MW-64	09/15/2020	ND	20.0000		32.3000
Zinc, total	ug/L	MW-64	03/02/2021	ND	20.0000		32.3000
Zinc, total	ug/L	MW-64	09/07/2021	ND	20.0000		32.3000
Zinc, total	ug/L	MW-64	03/24/2022	ND	20.0000		32.3000
Zinc, total	ug/L	MW-64	08/31/2022	ND	20.0000		32.3000
Zinc, total	ug/L	MW-64	03/02/2023	ND	20.0000		32.3000
Zinc, total	ug/L	MW-64	09/12/2023	ND	20.0000		32.3000
Zinc, total	ug/L	MW-64	03/04/2024		51.4000	*	32.3000
Zinc, total	ug/L	MW-64	09/23/2024		21.5000		32.3000
Arsenic, total	ug/L	MW-65	09/14/2016		8.0000	*	7.3000
Arsenic, total	ug/L	MW-65	09/08/2017	ND	4.0000		7.3000
Arsenic, total	ug/L	MW-65	03/19/2018	ND	4.0000		7.3000
Arsenic, total	ug/L	MW-65	09/11/2018	ND	4.0000		7.3000
Arsenic, total	ug/L	MW-65	03/26/2019		5.8000		7.3000
Arsenic, total	ug/L	MW-65	09/04/2019		4.0000		7.3000
Arsenic, total	ug/L	MW-65	03/26/2020	ND	4.0000		7.3000
Arsenic, total	ug/L	MW-65	09/15/2020		4.1000		7.3000
Arsenic, total	ug/L	MW-65	03/02/2021	ND	4.0000		7.3000
Arsenic, total	ug/L	MW-65	09/07/2021	ND	4.0000		7.3000
Arsenic, total	ug/L	MW-65	03/24/2022	ND	4.0000		7.3000
Arsenic, total	ug/L	MW-65	08/31/2022		4.3000		7.3000

* - Significantly increased over background.
** - Detect at limit for 100% NDs in background (NPPL only).
*** - Manual exclusion.
ND = Not Detected, Result = detection limit.

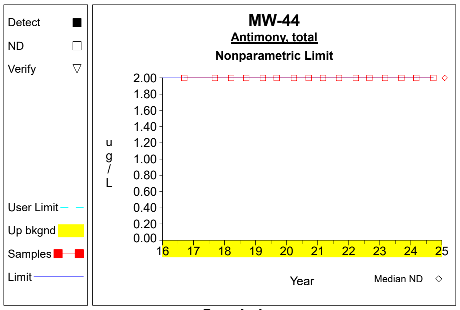
Table 8

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

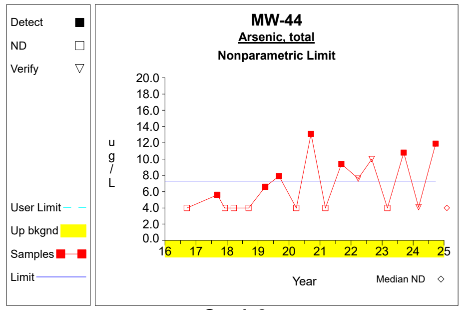
Constituent	Units	Well	Date		Result		Pred. Limit
Arsenic, total	ug/L	MW-65	03/02/2023		9.5000	*	7.3000
Arsenic, total	ug/L	MW-65	09/12/2023	ND	4.0000		7.3000
Arsenic, total	ug/L	MW-65	03/04/2024		6.7000		7.3000
Arsenic, total	ug/L	MW-65	09/23/2024		7.9000	*	7.3000
Cobalt, total	ug/L	MW-65	09/14/2016		10.7000	*	6.9000
Cobalt, total	ug/L	MW-65	09/08/2017		3.1000		6.9000
Cobalt, total	ug/L	MW-65	03/19/2018		8.8000	*	6.9000
Cobalt, total	ug/L	MW-65	09/11/2018		11.3000	*	6.9000
Cobalt, total	ug/L	MW-65	03/26/2019		10.0000	*	6.9000
Cobalt, total	ug/L	MW-65	09/04/2019		3.7000		6.9000
Cobalt, total	ug/L	MW-65	03/26/2020		1.6000		6.9000
Cobalt, total	ug/L	MW-65	09/15/2020		2.7000		6.9000
Cobalt, total	ug/L	MW-65	03/02/2021		3.2000		6.9000
Cobalt, total	ug/L	MW-65	09/07/2021		2.1000		6.9000
Cobalt, total	ug/L	MW-65	03/24/2022		0.7000		6.9000
Cobalt, total	ug/L	MW-65	08/31/2022		5.5000		6.9000
Cobalt, total	ug/L	MW-65	03/02/2023		9.3000	*	6.9000
Cobalt, total	ug/L	MW-65	09/12/2023		5.2000		6.9000
Cobalt, total	ug/L	MW-65	03/04/2024		9.2000	*	6.9000
Cobalt, total	ug/L	MW-65	09/23/2024		3.4000		6.9000
Copper, total	ug/L	MW-65	09/14/2016		6.7000	*	4.0000
Copper, total	ug/L	MW-65	09/08/2017	ND	4.0000		4.0000
Copper, total	ug/L	MW-65	03/19/2018	ND	4.0000		4.0000
Copper, total	ug/L	MW-65	09/11/2018		8.0000	*	4.0000
Copper, total	ug/L	MW-65	03/26/2019		4.0000	**	4.0000
Copper, total	ug/L	MW-65	09/04/2019	ND	4.0000		4.0000
Copper, total	ug/L	MW-65	03/26/2020	ND	4.0000		4.0000
Copper, total	ug/L	MW-65	09/15/2020	ND	4.0000		4.0000
Copper, total	ug/L	MW-65	03/02/2021		10.3000	*	4.0000
Copper, total	ug/L	MW-65	09/07/2021	ND	4.0000		4.0000
Copper, total	ug/L	MW-65	03/24/2022	ND	4.0000		4.0000
Copper, total	ug/L	MW-65	08/31/2022		4.4000	*	4.0000
Copper, total	ug/L	MW-65	03/02/2023		5.2000	*	4.0000
Copper, total	ug/L	MW-65	09/12/2023	ND	4.0000		4.0000
Copper, total	ug/L	MW-65	03/04/2024	ND	4.0000		4.0000
Copper, total	ug/L	MW-65	09/23/2024		8.7000	*	4.0000
Nickel, total	ug/L	MW-65	09/14/2016		28.2000	*	8.7000
Nickel, total	ug/L	MW-65	09/08/2017		10.9000	*	8.7000
Nickel, total	ug/L	MW-65	03/19/2018		15.3000	*	8.7000
Nickel, total	ug/L	MW-65	09/11/2018		24.8000	*	8.7000
Nickel, total	ug/L	MW-65	03/26/2019		12.3000	*	8.7000
Nickel, total	ug/L	MW-65	09/04/2019		9.2000	*	8.7000
Nickel, total	ug/L	MW-65	03/26/2020		7.6000		8.7000
Nickel, total	ug/L	MW-65	09/15/2020		5.8000		8.7000
Nickel, total	ug/L	MW-65	03/02/2021		7.4000		8.7000
Nickel, total	ug/L	MW-65	09/07/2021		4.5000		8.7000
Nickel, total	ug/L	MW-65	03/24/2022	ND	4.0000		8.7000
Nickel, total	ug/L	MW-65	08/31/2022		13.0000	*	8.7000
Nickel, total	ug/L	MW-65	03/02/2023		20.7000	*	8.7000
Nickel, total	ug/L	MW-65	09/12/2023		7.3000		8.7000
Nickel, total	ug/L	MW-65	03/04/2024		14.9000	*	8.7000
Nickel, total	ug/L	MW-65	09/23/2024		13.5000	*	8.7000

* - Significantly increased over background.
** - Detect at limit for 100% NDs in background (NPPL only).
*** - Manual exclusion.
ND = Not Detected, Result = detection limit.

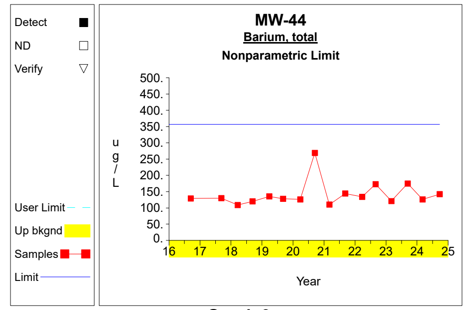
Up vs. Down Prediction Limits



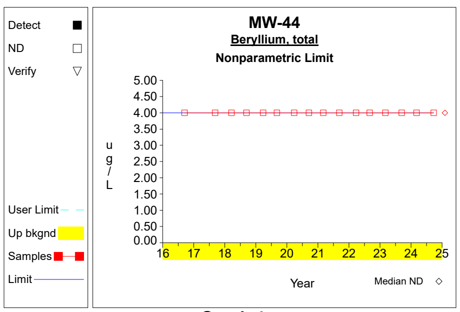
Graph 1



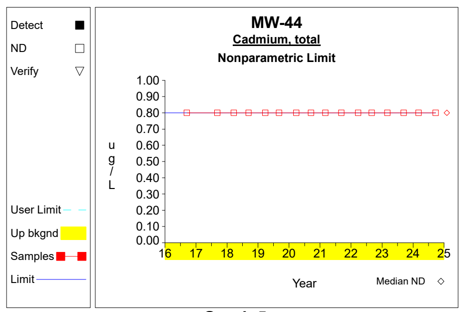
Graph 2



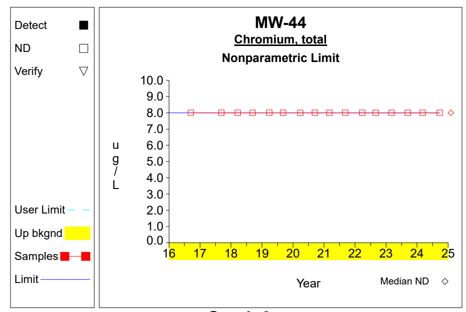
Graph 3



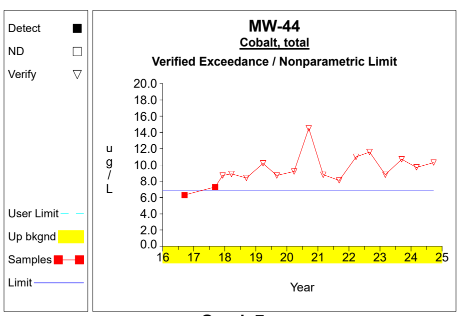
Graph 4



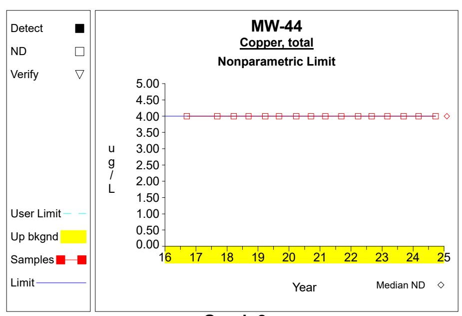
Graph 5



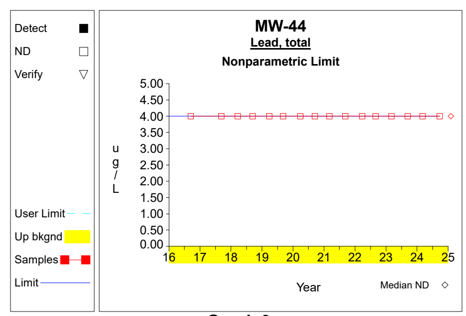
Graph 6



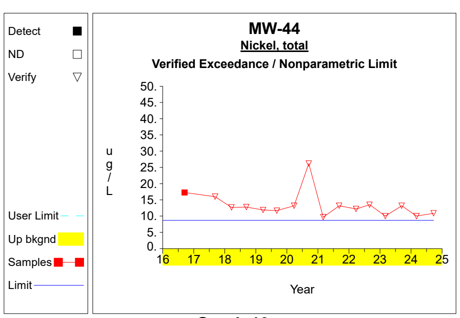
Graph 7



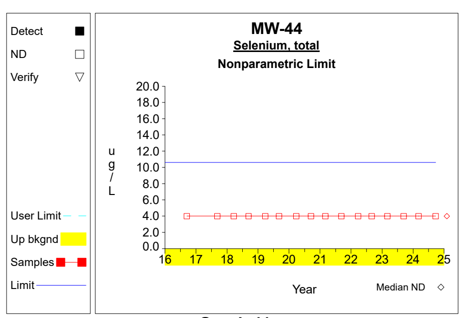
Graph 8



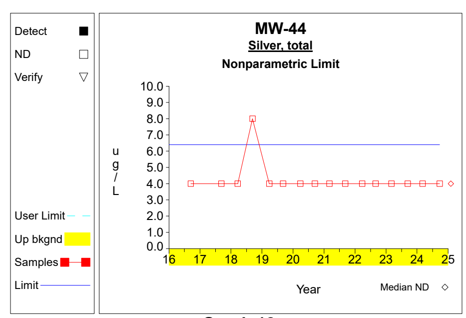
Graph 9



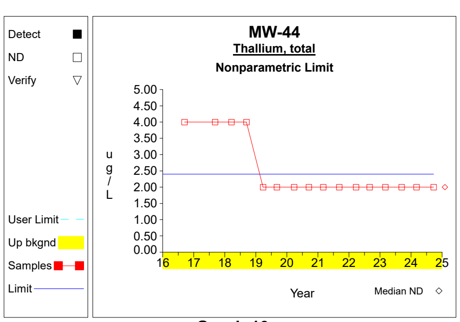
Graph 10



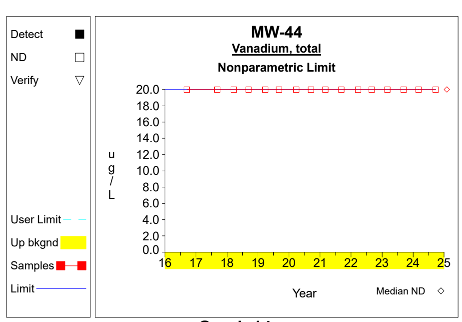
Graph 11



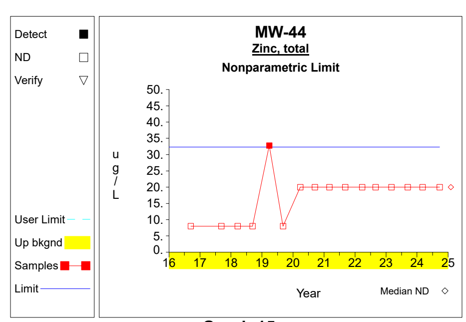
Graph 12



Graph 13

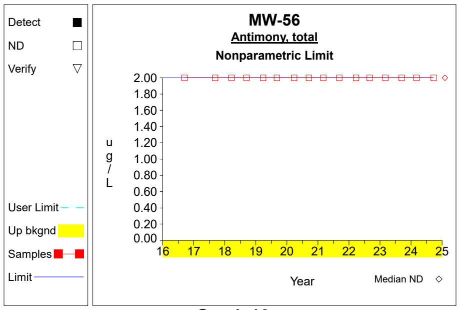


Graph 14

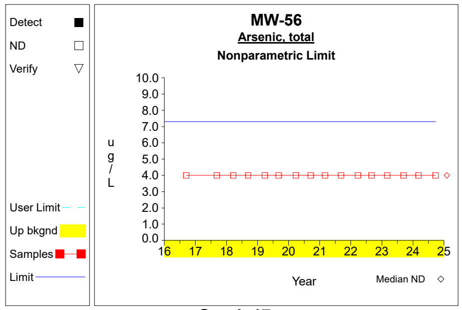


Graph 15

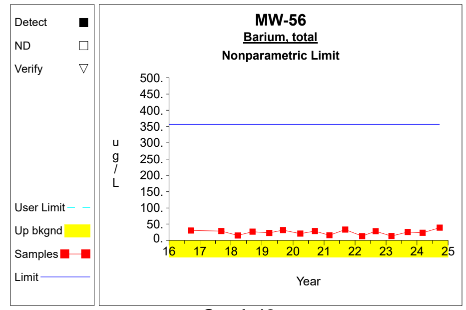
Up vs. Down Prediction Limits



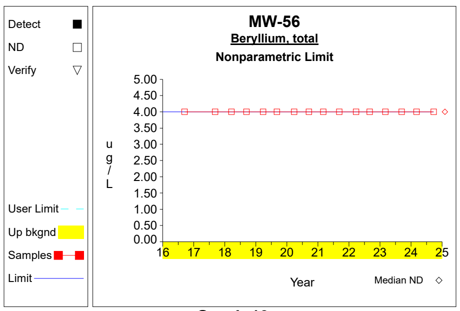
Graph 16



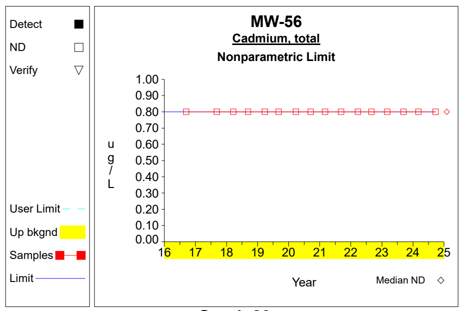
Graph 17



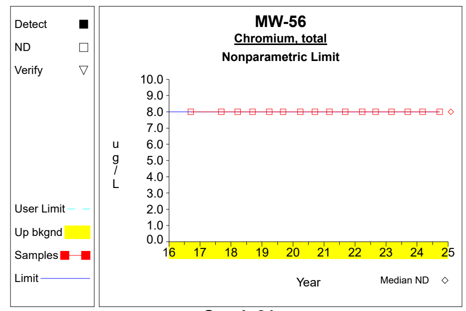
Graph 18



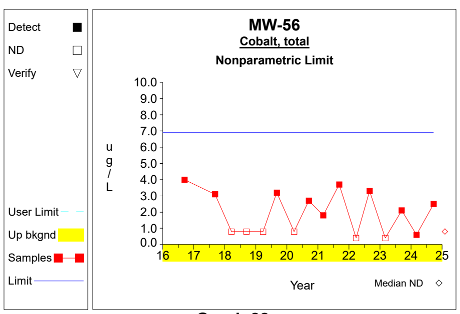
Graph 19



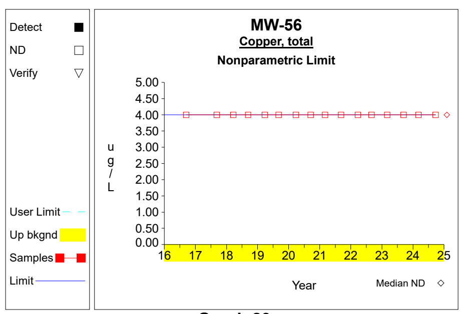
Graph 20



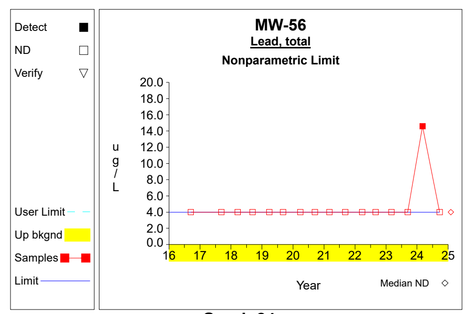
Graph 21



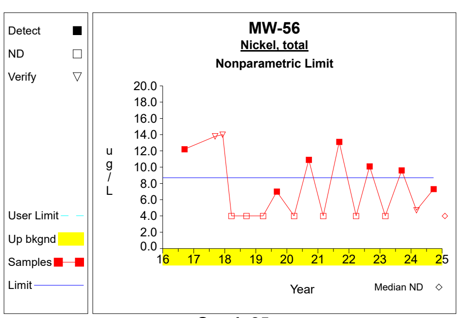
Graph 22



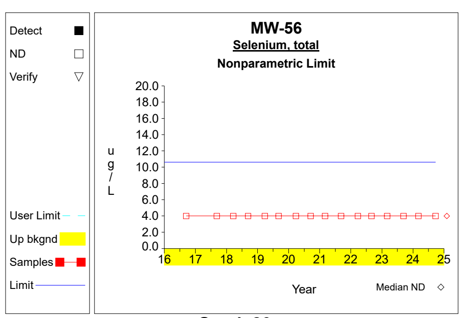
Graph 23



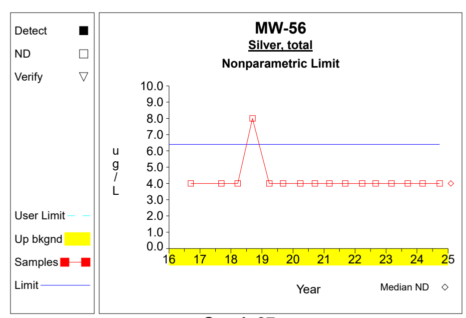
Graph 24



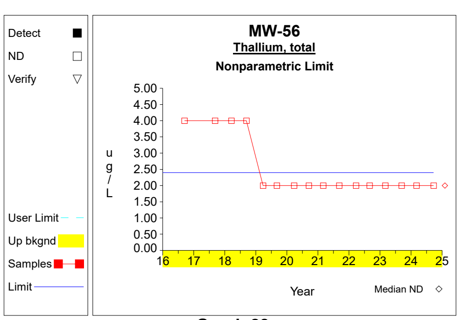
Graph 25



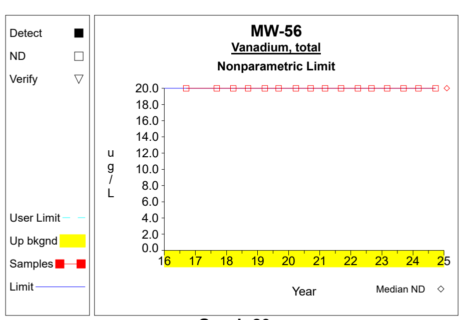
Graph 26



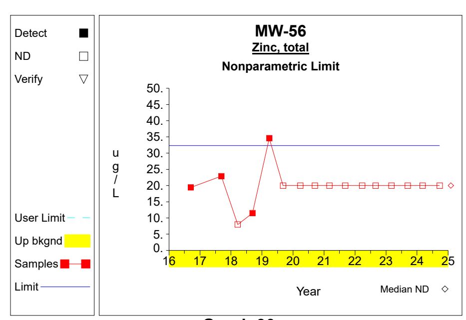
Graph 27



Graph 28



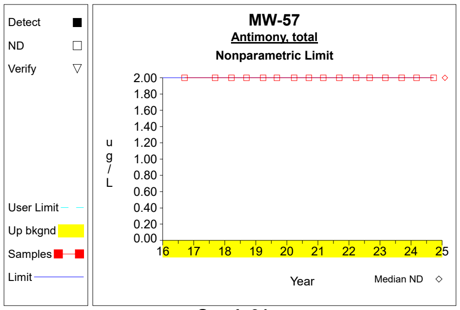
Graph 29



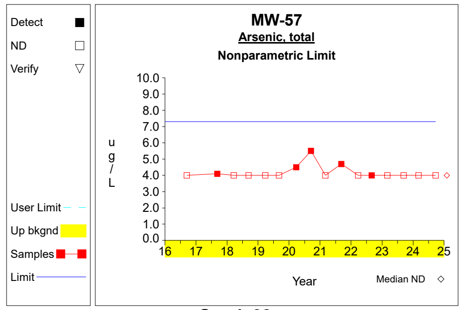
Graph 30

Newton [OLDLF] October 2024

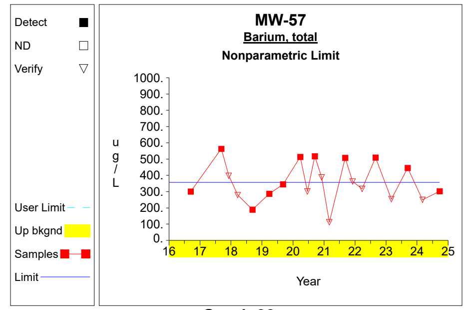
Up vs. Down Prediction Limits



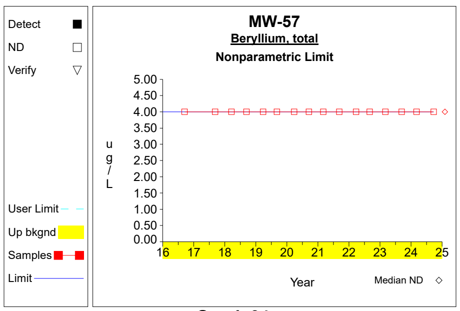
Graph 31



Graph 32



Graph 33



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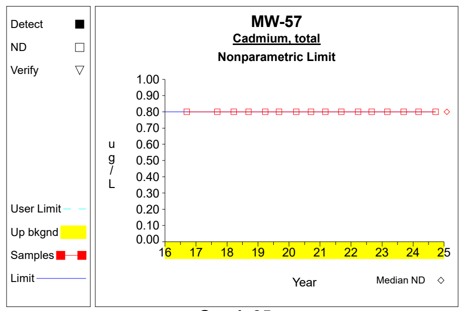
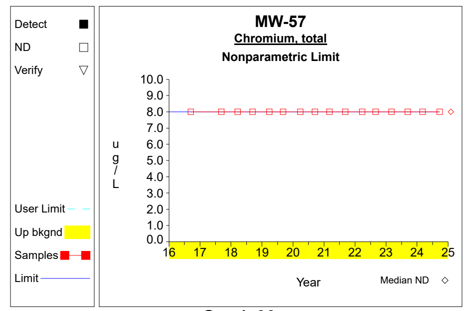


Graph 35



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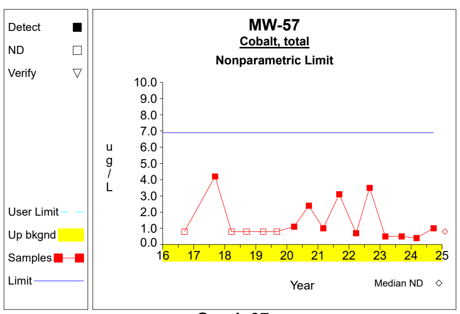
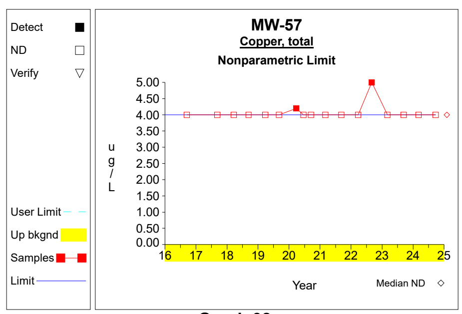


Graph 37



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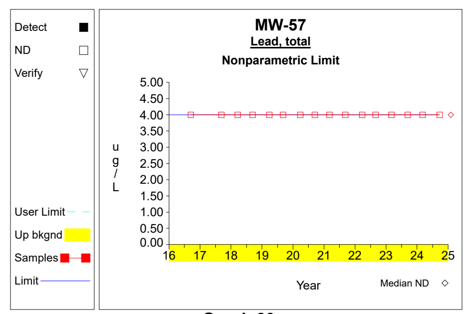
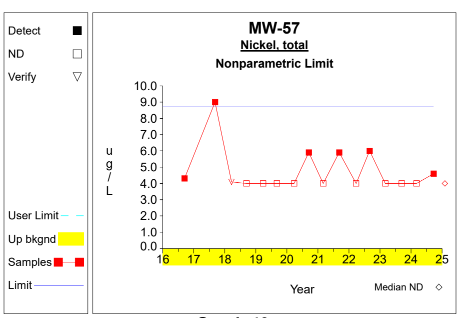


Graph 39



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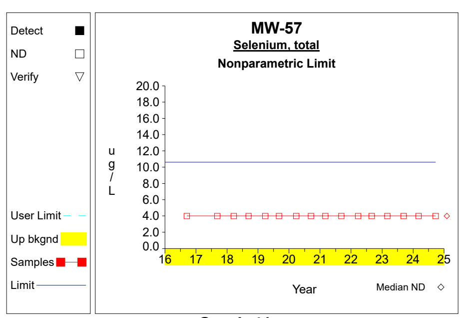
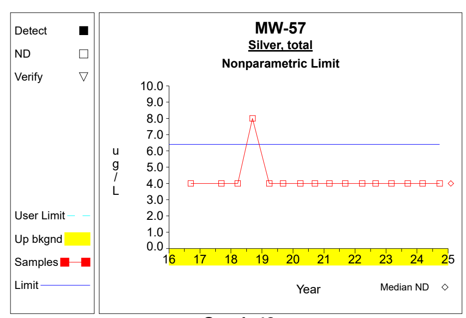


Graph 41



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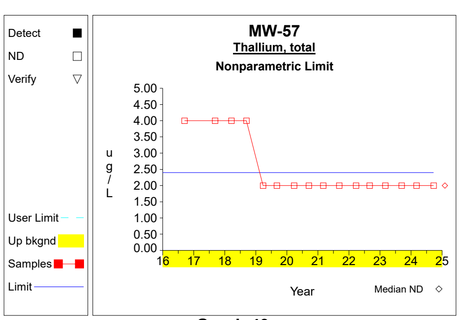

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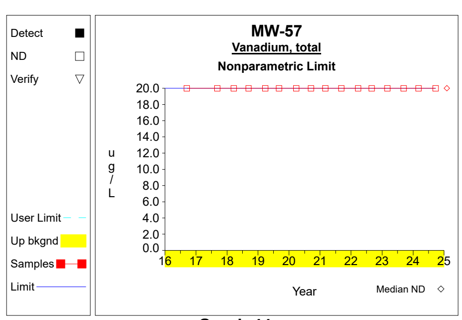
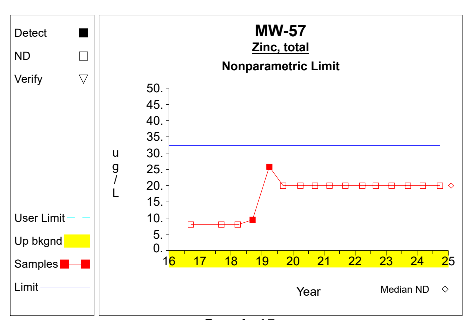


Graph 44



Graph 45

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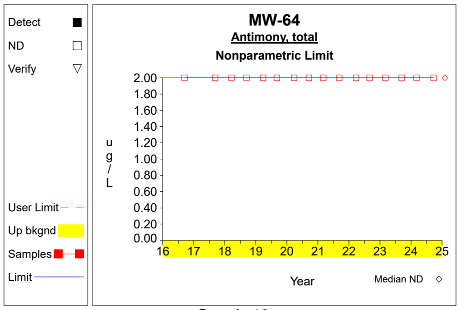
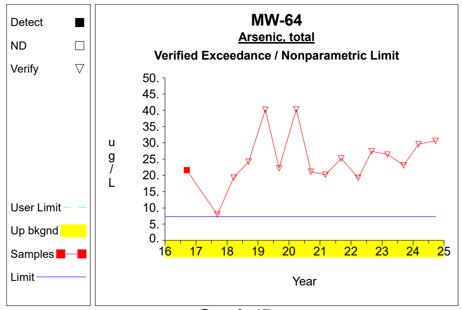
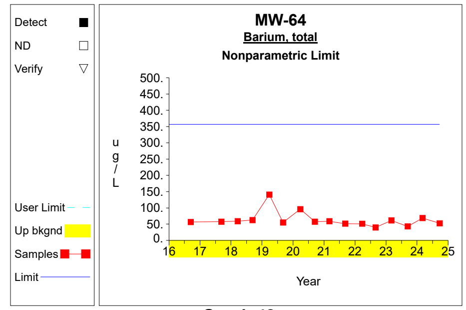
Up vs. Down Prediction Limits



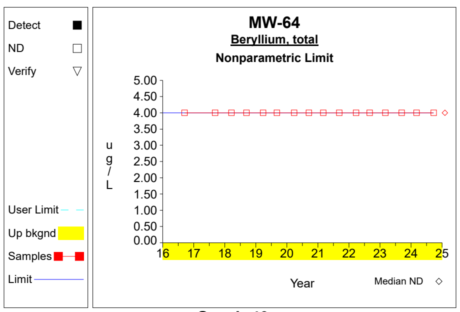
Graph 46



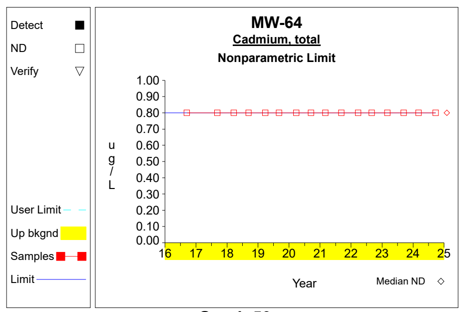
Graph 47



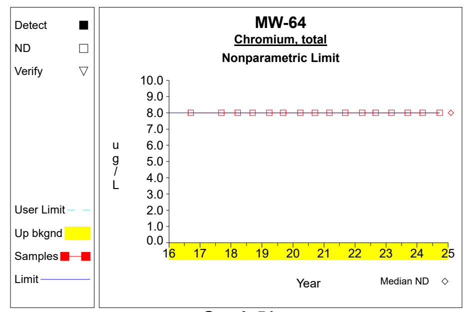
Graph 48



Graph 49



Graph 50



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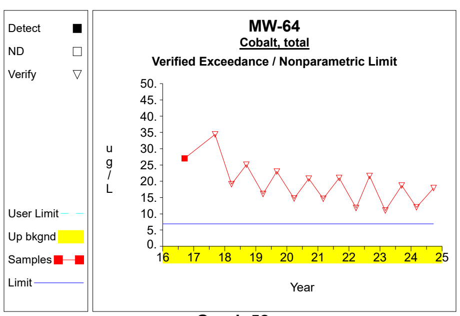
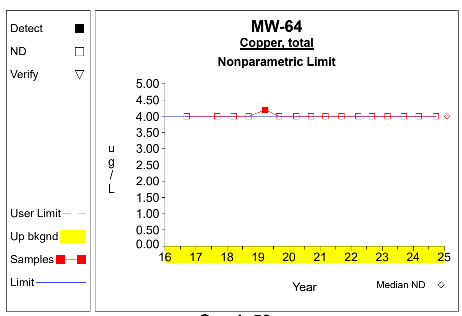


Graph 52



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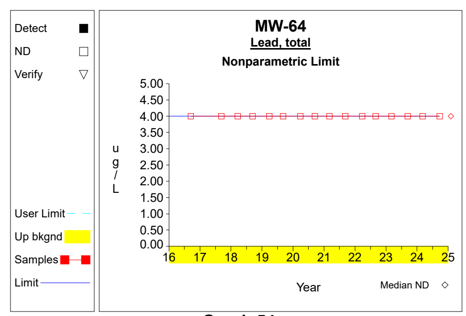
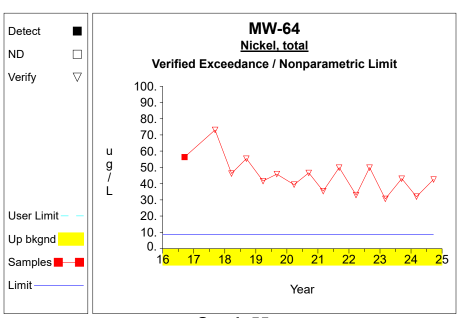
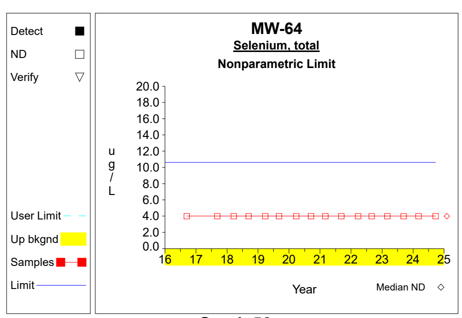


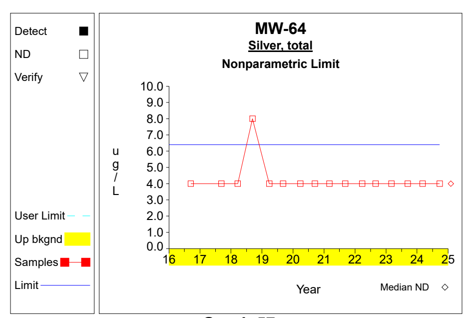
Graph 54



Graph 55



Graph 56



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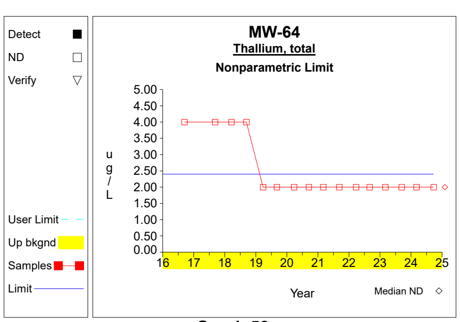

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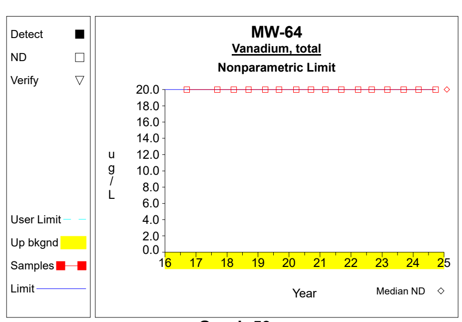

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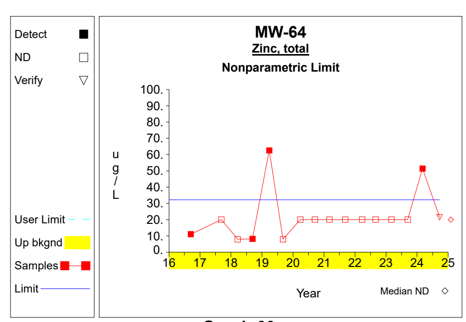

Graph 60

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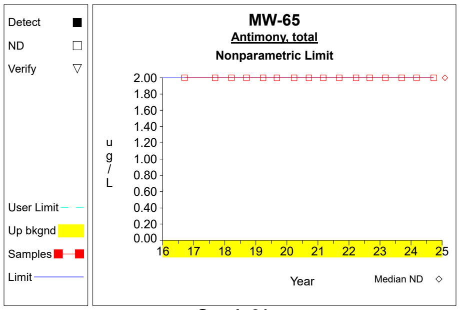
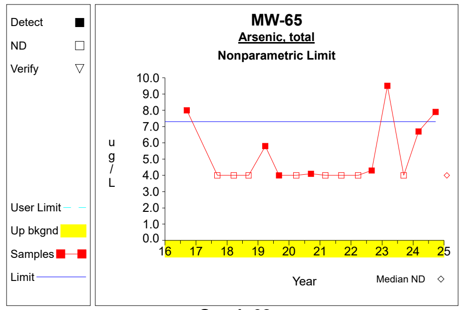
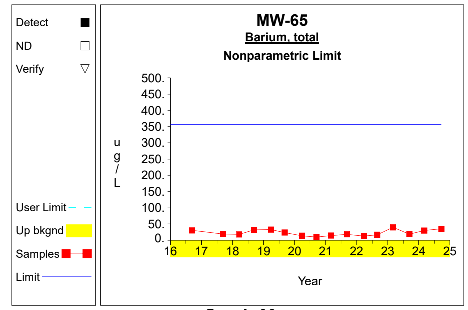
Up vs. Down Prediction Limits



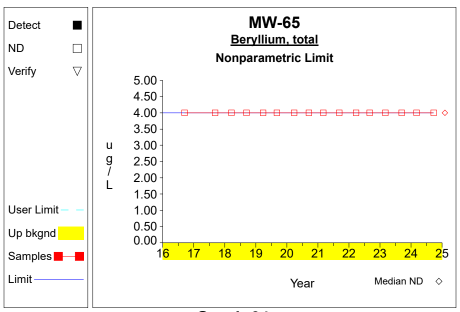
Graph 61



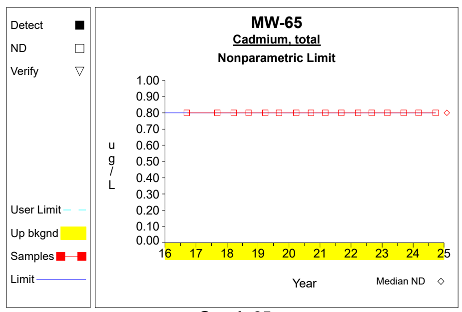
Graph 62



Graph 63



Graph 64



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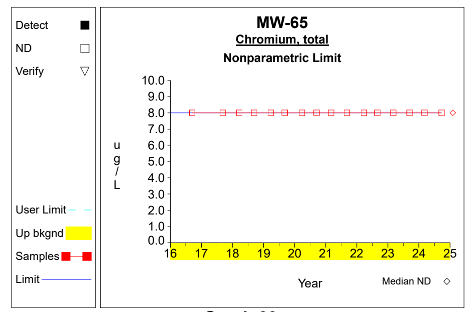

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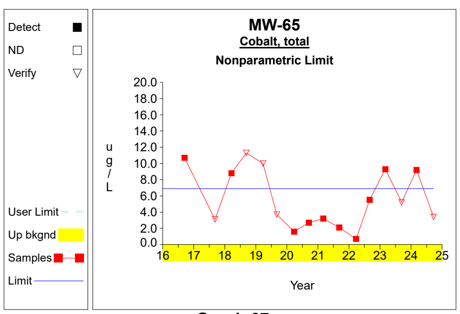
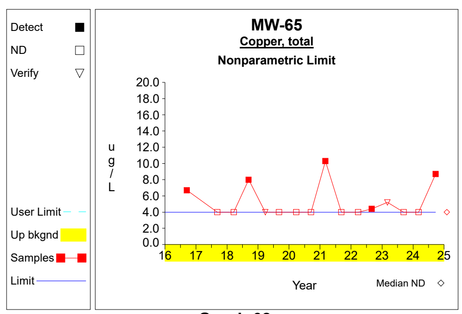


Graph 67



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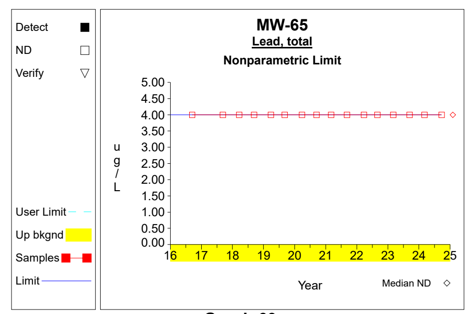
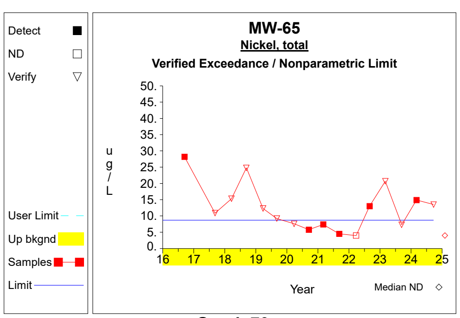
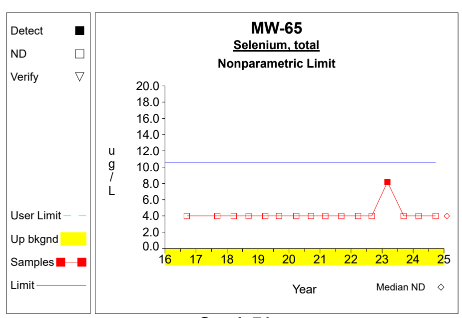


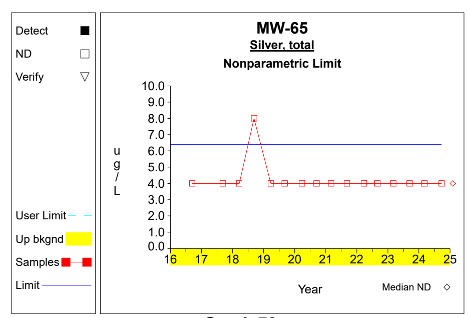
Graph 69



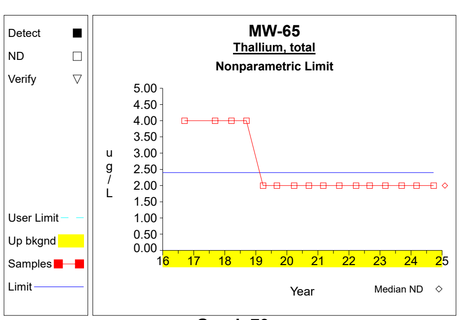
Graph 70



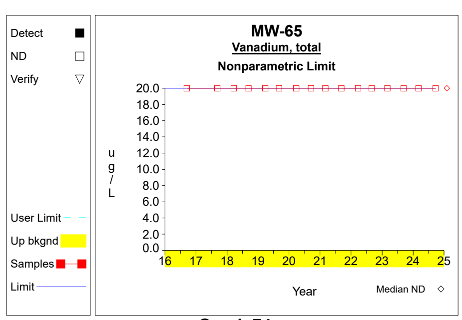
Graph 71



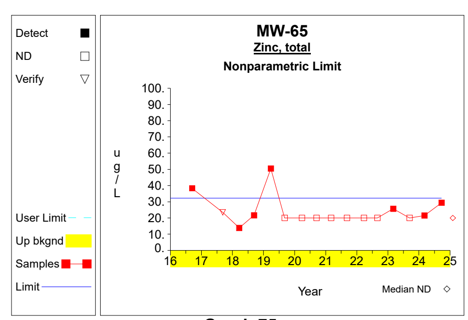
Graph 72



Graph 73



Graph 74



Graph 75

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

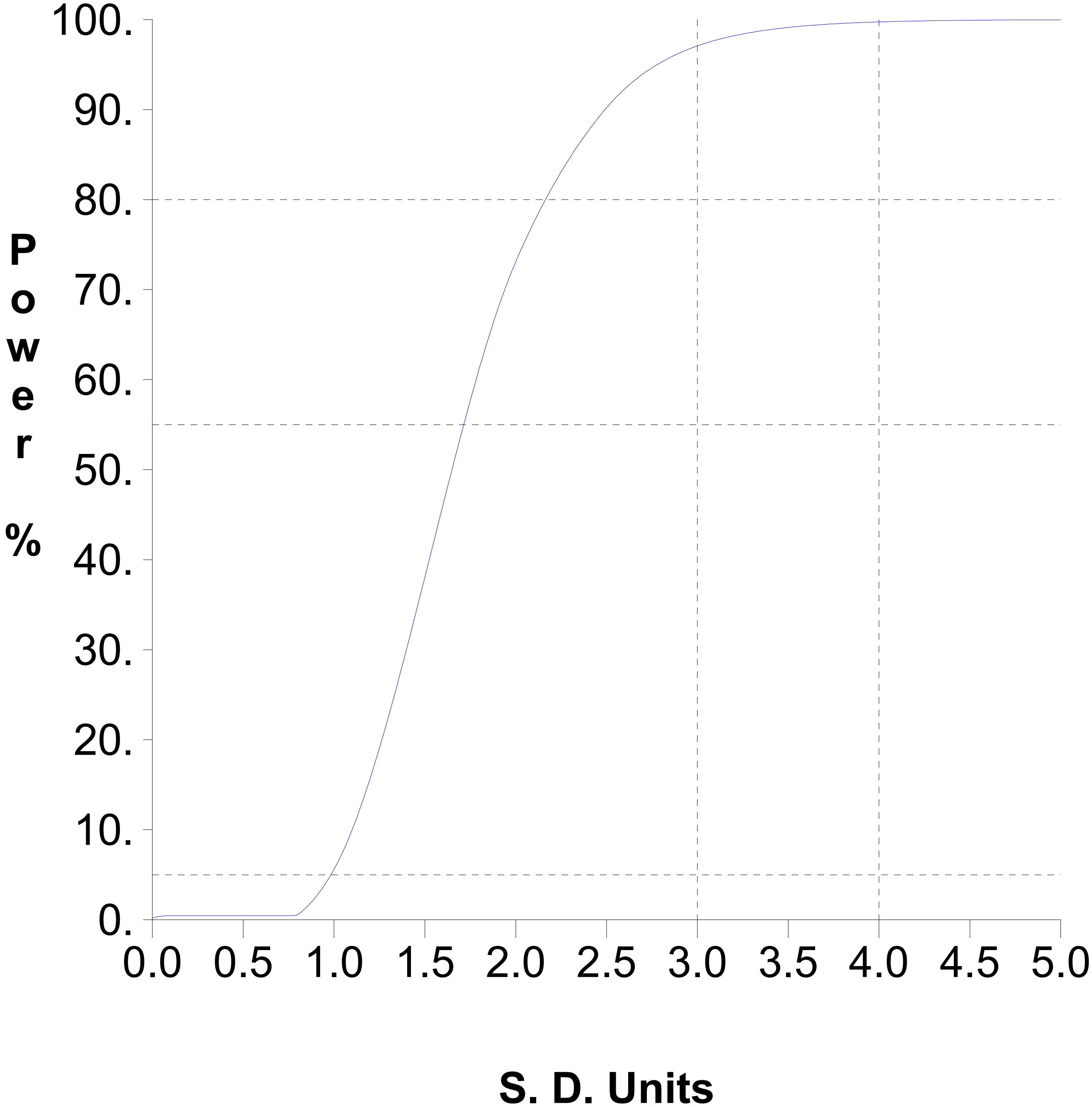


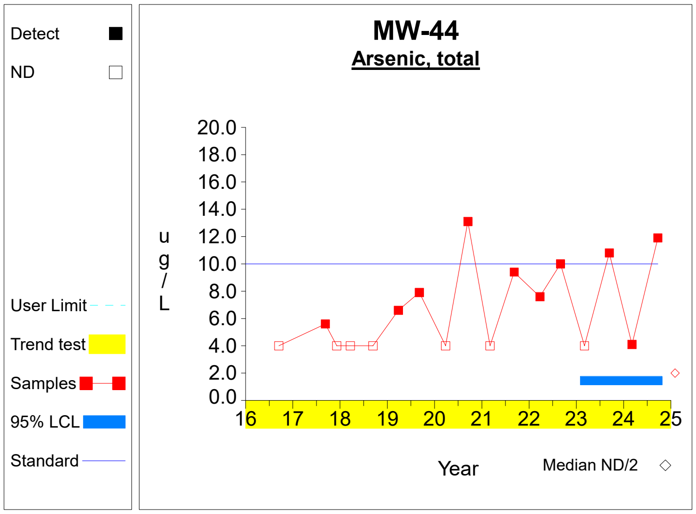
Table 1

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

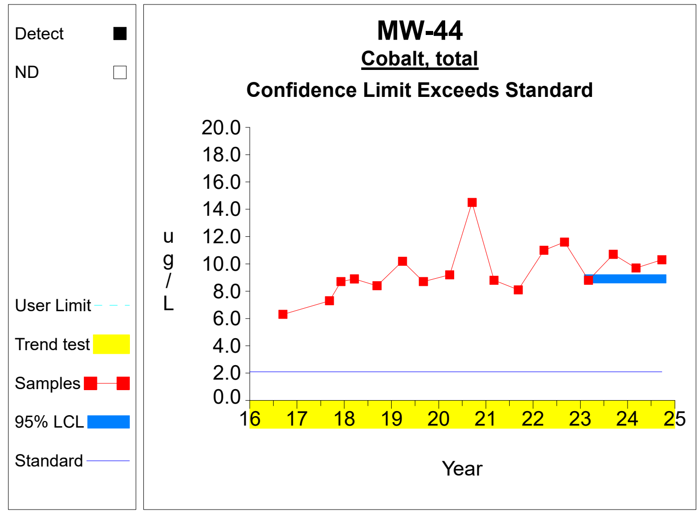
Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend	
Arsenic, total	ug/L	MW-44	4	7.200	4.889	1.176	1.449	12.951	10.000		
Cobalt, total	ug/L	MW-44	4	9.875	0.826	1.176	8.903	10.847	2.100		**
Copper, total	ug/L	MW-44	4	2.000	0.000	1.176	2.000	2.000	1300.000		
Nickel, total	ug/L	MW-44	4	11.025	1.511	1.176	9.248	12.802	100.000		
Arsenic, total	ug/L	MW-56	4	2.000	0.000	1.176	2.000	2.000	10.000		
Cobalt, total	ug/L	MW-56	4	1.400	1.055	1.176	0.159	2.641	2.100		
Copper, total	ug/L	MW-56	4	2.000	0.000	1.176	2.000	2.000	1300.000		
Nickel, total	ug/L	MW-56	4	5.900	3.281	1.176	2.040	9.760	100.000		
Arsenic, total	ug/L	MW-57	4	2.000	0.000	1.176	2.000	2.000	10.000		
Cobalt, total	ug/L	MW-57	4	0.600	0.271	1.176	0.281	0.919	2.100		
Copper, total	ug/L	MW-57	4	2.000	0.000	1.176	2.000	2.000	1300.000		
Nickel, total	ug/L	MW-57	4	2.650	1.300	1.176	1.121	4.179	100.000		
Arsenic, total	ug/L	MW-64	4	27.425	3.394	1.176	23.432	31.418	10.000		**
Cobalt, total	ug/L	MW-64	4	14.900	3.961	1.176	10.241	19.559	2.100		**
Copper, total	ug/L	MW-64	4	2.000	0.000	1.176	2.000	2.000	1300.000		
Nickel, total	ug/L	MW-64	4	37.075	6.696	1.176	29.199	44.951	100.000		
Arsenic, total	ug/L	MW-65	4	6.525	3.227	1.176	2.729	10.321	10.000		
Cobalt, total	ug/L	MW-65	4	6.775	2.951	1.176	3.304	10.246	2.100		**
Copper, total	ug/L	MW-65	4	4.475	3.195	1.176	0.717	8.233	1300.000		
Nickel, total	ug/L	MW-65	4	14.100	5.502	1.176	7.629	20.571	100.000		

* - Insufficient Data
** - Significant Exceedance
LCL = Lower Confidence Limit
UCL = Upper Confidence Limit

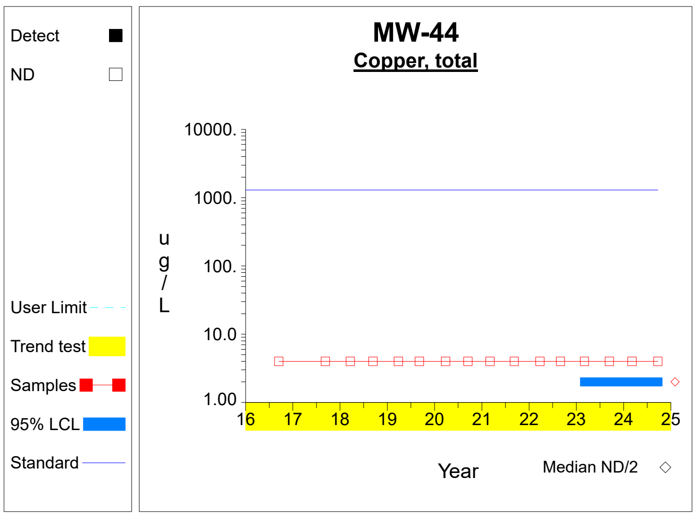
Confidence Limits (Assessment)



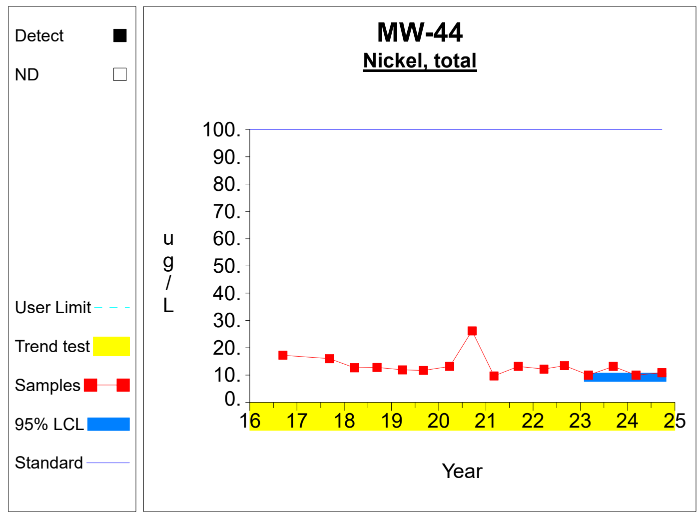
Graph 1



Graph 2

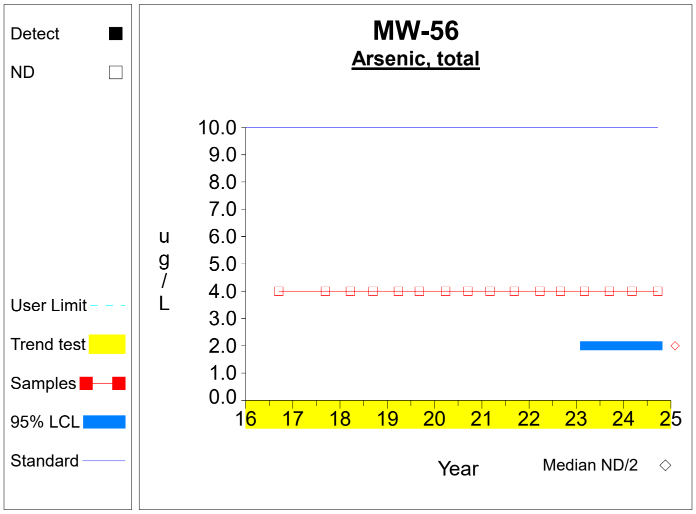


Graph 3

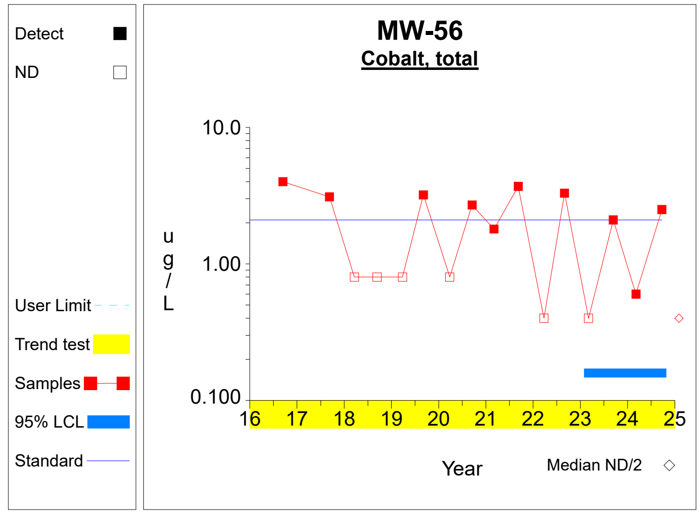


Graph 4

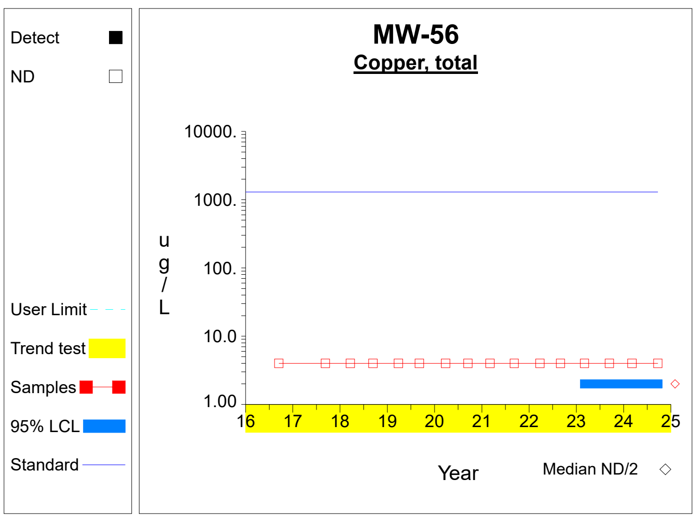
Confidence Limits (Assessment)



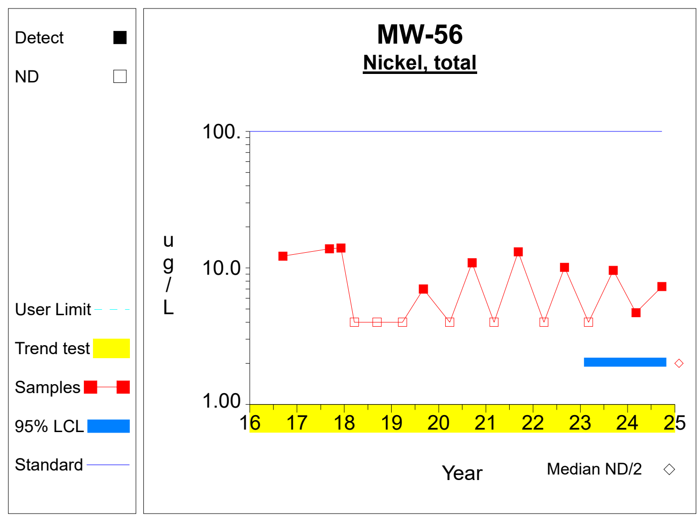
Graph 5



Graph 6

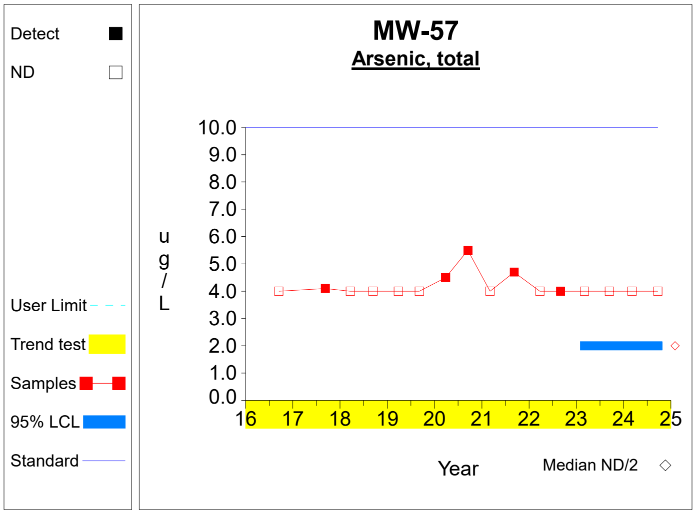


Graph 7

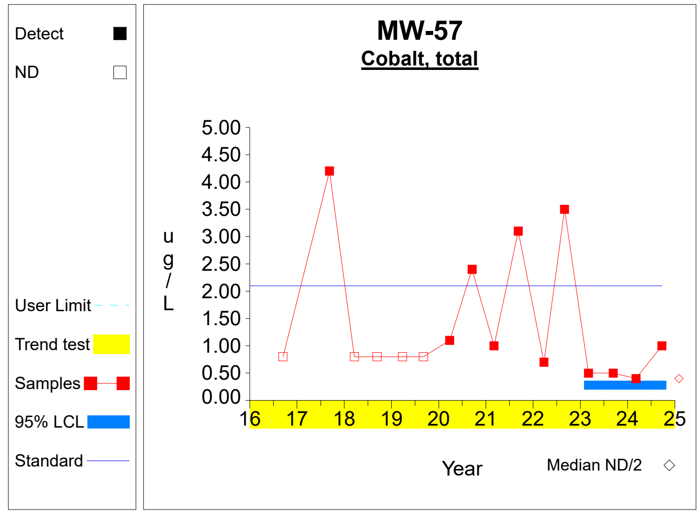


Graph 8

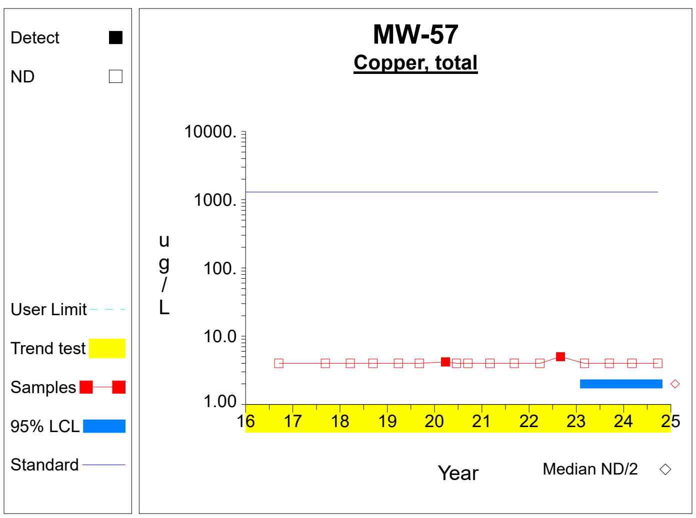
Confidence Limits (Assessment)



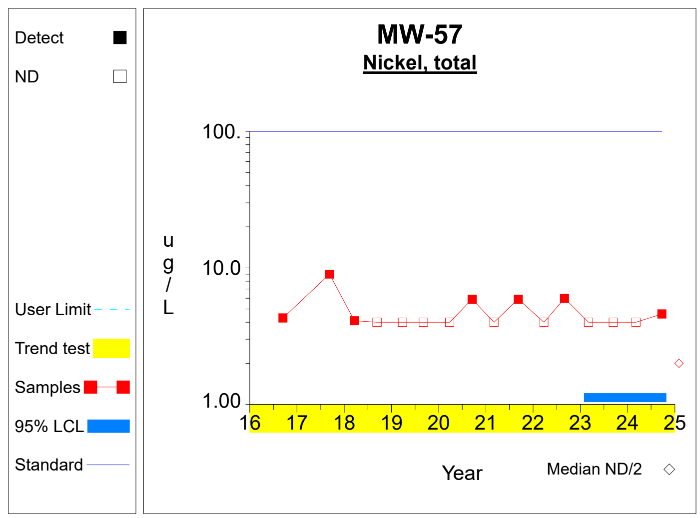
Graph 9



Graph 10

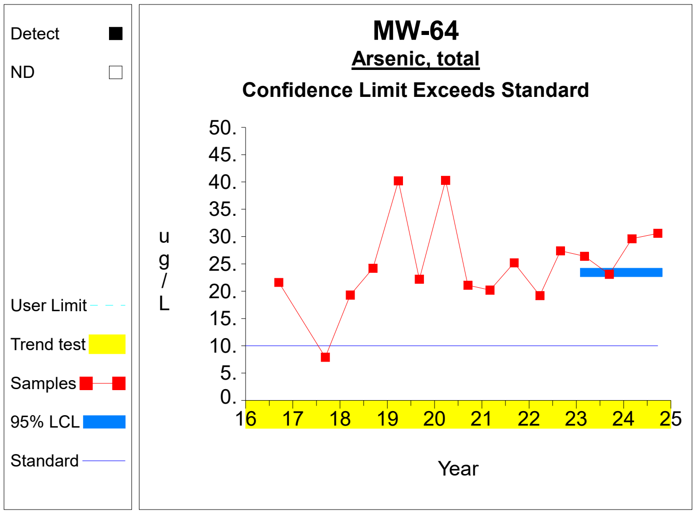


Graph 11

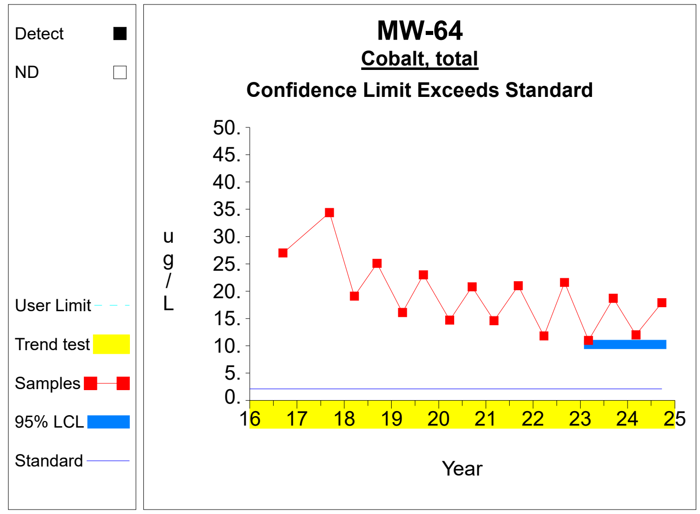


Graph 12

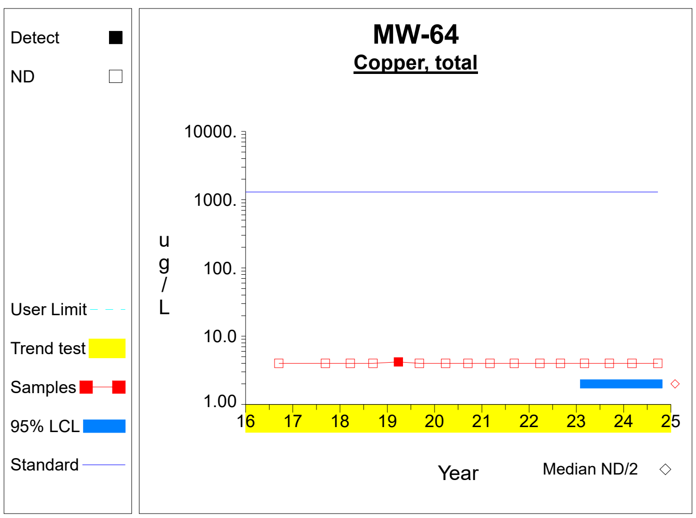
Confidence Limits (Assessment)



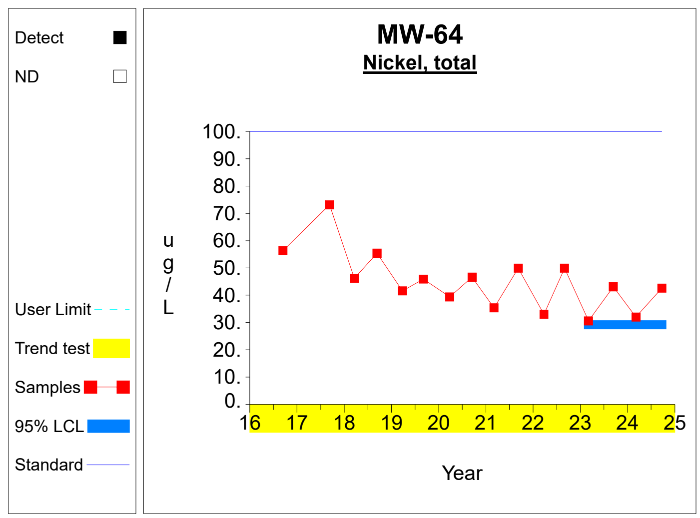
Graph 13



Graph 14



Graph 15



Graph 16

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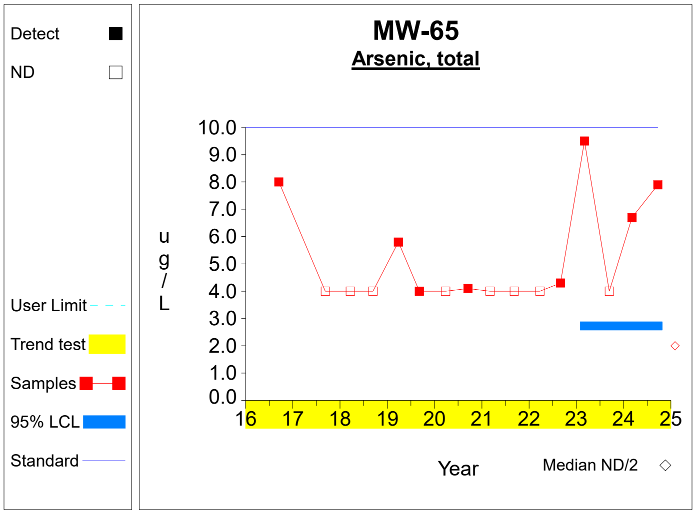
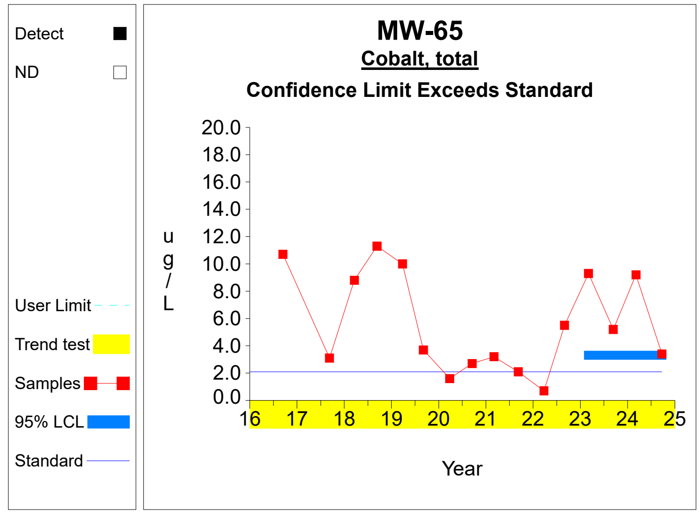
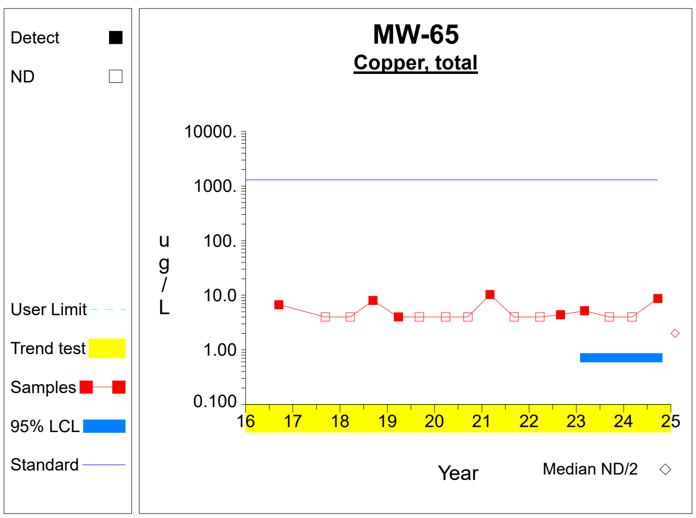
Confidence Limits (Assessment)



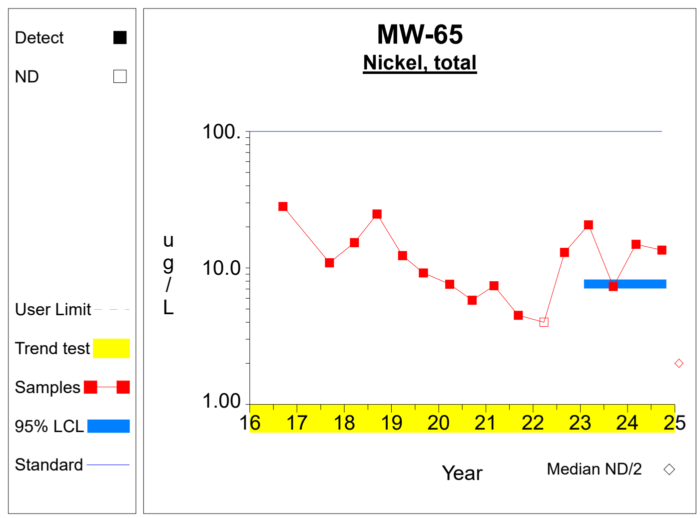
Graph 17



Graph 18



Graph 19



Graph 20

Worksheet 6 - Assessment Monitoring
Arsenic, total (ug/L) at MW-44

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **28.8** / **4** = **7.2**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2] - sum[X]^2**/**N**) / (**N**-1))^{½} = ((**279.06 - 829.44**/**4**) / (**4**-1))^{½} = **4.889**	Compute sd of the last 4 measurements.
3	LCL = **$\overline{X}$ - tS/N**^{½} = **7.2 - 2.353** * **4.889/4**^{½} = **1.449**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = **$\overline{X}$ + tS/N**^{½} = **7.2** + **2.353** * **4.889/4**^{½} = **12.951**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **17** * (**17**-1) / 2 = **136**	Number of sample pairs during trend detection period.
6	S = **0.783**	Sen's estimator of trend.
7	var(S) = **545.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**136** ± **2.576** * **545.0**^{½}) / 2 = [**37.931**, **98.069**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **1.798**]	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-44

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **39.5** / **4** = **9.875**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**392.11** - **1560.25**/**4**) / (**4**-1))^{½} = **0.826**	Compute sd of the last 4 measurements.
3	LCL = **$\overline{X}$** - **tS**/**N**^{½} = **9.875** - **2.353** * **0.826**/**4**^{½} = **8.903**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = **$\overline{X}$** + **tS**/**N**^{½} = **9.875** + **2.353** * **0.826**/**4**^{½} = **10.847**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **17** * (**17**-1) / 2 = **136**	Number of sample pairs during trend detection period.
6	S = **0.378**	Sen's estimator of trend.
7	var(S) = **587.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **$Z_{.995}$** * **var(S)**^{½}) / 2 = (**136** ± **2.576** * **587.333**^{½}) / 2 = [**36.785**, **99.215**]	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) = [**-0.023**, **0.854**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Copper, total (ug/L) at MW-44

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **8.0** / **4** = **2.0**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2] - sum[X]^2/N**) / (**N**-1))$^{1/2}$ = ((**16.0** - **64.0/4**) / (**4**-1))$^{1/2}$ = **0.0**	Compute sd of the last 4 measurements.
3	LCL = **$\overline{X}$ - tS/N**$^{1/2}$ = **2.0** - **2.353** * **0.0/4**$^{1/2}$ = **2.0**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = **$\overline{X}$ + tS/N**$^{1/2}$ = **2.0** + **2.353** * **0.0/4**$^{1/2}$ = **2.0**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **16** * (**16**-1) / 2 = **120**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**$^{1/2}$) / 2 = (**120** ± **2.576** * **0.0**$^{1/2}$) / 2 = [**60.0**, **60.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Nickel, total (ug/L) at MW-44

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N**	Compute the mean of the last 4 measurements.
	= **44.1** / **4**	
	= **11.025**	
2	S = ((**sum[X^2]** - **sum[X]^2**/**N**) / (**N**-1))$^{1/2}$	Compute sd of the last 4 measurements.
	= ((**493.05** - **1944.81**/**4**) / (**4**-1))$^{1/2}$	
	= **1.511**	
3	LCL = **$\overline{X}$** - **tS**/**N**$^{1/2}$	Compute lower confidence limit for the mean of the last 4 measurements.
	= **11.025** - **2.353** * **1.511**/**4**$^{1/2}$	
	= **9.248**	
4	UCL = **$\overline{X}$** + **tS**/**N**$^{1/2}$	Compute upper confidence limit for the mean of the last 4 measurements.
	= **11.025** + **2.353** * **1.511**/**4**$^{1/2}$	
	= **12.802**	
5	N' = **N** * (**N**-1) / 2	Number of sample pairs during trend detection period.
	= **16** * (**16**-1) / 2	
	= **120**	
6	S = **-0.507**	Sen's estimator of trend.
7	var(S) = **488.667**	Variance estimate for slope.
8	M(S) = (**N'** ± $Z_{.995}$ * **var(S)**$^{1/2}$) / 2	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
	= (**120** ± **2.576** * **488.667**$^{1/2}$) / 2	
	= [**31.528**, **88.472**]	
9	CL(S) = [**-1.257**, **0.162**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Arsenic, total (ug/L) at MW-56

Step	Equation	Description
1	$\bar{X} = \mathbf{sum[X]} / \mathbf{N}$ $= \mathbf{8.0} / \mathbf{4}$ $= \mathbf{2.0}$	Compute the mean of the last 4 measurements.
2	$S = ((\mathbf{sum[X^2]} - \mathbf{sum[X]}^2/\mathbf{N}) / (\mathbf{N}-1))^{½}$ $= ((\mathbf{16.0} - \mathbf{64.0/4}) / (\mathbf{4}-1))^{½}$ $= \mathbf{0.0}$	Compute sd of the last 4 measurements.
3	$LCL = \bar{\mathbf{X}} - \mathbf{tS/N}^{½}$ $= \mathbf{2.0} - \mathbf{2.353} * \mathbf{0.0/4}^{½}$ $= \mathbf{2.0}$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$UCL = \bar{\mathbf{X}} + \mathbf{tS/N}^{½}$ $= \mathbf{2.0} + \mathbf{2.353} * \mathbf{0.0/4}^{½}$ $= \mathbf{2.0}$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = \mathbf{N} * (\mathbf{N}-1) / 2$ $= \mathbf{16} * (\mathbf{16}-1) / 2$ $= \mathbf{120}$	Number of sample pairs during trend detection period.
6	$S = \mathbf{0.0}$	Sen's estimator of trend.
7	$var(S) = \mathbf{0.0}$	Variance estimate for slope.
8	$M(S) = (\mathbf{N'} \pm \mathbf{Z}_{.995} * \mathbf{var(S)}^{½}) / 2$ $= (\mathbf{120} \pm \mathbf{2.576} * \mathbf{0.0}^{½}) / 2$ $= [\ \mathbf{60.0}, \mathbf{60.0}\ ]$	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	$CL(S) = [\ \mathbf{0.0}, \mathbf{0.0}\ ]$	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-56

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **5.6** / **4** = **1.4**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2] - sum[X]^2/N**) / (**N**-1))$^{1/2}$ = ((**11.18 - 31.36/4**) / (**4**-1))$^{1/2}$ = **1.055**	Compute sd of the last 4 measurements.
3	LCL = $\overline{X}$ **- tS/N**$^{1/2}$ = **1.4 - 2.353 * 1.055/4**$^{1/2}$ = **0.159**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\overline{X}$ **+ tS/N**$^{1/2}$ = **1.4 + 2.353 * 1.055/4**$^{1/2}$ = **2.641**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **16** * (**16**-1) / 2 = **120**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **465.0**	Variance estimate for slope.
8	M(S) = (**N' ± $Z_{.995}$ * var(S)**$^{1/2}$) / 2 = (**120 ± 2.576 * 465.0**$^{1/2}$) / 2 = [**32.226**, **87.774**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.493**, **0.373**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Copper, total (ug/L) at MW-56

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **8.0** / **4** = **2.0**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2] - sum[X]^2/N**) / (**N**-1))$^{1/2}$ = ((**16.0** - **64.0/4**) / (**4**-1))$^{1/2}$ = **0.0**	Compute sd of the last 4 measurements.
3	LCL = **$\overline{X}$ - tS/N**$^{1/2}$ = **2.0** - **2.353** * **0.0/4**$^{1/2}$ = **2.0**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = **$\overline{X}$ + tS/N**$^{1/2}$ = **2.0** + **2.353** * **0.0/4**$^{1/2}$ = **2.0**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **16** * (**16**-1) / 2 = **120**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**$^{1/2}$) / 2 = (**120** ± **2.576** * **0.0**$^{1/2}$) / 2 = [**60.0**, **60.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Nickel, total (ug/L) at MW-56

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **23.6** / **4** = **5.9**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))$^{1/2}$ = ((**171.54** - **556.96**/**4**) / (**4**-1))$^{1/2}$ = **3.281**	Compute sd of the last 4 measurements.
3	LCL = $\overline{X}$ - **tS/N**$^{1/2}$ = **5.9** - **2.353** * **3.281/4**$^{1/2}$ = **2.04**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\overline{X}$ + **tS/N**$^{1/2}$ = **5.9** + **2.353** * **3.281/4**$^{1/2}$ = **9.76**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **17** * (**17**-1) / 2 = **136**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **545.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**$^{1/2}$) / 2 = (**136** ± **2.576** * **545.0**$^{1/2}$) / 2 = [**37.931**, **98.069**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-1.792**, **0.969**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Arsenic, total (ug/L) at MW-57

Step	Equation	Description
1	$\bar{X} = \mathbf{sum[X]} / \mathbf{N}$ $= \mathbf{8.0} / \mathbf{4}$ $= \mathbf{2.0}$	Compute the mean of the last 4 measurements.
2	$S = ((\mathbf{sum[X^2]} - \mathbf{sum[X]}^2/\mathbf{N}) / (\mathbf{N}-1))^{½}$ $= ((\mathbf{16.0} - \mathbf{64.0/4}) / (\mathbf{4}-1))^{½}$ $= \mathbf{0.0}$	Compute sd of the last 4 measurements.
3	$LCL = \bar{\mathbf{X}} - \mathbf{tS/N}^{½}$ $= \mathbf{2.0} - \mathbf{2.353} * \mathbf{0.0/4}^{½}$ $= \mathbf{2.0}$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$UCL = \bar{\mathbf{X}} + \mathbf{tS/N}^{½}$ $= \mathbf{2.0} + \mathbf{2.353} * \mathbf{0.0/4}^{½}$ $= \mathbf{2.0}$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = \mathbf{N} * (\mathbf{N}-1) / 2$ $= \mathbf{16} * (\mathbf{16}-1) / 2$ $= \mathbf{120}$	Number of sample pairs during trend detection period.
6	$S = \mathbf{0.0}$	Sen's estimator of trend.
7	$var(S) = \mathbf{328.333}$	Variance estimate for slope.
8	$M(S) = (\mathbf{N'} \pm \mathbf{Z}_{.995} * \mathbf{var(S)}^{½}) / 2$ $= (\mathbf{120} \pm \mathbf{2.576} * \mathbf{328.333}^{½}) / 2$ $= [\ \mathbf{36.661}, \mathbf{83.339}\ ]$	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	$CL(S) = [\ \mathbf{-0.007}, \mathbf{0.0}\ ]$	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-57

Step	Equation	Description
1	$\bar{X}$ = **sum[X]** / **N**	Compute the mean of the last 4 measurements.
	= **2.4** / **4**	
	= **0.6**	
2	S = ((**sum[X^2] - sum[X]^2/N**) / (**N**-1))^{½}	Compute sd of the last 4 measurements.
	= ((**1.66** - **5.76/4**) / (**4**-1))^{½}	
	= **0.271**	
3	LCL = **$\bar{X}$ - tS/N^{½}**	Compute lower confidence limit for the mean of the last 4 measurements.
	= **0.6** - **2.353** * **0.271/4^{½}**	
	= **0.281**	
4	UCL = **$\bar{X}$ + tS/N^{½}**	Compute upper confidence limit for the mean of the last 4 measurements.
	= **0.6** + **2.353** * **0.271/4^{½}**	
	= **0.919**	
5	N' = **N** * (**N**-1) / 2	Number of sample pairs during trend detection period.
	= **16** * (**16**-1) / 2	
	= **120**	
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **463.0**	Variance estimate for slope.
8	M(S) = (**N' ± Z$_{.995}$** * **var(S)^{½}**) / 2	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
	= (**120** ± **2.576** * **463.0^{½}**) / 2	
	= [**32.286**, **87.714**]	
9	CL(S) = [**-0.208**, **0.317**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Copper, total (ug/L) at MW-57

Step	Equation	Description
1	$\bar{X} = \mathbf{sum[X]} / \mathbf{N}$ $= \mathbf{8.0} / \mathbf{4}$ $= \mathbf{2.0}$	Compute the mean of the last 4 measurements.
2	$S = ((\mathbf{sum[X^2]} - \mathbf{sum[X]}^2/\mathbf{N}) / (\mathbf{N}-1))^{1/2}$ $= ((\mathbf{16.0} - \mathbf{64.0}/\mathbf{4}) / (\mathbf{4}-1))^{1/2}$ $= \mathbf{0.0}$	Compute sd of the last 4 measurements.
3	$LCL = \bar{\mathbf{X}} - \mathbf{tS}/\mathbf{N}^{1/2}$ $= \mathbf{2.0} - \mathbf{2.353} * \mathbf{0.0}/\mathbf{4}^{1/2}$ $= \mathbf{2.0}$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$UCL = \bar{\mathbf{X}} + \mathbf{tS}/\mathbf{N}^{1/2}$ $= \mathbf{2.0} + \mathbf{2.353} * \mathbf{0.0}/\mathbf{4}^{1/2}$ $= \mathbf{2.0}$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = \mathbf{N} * (\mathbf{N}-1) / 2$ $= \mathbf{17} * (\mathbf{17}-1) / 2$ $= \mathbf{136}$	Number of sample pairs during trend detection period.
6	$S = \mathbf{0.0}$	Sen's estimator of trend.
7	$var(S) = \mathbf{181.0}$	Variance estimate for slope.
8	$M(S) = (\mathbf{N'} \pm \mathbf{Z}_{.995} * \mathbf{var(S)}^{1/2}) / 2$ $= (\mathbf{136} \pm \mathbf{2.576} * \mathbf{181.0}^{1/2}) / 2$ $= [\ \mathbf{50.672}, \mathbf{85.328}\ ]$	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	$CL(S) = [\ \mathbf{0.0}, \mathbf{0.0}\ ]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Nickel, total (ug/L) at MW-57

Step	Equation	Description
1	$\bar{X}$ = **sum[X]** / **N** = **10.6** / **4** = **2.65**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2] - sum[X]^2/N**) / (**N**-1))$^{1/2}$ = ((**33.16** - **112.36/4**) / (**4**-1))$^{1/2}$ = **1.3**	Compute sd of the last 4 measurements.
3	LCL = **$\bar{X}$ - tS/N$^{1/2}$** = **2.65** - **2.353** * **1.3/4**$^{1/2}$ = **1.121**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = **$\bar{X}$ + tS/N$^{1/2}$** = **2.65** + **2.353** * **1.3/4**$^{1/2}$ = **4.179**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **16** * (**16**-1) / 2 = **120**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **400.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **$Z_{.995}$** * **var(S)**$^{1/2}$) / 2 = (**120** ± **2.576** * **400.333**$^{1/2}$) / 2 = [**34.229**, **85.771**]	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) = [**-0.645**, **0.029**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Arsenic, total (ug/L) at MW-64

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **109.7** / **4** = **27.425**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]^2**/**N**) / (**N**-1))^{½} = ((**3043.09** - **12034.09**/**4**) / (**4**-1))^{½} = **3.394**	Compute sd of the last 4 measurements.
3	LCL = **$\overline{X}$** - **tS**/**N**^{½} = **27.425** - **2.353** * **3.394**/**4**^{½} = **23.432**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = **$\overline{X}$** + **tS**/**N**^{½} = **27.425** + **2.353** * **3.394**/**4**^{½} = **31.418**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **16** * (**16**-1) / 2 = **120**	Number of sample pairs during trend detection period.
6	S = **1.134**	Sen's estimator of trend.
7	var(S) = **493.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**120** ± **2.576** * **493.333**^{½}) / 2 = [**31.392**, **88.608**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-1.306**, **3.115**]	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-64

Step	Equation	Description
1	$\bar{X} = \textbf{sum[X]} / \textbf{N}$ $= \textbf{59.6} / \textbf{4}$ $= \textbf{14.9}$	Compute the mean of the last 4 measurements.
2	$S = ((\textbf{sum[X}^2\textbf{]} - \textbf{sum[X]}^2/\textbf{N}) / (\textbf{N}-1))^{1/2}$ $= ((\textbf{935.1} - \textbf{3552.16}/\textbf{4}) / (\textbf{4}-1))^{1/2}$ $= \textbf{3.961}$	Compute sd of the last 4 measurements.
3	$LCL = \bar{\textbf{X}} - \textbf{tS}/\textbf{N}^{1/2}$ $= \textbf{14.9} - \textbf{2.353} * \textbf{3.961}/\textbf{4}^{1/2}$ $= \textbf{10.241}$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$UCL = \bar{\textbf{X}} + \textbf{tS}/\textbf{N}^{1/2}$ $= \textbf{14.9} + \textbf{2.353} * \textbf{3.961}/\textbf{4}^{1/2}$ $= \textbf{19.559}$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = \textbf{N} * (\textbf{N}-1) / 2$ $= \textbf{16} * (\textbf{16}-1) / 2$ $= \textbf{120}$	Number of sample pairs during trend detection period.
6	$S = \textbf{-1.321}$	Sen's estimator of trend.
7	$var(S) = \textbf{493.333}$	Variance estimate for slope.
8	$M(S) = (\textbf{N'} \pm \textbf{Z}_{.995} * \textbf{var(S)}^{1/2}) / 2$ $= (\textbf{120} \pm \textbf{2.576} * \textbf{493.333}^{1/2}) / 2$ $= [\ \textbf{31.392}, \textbf{88.608}\ ]$	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	$CL(S) = [\ \textbf{-3.274}, \textbf{0.034}\ ]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Copper, total (ug/L) at MW-64

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **8.0** / **4** = **2.0**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**16.0** - **64.0**/**4**) / (**4**-1))^{½} = **0.0**	Compute sd of the last 4 measurements.
3	LCL = **$\overline{X}$** - **tS/N**^{½} = **2.0** - **2.353** * **0.0/4**^{½} = **2.0**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = **$\overline{X}$** + **tS/N**^{½} = **2.0** + **2.353** * **0.0/4**^{½} = **2.0**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **16** * (**16**-1) / 2 = **120**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **85.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**120** ± **2.576** * **85.0**^{½}) / 2 = [**48.125**, **71.875**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Nickel, total (ug/L) at MW-64

Step	Equation	Description
1	$\bar{X} = \textbf{sum[X]} / \textbf{N}$ $= \textbf{148.3} / \textbf{4}$ $= \textbf{37.075}$	Compute the mean of the last 4 measurements.
2	$S = ((\textbf{sum[X}^2\textbf{]} - \textbf{sum[X]}^2/\textbf{N}) / (\textbf{N}-1))^{1/2}$ $= ((\textbf{5632.73} - \textbf{21992.89/4}) / (\textbf{4}-1))^{1/2}$ $= \textbf{6.696}$	Compute sd of the last 4 measurements.
3	$LCL = \bar{X} - tS/N^{1/2}$ $= \textbf{37.075} - \textbf{2.353} * \textbf{6.696/4}^{1/2}$ $= \textbf{29.199}$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$UCL = \bar{X} + tS/N^{1/2}$ $= \textbf{37.075} + \textbf{2.353} * \textbf{6.696/4}^{1/2}$ $= \textbf{44.951}$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = \textbf{N} * (\textbf{N}-1) / 2$ $= \textbf{16} * (\textbf{16}-1) / 2$ $= \textbf{120}$	Number of sample pairs during trend detection period.
6	$S = \textbf{-2.506}$	Sen's estimator of trend.
7	$var(S) = \textbf{492.333}$	Variance estimate for slope.
8	$M(S) = (\textbf{N'} \pm \textbf{Z}_{.995} * \textbf{var(S)}^{1/2}) / 2$ $= (\textbf{120} \pm \textbf{2.576} * \textbf{492.333}^{1/2}) / 2$ $= [\ \textbf{31.421}, \textbf{88.579}\ ]$	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	$CL(S) = [\ \textbf{-5.341}, \textbf{0.093}\ ]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Arsenic, total (ug/L) at MW-65

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **26.1** / **4** = **6.525**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2] - sum[X]^2/N**) / (**N**-1))$^{1/2}$ = ((**201.55 - 681.21/4**) / (**4**-1))$^{1/2}$ = **3.227**	Compute sd of the last 4 measurements.
3	LCL = **$\overline{X}$ - tS/N**$^{1/2}$ = **6.525 - 2.353 * 3.227/4**$^{1/2}$ = **2.729**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = **$\overline{X}$ + tS/N**$^{1/2}$ = **6.525 + 2.353 * 3.227/4**$^{1/2}$ = **10.321**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **16** * (**16**-1) / 2 = **120**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **428.0**	Variance estimate for slope.
8	M(S) = (**N' ± $Z_{.995}$ * var(S)**$^{1/2}$) / 2 = (**120 ± 2.576 * 428.0**$^{1/2}$) / 2 = [**33.354**, **86.646**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.344**, **0.996**]	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-65

Step	Equation	Description
1	$\bar{X}$ = **sum[X]** / **N** = **27.1** / **4** = **6.775**	Compute the mean of the last 4 measurements.
2	$S = ((\mathbf{sum[X^2]} - \mathbf{sum[X]}^2/\mathbf{N}) / (\mathbf{N}-1))^{1/2}$ $= ((\mathbf{209.73} - \mathbf{734.41/4}) / (\mathbf{4}-1))^{1/2}$ = **2.951**	Compute sd of the last 4 measurements.
3	$LCL = \bar{\mathbf{X}} - \mathbf{tS/N}^{1/2}$ $= \mathbf{6.775} - \mathbf{2.353} * \mathbf{2.951/4}^{1/2}$ = **3.304**	Compute lower confidence limit for the mean of the last 4 measurements.
4	$UCL = \bar{\mathbf{X}} + \mathbf{tS/N}^{1/2}$ $= \mathbf{6.775} + \mathbf{2.353} * \mathbf{2.951/4}^{1/2}$ = **10.246**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **16** * (**16**-1) / 2 = **120**	Number of sample pairs during trend detection period.
6	S = **-0.284**	Sen's estimator of trend.
7	var(S) = **493.333**	Variance estimate for slope.
8	$M(S) = (\mathbf{N'} \pm \mathbf{Z}_{.995} * \mathbf{var(S)}^{1/2}) / 2$ $= (\mathbf{120} \pm \mathbf{2.576} * \mathbf{493.333}^{1/2}) / 2$ = [**31.392**, **88.608**]	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) = [**-1.785**, **1.064**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Copper, total (ug/L) at MW-65

Step	Equation	Description
1	$\bar{X}$ = **sum[X]** / **N** = **17.9** / **4** = **4.475**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2] - sum[X]^2/N**) / (**N**-1))$^{1/2}$ = ((**110.73 - 320.41/4**) / (**4**-1))$^{1/2}$ = **3.195**	Compute sd of the last 4 measurements.
3	LCL = **$\bar{X}$ - tS/N**$^{1/2}$ = **4.475 - 2.353 * 3.195/4**$^{1/2}$ = **0.717**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = **$\bar{X}$ + tS/N**$^{1/2}$ = **4.475 + 2.353 * 3.195/4**$^{1/2}$ = **8.233**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **16** * (**16**-1) / 2 = **120**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **401.333**	Variance estimate for slope.
8	M(S) = (**N' ± Z**$_{.995}$ * **var(S)**$^{1/2}$) / 2 = (**120 ± 2.576 * 401.333**$^{1/2}$) / 2 = [**34.197**, **85.803**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.629**, **0.773**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Nickel, total (ug/L) at MW-65

Step	Equation	Description
1	$\bar{X}$ = **sum[X]** / **N** = **56.4** / **4** = **14.1**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2] - sum[X]^2/N**) / (**N**-1))$^{1/2}$ = ((**886.04 - 3180.96/4**) / (**4**-1))$^{1/2}$ = **5.502**	Compute sd of the last 4 measurements.
3	LCL = **$\bar{X}$ - tS/N**$^{1/2}$ = **14.1 - 2.353** * **5.502/4**$^{1/2}$ = **7.629**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = **$\bar{X}$** + **tS/N**$^{1/2}$ = **14.1** + **2.353** * **5.502/4**$^{1/2}$ = **20.571**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **16** * (**16**-1) / 2 = **120**	Number of sample pairs during trend detection period.
6	S = **-1.252**	Sen's estimator of trend.
7	var(S) = **493.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **$Z_{.995}$** * **var(S)**$^{1/2}$) / 2 = (**120** ± **2.576** * **493.333**$^{1/2}$) / 2 = [**31.392**, **88.608**]	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) = [**-3.475**, **1.296**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Attachment E

Historical Summary of the VOCs Detected

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
1,1-dichloroethane	GWD-1	9/08/2011		1	1	ug/L
Acetone	GWD-1	9/16/2008		66.7	20.0	ug/L
Chloroethane	GWD-1	3/06/2009		1.0	1.0	ug/L
Chloroethane	GWD-1	3/29/2010		1.4	1.0	ug/L
Chloroethane	GWD-1	9/08/2011		1.6	1.0	ug/L
Chloroethane	GWD-1	9/25/2012		1.0	1.0	ug/L
Cis-1,2-dichloroethylene	GWD-1	3/29/2010		1.4	1.0	ug/L
Cis-1,2-dichloroethylene	GWD-1	9/28/2010		1.4	1.0	ug/L
Cis-1,2-dichloroethylene	GWD-1	3/22/2011		1.2	1.0	ug/L
Cis-1,2-dichloroethylene	GWD-1	9/08/2011		1.7	1.0	ug/L
Cis-1,2-dichloroethylene	GWD-1	9/25/2012		1.1	1.0	ug/L
Vinyl chloride	GWD-1	3/29/2010		1.4	1.0	ug/L
Vinyl chloride	GWD-1	9/28/2010		1.0	1.0	ug/L
Vinyl chloride	GWD-1	3/22/2011		1.1	1.0	ug/L
Vinyl chloride	GWD-1	9/08/2011		1.2	1.0	ug/L
Trichlorofluoromethane	MW-39	9/25/2013		9	1	ug/L
1,1-dichloroethane	MW-41	9/27/2010		18.6	1.0	ug/L
1,1-dichloroethane	MW-41	3/23/2011		16.0	1.0	ug/L
1,1-dichloroethane	MW-41	9/08/2011		22.5	1.0	ug/L
1,1-dichloroethane	MW-41	3/09/2012		14.7	1.0	ug/L
1,1-dichloroethane	MW-41	9/25/2012		16.4	1.0	ug/L
1,1-dichloroethane	MW-41	3/15/2013		16.0	1.0	ug/L
1,1-dichloroethane	MW-41	9/25/2013		16.8	1.0	ug/L
1,1-dichloroethane	MW-41	3/25/2014		16.0	1.0	ug/L
1,1-dichloroethane	MW-41	9/24/2014		19.3	1.0	ug/L
1,1-dichloroethane	MW-41	3/11/2015		23.1	1.0	ug/L
1,1-dichloroethane	MW-41	9/16/2015		24.9	1.0	ug/L
1,1-dichloroethane	MW-41	3/22/2016		24.1	1.0	ug/L
1,1-dichloroethane	MW-41	9/15/2016		26.2	1.0	ug/L
1,1-dichloroethane	MW-41	3/23/2017		24.4	1.0	ug/L
1,1-dichloroethane	MW-41	9/08/2017		23.4	1.0	ug/L
1,1-dichloroethane	MW-41	3/19/2018		26.7	1.0	ug/L
1,1-dichloroethane	MW-41	9/11/2018		24.6	1.0	ug/L
1,1-dichloroethane	MW-41	3/26/2019		24.6	1.0	ug/L
1,1-dichloroethane	MW-41	9/04/2019		26.3	1.0	ug/L
1,1-dichloroethane	MW-41	3/26/2020		30.8	1.0	ug/L
1,1-dichloroethane	MW-41	9/15/2020		25.8	1.0	ug/L
1,1-dichloroethane	MW-41	3/02/2021		24.5	1.0	ug/L
1,1-dichloroethane	MW-41	9/07/2021		24.4	1.0	ug/L
1,1-dichloroethane	MW-41	3/24/2022		25.1	1.0	ug/L
1,1-dichloroethane	MW-41	8/31/2022		22.0	1.0	ug/L
1,1-dichloroethane	MW-41	3/02/2023		23.9	1.0	ug/L
1,1-dichloroethane	MW-41	9/12/2023		23.0	1.0	ug/L
1,1-dichloroethane	MW-41	3/04/2024		19.0	1.0	ug/L
1,1-dichloroethane	MW-41	9/23/2024		22.0	1.0	ug/L
1,2-dichloropropane	MW-41	3/26/2020		1.2	1.0	ug/L
1,2-dichloropropane	MW-41	3/02/2023		1.0	1.0	ug/L
1,2-dichloropropane	MW-41	9/23/2024		1.0	1.0	ug/L
Bis(2-ethylhexyl) phthalate	MW-41	3/09/2012		22	8	ug/L
Bis(2-ethylhexyl) phthalate	MW-41	3/25/2014		83	10	ug/L
Bis(2-ethylhexyl) phthalate	MW-41	9/16/2015		10	10	ug/L
Bis(2-ethylhexyl) phthalate	MW-41	3/26/2020		8	6	ug/L
Chloroethane	MW-41	3/26/2019		1.1	1.0	ug/L
Chloroethane	MW-41	3/26/2020		1.0	1.0	ug/L
Chloroethane	MW-41	9/07/2021		1.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-41	9/08/2011		1.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-41	9/24/2014		1.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-41	3/11/2015		2.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-41	9/16/2015		2.3	1.0	ug/L
Cis-1,2-dichloroethylene	MW-41	3/22/2016		2.5	1.0	ug/L
Cis-1,2-dichloroethylene	MW-41	9/15/2016		2.7	1.0	ug/L
Cis-1,2-dichloroethylene	MW-41	3/23/2017		2.7	1.0	ug/L
Cis-1,2-dichloroethylene	MW-41	9/08/2017		2.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-41	3/19/2018		2.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-41	9/11/2018		2.6	1.0	ug/L
Cis-1,2-dichloroethylene	MW-41	3/26/2019		3.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-41	9/04/2019		3.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-41	3/26/2020		5.3	1.0	ug/L
Cis-1,2-dichloroethylene	MW-41	9/15/2020		5.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-41	3/02/2021		4.6	1.0	ug/L
Cis-1,2-dichloroethylene	MW-41	9/07/2021		4.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-41	3/24/2022		4.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-41	8/31/2022		4.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-41	3/02/2023		4.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-41	9/12/2023		3.6	1.0	ug/L
Cis-1,2-dichloroethylene	MW-41	3/04/2024		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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Cis-1,2-dichloroethylene	MW-41	9/23/2024		3.1	1.0	ug/L
Tetrachloroethylene	MW-41	9/11/2018		1	1	ug/L
Trichloroethylene	MW-41	9/11/2018		1.1	1.0	ug/L
2,4,5-t	MW-42	3/19/2018		5.0	.5	ug/L
Bis(2-ethylhexyl) phthalate	MW-42	3/02/2023		6	6	ug/L
Acetone	MW-44	9/08/2017		20	10	ug/L
Acetone	MW-45	3/02/2021		21.1	10.0	ug/L
Tetrachloroethylene	MW-48	3/04/2024		2.3	1.0	ug/L
1,1-dichloroethane	MW-56	9/14/2016		5.0	1.0	ug/L
1,1-dichloroethane	MW-56	9/08/2017		10.4	1.0	ug/L
1,1-dichloroethane	MW-56	9/04/2019		4.7	1.0	ug/L
1,1-dichloroethane	MW-56	9/15/2020		6.9	1.0	ug/L
1,1-dichloroethane	MW-56	9/07/2021		8.4	1.0	ug/L
1,1-dichloroethane	MW-56	8/31/2022		7.4	1.0	ug/L
1,1-dichloroethane	MW-56	9/12/2023		4.0	1.0	ug/L
1,1-dichloroethane	MW-56	3/04/2024		1.7	1.0	ug/L
1,1-dichloroethane	MW-56	9/23/2024		2.6	1.0	ug/L
Benzene	MW-56	3/11/1992		7.8	5.0	ug/L
Benzene	MW-56	6/30/1992		1.4	1.0	ug/L
Benzene	MW-56	9/24/1992		9.7	5.0	ug/L
Benzene	MW-56	12/29/1992		8.3	5.0	ug/L
Benzene	MW-56	9/26/1995		10.0	5.0	ug/L
Benzene	MW-56	12/13/1995		11.3	5.0	ug/L
Benzene	MW-56	3/20/1996		11.1	5.0	ug/L
Benzene	MW-56	6/19/1996		11.7	5.0	ug/L
Benzene	MW-56	9/06/1996		9.6	5.0	ug/L
Benzene	MW-56	3/27/1997		10.4	5.0	ug/L
Benzene	MW-56	9/10/1997		11.3	5.0	ug/L
Benzene	MW-56	1/20/1998		9.6	5.0	ug/L
Benzene	MW-56	3/23/1998		5.9	5.0	ug/L
Benzene	MW-56	9/08/1998		9.1	5.0	ug/L
Benzene	MW-56	3/19/1999		7.4	5.0	ug/L
Benzene	MW-56	9/03/1999		7.6	5.0	ug/L
Benzene	MW-56	3/24/2000		9.5	5.0	ug/L
Benzene	MW-56	9/15/2000		7.1	5.0	ug/L
Benzene	MW-56	9/04/2001		6.4	5.0	ug/L
Benzene	MW-56	9/12/2002		7.1	5.0	ug/L
Benzene	MW-56	3/21/2003		5.8	5.0	ug/L
Benzene	MW-56	9/20/2003		5.9	5.0	ug/L
Benzene	MW-56	3/24/2004		.4	.3	ug/L
Benzene	MW-56	9/13/2005		5.8	5.0	ug/L
Benzene	MW-56	9/01/2006		5.3	5.0	ug/L
Benzene	MW-56	9/25/2007		2.3	1.0	ug/L
Benzene	MW-56	9/08/2017		1.4	1.0	ug/L
Benzene	MW-56	9/07/2021		1.0	1.0	ug/L
Chlorobenzene	MW-56	12/13/1995		5.6	5.0	ug/L
Chlorobenzene	MW-56	3/20/1996		4.7	1.0	ug/L
Chlorobenzene	MW-56	6/19/1996		4.7	1.0	ug/L
Chlorobenzene	MW-56	9/06/1996		4.4	1.0	ug/L
Chlorobenzene	MW-56	3/27/1997		5.0	1.0	ug/L
Chlorobenzene	MW-56	1/20/1998		4.8	1.0	ug/L
Chlorobenzene	MW-56	9/08/1998		5.1	5.0	ug/L
Chlorobenzene	MW-56	3/19/1999		4.6	1.0	ug/L
Chlorobenzene	MW-56	9/03/1999		5.1	5.0	ug/L
Chlorobenzene	MW-56	3/24/2000		7.0	5.0	ug/L
Chlorobenzene	MW-56	9/15/2000		5.2	5.0	ug/L
Chlorobenzene	MW-56	9/04/2001		5.4	5.0	ug/L
Chlorobenzene	MW-56	9/12/2002		4.8	1.0	ug/L
Chlorobenzene	MW-56	3/21/2003		5.3	5.0	ug/L
Chlorobenzene	MW-56	9/20/2003		4.5	1.0	ug/L
Chlorobenzene	MW-56	3/24/2004		.5	.3	ug/L
Chlorobenzene	MW-56	9/11/2004		4.1	1.0	ug/L
Chlorobenzene	MW-56	9/13/2005		4.3	1.0	ug/L
Chlorobenzene	MW-56	9/01/2006		3.7	1.0	ug/L
Chlorobenzene	MW-56	9/25/2007		1.3	1.0	ug/L
Cis-1,2-dichloroethylene	MW-56	12/13/1995		113.0	5.0	ug/L
Cis-1,2-dichloroethylene	MW-56	3/20/1996		118.0	5.0	ug/L
Cis-1,2-dichloroethylene	MW-56	6/19/1996		101.0	5.0	ug/L
Cis-1,2-dichloroethylene	MW-56	9/06/1996		86.5	5.0	ug/L
Cis-1,2-dichloroethylene	MW-56	3/27/1997		71.4	5.0	ug/L
Cis-1,2-dichloroethylene	MW-56	9/10/1997		61.3	5.0	ug/L
Cis-1,2-dichloroethylene	MW-56	1/20/1998		42.7	5.0	ug/L
Cis-1,2-dichloroethylene	MW-56	3/23/1998		27.0	5.0	ug/L
Cis-1,2-dichloroethylene	MW-56	9/08/1998		26.6	5.0	ug/L
Cis-1,2-dichloroethylene	MW-56	3/19/1999		18.6	5.0	ug/L
Cis-1,2-dichloroethylene	MW-56	9/03/1999		13.1	5.0	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Cis-1,2-dichloroethylene	MW-56	3/24/2000		8.6	5.0	ug/L
Cis-1,2-dichloroethylene	MW-56	9/15/2000		6.2	5.0	ug/L
Trans-1,2-dichloroethylene	MW-56	12/13/1995		3.7	1.0	ug/L
Trans-1,2-dichloroethylene	MW-56	3/20/1996		4.4	1.0	ug/L
Trans-1,2-dichloroethylene	MW-56	9/06/1996		3.2	1.0	ug/L
Trans-1,2-dichloroethylene	MW-56	3/27/1997		3.2	1.0	ug/L
Trans-1,2-dichloroethylene	MW-56	9/10/1997		3.0	1.0	ug/L
Trans-1,2-dichloroethylene	MW-56	1/20/1998		2.6	1.0	ug/L
Trans-1,2-dichloroethylene	MW-56	9/08/1998		2.0	1.0	ug/L
Trans-1,2-dichloroethylene	MW-56	3/19/1999		1.1	1.0	ug/L
Trans-1,2-dichloroethylene	MW-56	9/03/1999		1.8	1.0	ug/L
Trans-1,2-dichloroethylene	MW-56	3/24/2000		1.8	1.0	ug/L
Trans-1,2-dichloroethylene	MW-56	9/15/2000		1.3	1.0	ug/L
Trans-1,2-dichloroethylene	MW-56	9/12/2002		1.1	1.0	ug/L
Vinyl chloride	MW-56	12/13/1995		299.0	2.0	ug/L
Vinyl chloride	MW-56	3/20/1996		286.0	2.0	ug/L
Vinyl chloride	MW-56	6/19/1996		287.0	2.0	ug/L
Vinyl chloride	MW-56	9/06/1996		255.0	2.0	ug/L
Vinyl chloride	MW-56	3/27/1997		200.4	2.0	ug/L
Vinyl chloride	MW-56	9/10/1997		195.0	2.0	ug/L
Vinyl chloride	MW-56	1/20/1998		174.0	2.0	ug/L
Vinyl chloride	MW-56	3/23/1998		99.8	2.0	ug/L
Vinyl chloride	MW-56	9/08/1998		126.0	2.0	ug/L
Vinyl chloride	MW-56	3/19/1999		63.8	2.0	ug/L
Vinyl chloride	MW-56	9/03/1999		43.0	2.0	ug/L
Vinyl chloride	MW-56	3/24/2000		47.9	2.0	ug/L
Vinyl chloride	MW-56	9/15/2000		25.8	2.0	ug/L
Vinyl chloride	MW-56	9/04/2001		9.4	2.0	ug/L
Vinyl chloride	MW-56	9/12/2002		4.5	2.0	ug/L
Vinyl chloride	MW-56	9/20/2003		4.5	2.0	ug/L
Vinyl chloride	MW-56	3/24/2004		.4	.2	ug/L
Vinyl chloride	MW-56	9/11/2004		3.2	2.0	ug/L
Vinyl chloride	MW-56	9/13/2005		2.7	2.0	ug/L
Vinyl chloride	MW-56	9/01/2006		10.2	2.0	ug/L
Vinyl chloride	MW-56	9/25/2007		2.1	2.0	ug/L
Vinyl chloride	MW-56	9/24/2013		3.3	1.0	ug/L
Vinyl chloride	MW-56	9/14/2016		2.8	1.0	ug/L
Vinyl chloride	MW-56	9/08/2017		4.2	1.0	ug/L
Vinyl chloride	MW-56	9/15/2020		1.9	1.0	ug/L
Vinyl chloride	MW-56	9/07/2021		2.2	1.0	ug/L
Acetone	MW-57	9/08/2017		18.2	10.0	ug/L
Bis(2-ethylhexyl) phthalate	MW-57	3/02/2023		7	6	ug/L
Bis(2-ethylhexyl) phthalate	MW-58	3/26/2020		6	6	ug/L
Cis-1,2-dichloroethylene	MW-58	9/27/2010		14.3	1.0	ug/L
Cis-1,2-dichloroethylene	MW-58	3/23/2011		16.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-58	9/08/2011		16.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-58	3/09/2012		12.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-58	9/25/2012		14.5	1.0	ug/L
Cis-1,2-dichloroethylene	MW-58	3/15/2013		10.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-58	9/25/2013		7.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-58	3/25/2014		8.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-58	9/24/2014		3.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW-58	3/11/2015		5.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW-58	9/17/2015		5.3	1.0	ug/L
Cis-1,2-dichloroethylene	MW-58	3/22/2016		4.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-58	9/15/2016		5.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW-58	3/23/2017		4.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW-58	9/08/2017		5.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-58	3/19/2018		4.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-58	9/11/2018		3.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-58	3/26/2019		2.7	1.0	ug/L
Cis-1,2-dichloroethylene	MW-58	9/04/2019		3.6	1.0	ug/L
Cis-1,2-dichloroethylene	MW-58	3/26/2020		2.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW-58	9/15/2020		2.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-58	3/02/2021		1.7	1.0	ug/L
Cis-1,2-dichloroethylene	MW-58	9/07/2021		2.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-58	3/24/2022		1.7	1.0	ug/L
Cis-1,2-dichloroethylene	MW-58	8/31/2022		1.7	1.0	ug/L
Cis-1,2-dichloroethylene	MW-58	3/02/2023		1.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW-58	9/12/2023		1.7	1.0	ug/L
Cis-1,2-dichloroethylene	MW-58	3/04/2024		1.0	1.0	ug/L
Bis(2-ethylhexyl) phthalate	MW-59	3/26/2019		15	6	ug/L
Bis(2-ethylhexyl) phthalate	MW-59	12/04/2019		6	6	ug/L
Bis(2-ethylhexyl) phthalate	MW-62R	9/25/2012		18	8	ug/L
Bis(2-ethylhexyl) phthalate	MW-62R	9/24/2013		19	10	ug/L
Trichlorofluoromethane	MW-62R	9/28/2010		5.3	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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Trichlorofluoromethane	MW-62R	12/22/2010		3.1	1.0	ug/L
Trichlorofluoromethane	MW-62R	5/17/2011		3.2	1.0	ug/L
Trichlorofluoromethane	MW-62R	7/14/2011		2.1	1.0	ug/L
Trichlorofluoromethane	MW-62R	9/08/2011		6.1	1.0	ug/L
Trichlorofluoromethane	MW-62R	3/09/2012		4.2	1.0	ug/L
Trichlorofluoromethane	MW-62R	9/25/2012		4.7	1.0	ug/L
Trichlorofluoromethane	MW-62R	3/15/2013		5.1	1.0	ug/L
Trichlorofluoromethane	MW-62R	3/25/2014		7.1	1.0	ug/L
Trichlorofluoromethane	MW-62R	9/24/2014		8.6	1.0	ug/L
Trichlorofluoromethane	MW-62R	3/11/2015		8.8	1.0	ug/L
Trichlorofluoromethane	MW-62R	9/16/2015		6.3	1.0	ug/L
Trichlorofluoromethane	MW-62R	3/22/2016		5.5	1.0	ug/L
Trichlorofluoromethane	MW-62R	9/15/2016		6.5	1.0	ug/L
Trichlorofluoromethane	MW-62R	3/23/2017		6.0	1.0	ug/L
Trichlorofluoromethane	MW-62R	9/08/2017		5.1	1.0	ug/L
Trichlorofluoromethane	MW-62R	3/19/2018		4.8	1.0	ug/L
Trichlorofluoromethane	MW-62R	9/11/2018		5.1	1.0	ug/L
Trichlorofluoromethane	MW-62R	3/26/2019		3.4	1.0	ug/L
Trichlorofluoromethane	MW-62R	9/04/2019		3.4	1.0	ug/L
Trichlorofluoromethane	MW-62R	3/26/2020		2.2	1.0	ug/L
Trichlorofluoromethane	MW-62R	9/15/2020		1.7	1.0	ug/L
Trichlorofluoromethane	MW-62R	3/02/2021		2.0	1.0	ug/L
Trichlorofluoromethane	MW-62R	9/07/2021		1.3	1.0	ug/L
Trichlorofluoromethane	MW-62R	8/31/2022		1.6	1.0	ug/L
Trichlorofluoromethane	MW-62R	3/02/2023		1.9	1.0	ug/L
Trichlorofluoromethane	MW-62R	9/12/2023		1.4	1.0	ug/L
Trichlorofluoromethane	MW-62R	3/04/2024		1.0	1.0	ug/L
1,1-dichloroethane	MW-64	9/14/2016		1.9	1.0	ug/L
1,1-dichloroethane	MW-64	9/08/2017		2.0	1.0	ug/L
1,1-dichloroethane	MW-64	3/19/2018		2.6	1.0	ug/L
1,1-dichloroethane	MW-64	9/11/2018		1.2	1.0	ug/L
1,1-dichloroethane	MW-64	3/26/2019		2.4	1.0	ug/L
1,1-dichloroethane	MW-64	9/04/2019		2.3	1.0	ug/L
1,1-dichloroethane	MW-64	3/26/2020		2.4	1.0	ug/L
1,1-dichloroethane	MW-64	9/15/2020		1.8	1.0	ug/L
1,1-dichloroethane	MW-64	3/02/2021		2.7	1.0	ug/L
1,1-dichloroethane	MW-64	9/07/2021		1.6	1.0	ug/L
1,1-dichloroethane	MW-64	3/24/2022		2.1	1.0	ug/L
1,1-dichloroethane	MW-64	8/31/2022		1.6	1.0	ug/L
1,1-dichloroethane	MW-64	3/02/2023		2.3	1.0	ug/L
1,1-dichloroethane	MW-64	9/12/2023		1.8	1.0	ug/L
1,1-dichloroethane	MW-64	3/04/2024		1.5	1.0	ug/L
1,1-dichloroethane	MW-64	9/23/2024		1.7	1.0	ug/L
Benzene	MW-64	9/03/1999		1.4	1.0	ug/L
Benzene	MW-64	3/24/2000		2.1	1.0	ug/L
Benzene	MW-64	9/15/2000		1.1	1.0	ug/L
Benzene	MW-64	3/20/2001		1.4	1.0	ug/L
Benzene	MW-64	3/20/2002		1.8	1.0	ug/L
Benzene	MW-64	9/12/2002		2.1	1.0	ug/L
Benzene	MW-64	3/21/2003		1.9	1.0	ug/L
Benzene	MW-64	9/20/2003		1.8	1.0	ug/L
Benzene	MW-64	3/24/2004		1.8	1.0	ug/L
Benzene	MW-64	3/03/2005		1.6	1.0	ug/L
Benzene	MW-64	9/13/2005		1.5	1.0	ug/L
Benzene	MW-64	3/16/2006		1.4	1.0	ug/L
Benzene	MW-64	9/01/2006		1.5	1.0	ug/L
Benzene	MW-64	3/27/2007		1.1	1.0	ug/L
Benzene	MW-64	9/25/2007		1.0	.3	ug/L
Benzene	MW-64	3/20/2008		1.0	.3	ug/L
Benzene	MW-64	3/20/2008		1.0	1.0	ug/L
Benzene	MW-64	9/16/2008		1.0	1.0	ug/L
Chlorobenzene	MW-64	9/03/1999		1.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-64	3/23/1998		19.8	5.0	ug/L
Cis-1,2-dichloroethylene	MW-64	9/08/1998		28.2	5.0	ug/L
Cis-1,2-dichloroethylene	MW-64	3/19/1999		46.5	5.0	ug/L
Cis-1,2-dichloroethylene	MW-64	9/03/1999		34.2	5.0	ug/L
Cis-1,2-dichloroethylene	MW-64	3/24/2000		82.1	5.0	ug/L
Cis-1,2-dichloroethylene	MW-64	9/15/2000		43.8	5.0	ug/L
Cis-1,2-dichloroethylene	MW-64	3/20/2001		56.4	5.0	ug/L
Cis-1,2-dichloroethylene	MW-64	9/04/2001		67.0	5.0	ug/L
Cis-1,2-dichloroethylene	MW-64	3/20/2002		82.1	5.0	ug/L
Cis-1,2-dichloroethylene	MW-64	9/14/2016		36.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-64	9/08/2017		23.7	1.0	ug/L
Cis-1,2-dichloroethylene	MW-64	3/19/2018		17.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-64	9/11/2018		15.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-64	3/26/2019		9.7	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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Cis-1,2-dichloroethylene	MW-64	9/04/2019		8.3	1.0	ug/L
Cis-1,2-dichloroethylene	MW-64	3/26/2020		4.6	1.0	ug/L
Cis-1,2-dichloroethylene	MW-64	9/15/2020		6.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-64	3/02/2021		7.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-64	9/07/2021		7.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-64	3/24/2022		3.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-64	8/31/2022		5.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-64	3/02/2023		3.3	1.0	ug/L
Cis-1,2-dichloroethylene	MW-64	9/12/2023		4.5	1.0	ug/L
Cis-1,2-dichloroethylene	MW-64	3/04/2024		2.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-64	9/23/2024		4.1	1.0	ug/L
Trans-1,2-dichloroethylene	MW-64	9/15/2000		1.1	1.0	ug/L
Trans-1,2-dichloroethylene	MW-64	3/20/2001		1.4	1.0	ug/L
Trans-1,2-dichloroethylene	MW-64	3/20/2002		2.0	1.0	ug/L
Trans-1,2-dichloroethylene	MW-64	9/12/2002		2.4	1.0	ug/L
Vinyl chloride	MW-64	1/20/1998		7.4	2.0	ug/L
Vinyl chloride	MW-64	3/23/1998		8.0	2.0	ug/L
Vinyl chloride	MW-64	9/08/1998		12.0	2.0	ug/L
Vinyl chloride	MW-64	3/19/1999		17.8	2.0	ug/L
Vinyl chloride	MW-64	9/03/1999		12.1	2.0	ug/L
Vinyl chloride	MW-64	3/24/2000		59.8	2.0	ug/L
Vinyl chloride	MW-64	9/15/2000		19.7	2.0	ug/L
Vinyl chloride	MW-64	3/20/2001		35.4	2.0	ug/L
Vinyl chloride	MW-64	9/04/2001		35.6	2.0	ug/L
Vinyl chloride	MW-64	3/20/2002		44.3	2.0	ug/L
Vinyl chloride	MW-64	9/12/2002		51.8	2.0	ug/L
Vinyl chloride	MW-64	3/21/2003		56.1	2.0	ug/L
Vinyl chloride	MW-64	9/20/2003		57.0	2.0	ug/L
Vinyl chloride	MW-64	3/24/2004		65.8	2.0	ug/L
Vinyl chloride	MW-64	9/11/2004		65.8	2.0	ug/L
Vinyl chloride	MW-64	3/03/2005		81.3	2.0	ug/L
Vinyl chloride	MW-64	9/13/2005		85.2	2.0	ug/L
Vinyl chloride	MW-64	3/16/2006		103.0	2.0	ug/L
Vinyl chloride	MW-64	9/01/2006		122.0	2.0	ug/L
Vinyl chloride	MW-64	3/27/2007		87.5	2.0	ug/L
Vinyl chloride	MW-64	9/25/2007		74.4	2.0	ug/L
Vinyl chloride	MW-64	3/20/2008		61.9	1.0	ug/L
Vinyl chloride	MW-64	3/20/2008		61.9	2.0	ug/L
Vinyl chloride	MW-64	9/16/2008		77.9	2.0	ug/L
Vinyl chloride	MW-64	9/16/2008		77.9	1.0	ug/L
Vinyl chloride	MW-64	3/06/2009		45.9	1.0	ug/L
Vinyl chloride	MW-64	9/13/2009		42.5	1.0	ug/L
Vinyl chloride	MW-64	9/24/2013		70.6	1.0	ug/L
Vinyl chloride	MW-64	9/25/2014		38.9	1.0	ug/L
Vinyl chloride	MW-64	3/25/2015		20.0	1.0	ug/L
Vinyl chloride	MW-64	9/16/2015		20.1	1.0	ug/L
Vinyl chloride	MW-64	9/14/2016		23.7	1.0	ug/L
Vinyl chloride	MW-64	3/23/2017		14.3	1.0	ug/L
Vinyl chloride	MW-64	9/08/2017		17.4	1.0	ug/L
Vinyl chloride	MW-64	3/19/2018		14.4	1.0	ug/L
Vinyl chloride	MW-64	9/11/2018		7.9	1.0	ug/L
Vinyl chloride	MW-64	3/26/2019		7.0	1.0	ug/L
Vinyl chloride	MW-64	9/04/2019		5.6	1.0	ug/L
Vinyl chloride	MW-64	3/26/2020		3.7	1.0	ug/L
Vinyl chloride	MW-64	9/15/2020		5.6	1.0	ug/L
Vinyl chloride	MW-64	3/02/2021		3.4	1.0	ug/L
Vinyl chloride	MW-64	9/07/2021		2.6	1.0	ug/L
Vinyl chloride	MW-64	3/24/2022		1.6	1.0	ug/L
Vinyl chloride	MW-64	8/31/2022		1.7	1.0	ug/L
Vinyl chloride	MW-64	3/02/2023		1.9	1.0	ug/L
Vinyl chloride	MW-64	9/12/2023		1.8	1.0	ug/L
Vinyl chloride	MW-64	3/04/2024		2.7	1.0	ug/L
Vinyl chloride	MW-64	9/23/2024		1.7	1.0	ug/L
Vinyl chloride	MW-65	9/16/2008		1.2	1.0	ug/L
Vinyl chloride	MW-65	9/16/2008		1.2	1.0	ug/L
Vinyl chloride	MW-65	9/24/2013		3.1	1.0	ug/L
Carbon disulfide	MW-79	12/22/2010		1	1	ug/L
Trichlorofluoromethane	MW-79	3/24/2022		1.6	1.0	ug/L
Toluene	PECS-1	9/23/2024		1.8	1.0	ug/L
Cis-1,2-dichloroethylene	SW-101	3/23/2017		1.4	1.0	ug/L
Cis-1,2-dichloroethylene	SW-101	3/26/2019		2.8	1.0	ug/L
Cis-1,2-dichloroethylene	SW-101	9/04/2019		2.9	1.0	ug/L
Cis-1,2-dichloroethylene	SW-101	12/04/2019		3.6	1.0	ug/L
Vinyl chloride	SW-101	9/04/2019		1.6	1.0	ug/L
Cis-1,2-dichloroethylene	SW-101R	3/26/2020		2.6	1.0	ug/L
Cis-1,2-dichloroethylene	SW-101R	9/15/2020		1.8	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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Cis-1,2-dichloroethylene	SW-101R	3/02/2021		2.1	1.0	ug/L
Cis-1,2-dichloroethylene	SW-101R	9/07/2021		5.9	1.0	ug/L
Cis-1,2-dichloroethylene	SW-101R	3/24/2022		5.5	1.0	ug/L
Cis-1,2-dichloroethylene	SW-101R	8/31/2022		6.1	1.0	ug/L
Cis-1,2-dichloroethylene	SW-101R	3/02/2023		5.9	1.0	ug/L
Cis-1,2-dichloroethylene	SW-101R	9/12/2023		6.0	1.0	ug/L
Cis-1,2-dichloroethylene	SW-101R	3/04/2024		4.0	1.0	ug/L
Cis-1,2-dichloroethylene	SW-101R	9/23/2024		3.4	1.0	ug/L
Vinyl chloride	SW-101R	9/15/2020		1.8	1.0	ug/L
Vinyl chloride	SW-101R	3/02/2021		1.8	1.0	ug/L
Vinyl chloride	SW-101R	9/07/2021		4.6	1.0	ug/L
Vinyl chloride	SW-101R	3/24/2022		6.5	1.0	ug/L
Vinyl chloride	SW-101R	8/31/2022		3.9	1.0	ug/L
Vinyl chloride	SW-101R	3/02/2023		5.9	1.0	ug/L
Vinyl chloride	SW-101R	9/12/2023		4.4	1.0	ug/L
Vinyl chloride	SW-101R	3/04/2024		5.3	1.0	ug/L
Vinyl chloride	SW-101R	9/23/2024		3.1	1.0	ug/L
Cis-1,2-dichloroethylene	SW-103	12/13/1995		5.3	5.0	ug/L
Cis-1,2-dichloroethylene	SW-103	3/20/1996		1.1	1.0	ug/L
Cis-1,2-dichloroethylene	SW-103	3/27/1997		1.1	1.0	ug/L
Cis-1,2-dichloroethylene	SW-103	3/20/2002		1.4	1.0	ug/L
Vinyl chloride	SW-103	12/13/1995		6.2	2.0	ug/L

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

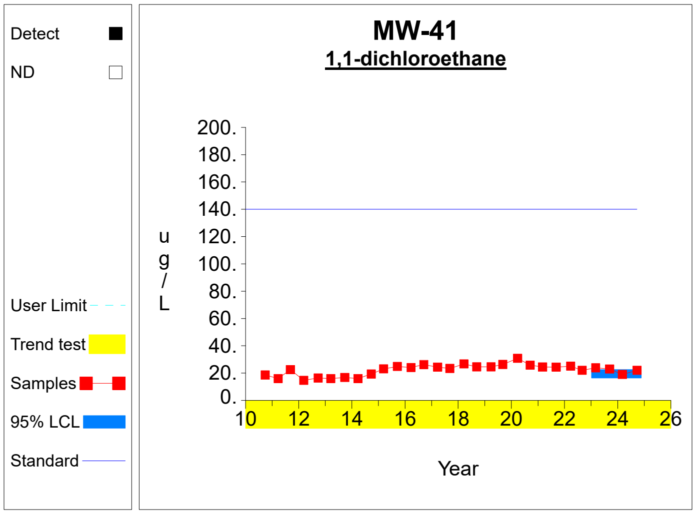
Table 1

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

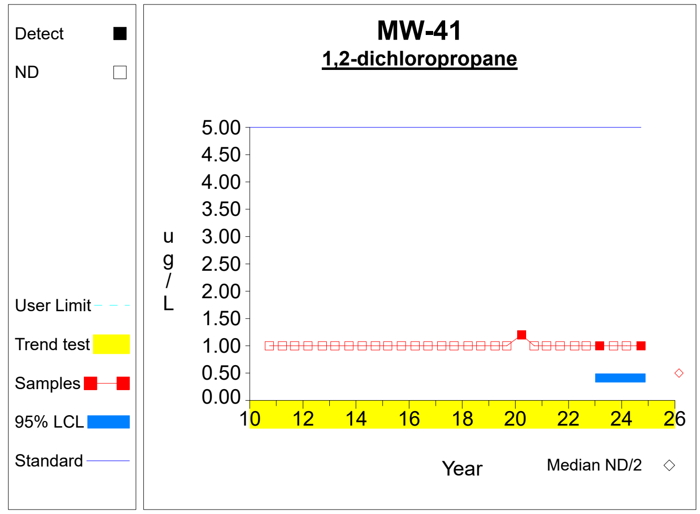
Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend	
1,1-dichloroethane	ug/L	MW-41	4	21.975	2.130	1.176	19.470	24.480	140.000		
1,2-dichloropropane	ug/L	MW-41	4	0.750	0.289	1.176	0.410	1.090	5.000		
Cis-1,2-dichloroethylene	ug/L	MW-41	4	3.300	0.726	1.176	2.446	4.154	70.000	inc	
Toluene	ug/L	MW-41	4	0.500	0.000	1.176	0.500	0.500	1000.000		
Trichlorofluoromethane	ug/L	MW-41	4	0.500	0.000	1.176	0.500	0.500	2000.000		
Vinyl chloride	ug/L	MW-41	4	0.500	0.000	1.176	0.500	0.500	2.000		
1,1-dichloroethane	ug/L	MW-56	4	2.200	1.476	1.176	0.463	3.937	140.000		
1,2-dichloropropane	ug/L	MW-56	4	0.500	0.000	1.176	0.500	0.500	5.000		
Cis-1,2-dichloroethylene	ug/L	MW-56	4	0.500	0.000	1.176	0.500	0.500	70.000		
Toluene	ug/L	MW-56	4	0.500	0.000	1.176	0.500	0.500	1000.000		
Trichlorofluoromethane	ug/L	MW-56	4	0.500	0.000	1.176	0.500	0.500	2000.000		
Vinyl chloride	ug/L	MW-56	4	0.500	0.000	1.176	0.500	0.500	2.000		
1,1-dichloroethane	ug/L	MW-58	4	0.500	0.000	1.176	0.500	0.500	140.000		
1,2-dichloropropane	ug/L	MW-58	4	0.500	0.000	1.176	0.500	0.500	5.000		
Cis-1,2-dichloroethylene	ug/L	MW-58	4	1.250	0.614	1.176	0.528	1.972	70.000	dec	
Toluene	ug/L	MW-58	4	0.500	0.000	1.176	0.500	0.500	1000.000		
Trichlorofluoromethane	ug/L	MW-58	4	0.500	0.000	1.176	0.500	0.500	2000.000		
Vinyl chloride	ug/L	MW-58	4	0.500	0.000	1.176	0.500	0.500	2.000		
1,1-dichloroethane	ug/L	MW-62R	4	0.500	0.000	1.176	0.500	0.500	140.000		
1,2-dichloropropane	ug/L	MW-62R	4	0.500	0.000	1.176	0.500	0.500	5.000		
Cis-1,2-dichloroethylene	ug/L	MW-62R	4	0.500	0.000	1.176	0.500	0.500	70.000		
Toluene	ug/L	MW-62R	4	0.500	0.000	1.176	0.500	0.500	1000.000		
Trichlorofluoromethane	ug/L	MW-62R	4	1.200	0.594	1.176	0.501	1.899	2000.000	dec	
Vinyl chloride	ug/L	MW-62R	4	0.500	0.000	1.176	0.500	0.500	2.000		
1,1-dichloroethane	ug/L	MW-64	4	1.825	0.340	1.176	1.425	2.225	140.000		
1,2-dichloropropane	ug/L	MW-64	4	0.500	0.000	1.176	0.500	0.500	5.000		
Cis-1,2-dichloroethylene	ug/L	MW-64	4	3.575	0.929	1.176	2.483	4.667	70.000	dec	
Toluene	ug/L	MW-64	4	0.500	0.000	1.176	0.500	0.500	1000.000		
Trichlorofluoromethane	ug/L	MW-64	4	0.500	0.000	1.176	0.500	0.500	2000.000		
Vinyl chloride	ug/L	MW-64	4	2.025	0.457	1.176	1.487	2.563	2.000	dec	
1,1-dichloroethane	ug/L	SW-101R	4	0.500	0.000	1.176	0.500	0.500	140.000		
1,2-dichloropropane	ug/L	SW-101R	4	0.500	0.000	1.176	0.500	0.500	5.000		
Cis-1,2-dichloroethylene	ug/L	SW-101R	4	4.825	1.323	1.176	3.269	6.381	70.000		
Toluene	ug/L	SW-101R	4	0.500	0.000	1.176	0.500	0.500	1000.000		
Trichlorofluoromethane	ug/L	SW-101R	4	0.500	0.000	1.176	0.500	0.500	2000.000		
Vinyl chloride	ug/L	SW-101R	4	4.675	1.218	1.176	3.243	6.107	2.000		**

* - Insufficient Data
** - Significant Exceedance
LCL = Lower Confidence Limit
UCL = Upper Confidence Limit

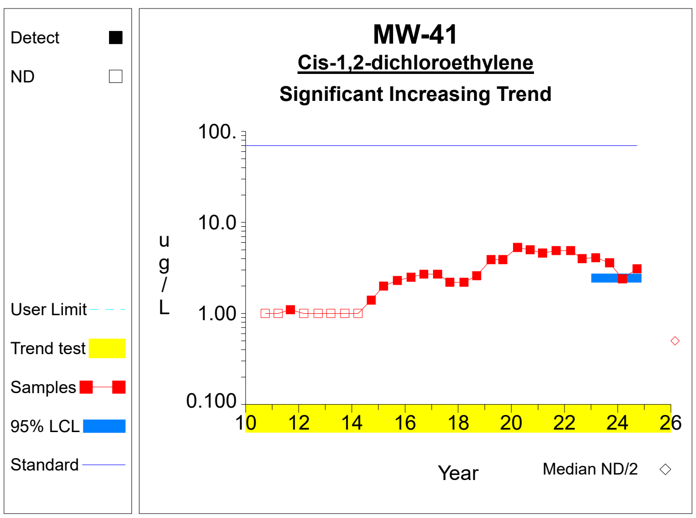
Confidence Limits (Assessment)



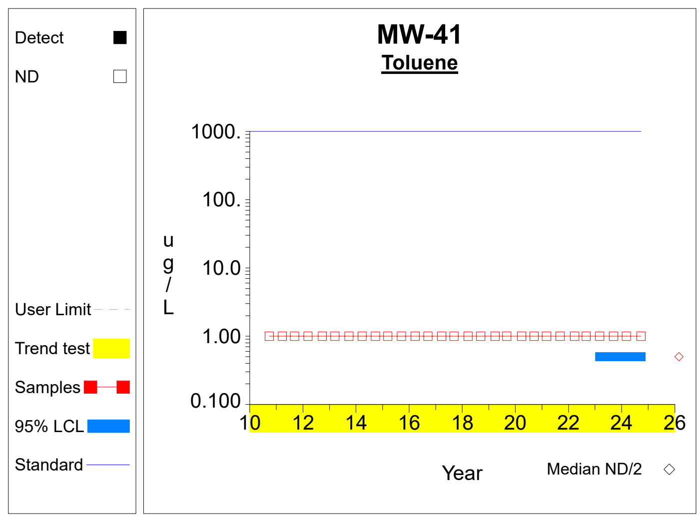
Graph 1



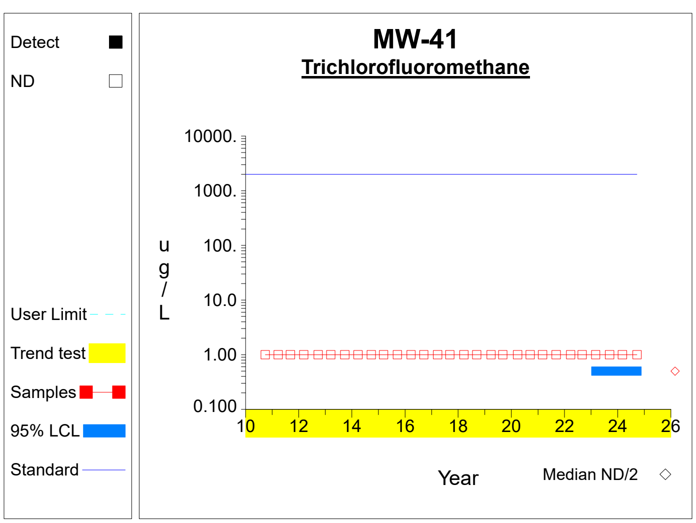
Graph 2



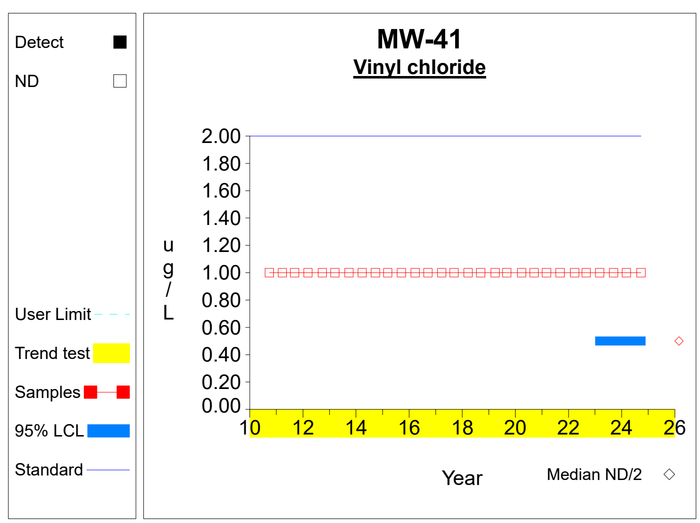
Graph 3



Graph 4



Graph 5



Graph 6

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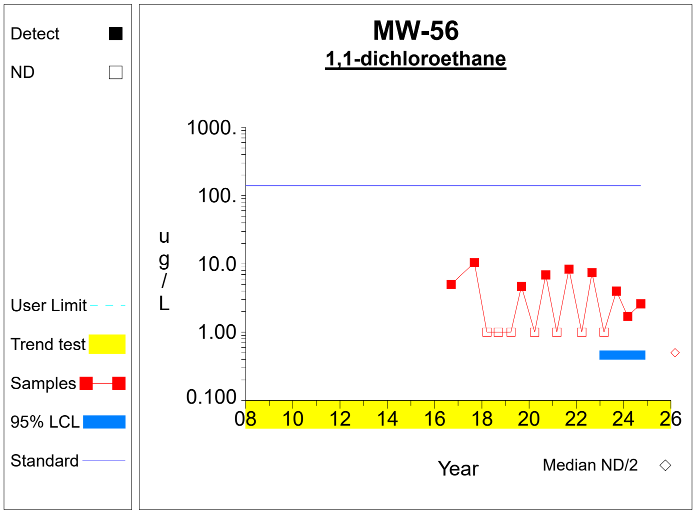
Confidence Limits (Assessment)



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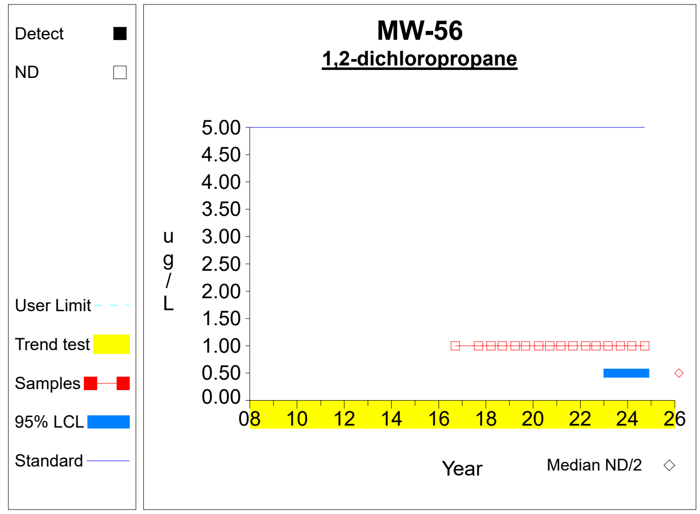

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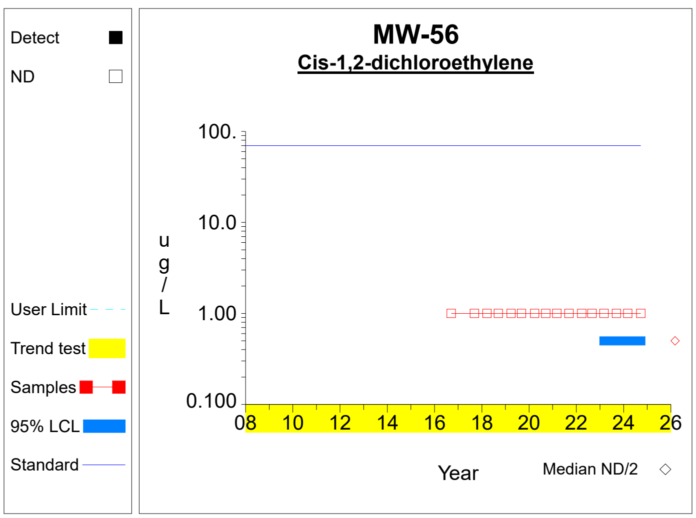

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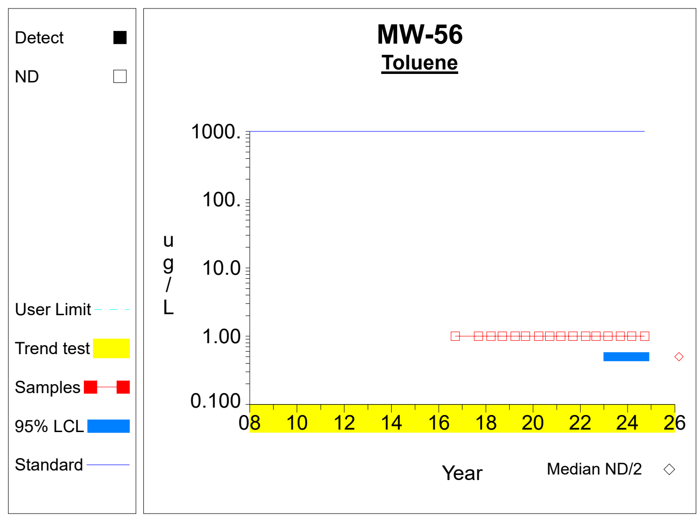

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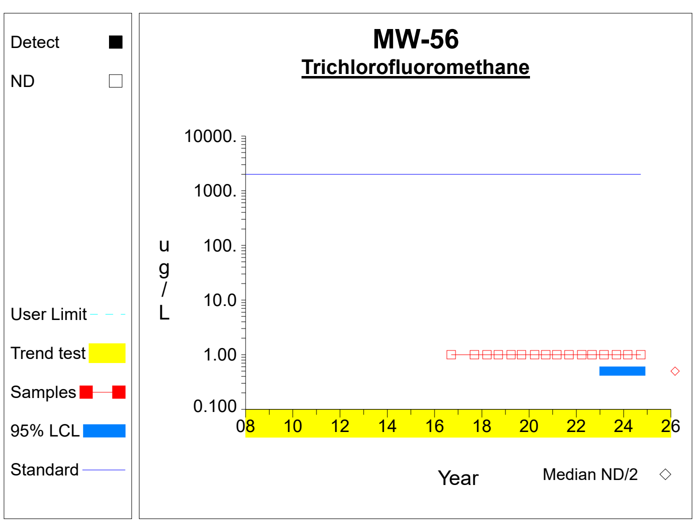

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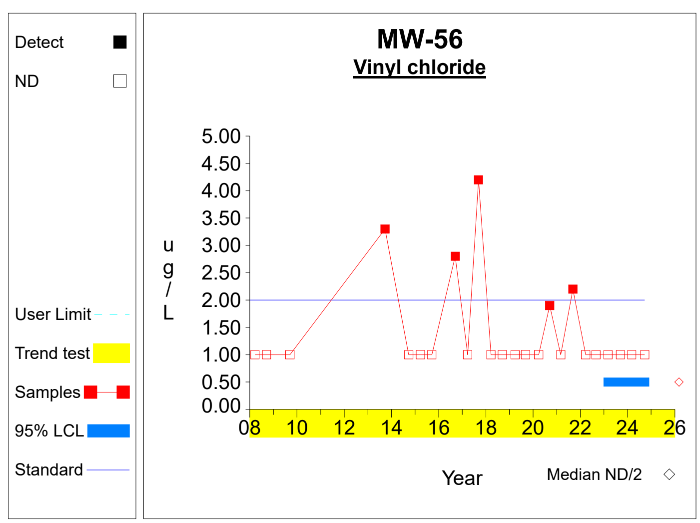

Graph 12

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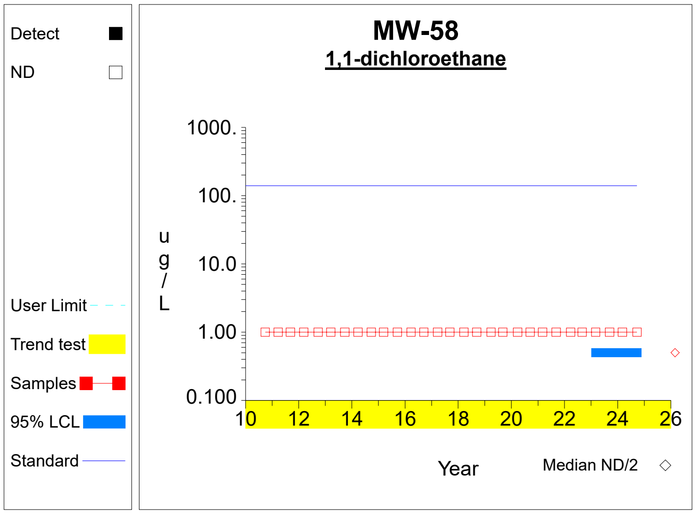
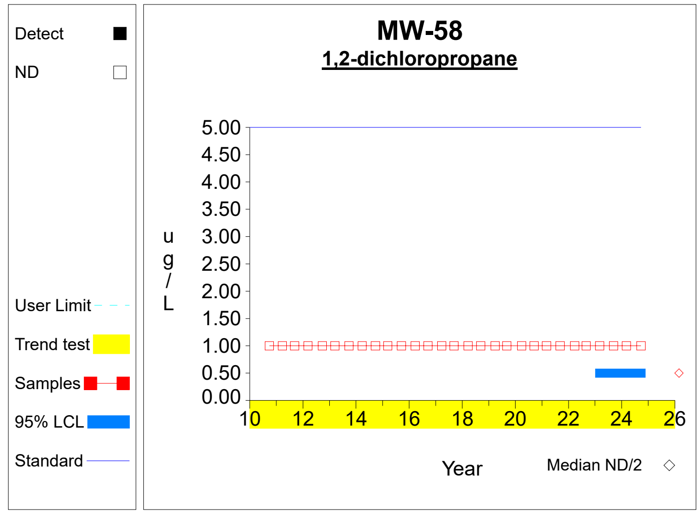
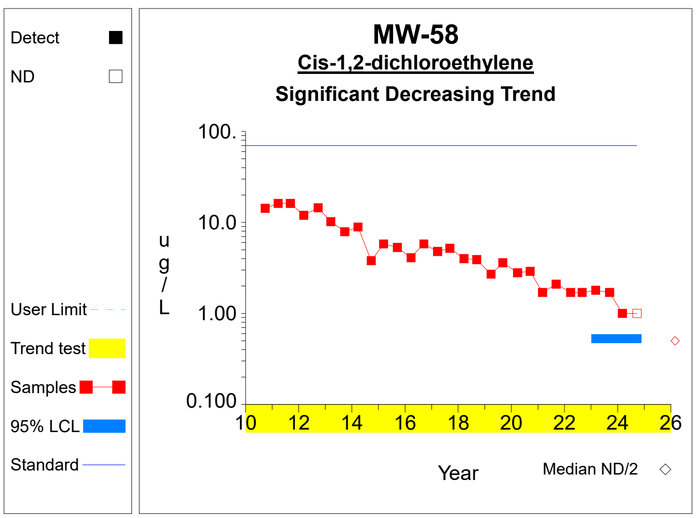
Confidence Limits (Assessment)



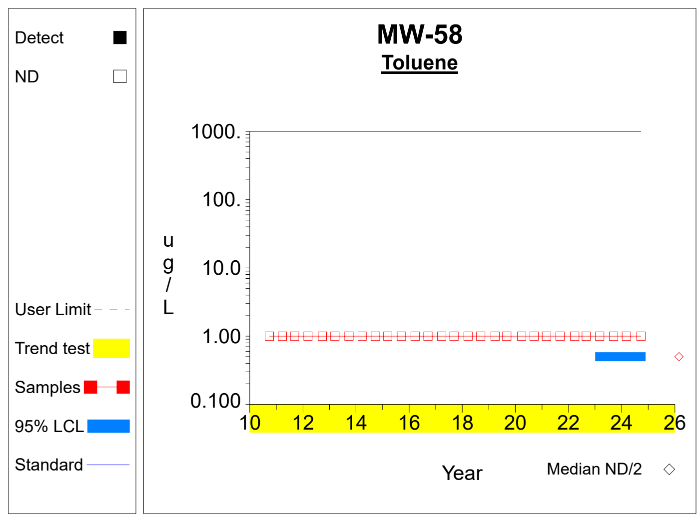
Graph 13



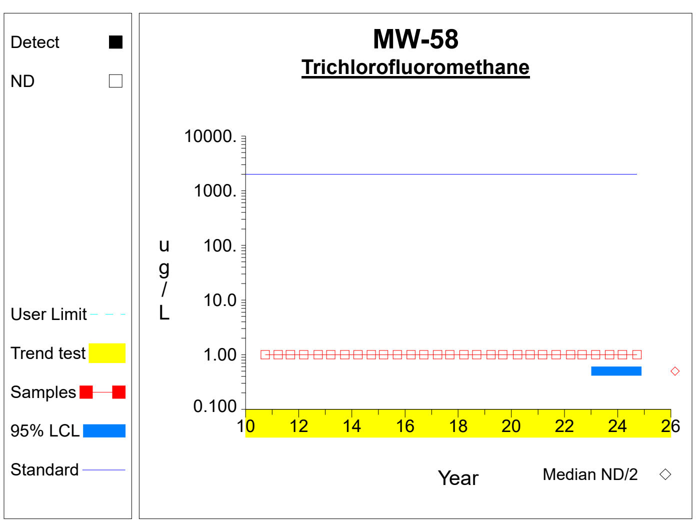
Graph 14



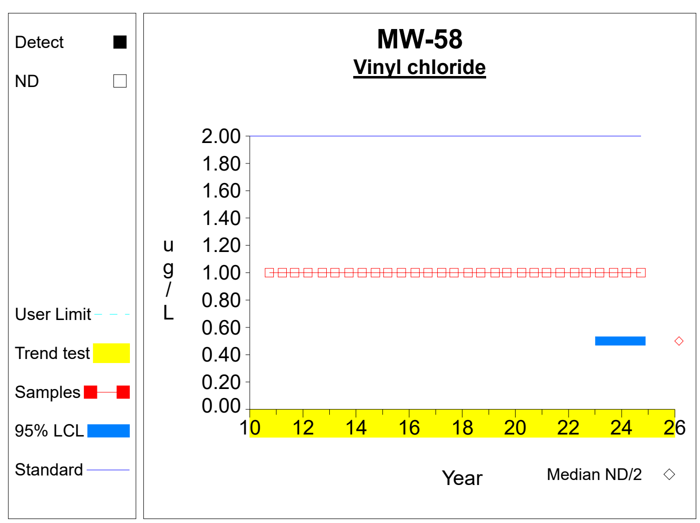
Graph 15



Graph 16



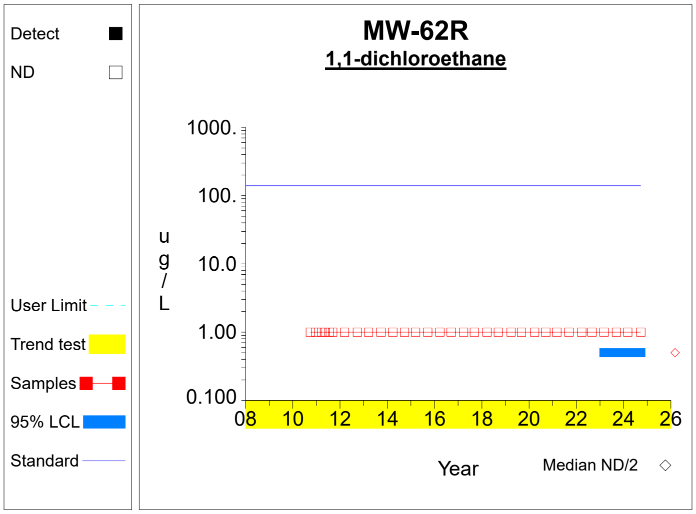
Graph 17



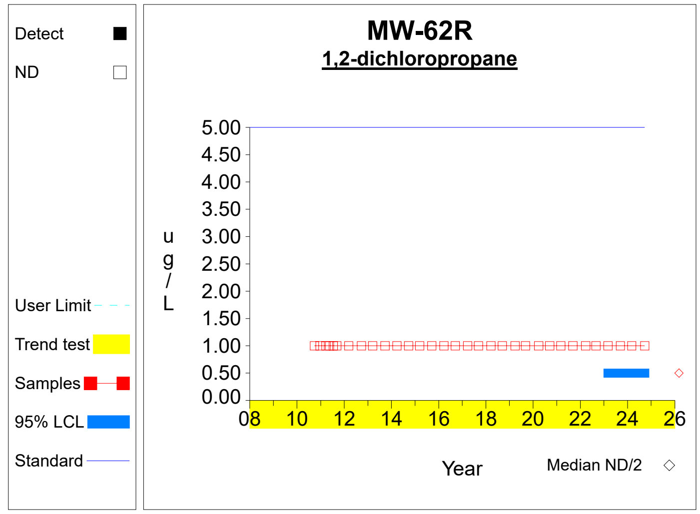
Graph 18

Prepared by: Otter Creek Environmental

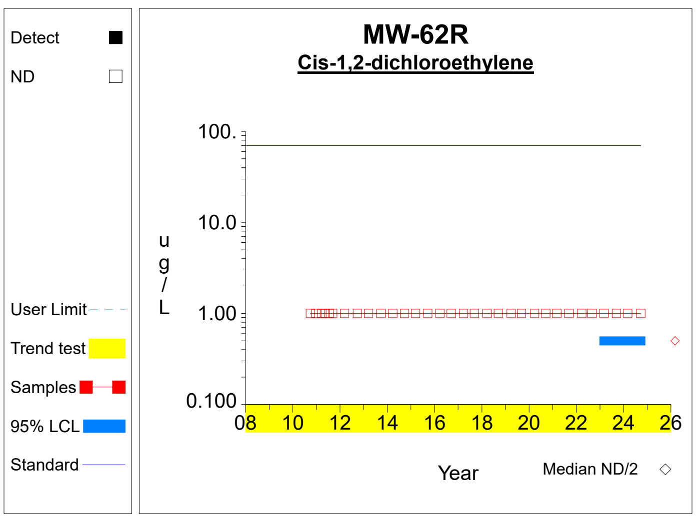
Confidence Limits (Assessment)



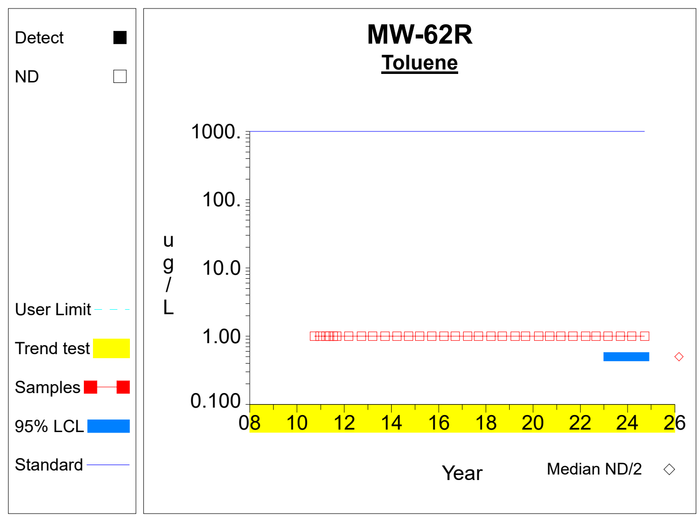
Graph 19



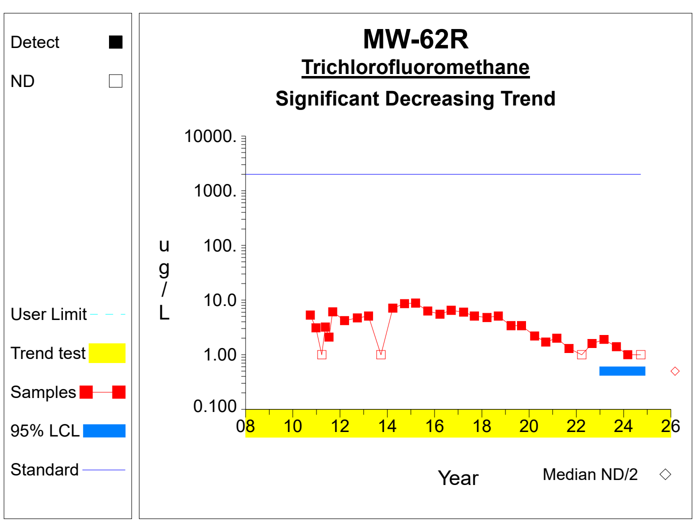
Graph 20



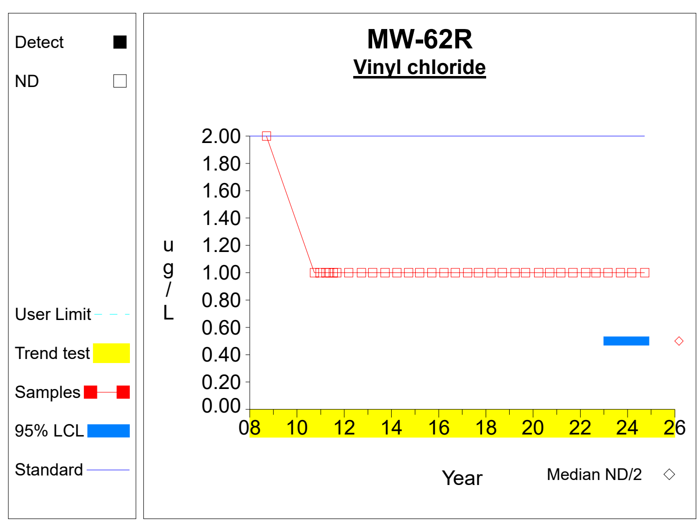
Graph 21



Graph 22

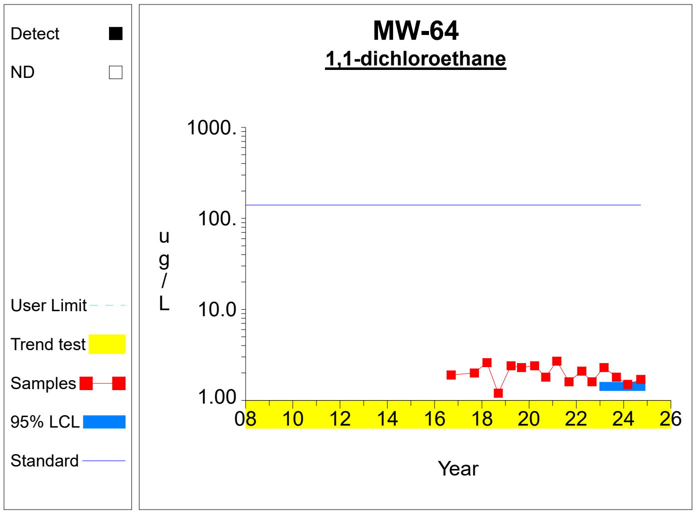


Graph 23

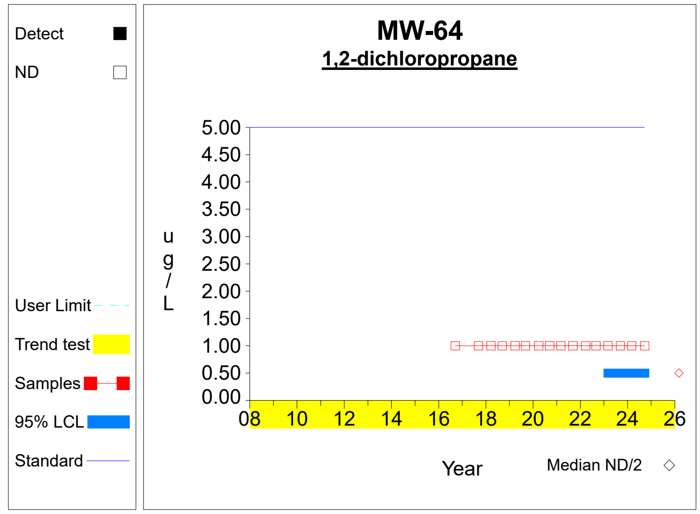


Graph 24

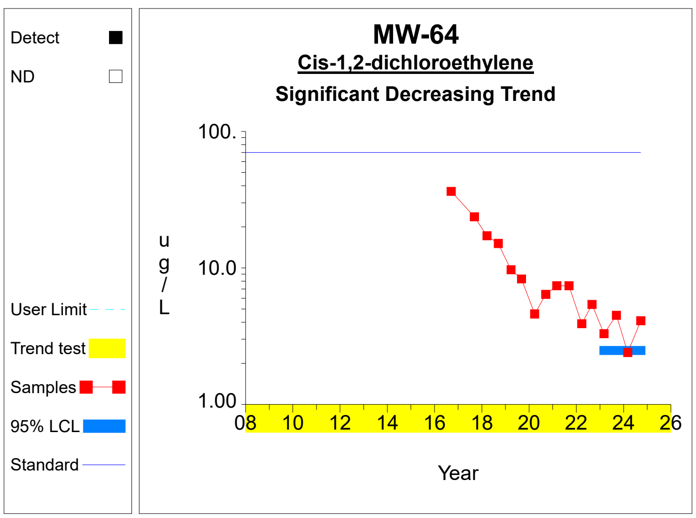
Confidence Limits (Assessment)



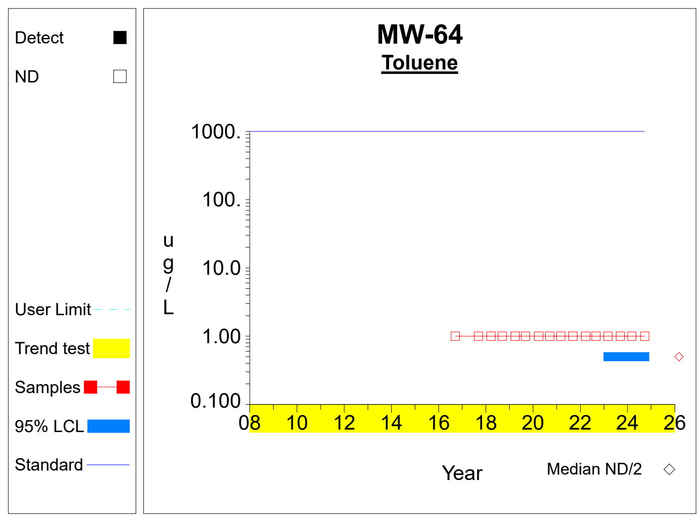
Graph 25



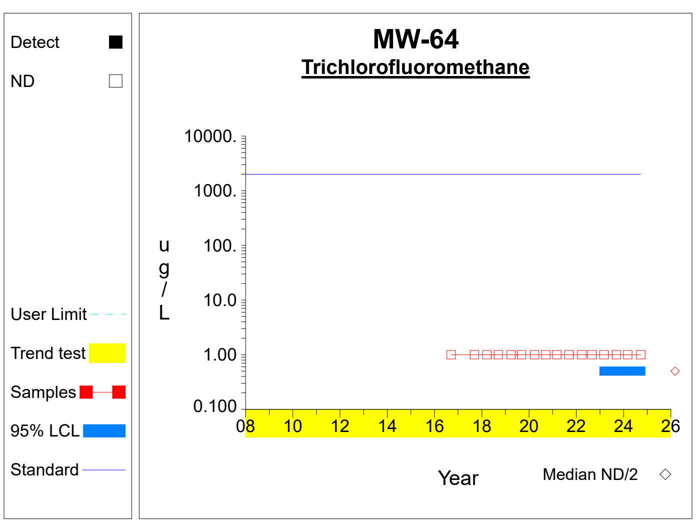
Graph 26



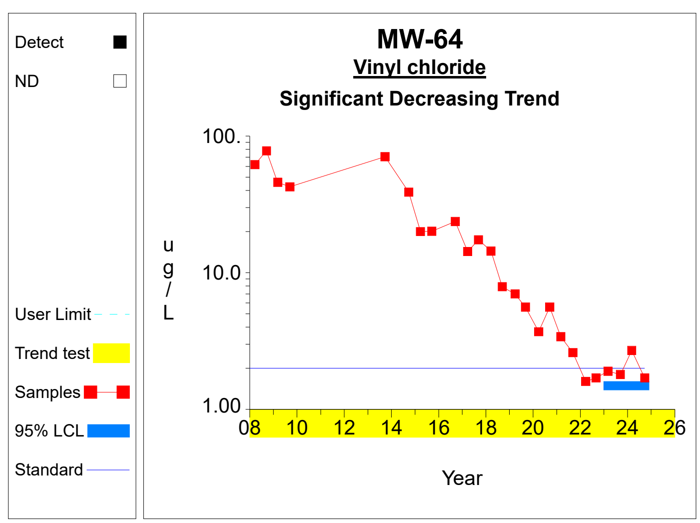
Graph 27



Graph 28



Graph 29



Graph 30

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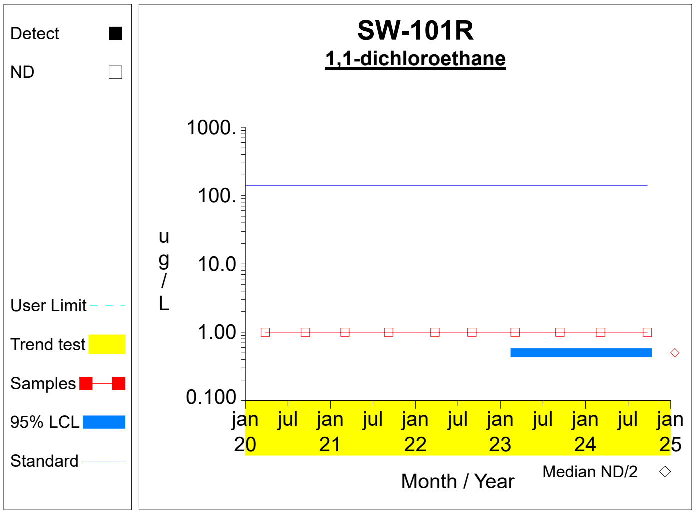
Confidence Limits (Assessment)



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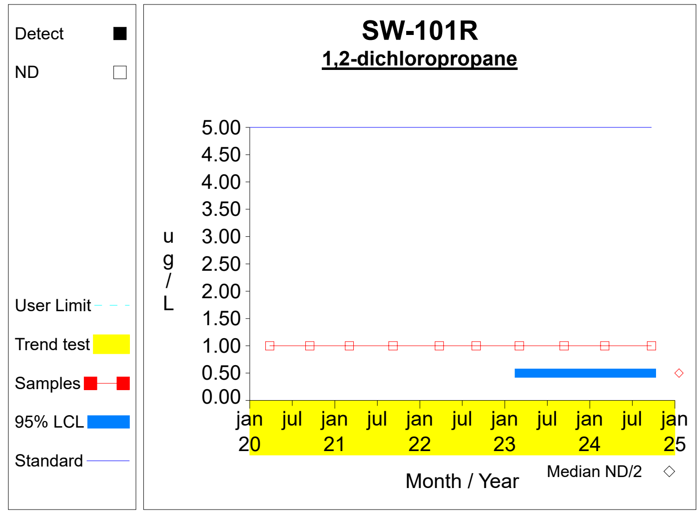

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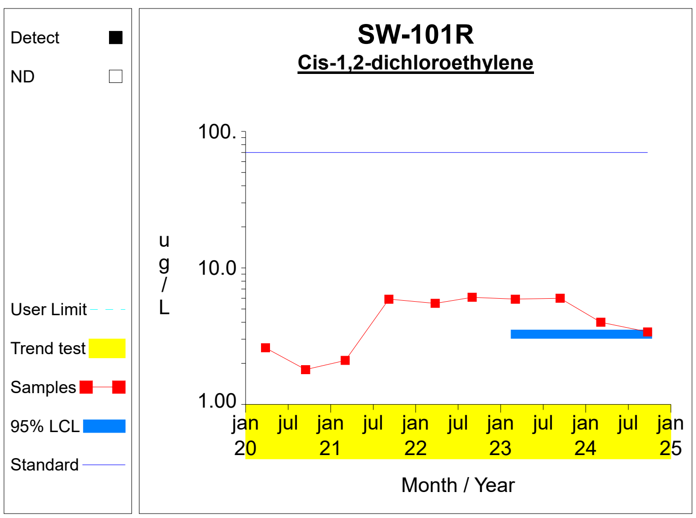
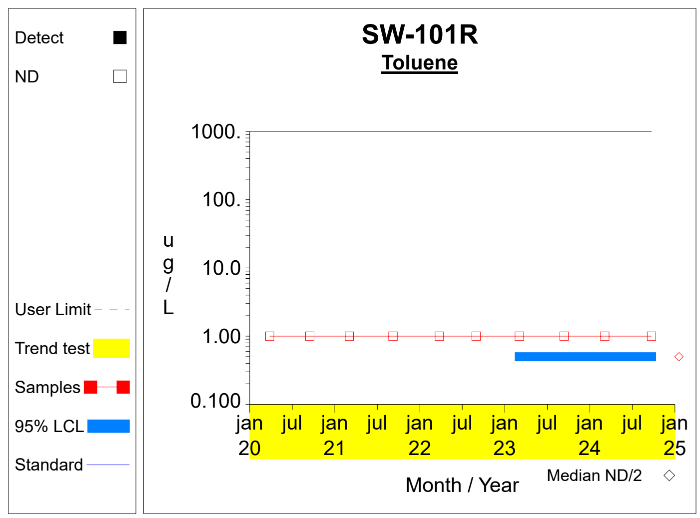


Graph 33



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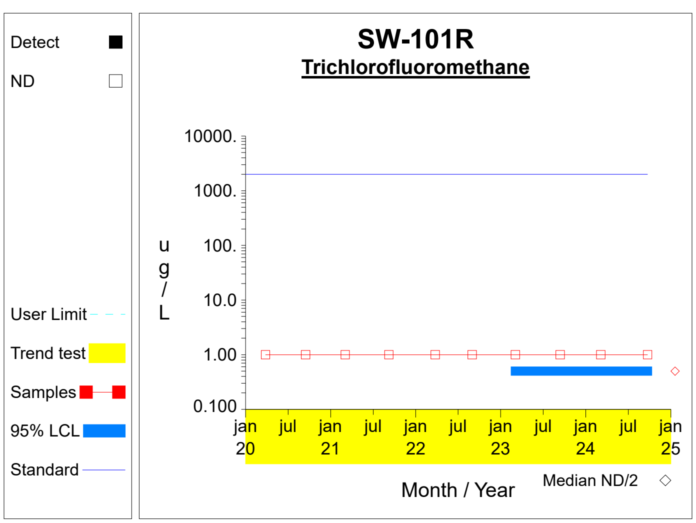
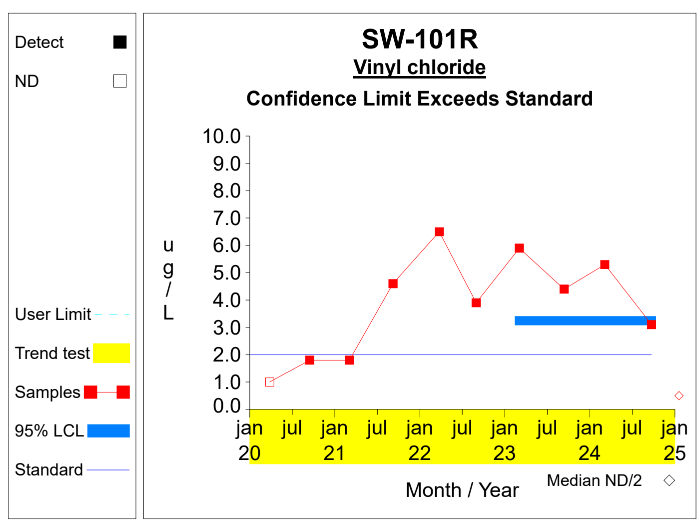


Graph 35



Graph 36

Worksheet 6 - Assessment Monitoring
1,1-dichloroethane (ug/L) at MW-41

Step	Equation	Description
1	$\bar{X}$ = **sum[X]** / **N** = **87.9** / **4** = **21.975**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2] - sum[X]^2/N**) / (**N**-1))$^{1/2}$ = ((**1945.21 - 7726.41/4**) / (**4**-1))$^{1/2}$ = **2.13**	Compute sd of the last 4 measurements.
3	LCL = $\bar{X}$ **- tS/N**$^{1/2}$ = **21.975 - 2.353** * **2.13/4**$^{1/2}$ = **19.47**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\bar{X}$ **+ tS/N**$^{1/2}$ = **21.975** + **2.353** * **2.13/4**$^{1/2}$ = **24.48**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **29** * (**29**-1) / 2 = **406**	Number of sample pairs during trend detection period.
6	S = **0.42**	Sen's estimator of trend.
7	var(S) = **2835.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**$^{1/2}$) / 2 = (**406** ± **2.576** * **2.835.333**$^{1/2}$) / 2 = [**134.417**, **271.583**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.043**, **0.998**]	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-41

Step	Equation	Description
1	$\bar{X}$ = **sum[X]** / **N** = **3.0** / **4** = **0.75**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.5** - **9.0**/**4**) / (**4**-1))^{½} = **0.289**	Compute sd of the last 4 measurements.
3	LCL = $\bar{X}$ - **tS/N**^{½} = **0.75** - **2.353** * **0.289/4**^{½} = **0.41**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\bar{X}$ + **tS/N**^{½} = **0.75** + **2.353** * **0.289/4**^{½} = **1.09**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **29** * (**29**-1) / 2 = **406**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **782.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**406** ± **2.576** * **782.667**^{½}) / 2 = [**166.967**, **239.033**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cis-1,2-dichloroethylene (ug/L) at MW-41

Step	Equation	Description
1	$\bar{X}$ = **sum[X]** / **N** = **13.2** / **4** = **3.3**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]^2**/**N**) / (**N**-1))^{½} = ((**45.14** - **174.24**/**4**) / (**4**-1))^{½} = **0.726**	Compute sd of the last 4 measurements.
3	LCL = $\bar{X}$ - **tS**/**N**^{½} = **3.3** - **2.353** * **0.726**/**4**^{½} = **2.446**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\bar{X}$ + **tS**/**N**^{½} = **3.3** + **2.353** * **0.726**/**4**^{½} = **4.154**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **29** * (**29**-1) / 2 = **406**	Number of sample pairs during trend detection period.
6	S = **0.349**	Sen's estimator of trend.
7	var(S) = **2793.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**406** ± **2.576** * **2793.667**^{½}) / 2 = [**134.923**, **271.077**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.2**, **0.442**]	Two-sided confidence interval for slope.
10	LCL(S) > 0	**Significant increasing trend.**

Worksheet 6 - Assessment Monitoring
Toluene (ug/L) at MW-41

Step	Equation	Description
1	$\overline{X} = \textbf{sum[X]} / \textbf{N}$ $= \textbf{2.0} / \textbf{4}$ $= \textbf{0.5}$	Compute the mean of the last 4 measurements.
2	$S = ((\textbf{sum[X}^2\textbf{]} - \textbf{sum[X]}^2/\textbf{N}) / (\textbf{N}-1))^{1/2}$ $= ((\textbf{1.0} - \textbf{4.0}/\textbf{4}) / (\textbf{4}-1))^{1/2}$ $= \textbf{0.0}$	Compute sd of the last 4 measurements.
3	$LCL = \overline{\textbf{X}} - \textbf{tS}/\textbf{N}^{1/2}$ $= \textbf{0.5} - \textbf{2.353} * \textbf{0.0}/\textbf{4}^{1/2}$ $= \textbf{0.5}$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$UCL = \overline{\textbf{X}} + \textbf{tS}/\textbf{N}^{1/2}$ $= \textbf{0.5} + \textbf{2.353} * \textbf{0.0}/\textbf{4}^{1/2}$ $= \textbf{0.5}$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = \textbf{N} * (\textbf{N}-1) / 2$ $= \textbf{29} * (\textbf{29}-1) / 2$ $= \textbf{406}$	Number of sample pairs during trend detection period.
6	$S = \textbf{0.0}$	Sen's estimator of trend.
7	$var(S) = \textbf{0.0}$	Variance estimate for slope.
8	$M(S) = (\textbf{N'} \pm \textbf{Z}_{.995} * \textbf{var(S)}^{1/2}) / 2$ $= (\textbf{406} \pm \textbf{2.576} * \textbf{0.0}^{1/2}) / 2$ $= [\ \textbf{203.0}, \textbf{203.0}\ ]$	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	$CL(S) = [\ \textbf{0.0}, \textbf{0.0}\ ]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Trichlorofluoromethane (ug/L) at MW-41

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **2.0** / **4** = **0.5**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2] - sum[X]^2/N**) / (**N**-1))$^{1/2}$ = ((**1.0 - 4.0/4**) / (**4**-1))$^{1/2}$ = **0.0**	Compute sd of the last 4 measurements.
3	LCL = $\overline{X}$ - **tS/N**$^{1/2}$ = **0.5** - **2.353** * **0.0/4**$^{1/2}$ = **0.5**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\overline{X}$ + **tS/N**$^{1/2}$ = **0.5** + **2.353** * **0.0/4**$^{1/2}$ = **0.5**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **29** * (**29**-1) / 2 = **406**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**$^{1/2}$) / 2 = (**406** ± **2.576** * **0.0**$^{1/2}$) / 2 = [**203.0**, **203.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Vinyl chloride (ug/L) at MW-41

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **2.0** / **4** = **0.5**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))$^{1/2}$ = ((**1.0** - **4.0**/**4**) / (**4**-1))$^{1/2}$ = **0.0**	Compute sd of the last 4 measurements.
3	LCL = **$\overline{X}$** - **tS**/**N**$^{1/2}$ = **0.5** - **2.353** * **0.0**/**4**$^{1/2}$ = **0.5**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = **$\overline{X}$** + **tS**/**N**$^{1/2}$ = **0.5** + **2.353** * **0.0**/**4**$^{1/2}$ = **0.5**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **29** * (**29**-1) / 2 = **406**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**$^{1/2}$) / 2 = (**406** ± **2.576** * **0.0**$^{1/2}$) / 2 = [**203.0**, **203.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
1,1-dichloroethane (ug/L) at MW-56

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **8.8** / **4** = **2.2**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2] - sum[X]^2**/**N**) / (**N**-1))^{½} = ((**25.9** - **77.44/4**) / (**4**-1))^{½} = **1.476**	Compute sd of the last 4 measurements.
3	LCL = **$\overline{X}$ - tS/N^{½}** = **2.2** - **2.353** * **1.476/4^{½}** = **0.463**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = **$\overline{X}$** + **tS/N^{½}** = **2.2** + **2.353** * **1.476/4^{½}** = **3.937**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **16** * (**16**-1) / 2 = **120**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **449.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**120** ± **2.576** * **449.0**^{½}) / 2 = [**32.708**, **87.292**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-1.172**, **0.688**]	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-56

Step	Equation	Description
1	$\bar{X}$ = **sum[X]** / **N** = **2.0** / **4** = **0.5**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))$^{1/2}$ = ((**1.0** - **4.0**/**4**) / (**4**-1))$^{1/2}$ = **0.0**	Compute sd of the last 4 measurements.
3	LCL = **$\bar{X}$** - **tS**/**N**$^{1/2}$ = **0.5** - **2.353** * **0.0**/**4**$^{1/2}$ = **0.5**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = **$\bar{X}$** + **tS**/**N**$^{1/2}$ = **0.5** + **2.353** * **0.0**/**4**$^{1/2}$ = **0.5**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **16** * (**16**-1) / 2 = **120**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**$^{1/2}$) / 2 = (**120** ± **2.576** * **0.0**$^{1/2}$) / 2 = [**60.0**, **60.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cis-1,2-dichloroethylene (ug/L) at MW-56

Step	Equation	Description
1	$\bar{X} = \textbf{sum[X]} / \textbf{N}$ $= \textbf{2.0} / \textbf{4}$ $= \textbf{0.5}$	Compute the mean of the last 4 measurements.
2	$S = ((\textbf{sum[X}^2\textbf{]} - \textbf{sum[X]}^2/\textbf{N}) / (\textbf{N}-1))^{1/2}$ $= ((\textbf{1.0} - \textbf{4.0}/\textbf{4}) / (\textbf{4}-1))^{1/2}$ $= \textbf{0.0}$	Compute sd of the last 4 measurements.
3	$LCL = \bar{\textbf{X}} - \textbf{tS}/\textbf{N}^{1/2}$ $= \textbf{0.5} - \textbf{2.353} * \textbf{0.0}/\textbf{4}^{1/2}$ $= \textbf{0.5}$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$UCL = \bar{\textbf{X}} + \textbf{tS}/\textbf{N}^{1/2}$ $= \textbf{0.5} + \textbf{2.353} * \textbf{0.0}/\textbf{4}^{1/2}$ $= \textbf{0.5}$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = \textbf{N} * (\textbf{N}-1) / 2$ $= \textbf{16} * (\textbf{16}-1) / 2$ $= \textbf{120}$	Number of sample pairs during trend detection period.
6	$S = \textbf{0.0}$	Sen's estimator of trend.
7	$var(S) = \textbf{0.0}$	Variance estimate for slope.
8	$M(S) = (\textbf{N'} \pm \textbf{Z}_{.995} * \textbf{var(S)}^{1/2}) / 2$ $= (\textbf{120} \pm \textbf{2.576} * \textbf{0.0}^{1/2}) / 2$ $= [\ \textbf{60.0}, \textbf{60.0}\ ]$	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	$CL(S) = [\ \textbf{0.0}, \textbf{0.0}\ ]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Toluene (ug/L) at MW-56

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **2.0** / **4** = **0.5**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]^2**/**N**) / (**N**-1))$^{1/2}$ = ((**1.0** - **4.0**/**4**) / (**4**-1))$^{1/2}$ = **0.0**	Compute sd of the last 4 measurements.
3	LCL = **$\overline{X}$** - **tS**/**N**$^{1/2}$ = **0.5** - **2.353** * **0.0**/**4**$^{1/2}$ = **0.5**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = **$\overline{X}$** + **tS**/**N**$^{1/2}$ = **0.5** + **2.353** * **0.0**/**4**$^{1/2}$ = **0.5**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **16** * (**16**-1) / 2 = **120**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**$^{1/2}$) / 2 = (**120** ± **2.576** * **0.0**$^{1/2}$) / 2 = [**60.0**, **60.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Trichlorofluoromethane (ug/L) at MW-56

Step	Equation	Description
1	$\bar{X}$ = **sum[X]** / **N** = **2.0** / **4** = **0.5**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]^2**/**N**) / (**N**-1))$^{1/2}$ = ((**1.0** - **4.0**/**4**) / (**4**-1))$^{1/2}$ = **0.0**	Compute sd of the last 4 measurements.
3	LCL = $\bar{X}$ - **tS**/**N**$^{1/2}$ = **0.5** - **2.353** * **0.0**/**4**$^{1/2}$ = **0.5**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\bar{X}$ + **tS**/**N**$^{1/2}$ = **0.5** + **2.353** * **0.0**/**4**$^{1/2}$ = **0.5**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **16** * (**16**-1) / 2 = **120**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**$^{1/2}$) / 2 = (**120** ± **2.576** * **0.0**$^{1/2}$) / 2 = [**60.0**, **60.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Vinyl chloride (ug/L) at MW-56

Step	Equation	Description
1	$\bar{X}$ = **sum[X]** / **N** = **2.0** / **4** = **0.5**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2] - sum[X]^2**/**N**) / (**N**-1))^{½} = ((**1.0 - 4.0**/**4**) / (**4**-1))^{½} = **0.0**	Compute sd of the last 4 measurements.
3	LCL = **$\bar{X}$ - tS/N^{½}** = **0.5** - **2.353** * **0.0/4^{½}** = **0.5**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = **$\bar{X}$ + tS/N^{½}** = **0.5** + **2.353** * **0.0/4^{½}** = **0.5**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **24** * (**24**-1) / 2 = **276**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **808.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**276** ± **2.576** * **808.333**^{½}) / 2 = [**101.381**, **174.619**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
1,1-dichloroethane (ug/L) at MW-58

Step	Equation	Description
1	$\bar{X}$ = **sum[X]** / **N** = **2.0** / **4** = **0.5**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X²]** - **sum[X]²**/**N**) / (**N**-1))^½ = ((**1.0** - **4.0**/**4**) / (**4**-1))^½ = **0.0**	Compute sd of the last 4 measurements.
3	LCL = $\bar{X}$ - **tS**/**N**^½ = **0.5** - **2.353** * **0.0**/**4**^½ = **0.5**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\bar{X}$ + **tS**/**N**^½ = **0.5** + **2.353** * **0.0**/**4**^½ = **0.5**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **29** * (**29**-1) / 2 = **406**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± $Z_{.995}$ * **var(S)**^½) / 2 = (**406** ± **2.576** * **0.0**^½) / 2 = [**203.0**, **203.0**]	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) = [**0.0**, **0.0**]	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-58

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **2.0** / **4** = **0.5**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))$^{1/2}$ = ((**1.0** - **4.0**/**4**) / (**4**-1))$^{1/2}$ = **0.0**	Compute sd of the last 4 measurements.
3	LCL = **$\overline{X}$** - **tS**/**N**$^{1/2}$ = **0.5** - **2.353** * **0.0**/**4**$^{1/2}$ = **0.5**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = **$\overline{X}$** + **tS**/**N**$^{1/2}$ = **0.5** + **2.353** * **0.0**/**4**$^{1/2}$ = **0.5**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **29** * (**29**-1) / 2 = **406**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**$^{1/2}$) / 2 = (**406** ± **2.576** * **0.0**$^{1/2}$) / 2 = [**203.0**, **203.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cis-1,2-dichloroethylene (ug/L) at MW-58

Step	Equation	Description
1	$\bar{X}$ = **sum[X]** / **N** = **5.0** / **4** = **1.25**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2] - sum[X]^2**/**N**) / (**N**-1))^{½} = ((**7.38** - **25.0**/**4**) / (**4**-1))^{½} = **0.614**	Compute sd of the last 4 measurements.
3	LCL = $\bar{X}$ - **tS**/**N**^{½} = **1.25** - **2.353** * **0.614**/**4**^{½} = **0.528**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\bar{X}$ + **tS**/**N**^{½} = **1.25** + **2.353** * **0.614**/**4**^{½} = **1.972**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **29** * (**29**-1) / 2 = **406**	Number of sample pairs during trend detection period.
6	S = **-0.802**	Sen's estimator of trend.
7	var(S) = **2831.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**406** ± **2.576** * **2831.333**^{½}) / 2 = [**134.465**, **271.535**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-1.196**, **-0.559**]	Two-sided confidence interval for slope.
10	UCL(S) < 0	**Significant decreasing trend.**

Worksheet 6 - Assessment Monitoring
Toluene (ug/L) at MW-58

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **2.0** / **4** = **0.5**	Compute the mean of the last 4 measurements.
2	$S = ((\mathbf{sum[X^2]} - \mathbf{sum[X]}^2/\mathbf{N}) / (\mathbf{N}-1))^{1/2}$ $= ((\mathbf{1.0} - \mathbf{4.0}/\mathbf{4}) / (\mathbf{4}-1))^{1/2}$ = **0.0**	Compute sd of the last 4 measurements.
3	$LCL = \mathbf{\overline{X}} - \mathbf{tS}/\mathbf{N}^{1/2}$ $= \mathbf{0.5} - \mathbf{2.353} * \mathbf{0.0}/\mathbf{4}^{1/2}$ = **0.5**	Compute lower confidence limit for the mean of the last 4 measurements.
4	$UCL = \mathbf{\overline{X}} + \mathbf{tS}/\mathbf{N}^{1/2}$ $= \mathbf{0.5} + \mathbf{2.353} * \mathbf{0.0}/\mathbf{4}^{1/2}$ = **0.5**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **29** * (**29**-1) / 2 = **406**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	$M(S) = (\mathbf{N'} \pm \mathbf{Z}_{.995} * \mathbf{var(S)}^{1/2}) / 2$ $= (\mathbf{406} \pm \mathbf{2.576} * \mathbf{0.0}^{1/2}) / 2$ = [**203.0**, **203.0**]	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) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Trichlorofluoromethane (ug/L) at MW-58

Step	Equation	Description
1	$\overline{X} = \mathbf{sum[X]} / \mathbf{N}$ $= \mathbf{2.0} / \mathbf{4}$ $= \mathbf{0.5}$	Compute the mean of the last 4 measurements.
2	$S = ((\mathbf{sum[X^2]} - \mathbf{sum[X]}^2/\mathbf{N}) / (\mathbf{N}-1))^{1/2}$ $= ((\mathbf{1.0} - \mathbf{4.0}/\mathbf{4}) / (\mathbf{4}-1))^{1/2}$ $= \mathbf{0.0}$	Compute sd of the last 4 measurements.
3	$LCL = \overline{\mathbf{X}} - \mathbf{tS}/\mathbf{N}^{1/2}$ $= \mathbf{0.5} - \mathbf{2.353} * \mathbf{0.0}/\mathbf{4}^{1/2}$ $= \mathbf{0.5}$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$UCL = \overline{\mathbf{X}} + \mathbf{tS}/\mathbf{N}^{1/2}$ $= \mathbf{0.5} + \mathbf{2.353} * \mathbf{0.0}/\mathbf{4}^{1/2}$ $= \mathbf{0.5}$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = \mathbf{N} * (\mathbf{N}-1) / 2$ $= \mathbf{29} * (\mathbf{29}-1) / 2$ $= \mathbf{406}$	Number of sample pairs during trend detection period.
6	$S = \mathbf{0.0}$	Sen's estimator of trend.
7	$var(S) = \mathbf{0.0}$	Variance estimate for slope.
8	$M(S) = (\mathbf{N'} \pm \mathbf{Z}_{.995} * \mathbf{var(S)}^{1/2}) / 2$ $= (\mathbf{406} \pm \mathbf{2.576} * \mathbf{0.0}^{1/2}) / 2$ $= [\ \mathbf{203.0}, \mathbf{203.0}\ ]$	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	$CL(S) = [\ \mathbf{0.0}, \mathbf{0.0}\ ]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Vinyl chloride (ug/L) at MW-58

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **2.0** / **4** = **0.5**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]^2**/**N**) / (**N**-1))^{½} = ((**1.0** - **4.0**/**4**) / (**4**-1))^{½} = **0.0**	Compute sd of the last 4 measurements.
3	LCL = $\overline{X}$ - **tS**/**N**^{½} = **0.5** - **2.353** * **0.0**/**4**^{½} = **0.5**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\overline{X}$ + **tS**/**N**^{½} = **0.5** + **2.353** * **0.0**/**4**^{½} = **0.5**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **29** * (**29**-1) / 2 = **406**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**406** ± **2.576** * **0.0**^{½}) / 2 = [**203.0**, **203.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
1,1-dichloroethane (ug/L) at MW-62R

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **2.0** / **4** = **0.5**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**1.0** - **4.0**/**4**) / (**4**-1))^{½} = **0.0**	Compute sd of the last 4 measurements.
3	LCL = **$\overline{X}$** - **tS**/**N**^{½} = **0.5** - **2.353** * **0.0**/**4**^{½} = **0.5**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = **$\overline{X}$** + **tS**/**N**^{½} = **0.5** + **2.353** * **0.0**/**4**^{½} = **0.5**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **32** * (**32**-1) / 2 = **496**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**496** ± **2.576** * **0.0**^{½}) / 2 = [**248.0**, **248.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	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-62R

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **2.0** / **4** = **0.5**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2] - sum[X]^2/N**) / (**N**-1))$^{1/2}$ = ((**1.0 - 4.0/4**) / (**4**-1))$^{1/2}$ = **0.0**	Compute sd of the last 4 measurements.
3	LCL = **$\overline{X}$ - tS/N**$^{1/2}$ = **0.5** - **2.353** * **0.0/4**$^{1/2}$ = **0.5**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = **$\overline{X}$ + tS/N**$^{1/2}$ = **0.5** + **2.353** * **0.0/4**$^{1/2}$ = **0.5**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **32** * (**32**-1) / 2 = **496**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**$^{1/2}$) / 2 = (**496** ± **2.576** * **0.0**$^{1/2}$) / 2 = [**248.0**, **248.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cis-1,2-dichloroethylene (ug/L) at MW-62R

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **2.0** / **4** = **0.5**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]^2**/**N**) / (**N**-1))$^{1/2}$ = ((**1.0** - **4.0**/**4**) / (**4**-1))$^{1/2}$ = **0.0**	Compute sd of the last 4 measurements.
3	LCL = **$\overline{X}$** - **tS**/**N**$^{1/2}$ = **0.5** - **2.353** * **0.0**/**4**$^{1/2}$ = **0.5**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = **$\overline{X}$** + **tS**/**N**$^{1/2}$ = **0.5** + **2.353** * **0.0**/**4**$^{1/2}$ = **0.5**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **32** * (**32**-1) / 2 = **496**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**$^{1/2}$) / 2 = (**496** ± **2.576** * **0.0**$^{1/2}$) / 2 = [**248.0**, **248.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Toluene (ug/L) at MW-62R

Step	Equation	Description
1	$\bar{X} = \textbf{sum[X]} / \textbf{N}$ $= \textbf{2.0} / \textbf{4}$ $= \textbf{0.5}$	Compute the mean of the last 4 measurements.
2	$S = ((\textbf{sum[X}^2\textbf{]} - \textbf{sum[X]}^2/\textbf{N}) / (\textbf{N}-1))^{½}$ $= ((\textbf{1.0} - \textbf{4.0}/\textbf{4}) / (\textbf{4}-1))^{½}$ $= \textbf{0.0}$	Compute sd of the last 4 measurements.
3	$LCL = \bar{\textbf{X}} - \textbf{tS}/\textbf{N}^{½}$ $= \textbf{0.5} - \textbf{2.353} * \textbf{0.0}/\textbf{4}^{½}$ $= \textbf{0.5}$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$UCL = \bar{\textbf{X}} + \textbf{tS}/\textbf{N}^{½}$ $= \textbf{0.5} + \textbf{2.353} * \textbf{0.0}/\textbf{4}^{½}$ $= \textbf{0.5}$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = \textbf{N} * (\textbf{N}-1) / 2$ $= \textbf{32} * (\textbf{32}-1) / 2$ $= \textbf{496}$	Number of sample pairs during trend detection period.
6	$S = \textbf{0.0}$	Sen's estimator of trend.
7	$var(S) = \textbf{0.0}$	Variance estimate for slope.
8	$M(S) = (\textbf{N'} \pm \textbf{Z}_{.995} * \textbf{var(S)}^{½}) / 2$ $= (\textbf{496} \pm \textbf{2.576} * \textbf{0.0}^{½}) / 2$ $= [\ \textbf{248.0}, \textbf{248.0}\ ]$	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	$CL(S) = [\ \textbf{0.0}, \textbf{0.0}\ ]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Trichlorofluoromethane (ug/L) at MW-62R

Step	Equation	Description
1	$\overline{X} = \textbf{sum[X]} / \textbf{N}$ $= \textbf{4.8} / \textbf{4}$ $= \textbf{1.2}$	Compute the mean of the last 4 measurements.
2	$S = ((\textbf{sum[X}^2\textbf{] - sum[X]}^2/\textbf{N}) / (\textbf{N}-1))^{½}$ $= ((\textbf{6.82 - 23.04/4}) / (\textbf{4}-1))^{½}$ $= \textbf{0.594}$	Compute sd of the last 4 measurements.
3	$LCL = \overline{\textbf{X}} - \textbf{tS/N}^{½}$ $= \textbf{1.2} - \textbf{2.353} * \textbf{0.594/4}^{½}$ $= \textbf{0.501}$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$UCL = \overline{\textbf{X}} + \textbf{tS/N}^{½}$ $= \textbf{1.2} + \textbf{2.353} * \textbf{0.594/4}^{½}$ $= \textbf{1.899}$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = \textbf{N} * (\textbf{N}-1) / 2$ $= \textbf{32} * (\textbf{32}-1) / 2$ $= \textbf{496}$	Number of sample pairs during trend detection period.
6	$S = \textbf{-0.314}$	Sen's estimator of trend.
7	$var(S) = \textbf{3789.333}$	Variance estimate for slope.
8	$M(S) = (\textbf{N'} \pm \textbf{Z}_{.995} * \textbf{var(S)}^{½}) / 2$ $= (\textbf{496} \pm \textbf{2.576} * \textbf{3789.333}^{½}) / 2$ $= [\ \textbf{168.714}, \textbf{327.286}\ ]$	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	$CL(S) = [\ \textbf{-0.622}, \textbf{-0.023}\ ]$	Two-sided confidence interval for slope.
10	$UCL(S) < 0$	**Significant decreasing trend.**

Worksheet 6 - Assessment Monitoring
Vinyl chloride (ug/L) at MW-62R

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **2.0** / **4** = **0.5**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))$^{1/2}$ = ((**1.0** - **4.0**/**4**) / (**4**-1))$^{1/2}$ = **0.0**	Compute sd of the last 4 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**$^{1/2}$ = **0.5** - **2.353** * **0.0**/**4**$^{1/2}$ = **0.5**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**$^{1/2}$ = **0.5** + **2.353** * **0.0**/**4**$^{1/2}$ = **0.5**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **33** * (**33**-1) / 2 = **528**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**$^{1/2}$) / 2 = (**528** ± **2.576** * **0.0**$^{1/2}$) / 2 = [**264.0**, **264.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
1,1-dichloroethane (ug/L) at MW-64

Step	Equation	Description
1	$\bar{X}$ = **sum[X]** / **N** = **7.3** / **4** = **1.825**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2] - sum[X]^2/N**) / (**N**-1))$^{1/2}$ = ((**13.67** - **53.29/4**) / (**4**-1))$^{1/2}$ = **0.34**	Compute sd of the last 4 measurements.
3	LCL = **$\bar{X}$ - tS/N**$^{1/2}$ = **1.825** - **2.353** * **0.34/4**$^{1/2}$ = **1.425**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = **$\bar{X}$ + tS/N**$^{1/2}$ = **1.825** + **2.353** * **0.34/4**$^{1/2}$ = **2.225**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **16** * (**16**-1) / 2 = **120**	Number of sample pairs during trend detection period.
6	S = **-0.06**	Sen's estimator of trend.
7	var(S) = **489.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **$Z_{.995}$** * **var(S)**$^{1/2}$) / 2 = (**120** ± **2.576** * **489.333**$^{1/2}$) / 2 = [**31.508**, **88.492**]	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) = [**-0.204**, **0.111**]	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-64

Step	Equation	Description
1	$\bar{X}$ = **sum[X]** / **N** = **2.0** / **4** = **0.5**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**1.0** - **4.0**/**4**) / (**4**-1))^{½} = **0.0**	Compute sd of the last 4 measurements.
3	LCL = **$\bar{X}$** - **tS**/**N**^{½} = **0.5** - **2.353** * **0.0**/**4**^{½} = **0.5**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = **$\bar{X}$** + **tS**/**N**^{½} = **0.5** + **2.353** * **0.0**/**4**^{½} = **0.5**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **16** * (**16**-1) / 2 = **120**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**120** ± **2.576** * **0.0**^{½}) / 2 = [**60.0**, **60.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cis-1,2-dichloroethylene (ug/L) at MW-64

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **14.3** / **4** = **3.575**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**53.71** - **204.49**/**4**) / (**4**-1))^{½} = **0.929**	Compute sd of the last 4 measurements.
3	LCL = **$\overline{X}$** - **tS**/**N**^{½} = **3.575** - **2.353** * **0.929**/**4**^{½} = **2.483**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = **$\overline{X}$** + **tS**/**N**^{½} = **3.575** + **2.353** * **0.929**/**4**^{½} = **4.667**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **16** * (**16**-1) / 2 = **120**	Number of sample pairs during trend detection period.
6	S = **-2.178**	Sen's estimator of trend.
7	var(S) = **492.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**120** ± **2.576** * **492.333**^{½}) / 2 = [**31.421**, **88.579**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-4.389**, **-0.941**]	Two-sided confidence interval for slope.
10	UCL(S) < 0	**Significant decreasing trend.**

Worksheet 6 - Assessment Monitoring
Toluene (ug/L) at MW-64

Step	Equation	Description
1	$\bar{X} = \mathbf{sum[X]} / \mathbf{N}$ $= \mathbf{2.0} / \mathbf{4}$ $= \mathbf{0.5}$	Compute the mean of the last 4 measurements.
2	$S = ((\mathbf{sum[X^2]} - \mathbf{sum[X]}^2/\mathbf{N}) / (\mathbf{N}-1))^{½}$ $= ((\mathbf{1.0} - \mathbf{4.0/4}) / (\mathbf{4}-1))^{½}$ $= \mathbf{0.0}$	Compute sd of the last 4 measurements.
3	$LCL = \mathbf{\bar{X}} - \mathbf{tS/N}^{½}$ $= \mathbf{0.5} - \mathbf{2.353} * \mathbf{0.0/4}^{½}$ $= \mathbf{0.5}$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$UCL = \mathbf{\bar{X}} + \mathbf{tS/N}^{½}$ $= \mathbf{0.5} + \mathbf{2.353} * \mathbf{0.0/4}^{½}$ $= \mathbf{0.5}$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = \mathbf{N} * (\mathbf{N}-1) / 2$ $= \mathbf{16} * (\mathbf{16}-1) / 2$ $= \mathbf{120}$	Number of sample pairs during trend detection period.
6	$S = \mathbf{0.0}$	Sen's estimator of trend.
7	$var(S) = \mathbf{0.0}$	Variance estimate for slope.
8	$M(S) = (\mathbf{N'} \pm \mathbf{Z}_{.995} * \mathbf{var(S)}^{½}) / 2$ $= (\mathbf{120} \pm \mathbf{2.576} * \mathbf{0.0}^{½}) / 2$ $= [\ \mathbf{60.0}, \mathbf{60.0}\ ]$	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	$CL(S) = [\ \mathbf{0.0}, \mathbf{0.0}\ ]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Trichlorofluoromethane (ug/L) at MW-64

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **2.0** / **4** = **0.5**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**1.0** - **4.0**/**4**) / (**4**-1))^{½} = **0.0**	Compute sd of the last 4 measurements.
3	LCL = $\overline{X}$ - **tS**/**N**^{½} = **0.5** - **2.353** * **0.0**/**4**^{½} = **0.5**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\overline{X}$ + **tS**/**N**^{½} = **0.5** + **2.353** * **0.0**/**4**^{½} = **0.5**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **16** * (**16**-1) / 2 = **120**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± $Z_{.995}$ * **var(S)**^{½}) / 2 = (**120** ± **2.576** * **0.0**^{½}) / 2 = [**60.0**, **60.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Vinyl chloride (ug/L) at MW-64

Step	Equation	Description
1	$\bar{X}$ = **sum[X]** / **N**	Compute the mean of the last 4 measurements.
	= **8.1** / **4**	
	= **2.025**	
2	S = ((**sum[X^2] - sum[X]^2/N**) / (**N**-1))$^{1/2}$	Compute sd of the last 4 measurements.
	= ((**17.03 - 65.61/4**) / (**4**-1))$^{1/2}$	
	= **0.457**	
3	LCL = $\bar{X}$ - **tS/N**$^{1/2}$	Compute lower confidence limit for the mean of the last 4 measurements.
	= **2.025** - **2.353** * **0.457/4**$^{1/2}$	
	= **1.487**	
4	UCL = $\bar{X}$ + **tS/N**$^{1/2}$	Compute upper confidence limit for the mean of the last 4 measurements.
	= **2.025** + **2.353** * **0.457/4**$^{1/2}$	
	= **2.563**	
5	N' = **N** * (**N**-1) / 2	Number of sample pairs during trend detection period.
	= **25** * (**25**-1) / 2	
	= **300**	
6	S = **-3.285**	Sen's estimator of trend.
7	var(S) = **1831.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **$Z_{.995}$** * **var(S)**$^{1/2}$) / 2	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.
	= (**300** ± **2.576** * **1831.333**$^{1/2}$) / 2	
	= [**94.881**, **205.119**]	
9	CL(S) = [**-4.31**, **-2.142**]	Two-sided confidence interval for slope.
10	UCL(S) < 0	**Significant decreasing trend.**

Worksheet 6 - Assessment Monitoring
1,1-dichloroethane (ug/L) at SW-101R

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **2.0** / **4** = **0.5**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]^2**/**N**) / (**N**-1))^{½} = ((**1.0** - **4.0**/**4**) / (**4**-1))^{½} = **0.0**	Compute sd of the last 4 measurements.
3	LCL = **$\overline{X}$** - **tS**/**N**^{½} = **0.5** - **2.353** * **0.0**/**4**^{½} = **0.5**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = **$\overline{X}$** + **tS**/**N**^{½} = **0.5** + **2.353** * **0.0**/**4**^{½} = **0.5**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **10** * (**10**-1) / 2 = **45**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**45** ± **2.576** * **0.0**^{½}) / 2 = [**22.5**, **22.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	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 SW-101R

Step	Equation	Description
1	$\overline{X} = \textbf{sum[X]} / \textbf{N}$ $= \textbf{2.0} / \textbf{4}$ $= \textbf{0.5}$	Compute the mean of the last 4 measurements.
2	$S = ((\textbf{sum[X}^{\textbf{2}}\textbf{]} - \textbf{sum[X]}^2/\textbf{N}) / (\textbf{N}-1))^{1/2}$ $= ((\textbf{1.0} - \textbf{4.0/4}) / (\textbf{4}-1))^{1/2}$ $= \textbf{0.0}$	Compute sd of the last 4 measurements.
3	$LCL = \overline{\textbf{X}} - \textbf{tS/N}^{1/2}$ $= \textbf{0.5} - \textbf{2.353} * \textbf{0.0/4}^{1/2}$ $= \textbf{0.5}$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$UCL = \overline{\textbf{X}} + \textbf{tS/N}^{1/2}$ $= \textbf{0.5} + \textbf{2.353} * \textbf{0.0/4}^{1/2}$ $= \textbf{0.5}$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = \textbf{N} * (\textbf{N}-1) / 2$ $= \textbf{10} * (\textbf{10}-1) / 2$ $= \textbf{45}$	Number of sample pairs during trend detection period.
6	$S = \textbf{0.0}$	Sen's estimator of trend.
7	$var(S) = \textbf{0.0}$	Variance estimate for slope.
8	$M(S) = (\textbf{N'} \pm \textbf{Z}_{.995} * \textbf{var(S)}^{1/2}) / 2$ $= (\textbf{45} \pm \textbf{2.576} * \textbf{0.0}^{1/2}) / 2$ $= [\ \textbf{22.5}, \textbf{22.5}\ ]$	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	$CL(S) = [\ \textbf{0.0}, \textbf{0.0}\ ]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cis-1,2-dichloroethylene (ug/L) at SW-101R

Step	Equation	Description
1	$\bar{X}$ = **sum[X]** / **N** = **19.3** / **4** = **4.825**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))$^{1/2}$ = ((**98.37** - **372.49**/**4**) / (**4**-1))$^{1/2}$ = **1.323**	Compute sd of the last 4 measurements.
3	LCL = $\bar{X}$ - **tS**/**N**$^{1/2}$ = **4.825** - **2.353** * **1.323**/**4**$^{1/2}$ = **3.269**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\bar{X}$ + **tS**/**N**$^{1/2}$ = **4.825** + **2.353** * **1.323**/**4**$^{1/2}$ = **6.381**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **10** * (**10**-1) / 2 = **45**	Number of sample pairs during trend detection period.
6	S = **0.355**	Sen's estimator of trend.
7	var(S) = **124.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**$^{1/2}$) / 2 = (**45** ± **2.576** * **124.0**$^{1/2}$) / 2 = [**8.157**, **36.843**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-1.044**, **1.647**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Toluene (ug/L) at SW-101R

Step	Equation	Description
1	$\bar{X}$ = **sum[X]** / **N**	Compute the mean of the last 4 measurements.
	= **2.0** / **4**	
	= **0.5**	
2	S = ((**sum[X^2]** - **sum[X]^2**/**N**) / (**N**-1))^{½}	Compute sd of the last 4 measurements.
	= ((**1.0** - **4.0**/**4**) / (**4**-1))^{½}	
	= **0.0**	
3	LCL = **$\bar{X}$** - **tS**/**N**^{½}	Compute lower confidence limit for the mean of the last 4 measurements.
	= **0.5** - **2.353** * **0.0**/**4**^{½}	
	= **0.5**	
4	UCL = **$\bar{X}$** + **tS**/**N**^{½}	Compute upper confidence limit for the mean of the last 4 measurements.
	= **0.5** + **2.353** * **0.0**/**4**^{½}	
	= **0.5**	
5	N' = **N** * (**N**-1) / 2	Number of sample pairs during trend detection period.
	= **10** * (**10**-1) / 2	
	= **45**	
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
	= (**45** ± **2.576** * **0.0**^{½}) / 2	
	= [**22.5**, **22.5**]	
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Trichlorofluoromethane (ug/L) at SW-101R

Step	Equation	Description
1	$\bar{X} = \mathbf{sum[X]} / \mathbf{N}$ $= \mathbf{2.0} / \mathbf{4}$ $= \mathbf{0.5}$	Compute the mean of the last 4 measurements.
2	$S = ((\mathbf{sum[X^2]} - \mathbf{sum[X]}^2/\mathbf{N}) / (\mathbf{N}-1))^{½}$ $= ((\mathbf{1.0} - \mathbf{4.0/4}) / (\mathbf{4}-1))^{½}$ $= \mathbf{0.0}$	Compute sd of the last 4 measurements.
3	$LCL = \mathbf{\bar{X}} - \mathbf{tS/N}^{½}$ $= \mathbf{0.5} - \mathbf{2.353} * \mathbf{0.0/4}^{½}$ $= \mathbf{0.5}$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$UCL = \mathbf{\bar{X}} + \mathbf{tS/N}^{½}$ $= \mathbf{0.5} + \mathbf{2.353} * \mathbf{0.0/4}^{½}$ $= \mathbf{0.5}$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = \mathbf{N} * (\mathbf{N}-1) / 2$ $= \mathbf{10} * (\mathbf{10}-1) / 2$ $= \mathbf{45}$	Number of sample pairs during trend detection period.
6	$S = \mathbf{0.0}$	Sen's estimator of trend.
7	$var(S) = \mathbf{0.0}$	Variance estimate for slope.
8	$M(S) = (\mathbf{N'} \pm \mathbf{Z}_{.995} * \mathbf{var(S)}^{½}) / 2$ $= (\mathbf{45} \pm \mathbf{2.576} * \mathbf{0.0}^{½}) / 2$ $= [\ \mathbf{22.5}, \mathbf{22.5}\ ]$	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	$CL(S) = [\ \mathbf{0.0}, \mathbf{0.0}\ ]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Vinyl chloride (ug/L) at SW-101R

Step	Equation	Description
1	$\bar{X} = \mathbf{sum[X]} / \mathbf{N}$ $= \mathbf{18.7} / \mathbf{4}$ $= \mathbf{4.675}$	Compute the mean of the last 4 measurements.
2	$S = ((\mathbf{sum[X^2]} - \mathbf{sum[X]}^2/\mathbf{N}) / (\mathbf{N}-1))^{1/2}$ $= ((\mathbf{91.87} - \mathbf{349.69}/\mathbf{4}) / (\mathbf{4}-1))^{1/2}$ $= \mathbf{1.218}$	Compute sd of the last 4 measurements.
3	$LCL = \bar{\mathbf{X}} - \mathbf{tS}/\mathbf{N}^{1/2}$ $= \mathbf{4.675} - \mathbf{2.353} * \mathbf{1.218}/\mathbf{4}^{1/2}$ $= \mathbf{3.243}$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$UCL = \bar{\mathbf{X}} + \mathbf{tS}/\mathbf{N}^{1/2}$ $= \mathbf{4.675} + \mathbf{2.353} * \mathbf{1.218}/\mathbf{4}^{1/2}$ $= \mathbf{6.107}$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = \mathbf{N} * (\mathbf{N}-1) / 2$ $= \mathbf{10} * (\mathbf{10}-1) / 2$ $= \mathbf{45}$	Number of sample pairs during trend detection period.
6	$S = \mathbf{0.928}$	Sen's estimator of trend.
7	$var(S) = \mathbf{124.0}$	Variance estimate for slope.
8	$M(S) = (\mathbf{N'} \pm \mathbf{Z}_{.995} * \mathbf{var(S)}^{1/2}) / 2$ $= (\mathbf{45} \pm \mathbf{2.576} * \mathbf{124.0}^{1/2}) / 2$ $= [\ \mathbf{8.157}, \mathbf{36.843}\ ]$	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	$CL(S) = [\ \mathbf{-0.702}, \mathbf{2.64}\ ]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

APPENDIX D.3 –Field Turbidity (NTU) Summary Data

No-Purge Sampling

Well	8/8/14 NTU	9/24/14 NTU	12/5/14 NTU	3/11/15 NTU	6/16/15 NTU	9/17/15 NTU	12/17/15 NTU	3/22/16 NTU	9/14/16 NTU	10/31/16 NTU	3/23/17 NTU	9/8/17 NTU	12/5/17 NTU	3/19/18 NTU	6/5/18 NTU	9/11/18 NTU	12/5/18 NTU
36		4.8		0.74		0.01		0.18	2.47		0.92	0.37		0.38		8.38	
39		3.15	1.29	0.84	2.98	1.11		4.05	3.16		0.64	0.65		2.21		2.08	
41		1.3		0.50		0.20		1.69	0.81		0.53	1.08		0.45		0.50	
42		2.44		0.74		NR		47.63	13.20	9.48	2.60	5.18		9.11		3.99	
48		1.13	2.75	2.75	2.39	9.60		2.59	0.91		0.82	0.48		7.34		1.87	
58		4.75		1.60		0.81		0.16	1.56		0.98	0.56		0.46		0.75	1.79
59	0.17	1.75		1.10		0.49		0.47	1.55		0.99	0.65		1.77	1.60	0.38	0.43
60		13		1.66		4.02	1.77	0.70	3.27		0.76	0.60		0.43		0.89	
61	4.07	0.79		1.05		0.29	0.73	0.13	2.80	1.59	0.85	0.68		0.49		1.10	
62R		1.88		1.84		0.24		0.44	2.77		0.67	0.47		5.16		0.53	
78		4.21	2.37	1.18	3.13	0.45		0.20	7.15		0.73	0.61		0.44		0.65	
79		20.1	1.45	1.34		2.79		0.14	2.42		0.61	0.37		0.29		0.39	
80		8.23		15.60		1.25		1.29	17.50		32.20	0.42		2.37		24.95	
MW-44									1.29			0.42	2.09	0.62		3.37	
MW-45									5.15			0.45		0.30		4.43	
MW-56									5.37			0.75	0.81	0.40		1.07	
MW-57									10.80			1.40	4.82	0.45		0.97	
MW-64									15.30			4.69		3.40		17.92	
MW-65									121.00			41.23		15.57		6.91	
SW-101R																	
SW-102														1.38		4.47	
SW-103														1.82		4.47	
Max	**4.07**	**20.10**	**2.75**	**15.60**	**3.13**	**9.60**	**1.77**	**47.63**	**121.00**	**9.48**	**32.20**	**41.23**	**4.82**	**15.57**	**1.60**	**24.95**	**1.79**
Min	**0.17**	**0.79**	**1.29**	**0.50**	**2.39**	**0.01**	**0.73**	**0.13**	**0.81**	**1.59**	**0.53**	**0.37**	**0.81**	**0.29**	**1.60**	**0.38**	**0.43**
Median	**2.12**	**3.15**	**1.91**	**1.18**	**2.98**	**0.65**	**1.25**	**0.47**	**2.98**	**5.54**	**0.84**	**0.62**	**2.09**	**0.63**	**1.60**	**1.77**	**1.11**
Average	**2.12**	**5.19**	**1.97**	**2.38**	**2.83**	**1.77**	**1.25**	**4.59**	**10.99**	**5.54**	**3.28**	**3.08**	**2.57**	**2.52**	**1.60**	**4.17**	**1.11**

Well	3/26/19 NTU	9/4/19 NTU	3/26/20 NTU	6/18/20 NTU	9/15/20 NTU	12/3/20 NTU	3/2/21 NTU	9/7/21 NTU	12/3/21 NTU	3/24/22 NTU	6/13/22 NTU	8/31/22 NTU	3/2/23 NTU	9/12/23 NTU	3/4/24 NTU	9/23/24 NTU	Max	Min	Ave	Std Dev
36	0.45	0.82	1.66		1.10		1.45	1.51		1.65		0.82	1.06	1.63	1.45	1.98	**8.38**	**0.01**	**1.61**	**1.86**
39	0.56	1.07	0.69		2.16		3.05	3.54		1.05		3.78	3.60	1.95	1.36	1.90	**4.05**	**0.56**	**2.04**	**1.16**
41	0.31	0.83	1.11		1.15		14.57	1.35		0.77		0.99	0.46	1.68	2.71	1.82	**14.57**	**0.20**	**1.66**	**3.02**
42	1.20	4.52	35.56		4.86		6.10	12.01		2.36		5.37	0.74	11.11	3.75	4.22	**47.63**	**0.74**	**8.87**	**11.63**
48	1.58	0.76	9.44		1.20		1.48	2.87		1.26		1.46	0.80	2.73	2.33	3.07	**9.60**	**0.48**	**2.68**	**2.57**
58	0.41	1.15	1.30		0.84		2.06	1.52		1.32		1.02	0.79	1.29	1.54	1.98	**4.75**	**0.16**	**1.30**	**0.93**
59	0.90	0.84	1.70		1.23		2.44	1.63		1.43		1.72	1.48	1.49	1.42	2.24	**2.44**	**0.17**	**1.24**	**0.60**
60	0.70	0.80	2.11		1.41		2.15	1.52		1.12		1.19	1.23	1.79	2.32	3.21	**13.00**	**0.43**	**2.12**	**2.61**
61	0.44	0.75	1.20		2.01		1.97	1.92		0.99		2.33	0.36	2.60	1.37	3.65	**4.07**	**0.13**	**1.42**	**1.06**
62R	0.30	0.90	1.00		1.00		4.85	2.16		0.97		1.22	1.63	1.97	2.43	2.32	**5.16**	**0.24**	**1.65**	**1.35**
78	0.32	0.78	1.04		0.36		1.86	2.02		1.64		1.02	0.66	1.53	1.75	1.47	**7.15**	**0.20**	**1.55**	**1.56**
79	0.41	0.92	2.30		0.95		1.44	1.62		1.40	2.77	0.94	0.97	1.89	2.20	1.92	**20.10**	**0.14**	**2.16**	**3.99**
80	237.00	8.66	3.73		136.40		4.85	12.37		1.70		723.10	2.76	5.71	6.01	4.85	**723.10**	**0.42**	**59.57**	**162.14**
MW-44	18.70	1.43	24.70		3.96		4.64	6.15		30.40		4.90	4.52	31.68	13.50	16.18	**31.68**	**0.42**	**9.91**	**10.61**
MW-45	23.10	7.66	2.79		3.51	2.23	106.10										**106.10**	**0.30**	**15.57**	**32.48**
MW-56	1.04	1.15	1.06		1.70		2.58	2.37		1.93		1.38	0.93	3.43	24.57	2.31	**24.57**	**0.40**	**3.11**	**5.66**
MW-57	0.58	11.04	55.30	134.00	10.29	1.62	4.47	5.75	7.17	4.51		2.09	1.63	6.23	2.74	3.86	**134.00**	**0.45**	**13.49**	**30.73**
MW-64	90.00	6.87	27.50		22.80		20.24	16.17		5.53		8.32	43.66	10.27	39.53	31.93	**90.00**	**3.40**	**22.76**	**21.74**
MW-65	89.40	15.21	57.30		18.73		28.05	10.82		7.25		22.24	106.50	6.85	2.99	42.20	**121.00**	**2.99**	**37.02**	**37.59**
SW-101R	1.13	105.30	1.70		2.97		1.93	1.79		6.51	1.24	1.85	3.12	1.64	3.13	2.61	**105.30**	**1.13**	**10.38**	**28.55**
SW-102	4.72	7.88			3.30		3.31	7.95		1.25			1.20		2.01	5.04	**7.95**	**1.20**	**3.86**	**2.44**
SW-103	2.06	7.78	2.68		4.06		8.50	3.97		1.55			2.01		5.33	4.40	**8.50**	**1.55**	**4.05**	**2.27**
Max	**237.00**	**105.30**	**57.30**	**134.00**	**136.40**	**2.23**	**106.10**	**16.17**	**7.17**	**30.40**	**2.77**	**723.10**	**106.50**	**31.68**	**39.53**	**42.20**				
Min	**0.30**	**0.75**	**0.69**	**134.00**	**0.36**	**1.62**	**1.44**	**1.35**	**7.17**	**0.77**	**1.24**	**0.82**	**0.36**	**1.29**	**1.36**	**1.47**				
Median	**0.97**	**1.15**	**2.11**	**134.00**	**2.09**	**1.93**	**3.18**	**2.37**	**7.17**	**1.55**	**2.01**	**1.72**	**1.23**	**1.97**	**2.43**	**3.07**				
Average	**21.61**	**8.51**	**11.23**	**134.00**	**10.27**	**1.93**	**10.37**	**4.81**	**7.17**	**3.65**	**2.01**	**41.35**	**8.58**	**5.13**	**5.93**	**6.82**				

APPENDIX D.4 –Running Summary of Prediction Limit Exceedances

Spring 2013		**Fall 2013**	
MW-41 -	selenium, 1,1-dichloroethane	MW-41 –	1,1-dichloroethane
MW-58 -	cis-1,2-dichloroethylene	MW-58 -	cis-1,2-dichloroethylene
MW-62R -	trichlorofluoromethane	MW-62R –	bis(2-ethylhexyl)phthalate
MW-80 -	arsenic		

Spring 2014		**Fall 2014**	
MW-41 -	1,1-dichloroethane bis(2-ethylhexyl)phthalate	MW-41 -	1,1-dichloroethane cis-1,2-dichloroethylene
MW-58 -	cis-1,2-dichloroethylene	MW-58 -	cis-1,2-dichloroethylene antimony
MW-60 -	cobalt	MW-60 -	none
MW-62R -	trichlorofluoromethane barium	MW-62R -	trichlorofluoromethane barium
MW-80 -	arsenic barium cadmium cobalt copper lead nickel vanadium zinc	MW-80 -	zinc

Spring 2015		**Fall 2015**	
MW-41 -	1,1-dichloroethane cis-1,2-dichloroethylene	MW-41 -	1,1-dichloroethane cis-1,2-dichloroethylene
MW-58 -	cis-1,2-dichloroethylene	MW-58 -	cis-1,2-dichloroethylene
MW-62R -	trichlorofluoromethane barium	MW-62R -	trichlorofluoromethane barium
MW-80 -	arsenic	MW-80 -	none

**resample for copper at MW-61 and nickel at MW-60 collected on December 17, 2015 both passed.*

Spring 2016		**Fall 2016**	
Former Detection Monitoring Wells			
MW-42 -	none	MW-42 -	cobalt
MW-61 -	none	MW-61 -	nickel
Current Assessment Monitoring Wells			
MW-41 -	1,1-dichloroethane cis-1,2-dichloroethylene	MW-41 -	1,1-dichloroethane cis-1,2-dichloroethylene
MW-58 -	cis-1,2-dichloroethylene nickel	MW-58 -	cis-1,2-dichloroethylene
MW-60 -	none	MW-60 -	nickel
MW-62R -	trichlorofluoromethane barium	MW-62R -	trichlorofluoromethane barium
MW-80 -	none	MW-80 -	arsenic

**resample for cobalt at MW-42 and nickel at MW-61 collected on October 31, 2016 both failed.*

Spring 2017

MW-41 - 1,1-dichloroethane
cis-1,2-dichloroethylene
MW-42 - none
MW-58 - cis-1,2-dichloroethylene
nickel
MW-60 - none
MW-61 - none
MW-62R - trichlorofluoromethane
barium
MW-80 - arsenic
cadmium

Fall 2017

MW-41 - 1,1-dichloroethane
cis-1,2-dichloroethylene
MW-42 - none
MW-58 - cis-1,2-dichloroethylene
nickel
MW-60 - none
MW-61 - none
MW-62R - trichlorofluoromethane
barium
MW-80 - none

Spring 2018

MW-41 - 1,1-dichloroethane
cis-1,2-dichloroethylene
MW-58 - cis-1,2-dichloroethylene
nickel
MW-59 - none
MW-62R - trichlorofluoromethane
barium

Fall 2018

MW-41 - 1,1-dichloroethane
cis-1,2-dichloroethylene
tetrachloroethene
trichloroethene
MW-58 - cis-1,2-dichloroethylene
nickel
MW-59 - copper
MW-62R - trichlorofluoromethane
barium

Spring 2019

MW-41 - 1,1-dichloroethane
Chloroethane
cis-1,2-dichloroethylene
MW-58 - cis-1,2-dichloroethylene
nickel
MW-59 - copper
Bis(2-ethylhexyl)phthalate
MW-60 nickel
MW-61 none
MW-62R - trichlorofluoromethane
barium
MW-80 arsenic

Fall 2019

MW-41 - 1,1-dichloroethane
cis-1,2-dichloroethylene
MW-58 - cis-1,2-dichloroethylene
MW-59 - none
MW-60 nickel
MW-61 nickel
MW-62R - trichlorofluoromethane
barium
MW-80 cadmium

Spring 2020

MW-41 - 1,1-dichloroethane
1,2-dichloropropane
bis(2-ethylhexyl)phthalate
chloroethane
cis-1,2-dichloroethylene
MW-58 - bis(2-ethylhexyl)phthalate
cis-1,2-dichloroethylene
nickel
MW-59 - copper
MW-60 nickel
MW-61 nickel
MW-62R - trichlorofluoromethane
barium
MW-80 none

Fall 2020

MW-41 - 1,1-dichloroethane
cis-1,2-dichloroethylene
MW-58 - cis-1,2-dichloroethylene
nickel
MW-59 - none
MW-60 nickel
MW-61 none
MW-62R - trichlorofluoromethane
barium
MW-80 none

Spring 2021

MW-41 - 1,1-dichloroethane
cis-1,2-dichloroethylene
MW-58 - cis-1,2-dichloroethylene
nickel
MW-60 nickel
MW-61 none
MW-62R - trichlorofluoromethane
barium

Fall 2021

MW-41 - 1,1-dichloroethane
chloroethane
cis-1,2-dichloroethylene
MW-58 - cis-1,2-dichloroethylene
nickel
MW-60 nickel
MW-61 nickel
MW-62R - trichlorofluoromethane
barium

Spring 2022

MW-41 - 1,1-dichloroethane, cis-1,2-DCE
MW-58 - nickel, cis-1,2-DCE
MW-59 - copper
MW-60 - nickel
MW-61 - none
MW-62R - barium
MW-80 - none

Fall 2022

MW-41 - 1,1-dichloroethane, cis-1,2-DCE
MW-58 - nickel, cis-1,2-DCE
MW-59 copper
MW-60 copper, nickel
MW-61 nickel
MW-62R - barium, trichlorofluoromethane
MW-80 - arsenic, barium, cadmium, cobalt, selenium

Spring 2023

MW-41 - 1,1-dichloroethane, cis-1,2-DCE
1,2-dichloropropane
MW-42 - none
MW-58 - nickel, cis-1,2-DCE
MW-59 - copper
MW-60 - nickel
MW-61 - none
MW-62R - barium, trichlorofluoromethane
MW-80 - none

Fall 2023

MW-41 - 1,1-dichloroethane, cis-1,2-DCE
MW-42 - none
MW-58 - nickel, cis-1,2-DCE
MW-59 none
MW-60 nickel
MW-61 none
MW-62R - barium, trichlorofluoromethane
MW-80 - none

Spring 2024

MW-41 - 1,1-dichloroethane, cis-1,2-DCE
MW-42 - none
MW-58 - nickel, cis-1,2-DCE
MW-59 - none
MW-60 - none
MW-61 - none
MW-62R - barium, trichlorofluoromethane
MW-80 - none

Fall 2024

MW-41 - 1,1-dichloroethane, cis-1,2-DCE
MW-42 - none
MW-58 - nickel
MW-59 none
MW-60 nickel
MW-61 none
MW-62R - barium
MW-80 - none

Appendix E

Laboratory Reports for Reporting Period

With Chain of Custody

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HC0401

Project Description

6002

For:

Todd Whipple

HLW Engineering

PO Box 314

Story City, IA 50248

Heather Murphy

Heather Murphy

Customer Relationship Specialist

Thursday, March 14, 2024

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

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HC0401

HLW Engineering

Todd Whipple
PO Box 314
Story City, IA 50248

Project Name: 6002

Project / PO Number: N/A
Received: 03/06/2024
Reported: 03/14/2024

Sample Summary Report

Sample Name	Laboratory ID	Client Matrix	Sample Type	Sample Begin	Sample Taken	Lab Received
MW-48 (B)	1HC0401-01	Water	GRAB		03/04/24 10:51	03/06/24 10:04
MW-39 (B)	1HC0401-02	Water	GRAB		03/04/24 11:55	03/06/24 10:04
MW-78 (B)	1HC0401-03	Water	GRAB		03/04/24 11:15	03/06/24 10:04
MW-62R	1HC0401-04	Water	GRAB		03/04/24 11:35	03/06/24 10:04
MW-79	1HC0401-05	Water	GRAB		03/04/24 13:18	03/06/24 10:04
MW-80	1HC0401-06	Water	GRAB		03/04/24 13:03	03/06/24 10:04
MW-36	1HC0401-07	Water	GRAB		03/04/24 12:14	03/06/24 10:04
MW-41	1HC0401-08	Water	GRAB		03/04/24 13:38	03/06/24 10:04
MW-42	1HC0401-09	Water	GRAB		03/04/24 13:52	03/06/24 10:04
MW-58	1HC0401-10	Water	GRAB		03/04/24 14:13	03/06/24 10:04
MW-44	1HC0401-11	Water	GRAB		03/04/24 08:30	03/06/24 10:04
MW-57	1HC0401-12	Water	GRAB		03/04/24 10:05	03/06/24 10:04
MW-56	1HC0401-13	Water	GRAB		03/04/24 09:09	03/06/24 10:04
MW-64	1HC0401-14	Water	GRAB		03/04/24 09:27	03/06/24 10:04
MW-65	1HC0401-15	Water	GRAB		03/04/24 08:45	03/06/24 10:04
SW-101R	1HC0401-16	Water	GRAB		03/04/24 10:45	03/06/24 10:04
PECS-1	1HC0401-17	Water	GRAB		03/04/24 10:25	03/06/24 10:04
SW-102	1HC0401-18	Water	GRAB		03/04/24 10:33	03/06/24 10:04
SW-103	1HC0401-19	Water	GRAB		03/04/24 09:00	03/06/24 10:04
MW-59	1HC0401-20	Water	GRAB		03/04/24 14:28	03/06/24 10:04
MW-60	1HC0401-21	Water	GRAB		03/04/24 12:29	03/06/24 10:04
MW-61	1HC0401-22	Water	GRAB		03/04/24 12:48	03/06/24 10:04
Duplicate	1HC0401-23	Water	GRAB		03/04/24 00:00	03/06/24 10:04

Analytical Testing Parameters

Client Sample ID:	MW-48 (B)		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC0401-01	**Collection Date:**	03/04/2024 10:51

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1352	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1352	CSM
Bromomethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1352	CSM
Chloroethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1352	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1352	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1352	CSM
Acetone	<10.0	10.0	ug/L	1		03/07/24 0000	03/07/24 1352	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1352	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1352	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		03/07/24 0000	03/07/24 1352	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		03/07/24 0000	03/07/24 1352	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1352	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1352	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		03/07/24 0000	03/07/24 1352	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1352	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/07/24 0000	03/07/24 1352	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1352	CSM
Chloroform	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1352	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1352	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1352	CSM
Benzene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1352	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1352	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1352	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1352	CSM
Dibromomethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1352	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1352	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1352	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/07/24 0000	03/07/24 1352	CSM
Toluene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1352	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1352	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1352	CSM
Tetrachloroethylene	**2.3**	1.0	ug/L	1		03/07/24 0000	03/07/24 1352	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/07/24 0000	03/07/24 1352	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1352	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1352	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1352	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1352	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1352	CSM
Xylenes, total	<2.0	2.0	ug/L	1		03/07/24 0000	03/07/24 1352	CSM
Styrene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1352	CSM

Client Sample ID:	MW-48 (B)		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC0401-01	**Collection Date:**	03/04/2024 10:51

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Bromoform	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1352	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1352	CSM
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		03/07/24 0000	03/07/24 1352	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1352	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1352	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1352	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/07/24 0000	03/07/24 1352	CSM
Surrogate: Dibromofluoromethane	101	Limit: 80-126	% Rec	1		03/07/24 0000	03/07/24 1352	CSM
Surrogate: Dibromofluoromethane	101	Limit: 75-136	% Rec	1		03/07/24 0000	03/07/24 1352	CSM
Surrogate: 1,2-Dichloroethane-d4	95.6	Limit: 61-142	% Rec	1		03/07/24 0000	03/07/24 1352	CSM
Surrogate: 1,2-Dichloroethane-d4	95.6	Limit: 63-138	% Rec	1		03/07/24 0000	03/07/24 1352	CSM
Surrogate: Toluene-d8	95.7	Limit: 87-116	% Rec	1		03/07/24 0000	03/07/24 1352	CSM
Surrogate: Toluene-d8	95.7	Limit: 82-121	% Rec	1		03/07/24 0000	03/07/24 1352	CSM
Surrogate: 4-Bromofluorobenzene	92.3	Limit: 80-116	% Rec	1		03/07/24 0000	03/07/24 1352	CSM
Surrogate: 4-Bromofluorobenzene	92.3	Limit: 85-111	% Rec	1		03/07/24 0000	03/07/24 1352	CSM

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		03/07/24 1046	03/08/24 0158	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0158	RVV
Barium, total	**0.149**	0.0040	mg/L	4		03/07/24 1046	03/08/24 0158	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0158	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		03/07/24 1046	03/08/24 0158	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/07/24 1046	03/08/24 0158	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		03/07/24 1046	03/08/24 0158	RVV
Copper, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0158	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0158	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0158	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0158	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0158	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/07/24 1046	03/08/24 0158	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/07/24 1046	03/08/24 0158	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		03/07/24 1046	03/08/24 0158	RVV

Client Sample ID:	MW-39 (B)			
Sample Matrix:	Water		**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC0401-02		**Collection Date:**	03/04/2024 11:55

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1415	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1415	CSM
Bromomethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1415	CSM
Chloroethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1415	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1415	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1415	CSM
Acetone	<10.0	10.0	ug/L	1		03/07/24 0000	03/07/24 1415	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1415	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1415	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		03/07/24 0000	03/07/24 1415	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		03/07/24 0000	03/07/24 1415	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1415	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1415	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		03/07/24 0000	03/07/24 1415	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1415	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/07/24 0000	03/07/24 1415	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1415	CSM
Chloroform	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1415	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1415	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1415	CSM
Benzene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1415	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1415	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1415	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1415	CSM
Dibromomethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1415	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1415	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1415	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/07/24 0000	03/07/24 1415	CSM
Toluene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1415	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1415	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1415	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1415	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/07/24 0000	03/07/24 1415	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1415	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1415	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1415	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1415	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1415	CSM
Xylenes, total	<2.0	2.0	ug/L	1		03/07/24 0000	03/07/24 1415	CSM
Styrene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1415	CSM
Bromoform	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1415	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1415	CSM

Client Sample ID:	MW-39 (B)		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC0401-02	**Collection Date:**	03/04/2024 11:55

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		03/07/24 0000	03/07/24 1415	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1415	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1415	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1415	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/07/24 0000	03/07/24 1415	CSM
Surrogate: Dibromofluoromethane	100	Limit: 80-126	% Rec	1		03/07/24 0000	03/07/24 1415	CSM
Surrogate: Dibromofluoromethane	100	Limit: 75-136	% Rec	1		03/07/24 0000	03/07/24 1415	CSM
Surrogate: 1,2-Dichloroethane-d4	95.4	Limit: 63-138	% Rec	1		03/07/24 0000	03/07/24 1415	CSM
Surrogate: 1,2-Dichloroethane-d4	95.4	Limit: 61-142	% Rec	1		03/07/24 0000	03/07/24 1415	CSM
Surrogate: Toluene-d8	96.6	Limit: 87-116	% Rec	1		03/07/24 0000	03/07/24 1415	CSM
Surrogate: Toluene-d8	96.6	Limit: 82-121	% Rec	1		03/07/24 0000	03/07/24 1415	CSM
Surrogate: 4-Bromofluorobenzene	91.7	Limit: 85-111	% Rec	1		03/07/24 0000	03/07/24 1415	CSM
Surrogate: 4-Bromofluorobenzene	91.7	Limit: 80-116	% Rec	1		03/07/24 0000	03/07/24 1415	CSM

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		03/07/24 1046	03/08/24 1137	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 1137	RVV
Barium, total	**0.128**	0.0040	mg/L	4		03/07/24 1046	03/08/24 1137	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 1137	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		03/07/24 1046	03/08/24 1137	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/07/24 1046	03/08/24 1137	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		03/07/24 1046	03/08/24 1137	RVV
Copper, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 1137	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 1137	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 1137	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 1137	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 1137	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/07/24 1046	03/08/24 1137	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/07/24 1046	03/08/24 1137	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		03/07/24 1046	03/08/24 1137	RVV

Client Sample ID:	MW-78 (B)		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC0401-03	**Collection Date:**	03/04/2024 11:15

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1438	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1438	CSM
Bromomethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1438	CSM
Chloroethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1438	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1438	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1438	CSM
Acetone	<10.0	10.0	ug/L	1		03/07/24 0000	03/07/24 1438	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1438	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1438	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		03/07/24 0000	03/07/24 1438	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		03/07/24 0000	03/07/24 1438	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1438	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1438	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		03/07/24 0000	03/07/24 1438	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1438	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/07/24 0000	03/07/24 1438	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1438	CSM
Chloroform	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1438	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1438	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1438	CSM
Benzene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1438	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1438	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1438	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1438	CSM
Dibromomethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1438	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1438	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1438	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/07/24 0000	03/07/24 1438	CSM
Toluene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1438	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1438	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1438	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1438	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/07/24 0000	03/07/24 1438	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1438	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1438	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1438	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1438	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1438	CSM
Xylenes, total	<2.0	2.0	ug/L	1		03/07/24 0000	03/07/24 1438	CSM
Styrene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1438	CSM
Bromoform	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1438	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1438	CSM

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CERTIFICATE OF ANALYSIS

1HC0401

Client Sample ID:	MW-78 (B)		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC0401-03	**Collection Date:**	03/04/2024 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		03/07/24 0000	03/07/24 1438	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1438	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1438	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1438	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/07/24 0000	03/07/24 1438	CSM
Surrogate: Dibromofluoromethane	100	Limit: 75-136	% Rec	1		03/07/24 0000	03/07/24 1438	CSM
Surrogate: Dibromofluoromethane	100	Limit: 80-126	% Rec	1		03/07/24 0000	03/07/24 1438	CSM
Surrogate: 1,2-Dichloroethane-d4	94.4	Limit: 61-142	% Rec	1		03/07/24 0000	03/07/24 1438	CSM
Surrogate: 1,2-Dichloroethane-d4	94.4	Limit: 63-138	% Rec	1		03/07/24 0000	03/07/24 1438	CSM
Surrogate: Toluene-d8	96.4	Limit: 87-116	% Rec	1		03/07/24 0000	03/07/24 1438	CSM
Surrogate: Toluene-d8	96.4	Limit: 82-121	% Rec	1		03/07/24 0000	03/07/24 1438	CSM
Surrogate: 4-Bromofluorobenzene	91.5	Limit: 80-116	% Rec	1		03/07/24 0000	03/07/24 1438	CSM
Surrogate: 4-Bromofluorobenzene	91.5	Limit: 85-111	% Rec	1		03/07/24 0000	03/07/24 1438	CSM

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		03/07/24 1046	03/08/24 0241	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0241	RVV
Barium, total	**0.341**	0.0040	mg/L	4		03/07/24 1046	03/08/24 0241	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0241	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		03/07/24 1046	03/08/24 0241	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/07/24 1046	03/08/24 0241	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		03/07/24 1046	03/08/24 0241	RVV
Copper, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0241	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0241	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0241	RVV
Selenium, total	**0.0057**	0.0040	mg/L	4		03/07/24 1046	03/08/24 0241	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0241	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/07/24 1046	03/08/24 0241	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/07/24 1046	03/08/24 0241	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		03/07/24 1046	03/08/24 0241	RVV

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HC0401

Client Sample ID:	MW-62R		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC0401-04	**Collection Date:**	03/04/2024 11:35

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1500	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1500	CSM
Bromomethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1500	CSM
Chloroethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1500	CSM
Trichlorofluoromethane	**1.0**	1.0	ug/L	1		03/07/24 0000	03/07/24 1500	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1500	CSM
Acetone	<10.0	10.0	ug/L	1		03/07/24 0000	03/07/24 1500	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1500	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1500	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		03/07/24 0000	03/07/24 1500	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		03/07/24 0000	03/07/24 1500	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1500	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1500	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		03/07/24 0000	03/07/24 1500	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1500	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/07/24 0000	03/07/24 1500	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1500	CSM
Chloroform	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1500	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1500	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1500	CSM
Benzene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1500	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1500	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1500	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1500	CSM
Dibromomethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1500	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1500	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1500	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/07/24 0000	03/07/24 1500	CSM
Toluene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1500	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1500	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1500	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1500	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/07/24 0000	03/07/24 1500	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1500	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1500	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1500	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1500	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1500	CSM
Xylenes, total	<2.0	2.0	ug/L	1		03/07/24 0000	03/07/24 1500	CSM
Styrene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1500	CSM
Bromoform	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1500	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1500	CSM

Client Sample ID:	MW-62R			
Sample Matrix:	Water		**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC0401-04		**Collection Date:**	03/04/2024 11:35

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		03/07/24 0000	03/07/24 1500	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1500	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1500	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1500	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/07/24 0000	03/07/24 1500	CSM
Surrogate: Dibromofluoromethane	100	Limit: 75-136	% Rec	1		03/07/24 0000	03/07/24 1500	CSM
Surrogate: Dibromofluoromethane	100	Limit: 80-126	% Rec	1		03/07/24 0000	03/07/24 1500	CSM
Surrogate: 1,2-Dichloroethane-d4	95.0	Limit: 63-138	% Rec	1		03/07/24 0000	03/07/24 1500	CSM
Surrogate: 1,2-Dichloroethane-d4	95.0	Limit: 61-142	% Rec	1		03/07/24 0000	03/07/24 1500	CSM
Surrogate: Toluene-d8	96.3	Limit: 82-121	% Rec	1		03/07/24 0000	03/07/24 1500	CSM
Surrogate: Toluene-d8	96.3	Limit: 87-116	% Rec	1		03/07/24 0000	03/07/24 1500	CSM
Surrogate: 4-Bromofluorobenzene	92.2	Limit: 85-111	% Rec	1		03/07/24 0000	03/07/24 1500	CSM
Surrogate: 4-Bromofluorobenzene	92.2	Limit: 80-116	% Rec	1		03/07/24 0000	03/07/24 1500	CSM

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		03/07/24 1046	03/08/24 0247	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0247	RVV
Barium, total	**1.01**	0.0040	mg/L	4		03/07/24 1046	03/08/24 0247	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0247	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		03/07/24 1046	03/08/24 0247	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/07/24 1046	03/08/24 0247	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		03/07/24 1046	03/08/24 0247	RVV
Copper, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0247	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0247	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0247	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0247	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0247	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/07/24 1046	03/08/24 0247	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/07/24 1046	03/08/24 0247	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		03/07/24 1046	03/08/24 0247	RVV

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HC0401

Client Sample ID:	MW-79			
Sample Matrix:	Water		**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC0401-05		**Collection Date:**	03/04/2024 13:18

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1523	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1523	CSM
Bromomethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1523	CSM
Chloroethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1523	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1523	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1523	CSM
Acetone	<10.0	10.0	ug/L	1		03/07/24 0000	03/07/24 1523	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1523	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1523	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		03/07/24 0000	03/07/24 1523	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		03/07/24 0000	03/07/24 1523	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1523	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1523	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		03/07/24 0000	03/07/24 1523	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1523	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/07/24 0000	03/07/24 1523	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1523	CSM
Chloroform	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1523	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1523	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1523	CSM
Benzene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1523	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1523	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1523	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1523	CSM
Dibromomethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1523	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1523	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1523	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/07/24 0000	03/07/24 1523	CSM
Toluene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1523	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1523	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1523	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1523	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/07/24 0000	03/07/24 1523	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1523	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1523	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1523	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1523	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1523	CSM
Xylenes, total	<2.0	2.0	ug/L	1		03/07/24 0000	03/07/24 1523	CSM
Styrene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1523	CSM
Bromoform	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1523	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1523	CSM

CERTIFICATE OF ANALYSIS

1HC0401

Client Sample ID:	MW-79		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC0401-05	**Collection Date:**	03/04/2024 13:18

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		03/07/24 0000	03/07/24 1523	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1523	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1523	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1523	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/07/24 0000	03/07/24 1523	CSM
Surrogate: Dibromofluoromethane	99.8	Limit: 80-126	% Rec	1		03/07/24 0000	03/07/24 1523	CSM
Surrogate: Dibromofluoromethane	99.8	Limit: 75-136	% Rec	1		03/07/24 0000	03/07/24 1523	CSM
Surrogate: 1,2-Dichloroethane-d4	96.5	Limit: 63-138	% Rec	1		03/07/24 0000	03/07/24 1523	CSM
Surrogate: 1,2-Dichloroethane-d4	96.5	Limit: 61-142	% Rec	1		03/07/24 0000	03/07/24 1523	CSM
Surrogate: Toluene-d8	95.5	Limit: 87-116	% Rec	1		03/07/24 0000	03/07/24 1523	CSM
Surrogate: Toluene-d8	95.5	Limit: 82-121	% Rec	1		03/07/24 0000	03/07/24 1523	CSM
Surrogate: 4-Bromofluorobenzene	92.8	Limit: 85-111	% Rec	1		03/07/24 0000	03/07/24 1523	CSM
Surrogate: 4-Bromofluorobenzene	92.8	Limit: 80-116	% Rec	1		03/07/24 0000	03/07/24 1523	CSM

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		03/07/24 1046	03/08/24 0253	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0253	RVV
Barium, total	**0.0579**	0.0040	mg/L	4		03/07/24 1046	03/08/24 0253	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0253	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		03/07/24 1046	03/08/24 0253	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/07/24 1046	03/08/24 0253	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		03/07/24 1046	03/08/24 0253	RVV
Copper, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0253	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0253	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0253	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0253	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0253	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/07/24 1046	03/08/24 0253	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/07/24 1046	03/08/24 0253	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		03/07/24 1046	03/08/24 0253	RVV

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HC0401

Client Sample ID:	MW-80		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC0401-06	**Collection Date:**	03/04/2024 13:03

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1546	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1546	CSM
Bromomethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1546	CSM
Chloroethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1546	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1546	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1546	CSM
Acetone	<10.0	10.0	ug/L	1		03/07/24 0000	03/07/24 1546	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1546	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1546	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		03/07/24 0000	03/07/24 1546	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		03/07/24 0000	03/07/24 1546	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1546	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1546	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		03/07/24 0000	03/07/24 1546	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1546	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/07/24 0000	03/07/24 1546	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1546	CSM
Chloroform	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1546	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1546	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1546	CSM
Benzene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1546	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1546	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1546	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1546	CSM
Dibromomethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1546	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1546	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1546	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/07/24 0000	03/07/24 1546	CSM
Toluene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1546	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1546	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1546	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1546	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/07/24 0000	03/07/24 1546	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1546	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1546	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1546	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1546	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1546	CSM
Xylenes, total	<2.0	2.0	ug/L	1		03/07/24 0000	03/07/24 1546	CSM
Styrene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1546	CSM
Bromoform	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1546	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1546	CSM

Client Sample ID:	MW-80		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC0401-06	**Collection Date:**	03/04/2024 13:03

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		03/07/24 0000	03/07/24 1546	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1546	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1546	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1546	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/07/24 0000	03/07/24 1546	CSM
Surrogate: Dibromofluoromethane	102	Limit: 75-136	% Rec	1		03/07/24 0000	03/07/24 1546	CSM
Surrogate: Dibromofluoromethane	102	Limit: 80-126	% Rec	1		03/07/24 0000	03/07/24 1546	CSM
Surrogate: 1,2-Dichloroethane-d4	96.2	Limit: 63-138	% Rec	1		03/07/24 0000	03/07/24 1546	CSM
Surrogate: 1,2-Dichloroethane-d4	96.2	Limit: 61-142	% Rec	1		03/07/24 0000	03/07/24 1546	CSM
Surrogate: Toluene-d8	96.7	Limit: 82-121	% Rec	1		03/07/24 0000	03/07/24 1546	CSM
Surrogate: Toluene-d8	96.7	Limit: 87-116	% Rec	1		03/07/24 0000	03/07/24 1546	CSM
Surrogate: 4-Bromofluorobenzene	92.6	Limit: 85-111	% Rec	1		03/07/24 0000	03/07/24 1546	CSM
Surrogate: 4-Bromofluorobenzene	92.6	Limit: 80-116	% Rec	1		03/07/24 0000	03/07/24 1546	CSM

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		03/07/24 1046	03/08/24 0300	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0300	RVV
Barium, total	**0.131**	0.0040	mg/L	4		03/07/24 1046	03/08/24 0300	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0300	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		03/07/24 1046	03/08/24 0300	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/07/24 1046	03/08/24 0300	RVV
Cobalt, total	**0.0013**	0.0004	mg/L	4		03/07/24 1046	03/08/24 0300	RVV
Copper, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0300	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0300	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0300	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0300	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0300	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/07/24 1046	03/08/24 0300	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/07/24 1046	03/08/24 0300	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		03/07/24 1046	03/08/24 0300	RVV

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HC0401

Client Sample ID:	MW-36			
Sample Matrix:	Water		**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC0401-07		**Collection Date:**	03/04/2024 12:14

Determination of Volatile Organic Compounds	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1609	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1609	CSM
Bromomethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1609	CSM
Chloroethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1609	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1609	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1609	CSM
Acetone	<10.0	10.0	ug/L	1		03/07/24 0000	03/07/24 1609	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1609	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1609	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		03/07/24 0000	03/07/24 1609	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		03/07/24 0000	03/07/24 1609	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1609	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1609	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		03/07/24 0000	03/07/24 1609	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1609	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/07/24 0000	03/07/24 1609	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1609	CSM
Chloroform	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1609	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1609	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1609	CSM
Benzene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1609	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1609	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1609	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1609	CSM
Dibromomethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1609	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1609	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1609	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/07/24 0000	03/07/24 1609	CSM
Toluene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1609	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1609	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1609	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1609	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/07/24 0000	03/07/24 1609	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1609	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1609	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1609	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1609	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1609	CSM
Xylenes, total	<2.0	2.0	ug/L	1		03/07/24 0000	03/07/24 1609	CSM
Styrene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1609	CSM
Bromoform	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1609	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1609	CSM

Client Sample ID:	MW-36			
Sample Matrix:	Water		**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC0401-07		**Collection Date:**	03/04/2024 12:14

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		03/07/24 0000	03/07/24 1609	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1609	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1609	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/07/24 0000	03/07/24 1609	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/07/24 0000	03/07/24 1609	CSM
Surrogate: Dibromofluoromethane	102	Limit: 75-136	% Rec	1		03/07/24 0000	03/07/24 1609	CSM
Surrogate: Dibromofluoromethane	102	Limit: 80-126	% Rec	1		03/07/24 0000	03/07/24 1609	CSM
Surrogate: 1,2-Dichloroethane-d4	99.3	Limit: 63-138	% Rec	1		03/07/24 0000	03/07/24 1609	CSM
Surrogate: 1,2-Dichloroethane-d4	99.3	Limit: 61-142	% Rec	1		03/07/24 0000	03/07/24 1609	CSM
Surrogate: Toluene-d8	96.6	Limit: 82-121	% Rec	1		03/07/24 0000	03/07/24 1609	CSM
Surrogate: Toluene-d8	96.6	Limit: 87-116	% Rec	1		03/07/24 0000	03/07/24 1609	CSM
Surrogate: 4-Bromofluorobenzene	121	Limit: 85-111	% Rec	1	**S-GC**	03/07/24 0000	03/07/24 1609	CSM
Surrogate: 4-Bromofluorobenzene	121	Limit: 80-116	% Rec	1	**S-GC**	03/07/24 0000	03/07/24 1609	CSM

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		03/07/24 1046	03/08/24 0306	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0306	RVV
Barium, total	**0.128**	0.0040	mg/L	4		03/07/24 1046	03/08/24 0306	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0306	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		03/07/24 1046	03/08/24 0306	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/07/24 1046	03/08/24 0306	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		03/07/24 1046	03/08/24 0306	RVV
Copper, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0306	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0306	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0306	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0306	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0306	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/07/24 1046	03/08/24 0306	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/07/24 1046	03/08/24 0306	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		03/07/24 1046	03/08/24 0306	RVV

Client Sample ID:	MW-41		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC0401-08	**Collection Date:**	03/04/2024 13:38

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1651	LJS
Vinyl Chloride	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1651	LJS
Bromomethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1651	LJS
Chloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1651	LJS
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1651	LJS
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1651	LJS
Acetone	<10.0	10.0	ug/L	1		03/08/24 0000	03/08/24 1651	LJS
Methyl Iodide	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1651	LJS
Carbon Disulfide	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1651	LJS
Methylene Chloride	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 1651	LJS
Acrylonitrile	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 1651	LJS
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1651	LJS
1,1-Dichloroethane	**19.0**	1.0	ug/L	1		03/08/24 0000	03/08/24 1651	LJS
Vinyl Acetate	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 1651	LJS
cis-1,2-Dichloroethylene	**2.4**	1.0	ug/L	1		03/08/24 0000	03/08/24 1651	LJS
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/08/24 0000	03/08/24 1651	LJS
Bromochloromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1651	LJS
Chloroform	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1651	LJS
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1651	LJS
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1651	LJS
Benzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1651	LJS
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1651	LJS
Trichloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1651	LJS
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1651	LJS
Dibromomethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1651	LJS
Bromodichloromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1651	LJS
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1651	LJS
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 1651	LJS
Toluene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1651	LJS
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1651	LJS
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1651	LJS
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1651	LJS
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 1651	LJS
Dibromochloromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1651	LJS
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1651	LJS
Chlorobenzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1651	LJS
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1651	LJS
Ethylbenzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1651	LJS
Xylenes, total	<2.0	2.0	ug/L	1		03/08/24 0000	03/08/24 1651	LJS
Styrene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1651	LJS
Bromoform	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1651	LJS
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1651	LJS

Client Sample ID:	MW-41		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC0401-08	**Collection Date:**	03/04/2024 13:38

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		03/08/24 0000	03/08/24 1651	LJS
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1651	LJS
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1651	LJS
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1651	LJS
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 1651	LJS
Surrogate: Dibromofluoromethane	80.5	Limit: 75-136	% Rec	1		03/08/24 0000	03/08/24 1651	LJS
Surrogate: Dibromofluoromethane	80.5	Limit: 80-126	% Rec	1		03/08/24 0000	03/08/24 1651	LJS
Surrogate: 1,2-Dichloroethane-d4	71.4	Limit: 61-142	% Rec	1		03/08/24 0000	03/08/24 1651	LJS
Surrogate: 1,2-Dichloroethane-d4	71.4	Limit: 63-138	% Rec	1		03/08/24 0000	03/08/24 1651	LJS
Surrogate: Toluene-d8	103	Limit: 82-121	% Rec	1		03/08/24 0000	03/08/24 1651	LJS
Surrogate: Toluene-d8	103	Limit: 87-116	% Rec	1		03/08/24 0000	03/08/24 1651	LJS
Surrogate: 4-Bromofluorobenzene	95.3	Limit: 80-116	% Rec	1		03/08/24 0000	03/08/24 1651	LJS
Surrogate: 4-Bromofluorobenzene	95.3	Limit: 85-111	% Rec	1		03/08/24 0000	03/08/24 1651	LJS

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		03/07/24 1046	03/08/24 0312	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0312	RVV
Barium, total	**0.0712**	0.0040	mg/L	4		03/07/24 1046	03/08/24 0312	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0312	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		03/07/24 1046	03/08/24 0312	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/07/24 1046	03/08/24 0312	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		03/07/24 1046	03/08/24 0312	RVV
Copper, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0312	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0312	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0312	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0312	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0312	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/07/24 1046	03/08/24 0312	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/07/24 1046	03/08/24 0312	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		03/07/24 1046	03/08/24 0312	RVV

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HC0401

Client Sample ID:	MW-42		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC0401-09	**Collection Date:**	03/04/2024 13:52

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1718	LJS
Vinyl Chloride	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1718	LJS
Bromomethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1718	LJS
Chloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1718	LJS
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1718	LJS
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1718	LJS
Acetone	<10.0	10.0	ug/L	1		03/08/24 0000	03/08/24 1718	LJS
Methyl Iodide	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1718	LJS
Carbon Disulfide	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1718	LJS
Methylene Chloride	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 1718	LJS
Acrylonitrile	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 1718	LJS
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1718	LJS
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1718	LJS
Vinyl Acetate	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 1718	LJS
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1718	LJS
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/08/24 0000	03/08/24 1718	LJS
Bromochloromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1718	LJS
Chloroform	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1718	LJS
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1718	LJS
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1718	LJS
Benzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1718	LJS
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1718	LJS
Trichloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1718	LJS
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1718	LJS
Dibromomethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1718	LJS
Bromodichloromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1718	LJS
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1718	LJS
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 1718	LJS
Toluene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1718	LJS
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1718	LJS
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1718	LJS
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1718	LJS
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 1718	LJS
Dibromochloromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1718	LJS
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1718	LJS
Chlorobenzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1718	LJS
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1718	LJS
Ethylbenzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1718	LJS
Xylenes, total	<2.0	2.0	ug/L	1		03/08/24 0000	03/08/24 1718	LJS
Styrene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1718	LJS
Bromoform	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1718	LJS
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1718	LJS

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HC0401

Client Sample ID:	MW-42			
Sample Matrix:	Water		**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC0401-09		**Collection Date:**	03/04/2024 13:52

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		03/08/24 0000	03/08/24 1718	LJS
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1718	LJS
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1718	LJS
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1718	LJS
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 1718	LJS
Surrogate: Dibromofluoromethane	81.4	Limit: 75-136	% Rec	1		03/08/24 0000	03/08/24 1718	LJS
Surrogate: Dibromofluoromethane	81.4	Limit: 80-126	% Rec	1		03/08/24 0000	03/08/24 1718	LJS
Surrogate: 1,2-Dichloroethane-d4	73.7	Limit: 63-138	% Rec	1		03/08/24 0000	03/08/24 1718	LJS
Surrogate: 1,2-Dichloroethane-d4	73.7	Limit: 61-142	% Rec	1		03/08/24 0000	03/08/24 1718	LJS
Surrogate: Toluene-d8	103	Limit: 82-121	% Rec	1		03/08/24 0000	03/08/24 1718	LJS
Surrogate: Toluene-d8	103	Limit: 87-116	% Rec	1		03/08/24 0000	03/08/24 1718	LJS
Surrogate: 4-Bromofluorobenzene	96.5	Limit: 85-111	% Rec	1		03/08/24 0000	03/08/24 1718	LJS
Surrogate: 4-Bromofluorobenzene	96.5	Limit: 80-116	% Rec	1		03/08/24 0000	03/08/24 1718	LJS

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		03/07/24 1046	03/08/24 0330	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0330	RVV
Barium, total	**0.0194**	0.0040	mg/L	4		03/07/24 1046	03/08/24 0330	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0330	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		03/07/24 1046	03/08/24 0330	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/07/24 1046	03/08/24 0330	RVV
Cobalt, total	**0.0007**	0.0004	mg/L	4		03/07/24 1046	03/08/24 0330	RVV
Copper, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0330	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0330	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0330	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0330	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0330	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/07/24 1046	03/08/24 0330	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/07/24 1046	03/08/24 0330	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		03/07/24 1046	03/08/24 0330	RVV

Client Sample ID:	MW-58		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC0401-10	**Collection Date:**	03/04/2024 14:13

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1744	LJS
Vinyl Chloride	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1744	LJS
Bromomethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1744	LJS
Chloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1744	LJS
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1744	LJS
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1744	LJS
Acetone	<10.0	10.0	ug/L	1		03/08/24 0000	03/08/24 1744	LJS
Methyl Iodide	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1744	LJS
Carbon Disulfide	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1744	LJS
Methylene Chloride	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 1744	LJS
Acrylonitrile	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 1744	LJS
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1744	LJS
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1744	LJS
Vinyl Acetate	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 1744	LJS
cis-1,2-Dichloroethylene	**1.0**	1.0	ug/L	1		03/08/24 0000	03/08/24 1744	LJS
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/08/24 0000	03/08/24 1744	LJS
Bromochloromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1744	LJS
Chloroform	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1744	LJS
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1744	LJS
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1744	LJS
Benzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1744	LJS
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1744	LJS
Trichloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1744	LJS
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1744	LJS
Dibromomethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1744	LJS
Bromodichloromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1744	LJS
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1744	LJS
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 1744	LJS
Toluene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1744	LJS
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1744	LJS
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1744	LJS
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1744	LJS
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 1744	LJS
Dibromochloromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1744	LJS
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1744	LJS
Chlorobenzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1744	LJS
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1744	LJS
Ethylbenzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1744	LJS
Xylenes, total	<2.0	2.0	ug/L	1		03/08/24 0000	03/08/24 1744	LJS
Styrene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1744	LJS
Bromoform	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1744	LJS
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1744	LJS

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HC0401

Client Sample ID:	MW-58		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC0401-10	**Collection Date:**	03/04/2024 14:13

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		03/08/24 0000	03/08/24 1744	LJS
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1744	LJS
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1744	LJS
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1744	LJS
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 1744	LJS
Surrogate: Dibromofluoromethane	81.2	Limit: 80-126	% Rec	1		03/08/24 0000	03/08/24 1744	LJS
Surrogate: Dibromofluoromethane	81.2	Limit: 75-136	% Rec	1		03/08/24 0000	03/08/24 1744	LJS
Surrogate: 1,2-Dichloroethane-d4	74.8	Limit: 61-142	% Rec	1		03/08/24 0000	03/08/24 1744	LJS
Surrogate: 1,2-Dichloroethane-d4	74.8	Limit: 63-138	% Rec	1		03/08/24 0000	03/08/24 1744	LJS
Surrogate: Toluene-d8	103	Limit: 87-116	% Rec	1		03/08/24 0000	03/08/24 1744	LJS
Surrogate: Toluene-d8	103	Limit: 82-121	% Rec	1		03/08/24 0000	03/08/24 1744	LJS
Surrogate: 4-Bromofluorobenzene	93.9	Limit: 80-116	% Rec	1		03/08/24 0000	03/08/24 1744	LJS
Surrogate: 4-Bromofluorobenzene	93.9	Limit: 85-111	% Rec	1		03/08/24 0000	03/08/24 1744	LJS

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		03/07/24 1046	03/08/24 0336	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0336	RVV
Barium, total	**0.0238**	0.0040	mg/L	4		03/07/24 1046	03/08/24 0336	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0336	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		03/07/24 1046	03/08/24 0336	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/07/24 1046	03/08/24 0336	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		03/07/24 1046	03/08/24 0336	RVV
Copper, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0336	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0336	RVV
Nickel, total	**0.0167**	0.0040	mg/L	4		03/07/24 1046	03/08/24 0336	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0336	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0336	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/07/24 1046	03/08/24 0336	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/07/24 1046	03/08/24 0336	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		03/07/24 1046	03/08/24 0336	RVV

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HC0401

Client Sample ID:	MW-44		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC0401-11	**Collection Date:**	03/04/2024 8:30

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1810	LJS
Vinyl Chloride	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1810	LJS
Bromomethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1810	LJS
Chloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1810	LJS
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1810	LJS
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1810	LJS
Acetone	<10.0	10.0	ug/L	1		03/08/24 0000	03/08/24 1810	LJS
Methyl Iodide	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1810	LJS
Carbon Disulfide	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1810	LJS
Methylene Chloride	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 1810	LJS
Acrylonitrile	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 1810	LJS
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1810	LJS
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1810	LJS
Vinyl Acetate	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 1810	LJS
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1810	LJS
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/08/24 0000	03/08/24 1810	LJS
Bromochloromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1810	LJS
Chloroform	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1810	LJS
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1810	LJS
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1810	LJS
Benzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1810	LJS
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1810	LJS
Trichloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1810	LJS
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1810	LJS
Dibromomethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1810	LJS
Bromodichloromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1810	LJS
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1810	LJS
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 1810	LJS
Toluene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1810	LJS
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1810	LJS
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1810	LJS
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1810	LJS
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 1810	LJS
Dibromochloromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1810	LJS
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1810	LJS
Chlorobenzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1810	LJS
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1810	LJS
Ethylbenzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1810	LJS
Xylenes, total	<2.0	2.0	ug/L	1		03/08/24 0000	03/08/24 1810	LJS
Styrene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1810	LJS
Bromoform	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1810	LJS
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1810	LJS

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HC0401

Client Sample ID:	MW-44		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC0401-11	**Collection Date:**	03/04/2024 8:30

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		03/08/24 0000	03/08/24 1810	LJS
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1810	LJS
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1810	LJS
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1810	LJS
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 1810	LJS
Surrogate: Dibromofluoromethane	80.5	Limit: 80-126	% Rec	1		03/08/24 0000	03/08/24 1810	LJS
Surrogate: Dibromofluoromethane	80.5	Limit: 75-136	% Rec	1		03/08/24 0000	03/08/24 1810	LJS
Surrogate: 1,2-Dichloroethane-d4	75.4	Limit: 63-138	% Rec	1		03/08/24 0000	03/08/24 1810	LJS
Surrogate: 1,2-Dichloroethane-d4	75.4	Limit: 61-142	% Rec	1		03/08/24 0000	03/08/24 1810	LJS
Surrogate: Toluene-d8	104	Limit: 87-116	% Rec	1		03/08/24 0000	03/08/24 1810	LJS
Surrogate: Toluene-d8	104	Limit: 82-121	% Rec	1		03/08/24 0000	03/08/24 1810	LJS
Surrogate: 4-Bromofluorobenzene	95.0	Limit: 85-111	% Rec	1		03/08/24 0000	03/08/24 1810	LJS
Surrogate: 4-Bromofluorobenzene	95.0	Limit: 80-116	% Rec	1		03/08/24 0000	03/08/24 1810	LJS

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		03/07/24 1046	03/08/24 0343	RVV
Arsenic, total	**0.0041**	0.0040	mg/L	4		03/07/24 1046	03/08/24 0343	RVV
Barium, total	**0.126**	0.0040	mg/L	4		03/07/24 1046	03/08/24 0343	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0343	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		03/07/24 1046	03/08/24 0343	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/07/24 1046	03/08/24 0343	RVV
Cobalt, total	**0.0097**	0.0004	mg/L	4		03/07/24 1046	03/08/24 0343	RVV
Copper, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0343	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0343	RVV
Nickel, total	**0.0100**	0.0040	mg/L	4		03/07/24 1046	03/08/24 0343	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0343	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0343	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/07/24 1046	03/08/24 0343	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/07/24 1046	03/08/24 0343	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		03/07/24 1046	03/08/24 0343	RVV

Client Sample ID:	MW-57		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC0401-12	**Collection Date:**	03/04/2024 10:05

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1836	LJS
Vinyl Chloride	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1836	LJS
Bromomethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1836	LJS
Chloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1836	LJS
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1836	LJS
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1836	LJS
Acetone	<10.0	10.0	ug/L	1		03/08/24 0000	03/08/24 1836	LJS
Methyl Iodide	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1836	LJS
Carbon Disulfide	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1836	LJS
Methylene Chloride	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 1836	LJS
Acrylonitrile	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 1836	LJS
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1836	LJS
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1836	LJS
Vinyl Acetate	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 1836	LJS
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1836	LJS
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/08/24 0000	03/08/24 1836	LJS
Bromochloromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1836	LJS
Chloroform	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1836	LJS
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1836	LJS
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1836	LJS
Benzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1836	LJS
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1836	LJS
Trichloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1836	LJS
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1836	LJS
Dibromomethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1836	LJS
Bromodichloromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1836	LJS
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1836	LJS
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 1836	LJS
Toluene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1836	LJS
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1836	LJS
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1836	LJS
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1836	LJS
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 1836	LJS
Dibromochloromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1836	LJS
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1836	LJS
Chlorobenzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1836	LJS
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1836	LJS
Ethylbenzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1836	LJS
Xylenes, total	<2.0	2.0	ug/L	1		03/08/24 0000	03/08/24 1836	LJS
Styrene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1836	LJS
Bromoform	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1836	LJS
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1836	LJS

Client Sample ID:	MW-57		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC0401-12	**Collection Date:**	03/04/2024 10:05

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		03/08/24 0000	03/08/24 1836	LJS
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1836	LJS
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1836	LJS
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1836	LJS
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 1836	LJS
Surrogate: Dibromofluoromethane	78.1	Limit: 80-126	% Rec	1	**S-GC**	03/08/24 0000	03/08/24 1836	LJS
Surrogate: Dibromofluoromethane	78.1	Limit: 75-136	% Rec	1		03/08/24 0000	03/08/24 1836	LJS
Surrogate: 1,2-Dichloroethane-d4	71.3	Limit: 63-138	% Rec	1		03/08/24 0000	03/08/24 1836	LJS
Surrogate: 1,2-Dichloroethane-d4	71.3	Limit: 61-142	% Rec	1		03/08/24 0000	03/08/24 1836	LJS
Surrogate: Toluene-d8	104	Limit: 87-116	% Rec	1		03/08/24 0000	03/08/24 1836	LJS
Surrogate: Toluene-d8	104	Limit: 82-121	% Rec	1		03/08/24 0000	03/08/24 1836	LJS
Surrogate: 4-Bromofluorobenzene	94.8	Limit: 85-111	% Rec	1		03/08/24 0000	03/08/24 1836	LJS
Surrogate: 4-Bromofluorobenzene	94.8	Limit: 80-116	% Rec	1		03/08/24 0000	03/08/24 1836	LJS

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		03/07/24 1046	03/08/24 0349	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0349	RVV
Barium, total	**0.250**	0.0040	mg/L	4		03/07/24 1046	03/08/24 0349	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0349	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		03/07/24 1046	03/08/24 0349	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/07/24 1046	03/08/24 0349	RVV
Cobalt, total	**0.0004**	0.0004	mg/L	4		03/07/24 1046	03/08/24 0349	RVV
Copper, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0349	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0349	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0349	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0349	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0349	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/07/24 1046	03/08/24 0349	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/07/24 1046	03/08/24 0349	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		03/07/24 1046	03/08/24 0349	RVV

Client Sample ID:	MW-56			
Sample Matrix:	Water		**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC0401-13		**Collection Date:**	03/04/2024 9:09

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1903	LJS
Vinyl Chloride	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1903	LJS
Bromomethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1903	LJS
Chloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1903	LJS
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1903	LJS
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1903	LJS
Acetone	<10.0	10.0	ug/L	1		03/08/24 0000	03/08/24 1903	LJS
Methyl Iodide	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1903	LJS
Carbon Disulfide	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1903	LJS
Methylene Chloride	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 1903	LJS
Acrylonitrile	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 1903	LJS
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1903	LJS
1,1-Dichloroethane	**1.7**	1.0	ug/L	1		03/08/24 0000	03/08/24 1903	LJS
Vinyl Acetate	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 1903	LJS
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1903	LJS
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/08/24 0000	03/08/24 1903	LJS
Bromochloromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1903	LJS
Chloroform	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1903	LJS
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1903	LJS
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1903	LJS
Benzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1903	LJS
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1903	LJS
Trichloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1903	LJS
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1903	LJS
Dibromomethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1903	LJS
Bromodichloromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1903	LJS
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1903	LJS
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 1903	LJS
Toluene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1903	LJS
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1903	LJS
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1903	LJS
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1903	LJS
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 1903	LJS
Dibromochloromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1903	LJS
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1903	LJS
Chlorobenzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1903	LJS
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1903	LJS
Ethylbenzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1903	LJS
Xylenes, total	<2.0	2.0	ug/L	1		03/08/24 0000	03/08/24 1903	LJS
Styrene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1903	LJS
Bromoform	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1903	LJS
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1903	LJS

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CERTIFICATE OF ANALYSIS

1HC0401

Client Sample ID:	MW-56		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC0401-13	**Collection Date:**	03/04/2024 9:09

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		03/08/24 0000	03/08/24 1903	LJS
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1903	LJS
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1903	LJS
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1903	LJS
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 1903	LJS
Surrogate: Dibromofluoromethane	81.5	Limit: 75-136	% Rec	1		03/08/24 0000	03/08/24 1903	LJS
Surrogate: Dibromofluoromethane	81.5	Limit: 80-126	% Rec	1		03/08/24 0000	03/08/24 1903	LJS
Surrogate: 1,2-Dichloroethane-d4	75.4	Limit: 61-142	% Rec	1		03/08/24 0000	03/08/24 1903	LJS
Surrogate: 1,2-Dichloroethane-d4	75.4	Limit: 63-138	% Rec	1		03/08/24 0000	03/08/24 1903	LJS
Surrogate: Toluene-d8	102	Limit: 82-121	% Rec	1		03/08/24 0000	03/08/24 1903	LJS
Surrogate: Toluene-d8	102	Limit: 87-116	% Rec	1		03/08/24 0000	03/08/24 1903	LJS
Surrogate: 4-Bromofluorobenzene	94.2	Limit: 80-116	% Rec	1		03/08/24 0000	03/08/24 1903	LJS
Surrogate: 4-Bromofluorobenzene	94.2	Limit: 85-111	% Rec	1		03/08/24 0000	03/08/24 1903	LJS

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		03/07/24 1046	03/08/24 0355	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0355	RVV
Barium, total	**0.0235**	0.0040	mg/L	4		03/07/24 1046	03/08/24 0355	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0355	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		03/07/24 1046	03/08/24 0355	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/07/24 1046	03/08/24 0355	RVV
Cobalt, total	**0.0006**	0.0004	mg/L	4		03/07/24 1046	03/08/24 0355	RVV
Copper, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0355	RVV
Lead, total	**0.0146**	0.0040	mg/L	4		03/07/24 1046	03/08/24 0355	RVV
Nickel, total	**0.0047**	0.0040	mg/L	4		03/07/24 1046	03/08/24 0355	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0355	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0355	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/07/24 1046	03/08/24 0355	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/07/24 1046	03/08/24 0355	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		03/07/24 1046	03/08/24 0355	RVV

Client Sample ID:	MW-64			
Sample Matrix:	Water		**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC0401-14		**Collection Date:**	03/04/2024 9:27

Determination of Volatile Organic Compounds	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1929	LJS
Vinyl Chloride	**2.7**	1.0	ug/L	1		03/08/24 0000	03/08/24 1929	LJS
Bromomethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1929	LJS
Chloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1929	LJS
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1929	LJS
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1929	LJS
Acetone	<10.0	10.0	ug/L	1		03/08/24 0000	03/08/24 1929	LJS
Methyl Iodide	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1929	LJS
Carbon Disulfide	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1929	LJS
Methylene Chloride	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 1929	LJS
Acrylonitrile	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 1929	LJS
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1929	LJS
1,1-Dichloroethane	**1.5**	1.0	ug/L	1		03/08/24 0000	03/08/24 1929	LJS
Vinyl Acetate	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 1929	LJS
cis-1,2-Dichloroethylene	**2.4**	1.0	ug/L	1		03/08/24 0000	03/08/24 1929	LJS
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/08/24 0000	03/08/24 1929	LJS
Bromochloromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1929	LJS
Chloroform	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1929	LJS
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1929	LJS
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1929	LJS
Benzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1929	LJS
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1929	LJS
Trichloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1929	LJS
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1929	LJS
Dibromomethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1929	LJS
Bromodichloromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1929	LJS
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1929	LJS
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 1929	LJS
Toluene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1929	LJS
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1929	LJS
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1929	LJS
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1929	LJS
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 1929	LJS
Dibromochloromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1929	LJS
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1929	LJS
Chlorobenzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1929	LJS
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1929	LJS
Ethylbenzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1929	LJS
Xylenes, total	<2.0	2.0	ug/L	1		03/08/24 0000	03/08/24 1929	LJS
Styrene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1929	LJS
Bromoform	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1929	LJS
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1929	LJS

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CERTIFICATE OF ANALYSIS

1HC0401

Client Sample ID:	MW-64		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC0401-14	**Collection Date:**	03/04/2024 9:27

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		03/08/24 0000	03/08/24 1929	LJS
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1929	LJS
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1929	LJS
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1929	LJS
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 1929	LJS
Surrogate: Dibromofluoromethane	81.0	Limit: 80-126	% Rec	1		03/08/24 0000	03/08/24 1929	LJS
Surrogate: Dibromofluoromethane	81.0	Limit: 75-136	% Rec	1		03/08/24 0000	03/08/24 1929	LJS
Surrogate: 1,2-Dichloroethane-d4	75.3	Limit: 63-138	% Rec	1		03/08/24 0000	03/08/24 1929	LJS
Surrogate: 1,2-Dichloroethane-d4	75.3	Limit: 61-142	% Rec	1		03/08/24 0000	03/08/24 1929	LJS
Surrogate: Toluene-d8	104	Limit: 87-116	% Rec	1		03/08/24 0000	03/08/24 1929	LJS
Surrogate: Toluene-d8	104	Limit: 82-121	% Rec	1		03/08/24 0000	03/08/24 1929	LJS
Surrogate: 4-Bromofluorobenzene	93.6	Limit: 85-111	% Rec	1		03/08/24 0000	03/08/24 1929	LJS
Surrogate: 4-Bromofluorobenzene	93.6	Limit: 80-116	% Rec	1		03/08/24 0000	03/08/24 1929	LJS

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		03/07/24 1046	03/08/24 0401	RVV
Arsenic, total	**0.0296**	0.0040	mg/L	4		03/07/24 1046	03/08/24 0401	RVV
Barium, total	**0.0685**	0.0040	mg/L	4		03/07/24 1046	03/08/24 0401	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0401	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		03/07/24 1046	03/08/24 0401	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/07/24 1046	03/08/24 0401	RVV
Cobalt, total	**0.0120**	0.0004	mg/L	4		03/07/24 1046	03/08/24 0401	RVV
Copper, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0401	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0401	RVV
Nickel, total	**0.0320**	0.0040	mg/L	4		03/07/24 1046	03/08/24 0401	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0401	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0401	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/07/24 1046	03/08/24 0401	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/07/24 1046	03/08/24 0401	RVV
Zinc, total	**0.0514**	0.0200	mg/L	4		03/07/24 1046	03/08/24 0401	RVV

Client Sample ID:	MW-65		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC0401-15	**Collection Date:**	03/04/2024 8:45

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1955	LJS
Vinyl Chloride	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1955	LJS
Bromomethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1955	LJS
Chloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1955	LJS
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1955	LJS
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1955	LJS
Acetone	<10.0	10.0	ug/L	1		03/08/24 0000	03/08/24 1955	LJS
Methyl Iodide	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1955	LJS
Carbon Disulfide	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1955	LJS
Methylene Chloride	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 1955	LJS
Acrylonitrile	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 1955	LJS
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1955	LJS
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1955	LJS
Vinyl Acetate	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 1955	LJS
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1955	LJS
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/08/24 0000	03/08/24 1955	LJS
Bromochloromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1955	LJS
Chloroform	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1955	LJS
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1955	LJS
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1955	LJS
Benzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1955	LJS
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1955	LJS
Trichloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1955	LJS
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1955	LJS
Dibromomethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1955	LJS
Bromodichloromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1955	LJS
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1955	LJS
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 1955	LJS
Toluene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1955	LJS
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1955	LJS
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1955	LJS
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1955	LJS
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 1955	LJS
Dibromochloromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1955	LJS
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1955	LJS
Chlorobenzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1955	LJS
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1955	LJS
Ethylbenzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1955	LJS
Xylenes, total	<2.0	2.0	ug/L	1		03/08/24 0000	03/08/24 1955	LJS
Styrene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1955	LJS
Bromoform	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1955	LJS
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1955	LJS

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CERTIFICATE OF ANALYSIS

1HC0401

Client Sample ID:	MW-65		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC0401-15	**Collection Date:**	03/04/2024 8:45

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		03/08/24 0000	03/08/24 1955	LJS
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1955	LJS
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1955	LJS
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 1955	LJS
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 1955	LJS
Surrogate: Dibromofluoromethane	77.7	Limit: 80-126	% Rec	1	**S-GC**	03/08/24 0000	03/08/24 1955	LJS
Surrogate: Dibromofluoromethane	77.7	Limit: 75-136	% Rec	1		03/08/24 0000	03/08/24 1955	LJS
Surrogate: 1,2-Dichloroethane-d4	72.6	Limit: 63-138	% Rec	1		03/08/24 0000	03/08/24 1955	LJS
Surrogate: 1,2-Dichloroethane-d4	72.6	Limit: 61-142	% Rec	1		03/08/24 0000	03/08/24 1955	LJS
Surrogate: Toluene-d8	102	Limit: 87-116	% Rec	1		03/08/24 0000	03/08/24 1955	LJS
Surrogate: Toluene-d8	102	Limit: 82-121	% Rec	1		03/08/24 0000	03/08/24 1955	LJS
Surrogate: 4-Bromofluorobenzene	93.0	Limit: 85-111	% Rec	1		03/08/24 0000	03/08/24 1955	LJS
Surrogate: 4-Bromofluorobenzene	93.0	Limit: 80-116	% Rec	1		03/08/24 0000	03/08/24 1955	LJS

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		03/07/24 1046	03/08/24 0407	RVV
Arsenic, total	**0.0067**	0.0040	mg/L	4		03/07/24 1046	03/08/24 0407	RVV
Barium, total	**0.0300**	0.0040	mg/L	4		03/07/24 1046	03/08/24 0407	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0407	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		03/07/24 1046	03/08/24 0407	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/07/24 1046	03/08/24 0407	RVV
Cobalt, total	**0.0092**	0.0004	mg/L	4		03/07/24 1046	03/08/24 0407	RVV
Copper, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0407	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0407	RVV
Nickel, total	**0.0149**	0.0040	mg/L	4		03/07/24 1046	03/08/24 0407	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0407	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0407	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/07/24 1046	03/08/24 0407	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/07/24 1046	03/08/24 0407	RVV
Zinc, total	**0.0215**	0.0200	mg/L	4		03/07/24 1046	03/08/24 0407	RVV

Client Sample ID:	SW-101R		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC0401-16	**Collection Date:**	03/04/2024 10:45

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2022	LJS
Vinyl Chloride	**5.3**	1.0	ug/L	1		03/08/24 0000	03/08/24 2022	LJS
Bromomethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2022	LJS
Chloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2022	LJS
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2022	LJS
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2022	LJS
Acetone	<10.0	10.0	ug/L	1		03/08/24 0000	03/08/24 2022	LJS
Methyl Iodide	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2022	LJS
Carbon Disulfide	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2022	LJS
Methylene Chloride	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 2022	LJS
Acrylonitrile	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 2022	LJS
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2022	LJS
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2022	LJS
Vinyl Acetate	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 2022	LJS
cis-1,2-Dichloroethylene	**4.0**	1.0	ug/L	1		03/08/24 0000	03/08/24 2022	LJS
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/08/24 0000	03/08/24 2022	LJS
Bromochloromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2022	LJS
Chloroform	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2022	LJS
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2022	LJS
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2022	LJS
Benzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2022	LJS
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2022	LJS
Trichloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2022	LJS
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2022	LJS
Dibromomethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2022	LJS
Bromodichloromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2022	LJS
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2022	LJS
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 2022	LJS
Toluene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2022	LJS
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2022	LJS
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2022	LJS
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2022	LJS
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 2022	LJS
Dibromochloromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2022	LJS
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2022	LJS
Chlorobenzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2022	LJS
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2022	LJS
Ethylbenzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2022	LJS
Xylenes, total	<2.0	2.0	ug/L	1		03/08/24 0000	03/08/24 2022	LJS
Styrene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2022	LJS
Bromoform	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2022	LJS
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2022	LJS

Client Sample ID:	SW-101R		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC0401-16	**Collection Date:**	03/04/2024 10:45

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		03/08/24 0000	03/08/24 2022	LJS
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2022	LJS
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2022	LJS
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2022	LJS
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 2022	LJS
Surrogate: Dibromofluoromethane	79.3	Limit: 75-136	% Rec	1		03/08/24 0000	03/08/24 2022	LJS
Surrogate: Dibromofluoromethane	79.3	Limit: 80-126	% Rec	1	**S-GC**	03/08/24 0000	03/08/24 2022	LJS
Surrogate: 1,2-Dichloroethane-d4	73.3	Limit: 61-142	% Rec	1		03/08/24 0000	03/08/24 2022	LJS
Surrogate: 1,2-Dichloroethane-d4	73.3	Limit: 63-138	% Rec	1		03/08/24 0000	03/08/24 2022	LJS
Surrogate: Toluene-d8	103	Limit: 87-116	% Rec	1		03/08/24 0000	03/08/24 2022	LJS
Surrogate: Toluene-d8	103	Limit: 82-121	% Rec	1		03/08/24 0000	03/08/24 2022	LJS
Surrogate: 4-Bromofluorobenzene	93.5	Limit: 80-116	% Rec	1		03/08/24 0000	03/08/24 2022	LJS
Surrogate: 4-Bromofluorobenzene	93.5	Limit: 85-111	% Rec	1		03/08/24 0000	03/08/24 2022	LJS

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		03/07/24 1046	03/08/24 0413	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0413	RVV
Barium, total	**0.240**	0.0040	mg/L	4		03/07/24 1046	03/08/24 0413	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0413	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		03/07/24 1046	03/08/24 0413	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/07/24 1046	03/08/24 0413	RVV
Cobalt, total	**0.0027**	0.0004	mg/L	4		03/07/24 1046	03/08/24 0413	RVV
Copper, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0413	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0413	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0413	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0413	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0413	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/07/24 1046	03/08/24 0413	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/07/24 1046	03/08/24 0413	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		03/07/24 1046	03/08/24 0413	RVV

Client Sample ID:	PECS-1		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC0401-17	**Collection Date:**	03/04/2024 10:25

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2048	LJS
Vinyl Chloride	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2048	LJS
Bromomethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2048	LJS
Chloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2048	LJS
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2048	LJS
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2048	LJS
Acetone	<10.0	10.0	ug/L	1		03/08/24 0000	03/08/24 2048	LJS
Methyl Iodide	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2048	LJS
Carbon Disulfide	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2048	LJS
Methylene Chloride	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 2048	LJS
Acrylonitrile	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 2048	LJS
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2048	LJS
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2048	LJS
Vinyl Acetate	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 2048	LJS
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2048	LJS
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/08/24 0000	03/08/24 2048	LJS
Bromochloromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2048	LJS
Chloroform	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2048	LJS
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2048	LJS
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2048	LJS
Benzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2048	LJS
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2048	LJS
Trichloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2048	LJS
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2048	LJS
Dibromomethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2048	LJS
Bromodichloromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2048	LJS
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2048	LJS
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 2048	LJS
Toluene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2048	LJS
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2048	LJS
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2048	LJS
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2048	LJS
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 2048	LJS
Dibromochloromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2048	LJS
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2048	LJS
Chlorobenzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2048	LJS
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2048	LJS
Ethylbenzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2048	LJS
Xylenes, total	<2.0	2.0	ug/L	1		03/08/24 0000	03/08/24 2048	LJS
Styrene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2048	LJS
Bromoform	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2048	LJS
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2048	LJS

Client Sample ID:	PECS-1		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC0401-17	**Collection Date:**	03/04/2024 10:25

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		03/08/24 0000	03/08/24 2048	LJS
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2048	LJS
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2048	LJS
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2048	LJS
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 2048	LJS
Surrogate: Dibromofluoromethane	78.5	Limit: 75-136	% Rec	1		03/08/24 0000	03/08/24 2048	LJS
Surrogate: Dibromofluoromethane	78.5	Limit: 80-126	% Rec	1	**S-GC**	03/08/24 0000	03/08/24 2048	LJS
Surrogate: 1,2-Dichloroethane-d4	73.4	Limit: 63-138	% Rec	1		03/08/24 0000	03/08/24 2048	LJS
Surrogate: 1,2-Dichloroethane-d4	73.4	Limit: 61-142	% Rec	1		03/08/24 0000	03/08/24 2048	LJS
Surrogate: Toluene-d8	102	Limit: 87-116	% Rec	1		03/08/24 0000	03/08/24 2048	LJS
Surrogate: Toluene-d8	102	Limit: 82-121	% Rec	1		03/08/24 0000	03/08/24 2048	LJS
Surrogate: 4-Bromofluorobenzene	92.7	Limit: 80-116	% Rec	1		03/08/24 0000	03/08/24 2048	LJS
Surrogate: 4-Bromofluorobenzene	92.7	Limit: 85-111	% Rec	1		03/08/24 0000	03/08/24 2048	LJS

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HC0401

Client Sample ID:	SW-102		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC0401-18	**Collection Date:**	03/04/2024 10:33

Determination of Volatile Organic Compounds	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2114	LJS
Vinyl Chloride	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2114	LJS
Bromomethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2114	LJS
Chloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2114	LJS
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2114	LJS
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2114	LJS
Acetone	<10.0	10.0	ug/L	1		03/08/24 0000	03/08/24 2114	LJS
Methyl Iodide	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2114	LJS
Carbon Disulfide	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2114	LJS
Methylene Chloride	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 2114	LJS
Acrylonitrile	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 2114	LJS
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2114	LJS
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2114	LJS
Vinyl Acetate	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 2114	LJS
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2114	LJS
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/08/24 0000	03/08/24 2114	LJS
Bromochloromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2114	LJS
Chloroform	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2114	LJS
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2114	LJS
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2114	LJS
Benzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2114	LJS
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2114	LJS
Trichloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2114	LJS
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2114	LJS
Dibromomethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2114	LJS
Bromodichloromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2114	LJS
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2114	LJS
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 2114	LJS
Toluene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2114	LJS
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2114	LJS
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2114	LJS
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2114	LJS
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 2114	LJS
Dibromochloromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2114	LJS
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2114	LJS
Chlorobenzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2114	LJS
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2114	LJS
Ethylbenzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2114	LJS
Xylenes, total	<2.0	2.0	ug/L	1		03/08/24 0000	03/08/24 2114	LJS
Styrene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2114	LJS
Bromoform	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2114	LJS
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2114	LJS

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HC0401

Client Sample ID:	SW-102		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC0401-18	**Collection Date:**	03/04/2024 10:33

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		03/08/24 0000	03/08/24 2114	LJS
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2114	LJS
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2114	LJS
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2114	LJS
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 2114	LJS
Surrogate: Dibromofluoromethane	82.4	Limit: 75-136	% Rec	1		03/08/24 0000	03/08/24 2114	LJS
Surrogate: Dibromofluoromethane	82.4	Limit: 80-126	% Rec	1		03/08/24 0000	03/08/24 2114	LJS
Surrogate: 1,2-Dichloroethane-d4	77.0	Limit: 63-138	% Rec	1		03/08/24 0000	03/08/24 2114	LJS
Surrogate: 1,2-Dichloroethane-d4	77.0	Limit: 61-142	% Rec	1		03/08/24 0000	03/08/24 2114	LJS
Surrogate: Toluene-d8	103	Limit: 87-116	% Rec	1		03/08/24 0000	03/08/24 2114	LJS
Surrogate: Toluene-d8	103	Limit: 82-121	% Rec	1		03/08/24 0000	03/08/24 2114	LJS
Surrogate: 4-Bromofluorobenzene	91.7	Limit: 80-116	% Rec	1		03/08/24 0000	03/08/24 2114	LJS
Surrogate: 4-Bromofluorobenzene	91.7	Limit: 85-111	% Rec	1		03/08/24 0000	03/08/24 2114	LJS

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		03/07/24 1046	03/08/24 0420	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0420	RVV
Barium, total	**0.134**	0.0040	mg/L	4		03/07/24 1046	03/08/24 0420	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0420	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		03/07/24 1046	03/08/24 0420	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/07/24 1046	03/08/24 0420	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		03/07/24 1046	03/08/24 0420	RVV
Copper, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0420	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0420	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0420	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0420	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0420	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/07/24 1046	03/08/24 0420	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/07/24 1046	03/08/24 0420	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		03/07/24 1046	03/08/24 0420	RVV

Client Sample ID:	SW-103		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC0401-19	**Collection Date:**	03/04/2024 9:00

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2140	LJS
Vinyl Chloride	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2140	LJS
Bromomethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2140	LJS
Chloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2140	LJS
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2140	LJS
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2140	LJS
Acetone	<10.0	10.0	ug/L	1		03/08/24 0000	03/08/24 2140	LJS
Methyl Iodide	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2140	LJS
Carbon Disulfide	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2140	LJS
Methylene Chloride	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 2140	LJS
Acrylonitrile	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 2140	LJS
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2140	LJS
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2140	LJS
Vinyl Acetate	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 2140	LJS
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2140	LJS
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/08/24 0000	03/08/24 2140	LJS
Bromochloromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2140	LJS
Chloroform	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2140	LJS
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2140	LJS
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2140	LJS
Benzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2140	LJS
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2140	LJS
Trichloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2140	LJS
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2140	LJS
Dibromomethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2140	LJS
Bromodichloromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2140	LJS
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2140	LJS
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 2140	LJS
Toluene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2140	LJS
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2140	LJS
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2140	LJS
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2140	LJS
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 2140	LJS
Dibromochloromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2140	LJS
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2140	LJS
Chlorobenzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2140	LJS
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2140	LJS
Ethylbenzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2140	LJS
Xylenes, total	<2.0	2.0	ug/L	1		03/08/24 0000	03/08/24 2140	LJS
Styrene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2140	LJS
Bromoform	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2140	LJS
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2140	LJS

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HC0401

Client Sample ID:	SW-103			
Sample Matrix:	Water		**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC0401-19		**Collection Date:**	03/04/2024 9:00

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		03/08/24 0000	03/08/24 2140	LJS
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2140	LJS
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2140	LJS
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2140	LJS
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 2140	LJS
Surrogate: Dibromofluoromethane	81.8	Limit: 75-136	% Rec	1		03/08/24 0000	03/08/24 2140	LJS
Surrogate: Dibromofluoromethane	81.8	Limit: 80-126	% Rec	1		03/08/24 0000	03/08/24 2140	LJS
Surrogate: 1,2-Dichloroethane-d4	75.2	Limit: 61-142	% Rec	1		03/08/24 0000	03/08/24 2140	LJS
Surrogate: 1,2-Dichloroethane-d4	75.2	Limit: 63-138	% Rec	1		03/08/24 0000	03/08/24 2140	LJS
Surrogate: Toluene-d8	102	Limit: 82-121	% Rec	1		03/08/24 0000	03/08/24 2140	LJS
Surrogate: Toluene-d8	102	Limit: 87-116	% Rec	1		03/08/24 0000	03/08/24 2140	LJS
Surrogate: 4-Bromofluorobenzene	92.5	Limit: 80-116	% Rec	1		03/08/24 0000	03/08/24 2140	LJS
Surrogate: 4-Bromofluorobenzene	92.5	Limit: 85-111	% Rec	1		03/08/24 0000	03/08/24 2140	LJS

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		03/07/24 1046	03/08/24 0426	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0426	RVV
Barium, total	**0.118**	0.0040	mg/L	4		03/07/24 1046	03/08/24 0426	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0426	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		03/07/24 1046	03/08/24 0426	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/07/24 1046	03/08/24 0426	RVV
Cobalt, total	**0.0007**	0.0004	mg/L	4		03/07/24 1046	03/08/24 0426	RVV
Copper, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0426	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0426	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0426	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0426	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0426	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/07/24 1046	03/08/24 0426	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/07/24 1046	03/08/24 0426	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		03/07/24 1046	03/08/24 0426	RVV

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CERTIFICATE OF ANALYSIS

1HC0401

Client Sample ID:	MW-59			
Sample Matrix:	Water		**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC0401-20		**Collection Date:**	03/04/2024 14:28

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2207	LJS
Vinyl Chloride	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2207	LJS
Bromomethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2207	LJS
Chloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2207	LJS
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2207	LJS
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2207	LJS
Acetone	<10.0	10.0	ug/L	1		03/08/24 0000	03/08/24 2207	LJS
Methyl Iodide	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2207	LJS
Carbon Disulfide	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2207	LJS
Methylene Chloride	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 2207	LJS
Acrylonitrile	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 2207	LJS
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2207	LJS
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2207	LJS
Vinyl Acetate	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 2207	LJS
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2207	LJS
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/08/24 0000	03/08/24 2207	LJS
Bromochloromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2207	LJS
Chloroform	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2207	LJS
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2207	LJS
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2207	LJS
Benzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2207	LJS
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2207	LJS
Trichloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2207	LJS
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2207	LJS
Dibromomethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2207	LJS
Bromodichloromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2207	LJS
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2207	LJS
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 2207	LJS
Toluene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2207	LJS
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2207	LJS
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2207	LJS
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2207	LJS
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 2207	LJS
Dibromochloromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2207	LJS
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2207	LJS
Chlorobenzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2207	LJS
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2207	LJS
Ethylbenzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2207	LJS
Xylenes, total	<2.0	2.0	ug/L	1		03/08/24 0000	03/08/24 2207	LJS
Styrene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2207	LJS
Bromoform	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2207	LJS
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2207	LJS

Client Sample ID:	MW-59		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC0401-20	**Collection Date:**	03/04/2024 14:28

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		03/08/24 0000	03/08/24 2207	LJS
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2207	LJS
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2207	LJS
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2207	LJS
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 2207	LJS
Surrogate: Dibromofluoromethane	78.4	Limit: 75-136	% Rec	1		03/08/24 0000	03/08/24 2207	LJS
Surrogate: Dibromofluoromethane	78.4	Limit: 80-126	% Rec	1	**S-GC**	03/08/24 0000	03/08/24 2207	LJS
Surrogate: 1,2-Dichloroethane-d4	73.8	Limit: 61-142	% Rec	1		03/08/24 0000	03/08/24 2207	LJS
Surrogate: 1,2-Dichloroethane-d4	73.8	Limit: 63-138	% Rec	1		03/08/24 0000	03/08/24 2207	LJS
Surrogate: Toluene-d8	102	Limit: 87-116	% Rec	1		03/08/24 0000	03/08/24 2207	LJS
Surrogate: Toluene-d8	102	Limit: 82-121	% Rec	1		03/08/24 0000	03/08/24 2207	LJS
Surrogate: 4-Bromofluorobenzene	91.8	Limit: 80-116	% Rec	1		03/08/24 0000	03/08/24 2207	LJS
Surrogate: 4-Bromofluorobenzene	91.8	Limit: 85-111	% Rec	1		03/08/24 0000	03/08/24 2207	LJS

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		03/07/24 1046	03/08/24 0444	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0444	RVV
Barium, total	**0.0335**	0.0040	mg/L	4		03/07/24 1046	03/08/24 0444	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0444	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		03/07/24 1046	03/08/24 0444	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/07/24 1046	03/08/24 0444	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		03/07/24 1046	03/08/24 0444	RVV
Copper, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0444	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0444	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0444	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0444	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0444	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/07/24 1046	03/08/24 0444	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/07/24 1046	03/08/24 0444	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		03/07/24 1046	03/08/24 0444	RVV

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HC0401

Client Sample ID:	MW-60		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC0401-21	**Collection Date:**	03/04/2024 12:29

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2233	LJS
Vinyl Chloride	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2233	LJS
Bromomethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2233	LJS
Chloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2233	LJS
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2233	LJS
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2233	LJS
Acetone	<10.0	10.0	ug/L	1		03/08/24 0000	03/08/24 2233	LJS
Methyl Iodide	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2233	LJS
Carbon Disulfide	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2233	LJS
Methylene Chloride	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 2233	LJS
Acrylonitrile	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 2233	LJS
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2233	LJS
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2233	LJS
Vinyl Acetate	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 2233	LJS
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2233	LJS
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/08/24 0000	03/08/24 2233	LJS
Bromochloromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2233	LJS
Chloroform	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2233	LJS
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2233	LJS
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2233	LJS
Benzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2233	LJS
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2233	LJS
Trichloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2233	LJS
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2233	LJS
Dibromomethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2233	LJS
Bromodichloromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2233	LJS
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2233	LJS
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 2233	LJS
Toluene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2233	LJS
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2233	LJS
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2233	LJS
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2233	LJS
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 2233	LJS
Dibromochloromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2233	LJS
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2233	LJS
Chlorobenzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2233	LJS
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2233	LJS
Ethylbenzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2233	LJS
Xylenes, total	<2.0	2.0	ug/L	1		03/08/24 0000	03/08/24 2233	LJS
Styrene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2233	LJS
Bromoform	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2233	LJS
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2233	LJS

CERTIFICATE OF ANALYSIS

1HC0401

Client Sample ID:	MW-60		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC0401-21	**Collection Date:**	03/04/2024 12:29

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		03/08/24 0000	03/08/24 2233	LJS
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2233	LJS
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2233	LJS
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2233	LJS
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 2233	LJS
Surrogate: Dibromofluoromethane	81.2	Limit: 75-136	% Rec	1		03/08/24 0000	03/08/24 2233	LJS
Surrogate: Dibromofluoromethane	81.2	Limit: 80-126	% Rec	1		03/08/24 0000	03/08/24 2233	LJS
Surrogate: 1,2-Dichloroethane-d4	76.7	Limit: 63-138	% Rec	1		03/08/24 0000	03/08/24 2233	LJS
Surrogate: 1,2-Dichloroethane-d4	76.7	Limit: 61-142	% Rec	1		03/08/24 0000	03/08/24 2233	LJS
Surrogate: Toluene-d8	103	Limit: 82-121	% Rec	1		03/08/24 0000	03/08/24 2233	LJS
Surrogate: Toluene-d8	103	Limit: 87-116	% Rec	1		03/08/24 0000	03/08/24 2233	LJS
Surrogate: 4-Bromofluorobenzene	92.7	Limit: 85-111	% Rec	1		03/08/24 0000	03/08/24 2233	LJS
Surrogate: 4-Bromofluorobenzene	92.7	Limit: 80-116	% Rec	1		03/08/24 0000	03/08/24 2233	LJS

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		03/07/24 1046	03/08/24 0450	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0450	RVV
Barium, total	**0.192**	0.0040	mg/L	4		03/07/24 1046	03/08/24 0450	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0450	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		03/07/24 1046	03/08/24 0450	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/07/24 1046	03/08/24 0450	RVV
Cobalt, total	**0.0005**	0.0004	mg/L	4		03/07/24 1046	03/08/24 0450	RVV
Copper, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0450	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0450	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0450	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0450	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/07/24 1046	03/08/24 0450	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/07/24 1046	03/08/24 0450	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/07/24 1046	03/08/24 0450	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		03/07/24 1046	03/08/24 0450	RVV

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HC0401

Client Sample ID:	MW-61		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC0401-22	**Collection Date:**	03/04/2024 12:48

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2259	LJS
Vinyl Chloride	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2259	LJS
Bromomethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2259	LJS
Chloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2259	LJS
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2259	LJS
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2259	LJS
Acetone	<10.0	10.0	ug/L	1		03/08/24 0000	03/08/24 2259	LJS
Methyl Iodide	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2259	LJS
Carbon Disulfide	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2259	LJS
Methylene Chloride	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 2259	LJS
Acrylonitrile	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 2259	LJS
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2259	LJS
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2259	LJS
Vinyl Acetate	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 2259	LJS
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2259	LJS
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/08/24 0000	03/08/24 2259	LJS
Bromochloromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2259	LJS
Chloroform	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2259	LJS
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2259	LJS
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2259	LJS
Benzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2259	LJS
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2259	LJS
Trichloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2259	LJS
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2259	LJS
Dibromomethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2259	LJS
Bromodichloromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2259	LJS
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2259	LJS
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 2259	LJS
Toluene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2259	LJS
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2259	LJS
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2259	LJS
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2259	LJS
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 2259	LJS
Dibromochloromethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2259	LJS
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2259	LJS
Chlorobenzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2259	LJS
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2259	LJS
Ethylbenzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2259	LJS
Xylenes, total	<2.0	2.0	ug/L	1		03/08/24 0000	03/08/24 2259	LJS
Styrene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2259	LJS
Bromoform	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2259	LJS
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2259	LJS

Client Sample ID:	MW-61		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC0401-22	**Collection Date:**	03/04/2024 12:48

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		03/08/24 0000	03/08/24 2259	LJS
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2259	LJS
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2259	LJS
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/08/24 0000	03/08/24 2259	LJS
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/08/24 0000	03/08/24 2259	LJS
Surrogate: Dibromofluoromethane	79.8	Limit: 80-126	% Rec	1	**S-GC**	03/08/24 0000	03/08/24 2259	LJS
Surrogate: Dibromofluoromethane	79.8	Limit: 75-136	% Rec	1		03/08/24 0000	03/08/24 2259	LJS
Surrogate: 1,2-Dichloroethane-d4	75.1	Limit: 61-142	% Rec	1		03/08/24 0000	03/08/24 2259	LJS
Surrogate: 1,2-Dichloroethane-d4	75.1	Limit: 63-138	% Rec	1		03/08/24 0000	03/08/24 2259	LJS
Surrogate: Toluene-d8	102	Limit: 82-121	% Rec	1		03/08/24 0000	03/08/24 2259	LJS
Surrogate: Toluene-d8	102	Limit: 87-116	% Rec	1		03/08/24 0000	03/08/24 2259	LJS
Surrogate: 4-Bromofluorobenzene	90.9	Limit: 85-111	% Rec	1		03/08/24 0000	03/08/24 2259	LJS
Surrogate: 4-Bromofluorobenzene	90.9	Limit: 80-116	% Rec	1		03/08/24 0000	03/08/24 2259	LJS

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		03/11/24 0841	03/12/24 0233	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		03/11/24 0841	03/12/24 0233	RVV
Barium, total	**0.0485**	0.0040	mg/L	4		03/11/24 0841	03/12/24 0233	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/11/24 0841	03/12/24 0233	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		03/11/24 0841	03/12/24 0233	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/11/24 0841	03/12/24 0233	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		03/11/24 0841	03/12/24 0233	RVV
Copper, total	<0.0040	0.0040	mg/L	4		03/11/24 0841	03/12/24 0233	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/11/24 0841	03/12/24 0233	RVV
Nickel, total	**0.0048**	0.0040	mg/L	4		03/11/24 0841	03/12/24 0233	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/11/24 0841	03/12/24 0233	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/11/24 0841	03/12/24 0233	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/11/24 0841	03/12/24 0233	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/11/24 0841	03/12/24 0233	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		03/11/24 0841	03/12/24 0233	RVV

CERTIFICATE OF ANALYSIS

1HC0401

Client Sample ID:	Duplicate		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC0401-23	**Collection Date:**	03/04/2024

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		03/11/24 0841	03/12/24 0239	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		03/11/24 0841	03/12/24 0239	RVV
Barium, total	**0.340**	0.0040	mg/L	4		03/11/24 0841	03/12/24 0239	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/11/24 0841	03/12/24 0239	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		03/11/24 0841	03/12/24 0239	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/11/24 0841	03/12/24 0239	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		03/11/24 0841	03/12/24 0239	RVV
Copper, total	<0.0040	0.0040	mg/L	4		03/11/24 0841	03/12/24 0239	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/11/24 0841	03/12/24 0239	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		03/11/24 0841	03/12/24 0239	RVV
Selenium, total	**0.0061**	0.0040	mg/L	4		03/11/24 0841	03/12/24 0239	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/11/24 0841	03/12/24 0239	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/11/24 0841	03/12/24 0239	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/11/24 0841	03/12/24 0239	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		03/11/24 0841	03/12/24 0239	RVV

Batch Log Summary

Method	Batch	Laboratory ID	Client / Source ID
EPA 6020A	1HC0366	1HC0366-BLK1	
		1HC0366-BS1	
		1HC0401-01	MW-48 (B)
		1HC0366-MS1	1HC0401-01
		1HC0366-MSD1	1HC0401-01
		1HC0401-03	MW-78 (B)
		1HC0401-04	MW-62R
		1HC0401-05	MW-79
		1HC0401-06	MW-80
		1HC0401-07	MW-36
		1HC0401-08	MW-41
		1HC0401-09	MW-42
		1HC0401-10	MW-58
		1HC0401-11	MW-44
		1HC0401-12	MW-57
		1HC0401-13	MW-56
		1HC0401-14	MW-64
		1HC0401-15	MW-65
		1HC0401-16	SW-101R
		1HC0401-18	SW-102
		1HC0401-19	SW-103
		1HC0401-20	MW-59
		1HC0401-21	MW-60
		1HC0366-PS1	1HC0401-01
		1HC0401-02	MW-39 (B)

Method	Batch	Laboratory ID	Client / Source ID
EPA 8260B	1HC0445	1HC0445-BS1	
		1HC0445-BSD1	
		1HC0445-BLK1	
		1HC0401-01	MW-48 (B)
		1HC0401-02	MW-39 (B)
		1HC0401-03	MW-78 (B)
		1HC0401-04	MW-62R
		1HC0401-05	MW-79
		1HC0401-06	MW-80
		1HC0401-07	MW-36

Method	Batch	Laboratory ID	Client / Source ID
EPA 8260B	1HC0510	1HC0510-BS1	

Method	Batch	Laboratory ID	Client / Source ID
EPA 8260B	1HC0510	1HC0510-BSD1	
		1HC0510-BLK1	
		1HC0401-08	MW-41
		1HC0401-09	MW-42
		1HC0401-10	MW-58
		1HC0401-11	MW-44
		1HC0401-12	MW-57
		1HC0401-13	MW-56
		1HC0401-14	MW-64
		1HC0401-15	MW-65
		1HC0401-16	SW-101R
		1HC0401-17	PECS-1
		1HC0401-18	SW-102
		1HC0401-19	SW-103
		1HC0401-20	MW-59
		1HC0401-21	MW-60
		1HC0401-22	MW-61
		1HC0510-MS1	1HC0401-08
		1HC0510-MSD1	1HC0401-08
		1HC0510-BS2	
		1HC0510-BSD2	
		1HC0510-BLK2	
		1HC0510-MS2	1HC0401-09
		1HC0510-MSD2	1HC0401-09

Method	Batch	Laboratory ID	Client / Source ID
EPA 6020A	1HC0519	1HC0519-BLK1	
		1HC0519-BS1	
		1HC0401-22	MW-61
		1HC0401-23	Duplicate
		1HC0519-MS1	1HC0404-01
		1HC0519-MSD1	1HC0404-01
		1HC0519-PS1	1HC0404-01

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 1HC0445 - EPA 5030B - EPA 8260B										
Blank (1HC0445-BLK1)			Prepared: 03/07/24 00:00 Analyzed: 03/07/24 11:28							
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							

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0445 - EPA 5030B - EPA 8260B										
Blank (1HC0445-BLK1)			Prepared: 03/07/24 00:00 Analyzed: 03/07/24 11:28							
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							
Acrylonitrile	<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							
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							

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0445 - EPA 5030B - EPA 8260B										
Blank (1HC0445-BLK1)				Prepared: 03/07/24 00:00 Analyzed: 03/07/24 11:28						
Surrogate: Dibromofluoromethane	*50.1*		ug/L	*50.2*		*99.8*	*75-136*			
Surrogate: Dibromofluoromethane	*50.1*		ug/L	*50.2*		*99.8*	*80-126*			
Surrogate: 1,2-Dichloroethane-d4	*47.9*		ug/L	*50.1*		*95.7*	*61-142*			
Surrogate: 1,2-Dichloroethane-d4	*47.9*		ug/L	*50.1*		*95.7*	*63-138*			
Surrogate: Toluene-d8	*48.3*		ug/L	*50.4*		*95.9*	*82-121*			
Surrogate: Toluene-d8	*48.3*		ug/L	*50.4*		*95.9*	*87-116*			
Surrogate: 4-Bromofluorobenzene	*46.5*		ug/L	*50.1*		*92.8*	*80-116*			
Surrogate: 4-Bromofluorobenzene	*46.5*		ug/L	*50.1*		*92.8*	*85-111*			
LCS (1HC0445-BS1)				Prepared: 03/07/24 00:00 Analyzed: 03/07/24 10:20						**QM-17**
Chloromethane	32.66	1.0	ug/L	30.6		107	63-155			
Vinyl Chloride	28.91	1.0	ug/L	30.2		95.6	70-154			
Bromomethane	33.00	1.0	ug/L	28.8		115	52-176			
Chloroethane	31.90	1.0	ug/L	31.6		101	72-148			
Trichlorofluoromethane	30.36	1.0	ug/L	32.6		93.1	70-152			
1,1-Dichloroethylene	49.00	1.0	ug/L	50.0		98.0	70-148			
Acetone	105.3	10.0	ug/L	102		103	43-172			
Methyl Iodide	98.13	1.0	ug/L	99.7		98.4	69-170			
Carbon Disulfide	89.49	1.0	ug/L	101		88.6	72-162			
Methylene Chloride	48.82	5.0	ug/L	50.0		97.6	68-142			
Acrylonitrile	91.15	5.0	ug/L	100		90.8	67-144			
trans-1,2-Dichloroethylene	46.30	1.0	ug/L	50.0		92.6	66-148			
1,1-Dichloroethane	45.66	1.0	ug/L	50.0		91.3	66-143			
Vinyl Acetate	104.2	5.0	ug/L	102		102	43-153			
cis-1,2-Dichloroethylene	64.50	1.0	ug/L	49.5		130	71-149			
2-Butanone (MEK)	112.8	10.0	ug/L	103		109	52-159			
Bromochloromethane	51.87	1.0	ug/L	50.0		104	69-143			
Chloroform	50.61	1.0	ug/L	50.0		101	69-144			
1,1,1-Trichloroethane	44.41	1.0	ug/L	50.0		88.9	62-129			
Carbon Tetrachloride	47.83	1.0	ug/L	50.0		95.7	63-141			
Benzene	46.25	1.0	ug/L	50.0		92.5	71-134			
1,2-Dichloroethane	46.23	1.0	ug/L	50.0		92.5	72-132			
Trichloroethylene	49.25	1.0	ug/L	50.0		98.5	71-135			
1,2-Dichloropropane	44.23	1.0	ug/L	50.0		88.5	69-136			
Dibromomethane	50.43	1.0	ug/L	50.0		101	73-147			
Bromodichloromethane	43.15	1.0	ug/L	50.0		86.3	68-129			
cis-1,3-Dichloropropene	46.90	1.0	ug/L	50.3		93.2	65-134			
4-Methyl-2-pentanone (MIBK)	110.0	5.0	ug/L	101		109	58-147			
Toluene	48.17	1.0	ug/L	50.0		96.3	72-133			
trans-1,3-Dichloropropene	49.51	1.0	ug/L	50.4		98.2	67-130			
1,1,2-Trichloroethane	48.30	1.0	ug/L	50.0		96.6	69-135			
Tetrachloroethylene	46.71	1.0	ug/L	50.0		93.4	69-130			
2-Hexanone (MBK)	95.43	5.0	ug/L	103		92.4	55-144			
Dibromochloromethane	46.55	1.0	ug/L	49.5		94.0	73-127			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0445 - EPA 5030B - EPA 8260B										
LCS (1HC0445-BS1)			Prepared: 03/07/24 00:00 Analyzed: 03/07/24 10:20							**QM-17**
1,2-Dibromoethane	45.77	1.0	ug/L	50.0		91.5	67-132			
Chlorobenzene	46.54	1.0	ug/L	50.0		93.1	72-123			
1,1,1,2-Tetrachloroethane	47.59	1.0	ug/L	50.0		95.2	73-127			
Ethylbenzene	43.70	1.0	ug/L	50.0		87.4	71-127			
Xylenes, total	135.3	2.0	ug/L	150		90.2	74-127			
Styrene	46.05	1.0	ug/L	50.0		92.1	66-126			
Bromoform	49.09	1.0	ug/L	50.0		98.2	68-130			
1,2,3-Trichloropropane	47.59	1.0	ug/L	50.0		95.2	63-136			
trans-1,4-Dichloro-2-butene	85.79	5.0	ug/L	104		82.6	54-134			
1,1,2,2-Tetrachloroethane	46.11	1.0	ug/L	49.8		92.5	61-131			
1,4-Dichlorobenzene	47.27	1.0	ug/L	50.0		94.5	70-129			
1,2-Dichlorobenzene	44.73	1.0	ug/L	50.0		89.5	69-126			
1,2-Dibromo-3-chloropropane	49.64	5.0	ug/L	50.0		99.3	50-143			
Surrogate: Dibromofluoromethane	*51.9*		ug/L	*50.2*		*103*	*75-136*			
Surrogate: Dibromofluoromethane	*51.9*		ug/L	*50.2*		*103*	*80-126*			
Surrogate: 1,2-Dichloroethane-d4	*45.9*		ug/L	*50.1*		*91.7*	*61-142*			
Surrogate: 1,2-Dichloroethane-d4	*45.9*		ug/L	*50.1*		*91.7*	*63-138*			
Surrogate: Toluene-d8	*50.8*		ug/L	*50.4*		*101*	*82-121*			
Surrogate: Toluene-d8	*50.8*		ug/L	*50.4*		*101*	*87-116*			
Surrogate: 4-Bromofluorobenzene	*48.4*		ug/L	*50.1*		*96.5*	*80-116*			
Surrogate: 4-Bromofluorobenzene	*48.4*		ug/L	*50.1*		*96.5*	*85-111*			
LCS Dup (1HC0445-BSD1)			Prepared: 03/07/24 00:00 Analyzed: 03/07/24 10:43							**QM-17**
Chloromethane	31.06	1.0	ug/L	30.6		101	63-155	5.02	24	
Vinyl Chloride	28.28	1.0	ug/L	30.2		93.6	70-154	2.20	25	
Bromomethane	34.79	1.0	ug/L	28.8		121	52-176	5.28	27	
Chloroethane	32.79	1.0	ug/L	31.6		104	72-148	2.75	25	
Trichlorofluoromethane	31.19	1.0	ug/L	32.6		95.6	70-152	2.70	26	
1,1-Dichloroethylene	49.42	1.0	ug/L	50.0		98.8	70-148	0.853	24	
Acetone	94.69	10.0	ug/L	102		92.8	43-172	10.6	30	
Methyl Iodide	104.2	1.0	ug/L	99.7		105	69-170	5.99	30	
Carbon Disulfide	91.09	1.0	ug/L	101		90.2	72-162	1.77	24	
Methylene Chloride	48.06	5.0	ug/L	50.0		96.1	68-142	1.57	21	
Acrylonitrile	91.78	5.0	ug/L	100		91.5	67-144	0.689	24	
trans-1,2-Dichloroethylene	48.78	1.0	ug/L	50.0		97.6	66-148	5.22	27	
1,1-Dichloroethane	47.47	1.0	ug/L	50.0		94.9	66-143	3.89	24	
Vinyl Acetate	104.4	5.0	ug/L	102		102	43-153	0.221	30	
cis-1,2-Dichloroethylene	61.67	1.0	ug/L	49.5		125	71-149	4.49	26	
2-Butanone (MEK)	103.6	10.0	ug/L	103		100	52-159	8.51	27	
Bromochloromethane	48.84	1.0	ug/L	50.0		97.7	69-143	6.02	23	
Chloroform	50.30	1.0	ug/L	50.0		101	69-144	0.614	23	
1,1,1-Trichloroethane	45.19	1.0	ug/L	50.0		90.4	62-129	1.74	24	
Carbon Tetrachloride	47.70	1.0	ug/L	50.0		95.4	63-141	0.272	25	
Benzene	48.85	1.0	ug/L	50.0		97.7	71-134	5.47	24	

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0445 - EPA 5030B - EPA 8260B										
LCS Dup (1HC0445-BSD1)			Prepared: 03/07/24 00:00 Analyzed: 03/07/24 10:43							**QM-17**
1,2-Dichloroethane	48.27	1.0	ug/L	50.0		96.5	72-132	4.32	24	
Trichloroethylene	49.57	1.0	ug/L	50.0		99.1	71-135	0.648	24	
1,2-Dichloropropane	47.15	1.0	ug/L	50.0		94.3	69-136	6.39	24	
Dibromomethane	52.62	1.0	ug/L	50.0		105	73-147	4.25	25	
Bromodichloromethane	45.43	1.0	ug/L	50.0		90.9	68-129	5.15	22	
cis-1,3-Dichloropropene	47.89	1.0	ug/L	50.3		95.2	65-134	2.09	23	
4-Methyl-2-pentanone (MIBK)	101.5	5.0	ug/L	101		100	58-147	8.05	27	
Toluene	49.99	1.0	ug/L	50.0		100	72-133	3.71	24	
trans-1,3-Dichloropropene	47.11	1.0	ug/L	50.4		93.4	67-130	4.97	24	
1,1,2-Trichloroethane	49.53	1.0	ug/L	50.0		99.1	69-135	2.51	23	
Tetrachloroethylene	52.03	1.0	ug/L	50.0		104	69-130	10.8	25	
2-Hexanone (MBK)	99.81	5.0	ug/L	103		96.6	55-144	4.49	25	
Dibromochloromethane	50.02	1.0	ug/L	49.5		101	73-127	7.19	22	
1,2-Dibromoethane	49.39	1.0	ug/L	50.0		98.8	67-132	7.61	24	
Chlorobenzene	48.55	1.0	ug/L	50.0		97.1	72-123	4.23	23	
1,1,1,2-Tetrachloroethane	50.69	1.0	ug/L	50.0		101	73-127	6.31	24	
Ethylbenzene	46.84	1.0	ug/L	50.0		93.7	71-127	6.94	26	
Xylenes, total	140.1	2.0	ug/L	150		93.4	74-127	3.46	25	
Styrene	47.42	1.0	ug/L	50.0		94.8	66-126	2.93	23	
Bromoform	52.85	1.0	ug/L	50.0		106	68-130	7.38	23	
1,2,3-Trichloropropane	50.81	1.0	ug/L	50.0		102	63-136	6.54	24	
trans-1,4-Dichloro-2-butene	89.77	5.0	ug/L	104		86.4	54-134	4.53	27	
1,1,2,2-Tetrachloroethane	47.31	1.0	ug/L	49.8		94.9	61-131	2.57	29	
1,4-Dichlorobenzene	51.07	1.0	ug/L	50.0		102	70-129	7.73	24	
1,2-Dichlorobenzene	48.57	1.0	ug/L	50.0		97.1	69-126	8.23	26	
1,2-Dibromo-3-chloropropane	54.23	5.0	ug/L	50.0		108	50-143	8.84	30	
Surrogate: Dibromofluoromethane	*50.1*		ug/L	*50.2*		*99.8*	*75-136*			
Surrogate: Dibromofluoromethane	*50.1*		ug/L	*50.2*		*99.8*	*80-126*			
Surrogate: 1,2-Dichloroethane-d4	*45.8*		ug/L	*50.1*		*91.5*	*61-142*			
Surrogate: 1,2-Dichloroethane-d4	*45.8*		ug/L	*50.1*		*91.5*	*63-138*			
Surrogate: Toluene-d8	*48.6*		ug/L	*50.4*		*96.5*	*82-121*			
Surrogate: Toluene-d8	*48.6*		ug/L	*50.4*		*96.5*	*87-116*			
Surrogate: 4-Bromofluorobenzene	*46.7*		ug/L	*50.1*		*93.2*	*80-116*			
Surrogate: 4-Bromofluorobenzene	*46.7*		ug/L	*50.1*		*93.2*	*85-111*			
Batch 1HC0510 - EPA 5030B - EPA 8260B										
Blank (1HC0510-BLK1)			Prepared: 03/08/24 00:00 Analyzed: 03/08/24 16:25							
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							

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0510 - EPA 5030B - EPA 8260B										
Blank (1HC0510-BLK1)				Prepared: 03/08/24 00:00 Analyzed: 03/08/24 16:25						
Acetone	81.24	10.0	ug/L							QB-02
Methyl Iodide	<1.0	1.0	ug/L							
Carbon Disulfide	<1.0	1.0	ug/L							
Methylene Chloride	<5.0	5.0	ug/L							
Acrylonitrile	<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							
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	*37.2*		ug/L	*50.2*		*74.2*	*75-136*			*S-GC*

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0510 - EPA 5030B - EPA 8260B										
Blank (1HC0510-BLK1)			Prepared: 03/08/24 00:00 Analyzed: 03/08/24 16:25							
Surrogate: Dibromofluoromethane	*37.2*		ug/L	*50.2*		*74.2*	*80-126*			*S-GC*
Surrogate: 1,2-Dichloroethane-d4	*33.8*		ug/L	*50.1*		*67.5*	*61-142*			
Surrogate: 1,2-Dichloroethane-d4	*33.8*		ug/L	*50.1*		*67.5*	*63-138*			
Surrogate: Toluene-d8	*52.0*		ug/L	*50.4*		*103*	*82-121*			
Surrogate: Toluene-d8	*52.0*		ug/L	*50.4*		*103*	*87-116*			
Surrogate: 4-Bromofluorobenzene	*48.4*		ug/L	*50.1*		*96.6*	*80-116*			
Surrogate: 4-Bromofluorobenzene	*48.4*		ug/L	*50.1*		*96.6*	*85-111*			
Blank (1HC0510-BLK2)			Prepared: 03/08/24 00:00 Analyzed: 03/09/24 04:15							
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	81.15	10.0	ug/L							QB-02
Methyl Iodide	<1.0	1.0	ug/L							
Carbon Disulfide	<1.0	1.0	ug/L							
Methylene Chloride	<5.0	5.0	ug/L							
Acrylonitrile	<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							
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							

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0510 - EPA 5030B - EPA 8260B										
Blank (1HC0510-BLK2)				Prepared: 03/08/24 00:00 Analyzed: 03/09/24 04:15						
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	*35.3*		ug/L	*50.2*		*70.4*	*75-136*			*S-GC*
Surrogate: Dibromofluoromethane	*35.3*		ug/L	*50.2*		*70.4*	*80-126*			*S-GC*
Surrogate: 1,2-Dichloroethane-d4	*33.5*		ug/L	*50.1*		*66.9*	*61-142*			
Surrogate: 1,2-Dichloroethane-d4	*33.5*		ug/L	*50.1*		*66.9*	*63-138*			
Surrogate: Toluene-d8	*51.5*		ug/L	*50.4*		*102*	*82-121*			
Surrogate: Toluene-d8	*51.5*		ug/L	*50.4*		*102*	*87-116*			
Surrogate: 4-Bromofluorobenzene	*46.0*		ug/L	*50.1*		*91.7*	*80-116*			
Surrogate: 4-Bromofluorobenzene	*46.0*		ug/L	*50.1*		*91.7*	*85-111*			
LCS (1HC0510-BS1)				Prepared: 03/08/24 00:00 Analyzed: 03/08/24 15:06						
Chloromethane	33.23	1.0	ug/L	30.6		108	63-155			
Vinyl Chloride	30.61	1.0	ug/L	30.2		101	70-154			
Bromomethane	30.17	1.0	ug/L	28.8		105	52-176			
Chloroethane	34.22	1.0	ug/L	31.6		108	72-148			
Trichlorofluoromethane	32.24	1.0	ug/L	32.6		98.9	70-152			
1,1-Dichloroethylene	55.05	1.0	ug/L	50.0		110	70-148			
Acetone	111.3	10.0	ug/L	102		109	43-172			
Methyl Iodide	111.6	1.0	ug/L	99.7		112	69-170			
Carbon Disulfide	99.86	1.0	ug/L	101		98.9	72-162			
Methylene Chloride	49.51	5.0	ug/L	50.0		99.0	68-142			
Acrylonitrile	82.61	5.0	ug/L	100		82.3	67-144			
trans-1,2-Dichloroethylene	51.83	1.0	ug/L	50.0		104	66-148			
1,1-Dichloroethane	50.53	1.0	ug/L	50.0		101	66-143			
Vinyl Acetate	114.5	5.0	ug/L	102		112	43-153			
cis-1,2-Dichloroethylene	51.62	1.0	ug/L	49.5		104	71-149			
2-Butanone (MEK)	103.9	10.0	ug/L	103		101	52-159			
Bromochloromethane	52.10	1.0	ug/L	50.0		104	69-143			
Chloroform	50.99	1.0	ug/L	50.0		102	69-144			
1,1,1-Trichloroethane	46.85	1.0	ug/L	50.0		93.7	62-129			
Carbon Tetrachloride	49.64	1.0	ug/L	50.0		99.3	63-141			
Benzene	50.69	1.0	ug/L	50.0		101	71-134			
1,2-Dichloroethane	49.04	1.0	ug/L	50.0		98.1	72-132			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0510 - EPA 5030B - EPA 8260B										
LCS (1HC0510-BS1)				Prepared: 03/08/24 00:00 Analyzed: 03/08/24 15:06						
Trichloroethylene	49.07	1.0	ug/L	50.0		98.1	71-135			
1,2-Dichloropropane	49.27	1.0	ug/L	50.0		98.5	69-136			
Dibromomethane	51.22	1.0	ug/L	50.0		102	73-147			
Bromodichloromethane	47.31	1.0	ug/L	50.0		94.6	68-129			
cis-1,3-Dichloropropene	48.59	1.0	ug/L	50.3		96.6	65-134			
4-Methyl-2-pentanone (MIBK)	97.75	5.0	ug/L	101		96.4	58-147			
Toluene	49.42	1.0	ug/L	50.0		98.8	72-133			
trans-1,3-Dichloropropene	47.44	1.0	ug/L	50.4		94.1	67-130			
1,1,2-Trichloroethane	48.55	1.0	ug/L	50.0		97.1	69-135			
Tetrachloroethylene	50.16	1.0	ug/L	50.0		100	69-130			
2-Hexanone (MBK)	100.4	5.0	ug/L	103		97.2	55-144			
Dibromochloromethane	49.30	1.0	ug/L	49.5		99.6	73-127			
1,2-Dibromoethane	49.08	1.0	ug/L	50.0		98.2	67-132			
Chlorobenzene	50.56	1.0	ug/L	50.0		101	72-123			
1,1,1,2-Tetrachloroethane	50.56	1.0	ug/L	50.0		101	73-127			
Ethylbenzene	48.11	1.0	ug/L	50.0		96.2	71-127			
Xylenes, total	144.9	2.0	ug/L	150		96.6	74-127			
Styrene	47.41	1.0	ug/L	50.0		94.8	66-126			
Bromoform	53.13	1.0	ug/L	50.0		106	68-130			
1,2,3-Trichloropropane	48.66	1.0	ug/L	50.0		97.3	63-136			
trans-1,4-Dichloro-2-butene	87.42	5.0	ug/L	104		84.1	54-134			
1,1,2,2-Tetrachloroethane	48.73	1.0	ug/L	49.8		97.8	61-131			
1,4-Dichlorobenzene	48.88	1.0	ug/L	50.0		97.8	70-129			
1,2-Dichlorobenzene	49.22	1.0	ug/L	50.0		98.4	69-126			
1,2-Dibromo-3-chloropropane	49.01	5.0	ug/L	50.0		98.0	50-143			
Surrogate: Dibromofluoromethane	*55.4*		ug/L	*50.2*		*110*	*80-126*			
Surrogate: Dibromofluoromethane	*55.4*		ug/L	*50.2*		*110*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*55.1*		ug/L	*50.1*		*110*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*55.1*		ug/L	*50.1*		*110*	*61-142*			
Surrogate: Toluene-d8	*50.0*		ug/L	*50.4*		*99.1*	*87-116*			
Surrogate: Toluene-d8	*50.0*		ug/L	*50.4*		*99.1*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*51.3*		ug/L	*50.1*		*102*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*51.3*		ug/L	*50.1*		*102*	*80-116*			
LCS (1HC0510-BS2)				Prepared: 03/08/24 00:00 Analyzed: 03/09/24 02:56						
Chloromethane	31.68	1.0	ug/L	30.6		103	63-155			
Vinyl Chloride	28.94	1.0	ug/L	30.2		95.7	70-154			
Bromomethane	28.73	1.0	ug/L	28.8		99.8	52-176			
Chloroethane	32.15	1.0	ug/L	31.6		102	72-148			
Trichlorofluoromethane	29.53	1.0	ug/L	32.6		90.6	70-152			
1,1-Dichloroethylene	51.12	1.0	ug/L	50.0		102	70-148			
Acetone	107.6	10.0	ug/L	102		105	43-172			
Methyl Iodide	105.6	1.0	ug/L	99.7		106	69-170			
Carbon Disulfide	93.31	1.0	ug/L	101		92.4	72-162			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0510 - EPA 5030B - EPA 8260B										
LCS (1HC0510-BS2)				Prepared: 03/08/24 00:00 Analyzed: 03/09/24 02:56						
Methylene Chloride	45.97	5.0	ug/L	50.0		91.9	68-142			
Acrylonitrile	79.34	5.0	ug/L	100		79.1	67-144			
trans-1,2-Dichloroethylene	49.12	1.0	ug/L	50.0		98.2	66-148			
1,1-Dichloroethane	47.89	1.0	ug/L	50.0		95.8	66-143			
Vinyl Acetate	111.8	5.0	ug/L	102		110	43-153			
cis-1,2-Dichloroethylene	47.27	1.0	ug/L	49.5		95.5	71-149			
2-Butanone (MEK)	82.89	10.0	ug/L	103		80.2	52-159			
Bromochloromethane	49.11	1.0	ug/L	50.0		98.2	69-143			
Chloroform	47.92	1.0	ug/L	50.0		95.8	69-144			
1,1,1-Trichloroethane	44.27	1.0	ug/L	50.0		88.6	62-129			
Carbon Tetrachloride	47.24	1.0	ug/L	50.0		94.5	63-141			
Benzene	51.05	1.0	ug/L	50.0		102	71-134			
1,2-Dichloroethane	48.20	1.0	ug/L	50.0		96.4	72-132			
Trichloroethylene	49.37	1.0	ug/L	50.0		98.7	71-135			
1,2-Dichloropropane	49.61	1.0	ug/L	50.0		99.2	69-136			
Dibromomethane	50.26	1.0	ug/L	50.0		101	73-147			
Bromodichloromethane	46.68	1.0	ug/L	50.0		93.4	68-129			
cis-1,3-Dichloropropene	45.22	1.0	ug/L	50.3		89.9	65-134			
4-Methyl-2-pentanone (MIBK)	96.66	5.0	ug/L	101		95.3	58-147			
Toluene	49.59	1.0	ug/L	50.0		99.2	72-133			
trans-1,3-Dichloropropene	43.99	1.0	ug/L	50.4		87.2	67-130			
1,1,2-Trichloroethane	47.06	1.0	ug/L	50.0		94.1	69-135			
Tetrachloroethylene	50.34	1.0	ug/L	50.0		101	69-130			
2-Hexanone (MBK)	101.9	5.0	ug/L	103		98.7	55-144			
Dibromochloromethane	49.23	1.0	ug/L	49.5		99.5	73-127			
1,2-Dibromoethane	48.73	1.0	ug/L	50.0		97.5	67-132			
Chlorobenzene	51.67	1.0	ug/L	50.0		103	72-123			
1,1,1,2-Tetrachloroethane	51.01	1.0	ug/L	50.0		102	73-127			
Ethylbenzene	49.30	1.0	ug/L	50.0		98.6	71-127			
Xylenes, total	148.7	2.0	ug/L	150		99.2	74-127			
Styrene	48.46	1.0	ug/L	50.0		96.9	66-126			
Bromoform	51.96	1.0	ug/L	50.0		104	68-130			
1,2,3-Trichloropropane	49.16	1.0	ug/L	50.0		98.3	63-136			
trans-1,4-Dichloro-2-butene	79.04	5.0	ug/L	104		76.1	54-134			
1,1,2,2-Tetrachloroethane	48.96	1.0	ug/L	49.8		98.2	61-131			
1,4-Dichlorobenzene	48.73	1.0	ug/L	50.0		97.5	70-129			
1,2-Dichlorobenzene	49.17	1.0	ug/L	50.0		98.3	69-126			
1,2-Dibromo-3-chloropropane	45.75	5.0	ug/L	50.0		91.5	50-143			
Surrogate: Dibromofluoromethane	*51.0*		ug/L	*50.2*		*102*	*80-126*			
Surrogate: Dibromofluoromethane	*51.0*		ug/L	*50.2*		*102*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*51.6*		ug/L	*50.1*		*103*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*51.6*		ug/L	*50.1*		*103*	*61-142*			
Surrogate: Toluene-d8	*49.9*		ug/L	*50.4*		*99.0*	*87-116*			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0510 - EPA 5030B - EPA 8260B										
LCS (1HC0510-BS2)				Prepared: 03/08/24 00:00 Analyzed: 03/09/24 02:56						
Surrogate: Toluene-d8	*49.9*		ug/L	*50.4*		*99.0*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*51.7*		ug/L	*50.1*		*103*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*51.7*		ug/L	*50.1*		*103*	*80-116*			
LCS Dup (1HC0510-BSD1)				Prepared: 03/08/24 00:00 Analyzed: 03/08/24 15:32						
Chloromethane	32.15	1.0	ug/L	30.6		105	63-155	3.30	24	
Vinyl Chloride	29.29	1.0	ug/L	30.2		96.9	70-154	4.41	25	
Bromomethane	30.26	1.0	ug/L	28.8		105	52-176	0.298	27	
Chloroethane	33.22	1.0	ug/L	31.6		105	72-148	2.97	25	
Trichlorofluoromethane	30.50	1.0	ug/L	32.6		93.5	70-152	5.55	26	
1,1-Dichloroethylene	51.55	1.0	ug/L	50.0		103	70-148	6.57	24	
Acetone	105.1	10.0	ug/L	102		103	43-172	5.76	30	
Methyl Iodide	108.2	1.0	ug/L	99.7		109	69-170	3.10	30	
Carbon Disulfide	95.46	1.0	ug/L	101		94.5	72-162	4.51	24	
Methylene Chloride	47.91	5.0	ug/L	50.0		95.8	68-142	3.28	21	
Acrylonitrile	79.03	5.0	ug/L	100		78.8	67-144	4.43	24	
trans-1,2-Dichloroethylene	48.52	1.0	ug/L	50.0		97.0	66-148	6.60	27	
1,1-Dichloroethane	47.17	1.0	ug/L	50.0		94.3	66-143	6.88	24	
Vinyl Acetate	113.8	5.0	ug/L	102		112	43-153	0.605	30	
cis-1,2-Dichloroethylene	48.47	1.0	ug/L	49.5		98.0	71-149	6.29	26	
2-Butanone (MEK)	93.68	10.0	ug/L	103		90.7	52-159	10.4	27	
Bromochloromethane	49.63	1.0	ug/L	50.0		99.3	69-143	4.86	23	
Chloroform	47.72	1.0	ug/L	50.0		95.4	69-144	6.63	23	
1,1,1-Trichloroethane	43.89	1.0	ug/L	50.0		87.8	62-129	6.52	24	
Carbon Tetrachloride	46.84	1.0	ug/L	50.0		93.7	63-141	5.80	25	
Benzene	48.94	1.0	ug/L	50.0		97.9	71-134	3.51	24	
1,2-Dichloroethane	46.66	1.0	ug/L	50.0		93.3	72-132	4.97	24	
Trichloroethylene	47.35	1.0	ug/L	50.0		94.7	71-135	3.57	24	
1,2-Dichloropropane	47.68	1.0	ug/L	50.0		95.4	69-136	3.28	24	
Dibromomethane	49.21	1.0	ug/L	50.0		98.4	73-147	4.00	25	
Bromodichloromethane	44.79	1.0	ug/L	50.0		89.6	68-129	5.47	22	
cis-1,3-Dichloropropene	46.85	1.0	ug/L	50.3		93.1	65-134	3.65	23	
4-Methyl-2-pentanone (MIBK)	99.48	5.0	ug/L	101		98.1	58-147	1.75	27	
Toluene	48.69	1.0	ug/L	50.0		97.4	72-133	1.49	24	
trans-1,3-Dichloropropene	46.14	1.0	ug/L	50.4		91.5	67-130	2.78	24	
1,1,2-Trichloroethane	46.79	1.0	ug/L	50.0		93.6	69-135	3.69	23	
Tetrachloroethylene	47.97	1.0	ug/L	50.0		95.9	69-130	4.46	25	
2-Hexanone (MBK)	100.6	5.0	ug/L	103		97.4	55-144	0.189	25	
Dibromochloromethane	47.18	1.0	ug/L	49.5		95.3	73-127	4.39	22	
1,2-Dibromoethane	47.55	1.0	ug/L	50.0		95.1	67-132	3.17	24	
Chlorobenzene	49.41	1.0	ug/L	50.0		98.8	72-123	2.30	23	
1,1,1,2-Tetrachloroethane	48.29	1.0	ug/L	50.0		96.6	73-127	4.59	24	
Ethylbenzene	46.79	1.0	ug/L	50.0		93.6	71-127	2.78	26	

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0510 - EPA 5030B - EPA 8260B										
LCS Dup (1HC0510-BSD1)			Prepared: 03/08/24 00:00 Analyzed: 03/08/24 15:32							
Xylenes, total	141.9	2.0	ug/L	150		94.6	74-127	2.14	25	
Styrene	46.68	1.0	ug/L	50.0		93.4	66-126	1.55	23	
Bromoform	52.18	1.0	ug/L	50.0		104	68-130	1.80	23	
1,2,3-Trichloropropane	47.31	1.0	ug/L	50.0		94.6	63-136	2.81	24	
trans-1,4-Dichloro-2-butene	88.11	5.0	ug/L	104		84.8	54-134	0.786	27	
1,1,2,2-Tetrachloroethane	48.59	1.0	ug/L	49.8		97.5	61-131	0.288	29	
1,4-Dichlorobenzene	48.25	1.0	ug/L	50.0		96.5	70-129	1.30	24	
1,2-Dichlorobenzene	48.83	1.0	ug/L	50.0		97.7	69-126	0.796	26	
1,2-Dibromo-3-chloropropane	49.42	5.0	ug/L	50.0		98.8	50-143	0.833	30	
Surrogate: Dibromofluoromethane	*52.6*		ug/L	*50.2*		*105*	*80-126*			
Surrogate: Dibromofluoromethane	*52.6*		ug/L	*50.2*		*105*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*52.2*		ug/L	*50.1*		*104*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*52.2*		ug/L	*50.1*		*104*	*61-142*			
Surrogate: Toluene-d8	*50.8*		ug/L	*50.4*		*101*	*87-116*			
Surrogate: Toluene-d8	*50.8*		ug/L	*50.4*		*101*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*51.2*		ug/L	*50.1*		*102*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*51.2*		ug/L	*50.1*		*102*	*80-116*			
LCS Dup (1HC0510-BSD2)			Prepared: 03/08/24 00:00 Analyzed: 03/09/24 03:22							
Chloromethane	29.79	1.0	ug/L	30.6		97.2	63-155	6.15	24	
Vinyl Chloride	27.13	1.0	ug/L	30.2		89.8	70-154	6.46	25	
Bromomethane	27.51	1.0	ug/L	28.8		95.5	52-176	4.34	27	
Chloroethane	30.52	1.0	ug/L	31.6		96.5	72-148	5.20	25	
Trichlorofluoromethane	27.62	1.0	ug/L	32.6		84.7	70-152	6.68	26	
1,1-Dichloroethylene	48.48	1.0	ug/L	50.0		97.0	70-148	5.30	24	
Acetone	106.5	10.0	ug/L	102		104	43-172	1.02	30	
Methyl Iodide	100.7	1.0	ug/L	99.7		101	69-170	4.75	30	
Carbon Disulfide	87.36	1.0	ug/L	101		86.5	72-162	6.59	24	
Methylene Chloride	44.88	5.0	ug/L	50.0		89.8	68-142	2.40	21	
Acrylonitrile	78.48	5.0	ug/L	100		78.2	67-144	1.09	24	
trans-1,2-Dichloroethylene	46.66	1.0	ug/L	50.0		93.3	66-148	5.14	27	
1,1-Dichloroethane	45.47	1.0	ug/L	50.0		90.9	66-143	5.18	24	
Vinyl Acetate	108.6	5.0	ug/L	102		107	43-153	2.83	30	
cis-1,2-Dichloroethylene	45.44	1.0	ug/L	49.5		91.8	71-149	3.95	26	
2-Butanone (MEK)	89.39	10.0	ug/L	103		86.5	52-159	7.55	27	
Bromochloromethane	48.32	1.0	ug/L	50.0		96.6	69-143	1.62	23	
Chloroform	46.24	1.0	ug/L	50.0		92.5	69-144	3.57	23	
1,1,1-Trichloroethane	41.91	1.0	ug/L	50.0		83.9	62-129	5.48	24	
Carbon Tetrachloride	44.39	1.0	ug/L	50.0		88.8	63-141	6.22	25	
Benzene	48.24	1.0	ug/L	50.0		96.5	71-134	5.66	24	
1,2-Dichloroethane	46.86	1.0	ug/L	50.0		93.7	72-132	2.82	24	
Trichloroethylene	46.22	1.0	ug/L	50.0		92.4	71-135	6.59	24	
1,2-Dichloropropane	47.42	1.0	ug/L	50.0		94.8	69-136	4.51	24	
Dibromomethane	49.17	1.0	ug/L	50.0		98.3	73-147	2.19	25	

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0510 - EPA 5030B - EPA 8260B										
LCS Dup (1HC0510-BSD2)			Prepared: 03/08/24 00:00 Analyzed: 03/09/24 03:22							
Bromodichloromethane	44.83	1.0	ug/L	50.0		89.7	68-129	4.04	22	
cis-1,3-Dichloropropene	44.26	1.0	ug/L	50.3		87.9	65-134	2.15	23	
4-Methyl-2-pentanone (MIBK)	96.05	5.0	ug/L	101		94.7	58-147	0.633	27	
Toluene	46.92	1.0	ug/L	50.0		93.8	72-133	5.53	24	
trans-1,3-Dichloropropene	43.10	1.0	ug/L	50.4		85.5	67-130	2.04	24	
1,1,2-Trichloroethane	46.23	1.0	ug/L	50.0		92.5	69-135	1.78	23	
Tetrachloroethylene	46.82	1.0	ug/L	50.0		93.6	69-130	7.25	25	
2-Hexanone (MBK)	100.8	5.0	ug/L	103		97.5	55-144	1.16	25	
Dibromochloromethane	47.34	1.0	ug/L	49.5		95.6	73-127	3.91	22	
1,2-Dibromoethane	48.09	1.0	ug/L	50.0		96.2	67-132	1.32	24	
Chlorobenzene	48.82	1.0	ug/L	50.0		97.6	72-123	5.67	23	
1,1,1,2-Tetrachloroethane	48.78	1.0	ug/L	50.0		97.6	73-127	4.47	24	
Ethylbenzene	46.26	1.0	ug/L	50.0		92.5	71-127	6.36	26	
Xylenes, total	140.1	2.0	ug/L	150		93.4	74-127	5.98	25	
Styrene	46.52	1.0	ug/L	50.0		93.0	66-126	4.09	23	
Bromoform	50.90	1.0	ug/L	50.0		102	68-130	2.06	23	
1,2,3-Trichloropropane	48.17	1.0	ug/L	50.0		96.3	63-136	2.03	24	
trans-1,4-Dichloro-2-butene	79.37	5.0	ug/L	104		76.4	54-134	0.417	27	
1,1,2,2-Tetrachloroethane	48.47	1.0	ug/L	49.8		97.2	61-131	1.01	29	
1,4-Dichlorobenzene	46.94	1.0	ug/L	50.0		93.9	70-129	3.74	24	
1,2-Dichlorobenzene	47.39	1.0	ug/L	50.0		94.8	69-126	3.69	26	
1,2-Dibromo-3-chloropropane	45.50	5.0	ug/L	50.0		91.0	50-143	0.548	30	
Surrogate: Dibromofluoromethane	*50.5*		ug/L	*50.2*		*101*	*80-126*			
Surrogate: Dibromofluoromethane	*50.5*		ug/L	*50.2*		*101*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*52.4*		ug/L	*50.1*		*105*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*52.4*		ug/L	*50.1*		*105*	*61-142*			
Surrogate: Toluene-d8	*49.4*		ug/L	*50.4*		*98.1*	*87-116*			
Surrogate: Toluene-d8	*49.4*		ug/L	*50.4*		*98.1*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*51.5*		ug/L	*50.1*		*103*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*51.5*		ug/L	*50.1*		*103*	*80-116*			
Matrix Spike (1HC0510-MS1)	**Source: 1HC0401-08**		Prepared: 03/08/24 00:00 Analyzed: 03/09/24 02:04							
Chloromethane	316.8	10.0	ug/L	306	ND	103	61-152			
Vinyl Chloride	295.5	10.0	ug/L	302	ND	97.8	66-149			
Bromomethane	281.8	10.0	ug/L	288	ND	97.8	43-171			
Chloroethane	326.0	10.0	ug/L	316	ND	103	69-148			
Trichlorofluoromethane	304.3	10.0	ug/L	326	ND	93.3	62-163			
1,1-Dichloroethylene	522.9	10.0	ug/L	500	ND	105	70-148			
Acetone	1050	100	ug/L	1020	ND	103	45-173			
Methyl Iodide	1065	10.0	ug/L	997	ND	107	62-167			
Carbon Disulfide	963.1	10.0	ug/L	1010	ND	95.4	71-163			
Methylene Chloride	461.6	50.0	ug/L	500	ND	92.3	69-140			
Acrylonitrile	773.0	50.0	ug/L	1000	ND	77.0	58-151			
trans-1,2-Dichloroethylene	499.2	10.0	ug/L	500	ND	99.8	69-144			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0510 - EPA 5030B - EPA 8260B										
Matrix Spike (1HC0510-MS1)	**Source: 1HC0401-08**		Prepared: 03/08/24 00:00 Analyzed: 03/09/24 02:04							
1,1-Dichloroethane	495.2	10.0	ug/L	500	18.96	95.2	70-138			
Vinyl Acetate	1152	50.0	ug/L	1020	ND	113	58-142			
cis-1,2-Dichloroethylene	477.4	10.0	ug/L	495	ND	96.5	68-151			
2-Butanone (MEK)	922.0	100	ug/L	1030	ND	89.3	50-160			
Bromochloromethane	486.5	10.0	ug/L	500	ND	97.3	65-143			
Chloroform	484.6	10.0	ug/L	500	ND	96.9	71-143			
1,1,1-Trichloroethane	455.0	10.0	ug/L	500	ND	91.0	63-133			
Carbon Tetrachloride	483.5	10.0	ug/L	500	ND	96.7	63-142			
Benzene	513.7	10.0	ug/L	500	ND	103	69-133			
1,2-Dichloroethane	480.9	10.0	ug/L	500	ND	96.2	63-138			
Trichloroethylene	497.9	10.0	ug/L	500	ND	99.6	71-133			
1,2-Dichloropropane	490.5	10.0	ug/L	500	ND	98.1	69-132			
Dibromomethane	504.2	10.0	ug/L	500	ND	101	70-147			
Bromodichloromethane	466.5	10.0	ug/L	500	ND	93.3	67-130			
cis-1,3-Dichloropropene	449.2	10.0	ug/L	503	ND	89.3	61-126			
4-Methyl-2-pentanone (MIBK)	936.3	50.0	ug/L	1010	ND	92.3	55-147			
Toluene	498.6	10.0	ug/L	500	ND	99.7	71-133			
trans-1,3-Dichloropropene	432.7	10.0	ug/L	504	ND	85.8	63-124			
1,1,2-Trichloroethane	471.8	10.0	ug/L	500	ND	94.4	69-133			
Tetrachloroethylene	510.9	10.0	ug/L	500	ND	102	70-124			
2-Hexanone (MBK)	976.2	50.0	ug/L	1030	ND	94.5	53-141			
Dibromochloromethane	487.3	10.0	ug/L	495	ND	98.4	74-122			
1,2-Dibromoethane	473.9	10.0	ug/L	500	ND	94.8	66-127			
Chlorobenzene	508.6	10.0	ug/L	500	ND	102	76-116			
1,1,1,2-Tetrachloroethane	508.3	10.0	ug/L	500	ND	102	77-121			
Ethylbenzene	490.5	10.0	ug/L	500	ND	98.1	73-124			
Xylenes, total	1473	20.0	ug/L	1500	ND	98.2	75-123			
Styrene	479.1	10.0	ug/L	500	ND	95.8	70-120			
Bromoform	512.7	10.0	ug/L	500	ND	103	70-124			
1,2,3-Trichloropropane	484.4	10.0	ug/L	500	ND	96.9	62-135			
trans-1,4-Dichloro-2-butene	795.4	50.0	ug/L	1040	ND	76.6	50-120			
1,1,2,2-Tetrachloroethane	479.9	10.0	ug/L	498	ND	96.3	63-126			
1,4-Dichlorobenzene	480.5	10.0	ug/L	500	ND	96.1	72-119			
1,2-Dichlorobenzene	485.4	10.0	ug/L	500	ND	97.1	71-117			
1,2-Dibromo-3-chloropropane	452.6	50.0	ug/L	500	ND	90.5	49-134			
Surrogate: Dibromofluoromethane	*524*		ug/L	*502*		*104*	*80-126*			
Surrogate: Dibromofluoromethane	*524*		ug/L	*502*		*104*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*525*		ug/L	*501*		*105*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*525*		ug/L	*501*		*105*	*61-142*			
Surrogate: Toluene-d8	*503*		ug/L	*504*		*99.8*	*87-116*			
Surrogate: Toluene-d8	*503*		ug/L	*504*		*99.8*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*510*		ug/L	*501*		*102*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*510*		ug/L	*501*		*102*	*80-116*			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0510 - EPA 5030B - EPA 8260B										
Matrix Spike (1HC0510-MS2)	**Source: 1HC0401-09**	Prepared: 03/08/24 00:00 Analyzed: 03/09/24 07:46								
Chloromethane	276.6	10.0	ug/L	306	ND	90.3	61-152			
Vinyl Chloride	277.3	10.0	ug/L	302	ND	91.7	66-149			
Bromomethane	257.7	10.0	ug/L	288	ND	89.5	43-171			
Chloroethane	274.1	10.0	ug/L	316	ND	86.6	69-148			
Trichlorofluoromethane	262.5	10.0	ug/L	326	ND	80.5	62-163			
1,1-Dichloroethylene	452.7	10.0	ug/L	500	ND	90.5	70-148			
Acetone	984.1	100	ug/L	1020	ND	96.5	45-173			
Methyl Iodide	926.1	10.0	ug/L	997	ND	92.9	62-167			
Carbon Disulfide	927.5	10.0	ug/L	1010	ND	91.8	71-163			
Methylene Chloride	435.1	50.0	ug/L	500	ND	87.0	69-140			
Acrylonitrile	433.7	50.0	ug/L	1000	ND	43.2	58-151			QM-05
trans-1,2-Dichloroethylene	459.6	10.0	ug/L	500	ND	91.9	69-144			
1,1-Dichloroethane	457.3	10.0	ug/L	500	ND	91.5	70-138			
Vinyl Acetate	1241	50.0	ug/L	1020	ND	122	58-142			
cis-1,2-Dichloroethylene	424.2	10.0	ug/L	495	ND	85.7	68-151			
2-Butanone (MEK)	855.1	100	ug/L	1030	ND	82.8	50-160			
Bromochloromethane	434.6	10.0	ug/L	500	ND	86.9	65-143			
Chloroform	451.4	10.0	ug/L	500	ND	90.3	71-143			
1,1,1-Trichloroethane	464.1	10.0	ug/L	500	ND	92.9	63-133			
Carbon Tetrachloride	461.9	10.0	ug/L	500	ND	92.4	63-142			
Benzene	505.4	10.0	ug/L	500	ND	101	69-133			
1,2-Dichloroethane	469.7	10.0	ug/L	500	ND	93.9	63-138			
Trichloroethylene	494.1	10.0	ug/L	500	ND	98.8	71-133			
1,2-Dichloropropane	481.2	10.0	ug/L	500	ND	96.2	69-132			
Dibromomethane	459.3	10.0	ug/L	500	ND	91.9	70-147			
Bromodichloromethane	474.5	10.0	ug/L	500	ND	94.9	67-130			
cis-1,3-Dichloropropene	434.2	10.0	ug/L	503	ND	86.3	61-126			
4-Methyl-2-pentanone (MIBK)	877.4	50.0	ug/L	1010	ND	86.5	55-147			
Toluene	498.7	10.0	ug/L	500	ND	99.7	71-133			
trans-1,3-Dichloropropene	419.5	10.0	ug/L	504	ND	83.2	63-124			
1,1,2-Trichloroethane	466.5	10.0	ug/L	500	ND	93.3	69-133			
Tetrachloroethylene	513.8	10.0	ug/L	500	ND	103	70-124			
2-Hexanone (MBK)	901.4	50.0	ug/L	1030	ND	87.3	53-141			
Dibromochloromethane	473.7	10.0	ug/L	495	ND	95.7	74-122			
1,2-Dibromoethane	464.9	10.0	ug/L	500	ND	93.0	66-127			
Chlorobenzene	521.3	10.0	ug/L	500	ND	104	76-116			
1,1,1,2-Tetrachloroethane	495.7	10.0	ug/L	500	ND	99.1	77-121			
Ethylbenzene	505.0	10.0	ug/L	500	ND	101	73-124			
Xylenes, total	1510	20.0	ug/L	1500	ND	101	75-123			
Styrene	496.4	10.0	ug/L	500	ND	99.3	70-120			
Bromoform	490.0	10.0	ug/L	500	ND	98.0	70-124			
1,2,3-Trichloropropane	471.0	10.0	ug/L	500	ND	94.2	62-135			
trans-1,4-Dichloro-2-butene	787.7	50.0	ug/L	1040	ND	75.8	50-120			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0510 - EPA 5030B - EPA 8260B										
Matrix Spike (1HC0510-MS2)	**Source: 1HC0401-09**	Prepared: 03/08/24 00:00 Analyzed: 03/09/24 07:46								
1,1,2,2-Tetrachloroethane	479.1	10.0	ug/L	498	ND	96.1	63-126			
1,4-Dichlorobenzene	473.4	10.0	ug/L	500	ND	94.7	72-119			
1,2-Dichlorobenzene	487.7	10.0	ug/L	500	ND	97.5	71-117			
1,2-Dibromo-3-chloropropane	439.4	50.0	ug/L	500	ND	87.9	49-134			
Surrogate: Dibromofluoromethane	*484*		ug/L	*502*		*96.5*	*75-136*			
Surrogate: Dibromofluoromethane	*484*		ug/L	*502*		*96.5*	*80-126*			
Surrogate: 1,2-Dichloroethane-d4	*499*		ug/L	*501*		*99.7*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*499*		ug/L	*501*		*99.7*	*61-142*			
Surrogate: Toluene-d8	*497*		ug/L	*504*		*98.6*	*87-116*			
Surrogate: Toluene-d8	*497*		ug/L	*504*		*98.6*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*508*		ug/L	*501*		*101*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*508*		ug/L	*501*		*101*	*80-116*			
Matrix Spike Dup (1HC0510-MSD1)	**Source: 1HC0401-08**	Prepared: 03/08/24 00:00 Analyzed: 03/09/24 02:30								
Chloromethane	304.3	10.0	ug/L	306	ND	99.3	61-152	4.03	26	
Vinyl Chloride	284.1	10.0	ug/L	302	ND	94.0	66-149	3.93	23	
Bromomethane	277.7	10.0	ug/L	288	ND	96.4	43-171	1.47	29	
Chloroethane	313.9	10.0	ug/L	316	ND	99.2	69-148	3.78	25	
Trichlorofluoromethane	297.6	10.0	ug/L	326	ND	91.3	62-163	2.23	25	
1,1-Dichloroethylene	515.3	10.0	ug/L	500	ND	103	70-148	1.46	22	
Acetone	1096	100	ug/L	1020	ND	107	45-173	4.28	30	
Methyl Iodide	1029	10.0	ug/L	997	ND	103	62-167	3.47	24	
Carbon Disulfide	930.3	10.0	ug/L	1010	ND	92.1	71-163	3.46	22	
Methylene Chloride	456.8	50.0	ug/L	500	ND	91.4	69-140	1.05	19	
Acrylonitrile	812.2	50.0	ug/L	1000	ND	80.9	58-151	4.95	15	
trans-1,2-Dichloroethylene	495.7	10.0	ug/L	500	ND	99.1	69-144	0.704	22	
1,1-Dichloroethane	494.8	10.0	ug/L	500	18.96	95.2	70-138	0.0808	20	
Vinyl Acetate	1124	50.0	ug/L	1020	ND	110	58-142	2.49	24	
cis-1,2-Dichloroethylene	479.7	10.0	ug/L	495	ND	97.0	68-151	0.481	22	
2-Butanone (MEK)	987.4	100	ug/L	1030	ND	95.6	50-160	6.85	23	
Bromochloromethane	496.2	10.0	ug/L	500	ND	99.2	65-143	1.97	22	
Chloroform	486.8	10.0	ug/L	500	ND	97.4	71-143	0.453	21	
1,1,1-Trichloroethane	447.7	10.0	ug/L	500	ND	89.6	63-133	1.62	23	
Carbon Tetrachloride	477.0	10.0	ug/L	500	ND	95.4	63-142	1.35	22	
Benzene	499.8	10.0	ug/L	500	ND	100	69-133	2.74	18	
1,2-Dichloroethane	487.5	10.0	ug/L	500	ND	97.5	63-138	1.36	20	
Trichloroethylene	482.8	10.0	ug/L	500	ND	96.6	71-133	3.08	23	
1,2-Dichloropropane	487.4	10.0	ug/L	500	ND	97.5	69-132	0.634	20	
Dibromomethane	508.0	10.0	ug/L	500	ND	102	70-147	0.751	22	
Bromodichloromethane	467.6	10.0	ug/L	500	ND	93.5	67-130	0.236	21	
cis-1,3-Dichloropropene	452.5	10.0	ug/L	503	ND	89.9	61-126	0.732	21	
4-Methyl-2-pentanone (MIBK)	972.7	50.0	ug/L	1010	ND	95.9	55-147	3.81	23	
Toluene	483.7	10.0	ug/L	500	ND	96.7	71-133	3.03	19	
trans-1,3-Dichloropropene	440.7	10.0	ug/L	504	ND	87.4	63-124	1.83	21	

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0510 - EPA 5030B - EPA 8260B										
Matrix Spike Dup (1HC0510-MSD1)	**Source: 1HC0401-08**	Prepared: 03/08/24 00:00 Analyzed: 03/09/24 02:30								
1,1,2-Trichloroethane	479.4	10.0	ug/L	500	ND	95.9	69-133	1.60	19	
Tetrachloroethylene	498.0	10.0	ug/L	500	ND	99.6	70-124	2.56	24	
2-Hexanone (MBK)	1022	50.0	ug/L	1030	ND	98.9	53-141	4.57	24	
Dibromochloromethane	494.4	10.0	ug/L	495	ND	99.9	74-122	1.45	21	
1,2-Dibromoethane	487.4	10.0	ug/L	500	ND	97.5	66-127	2.81	23	
Chlorobenzene	501.5	10.0	ug/L	500	ND	100	76-116	1.41	21	
1,1,1,2-Tetrachloroethane	505.5	10.0	ug/L	500	ND	101	77-121	0.552	25	
Ethylbenzene	479.3	10.0	ug/L	500	ND	95.9	73-124	2.31	20	
Xylenes, total	1440	20.0	ug/L	1500	ND	96.0	75-123	2.27	20	
Styrene	472.1	10.0	ug/L	500	ND	94.4	70-120	1.47	23	
Bromoform	522.6	10.0	ug/L	500	ND	105	70-124	1.91	22	
1,2,3-Trichloropropane	491.3	10.0	ug/L	500	ND	98.3	62-135	1.41	28	
trans-1,4-Dichloro-2-butene	815.5	50.0	ug/L	1040	ND	78.5	50-120	2.50	26	
1,1,2,2-Tetrachloroethane	487.6	10.0	ug/L	498	ND	97.8	63-126	1.59	24	
1,4-Dichlorobenzene	477.4	10.0	ug/L	500	ND	95.5	72-119	0.647	24	
1,2-Dichlorobenzene	480.9	10.0	ug/L	500	ND	96.2	71-117	0.931	24	
1,2-Dibromo-3-chloropropane	463.5	50.0	ug/L	500	ND	92.7	49-134	2.38	28	
Surrogate: Dibromofluoromethane	*529*		ug/L	*502*		*105*	*80-126*			
Surrogate: Dibromofluoromethane	*529*		ug/L	*502*		*105*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*544*		ug/L	*501*		*109*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*544*		ug/L	*501*		*109*	*61-142*			
Surrogate: Toluene-d8	*495*		ug/L	*504*		*98.2*	*87-116*			
Surrogate: Toluene-d8	*495*		ug/L	*504*		*98.2*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*512*		ug/L	*501*		*102*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*512*		ug/L	*501*		*102*	*80-116*			
Matrix Spike Dup (1HC0510-MSD2)	**Source: 1HC0401-09**	Prepared: 03/08/24 00:00 Analyzed: 03/09/24 08:12								
Chloromethane	264.5	10.0	ug/L	306	ND	86.3	61-152	4.47	26	
Vinyl Chloride	263.5	10.0	ug/L	302	ND	87.2	66-149	5.10	23	
Bromomethane	255.6	10.0	ug/L	288	ND	88.8	43-171	0.818	29	
Chloroethane	263.2	10.0	ug/L	316	ND	83.2	69-148	4.06	25	
Trichlorofluoromethane	251.4	10.0	ug/L	326	ND	77.1	62-163	4.32	25	
1,1-Dichloroethylene	435.9	10.0	ug/L	500	ND	87.2	70-148	3.78	22	
Acetone	988.7	100	ug/L	1020	ND	96.9	45-173	0.466	30	
Methyl Iodide	884.2	10.0	ug/L	997	ND	88.7	62-167	4.63	24	
Carbon Disulfide	886.5	10.0	ug/L	1010	ND	87.8	71-163	4.52	22	
Methylene Chloride	423.6	50.0	ug/L	500	ND	84.7	69-140	2.68	19	
Acrylonitrile	432.0	50.0	ug/L	1000	ND	43.0	58-151	0.393	15	QM-05
trans-1,2-Dichloroethylene	450.5	10.0	ug/L	500	ND	90.1	69-144	2.00	22	
1,1-Dichloroethane	444.2	10.0	ug/L	500	ND	88.8	70-138	2.91	20	
Vinyl Acetate	1301	50.0	ug/L	1020	ND	128	58-142	4.73	24	
cis-1,2-Dichloroethylene	417.5	10.0	ug/L	495	ND	84.4	68-151	1.59	22	
2-Butanone (MEK)	796.8	100	ug/L	1030	ND	77.1	50-160	7.06	23	
Bromochloromethane	433.1	10.0	ug/L	500	ND	86.6	65-143	0.346	22	

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0510 - EPA 5030B - EPA 8260B										
Matrix Spike Dup (1HC0510-MSD2)	**Source: 1HC0401-09**		Prepared: 03/08/24 00:00 Analyzed: 03/09/24 08:12							
Chloroform	440.9	10.0	ug/L	500	ND	88.2	71-143	2.35	21	
1,1,1-Trichloroethane	450.1	10.0	ug/L	500	ND	90.1	63-133	3.06	23	
Carbon Tetrachloride	445.5	10.0	ug/L	500	ND	89.1	63-142	3.61	22	
Benzene	492.4	10.0	ug/L	500	ND	98.5	69-133	2.61	18	
1,2-Dichloroethane	462.6	10.0	ug/L	500	ND	92.5	63-138	1.52	20	
Trichloroethylene	484.1	10.0	ug/L	500	ND	96.8	71-133	2.04	23	
1,2-Dichloropropane	476.2	10.0	ug/L	500	ND	95.2	69-132	1.04	20	
Dibromomethane	460.9	10.0	ug/L	500	ND	92.2	70-147	0.348	22	
Bromodichloromethane	467.0	10.0	ug/L	500	ND	93.4	67-130	1.59	21	
cis-1,3-Dichloropropene	435.1	10.0	ug/L	503	ND	86.5	61-126	0.207	21	
4-Methyl-2-pentanone (MIBK)	893.8	50.0	ug/L	1010	ND	88.1	55-147	1.85	23	
Toluene	486.2	10.0	ug/L	500	ND	97.2	71-133	2.54	19	
trans-1,3-Dichloropropene	423.2	10.0	ug/L	504	ND	83.9	63-124	0.878	21	
1,1,2-Trichloroethane	462.6	10.0	ug/L	500	ND	92.5	69-133	0.840	19	
Tetrachloroethylene	500.5	10.0	ug/L	500	ND	100	70-124	2.62	24	
2-Hexanone (MBK)	921.3	50.0	ug/L	1030	ND	89.2	53-141	2.18	24	
Dibromochloromethane	470.7	10.0	ug/L	495	ND	95.1	74-122	0.635	21	
1,2-Dibromoethane	467.5	10.0	ug/L	500	ND	93.5	66-127	0.558	23	
Chlorobenzene	513.8	10.0	ug/L	500	ND	103	76-116	1.45	21	
1,1,1,2-Tetrachloroethane	489.4	10.0	ug/L	500	ND	97.9	77-121	1.28	25	
Ethylbenzene	496.4	10.0	ug/L	500	ND	99.3	73-124	1.72	20	
Xylenes, total	1491	20.0	ug/L	1500	ND	99.4	75-123	1.29	20	
Styrene	489.9	10.0	ug/L	500	ND	98.0	70-120	1.32	23	
Bromoform	494.5	10.0	ug/L	500	ND	98.9	70-124	0.914	22	
1,2,3-Trichloropropane	479.7	10.0	ug/L	500	ND	95.9	62-135	1.83	28	
trans-1,4-Dichloro-2-butene	787.9	50.0	ug/L	1040	ND	75.8	50-120	0.0254	26	
1,1,2,2-Tetrachloroethane	489.9	10.0	ug/L	498	ND	98.3	63-126	2.23	24	
1,4-Dichlorobenzene	475.6	10.0	ug/L	500	ND	95.1	72-119	0.464	24	
1,2-Dichlorobenzene	485.8	10.0	ug/L	500	ND	97.2	71-117	0.390	24	
1,2-Dibromo-3-chloropropane	437.6	50.0	ug/L	500	ND	87.5	49-134	0.410	28	
Surrogate: Dibromofluoromethane	*476*		ug/L	*502*		*94.8*	*80-126*			
Surrogate: Dibromofluoromethane	*476*		ug/L	*502*		*94.8*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*496*		ug/L	*501*		*99.0*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*496*		ug/L	*501*		*99.0*	*61-142*			
Surrogate: Toluene-d8	*496*		ug/L	*504*		*98.5*	*87-116*			
Surrogate: Toluene-d8	*496*		ug/L	*504*		*98.5*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*512*		ug/L	*501*		*102*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*512*		ug/L	*501*		*102*	*80-116*			

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0366 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Blank (1HC0366-BLK1)			Prepared: 03/07/24 10:46 Analyzed: 03/08/24 01:46							

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0366 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Blank (1HC0366-BLK1)			Prepared: 03/07/24 10:46 Analyzed: 03/08/24 01:46							
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							
Vanadium, total	<0.0200	0.0200	mg/L							
Zinc, total	<0.0200	0.0200	mg/L							
LCS (1HC0366-BS1)			Prepared: 03/07/24 10:46 Analyzed: 03/08/24 01:52							
Antimony, total	0.0932	0.0020	mg/L	0.100		93.2	80-120			
Arsenic, total	0.0925	0.0040	mg/L	0.100		92.5	80-120			
Barium, total	0.103	0.0040	mg/L	0.100		103	80-120			
Beryllium, total	0.0824	0.0040	mg/L	0.100		82.4	80-120			
Cadmium, total	0.0947	0.0008	mg/L	0.100		94.7	80-120			
Chromium, total	0.0909	0.0080	mg/L	0.100		90.9	80-120			
Cobalt, total	0.0966	0.0004	mg/L	0.100		96.6	80-120			
Copper, total	0.0951	0.0040	mg/L	0.100		95.1	80-120			
Lead, total	0.0965	0.0040	mg/L	0.100		96.5	80-120			
Nickel, total	0.0941	0.0040	mg/L	0.100		94.1	80-120			
Selenium, total	0.0983	0.0040	mg/L	0.100		98.3	80-120			
Silver, total	0.0987	0.0040	mg/L	0.100		98.7	80-120			
Thallium, total	0.0946	0.0020	mg/L	0.100		94.6	80-120			
Vanadium, total	0.0942	0.0200	mg/L	0.100		94.2	80-120			
Zinc, total	0.100	0.0200	mg/L	0.100		100	80-120			
Matrix Spike (1HC0366-MS1)	**Source: 1HC0401-01**		Prepared: 03/07/24 10:46 Analyzed: 03/08/24 02:17							
Antimony, total	0.0927	0.0020	mg/L	0.100	ND	92.7	75-125			
Arsenic, total	0.0944	0.0040	mg/L	0.100	0.0012	93.2	75-125			
Barium, total	0.258	0.0040	mg/L	0.100	0.149	109	75-125			
Beryllium, total	0.0800	0.0040	mg/L	0.100	ND	80.0	75-125			
Cadmium, total	0.0930	0.0008	mg/L	0.100	ND	93.0	75-125			
Chromium, total	0.0905	0.0080	mg/L	0.100	0.0009	89.6	75-125			
Cobalt, total	0.0977	0.0004	mg/L	0.100	ND	97.7	75-125			
Copper, total	0.0911	0.0040	mg/L	0.100	ND	91.1	75-125			
Lead, total	0.0933	0.0040	mg/L	0.100	ND	93.3	75-125			
Nickel, total	0.0945	0.0040	mg/L	0.100	ND	94.5	75-125			
Selenium, total	0.0954	0.0040	mg/L	0.100	ND	95.4	75-125			

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0366 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Matrix Spike (1HC0366-MS1)	**Source: 1HC0401-01**	Prepared: 03/07/24 10:46 Analyzed: 03/08/24 02:17								
Silver, total	0.0979	0.0040	mg/L	0.100	ND	97.9	75-125			
Thallium, total	0.0917	0.0020	mg/L	0.100	0.0007	91.0	75-125			
Vanadium, total	0.0957	0.0200	mg/L	0.100	ND	95.7	75-125			
Zinc, total	0.0978	0.0200	mg/L	0.100	ND	97.8	75-125			
Matrix Spike Dup (1HC0366-MSD1)	**Source: 1HC0401-01**	Prepared: 03/07/24 10:46 Analyzed: 03/08/24 02:23								
Antimony, total	0.0946	0.0020	mg/L	0.100	ND	94.6	75-125	1.97	20	
Arsenic, total	0.0955	0.0040	mg/L	0.100	0.0012	94.4	75-125	1.21	20	
Barium, total	0.263	0.0040	mg/L	0.100	0.149	114	75-125	1.95	20	
Beryllium, total	0.0813	0.0040	mg/L	0.100	ND	81.3	75-125	1.59	20	
Cadmium, total	0.0940	0.0008	mg/L	0.100	ND	94.0	75-125	1.07	20	
Chromium, total	0.0919	0.0080	mg/L	0.100	0.0009	91.1	75-125	1.61	20	
Cobalt, total	0.0985	0.0004	mg/L	0.100	ND	98.5	75-125	0.822	20	
Copper, total	0.0929	0.0040	mg/L	0.100	ND	92.9	75-125	1.91	20	
Lead, total	0.0946	0.0040	mg/L	0.100	ND	94.6	75-125	1.45	20	
Nickel, total	0.0953	0.0040	mg/L	0.100	ND	95.3	75-125	0.779	20	
Selenium, total	0.0999	0.0040	mg/L	0.100	ND	99.9	75-125	4.68	20	
Silver, total	0.0989	0.0040	mg/L	0.100	ND	98.9	75-125	1.06	20	
Thallium, total	0.0942	0.0020	mg/L	0.100	0.0007	93.5	75-125	2.65	20	
Vanadium, total	0.0969	0.0200	mg/L	0.100	ND	96.9	75-125	1.23	20	
Zinc, total	0.0984	0.0200	mg/L	0.100	ND	98.4	75-125	0.645	20	
Post Spike (1HC0366-PS1)	**Source: 1HC0401-01**	Prepared: 03/07/24 10:46 Analyzed: 03/08/24 11:31								
Antimony, total	0.0780		mg/L	0.0800	0.00008	97.3	80-120			
Arsenic, total	0.0778		mg/L	0.0800	0.0011	95.8	80-120			
Barium, total	0.236		mg/L	0.0800	0.146	113	80-120			
Beryllium, total	0.0760		mg/L	0.0800	0.00001	95.0	80-120			
Cadmium, total	0.0769		mg/L	0.0800	0.00004	96.0	80-120			
Chromium, total	0.0775		mg/L	0.0800	0.0008	95.8	80-120			
Cobalt, total	0.0787		mg/L	0.0800	0.00002	98.3	80-120			
Copper, total	0.0746		mg/L	0.0800	0.0009	92.1	80-120			
Lead, total	0.0762		mg/L	0.0800	0.0001	95.2	80-120			
Nickel, total	0.0775		mg/L	0.0800	0.0006	96.1	80-120			
Selenium, total	0.0758		mg/L	0.0800	0.0005	94.1	80-120			
Silver, total	0.0803		mg/L	0.0800	0.0002	100	80-120			
Thallium, total	0.0749		mg/L	0.0800	0.0007	92.8	80-120			
Vanadium, total	0.0813		mg/L	0.0800	0.0047	95.6	80-120			
Zinc, total	0.0764		mg/L	0.0800	0.0036	91.1	80-120			
Batch 1HC0519 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Blank (1HC0519-BLK1)		Prepared: 03/11/24 08:41 Analyzed: 03/12/24 02:20								
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							

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0519 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Blank (1HC0519-BLK1)			Prepared: 03/11/24 08:41 Analyzed: 03/12/24 02:20							
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							
Vanadium, total	<0.0200	0.0200	mg/L							
Zinc, total	<0.0200	0.0200	mg/L							
LCS (1HC0519-BS1)			Prepared: 03/11/24 08:41 Analyzed: 03/12/24 02:27							
Antimony, total	0.0944	0.0020	mg/L	0.100		94.4	80-120			
Arsenic, total	0.0932	0.0040	mg/L	0.100		93.2	80-120			
Barium, total	0.102	0.0040	mg/L	0.100		102	80-120			
Beryllium, total	0.0950	0.0040	mg/L	0.100		95.0	80-120			
Cadmium, total	0.0962	0.0008	mg/L	0.100		96.2	80-120			
Chromium, total	0.0937	0.0080	mg/L	0.100		93.7	80-120			
Cobalt, total	0.0930	0.0004	mg/L	0.100		93.0	80-120			
Copper, total	0.0939	0.0040	mg/L	0.100		93.9	80-120			
Lead, total	0.0942	0.0040	mg/L	0.100		94.2	80-120			
Nickel, total	0.0932	0.0040	mg/L	0.100		93.2	80-120			
Selenium, total	0.0956	0.0040	mg/L	0.100		95.6	80-120			
Silver, total	0.100	0.0040	mg/L	0.100		100	80-120			
Thallium, total	0.0952	0.0020	mg/L	0.100		95.2	80-120			
Vanadium, total	0.0966	0.0200	mg/L	0.100		96.6	80-120			
Zinc, total	0.0966	0.0200	mg/L	0.100		96.6	80-120			
Matrix Spike (1HC0519-MS1)	**Source: 1HC0404-01**		Prepared: 03/11/24 08:41 Analyzed: 03/12/24 02:51							
Antimony, total	0.0958	0.0020	mg/L	0.100	ND	95.8	75-125			
Arsenic, total	0.0976	0.0040	mg/L	0.100	0.0022	95.4	75-125			
Barium, total	0.302	0.0040	mg/L	0.100	0.201	101	75-125			
Beryllium, total	0.0944	0.0040	mg/L	0.100	ND	94.4	75-125			
Cadmium, total	0.0941	0.0008	mg/L	0.100	ND	94.1	75-125			
Chromium, total	0.0967	0.0080	mg/L	0.100	0.0039	92.7	75-125			
Cobalt, total	0.0955	0.0004	mg/L	0.100	0.0004	95.1	75-125			
Copper, total	0.0967	0.0040	mg/L	0.100	0.0014	95.3	75-125			
Lead, total	0.0938	0.0040	mg/L	0.100	ND	93.8	75-125			
Nickel, total	0.0954	0.0040	mg/L	0.100	0.0014	94.0	75-125			
Selenium, total	0.1012	0.0040	mg/L	0.100	ND	101	75-125			
Silver, total	0.101	0.0040	mg/L	0.100	ND	101	75-125			
Thallium, total	0.0950	0.0020	mg/L	0.100	ND	95.0	75-125			
Vanadium, total	0.102	0.0200	mg/L	0.100	ND	102	75-125			
Zinc, total	0.0977	0.0200	mg/L	0.100	ND	97.7	75-125			

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0519 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Matrix Spike Dup (1HC0519-MSD1)	**Source: 1HC0404-01**	Prepared: 03/11/24 08:41 Analyzed: 03/12/24 03:10								
Antimony, total	0.0933	0.0020	mg/L	0.100	ND	93.3	75-125	2.66	20	
Arsenic, total	0.0961	0.0040	mg/L	0.100	0.0022	93.9	75-125	1.53	20	
Barium, total	0.298	0.0040	mg/L	0.100	0.201	97.0	75-125	1.39	20	
Beryllium, total	0.0935	0.0040	mg/L	0.100	ND	93.5	75-125	0.966	20	
Cadmium, total	0.0934	0.0008	mg/L	0.100	ND	93.4	75-125	0.662	20	
Chromium, total	0.0950	0.0080	mg/L	0.100	0.0039	91.1	75-125	1.72	20	
Cobalt, total	0.0942	0.0004	mg/L	0.100	0.0004	93.8	75-125	1.37	20	
Copper, total	0.0914	0.0040	mg/L	0.100	0.0014	90.0	75-125	5.63	20	
Lead, total	0.0922	0.0040	mg/L	0.100	ND	92.2	75-125	1.72	20	
Nickel, total	0.0944	0.0040	mg/L	0.100	0.0014	93.0	75-125	1.02	20	
Selenium, total	0.0970	0.0040	mg/L	0.100	ND	97.0	75-125	4.18	20	
Silver, total	0.0989	0.0040	mg/L	0.100	ND	98.9	75-125	1.65	20	
Thallium, total	0.0936	0.0020	mg/L	0.100	ND	93.6	75-125	1.45	20	
Vanadium, total	0.0999	0.0200	mg/L	0.100	ND	99.9	75-125	1.86	20	
Zinc, total	0.0976	0.0200	mg/L	0.100	ND	97.6	75-125	0.136	20	
Post Spike (1HC0519-PS1)	**Source: 1HC0404-01**	Prepared: 03/11/24 08:41 Analyzed: 03/12/24 03:16								
Antimony, total	0.0773		mg/L	0.0800	0.0001	96.6	80-120			
Arsenic, total	0.0795		mg/L	0.0800	0.0022	96.6	80-120			
Barium, total	0.281		mg/L	0.0800	0.197	105	80-120			
Beryllium, total	0.0761		mg/L	0.0800	-0.00004	95.2	80-120			
Cadmium, total	0.0762		mg/L	0.0800	0.00006	95.2	80-120			
Chromium, total	0.0778		mg/L	0.0800	0.0039	92.4	80-120			
Cobalt, total	0.0781		mg/L	0.0800	0.0004	97.2	80-120			
Copper, total	0.0756		mg/L	0.0800	0.0013	92.8	80-120			
Lead, total	0.0762		mg/L	0.0800	0.0004	94.8	80-120			
Nickel, total	0.0787		mg/L	0.0800	0.0014	96.6	80-120			
Selenium, total	0.0763		mg/L	0.0800	0.0011	94.0	80-120			
Silver, total	0.0804		mg/L	0.0800	-0.0003	101	80-120			
Thallium, total	0.0793		mg/L	0.0800	0.00001	99.1	80-120			
Vanadium, total	0.0840		mg/L	0.0800	0.0080	95.0	80-120			
Zinc, total	0.0796		mg/L	0.0800	0.0038	94.7	80-120			

Definitions

QB-02: The method blank contains analyte at a concentration above the MRL; however, sample concentration was less than the MRL or less than the applicable action level.

QM-05: The spike recovery and/or RPD was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.

QM-17: The MS/MSD recovery for this sample is not available due to instrument malfunction. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.

RL: Reporting Limit

RPD: Relative Percent Difference

S-GC: Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate.

Cooler Receipt Log

Cooler ID: Default Cooler   Temp: 4.2ºC

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

Heather Murphy
Customer Relationship Specialist
heather.murphy@microbac.com
03/14/24 17:02

CHAIN OF CUSTODY RECORD

Keystone LABORATORIES, INC.

☐ 600 E. 17th St. S. Newton, IA 50208 Phone: 641-792-8451 Fax: 641-792-7989
☐ 3012 Ansborough Ave. Waterloo, IA 50701 Phone: 319-235-4440 Fax: 319-235-2480
☐ 835 S St Paul Kansas City, KS 66105 Phone: 913-321-7856 Fax: 913-831-6778
☐ 205 E VanBuren St Centerville, IA 52544 Phone: 641-437-7023 Fax: 641-437-7040

PAGE 01 OF 3

PRINT OR TYPE INFORMATION BELOW

SAMPLER: TODD WHIPPLE
SITE NAME: Newton Landfill
ADDRESS:
CITY/ST/ZIP: Newton IA
PHONE:

REPORT TO:
NAME: TODD WHIPPLE
COMPANY NAME: HLW Group LLC
ADDRESS: P.O. Box 314
CITY/ST/ZIP: Story City, IA 50208
PHONE: 515 733 4144
FAX: 4146

BILL TO:
NAME: Joe Grife, PWD
COMPANY NAME: City of Newton
ADDRESS: 403 W 4th ST N, Suite 501
CITY/ST/ZIP: Newton, IA 50208
PHONE:
Keystone Quote No: (If Applicable)

LAB USE ONLY
LABORATORY WORK ORDER NO. 1HC0401
SAMPLE TEMPERATURE UPON RECEIPT: ~~1.0~~ ECKL ICe 4.2C

CLIENT SAMPLE NUMBER	DATE	TIME	SAMPLE LOCATION	NO. OF CONTAINERS	MATRIX	GRAB/COMPOSITE	Landfill Appendix I		Landfill App I Voc		Landfill App I metals				SAMPLE CONDITION/COMMENTS	LABORATORY SAMPLE NUMBER
MW 48	3/4/24	10:51	MW 48	7	W	G	X									01
MW 39	3/4/24	11:55	MW 39	7	W	G	X									02
MW 78	3/4/24	11:15	MW 78	7	W	G	X									03
MW 62R	3/4/24	11:35	MW 62R	7	W	G	X									04
MW 79	3/4/24	13:18	MW 79	7	W	G	X									05
MW 80	3/4/24	13:03	MW 80	7	W	G	X									06
MW 36	3/4/24	12:14	MW 36	7	W	G	X									07
MW 41	3/4/24	13:38	MW 41	7	W	G	X									08
MW 42	3/4/24	13:52	MW 42	7	W	G	X									09
MW 58	3/4/24	14:13	MW 58	7	W	G	X									10

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Date / Time	Turn-Around:
Todd Whipple	Date 3/6/24 Time		Date Time	☐ Standard
Relinquished by: (Signature)	Date Time	Received for Lab by: (Signature) Makin	Date 3/6/24 Time 10:04	Remarks:

1 H C 0 4 0 1
HLW Engineering
PM: Heather Murphy

Original - Lab Copy • Yellow - Sampler Copy

CHAIN OF CUSTODY RECORD

Keystone LABORATORIES, INC.

☐ 600 E. 17th St. S. Newton, IA 50208 Phone: 641-792-8451 Fax: 641-792-7989

☐ 3012 Ansborough Ave. Waterloo, IA 50701 Phone: 319-235-4440 Fax: 319-235-2480

☐ 835 S St Paul Kansas City, KS 66105 Phone: 913-321-7856 Fax: 913-831-6778

☐ 205 E VanBuren St Centerville, IA 52544 Phone: 641-437-7023 Fax: 641-437-7040

PAGE 2 OF 3

PRINT OR TYPE INFORMATION BELOW

SAMPLER: TODD WHIPPLE
SITE NAME: Newton Landfill
ADDRESS:
CITY/ST/ZIP: Newton, IA
PHONE:

REPORT TO:
NAME: TODD WHIPPLE
COMPANY NAME: HLW Group LLC
ADDRESS: P.O Box 314
CITY/ST/ZIP: Story City IA 50248
PHONE: 515 733 4144
FAX: 4146

BILL TO:
NAME: Joe Grife, PWD
COMPANY NAME: City of Newton
ADDRESS: 403 W 4th St N, Suite 501
CITY/ST/ZIP: Newton, IA 50208
PHONE:
Keystone Quote No: (If Applicable)

CLIENT SAMPLE NUMBER	DATE	TIME	SAMPLE LOCATION	NO. OF CONTAINERS	MATRIX	GRAB/COMPOSITE	Landfill Appendix I		Landfill App I. Voc		Landfill App Metals			LABORATORY SAMPLE NUMBER
MW 45R	3/4/24	—	MW45R DRY	—	—	—								
MW 44	3/4/24	8:30	MW 44	7	W	G	X							11
MW 57	3/4/24	10:05	MW57	7	W	G	X							12
MW 56	3/4/24	9:09	MW56	7	W	G	X							13
MW 64	3/4/24	9:27	MW 64	7	W	G	X							14
MW 65	3/4/24	8:45	MW65	7	W	G	X							15
SW 101R	3/4/24	10:45	SW-101R	7	W	G	X							16
PECS-1	3/4/24	10:25	PECS-1	6	W	G			X					17
SW-102	3/4/24	10:33	SW-102	7	W	G	X							18
SW-103	3/4/24	9:00	SW-103	7	W	G	X							19

LAB USE ONLY
LABORATORY WORK ORDER NO. 1HC0401
SAMPLE TEMPERATURE UPON RECEIPT: ~~[illegible]~~ ice √ 4.2C
SAMPLE CONDITION/COMMENTS

Relinquished by: (Signature)	Date	Received by: (Signature)	Date	Turn-Around:
[signature]	3/6/24 Time		Time	☐
Relinquished by: (Signature)	Date	Received for Lab by: (Signature)	Date 3/6/24	Remarks
	Time	[signature]	Time 10:04	

1 H C 0 4 0 1
HLW Engineering
PM: Heather Murphy

CHAIN OF CUSTODY RECORD

Keystone LABORATORIES, INC.

☐ 600 E. 17th St. S. Newton, IA 50208 Phone: 641-792-8451 Fax: 641-792-7989

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PAGE 3 OF 3

PRINT OR TYPE INFORMATION BELOW

SAMPLER: TODD WHIPPLE
SITE NAME; NEWTON LANDFILL
ADDRESS:
CITY/ST/ZIP: NEWTON, IA
PHONE:

REPORT TO:
NAME: TODD WHIPPLE
COMPANY NAME: HLW Group LLC
ADDRESS: P.O. Box 314
CITY/ST/ZIP: STORY CITY, IA 50248
PHONE: 515 733 4144
FAX: 4146

BILL TO:
NAME: Joe Grife, PWD
COMPANY NAME: NEWTON
ADDRESS: 403 W 4th ST. N, Suite 501
CITY/ST/ZIP: NEWTON IOWA 50208
PHONE:
Keystone Quote No: (If Applicable)

LAB USE ONLY
LABORATORY WORK ORDER NO. 1HC0401
SAMPLE TEMPERATURE UPON RECEIPT: ~~FL~~ ice 4.2 EG
SAMPLE CONDITION/COMMENTS

CLIENT SAMPLE NUMBER	DATE	TIME	SAMPLE LOCATION	NO. OF CONTAINERS	MATRIX	GRAB/COMPOSITE	Appendix I (Landfill)		App I VOC		App I metals			SAMPLE CONDITION/COMMENTS	LABORATORY SAMPLE NUMBER
MW 59	3/4/24	14:28	MW 59	7	W	G	X								20
MW 60	3/4/24	12:29	MW 60	7	W	G	X								21
MW 61	3/4/24	12:48	MW 61	7	W	G	X								22
DUPLICATE	3/4/24	✓	DUPLICATE	1	W	G					X				23

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Date / Time	Turn-Around
Todd Whipple	Date 3/6/24 Time		Date Time	☐ Standard
Relinquished by: (Signature)	Date / Time	Received for Lab by: (Signature)	Date 3/6/24 Time 10:04	Remarks:
		Maher		

1HC0401
HLW Engineering
PM: Heather Murphy

-97

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HE2316

Project Description

6002

For:

Todd Whipple

HLW Engineering

PO Box 314

Story City, IA 50248

Heather Murphy

Customer Relationship Specialist

Friday, June 14, 2024

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

1HE2316

HLW Engineering

Todd Whipple
PO Box 314
Story City, IA 50248

Project Name: 6002

Project / PO Number: N/A
Received: 05/30/2024
Reported: 06/14/2024

Sample Summary Report

Sample Name	Laboratory ID	Client Matrix	Sample Type	Sample Begin	Sample Taken	Lab Received
MW-48 (B)	1HE2316-01	Aqueous	GRAB		05/29/24 11:44	05/30/24 10:00

Analytical Testing Parameters

Client Sample ID:	MW-48 (B)		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HE2316-01	**Collection Date:**	05/29/2024 11:44

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Tetrachloroethylene	<1.0	1.0	ug/L	1		06/06/24 0000	06/06/24 1406	BDF
Surrogate: Dibromofluoromethane	86.1	Limit: 80-126	% Rec	1		06/06/24 0000	06/06/24 1406	BDF
Surrogate: 1,2-Dichloroethane-d4	92.4	Limit: 63-138	% Rec	1		06/06/24 0000	06/06/24 1406	BDF
Surrogate: Toluene-d8	97.7	Limit: 87-116	% Rec	1		06/06/24 0000	06/06/24 1406	BDF
Surrogate: 4-Bromofluorobenzene	96.9	Limit: 85-111	% Rec	1		06/06/24 0000	06/06/24 1406	BDF

Batch Log Summary

Method	Batch	Laboratory ID	Client / Source ID
EPA 8260B	1HF0310	1HF0310-BS1	
		1HF0310-BSD1	
		1HF0310-BLK1	
		1HE2316-01	MW-48 (B)
		1HE2316-01	MW-48 (B)
		1HF0310-MS1	1HE2410-01
		1HF0310-MSD1	1HE2410-01

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 1HF0310 - EPA 5030B - EPA 8260B										
Blank (1HF0310-BLK1)			Prepared: 06/06/24 00:00 Analyzed: 06/06/24 10:31							
Tetrachloroethylene	<1.0	1.0	ug/L							
Surrogate: Dibromofluoromethane	*42.5*		ug/L	*50.2*		*84.7*	*80-126*			
Surrogate: 1,2-Dichloroethane-d4	*45.7*		ug/L	*50.1*		*91.3*	*63-138*			
Surrogate: Toluene-d8	*48.6*		ug/L	*50.4*		*96.4*	*87-116*			
Surrogate: 4-Bromofluorobenzene	*49.2*		ug/L	*50.1*		*98.1*	*85-111*			
LCS (1HF0310-BS1)			Prepared: 06/06/24 00:00 Analyzed: 06/06/24 09:24							
Tetrachloroethylene	50.80	1.0	ug/L	50.0		102	73-124			
Surrogate: Dibromofluoromethane	*42.2*		ug/L	*50.2*		*84.2*	*80-126*			
Surrogate: 1,2-Dichloroethane-d4	*43.7*		ug/L	*50.1*		*87.2*	*63-138*			
Surrogate: Toluene-d8	*49.2*		ug/L	*50.4*		*97.6*	*87-116*			
Surrogate: 4-Bromofluorobenzene	*50.2*		ug/L	*50.1*		*100*	*85-111*			
LCS Dup (1HF0310-BSD1)			Prepared: 06/06/24 00:00 Analyzed: 06/06/24 09:46							
Tetrachloroethylene	51.09	1.0	ug/L	50.0		102	73-124	0.569	26	
Surrogate: Dibromofluoromethane	*42.6*		ug/L	*50.2*		*84.9*	*80-126*			
Surrogate: 1,2-Dichloroethane-d4	*44.2*		ug/L	*50.1*		*88.2*	*63-138*			
Surrogate: Toluene-d8	*49.4*		ug/L	*50.4*		*97.9*	*87-116*			
Surrogate: 4-Bromofluorobenzene	*50.6*		ug/L	*50.1*		*101*	*85-111*			
Matrix Spike (1HF0310-MS1)	**Source: 1HE2410-01**		Prepared: 06/06/24 00:00 Analyzed: 06/07/24 01:46							
Tetrachloroethylene	496.3	10.0	ug/L	500	ND	99.3	74-120			
Surrogate: Dibromofluoromethane	*430*		ug/L	*502*		*85.8*	*80-126*			
Surrogate: 1,2-Dichloroethane-d4	*450*		ug/L	*501*		*89.8*	*63-138*			
Surrogate: Toluene-d8	*494*		ug/L	*504*		*98.1*	*87-116*			
Surrogate: 4-Bromofluorobenzene	*505*		ug/L	*501*		*101*	*85-111*			
Matrix Spike Dup (1HF0310-MSD1)	**Source: 1HE2410-01**		Prepared: 06/06/24 00:00 Analyzed: 06/07/24 02:09							
Tetrachloroethylene	472.7	10.0	ug/L	500	ND	94.5	74-120	4.87	17	
Surrogate: Dibromofluoromethane	*430*		ug/L	*502*		*85.7*	*80-126*			

CERTIFICATE OF ANALYSIS

1HE2316

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HF0310 - EPA 5030B - EPA 8260B										
Matrix Spike Dup (1HF0310-MSD1)	**Source: 1HE2410-01**	Prepared: 06/06/24 00:00 Analyzed: 06/07/24 02:09								
Surrogate: 1,2-Dichloroethane-d4	*448*		ug/L	*501*		*89.4*	*63-138*			
Surrogate: Toluene-d8	*495*		ug/L	*504*		*98.3*	*87-116*			
Surrogate: 4-Bromofluorobenzene	*503*		ug/L	*501*		*100*	*85-111*			

Definitions

RL: Reporting Limit
RPD: Relative Percent Difference

Cooler Receipt Log

Cooler ID: Default Cooler   Temp: 0.0°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
Heather Murphy
Customer Relationship Specialist
heather.murphy@microbac.com
06/14/24 08:35

CHAIN OF CUSTODY RECORD

1HE2316
HLW Engineering
PM: Heather Murphy

Keystone LABORATORIES, INC.

❑ 600 E. 17th St. S.
Newton, IA 50208
Phone: 641-792-8451
Fax: 641-792-7989

❑ 3012 Ansborough
Waterloo, IA 507
Phone: 319-235-
Fax: 319-235-

anBuren St
lle, IA 52544
641-437-7023
641-437-7040

PAGE 1 OF 1

PRINT OR TYPE INFORMATION BELOW	REPORT TO:	BILL TO:
SAMPLER: TODD WHIPPLE	NAME: TODD WHIPPLE	NAME: Joe Grife, PWD
SITE NAME: NEWTON SLF	COMPANY NAME: HLW Group LLC	COMPANY NAME: City of Newton
ADDRESS:	ADDRESS: P.O. Box 314	ADDRESS: 303 West 4th St N Suite 501
CITY/ST/ZIP: NEWTON, IOWA	CITY/ST/ZIP: STORY City IOWA 50248	CITY/ST/ZIP: NEWTON, IOWA 50208
PHONE:	PHONE: 515 733-4144	PHONE:
	FAX: 4146	Keystone Quote No: (If Applicable)

ANALYSES REQUIRED

LAB USE ONLY
LABORATORY WORK ORDER NO. 1HE2316
SAMPLE TEMPERATURE UPON RECEIPT: 0.0 °C

CLIENT SAMPLE NUMBER	DATE	TIME	SAMPLE LOCATION	NO. OF CONTAINERS	MATRIX	GRAB/COMPOSITE	tetrachloroethene							SAMPLE CONDITION/COMMENTS	LABORATORY SAMPLE NUMBER
MW-48	5/29/24	11:44	MW-48	3	W	G	X							on ice	01

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Date / Time	Turn-Around:
[signature]	Date 5/30/24 Time		Date Time	❑ Standard ❑ Rush ____ Contact Lab Prior to Submission
Relinquished by: (Signature)	Date Time	Received for Lab by: (Signature) [signature]	Date 5-30-24 Time 10:00	Remarks:

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HI1560

Project Description

6002

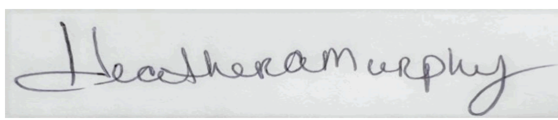
For:

Todd Whipple

HLW Engineering

204 West Broad St

Story City, IA 50248



Heather Murphy

Customer Relationship Specialist

Monday, October 7, 2024

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.

600 East 17th Street South | Newton, IA 50208 | 641-792-8451 p | www.microbac.com

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CERTIFICATE OF ANALYSIS

1HI1560

HLW Engineering

Todd Whipple
204 West Broad St
Story City, IA 50248

Project Name: 6002

Project / PO Number: City of Newton SLF-New Regs-C
Received: 09/23/2024
Reported: 10/07/2024

Sample Summary Report

Sample Name	Laboratory ID	Client Matrix	Sample Type	Sample Begin	Sample Taken	Lab Received
MW-44	1HI1560-01	Aqueous	GRAB		09/23/24 10:23	09/23/24 16:05
MW-57	1HI1560-02	Aqueous	GRAB		09/23/24 11:20	09/23/24 16:05
MW-56	1HI1560-03	Aqueous	GRAB		09/23/24 10:55	09/23/24 16:05
MW-64	1HI1560-04	Aqueous	GRAB		09/23/24 11:07	09/23/24 16:05
MW-65	1HI1560-05	Aqueous	GRAB		09/23/24 10:37	09/23/24 16:05
SW-101R	1HI1560-06	Aqueous	GRAB		09/23/24 11:54	09/23/24 16:05
PECS-1	1HI1560-07	Aqueous	GRAB		09/23/24 12:05	09/23/24 16:05
SW-102	1HI1560-08	Aqueous	GRAB		09/23/24 12:11	09/23/24 16:05
SW-103	1HI1560-09	Aqueous	GRAB		09/23/24 10:47	09/23/24 16:05
MW-48 (B)	1HI1560-10	Aqueous	GRAB		09/23/24 11:36	09/23/24 16:05
MW-39 (B)	1HI1560-11	Aqueous	GRAB		09/23/24 13:42	09/23/24 16:05
MW-78 (B)	1HI1560-12	Aqueous	GRAB		09/23/24 14:07	09/23/24 16:05
MW-62R	1HI1560-13	Aqueous	GRAB		09/23/24 13:56	09/23/24 16:05
MW-79	1HI1560-14	Aqueous	GRAB		09/23/24 14:19	09/23/24 16:05
MW-80	1HI1560-15	Aqueous	GRAB		09/23/24 14:32	09/23/24 16:05
MW-36	1HI1560-16	Aqueous	GRAB		09/23/24 13:27	09/23/24 16:05
MW-41	1HI1560-17	Aqueous	GRAB		09/23/24 13:03	09/23/24 16:05
MW-42	1HI1560-18	Aqueous	GRAB		09/23/24 12:49	09/23/24 16:05
MW-58	1HI1560-19	Aqueous	GRAB		09/23/24 12:34	09/23/24 16:05
MW-59	1HI1560-20	Aqueous	GRAB		09/23/24 12:22	09/23/24 16:05
MW-60	1HI1560-21	Aqueous	GRAB		09/23/24 13:16	09/23/24 16:05
MW-61	1HI1560-22	Aqueous	GRAB		09/23/24 14:44	09/23/24 16:05
Duplicate	1HI1560-23	Aqueous	GRAB		09/23/24 00:00	09/23/24 16:05

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CERTIFICATE OF ANALYSIS

1HI1560

Analytical Testing Parameters

Client Sample ID:	MW-44		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HI1560-01	**Collection Date:**	09/23/2024 10:23

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		09/30/24 0000	09/30/24 2347	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		09/30/24 0000	09/30/24 2347	BDF
Bromomethane	<1.0	1.0	ug/L	1		09/30/24 0000	09/30/24 2347	BDF
Chloroethane	<1.0	1.0	ug/L	1		09/30/24 0000	09/30/24 2347	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		09/30/24 0000	09/30/24 2347	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		09/30/24 0000	09/30/24 2347	BDF
Acetone	<10.0	10.0	ug/L	1		09/30/24 0000	09/30/24 2347	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		09/30/24 0000	09/30/24 2347	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1		09/30/24 0000	09/30/24 2347	BDF
Methylene Chloride	<5.0	5.0	ug/L	1		09/30/24 0000	09/30/24 2347	BDF
Acrylonitrile	<5.0	5.0	ug/L	1	**Q8**	09/28/24 0000	09/28/24 1900	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		09/30/24 0000	09/30/24 2347	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1		09/30/24 0000	09/30/24 2347	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		09/30/24 0000	09/30/24 2347	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		09/30/24 0000	09/30/24 2347	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		09/30/24 0000	09/30/24 2347	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		09/30/24 0000	09/30/24 2347	BDF
Chloroform	<1.0	1.0	ug/L	1		09/30/24 0000	09/30/24 2347	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		09/30/24 0000	09/30/24 2347	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		09/30/24 0000	09/30/24 2347	BDF
Benzene	<1.0	1.0	ug/L	1		09/30/24 0000	09/30/24 2347	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		09/30/24 0000	09/30/24 2347	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		09/30/24 0000	09/30/24 2347	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		09/30/24 0000	09/30/24 2347	BDF
Dibromomethane	<1.0	1.0	ug/L	1		09/30/24 0000	09/30/24 2347	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		09/30/24 0000	09/30/24 2347	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		09/30/24 0000	09/30/24 2347	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		09/30/24 0000	09/30/24 2347	BDF
Toluene	<1.0	1.0	ug/L	1		09/30/24 0000	09/30/24 2347	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		09/30/24 0000	09/30/24 2347	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		09/30/24 0000	09/30/24 2347	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		09/30/24 0000	09/30/24 2347	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		09/30/24 0000	09/30/24 2347	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		09/30/24 0000	09/30/24 2347	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		09/30/24 0000	09/30/24 2347	BDF
Chlorobenzene	<1.0	1.0	ug/L	1		09/30/24 0000	09/30/24 2347	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		09/30/24 0000	09/30/24 2347	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		09/30/24 0000	09/30/24 2347	BDF
Xylenes, total	<2.0	2.0	ug/L	1		09/30/24 0000	09/30/24 2347	BDF
Styrene	<1.0	1.0	ug/L	1		09/30/24 0000	09/30/24 2347	BDF

Client Sample ID:	MW-44		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HI1560-01	**Collection Date:**	09/23/2024 10:23

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Bromoform	<1.0	1.0	ug/L	1		09/30/24 0000	09/30/24 2347	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		09/30/24 0000	09/30/24 2347	BDF
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		09/30/24 0000	09/30/24 2347	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		09/30/24 0000	09/30/24 2347	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		09/30/24 0000	09/30/24 2347	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		09/30/24 0000	09/30/24 2347	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		09/30/24 0000	09/30/24 2347	BDF
Surrogate: Dibromofluoromethane	59.6	Limit: 57-134	% Rec	1		09/28/24 0000	09/28/24 1900	BDF
Surrogate: Dibromofluoromethane	104	Limit: 75-136	% Rec	1		09/30/24 0000	09/30/24 2347	BDF
Surrogate: 1,2-Dichloroethane-d4	59.2	Limit: 53-140	% Rec	1		09/28/24 0000	09/28/24 1900	BDF
Surrogate: 1,2-Dichloroethane-d4	107	Limit: 61-142	% Rec	1		09/30/24 0000	09/30/24 2347	BDF
Surrogate: Toluene-d8	102	Limit: 82-121	% Rec	1		09/30/24 0000	09/30/24 2347	BDF
Surrogate: Toluene-d8	106	Limit: 86-114	% Rec	1		09/28/24 0000	09/28/24 1900	BDF
Surrogate: 4-Bromofluorobenzene	104	Limit: 80-116	% Rec	1		09/30/24 0000	09/30/24 2347	BDF
Surrogate: 4-Bromofluorobenzene	83.1	Limit: 78-121	% Rec	1		09/28/24 0000	09/28/24 1900	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		09/25/24 1604	09/26/24 1947	RVV
Arsenic, total	**0.0119**	0.0040	mg/L	4		09/25/24 1604	09/26/24 1947	RVV
Barium, total	**0.142**	0.0040	mg/L	4		09/25/24 1604	09/26/24 1947	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 1947	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		09/25/24 1604	09/26/24 1947	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		09/25/24 1604	09/26/24 1947	RVV
Cobalt, total	**0.0103**	0.0004	mg/L	4		09/25/24 1604	09/26/24 1947	RVV
Copper, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 1947	RVV
Lead, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 1947	RVV
Nickel, total	**0.0109**	0.0040	mg/L	4		09/25/24 1604	09/26/24 1947	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 1947	RVV
Silver, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 1947	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		09/25/24 1604	09/26/24 1947	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		09/25/24 1604	09/26/24 1947	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		09/25/24 1604	09/26/24 1947	RVV

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CERTIFICATE OF ANALYSIS

1HI1560

Client Sample ID:	MW-57		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HI1560-02	**Collection Date:**	09/23/2024 11:20

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0009	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0009	BDF
Bromomethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0009	BDF
Chloroethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0009	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0009	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0009	BDF
Acetone	<10.0	10.0	ug/L	1		09/30/24 0000	10/01/24 0009	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0009	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0009	BDF
Methylene Chloride	<5.0	5.0	ug/L	1		09/30/24 0000	10/01/24 0009	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		09/24/24 0000	09/24/24 1841	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0009	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0009	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		09/30/24 0000	10/01/24 0009	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0009	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		09/30/24 0000	10/01/24 0009	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0009	BDF
Chloroform	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0009	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0009	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0009	BDF
Benzene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0009	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0009	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0009	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0009	BDF
Dibromomethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0009	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0009	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0009	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		09/30/24 0000	10/01/24 0009	BDF
Toluene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0009	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0009	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0009	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0009	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		09/30/24 0000	10/01/24 0009	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0009	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0009	BDF
Chlorobenzene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0009	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0009	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0009	BDF
Xylenes, total	<2.0	2.0	ug/L	1		09/30/24 0000	10/01/24 0009	BDF
Styrene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0009	BDF
Bromoform	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0009	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0009	BDF

Client Sample ID:	MW-57		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HI1560-02	**Collection Date:**	09/23/2024 11:20

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		09/30/24 0000	10/01/24 0009	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0009	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0009	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0009	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		09/30/24 0000	10/01/24 0009	BDF
Surrogate: Dibromofluoromethane	80.3	Limit: 57-134	% Rec	1		09/24/24 0000	09/24/24 1841	BDF
Surrogate: Dibromofluoromethane	106	Limit: 75-136	% Rec	1		09/30/24 0000	10/01/24 0009	BDF
Surrogate: 1,2-Dichloroethane-d4	87.5	Limit: 53-140	% Rec	1		09/24/24 0000	09/24/24 1841	BDF
Surrogate: 1,2-Dichloroethane-d4	111	Limit: 61-142	% Rec	1		09/30/24 0000	10/01/24 0009	BDF
Surrogate: Toluene-d8	89.4	Limit: 86-114	% Rec	1		09/24/24 0000	09/24/24 1841	BDF
Surrogate: Toluene-d8	99.4	Limit: 82-121	% Rec	1		09/30/24 0000	10/01/24 0009	BDF
Surrogate: 4-Bromofluorobenzene	98.2	Limit: 78-121	% Rec	1		09/24/24 0000	09/24/24 1841	BDF
Surrogate: 4-Bromofluorobenzene	103	Limit: 80-116	% Rec	1		09/30/24 0000	10/01/24 0009	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		09/25/24 1604	09/26/24 2024	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2024	RVV
Barium, total	**0.302**	0.0040	mg/L	4		09/25/24 1604	09/26/24 2024	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2024	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		09/25/24 1604	09/26/24 2024	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		09/25/24 1604	09/26/24 2024	RVV
Cobalt, total	**0.0010**	0.0004	mg/L	4		09/25/24 1604	09/26/24 2024	RVV
Copper, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2024	RVV
Lead, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2024	RVV
Nickel, total	**0.0046**	0.0040	mg/L	4		09/25/24 1604	09/26/24 2024	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2024	RVV
Silver, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2024	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		09/25/24 1604	09/26/24 2024	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		09/25/24 1604	09/26/24 2024	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		09/25/24 1604	09/26/24 2024	RVV

CERTIFICATE OF ANALYSIS

1HI1560

Client Sample ID:	MW-56		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HI1560-03	**Collection Date:**	09/23/2024 10:55

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0032	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0032	BDF
Bromomethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0032	BDF
Chloroethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0032	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0032	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0032	BDF
Acetone	<10.0	10.0	ug/L	1		09/30/24 0000	10/01/24 0032	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0032	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0032	BDF
Methylene Chloride	<5.0	5.0	ug/L	1		09/30/24 0000	10/01/24 0032	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		09/24/24 0000	09/24/24 1903	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0032	BDF
1,1-Dichloroethane	**2.6**	1.0	ug/L	1		09/30/24 0000	10/01/24 0032	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		09/30/24 0000	10/01/24 0032	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0032	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		09/30/24 0000	10/01/24 0032	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0032	BDF
Chloroform	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0032	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0032	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0032	BDF
Benzene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0032	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0032	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0032	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0032	BDF
Dibromomethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0032	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0032	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0032	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		09/30/24 0000	10/01/24 0032	BDF
Toluene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0032	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0032	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0032	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0032	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		09/30/24 0000	10/01/24 0032	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0032	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0032	BDF
Chlorobenzene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0032	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0032	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0032	BDF
Xylenes, total	<2.0	2.0	ug/L	1		09/30/24 0000	10/01/24 0032	BDF
Styrene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0032	BDF
Bromoform	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0032	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0032	BDF

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CERTIFICATE OF ANALYSIS

1HI1560

Client Sample ID:	MW-56		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HI1560-03	**Collection Date:**	09/23/2024 10:55

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		09/30/24 0000	10/01/24 0032	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0032	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0032	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0032	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		09/30/24 0000	10/01/24 0032	BDF
Surrogate: Dibromofluoromethane	106	Limit: 75-136	% Rec	1		09/30/24 0000	10/01/24 0032	BDF
Surrogate: Dibromofluoromethane	80.5	Limit: 57-134	% Rec	1		09/24/24 0000	09/24/24 1903	BDF
Surrogate: 1,2-Dichloroethane-d4	87.5	Limit: 53-140	% Rec	1		09/24/24 0000	09/24/24 1903	BDF
Surrogate: 1,2-Dichloroethane-d4	110	Limit: 61-142	% Rec	1		09/30/24 0000	10/01/24 0032	BDF
Surrogate: Toluene-d8	100	Limit: 82-121	% Rec	1		09/30/24 0000	10/01/24 0032	BDF
Surrogate: Toluene-d8	89.5	Limit: 86-114	% Rec	1		09/24/24 0000	09/24/24 1903	BDF
Surrogate: 4-Bromofluorobenzene	98.9	Limit: 78-121	% Rec	1		09/24/24 0000	09/24/24 1903	BDF
Surrogate: 4-Bromofluorobenzene	102	Limit: 80-116	% Rec	1		09/30/24 0000	10/01/24 0032	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		09/25/24 1604	09/26/24 2030	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2030	RVV
Barium, total	**0.0392**	0.0040	mg/L	4		09/25/24 1604	09/26/24 2030	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2030	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		09/25/24 1604	09/26/24 2030	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		09/25/24 1604	09/26/24 2030	RVV
Cobalt, total	**0.0025**	0.0004	mg/L	4		09/25/24 1604	09/26/24 2030	RVV
Copper, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2030	RVV
Lead, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2030	RVV
Nickel, total	**0.0073**	0.0040	mg/L	4		09/25/24 1604	09/26/24 2030	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2030	RVV
Silver, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2030	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		09/25/24 1604	09/26/24 2030	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		09/25/24 1604	09/26/24 2030	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		09/25/24 1604	09/26/24 2030	RVV

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CERTIFICATE OF ANALYSIS

1HI1560

Client Sample ID:	MW-64		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HI1560-04	**Collection Date:**	09/23/2024 11:07

Determination of Volatile Organic Compounds	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
EPA 5030B/EPA 8260B			**Method Notes:** A15					
Chloromethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0054	BDF
Vinyl Chloride	**1.7**	1.0	ug/L	1		09/30/24 0000	10/01/24 0054	BDF
Bromomethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0054	BDF
Chloroethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0054	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0054	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0054	BDF
Acetone	<10.0	10.0	ug/L	1		09/30/24 0000	10/01/24 0054	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0054	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0054	BDF
Methylene Chloride	<5.0	5.0	ug/L	1		09/30/24 0000	10/01/24 0054	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		09/24/24 0000	09/24/24 1926	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0054	BDF
1,1-Dichloroethane	**1.7**	1.0	ug/L	1		09/30/24 0000	10/01/24 0054	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		09/30/24 0000	10/01/24 0054	BDF
cis-1,2-Dichloroethylene	**4.1**	1.0	ug/L	1		09/30/24 0000	10/01/24 0054	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		09/30/24 0000	10/01/24 0054	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0054	BDF
Chloroform	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0054	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0054	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0054	BDF
Benzene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0054	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0054	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0054	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0054	BDF
Dibromomethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0054	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0054	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0054	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		09/30/24 0000	10/01/24 0054	BDF
Toluene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0054	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0054	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0054	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0054	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		09/30/24 0000	10/01/24 0054	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0054	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0054	BDF
Chlorobenzene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0054	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0054	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0054	BDF
Xylenes, total	<2.0	2.0	ug/L	1		09/30/24 0000	10/01/24 0054	BDF
Styrene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0054	BDF
Bromoform	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0054	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0054	BDF

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CERTIFICATE OF ANALYSIS

1HI1560

Client Sample ID:	MW-64		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HI1560-04	**Collection Date:**	09/23/2024 11:07

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		09/30/24 0000	10/01/24 0054	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0054	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0054	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0054	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		09/30/24 0000	10/01/24 0054	BDF
Surrogate: Dibromofluoromethane	80.4	Limit: 57-134	% Rec	1		09/24/24 0000	09/24/24 1926	BDF
Surrogate: Dibromofluoromethane	107	Limit: 75-136	% Rec	1		09/30/24 0000	10/01/24 0054	BDF
Surrogate: 1,2-Dichloroethane-d4	88.0	Limit: 53-140	% Rec	1		09/24/24 0000	09/24/24 1926	BDF
Surrogate: 1,2-Dichloroethane-d4	110	Limit: 61-142	% Rec	1		09/30/24 0000	10/01/24 0054	BDF
Surrogate: Toluene-d8	88.6	Limit: 86-114	% Rec	1		09/24/24 0000	09/24/24 1926	BDF
Surrogate: Toluene-d8	115	Limit: 82-121	% Rec	1		09/30/24 0000	10/01/24 0054	BDF
Surrogate: 4-Bromofluorobenzene	98.3	Limit: 78-121	% Rec	1		09/24/24 0000	09/24/24 1926	BDF
Surrogate: 4-Bromofluorobenzene	103	Limit: 80-116	% Rec	1		09/30/24 0000	10/01/24 0054	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		09/25/24 1604	09/26/24 2036	RVV
Arsenic, total	**0.0306**	0.0040	mg/L	4		09/25/24 1604	09/26/24 2036	RVV
Barium, total	**0.0528**	0.0040	mg/L	4		09/25/24 1604	09/26/24 2036	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2036	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		09/25/24 1604	09/26/24 2036	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		09/25/24 1604	09/26/24 2036	RVV
Cobalt, total	**0.0179**	0.0004	mg/L	4		09/25/24 1604	09/26/24 2036	RVV
Copper, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2036	RVV
Lead, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2036	RVV
Nickel, total	**0.0426**	0.0040	mg/L	4		09/25/24 1604	09/26/24 2036	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2036	RVV
Silver, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2036	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		09/25/24 1604	09/26/24 2036	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		09/25/24 1604	09/26/24 2036	RVV
Zinc, total	**0.0215**	0.0200	mg/L	4		09/25/24 1604	09/26/24 2036	RVV

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HI1560

Client Sample ID:	MW-65		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HI1560-05	**Collection Date:**	09/23/2024 10:37

Determination of Volatile Organic Compounds	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0116	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0116	BDF
Bromomethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0116	BDF
Chloroethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0116	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0116	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0116	BDF
Acetone	<10.0	10.0	ug/L	1		09/30/24 0000	10/01/24 0116	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0116	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0116	BDF
Methylene Chloride	<5.0	5.0	ug/L	1		09/30/24 0000	10/01/24 0116	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		09/24/24 0000	09/24/24 1948	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0116	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0116	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		09/30/24 0000	10/01/24 0116	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0116	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		09/30/24 0000	10/01/24 0116	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0116	BDF
Chloroform	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0116	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0116	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0116	BDF
Benzene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0116	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0116	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0116	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0116	BDF
Dibromomethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0116	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0116	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0116	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		09/30/24 0000	10/01/24 0116	BDF
Toluene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0116	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0116	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0116	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0116	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		09/30/24 0000	10/01/24 0116	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0116	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0116	BDF
Chlorobenzene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0116	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0116	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0116	BDF
Xylenes, total	<2.0	2.0	ug/L	1		09/30/24 0000	10/01/24 0116	BDF
Styrene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0116	BDF
Bromoform	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0116	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0116	BDF

Client Sample ID:	MW-65			
Sample Matrix:	Aqueous		**Collected By:**	Whipple, Todd
Lab Sample ID:	1HI1560-05		**Collection Date:**	09/23/2024 10:37

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		09/30/24 0000	10/01/24 0116	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0116	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0116	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0116	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		09/30/24 0000	10/01/24 0116	BDF
Surrogate: Dibromofluoromethane	80.3	Limit: 57-134	% Rec	1		09/24/24 0000	09/24/24 1948	BDF
Surrogate: Dibromofluoromethane	107	Limit: 75-136	% Rec	1		09/30/24 0000	10/01/24 0116	BDF
Surrogate: 1,2-Dichloroethane-d4	86.8	Limit: 53-140	% Rec	1		09/24/24 0000	09/24/24 1948	BDF
Surrogate: 1,2-Dichloroethane-d4	110	Limit: 61-142	% Rec	1		09/30/24 0000	10/01/24 0116	BDF
Surrogate: Toluene-d8	89.7	Limit: 86-114	% Rec	1		09/24/24 0000	09/24/24 1948	BDF
Surrogate: Toluene-d8	90.0	Limit: 82-121	% Rec	1		09/30/24 0000	10/01/24 0116	BDF
Surrogate: 4-Bromofluorobenzene	99.8	Limit: 78-121	% Rec	1		09/24/24 0000	09/24/24 1948	BDF
Surrogate: 4-Bromofluorobenzene	101	Limit: 80-116	% Rec	1		09/30/24 0000	10/01/24 0116	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		09/25/24 1604	09/26/24 2043	RVV
Arsenic, total	**0.0079**	0.0040	mg/L	4		09/25/24 1604	09/26/24 2043	RVV
Barium, total	**0.0354**	0.0040	mg/L	4		09/25/24 1604	09/26/24 2043	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2043	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		09/25/24 1604	09/26/24 2043	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		09/25/24 1604	09/26/24 2043	RVV
Cobalt, total	**0.0034**	0.0004	mg/L	4		09/25/24 1604	09/26/24 2043	RVV
Copper, total	**0.0087**	0.0040	mg/L	4		09/25/24 1604	09/26/24 2043	RVV
Lead, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2043	RVV
Nickel, total	**0.0135**	0.0040	mg/L	4		09/25/24 1604	09/26/24 2043	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2043	RVV
Silver, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2043	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		09/25/24 1604	09/26/24 2043	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		09/25/24 1604	09/26/24 2043	RVV
Zinc, total	**0.0294**	0.0200	mg/L	4		09/25/24 1604	09/26/24 2043	RVV

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HI1560

Client Sample ID:	SW-101R		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HI1560-06	**Collection Date:**	09/23/2024 11:54

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0139	BDF
Vinyl Chloride	**3.1**	1.0	ug/L	1		09/30/24 0000	10/01/24 0139	BDF
Bromomethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0139	BDF
Chloroethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0139	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0139	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0139	BDF
Acetone	<10.0	10.0	ug/L	1		09/30/24 0000	10/01/24 0139	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0139	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0139	BDF
Methylene Chloride	<5.0	5.0	ug/L	1		09/30/24 0000	10/01/24 0139	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		09/24/24 0000	09/24/24 2011	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0139	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0139	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		09/30/24 0000	10/01/24 0139	BDF
cis-1,2-Dichloroethylene	**3.4**	1.0	ug/L	1		09/30/24 0000	10/01/24 0139	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		09/30/24 0000	10/01/24 0139	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0139	BDF
Chloroform	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0139	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0139	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0139	BDF
Benzene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0139	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0139	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0139	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0139	BDF
Dibromomethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0139	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0139	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0139	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		09/30/24 0000	10/01/24 0139	BDF
Toluene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0139	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0139	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0139	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0139	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		09/30/24 0000	10/01/24 0139	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0139	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0139	BDF
Chlorobenzene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0139	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0139	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0139	BDF
Xylenes, total	<2.0	2.0	ug/L	1		09/30/24 0000	10/01/24 0139	BDF
Styrene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0139	BDF
Bromoform	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0139	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0139	BDF

Client Sample ID:	SW-101R		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HI1560-06	**Collection Date:**	09/23/2024 11:54

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		09/30/24 0000	10/01/24 0139	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0139	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0139	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0139	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		09/30/24 0000	10/01/24 0139	BDF
Surrogate: Dibromofluoromethane	80.9	Limit: 57-134	% Rec	1		09/24/24 0000	09/24/24 2011	BDF
Surrogate: Dibromofluoromethane	106	Limit: 75-136	% Rec	1		09/30/24 0000	10/01/24 0139	BDF
Surrogate: 1,2-Dichloroethane-d4	111	Limit: 61-142	% Rec	1		09/30/24 0000	10/01/24 0139	BDF
Surrogate: 1,2-Dichloroethane-d4	88.8	Limit: 53-140	% Rec	1		09/24/24 0000	09/24/24 2011	BDF
Surrogate: Toluene-d8	89.0	Limit: 86-114	% Rec	1		09/24/24 0000	09/24/24 2011	BDF
Surrogate: Toluene-d8	100	Limit: 82-121	% Rec	1		09/30/24 0000	10/01/24 0139	BDF
Surrogate: 4-Bromofluorobenzene	105	Limit: 80-116	% Rec	1		09/30/24 0000	10/01/24 0139	BDF
Surrogate: 4-Bromofluorobenzene	98.6	Limit: 78-121	% Rec	1		09/24/24 0000	09/24/24 2011	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		09/25/24 1604	09/26/24 2049	RVV
Arsenic, total	**0.0047**	0.0040	mg/L	4		09/25/24 1604	09/26/24 2049	RVV
Barium, total	**0.236**	0.0040	mg/L	4		09/25/24 1604	09/26/24 2049	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2049	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		09/25/24 1604	09/26/24 2049	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		09/25/24 1604	09/26/24 2049	RVV
Cobalt, total	**0.0039**	0.0004	mg/L	4		09/25/24 1604	09/26/24 2049	RVV
Copper, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2049	RVV
Lead, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2049	RVV
Nickel, total	**0.0047**	0.0040	mg/L	4		09/25/24 1604	09/26/24 2049	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2049	RVV
Silver, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2049	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		09/25/24 1604	09/26/24 2049	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		09/25/24 1604	09/26/24 2049	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		09/25/24 1604	09/26/24 2049	RVV

Client Sample ID:	PECS-1		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HI1560-07	**Collection Date:**	09/23/2024 12:05

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0201	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0201	BDF
Bromomethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0201	BDF
Chloroethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0201	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0201	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0201	BDF
Acetone	<10.0	10.0	ug/L	1		09/30/24 0000	10/01/24 0201	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0201	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0201	BDF
Methylene Chloride	<5.0	5.0	ug/L	1		09/30/24 0000	10/01/24 0201	BDF
Acrylonitrile	<5.0	5.0	ug/L	1	**Q8**	09/28/24 0000	09/28/24 1922	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0201	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0201	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		09/30/24 0000	10/01/24 0201	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0201	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		09/30/24 0000	10/01/24 0201	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0201	BDF
Chloroform	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0201	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0201	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0201	BDF
Benzene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0201	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0201	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0201	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0201	BDF
Dibromomethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0201	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0201	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0201	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		09/30/24 0000	10/01/24 0201	BDF
Toluene	**1.8**	1.0	ug/L	1		09/30/24 0000	10/01/24 0201	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0201	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0201	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0201	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		09/30/24 0000	10/01/24 0201	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0201	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0201	BDF
Chlorobenzene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0201	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0201	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0201	BDF
Xylenes, total	<2.0	2.0	ug/L	1		09/30/24 0000	10/01/24 0201	BDF
Styrene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0201	BDF
Bromoform	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0201	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0201	BDF

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HI1560

Client Sample ID:	PECS-1		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HI1560-07	**Collection Date:**	09/23/2024 12:05

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		09/30/24 0000	10/01/24 0201	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0201	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0201	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		09/30/24 0000	10/01/24 0201	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		09/30/24 0000	10/01/24 0201	BDF
Surrogate: Dibromofluoromethane	106	Limit: 75-136	% Rec	1		09/30/24 0000	10/01/24 0201	BDF
Surrogate: Dibromofluoromethane	64.7	Limit: 57-134	% Rec	1		09/28/24 0000	09/28/24 1922	BDF
Surrogate: 1,2-Dichloroethane-d4	111	Limit: 61-142	% Rec	1		09/30/24 0000	10/01/24 0201	BDF
Surrogate: 1,2-Dichloroethane-d4	66.6	Limit: 53-140	% Rec	1		09/28/24 0000	09/28/24 1922	BDF
Surrogate: Toluene-d8	100	Limit: 82-121	% Rec	1		09/30/24 0000	10/01/24 0201	BDF
Surrogate: Toluene-d8	104	Limit: 86-114	% Rec	1		09/28/24 0000	09/28/24 1922	BDF
Surrogate: 4-Bromofluorobenzene	115	Limit: 80-116	% Rec	1		09/30/24 0000	10/01/24 0201	BDF
Surrogate: 4-Bromofluorobenzene	85.5	Limit: 78-121	% Rec	1		09/28/24 0000	09/28/24 1922	BDF

Client Sample ID:	SW-102		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HI1560-08	**Collection Date:**	09/23/2024 12:11

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1			10/01/24 1116	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1			10/01/24 1116	BDF
Bromomethane	<1.0	1.0	ug/L	1			10/01/24 1116	BDF
Chloroethane	<1.0	1.0	ug/L	1			10/01/24 1116	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1			10/01/24 1116	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1			10/01/24 1116	BDF
Acetone	<10.0	10.0	ug/L	1			10/01/24 1116	BDF
Methyl Iodide	<1.0	1.0	ug/L	1			10/01/24 1116	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1			10/01/24 1116	BDF
Methylene Chloride	<5.0	5.0	ug/L	1			10/01/24 1116	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		09/24/24 0000	09/24/24 2033	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1			10/01/24 1116	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1			10/01/24 1116	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1			10/01/24 1116	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1			10/01/24 1116	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1			10/01/24 1116	BDF
Bromochloromethane	<1.0	1.0	ug/L	1			10/01/24 1116	BDF
Chloroform	<1.0	1.0	ug/L	1			10/01/24 1116	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1			10/01/24 1116	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1			10/01/24 1116	BDF
Benzene	<1.0	1.0	ug/L	1			10/01/24 1116	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1			10/01/24 1116	BDF
Trichloroethylene	<1.0	1.0	ug/L	1			10/01/24 1116	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1			10/01/24 1116	BDF
Dibromomethane	<1.0	1.0	ug/L	1			10/01/24 1116	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1			10/01/24 1116	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1			10/01/24 1116	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1			10/01/24 1116	BDF
Toluene	<1.0	1.0	ug/L	1			10/01/24 1116	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1			10/01/24 1116	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1			10/01/24 1116	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1			10/01/24 1116	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1			10/01/24 1116	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1			10/01/24 1116	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1			10/01/24 1116	BDF
Chlorobenzene	<1.0	1.0	ug/L	1			10/01/24 1116	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1			10/01/24 1116	BDF
Ethylbenzene	<1.0	1.0	ug/L	1			10/01/24 1116	BDF
Xylenes, total	<2.0	2.0	ug/L	1			10/01/24 1116	BDF
Styrene	<1.0	1.0	ug/L	1			10/01/24 1116	BDF
Bromoform	<1.0	1.0	ug/L	1			10/01/24 1116	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1			10/01/24 1116	BDF

Client Sample ID:	SW-102		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HI1560-08	**Collection Date:**	09/23/2024 12:11

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			10/01/24 1116	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1			10/01/24 1116	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1			10/01/24 1116	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1			10/01/24 1116	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1			10/01/24 1116	BDF
Surrogate: Dibromofluoromethane	81.0	Limit: 57-134	% Rec	1		09/24/24 0000	09/24/24 2033	BDF
Surrogate: Dibromofluoromethane	101	Limit: 75-136	% Rec	1			10/01/24 1116	BDF
Surrogate: 1,2-Dichloroethane-d4	89.1	Limit: 53-140	% Rec	1		09/24/24 0000	09/24/24 2033	BDF
Surrogate: 1,2-Dichloroethane-d4	102	Limit: 61-142	% Rec	1			10/01/24 1116	BDF
Surrogate: Toluene-d8	89.6	Limit: 86-114	% Rec	1		09/24/24 0000	09/24/24 2033	BDF
Surrogate: Toluene-d8	97.4	Limit: 82-121	% Rec	1			10/01/24 1116	BDF
Surrogate: 4-Bromofluorobenzene	98.1	Limit: 78-121	% Rec	1		09/24/24 0000	09/24/24 2033	BDF
Surrogate: 4-Bromofluorobenzene	95.5	Limit: 80-116	% Rec	1			10/01/24 1116	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		09/25/24 1604	09/26/24 2055	RVV
Arsenic, total	**0.0043**	0.0040	mg/L	4		09/25/24 1604	09/26/24 2055	RVV
Barium, total	**0.190**	0.0040	mg/L	4		09/25/24 1604	09/26/24 2055	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2055	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		09/25/24 1604	09/26/24 2055	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		09/25/24 1604	09/26/24 2055	RVV
Cobalt, total	**0.0011**	0.0004	mg/L	4		09/25/24 1604	09/26/24 2055	RVV
Copper, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2055	RVV
Lead, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2055	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2055	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2055	RVV
Silver, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2055	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		09/25/24 1604	09/26/24 2055	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		09/25/24 1604	09/26/24 2055	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		09/25/24 1604	09/26/24 2055	RVV

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HI1560

Client Sample ID:	SW-103			
Sample Matrix:	Aqueous		**Collected By:**	Whipple, Todd
Lab Sample ID:	1HI1560-09		**Collection Date:**	09/23/2024 10:47

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1			10/01/24 1138	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1			10/01/24 1138	BDF
Bromomethane	<1.0	1.0	ug/L	1			10/01/24 1138	BDF
Chloroethane	<1.0	1.0	ug/L	1			10/01/24 1138	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1			10/01/24 1138	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1			10/01/24 1138	BDF
Acetone	<10.0	10.0	ug/L	1			10/01/24 1138	BDF
Methyl Iodide	<1.0	1.0	ug/L	1			10/01/24 1138	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1			10/01/24 1138	BDF
Methylene Chloride	<5.0	5.0	ug/L	1			10/01/24 1138	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		09/24/24 0000	09/24/24 2056	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1			10/01/24 1138	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1			10/01/24 1138	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1			10/01/24 1138	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1			10/01/24 1138	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1			10/01/24 1138	BDF
Bromochloromethane	<1.0	1.0	ug/L	1			10/01/24 1138	BDF
Chloroform	<1.0	1.0	ug/L	1			10/01/24 1138	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1			10/01/24 1138	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1			10/01/24 1138	BDF
Benzene	<1.0	1.0	ug/L	1			10/01/24 1138	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1			10/01/24 1138	BDF
Trichloroethylene	<1.0	1.0	ug/L	1			10/01/24 1138	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1			10/01/24 1138	BDF
Dibromomethane	<1.0	1.0	ug/L	1			10/01/24 1138	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1			10/01/24 1138	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1			10/01/24 1138	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1			10/01/24 1138	BDF
Toluene	<1.0	1.0	ug/L	1			10/01/24 1138	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1			10/01/24 1138	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1			10/01/24 1138	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1			10/01/24 1138	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1			10/01/24 1138	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1			10/01/24 1138	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1			10/01/24 1138	BDF
Chlorobenzene	<1.0	1.0	ug/L	1			10/01/24 1138	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1			10/01/24 1138	BDF
Ethylbenzene	<1.0	1.0	ug/L	1			10/01/24 1138	BDF
Xylenes, total	<2.0	2.0	ug/L	1			10/01/24 1138	BDF
Styrene	<1.0	1.0	ug/L	1			10/01/24 1138	BDF
Bromoform	<1.0	1.0	ug/L	1			10/01/24 1138	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1			10/01/24 1138	BDF

Client Sample ID:	SW-103			
Sample Matrix:	Aqueous		**Collected By:**	Whipple, Todd
Lab Sample ID:	1HI1560-09		**Collection Date:**	09/23/2024 10:47

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			10/01/24 1138	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1			10/01/24 1138	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1			10/01/24 1138	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1			10/01/24 1138	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1			10/01/24 1138	BDF
Surrogate: Dibromofluoromethane	100	Limit: 75-136	% Rec	1			10/01/24 1138	BDF
Surrogate: Dibromofluoromethane	79.9	Limit: 57-134	% Rec	1		09/24/24 0000	09/24/24 2056	BDF
Surrogate: 1,2-Dichloroethane-d4	103	Limit: 61-142	% Rec	1			10/01/24 1138	BDF
Surrogate: 1,2-Dichloroethane-d4	89.3	Limit: 53-140	% Rec	1		09/24/24 0000	09/24/24 2056	BDF
Surrogate: Toluene-d8	89.2	Limit: 86-114	% Rec	1		09/24/24 0000	09/24/24 2056	BDF
Surrogate: Toluene-d8	98.9	Limit: 82-121	% Rec	1			10/01/24 1138	BDF
Surrogate: 4-Bromofluorobenzene	97.0	Limit: 78-121	% Rec	1		09/24/24 0000	09/24/24 2056	BDF
Surrogate: 4-Bromofluorobenzene	95.5	Limit: 80-116	% Rec	1			10/01/24 1138	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		09/25/24 1604	09/26/24 2101	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2101	RVV
Barium, total	**0.141**	0.0040	mg/L	4		09/25/24 1604	09/26/24 2101	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2101	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		09/25/24 1604	09/26/24 2101	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		09/25/24 1604	09/26/24 2101	RVV
Cobalt, total	**0.0006**	0.0004	mg/L	4		09/25/24 1604	09/26/24 2101	RVV
Copper, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2101	RVV
Lead, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2101	RVV
Nickel, total	**0.0045**	0.0040	mg/L	4		09/25/24 1604	09/26/24 2101	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2101	RVV
Silver, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2101	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		09/25/24 1604	09/26/24 2101	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		09/25/24 1604	09/26/24 2101	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		09/25/24 1604	09/26/24 2101	RVV

Client Sample ID:	MW-48 (B)			
Sample Matrix:	Aqueous		**Collected By:**	Whipple, Todd
Lab Sample ID:	1HI1560-10		**Collection Date:**	09/23/2024 11:36

Determination of Volatile Organic Compounds	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1			10/01/24 1201	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1			10/01/24 1201	BDF
Bromomethane	<1.0	1.0	ug/L	1			10/01/24 1201	BDF
Chloroethane	<1.0	1.0	ug/L	1			10/01/24 1201	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1			10/01/24 1201	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1			10/01/24 1201	BDF
Acetone	<10.0	10.0	ug/L	1			10/01/24 1201	BDF
Methyl Iodide	<1.0	1.0	ug/L	1			10/01/24 1201	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1			10/01/24 1201	BDF
Methylene Chloride	<5.0	5.0	ug/L	1			10/01/24 1201	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		09/24/24 0000	09/24/24 2118	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1			10/01/24 1201	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1			10/01/24 1201	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1			10/01/24 1201	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1			10/01/24 1201	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1			10/01/24 1201	BDF
Bromochloromethane	<1.0	1.0	ug/L	1			10/01/24 1201	BDF
Chloroform	<1.0	1.0	ug/L	1			10/01/24 1201	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1			10/01/24 1201	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1			10/01/24 1201	BDF
Benzene	<1.0	1.0	ug/L	1			10/01/24 1201	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1			10/01/24 1201	BDF
Trichloroethylene	<1.0	1.0	ug/L	1			10/01/24 1201	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1			10/01/24 1201	BDF
Dibromomethane	<1.0	1.0	ug/L	1			10/01/24 1201	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1			10/01/24 1201	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1			10/01/24 1201	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1			10/01/24 1201	BDF
Toluene	<1.0	1.0	ug/L	1			10/01/24 1201	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1			10/01/24 1201	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1			10/01/24 1201	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1			10/01/24 1201	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1			10/01/24 1201	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1			10/01/24 1201	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1			10/01/24 1201	BDF
Chlorobenzene	<1.0	1.0	ug/L	1			10/01/24 1201	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1			10/01/24 1201	BDF
Ethylbenzene	<1.0	1.0	ug/L	1			10/01/24 1201	BDF
Xylenes, total	<2.0	2.0	ug/L	1			10/01/24 1201	BDF
Styrene	<1.0	1.0	ug/L	1			10/01/24 1201	BDF
Bromoform	<1.0	1.0	ug/L	1			10/01/24 1201	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1			10/01/24 1201	BDF

Client Sample ID:	MW-48 (B)		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HI1560-10	**Collection Date:**	09/23/2024 11:36

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			10/01/24 1201	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1			10/01/24 1201	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1			10/01/24 1201	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1			10/01/24 1201	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1			10/01/24 1201	BDF
Surrogate: Dibromofluoromethane	83.8	Limit: 57-134	% Rec	1		09/24/24 0000	09/24/24 2118	BDF
Surrogate: Dibromofluoromethane	100	Limit: 75-136	% Rec	1			10/01/24 1201	BDF
Surrogate: 1,2-Dichloroethane-d4	88.7	Limit: 53-140	% Rec	1		09/24/24 0000	09/24/24 2118	BDF
Surrogate: 1,2-Dichloroethane-d4	103	Limit: 61-142	% Rec	1			10/01/24 1201	BDF
Surrogate: Toluene-d8	75.8	Limit: 86-114	% Rec	1	**S2**	09/24/24 0000	09/24/24 2118	BDF
Surrogate: Toluene-d8	98.6	Limit: 82-121	% Rec	1			10/01/24 1201	BDF
Surrogate: 4-Bromofluorobenzene	110	Limit: 78-121	% Rec	1		09/24/24 0000	09/24/24 2118	BDF
Surrogate: 4-Bromofluorobenzene	95.7	Limit: 80-116	% Rec	1			10/01/24 1201	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		09/25/24 1604	09/26/24 2119	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2119	RVV
Barium, total	**0.148**	0.0040	mg/L	4		09/25/24 1604	09/26/24 2119	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2119	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		09/25/24 1604	09/26/24 2119	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		09/25/24 1604	09/26/24 2119	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		09/25/24 1604	09/26/24 2119	RVV
Copper, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2119	RVV
Lead, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2119	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2119	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2119	RVV
Silver, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2119	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		09/25/24 1604	09/26/24 2119	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		09/25/24 1604	09/26/24 2119	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		09/25/24 1604	09/26/24 2119	RVV

Client Sample ID:	MW-39 (B)			
Sample Matrix:	Aqueous		**Collected By:**	Whipple, Todd
Lab Sample ID:	1HI1560-11		**Collection Date:**	09/23/2024 13:42

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1			10/01/24 1224	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1			10/01/24 1224	BDF
Bromomethane	<1.0	1.0	ug/L	1			10/01/24 1224	BDF
Chloroethane	<1.0	1.0	ug/L	1			10/01/24 1224	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1			10/01/24 1224	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1			10/01/24 1224	BDF
Acetone	<10.0	10.0	ug/L	1			10/01/24 1224	BDF
Methyl Iodide	<1.0	1.0	ug/L	1			10/01/24 1224	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1			10/01/24 1224	BDF
Methylene Chloride	<5.0	5.0	ug/L	1			10/01/24 1224	BDF
Acrylonitrile	<5.0	5.0	ug/L	1	**Q8**	09/28/24 0000	09/28/24 1945	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1			10/01/24 1224	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1			10/01/24 1224	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1			10/01/24 1224	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1			10/01/24 1224	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1			10/01/24 1224	BDF
Bromochloromethane	<1.0	1.0	ug/L	1			10/01/24 1224	BDF
Chloroform	<1.0	1.0	ug/L	1			10/01/24 1224	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1			10/01/24 1224	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1			10/01/24 1224	BDF
Benzene	<1.0	1.0	ug/L	1			10/01/24 1224	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1			10/01/24 1224	BDF
Trichloroethylene	<1.0	1.0	ug/L	1			10/01/24 1224	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1			10/01/24 1224	BDF
Dibromomethane	<1.0	1.0	ug/L	1			10/01/24 1224	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1			10/01/24 1224	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1			10/01/24 1224	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1			10/01/24 1224	BDF
Toluene	<1.0	1.0	ug/L	1			10/01/24 1224	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1			10/01/24 1224	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1			10/01/24 1224	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1			10/01/24 1224	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1			10/01/24 1224	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1			10/01/24 1224	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1			10/01/24 1224	BDF
Chlorobenzene	<1.0	1.0	ug/L	1			10/01/24 1224	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1			10/01/24 1224	BDF
Ethylbenzene	<1.0	1.0	ug/L	1			10/01/24 1224	BDF
Xylenes, total	<2.0	2.0	ug/L	1			10/01/24 1224	BDF
Styrene	<1.0	1.0	ug/L	1			10/01/24 1224	BDF
Bromoform	<1.0	1.0	ug/L	1			10/01/24 1224	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1			10/01/24 1224	BDF

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CERTIFICATE OF ANALYSIS

1HI1560

Client Sample ID:	MW-39 (B)		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HI1560-11	**Collection Date:**	09/23/2024 13:42

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			10/01/24 1224	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1			10/01/24 1224	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1			10/01/24 1224	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1			10/01/24 1224	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1			10/01/24 1224	BDF
Surrogate: Dibromofluoromethane	68.8	Limit: 57-134	% Rec	1		09/28/24 0000	09/28/24 1945	BDF
Surrogate: Dibromofluoromethane	101	Limit: 75-136	% Rec	1			10/01/24 1224	BDF
Surrogate: 1,2-Dichloroethane-d4	68.3	Limit: 53-140	% Rec	1		09/28/24 0000	09/28/24 1945	BDF
Surrogate: 1,2-Dichloroethane-d4	102	Limit: 61-142	% Rec	1			10/01/24 1224	BDF
Surrogate: Toluene-d8	104	Limit: 86-114	% Rec	1		09/28/24 0000	09/28/24 1945	BDF
Surrogate: Toluene-d8	97.9	Limit: 82-121	% Rec	1			10/01/24 1224	BDF
Surrogate: 4-Bromofluorobenzene	84.3	Limit: 78-121	% Rec	1		09/28/24 0000	09/28/24 1945	BDF
Surrogate: 4-Bromofluorobenzene	96.2	Limit: 80-116	% Rec	1			10/01/24 1224	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		09/25/24 1604	09/26/24 2125	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2125	RVV
Barium, total	**0.119**	0.0040	mg/L	4		09/25/24 1604	09/26/24 2125	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2125	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		09/25/24 1604	09/26/24 2125	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		09/25/24 1604	09/26/24 2125	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		09/25/24 1604	09/26/24 2125	RVV
Copper, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2125	RVV
Lead, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2125	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2125	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2125	RVV
Silver, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2125	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		09/25/24 1604	09/26/24 2125	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		09/25/24 1604	09/26/24 2125	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		09/25/24 1604	09/26/24 2125	RVV

Client Sample ID:	MW-78 (B)			
Sample Matrix:	Aqueous		**Collected By:**	Whipple, Todd
Lab Sample ID:	1HI1560-12		**Collection Date:**	09/23/2024 14:07

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1			10/01/24 1246	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1			10/01/24 1246	BDF
Bromomethane	<1.0	1.0	ug/L	1			10/01/24 1246	BDF
Chloroethane	<1.0	1.0	ug/L	1			10/01/24 1246	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1			10/01/24 1246	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1			10/01/24 1246	BDF
Acetone	<10.0	10.0	ug/L	1			10/01/24 1246	BDF
Methyl Iodide	<1.0	1.0	ug/L	1			10/01/24 1246	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1			10/01/24 1246	BDF
Methylene Chloride	<5.0	5.0	ug/L	1			10/01/24 1246	BDF
Acrylonitrile	<5.0	5.0	ug/L	1	**Q8**	09/28/24 0000	09/28/24 2007	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1			10/01/24 1246	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1			10/01/24 1246	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1			10/01/24 1246	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1			10/01/24 1246	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1			10/01/24 1246	BDF
Bromochloromethane	<1.0	1.0	ug/L	1			10/01/24 1246	BDF
Chloroform	<1.0	1.0	ug/L	1			10/01/24 1246	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1			10/01/24 1246	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1			10/01/24 1246	BDF
Benzene	<1.0	1.0	ug/L	1			10/01/24 1246	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1			10/01/24 1246	BDF
Trichloroethylene	<1.0	1.0	ug/L	1			10/01/24 1246	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1			10/01/24 1246	BDF
Dibromomethane	<1.0	1.0	ug/L	1			10/01/24 1246	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1			10/01/24 1246	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1			10/01/24 1246	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1			10/01/24 1246	BDF
Toluene	<1.0	1.0	ug/L	1			10/01/24 1246	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1			10/01/24 1246	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1			10/01/24 1246	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1			10/01/24 1246	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1			10/01/24 1246	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1			10/01/24 1246	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1			10/01/24 1246	BDF
Chlorobenzene	<1.0	1.0	ug/L	1			10/01/24 1246	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1			10/01/24 1246	BDF
Ethylbenzene	<1.0	1.0	ug/L	1			10/01/24 1246	BDF
Xylenes, total	<2.0	2.0	ug/L	1			10/01/24 1246	BDF
Styrene	<1.0	1.0	ug/L	1			10/01/24 1246	BDF
Bromoform	<1.0	1.0	ug/L	1			10/01/24 1246	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1			10/01/24 1246	BDF

Client Sample ID:	MW-78 (B)		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HI1560-12	**Collection Date:**	09/23/2024 14:07

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			10/01/24 1246	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1			10/01/24 1246	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1			10/01/24 1246	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1			10/01/24 1246	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1			10/01/24 1246	BDF
Surrogate: Dibromofluoromethane	66.0	Limit: 57-134	% Rec	1		09/28/24 0000	09/28/24 2007	BDF
Surrogate: Dibromofluoromethane	99.1	Limit: 75-136	% Rec	1			10/01/24 1246	BDF
Surrogate: 1,2-Dichloroethane-d4	69.2	Limit: 53-140	% Rec	1		09/28/24 0000	09/28/24 2007	BDF
Surrogate: 1,2-Dichloroethane-d4	102	Limit: 61-142	% Rec	1			10/01/24 1246	BDF
Surrogate: Toluene-d8	113	Limit: 86-114	% Rec	1		09/28/24 0000	09/28/24 2007	BDF
Surrogate: Toluene-d8	97.8	Limit: 82-121	% Rec	1			10/01/24 1246	BDF
Surrogate: 4-Bromofluorobenzene	83.3	Limit: 78-121	% Rec	1		09/28/24 0000	09/28/24 2007	BDF
Surrogate: 4-Bromofluorobenzene	96.5	Limit: 80-116	% Rec	1			10/01/24 1246	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		09/25/24 1604	09/26/24 2132	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2132	RVV
Barium, total	**0.284**	0.0040	mg/L	4		09/25/24 1604	09/26/24 2132	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2132	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		09/25/24 1604	09/26/24 2132	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		09/25/24 1604	09/26/24 2132	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		09/25/24 1604	09/26/24 2132	RVV
Copper, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2132	RVV
Lead, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2132	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2132	RVV
Selenium, total	**0.0041**	0.0040	mg/L	4		09/25/24 1604	09/26/24 2132	RVV
Silver, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2132	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		09/25/24 1604	09/26/24 2132	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		09/25/24 1604	09/26/24 2132	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		09/25/24 1604	09/26/24 2132	RVV

Client Sample ID:	MW-62R		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HI1560-13	**Collection Date:**	09/23/2024 13:56

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1			10/01/24 1309	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1			10/01/24 1309	BDF
Bromomethane	<1.0	1.0	ug/L	1			10/01/24 1309	BDF
Chloroethane	<1.0	1.0	ug/L	1			10/01/24 1309	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1			10/01/24 1309	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1			10/01/24 1309	BDF
Acetone	<10.0	10.0	ug/L	1			10/01/24 1309	BDF
Methyl Iodide	<1.0	1.0	ug/L	1			10/01/24 1309	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1			10/01/24 1309	BDF
Methylene Chloride	<5.0	5.0	ug/L	1			10/01/24 1309	BDF
Acrylonitrile	<5.0	5.0	ug/L	1	**Q8**	09/28/24 0000	09/28/24 2029	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1			10/01/24 1309	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1			10/01/24 1309	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1			10/01/24 1309	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1			10/01/24 1309	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1			10/01/24 1309	BDF
Bromochloromethane	<1.0	1.0	ug/L	1			10/01/24 1309	BDF
Chloroform	<1.0	1.0	ug/L	1			10/01/24 1309	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1			10/01/24 1309	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1			10/01/24 1309	BDF
Benzene	<1.0	1.0	ug/L	1			10/01/24 1309	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1			10/01/24 1309	BDF
Trichloroethylene	<1.0	1.0	ug/L	1			10/01/24 1309	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1			10/01/24 1309	BDF
Dibromomethane	<1.0	1.0	ug/L	1			10/01/24 1309	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1			10/01/24 1309	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1			10/01/24 1309	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1			10/01/24 1309	BDF
Toluene	<1.0	1.0	ug/L	1			10/01/24 1309	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1			10/01/24 1309	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1			10/01/24 1309	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1			10/01/24 1309	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1			10/01/24 1309	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1			10/01/24 1309	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1			10/01/24 1309	BDF
Chlorobenzene	<1.0	1.0	ug/L	1			10/01/24 1309	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1			10/01/24 1309	BDF
Ethylbenzene	<1.0	1.0	ug/L	1			10/01/24 1309	BDF
Xylenes, total	<2.0	2.0	ug/L	1			10/01/24 1309	BDF
Styrene	<1.0	1.0	ug/L	1			10/01/24 1309	BDF
Bromoform	<1.0	1.0	ug/L	1			10/01/24 1309	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1			10/01/24 1309	BDF

Client Sample ID:	MW-62R		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HI1560-13	**Collection Date:**	09/23/2024 13:56

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			10/01/24 1309	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1			10/01/24 1309	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1			10/01/24 1309	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1			10/01/24 1309	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1			10/01/24 1309	BDF
Surrogate: Dibromofluoromethane	98.6	Limit: 75-136	% Rec	1			10/01/24 1309	BDF
Surrogate: Dibromofluoromethane	63.7	Limit: 57-134	% Rec	1		09/28/24 0000	09/28/24 2029	BDF
Surrogate: 1,2-Dichloroethane-d4	103	Limit: 61-142	% Rec	1			10/01/24 1309	BDF
Surrogate: 1,2-Dichloroethane-d4	58.3	Limit: 53-140	% Rec	1		09/28/24 0000	09/28/24 2029	BDF
Surrogate: Toluene-d8	97.6	Limit: 82-121	% Rec	1			10/01/24 1309	BDF
Surrogate: Toluene-d8	112	Limit: 86-114	% Rec	1		09/28/24 0000	09/28/24 2029	BDF
Surrogate: 4-Bromofluorobenzene	94.7	Limit: 80-116	% Rec	1			10/01/24 1309	BDF
Surrogate: 4-Bromofluorobenzene	82.1	Limit: 78-121	% Rec	1		09/28/24 0000	09/28/24 2029	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		09/25/24 1604	09/26/24 2138	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2138	RVV
Barium, total	**0.945**	0.0040	mg/L	4		09/25/24 1604	09/26/24 2138	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2138	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		09/25/24 1604	09/26/24 2138	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		09/25/24 1604	09/26/24 2138	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		09/25/24 1604	09/26/24 2138	RVV
Copper, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2138	RVV
Lead, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2138	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2138	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2138	RVV
Silver, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2138	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		09/25/24 1604	09/26/24 2138	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		09/25/24 1604	09/26/24 2138	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		09/25/24 1604	09/26/24 2138	RVV

Client Sample ID:	MW-79			
Sample Matrix:	Aqueous		**Collected By:**	Whipple, Todd
Lab Sample ID:	1HI1560-14		**Collection Date:**	09/23/2024 14:19

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1			10/01/24 1332	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1			10/01/24 1332	BDF
Bromomethane	<1.0	1.0	ug/L	1			10/01/24 1332	BDF
Chloroethane	<1.0	1.0	ug/L	1			10/01/24 1332	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1			10/01/24 1332	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1			10/01/24 1332	BDF
Acetone	<10.0	10.0	ug/L	1			10/01/24 1332	BDF
Methyl Iodide	<1.0	1.0	ug/L	1			10/01/24 1332	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1			10/01/24 1332	BDF
Methylene Chloride	<5.0	5.0	ug/L	1			10/01/24 1332	BDF
Acrylonitrile	<5.0	5.0	ug/L	1	**Q8**	09/28/24 0000	09/28/24 2052	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1			10/01/24 1332	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1			10/01/24 1332	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1			10/01/24 1332	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1			10/01/24 1332	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1			10/01/24 1332	BDF
Bromochloromethane	<1.0	1.0	ug/L	1			10/01/24 1332	BDF
Chloroform	<1.0	1.0	ug/L	1			10/01/24 1332	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1			10/01/24 1332	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1			10/01/24 1332	BDF
Benzene	<1.0	1.0	ug/L	1			10/01/24 1332	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1			10/01/24 1332	BDF
Trichloroethylene	<1.0	1.0	ug/L	1			10/01/24 1332	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1			10/01/24 1332	BDF
Dibromomethane	<1.0	1.0	ug/L	1			10/01/24 1332	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1			10/01/24 1332	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1			10/01/24 1332	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1			10/01/24 1332	BDF
Toluene	<1.0	1.0	ug/L	1			10/01/24 1332	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1			10/01/24 1332	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1			10/01/24 1332	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1			10/01/24 1332	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1			10/01/24 1332	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1			10/01/24 1332	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1			10/01/24 1332	BDF
Chlorobenzene	<1.0	1.0	ug/L	1			10/01/24 1332	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1			10/01/24 1332	BDF
Ethylbenzene	<1.0	1.0	ug/L	1			10/01/24 1332	BDF
Xylenes, total	<2.0	2.0	ug/L	1			10/01/24 1332	BDF
Styrene	<1.0	1.0	ug/L	1			10/01/24 1332	BDF
Bromoform	<1.0	1.0	ug/L	1			10/01/24 1332	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1			10/01/24 1332	BDF

Client Sample ID:	MW-79		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HI1560-14	**Collection Date:**	09/23/2024 14:19

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			10/01/24 1332	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1			10/01/24 1332	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1			10/01/24 1332	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1			10/01/24 1332	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1			10/01/24 1332	BDF
Surrogate: Dibromofluoromethane	98.4	Limit: 75-136	% Rec	1			10/01/24 1332	BDF
Surrogate: Dibromofluoromethane	68.3	Limit: 57-134	% Rec	1		09/28/24 0000	09/28/24 2052	BDF
Surrogate: 1,2-Dichloroethane-d4	101	Limit: 61-142	% Rec	1			10/01/24 1332	BDF
Surrogate: 1,2-Dichloroethane-d4	65.7	Limit: 53-140	% Rec	1		09/28/24 0000	09/28/24 2052	BDF
Surrogate: Toluene-d8	97.7	Limit: 82-121	% Rec	1			10/01/24 1332	BDF
Surrogate: Toluene-d8	104	Limit: 86-114	% Rec	1		09/28/24 0000	09/28/24 2052	BDF
Surrogate: 4-Bromofluorobenzene	84.8	Limit: 78-121	% Rec	1		09/28/24 0000	09/28/24 2052	BDF
Surrogate: 4-Bromofluorobenzene	96.1	Limit: 80-116	% Rec	1			10/01/24 1332	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		09/25/24 1604	09/26/24 2144	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2144	RVV
Barium, total	**0.0647**	0.0040	mg/L	4		09/25/24 1604	09/26/24 2144	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2144	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		09/25/24 1604	09/26/24 2144	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		09/25/24 1604	09/26/24 2144	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		09/25/24 1604	09/26/24 2144	RVV
Copper, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2144	RVV
Lead, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2144	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2144	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2144	RVV
Silver, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2144	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		09/25/24 1604	09/26/24 2144	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		09/25/24 1604	09/26/24 2144	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		09/25/24 1604	09/26/24 2144	RVV

Client Sample ID:	MW-80		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HI1560-15	**Collection Date:**	09/23/2024 14:32

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1			10/01/24 1354	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1			10/01/24 1354	BDF
Bromomethane	<1.0	1.0	ug/L	1			10/01/24 1354	BDF
Chloroethane	<1.0	1.0	ug/L	1			10/01/24 1354	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1			10/01/24 1354	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1			10/01/24 1354	BDF
Acetone	<10.0	10.0	ug/L	1			10/01/24 1354	BDF
Methyl Iodide	<1.0	1.0	ug/L	1			10/01/24 1354	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1			10/01/24 1354	BDF
Methylene Chloride	<5.0	5.0	ug/L	1			10/01/24 1354	BDF
Acrylonitrile	<5.0	5.0	ug/L	1	**Q8**	09/28/24 0000	09/28/24 2114	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1			10/01/24 1354	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1			10/01/24 1354	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1			10/01/24 1354	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1			10/01/24 1354	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1			10/01/24 1354	BDF
Bromochloromethane	<1.0	1.0	ug/L	1			10/01/24 1354	BDF
Chloroform	<1.0	1.0	ug/L	1			10/01/24 1354	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1			10/01/24 1354	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1			10/01/24 1354	BDF
Benzene	<1.0	1.0	ug/L	1			10/01/24 1354	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1			10/01/24 1354	BDF
Trichloroethylene	<1.0	1.0	ug/L	1			10/01/24 1354	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1			10/01/24 1354	BDF
Dibromomethane	<1.0	1.0	ug/L	1			10/01/24 1354	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1			10/01/24 1354	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1			10/01/24 1354	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1			10/01/24 1354	BDF
Toluene	<1.0	1.0	ug/L	1			10/01/24 1354	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1			10/01/24 1354	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1			10/01/24 1354	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1			10/01/24 1354	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1			10/01/24 1354	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1			10/01/24 1354	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1			10/01/24 1354	BDF
Chlorobenzene	<1.0	1.0	ug/L	1			10/01/24 1354	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1			10/01/24 1354	BDF
Ethylbenzene	<1.0	1.0	ug/L	1			10/01/24 1354	BDF
Xylenes, total	<2.0	2.0	ug/L	1			10/01/24 1354	BDF
Styrene	<1.0	1.0	ug/L	1			10/01/24 1354	BDF
Bromoform	<1.0	1.0	ug/L	1			10/01/24 1354	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1			10/01/24 1354	BDF

Client Sample ID:	MW-80		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HI1560-15	**Collection Date:**	09/23/2024 14:32

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			10/01/24 1354	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1			10/01/24 1354	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1			10/01/24 1354	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1			10/01/24 1354	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1			10/01/24 1354	BDF
Surrogate: Dibromofluoromethane	68.9	Limit: 57-134	% Rec	1		09/28/24 0000	09/28/24 2114	BDF
Surrogate: Dibromofluoromethane	98.8	Limit: 75-136	% Rec	1			10/01/24 1354	BDF
Surrogate: 1,2-Dichloroethane-d4	67.0	Limit: 53-140	% Rec	1		09/28/24 0000	09/28/24 2114	BDF
Surrogate: 1,2-Dichloroethane-d4	102	Limit: 61-142	% Rec	1			10/01/24 1354	BDF
Surrogate: Toluene-d8	98.0	Limit: 82-121	% Rec	1			10/01/24 1354	BDF
Surrogate: Toluene-d8	102	Limit: 86-114	% Rec	1		09/28/24 0000	09/28/24 2114	BDF
Surrogate: 4-Bromofluorobenzene	84.9	Limit: 78-121	% Rec	1		09/28/24 0000	09/28/24 2114	BDF
Surrogate: 4-Bromofluorobenzene	96.4	Limit: 80-116	% Rec	1			10/01/24 1354	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		09/25/24 1604	09/26/24 2150	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2150	RVV
Barium, total	**0.135**	0.0040	mg/L	4		09/25/24 1604	09/26/24 2150	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2150	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		09/25/24 1604	09/26/24 2150	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		09/25/24 1604	09/26/24 2150	RVV
Cobalt, total	**0.0008**	0.0004	mg/L	4		09/25/24 1604	09/26/24 2150	RVV
Copper, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2150	RVV
Lead, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2150	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2150	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2150	RVV
Silver, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2150	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		09/25/24 1604	09/26/24 2150	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		09/25/24 1604	09/26/24 2150	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		09/25/24 1604	09/26/24 2150	RVV

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CERTIFICATE OF ANALYSIS

1HI1560

Client Sample ID:	MW-36		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HI1560-16	**Collection Date:**	09/23/2024 13:27

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1			10/01/24 1417	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1			10/01/24 1417	BDF
Bromomethane	<1.0	1.0	ug/L	1			10/01/24 1417	BDF
Chloroethane	<1.0	1.0	ug/L	1			10/01/24 1417	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1			10/01/24 1417	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1			10/01/24 1417	BDF
Acetone	<10.0	10.0	ug/L	1			10/01/24 1417	BDF
Methyl Iodide	<1.0	1.0	ug/L	1			10/01/24 1417	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1			10/01/24 1417	BDF
Methylene Chloride	<5.0	5.0	ug/L	1			10/01/24 1417	BDF
Acrylonitrile	<5.0	5.0	ug/L	1	**Q8**	09/28/24 0000	09/28/24 2136	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1			10/01/24 1417	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1			10/01/24 1417	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1			10/01/24 1417	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1			10/01/24 1417	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1			10/01/24 1417	BDF
Bromochloromethane	<1.0	1.0	ug/L	1			10/01/24 1417	BDF
Chloroform	<1.0	1.0	ug/L	1			10/01/24 1417	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1			10/01/24 1417	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1			10/01/24 1417	BDF
Benzene	<1.0	1.0	ug/L	1			10/01/24 1417	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1			10/01/24 1417	BDF
Trichloroethylene	<1.0	1.0	ug/L	1			10/01/24 1417	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1			10/01/24 1417	BDF
Dibromomethane	<1.0	1.0	ug/L	1			10/01/24 1417	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1			10/01/24 1417	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1			10/01/24 1417	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1			10/01/24 1417	BDF
Toluene	<1.0	1.0	ug/L	1			10/01/24 1417	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1			10/01/24 1417	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1			10/01/24 1417	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1			10/01/24 1417	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1			10/01/24 1417	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1			10/01/24 1417	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1			10/01/24 1417	BDF
Chlorobenzene	<1.0	1.0	ug/L	1			10/01/24 1417	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1			10/01/24 1417	BDF
Ethylbenzene	<1.0	1.0	ug/L	1			10/01/24 1417	BDF
Xylenes, total	<2.0	2.0	ug/L	1			10/01/24 1417	BDF
Styrene	<1.0	1.0	ug/L	1			10/01/24 1417	BDF
Bromoform	<1.0	1.0	ug/L	1			10/01/24 1417	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1			10/01/24 1417	BDF

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CERTIFICATE OF ANALYSIS

1HI1560

Client Sample ID:	MW-36		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HI1560-16	**Collection Date:**	09/23/2024 13:27

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			10/01/24 1417	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1			10/01/24 1417	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1			10/01/24 1417	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1			10/01/24 1417	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1			10/01/24 1417	BDF
Surrogate: Dibromofluoromethane	98.6	Limit: 75-136	% Rec	1			10/01/24 1417	BDF
Surrogate: Dibromofluoromethane	66.9	Limit: 57-134	% Rec	1		09/28/24 0000	09/28/24 2136	BDF
Surrogate: 1,2-Dichloroethane-d4	101	Limit: 61-142	% Rec	1			10/01/24 1417	BDF
Surrogate: 1,2-Dichloroethane-d4	65.4	Limit: 53-140	% Rec	1		09/28/24 0000	09/28/24 2136	BDF
Surrogate: Toluene-d8	97.5	Limit: 82-121	% Rec	1			10/01/24 1417	BDF
Surrogate: Toluene-d8	109	Limit: 86-114	% Rec	1		09/28/24 0000	09/28/24 2136	BDF
Surrogate: 4-Bromofluorobenzene	95.9	Limit: 80-116	% Rec	1			10/01/24 1417	BDF
Surrogate: 4-Bromofluorobenzene	82.1	Limit: 78-121	% Rec	1		09/28/24 0000	09/28/24 2136	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		09/25/24 1604	09/26/24 2156	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2156	RVV
Barium, total	**0.125**	0.0040	mg/L	4		09/25/24 1604	09/26/24 2156	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2156	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		09/25/24 1604	09/26/24 2156	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		09/25/24 1604	09/26/24 2156	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		09/25/24 1604	09/26/24 2156	RVV
Copper, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2156	RVV
Lead, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2156	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2156	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2156	RVV
Silver, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2156	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		09/25/24 1604	09/26/24 2156	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		09/25/24 1604	09/26/24 2156	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		09/25/24 1604	09/26/24 2156	RVV

Client Sample ID:	MW-41		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HI1560-17	**Collection Date:**	09/23/2024 13:03

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1			10/01/24 1440	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1			10/01/24 1440	BDF
Bromomethane	<1.0	1.0	ug/L	1			10/01/24 1440	BDF
Chloroethane	<1.0	1.0	ug/L	1			10/01/24 1440	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1			10/01/24 1440	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1			10/01/24 1440	BDF
Acetone	<10.0	10.0	ug/L	1			10/01/24 1440	BDF
Methyl Iodide	<1.0	1.0	ug/L	1			10/01/24 1440	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1			10/01/24 1440	BDF
Methylene Chloride	<5.0	5.0	ug/L	1			10/01/24 1440	BDF
Acrylonitrile	<5.0	5.0	ug/L	1	**Q8**	09/28/24 0000	09/28/24 2159	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1			10/01/24 1440	BDF
1,1-Dichloroethane	**22.0**	1.0	ug/L	1			10/01/24 1440	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1			10/01/24 1440	BDF
cis-1,2-Dichloroethylene	**3.1**	1.0	ug/L	1			10/01/24 1440	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1			10/01/24 1440	BDF
Bromochloromethane	<1.0	1.0	ug/L	1			10/01/24 1440	BDF
Chloroform	<1.0	1.0	ug/L	1			10/01/24 1440	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1			10/01/24 1440	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1			10/01/24 1440	BDF
Benzene	<1.0	1.0	ug/L	1			10/01/24 1440	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1			10/01/24 1440	BDF
Trichloroethylene	<1.0	1.0	ug/L	1			10/01/24 1440	BDF
1,2-Dichloropropane	**1.0**	1.0	ug/L	1			10/01/24 1440	BDF
Dibromomethane	<1.0	1.0	ug/L	1			10/01/24 1440	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1			10/01/24 1440	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1			10/01/24 1440	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1			10/01/24 1440	BDF
Toluene	<1.0	1.0	ug/L	1			10/01/24 1440	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1			10/01/24 1440	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1			10/01/24 1440	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1			10/01/24 1440	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1			10/01/24 1440	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1			10/01/24 1440	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1			10/01/24 1440	BDF
Chlorobenzene	<1.0	1.0	ug/L	1			10/01/24 1440	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1			10/01/24 1440	BDF
Ethylbenzene	<1.0	1.0	ug/L	1			10/01/24 1440	BDF
Xylenes, total	<2.0	2.0	ug/L	1			10/01/24 1440	BDF
Styrene	<1.0	1.0	ug/L	1			10/01/24 1440	BDF
Bromoform	<1.0	1.0	ug/L	1			10/01/24 1440	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1			10/01/24 1440	BDF

Client Sample ID:	MW-41		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HI1560-17	**Collection Date:**	09/23/2024 13:03

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			10/01/24 1440	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1			10/01/24 1440	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1			10/01/24 1440	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1			10/01/24 1440	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1			10/01/24 1440	BDF
Surrogate: Dibromofluoromethane	76.3	Limit: 57-134	% Rec	1		09/28/24 0000	09/28/24 2159	BDF
Surrogate: Dibromofluoromethane	99.6	Limit: 75-136	% Rec	1			10/01/24 1440	BDF
Surrogate: 1,2-Dichloroethane-d4	102	Limit: 61-142	% Rec	1			10/01/24 1440	BDF
Surrogate: 1,2-Dichloroethane-d4	75.4	Limit: 53-140	% Rec	1		09/28/24 0000	09/28/24 2159	BDF
Surrogate: Toluene-d8	105	Limit: 86-114	% Rec	1		09/28/24 0000	09/28/24 2159	BDF
Surrogate: Toluene-d8	97.1	Limit: 82-121	% Rec	1			10/01/24 1440	BDF
Surrogate: 4-Bromofluorobenzene	95.4	Limit: 80-116	% Rec	1			10/01/24 1440	BDF
Surrogate: 4-Bromofluorobenzene	84.1	Limit: 78-121	% Rec	1		09/28/24 0000	09/28/24 2159	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		09/25/24 1604	09/26/24 2202	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2202	RVV
Barium, total	**0.0694**	0.0040	mg/L	4		09/25/24 1604	09/26/24 2202	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2202	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		09/25/24 1604	09/26/24 2202	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		09/25/24 1604	09/26/24 2202	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		09/25/24 1604	09/26/24 2202	RVV
Copper, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2202	RVV
Lead, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2202	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2202	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2202	RVV
Silver, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2202	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		09/25/24 1604	09/26/24 2202	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		09/25/24 1604	09/26/24 2202	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		09/25/24 1604	09/26/24 2202	RVV

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CERTIFICATE OF ANALYSIS

1HI1560

Client Sample ID:	MW-42		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HI1560-18	**Collection Date:**	09/23/2024 12:49

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1			10/01/24 1502	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1			10/01/24 1502	BDF
Bromomethane	<1.0	1.0	ug/L	1			10/01/24 1502	BDF
Chloroethane	<1.0	1.0	ug/L	1			10/01/24 1502	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1			10/01/24 1502	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1			10/01/24 1502	BDF
Acetone	<10.0	10.0	ug/L	1			10/01/24 1502	BDF
Methyl Iodide	<1.0	1.0	ug/L	1			10/01/24 1502	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1			10/01/24 1502	BDF
Methylene Chloride	<5.0	5.0	ug/L	1			10/01/24 1502	BDF
Acrylonitrile	<5.0	5.0	ug/L	1	**Q8**	09/28/24 0000	09/28/24 2221	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1			10/01/24 1502	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1			10/01/24 1502	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1			10/01/24 1502	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1			10/01/24 1502	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1			10/01/24 1502	BDF
Bromochloromethane	<1.0	1.0	ug/L	1			10/01/24 1502	BDF
Chloroform	<1.0	1.0	ug/L	1			10/01/24 1502	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1			10/01/24 1502	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1			10/01/24 1502	BDF
Benzene	<1.0	1.0	ug/L	1			10/01/24 1502	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1			10/01/24 1502	BDF
Trichloroethylene	<1.0	1.0	ug/L	1			10/01/24 1502	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1			10/01/24 1502	BDF
Dibromomethane	<1.0	1.0	ug/L	1			10/01/24 1502	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1			10/01/24 1502	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1			10/01/24 1502	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1			10/01/24 1502	BDF
Toluene	<1.0	1.0	ug/L	1			10/01/24 1502	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1			10/01/24 1502	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1			10/01/24 1502	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1			10/01/24 1502	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1			10/01/24 1502	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1			10/01/24 1502	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1			10/01/24 1502	BDF
Chlorobenzene	<1.0	1.0	ug/L	1			10/01/24 1502	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1			10/01/24 1502	BDF
Ethylbenzene	<1.0	1.0	ug/L	1			10/01/24 1502	BDF
Xylenes, total	<2.0	2.0	ug/L	1			10/01/24 1502	BDF
Styrene	<1.0	1.0	ug/L	1			10/01/24 1502	BDF
Bromoform	<1.0	1.0	ug/L	1			10/01/24 1502	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1			10/01/24 1502	BDF

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CERTIFICATE OF ANALYSIS

1HI1560

Client Sample ID:	MW-42		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HI1560-18	**Collection Date:**	09/23/2024 12:49

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			10/01/24 1502	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1			10/01/24 1502	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1			10/01/24 1502	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1			10/01/24 1502	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1			10/01/24 1502	BDF
Surrogate: Dibromofluoromethane	91.7	Limit: 57-134	% Rec	1		09/28/24 0000	09/28/24 2221	BDF
Surrogate: Dibromofluoromethane	98.0	Limit: 75-136	% Rec	1			10/01/24 1502	BDF
Surrogate: 1,2-Dichloroethane-d4	89.8	Limit: 53-140	% Rec	1		09/28/24 0000	09/28/24 2221	BDF
Surrogate: 1,2-Dichloroethane-d4	100	Limit: 61-142	% Rec	1			10/01/24 1502	BDF
Surrogate: Toluene-d8	103	Limit: 86-114	% Rec	1		09/28/24 0000	09/28/24 2221	BDF
Surrogate: Toluene-d8	97.4	Limit: 82-121	% Rec	1			10/01/24 1502	BDF
Surrogate: 4-Bromofluorobenzene	78.5	Limit: 78-121	% Rec	1		09/28/24 0000	09/28/24 2221	BDF
Surrogate: 4-Bromofluorobenzene	95.7	Limit: 80-116	% Rec	1			10/01/24 1502	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		09/25/24 1604	09/26/24 2208	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2208	RVV
Barium, total	**0.0193**	0.0040	mg/L	4		09/25/24 1604	09/26/24 2208	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2208	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		09/25/24 1604	09/26/24 2208	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		09/25/24 1604	09/26/24 2208	RVV
Cobalt, total	**0.0016**	0.0004	mg/L	4		09/25/24 1604	09/26/24 2208	RVV
Copper, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2208	RVV
Lead, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2208	RVV
Nickel, total	**0.0048**	0.0040	mg/L	4		09/25/24 1604	09/26/24 2208	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2208	RVV
Silver, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2208	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		09/25/24 1604	09/26/24 2208	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		09/25/24 1604	09/26/24 2208	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		09/25/24 1604	09/26/24 2208	RVV

Client Sample ID:	MW-58		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HI1560-19	**Collection Date:**	09/23/2024 12:34

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1			10/01/24 1525	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1			10/01/24 1525	BDF
Bromomethane	<1.0	1.0	ug/L	1			10/01/24 1525	BDF
Chloroethane	<1.0	1.0	ug/L	1			10/01/24 1525	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1			10/01/24 1525	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1			10/01/24 1525	BDF
Acetone	<10.0	10.0	ug/L	1			10/01/24 1525	BDF
Methyl Iodide	<1.0	1.0	ug/L	1			10/01/24 1525	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1			10/01/24 1525	BDF
Methylene Chloride	<5.0	5.0	ug/L	1			10/01/24 1525	BDF
Acrylonitrile	<5.0	5.0	ug/L	1	**Q8**	09/28/24 0000	09/28/24 2244	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1			10/01/24 1525	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1			10/01/24 1525	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1			10/01/24 1525	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1			10/01/24 1525	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1			10/01/24 1525	BDF
Bromochloromethane	<1.0	1.0	ug/L	1			10/01/24 1525	BDF
Chloroform	<1.0	1.0	ug/L	1			10/01/24 1525	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1			10/01/24 1525	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1			10/01/24 1525	BDF
Benzene	<1.0	1.0	ug/L	1			10/01/24 1525	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1			10/01/24 1525	BDF
Trichloroethylene	<1.0	1.0	ug/L	1			10/01/24 1525	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1			10/01/24 1525	BDF
Dibromomethane	<1.0	1.0	ug/L	1			10/01/24 1525	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1			10/01/24 1525	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1			10/01/24 1525	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1			10/01/24 1525	BDF
Toluene	<1.0	1.0	ug/L	1			10/01/24 1525	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1			10/01/24 1525	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1			10/01/24 1525	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1			10/01/24 1525	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1			10/01/24 1525	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1			10/01/24 1525	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1			10/01/24 1525	BDF
Chlorobenzene	<1.0	1.0	ug/L	1			10/01/24 1525	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1			10/01/24 1525	BDF
Ethylbenzene	<1.0	1.0	ug/L	1			10/01/24 1525	BDF
Xylenes, total	<2.0	2.0	ug/L	1			10/01/24 1525	BDF
Styrene	<1.0	1.0	ug/L	1			10/01/24 1525	BDF
Bromoform	<1.0	1.0	ug/L	1			10/01/24 1525	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1			10/01/24 1525	BDF

Client Sample ID:	MW-58		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HI1560-19	**Collection Date:**	09/23/2024 12:34

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			10/01/24 1525	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1			10/01/24 1525	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1			10/01/24 1525	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1			10/01/24 1525	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1			10/01/24 1525	BDF
Surrogate: Dibromofluoromethane	66.7	Limit: 57-134	% Rec	1		09/28/24 0000	09/28/24 2244	BDF
Surrogate: Dibromofluoromethane	98.5	Limit: 75-136	% Rec	1			10/01/24 1525	BDF
Surrogate: 1,2-Dichloroethane-d4	102	Limit: 61-142	% Rec	1			10/01/24 1525	BDF
Surrogate: 1,2-Dichloroethane-d4	67.8	Limit: 53-140	% Rec	1		09/28/24 0000	09/28/24 2244	BDF
Surrogate: Toluene-d8	109	Limit: 86-114	% Rec	1		09/28/24 0000	09/28/24 2244	BDF
Surrogate: Toluene-d8	97.7	Limit: 82-121	% Rec	1			10/01/24 1525	BDF
Surrogate: 4-Bromofluorobenzene	82.7	Limit: 78-121	% Rec	1		09/28/24 0000	09/28/24 2244	BDF
Surrogate: 4-Bromofluorobenzene	95.8	Limit: 80-116	% Rec	1			10/01/24 1525	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		09/25/24 1604	09/27/24 0945	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/27/24 0945	RVV
Barium, total	**0.0209**	0.0040	mg/L	4		09/25/24 1604	09/27/24 0945	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/27/24 0945	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		09/25/24 1604	09/27/24 0945	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		09/25/24 1604	09/27/24 0945	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		09/25/24 1604	09/27/24 0945	RVV
Copper, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/27/24 0945	RVV
Lead, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/27/24 0945	RVV
Nickel, total	**0.0126**	0.0040	mg/L	4		09/25/24 1604	09/27/24 0945	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/27/24 0945	RVV
Silver, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/27/24 0945	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		09/25/24 1604	09/27/24 0945	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		09/25/24 1604	09/27/24 0945	RVV
Zinc, total	**0.0210**	0.0200	mg/L	4		09/25/24 1604	09/27/24 0945	RVV

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CERTIFICATE OF ANALYSIS

1HI1560

Client Sample ID:	MW-59		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HI1560-20	**Collection Date:**	09/23/2024 12:22

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1			10/01/24 1548	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1			10/01/24 1548	BDF
Bromomethane	<1.0	1.0	ug/L	1			10/01/24 1548	BDF
Chloroethane	<1.0	1.0	ug/L	1			10/01/24 1548	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1			10/01/24 1548	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1			10/01/24 1548	BDF
Acetone	<10.0	10.0	ug/L	1			10/01/24 1548	BDF
Methyl Iodide	<1.0	1.0	ug/L	1			10/01/24 1548	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1			10/01/24 1548	BDF
Methylene Chloride	<5.0	5.0	ug/L	1			10/01/24 1548	BDF
Acrylonitrile	<5.0	5.0	ug/L	1	**Q8**	09/28/24 0000	09/28/24 2306	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1			10/01/24 1548	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1			10/01/24 1548	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1			10/01/24 1548	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1			10/01/24 1548	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1			10/01/24 1548	BDF
Bromochloromethane	<1.0	1.0	ug/L	1			10/01/24 1548	BDF
Chloroform	<1.0	1.0	ug/L	1			10/01/24 1548	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1			10/01/24 1548	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1			10/01/24 1548	BDF
Benzene	<1.0	1.0	ug/L	1			10/01/24 1548	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1			10/01/24 1548	BDF
Trichloroethylene	<1.0	1.0	ug/L	1			10/01/24 1548	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1			10/01/24 1548	BDF
Dibromomethane	<1.0	1.0	ug/L	1			10/01/24 1548	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1			10/01/24 1548	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1			10/01/24 1548	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1			10/01/24 1548	BDF
Toluene	<1.0	1.0	ug/L	1			10/01/24 1548	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1			10/01/24 1548	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1			10/01/24 1548	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1			10/01/24 1548	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1			10/01/24 1548	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1			10/01/24 1548	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1			10/01/24 1548	BDF
Chlorobenzene	<1.0	1.0	ug/L	1			10/01/24 1548	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1			10/01/24 1548	BDF
Ethylbenzene	<1.0	1.0	ug/L	1			10/01/24 1548	BDF
Xylenes, total	<2.0	2.0	ug/L	1			10/01/24 1548	BDF
Styrene	<1.0	1.0	ug/L	1			10/01/24 1548	BDF
Bromoform	<1.0	1.0	ug/L	1			10/01/24 1548	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1			10/01/24 1548	BDF

Client Sample ID:	MW-59		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HI1560-20	**Collection Date:**	09/23/2024 12:22

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			10/01/24 1548	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1			10/01/24 1548	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1			10/01/24 1548	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1			10/01/24 1548	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1			10/01/24 1548	BDF
Surrogate: Dibromofluoromethane	69.1	Limit: 57-134	% Rec	1		09/28/24 0000	09/28/24 2306	BDF
Surrogate: Dibromofluoromethane	99.0	Limit: 75-136	% Rec	1			10/01/24 1548	BDF
Surrogate: 1,2-Dichloroethane-d4	70.7	Limit: 53-140	% Rec	1		09/28/24 0000	09/28/24 2306	BDF
Surrogate: 1,2-Dichloroethane-d4	102	Limit: 61-142	% Rec	1			10/01/24 1548	BDF
Surrogate: Toluene-d8	106	Limit: 86-114	% Rec	1		09/28/24 0000	09/28/24 2306	BDF
Surrogate: Toluene-d8	97.8	Limit: 82-121	% Rec	1			10/01/24 1548	BDF
Surrogate: 4-Bromofluorobenzene	82.5	Limit: 78-121	% Rec	1		09/28/24 0000	09/28/24 2306	BDF
Surrogate: 4-Bromofluorobenzene	95.7	Limit: 80-116	% Rec	1			10/01/24 1548	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		09/25/24 1604	09/26/24 2233	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2233	RVV
Barium, total	**0.0252**	0.0040	mg/L	4		09/25/24 1604	09/26/24 2233	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2233	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		09/25/24 1604	09/26/24 2233	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		09/25/24 1604	09/26/24 2233	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		09/25/24 1604	09/26/24 2233	RVV
Copper, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2233	RVV
Lead, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2233	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2233	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2233	RVV
Silver, total	<0.0040	0.0040	mg/L	4		09/25/24 1604	09/26/24 2233	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		09/25/24 1604	09/26/24 2233	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		09/25/24 1604	09/26/24 2233	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		09/25/24 1604	09/26/24 2233	RVV

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CERTIFICATE OF ANALYSIS

1HI1560

Client Sample ID:	MW-60		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HI1560-21	**Collection Date:**	09/23/2024 13:16

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1			10/01/24 1610	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1			10/01/24 1610	BDF
Bromomethane	<1.0	1.0	ug/L	1			10/01/24 1610	BDF
Chloroethane	<1.0	1.0	ug/L	1			10/01/24 1610	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1			10/01/24 1610	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1			10/01/24 1610	BDF
Acetone	<10.0	10.0	ug/L	1			10/01/24 1610	BDF
Methyl Iodide	<1.0	1.0	ug/L	1			10/01/24 1610	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1			10/01/24 1610	BDF
Methylene Chloride	<5.0	5.0	ug/L	1			10/01/24 1610	BDF
Acrylonitrile	<5.0	5.0	ug/L	1	**Q8**	09/28/24 0000	09/28/24 2329	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1			10/01/24 1610	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1			10/01/24 1610	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1			10/01/24 1610	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1			10/01/24 1610	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1			10/01/24 1610	BDF
Bromochloromethane	<1.0	1.0	ug/L	1			10/01/24 1610	BDF
Chloroform	<1.0	1.0	ug/L	1			10/01/24 1610	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1			10/01/24 1610	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1			10/01/24 1610	BDF
Benzene	<1.0	1.0	ug/L	1			10/01/24 1610	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1			10/01/24 1610	BDF
Trichloroethylene	<1.0	1.0	ug/L	1			10/01/24 1610	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1			10/01/24 1610	BDF
Dibromomethane	<1.0	1.0	ug/L	1			10/01/24 1610	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1			10/01/24 1610	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1			10/01/24 1610	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1			10/01/24 1610	BDF
Toluene	<1.0	1.0	ug/L	1			10/01/24 1610	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1			10/01/24 1610	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1			10/01/24 1610	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1			10/01/24 1610	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1			10/01/24 1610	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1			10/01/24 1610	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1			10/01/24 1610	BDF
Chlorobenzene	<1.0	1.0	ug/L	1			10/01/24 1610	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1			10/01/24 1610	BDF
Ethylbenzene	<1.0	1.0	ug/L	1			10/01/24 1610	BDF
Xylenes, total	<2.0	2.0	ug/L	1			10/01/24 1610	BDF
Styrene	<1.0	1.0	ug/L	1			10/01/24 1610	BDF
Bromoform	<1.0	1.0	ug/L	1			10/01/24 1610	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1			10/01/24 1610	BDF

Client Sample ID:	MW-60		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HI1560-21	**Collection Date:**	09/23/2024 13:16

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			10/01/24 1610	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1			10/01/24 1610	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1			10/01/24 1610	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1			10/01/24 1610	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1			10/01/24 1610	BDF
Surrogate: Dibromofluoromethane	73.0	Limit: 57-134	% Rec	1		09/28/24 0000	09/28/24 2329	BDF
Surrogate: Dibromofluoromethane	98.2	Limit: 75-136	% Rec	1			10/01/24 1610	BDF
Surrogate: 1,2-Dichloroethane-d4	73.8	Limit: 53-140	% Rec	1		09/28/24 0000	09/28/24 2329	BDF
Surrogate: 1,2-Dichloroethane-d4	101	Limit: 61-142	% Rec	1			10/01/24 1610	BDF
Surrogate: Toluene-d8	111	Limit: 86-114	% Rec	1		09/28/24 0000	09/28/24 2329	BDF
Surrogate: Toluene-d8	97.3	Limit: 82-121	% Rec	1			10/01/24 1610	BDF
Surrogate: 4-Bromofluorobenzene	84.1	Limit: 78-121	% Rec	1		09/28/24 0000	09/28/24 2329	BDF
Surrogate: 4-Bromofluorobenzene	95.5	Limit: 80-116	% Rec	1			10/01/24 1610	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		09/25/24 1607	09/26/24 2251	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		09/25/24 1607	09/26/24 2251	RVV
Barium, total	**0.238**	0.0040	mg/L	4		09/25/24 1607	09/26/24 2251	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		09/25/24 1607	09/26/24 2251	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		09/25/24 1607	09/26/24 2251	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		09/25/24 1607	09/26/24 2251	RVV
Cobalt, total	**0.0013**	0.0004	mg/L	4		09/25/24 1607	09/26/24 2251	RVV
Copper, total	<0.0040	0.0040	mg/L	4		09/25/24 1607	09/26/24 2251	RVV
Lead, total	<0.0040	0.0040	mg/L	4		09/25/24 1607	09/26/24 2251	RVV
Nickel, total	**0.0292**	0.0040	mg/L	4		09/25/24 1607	09/26/24 2251	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		09/25/24 1607	09/26/24 2251	RVV
Silver, total	<0.0040	0.0040	mg/L	4		09/25/24 1607	09/26/24 2251	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		09/25/24 1607	09/26/24 2251	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		09/25/24 1607	09/26/24 2251	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		09/25/24 1607	09/26/24 2251	RVV

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HI1560

Client Sample ID:	MW-61		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HI1560-22	**Collection Date:**	09/23/2024 14:44

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1			10/01/24 1633	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1			10/01/24 1633	BDF
Bromomethane	<1.0	1.0	ug/L	1			10/01/24 1633	BDF
Chloroethane	<1.0	1.0	ug/L	1			10/01/24 1633	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1			10/01/24 1633	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1			10/01/24 1633	BDF
Acetone	<10.0	10.0	ug/L	1			10/01/24 1633	BDF
Methyl Iodide	<1.0	1.0	ug/L	1			10/01/24 1633	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1			10/01/24 1633	BDF
Methylene Chloride	<5.0	5.0	ug/L	1			10/01/24 1633	BDF
Acrylonitrile	<5.0	5.0	ug/L	1	**Q8**	09/28/24 0000	09/28/24 2351	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1			10/01/24 1633	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1			10/01/24 1633	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1			10/01/24 1633	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1			10/01/24 1633	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1			10/01/24 1633	BDF
Bromochloromethane	<1.0	1.0	ug/L	1			10/01/24 1633	BDF
Chloroform	<1.0	1.0	ug/L	1			10/01/24 1633	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1			10/01/24 1633	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1			10/01/24 1633	BDF
Benzene	<1.0	1.0	ug/L	1			10/01/24 1633	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1			10/01/24 1633	BDF
Trichloroethylene	<1.0	1.0	ug/L	1			10/01/24 1633	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1			10/01/24 1633	BDF
Dibromomethane	<1.0	1.0	ug/L	1			10/01/24 1633	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1			10/01/24 1633	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1			10/01/24 1633	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1			10/01/24 1633	BDF
Toluene	<1.0	1.0	ug/L	1			10/01/24 1633	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1			10/01/24 1633	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1			10/01/24 1633	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1			10/01/24 1633	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1			10/01/24 1633	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1			10/01/24 1633	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1			10/01/24 1633	BDF
Chlorobenzene	<1.0	1.0	ug/L	1			10/01/24 1633	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1			10/01/24 1633	BDF
Ethylbenzene	<1.0	1.0	ug/L	1			10/01/24 1633	BDF
Xylenes, total	<2.0	2.0	ug/L	1			10/01/24 1633	BDF
Styrene	<1.0	1.0	ug/L	1			10/01/24 1633	BDF
Bromoform	<1.0	1.0	ug/L	1			10/01/24 1633	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1			10/01/24 1633	BDF

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CERTIFICATE OF ANALYSIS

1HI1560

Client Sample ID:	MW-61		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HI1560-22	**Collection Date:**	09/23/2024 14:44

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			10/01/24 1633	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1			10/01/24 1633	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1			10/01/24 1633	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1			10/01/24 1633	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1			10/01/24 1633	BDF
Surrogate: Dibromofluoromethane	79.8	Limit: 57-134	% Rec	1		09/28/24 0000	09/28/24 2351	BDF
Surrogate: Dibromofluoromethane	97.6	Limit: 75-136	% Rec	1			10/01/24 1633	BDF
Surrogate: 1,2-Dichloroethane-d4	101	Limit: 61-142	% Rec	1			10/01/24 1633	BDF
Surrogate: 1,2-Dichloroethane-d4	80.0	Limit: 53-140	% Rec	1		09/28/24 0000	09/28/24 2351	BDF
Surrogate: Toluene-d8	97.6	Limit: 82-121	% Rec	1			10/01/24 1633	BDF
Surrogate: Toluene-d8	97.6	Limit: 86-114	% Rec	1		09/28/24 0000	09/28/24 2351	BDF
Surrogate: 4-Bromofluorobenzene	86.2	Limit: 78-121	% Rec	1		09/28/24 0000	09/28/24 2351	BDF
Surrogate: 4-Bromofluorobenzene	95.6	Limit: 80-116	% Rec	1			10/01/24 1633	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		09/25/24 1607	09/26/24 2316	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		09/25/24 1607	09/26/24 2316	RVV
Barium, total	**0.0517**	0.0040	mg/L	4		09/25/24 1607	09/26/24 2316	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		09/25/24 1607	09/26/24 2316	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		09/25/24 1607	09/26/24 2316	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		09/25/24 1607	09/26/24 2316	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		09/25/24 1607	09/26/24 2316	RVV
Copper, total	**0.0050**	0.0040	mg/L	4		09/25/24 1607	09/26/24 2316	RVV
Lead, total	<0.0040	0.0040	mg/L	4		09/25/24 1607	09/26/24 2316	RVV
Nickel, total	**0.0056**	0.0040	mg/L	4		09/25/24 1607	09/26/24 2316	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		09/25/24 1607	09/26/24 2316	RVV
Silver, total	<0.0040	0.0040	mg/L	4		09/25/24 1607	09/26/24 2316	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		09/25/24 1607	09/26/24 2316	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		09/25/24 1607	09/26/24 2316	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		09/25/24 1607	09/26/24 2316	RVV

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HI1560

Client Sample ID:	Duplicate		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HI1560-23	**Collection Date:**	09/23/2024

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		09/25/24 1607	09/26/24 2322	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		09/25/24 1607	09/26/24 2322	RVV
Barium, total	**0.0251**	0.0040	mg/L	4		09/25/24 1607	09/26/24 2322	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		09/25/24 1607	09/26/24 2322	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		09/25/24 1607	09/26/24 2322	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		09/25/24 1607	09/26/24 2322	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		09/25/24 1607	09/26/24 2322	RVV
Copper, total	<0.0040	0.0040	mg/L	4		09/25/24 1607	09/26/24 2322	RVV
Lead, total	<0.0040	0.0040	mg/L	4		09/25/24 1607	09/26/24 2322	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		09/25/24 1607	09/26/24 2322	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		09/25/24 1607	09/26/24 2322	RVV
Silver, total	<0.0040	0.0040	mg/L	4		09/25/24 1607	09/26/24 2322	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		09/25/24 1607	09/26/24 2322	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		09/25/24 1607	09/26/24 2322	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		09/25/24 1607	09/26/24 2322	RVV

Batch Log Summary

Method	Batch	Laboratory ID	Client / Source ID
EPA 8260B	1HI1321	1HI1321-BS1	
		1HI1321-MS1	1HI1410-02
		1HI1321-MSD1	1HI1410-02
		1HI1321-BLK1	
		1HI1560-02	MW-57
		1HI1560-03	MW-56
		1HI1560-04	MW-64
		1HI1560-05	MW-65
		1HI1560-06	SW-101R
		1HI1560-08	SW-102
		1HI1560-09	SW-103
		1HI1560-10	MW-48 (B)

Method	Batch	Laboratory ID	Client / Source ID
EPA 6020A	1HI1400	1HI1400-BLK1	
		1HI1400-BS1	
		1HI1560-01	MW-44
		1HI1400-MS1	1HI1560-01
		1HI1400-MSD1	1HI1560-01
		1HI1400-PS1	1HI1560-01
		1HI1560-02	MW-57
		1HI1560-03	MW-56
		1HI1560-04	MW-64
		1HI1560-05	MW-65
		1HI1560-06	SW-101R
		1HI1560-08	SW-102
		1HI1560-09	SW-103
		1HI1560-10	MW-48 (B)
		1HI1560-11	MW-39 (B)
		1HI1560-12	MW-78 (B)
		1HI1560-13	MW-62R
		1HI1560-14	MW-79
		1HI1560-15	MW-80
		1HI1560-16	MW-36
		1HI1560-17	MW-41
		1HI1560-18	MW-42
		1HI1560-20	MW-59
		1HI1560-19	MW-58

Method	Batch	Laboratory ID	Client / Source ID

Method	Batch	Laboratory ID	Client / Source ID
EPA 6020A	1HI1402	1HI1402-BLK1	
		1HI1402-BS1	
		1HI1560-21	MW-60
		1HI1402-MS1	1HI1560-21
		1HI1402-MSD1	1HI1560-21
		1HI1402-PS1	1HI1560-21
		1HI1560-22	MW-61
		1HI1560-23	Duplicate

Method	Batch	Laboratory ID	Client / Source ID
EPA 8260B	1HI1578	1HI1578-BS1	
		1HI1578-BSD1	
		1HI1578-MS1	1HI1863-03
		1HI1578-MSD1	1HI1863-03
		1HI1578-BLK1	
		1HI1560-01	MW-44
		1HI1560-07	PECS-1
		1HI1560-11	MW-39 (B)
		1HI1560-12	MW-78 (B)
		1HI1560-13	MW-62R
		1HI1560-14	MW-79
		1HI1560-15	MW-80
		1HI1560-16	MW-36
		1HI1560-17	MW-41
		1HI1560-18	MW-42
		1HI1560-19	MW-58
		1HI1560-20	MW-59
		1HI1560-21	MW-60
		1HI1560-22	MW-61

Method	Batch	Laboratory ID	Client / Source ID
EPA 8260B	1HJ0018	1HJ0018-BS1	
		1HJ0018-BSD1	
		1HJ0018-BLK1	
		1HI1560-01	MW-44
		1HI1560-02	MW-57
		1HI1560-03	MW-56
		1HI1560-04	MW-64
		1HI1560-05	MW-65
		1HI1560-06	SW-101R
		1HI1560-07	PECS-1
		1HJ0018-MS1	1HI1410-21
		1HJ0018-MSD1	1HI1410-21

Method	Batch	Laboratory ID	Client / Source ID
EPA 8260B	1HJ0102	1HJ0102-BS1	
		1HJ0102-BLK1	
		1HI1560-08	SW-102
		1HI1560-09	SW-103
		1HI1560-10	MW-48 (B)
		1HI1560-11	MW-39 (B)
		1HI1560-12	MW-78 (B)
		1HI1560-13	MW-62R
		1HI1560-14	MW-79
		1HI1560-15	MW-80
		1HI1560-16	MW-36
		1HI1560-17	MW-41
		1HI1560-18	MW-42
		1HI1560-19	MW-58
		1HI1560-20	MW-59
		1HI1560-21	MW-60
		1HI1560-22	MW-61
		1HJ0102-MS1	1HI1560-20
		1HJ0102-MSD1	1HI1560-20

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 1HI1321 - EPA 5030B - EPA 8260B										
Blank (1HI1321-BLK1)			Prepared: 09/24/24 00:00 Analyzed: 09/24/24 16:25							
Acrylonitrile	<5.0	5.0	ug/L							
Surrogate: Dibromofluoromethane	*40.0*		ug/L	*50.2*		*79.6*	*57-134*			
Surrogate: 1,2-Dichloroethane-d4	*43.3*		ug/L	*50.4*		*86.0*	*53-140*			
Surrogate: Toluene-d8	*45.1*		ug/L	*50.5*		*89.3*	*86-114*			
Surrogate: 4-Bromofluorobenzene	*49.4*		ug/L	*50.2*		*98.6*	*78-121*			
LCS (1HI1321-BS1)			Prepared: 09/24/24 00:00 Analyzed: 09/24/24 10:02							
Acrylonitrile	56.79	5.0	ug/L	50.2		113	56-135			
Surrogate: Dibromofluoromethane	*35.2*		ug/L	*50.2*		*70.1*	*57-134*			
Surrogate: 1,2-Dichloroethane-d4	*39.8*		ug/L	*50.4*		*79.0*	*53-140*			
Surrogate: Toluene-d8	*46.4*		ug/L	*50.5*		*92.0*	*86-114*			
Surrogate: 4-Bromofluorobenzene	*47.2*		ug/L	*50.2*		*94.1*	*78-121*			
Matrix Spike (1HI1321-MS1)	**Source: 1HI1410-02**		Prepared: 09/24/24 00:00 Analyzed: 09/24/24 15:18							
Acrylonitrile	155.3	20.0	ug/L	201	ND	77.3	38-147			
Surrogate: Dibromofluoromethane	*162*		ug/L	*201*		*80.7*	*57-134*			
Surrogate: 1,2-Dichloroethane-d4	*181*		ug/L	*201*		*90.0*	*53-140*			
Surrogate: Toluene-d8	*187*		ug/L	*202*		*92.4*	*86-114*			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HI1321 - EPA 5030B - EPA 8260B										
Matrix Spike (1HI1321-MS1)	**Source: 1HI1410-02**		Prepared: 09/24/24 00:00 Analyzed: 09/24/24 15:18							
Surrogate: 4-Bromofluorobenzene	*193*		ug/L	*201*		*96.1*	*78-121*			
Matrix Spike Dup (1HI1321-MSD1)	**Source: 1HI1410-02**		Prepared: 09/24/24 00:00 Analyzed: 09/24/24 15:40							
Acrylonitrile	156.4	20.0	ug/L	201	ND	77.9	38-147	0.693	30	
Surrogate: Dibromofluoromethane	*163*		ug/L	*201*		*81.4*	*57-134*			
Surrogate: 1,2-Dichloroethane-d4	*183*		ug/L	*201*		*91.0*	*53-140*			
Surrogate: Toluene-d8	*215*		ug/L	*202*		*107*	*86-114*			
Surrogate: 4-Bromofluorobenzene	*191*		ug/L	*201*		*95.0*	*78-121*			
Batch 1HI1578 - EPA 5030B - EPA 8260B										
Blank (1HI1578-BLK1)			Prepared: 09/28/24 00:00 Analyzed: 09/28/24 18:37							
Acrylonitrile	<5.0	5.0	ug/L							
Surrogate: Dibromofluoromethane	*31.9*		ug/L	*50.2*		*63.6*	*57-134*			
Surrogate: 1,2-Dichloroethane-d4	*31.3*		ug/L	*50.4*		*62.1*	*53-140*			
Surrogate: Toluene-d8	*55.4*		ug/L	*50.5*		*110*	*86-114*			
Surrogate: 4-Bromofluorobenzene	*42.5*		ug/L	*50.2*		*84.7*	*78-121*			
LCS (1HI1578-BS1)			Prepared: 09/28/24 00:00 Analyzed: 09/28/24 16:46							
Acrylonitrile	33.36	5.0	ug/L	50.2		66.5	56-135			
Surrogate: Dibromofluoromethane	*45.3*		ug/L	*50.2*		*90.3*	*57-134*			
Surrogate: 1,2-Dichloroethane-d4	*44.8*		ug/L	*50.4*		*89.1*	*53-140*			
Surrogate: Toluene-d8	*49.7*		ug/L	*50.5*		*98.4*	*86-114*			
Surrogate: 4-Bromofluorobenzene	*47.4*		ug/L	*50.2*		*94.5*	*78-121*			
LCS Dup (1HI1578-BSD1)			Prepared: 09/28/24 00:00 Analyzed: 09/28/24 17:08							
Acrylonitrile	25.42	5.0	ug/L	50.2		50.6	56-135	27.0	16	Q3
Surrogate: Dibromofluoromethane	*38.8*		ug/L	*50.2*		*77.2*	*57-134*			
Surrogate: 1,2-Dichloroethane-d4	*39.3*		ug/L	*50.4*		*78.0*	*53-140*			
Surrogate: Toluene-d8	*48.9*		ug/L	*50.5*		*96.9*	*86-114*			
Surrogate: 4-Bromofluorobenzene	*47.7*		ug/L	*50.2*		*95.1*	*78-121*			
Matrix Spike (1HI1578-MS1)	**Source: 1HI1863-03**		Prepared: 09/28/24 00:00 Analyzed: 09/28/24 17:30							
Acrylonitrile	144.8	20.0	ug/L	201	ND	72.1	38-147			
Surrogate: Dibromofluoromethane	*175*		ug/L	*201*		*87.1*	*57-134*			
Surrogate: 1,2-Dichloroethane-d4	*184*		ug/L	*201*		*91.3*	*53-140*			
Surrogate: Toluene-d8	*203*		ug/L	*202*		*101*	*86-114*			
Surrogate: 4-Bromofluorobenzene	*198*		ug/L	*201*		*98.5*	*78-121*			
Matrix Spike Dup (1HI1578-MSD1)	**Source: 1HI1863-03**		Prepared: 09/28/24 00:00 Analyzed: 09/28/24 17:53							
Acrylonitrile	145.8	20.0	ug/L	201	ND	72.6	38-147	0.716	30	
Surrogate: Dibromofluoromethane	*180*		ug/L	*201*		*89.5*	*57-134*			
Surrogate: 1,2-Dichloroethane-d4	*192*		ug/L	*201*		*95.5*	*53-140*			
Surrogate: Toluene-d8	*203*		ug/L	*202*		*101*	*86-114*			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HI1578 - EPA 5030B - EPA 8260B										
Matrix Spike Dup (1HI1578-MSD1)	**Source: 1HI1863-03**	Prepared: 09/28/24 00:00 Analyzed: 09/28/24 17:53								
Surrogate: 4-Bromofluorobenzene	*197*		ug/L	*201*		*98.4*	*78-121*			
Batch 1HJ0018 - EPA 5030B - EPA 8260B										
Blank (1HJ0018-BLK1)		Prepared: 09/30/24 00:00 Analyzed: 09/30/24 17:45								
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							
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							

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ0018 - EPA 5030B - EPA 8260B										
Blank (1HJ0018-BLK1)			Prepared: 09/30/24 00:00 Analyzed: 09/30/24 17:45							
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	*51.6*		ug/L	*50.2*		*103*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*54.0*		ug/L	*50.4*		*107*	*61-142*			
Surrogate: Toluene-d8	*50.8*		ug/L	*50.5*		*101*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*52.4*		ug/L	*50.2*		*104*	*80-116*			
LCS (1HJ0018-BS1)			Prepared: 09/30/24 00:00 Analyzed: 09/30/24 16:38							
Chloromethane	31.14	1.0	ug/L	30.0		104	63-155			
Vinyl Chloride	30.30	1.0	ug/L	30.0		101	70-154			
Bromomethane	29.07	1.0	ug/L	30.0		96.9	52-176			
Chloroethane	32.68	1.0	ug/L	30.0		109	72-148			
Trichlorofluoromethane	33.34	1.0	ug/L	30.0		111	70-152			
1,1-Dichloroethylene	100.7	1.0	ug/L	100		101	70-148			
Acetone	104.8	10.0	ug/L	101		104	43-172			
Methyl Iodide	104.7	1.0	ug/L	102		103	69-170			
Carbon Disulfide	99.47	1.0	ug/L	103		96.9	72-162			
Methylene Chloride	95.82	5.0	ug/L	100		95.8	68-142			
trans-1,2-Dichloroethylene	97.33	1.0	ug/L	100		97.3	66-148			
1,1-Dichloroethane	97.00	1.0	ug/L	100		97.0	66-143			
Vinyl Acetate	93.11	5.0	ug/L	100		93.1	43-153			
cis-1,2-Dichloroethylene	88.97	1.0	ug/L	100		89.0	71-149			
2-Butanone (MEK)	87.82	10.0	ug/L	102		86.3	52-159			
Bromochloromethane	94.56	1.0	ug/L	100		94.6	69-143			
Chloroform	98.08	1.0	ug/L	100		98.1	69-144			
1,1,1-Trichloroethane	94.56	1.0	ug/L	100		94.6	62-129			
Carbon Tetrachloride	97.05	1.0	ug/L	100		97.0	63-141			
Benzene	120.8	1.0	ug/L	100		121	71-134			
1,2-Dichloroethane	113.4	1.0	ug/L	100		113	72-132			
Trichloroethylene	98.86	1.0	ug/L	100		98.9	71-135			
1,2-Dichloropropane	92.86	1.0	ug/L	100		92.9	69-136			
Dibromomethane	97.00	1.0	ug/L	100		97.0	73-147			
Bromodichloromethane	97.17	1.0	ug/L	100		97.2	68-129			
cis-1,3-Dichloropropene	97.76	1.0	ug/L	100		97.8	65-134			
4-Methyl-2-pentanone (MIBK)	99.12	5.0	ug/L	100		99.0	58-147			
Toluene	98.44	1.0	ug/L	100		98.4	72-133			
trans-1,3-Dichloropropene	98.15	1.0	ug/L	100		98.2	67-130			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ0018 - EPA 5030B - EPA 8260B										
LCS (1HJ0018-BS1)			Prepared: 09/30/24 00:00 Analyzed: 09/30/24 16:38							
1,1,2-Trichloroethane	95.28	1.0	ug/L	100		95.3	69-135			
Tetrachloroethylene	97.22	1.0	ug/L	100		97.2	69-130			
2-Hexanone (MBK)	87.46	5.0	ug/L	99.3		88.1	55-144			
Dibromochloromethane	88.09	1.0	ug/L	100		88.1	73-127			
1,2-Dibromoethane	84.48	1.0	ug/L	100		84.5	67-132			
Chlorobenzene	97.88	1.0	ug/L	100		97.9	72-123			
1,1,1,2-Tetrachloroethane	93.32	1.0	ug/L	100		93.3	73-127			
Ethylbenzene	94.83	1.0	ug/L	100		94.8	71-127			
Xylenes, total	270.3	2.0	ug/L	300		90.1	74-127			
Styrene	89.04	1.0	ug/L	100		89.0	66-126			
Bromoform	82.68	1.0	ug/L	100		82.7	68-130			
1,2,3-Trichloropropane	84.95	1.0	ug/L	100		85.0	63-136			
trans-1,4-Dichloro-2-butene	78.91	5.0	ug/L	103		76.8	54-134			
1,1,2,2-Tetrachloroethane	97.46	1.0	ug/L	100		97.5	61-131			
1,4-Dichlorobenzene	98.22	1.0	ug/L	100		98.2	70-129			
1,2-Dichlorobenzene	95.87	1.0	ug/L	100		95.9	69-126			
1,2-Dibromo-3-chloropropane	84.51	5.0	ug/L	100		84.5	50-143			
Surrogate: Dibromofluoromethane	*51.5*		ug/L	*50.2*		*103*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*50.1*		ug/L	*50.4*		*99.5*	*61-142*			
Surrogate: Toluene-d8	*52.2*		ug/L	*50.5*		*103*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*44.8*		ug/L	*50.2*		*89.3*	*80-116*			
LCS Dup (1HJ0018-BSD1)			Prepared: 09/30/24 00:00 Analyzed: 09/30/24 17:00							
Chloromethane	31.31	1.0	ug/L	30.0		104	63-155	0.544	24	
Vinyl Chloride	31.10	1.0	ug/L	30.0		104	70-154	2.61	25	
Bromomethane	30.40	1.0	ug/L	30.0		101	52-176	4.47	27	
Chloroethane	40.15	1.0	ug/L	30.0		134	72-148	20.5	25	
Trichlorofluoromethane	37.15	1.0	ug/L	30.0		124	70-152	10.8	26	
1,1-Dichloroethylene	120.2	1.0	ug/L	100		120	70-148	17.7	24	
Acetone	128.6	10.0	ug/L	101		127	43-172	20.3	30	
Methyl Iodide	112.8	1.0	ug/L	102		111	69-170	7.41	30	
Carbon Disulfide	103.8	1.0	ug/L	103		101	72-162	4.28	24	
Methylene Chloride	103.5	5.0	ug/L	100		103	68-142	7.70	21	
trans-1,2-Dichloroethylene	105.0	1.0	ug/L	100		105	66-148	7.58	27	
1,1-Dichloroethane	105.0	1.0	ug/L	100		105	66-143	7.92	24	
Vinyl Acetate	109.3	5.0	ug/L	100		109	43-153	16.0	30	
cis-1,2-Dichloroethylene	99.91	1.0	ug/L	100		99.9	71-149	11.6	26	
2-Butanone (MEK)	113.5	10.0	ug/L	102		112	52-159	25.5	27	
Bromochloromethane	104.8	1.0	ug/L	100		105	69-143	10.3	23	
Chloroform	101.3	1.0	ug/L	100		101	69-144	3.21	23	
1,1,1-Trichloroethane	96.43	1.0	ug/L	100		96.4	62-129	1.96	24	
Carbon Tetrachloride	102.6	1.0	ug/L	100		103	63-141	5.57	25	
Benzene	104.4	1.0	ug/L	100		104	71-134	14.5	24	

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ0018 - EPA 5030B - EPA 8260B										
LCS Dup (1HJ0018-BSD1)			Prepared: 09/30/24 00:00 Analyzed: 09/30/24 17:00							
1,2-Dichloroethane	108.5	1.0	ug/L	100		108	72-132	4.41	24	
Trichloroethylene	100.6	1.0	ug/L	100		101	71-135	1.73	24	
1,2-Dichloropropane	96.26	1.0	ug/L	100		96.3	69-136	3.60	24	
Dibromomethane	103.2	1.0	ug/L	100		103	73-147	6.23	25	
Bromodichloromethane	99.84	1.0	ug/L	100		99.8	68-129	2.71	22	
cis-1,3-Dichloropropene	100.5	1.0	ug/L	100		100	65-134	2.74	23	
4-Methyl-2-pentanone (MIBK)	130.8	5.0	ug/L	100		131	58-147	27.5	27	R1
Toluene	110.9	1.0	ug/L	100		111	72-133	11.9	24	
trans-1,3-Dichloropropene	103.2	1.0	ug/L	100		103	67-130	5.05	24	
1,1,2-Trichloroethane	101.6	1.0	ug/L	100		102	69-135	6.41	23	
Tetrachloroethylene	104.3	1.0	ug/L	100		104	69-130	7.03	25	
2-Hexanone (MBK)	116.6	5.0	ug/L	99.3		117	55-144	28.5	25	R1
Dibromochloromethane	101.6	1.0	ug/L	100		102	73-127	14.2	22	
1,2-Dibromoethane	99.26	1.0	ug/L	100		99.3	67-132	16.1	24	
Chlorobenzene	100.4	1.0	ug/L	100		100	72-123	2.53	23	
1,1,1,2-Tetrachloroethane	99.92	1.0	ug/L	100		99.9	73-127	6.83	24	
Ethylbenzene	98.36	1.0	ug/L	100		98.4	71-127	3.65	26	
Xylenes, total	306.3	2.0	ug/L	300		102	74-127	12.5	25	
Styrene	100.8	1.0	ug/L	100		101	66-126	12.4	23	
Bromoform	100.6	1.0	ug/L	100		101	68-130	19.6	23	
1,2,3-Trichloropropane	115.0	1.0	ug/L	100		115	63-136	30.0	24	R1
trans-1,4-Dichloro-2-butene	107.0	5.0	ug/L	103		104	54-134	30.2	27	R1
1,1,2,2-Tetrachloroethane	131.2	1.0	ug/L	100		131	61-131	29.5	29	R1
1,4-Dichlorobenzene	100.3	1.0	ug/L	100		100	70-129	2.14	24	
1,2-Dichlorobenzene	100.2	1.0	ug/L	100		100	69-126	4.46	26	
1,2-Dibromo-3-chloropropane	101.2	5.0	ug/L	100		101	50-143	18.0	30	
Surrogate: Dibromofluoromethane	*51.2*		ug/L	*50.2*		*102*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*52.6*		ug/L	*50.4*		*104*	*61-142*			
Surrogate: Toluene-d8	*58.3*		ug/L	*50.5*		*116*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*49.5*		ug/L	*50.2*		*98.7*	*80-116*			
Matrix Spike (1HJ0018-MS1)	**Source: 1HI1410-21**		Prepared: 09/30/24 00:00 Analyzed: 10/01/24 02:24							
Chloromethane	318.8	10.0	ug/L	300	ND	106	61-152			
Vinyl Chloride	313.8	10.0	ug/L	300	ND	105	66-149			
Bromomethane	198.7	10.0	ug/L	300	ND	66.2	43-171			
Chloroethane	331.9	10.0	ug/L	300	ND	111	69-148			
Trichlorofluoromethane	326.2	10.0	ug/L	300	ND	109	62-163			
1,1-Dichloroethylene	1029	10.0	ug/L	1000	ND	103	70-148			
Acetone	1163	100	ug/L	1010	ND	115	45-173			
Methyl Iodide	851.3	10.0	ug/L	1020	ND	83.6	62-167			
Carbon Disulfide	1019	10.0	ug/L	1030	ND	99.2	71-163			
Methylene Chloride	986.3	50.0	ug/L	1000	ND	98.6	69-140			
trans-1,2-Dichloroethylene	1015	10.0	ug/L	1000	ND	101	69-144			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ0018 - EPA 5030B - EPA 8260B										
Matrix Spike (1HJ0018-MS1)	**Source: 1HI1410-21**	Prepared: 09/30/24 00:00 Analyzed: 10/01/24 02:24								
1,1-Dichloroethane	1010	10.0	ug/L	1000	ND	101	70-138			
Vinyl Acetate	1010	50.0	ug/L	1000	ND	101	58-142			
cis-1,2-Dichloroethylene	915.9	10.0	ug/L	1000	ND	91.6	68-151			
2-Butanone (MEK)	1056	100	ug/L	1020	ND	104	50-160			
Bromochloromethane	1126	10.0	ug/L	1000	ND	113	65-143			
Chloroform	1041	10.0	ug/L	1000	ND	104	71-143			
1,1,1-Trichloroethane	977.6	10.0	ug/L	1000	ND	97.8	63-133			
Carbon Tetrachloride	1022	10.0	ug/L	1000	ND	102	63-142			
Benzene	1221	10.0	ug/L	1000	ND	122	69-133			
1,2-Dichloroethane	1191	10.0	ug/L	1000	ND	119	63-138			
Trichloroethylene	1024	10.0	ug/L	1000	ND	102	71-133			
1,2-Dichloropropane	982.3	10.0	ug/L	1000	ND	98.2	69-132			
Dibromomethane	1044	10.0	ug/L	1000	ND	104	70-147			
Bromodichloromethane	1007	10.0	ug/L	1000	ND	101	67-130			
cis-1,3-Dichloropropene	990.2	10.0	ug/L	1000	ND	99.0	61-126			
4-Methyl-2-pentanone (MIBK)	1185	50.0	ug/L	1000	ND	118	55-147			
Toluene	1041	10.0	ug/L	1000	ND	104	71-133			
trans-1,3-Dichloropropene	1008	10.0	ug/L	1000	ND	101	63-124			
1,1,2-Trichloroethane	1158	10.0	ug/L	1000	ND	116	69-133			
Tetrachloroethylene	1139	10.0	ug/L	1000	ND	114	70-124			
2-Hexanone (MBK)	1259	50.0	ug/L	993	ND	127	53-141			
Dibromochloromethane	1094	10.0	ug/L	1000	ND	109	74-122			
1,2-Dibromoethane	1088	10.0	ug/L	1000	ND	109	66-127			
Chlorobenzene	1006	10.0	ug/L	1000	ND	101	76-116			
1,1,1,2-Tetrachloroethane	984.3	10.0	ug/L	1000	ND	98.4	77-121			
Ethylbenzene	995.7	10.0	ug/L	1000	ND	99.6	73-124			
Xylenes, total	3082	20.0	ug/L	3000	ND	103	75-123			
Styrene	1007	10.0	ug/L	1000	ND	101	70-120			
Bromoform	971.3	10.0	ug/L	1000	ND	97.1	70-124			
1,2,3-Trichloropropane	1078	10.0	ug/L	1000	ND	108	62-135			
trans-1,4-Dichloro-2-butene	921.3	50.0	ug/L	1030	ND	89.6	50-120			
1,1,2,2-Tetrachloroethane	1269	10.0	ug/L	1000	ND	127	63-126			M1
1,4-Dichlorobenzene	987.9	10.0	ug/L	1000	ND	98.8	72-119			
1,2-Dichlorobenzene	992.1	10.0	ug/L	1000	ND	99.2	71-117			
1,2-Dibromo-3-chloropropane	1009	50.0	ug/L	1000	ND	101	49-134			
Surrogate: Dibromofluoromethane	*519*		ug/L	*502*		*103*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*520*		ug/L	*504*		*103*	*61-142*			
Surrogate: Toluene-d8	*534*		ug/L	*505*		*106*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*500*		ug/L	*502*		*99.7*	*80-116*			
Matrix Spike Dup (1HJ0018-MSD1)	**Source: 1HI1410-21**	Prepared: 09/30/24 00:00 Analyzed: 10/01/24 02:46								
Chloromethane	309.0	10.0	ug/L	300	ND	103	61-152	3.12	26	
Vinyl Chloride	301.7	10.0	ug/L	300	ND	101	66-149	3.93	23	

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ0018 - EPA 5030B - EPA 8260B										
Matrix Spike Dup (1HJ0018-MSD1)	**Source: 1HI1410-21**	Prepared: 09/30/24 00:00 Analyzed: 10/01/24 02:46								
Bromomethane	223.3	10.0	ug/L	300	ND	74.4	43-171	11.7	29	
Chloroethane	336.2	10.0	ug/L	300	ND	112	69-148	1.29	25	
Trichlorofluoromethane	325.8	10.0	ug/L	300	ND	109	62-163	0.123	25	
1,1-Dichloroethylene	1040	10.0	ug/L	1000	ND	104	70-148	1.10	22	
Acetone	1199	100	ug/L	1010	ND	118	45-173	3.07	30	
Methyl Iodide	1014	10.0	ug/L	1020	ND	99.5	62-167	17.4	24	
Carbon Disulfide	1025	10.0	ug/L	1030	ND	99.8	71-163	0.626	22	
Methylene Chloride	1014	50.0	ug/L	1000	ND	101	69-140	2.80	19	
trans-1,2-Dichloroethylene	1043	10.0	ug/L	1000	ND	104	69-144	2.72	22	
1,1-Dichloroethane	1046	10.0	ug/L	1000	ND	105	70-138	3.43	20	
Vinyl Acetate	1066	50.0	ug/L	1000	ND	107	58-142	5.34	24	
cis-1,2-Dichloroethylene	942.6	10.0	ug/L	1000	ND	94.3	68-151	2.87	22	
2-Butanone (MEK)	1087	100	ug/L	1020	ND	107	50-160	2.86	23	
Bromochloromethane	1056	10.0	ug/L	1000	ND	106	65-143	6.34	22	
Chloroform	981.8	10.0	ug/L	1000	ND	98.2	71-143	5.89	21	
1,1,1-Trichloroethane	940.0	10.0	ug/L	1000	ND	94.0	63-133	3.92	23	
Carbon Tetrachloride	993.9	10.0	ug/L	1000	ND	99.4	63-142	2.81	22	
Benzene	949.0	10.0	ug/L	1000	ND	94.9	69-133	25.1	18	R1
1,2-Dichloroethane	961.1	10.0	ug/L	1000	ND	96.1	63-138	21.4	20	R1
Trichloroethylene	987.5	10.0	ug/L	1000	ND	98.8	71-133	3.58	23	
1,2-Dichloropropane	974.7	10.0	ug/L	1000	ND	97.5	69-132	0.777	20	
Dibromomethane	990.5	10.0	ug/L	1000	ND	99.0	70-147	5.22	22	
Bromodichloromethane	972.9	10.0	ug/L	1000	ND	97.3	67-130	3.41	21	
cis-1,3-Dichloropropene	966.8	10.0	ug/L	1000	ND	96.7	61-126	2.39	21	
4-Methyl-2-pentanone (MIBK)	1052	50.0	ug/L	1000	ND	105	55-147	11.9	23	
Toluene	901.9	10.0	ug/L	1000	ND	90.2	71-133	14.3	19	
trans-1,3-Dichloropropene	883.7	10.0	ug/L	1000	ND	88.4	63-124	13.1	21	
1,1,2-Trichloroethane	906.7	10.0	ug/L	1000	ND	90.7	69-133	24.3	19	R1
Tetrachloroethylene	993.6	10.0	ug/L	1000	ND	99.4	70-124	13.6	24	
2-Hexanone (MBK)	1101	50.0	ug/L	993	ND	111	53-141	13.4	24	
Dibromochloromethane	984.9	10.0	ug/L	1000	ND	98.5	74-122	10.5	21	
1,2-Dibromoethane	970.3	10.0	ug/L	1000	ND	97.0	66-127	11.4	23	
Chlorobenzene	976.6	10.0	ug/L	1000	ND	97.7	76-116	3.01	21	
1,1,1,2-Tetrachloroethane	965.4	10.0	ug/L	1000	ND	96.5	77-121	1.94	25	
Ethylbenzene	966.7	10.0	ug/L	1000	ND	96.7	73-124	2.96	20	
Xylenes, total	3000	20.0	ug/L	3000	ND	100	75-123	2.69	20	
Styrene	989.1	10.0	ug/L	1000	ND	98.9	70-120	1.81	23	
Bromoform	953.8	10.0	ug/L	1000	ND	95.4	70-124	1.82	22	
1,2,3-Trichloropropane	1134	10.0	ug/L	1000	ND	113	62-135	5.09	28	
trans-1,4-Dichloro-2-butene	967.5	50.0	ug/L	1030	ND	94.1	50-120	4.89	26	
1,1,2,2-Tetrachloroethane	1276	10.0	ug/L	1000	ND	128	63-126	0.558	24	M1
1,4-Dichlorobenzene	954.1	10.0	ug/L	1000	ND	95.4	72-119	3.48	24	
1,2-Dichlorobenzene	949.6	10.0	ug/L	1000	ND	95.0	71-117	4.38	24	

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ0018 - EPA 5030B - EPA 8260B										
Matrix Spike Dup (1HJ0018-MSD1)	**Source: 1HI1410-21**		Prepared: 09/30/24 00:00 Analyzed: 10/01/24 02:46							
1,2-Dibromo-3-chloropropane	960.2	50.0	ug/L	1000	ND	96.0	49-134	5.00	28	
Surrogate: Dibromofluoromethane	*512*		ug/L	*502*		*102*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*530*		ug/L	*504*		*105*	*61-142*			
Surrogate: Toluene-d8	*482*		ug/L	*505*		*95.5*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*544*		ug/L	*502*		*109*	*80-116*			
Batch 1HJ0102 - EPA 5030B - EPA 8260B										
Blank (1HJ0102-BLK1)			Prepared & Analyzed: 10/01/24 09:41							
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							
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							

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ0102 - EPA 5030B - EPA 8260B										
Blank (1HJ0102-BLK1)			Prepared & Analyzed: 10/01/24 09:41							
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	*50.9*		ug/L	*50.2*		*101*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*51.9*		ug/L	*50.4*		*103*	*61-142*			
Surrogate: Toluene-d8	*49.6*		ug/L	*50.5*		*98.3*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*48.5*		ug/L	*50.2*		*96.7*	*80-116*			
LCS (1HJ0102-BS1)			Prepared & Analyzed: 10/01/24 08:33							
Chloromethane	33.99	1.0	ug/L	30.0		113	63-155			
Vinyl Chloride	30.90	1.0	ug/L	30.0		103	70-154			
Bromomethane	32.78	1.0	ug/L	30.0		109	52-176			
Chloroethane	33.10	1.0	ug/L	30.0		110	72-148			
Trichlorofluoromethane	33.49	1.0	ug/L	30.0		112	70-152			
1,1-Dichloroethylene	97.35	1.0	ug/L	100		97.4	70-148			
Acetone	114.0	10.0	ug/L	101		113	43-172			
Methyl Iodide	106.2	1.0	ug/L	102		104	69-170			
Carbon Disulfide	100.6	1.0	ug/L	103		98.0	72-162			
Methylene Chloride	97.96	5.0	ug/L	100		98.0	68-142			
trans-1,2-Dichloroethylene	96.98	1.0	ug/L	100		97.0	66-148			
1,1-Dichloroethane	94.79	1.0	ug/L	100		94.8	66-143			
Vinyl Acetate	98.53	5.0	ug/L	100		98.5	43-153			
cis-1,2-Dichloroethylene	87.27	1.0	ug/L	100		87.3	71-149			
2-Butanone (MEK)	100.6	10.0	ug/L	102		98.8	52-159			
Bromochloromethane	101.9	1.0	ug/L	100		102	69-143			
Chloroform	98.92	1.0	ug/L	100		98.9	69-144			
1,1,1-Trichloroethane	93.49	1.0	ug/L	100		93.5	62-129			
Carbon Tetrachloride	110.9	1.0	ug/L	100		111	63-141			
Benzene	100.2	1.0	ug/L	100		100	71-134			
1,2-Dichloroethane	100.8	1.0	ug/L	100		101	72-132			
Trichloroethylene	93.41	1.0	ug/L	100		93.4	71-135			
1,2-Dichloropropane	93.65	1.0	ug/L	100		93.6	69-136			
Dibromomethane	93.63	1.0	ug/L	100		93.6	73-147			
Bromodichloromethane	92.85	1.0	ug/L	100		92.8	68-129			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ0102 - EPA 5030B - EPA 8260B										
LCS (1HJ0102-BS1)			Prepared & Analyzed: 10/01/24 08:33							
cis-1,3-Dichloropropene	93.91	1.0	ug/L	100		93.9	65-134			
4-Methyl-2-pentanone (MIBK)	92.85	5.0	ug/L	100		92.8	58-147			
Toluene	99.04	1.0	ug/L	100		99.0	72-133			
trans-1,3-Dichloropropene	97.30	1.0	ug/L	100		97.3	67-130			
1,1,2-Trichloroethane	97.85	1.0	ug/L	100		97.8	69-135			
Tetrachloroethylene	93.00	1.0	ug/L	100		93.0	69-130			
2-Hexanone (MBK)	93.06	5.0	ug/L	99.3		93.7	55-144			
Dibromochloromethane	96.90	1.0	ug/L	100		96.9	73-127			
1,2-Dibromoethane	92.03	1.0	ug/L	100		92.0	67-132			
Chlorobenzene	97.20	1.0	ug/L	100		97.2	72-123			
1,1,1,2-Tetrachloroethane	95.66	1.0	ug/L	100		95.7	73-127			
Ethylbenzene	93.58	1.0	ug/L	100		93.6	71-127			
Xylenes, total	281.7	2.0	ug/L	300		93.9	74-127			
Styrene	96.36	1.0	ug/L	100		96.4	66-126			
Bromoform	92.77	1.0	ug/L	100		92.8	68-130			
1,2,3-Trichloropropane	90.51	1.0	ug/L	100		90.5	63-136			
trans-1,4-Dichloro-2-butene	83.35	5.0	ug/L	103		81.1	54-134			
1,1,2,2-Tetrachloroethane	90.34	1.0	ug/L	100		90.3	61-131			
1,4-Dichlorobenzene	96.35	1.0	ug/L	100		96.4	70-129			
1,2-Dichlorobenzene	99.15	1.0	ug/L	100		99.2	69-126			
1,2-Dibromo-3-chloropropane	95.13	5.0	ug/L	100		95.1	50-143			
Surrogate: Dibromofluoromethane	*50.9*		ug/L	*50.2*		*101*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*51.3*		ug/L	*50.4*		*102*	*61-142*			
Surrogate: Toluene-d8	*50.5*		ug/L	*50.5*		*100*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*50.5*		ug/L	*50.2*		*101*	*80-116*			
Matrix Spike (1HJ0102-MS1)	**Source: 1HI1560-20**		Prepared & Analyzed: 10/01/24 18:49							
Chloromethane	317.6	10.0	ug/L	300	ND	106	61-152			
Vinyl Chloride	286.7	10.0	ug/L	300	ND	95.6	66-149			
Bromomethane	299.7	10.0	ug/L	300	ND	99.9	43-171			
Chloroethane	307.4	10.0	ug/L	300	ND	102	69-148			
Trichlorofluoromethane	309.3	10.0	ug/L	300	ND	103	62-163			
1,1-Dichloroethylene	908.1	10.0	ug/L	1000	ND	90.8	70-148			
Acetone	966.5	100	ug/L	1010	ND	95.5	45-173			
Methyl Iodide	918.0	10.0	ug/L	1020	ND	90.1	62-167			
Carbon Disulfide	915.7	10.0	ug/L	1030	ND	89.2	71-163			
Methylene Chloride	905.6	50.0	ug/L	1000	ND	90.6	69-140			
trans-1,2-Dichloroethylene	895.3	10.0	ug/L	1000	ND	89.5	69-144			
1,1-Dichloroethane	875.6	10.0	ug/L	1000	ND	87.6	70-138			
Vinyl Acetate	898.2	50.0	ug/L	1000	ND	89.8	58-142			
cis-1,2-Dichloroethylene	801.9	10.0	ug/L	1000	ND	80.2	68-151			
2-Butanone (MEK)	923.1	100	ug/L	1020	ND	90.7	50-160			
Bromochloromethane	956.3	10.0	ug/L	1000	ND	95.6	65-143			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ0102 - EPA 5030B - EPA 8260B										
Matrix Spike (1HJ0102-MS1)	**Source: 1HI1560-20**	Prepared & Analyzed: 10/01/24 18:49								
Chloroform	912.7	10.0	ug/L	1000	ND	91.3	71-143			
1,1,1-Trichloroethane	865.5	10.0	ug/L	1000	ND	86.6	63-133			
Carbon Tetrachloride	1016	10.0	ug/L	1000	ND	102	63-142			
Benzene	960.4	10.0	ug/L	1000	ND	96.0	69-133			
1,2-Dichloroethane	976.5	10.0	ug/L	1000	ND	97.6	63-138			
Trichloroethylene	890.0	10.0	ug/L	1000	ND	89.0	71-133			
1,2-Dichloropropane	891.9	10.0	ug/L	1000	ND	89.2	69-132			
Dibromomethane	915.9	10.0	ug/L	1000	ND	91.6	70-147			
Bromodichloromethane	887.0	10.0	ug/L	1000	ND	88.7	67-130			
cis-1,3-Dichloropropene	885.0	10.0	ug/L	1000	ND	88.5	61-126			
4-Methyl-2-pentanone (MIBK)	905.3	50.0	ug/L	1000	ND	90.4	55-147			
Toluene	953.5	10.0	ug/L	1000	ND	95.4	71-133			
trans-1,3-Dichloropropene	930.5	10.0	ug/L	1000	ND	93.0	63-124			
1,1,2-Trichloroethane	945.1	10.0	ug/L	1000	ND	94.5	69-133			
Tetrachloroethylene	923.3	10.0	ug/L	1000	ND	92.3	70-124			
2-Hexanone (MBK)	915.3	50.0	ug/L	993	ND	92.2	53-141			
Dibromochloromethane	949.9	10.0	ug/L	1000	ND	95.0	74-122			
1,2-Dibromoethane	910.3	10.0	ug/L	1000	ND	91.0	66-127			
Chlorobenzene	961.7	10.0	ug/L	1000	ND	96.2	76-116			
1,1,1,2-Tetrachloroethane	937.7	10.0	ug/L	1000	ND	93.8	77-121			
Ethylbenzene	927.7	10.0	ug/L	1000	ND	92.8	73-124			
Xylenes, total	2792	20.0	ug/L	3000	ND	93.1	75-123			
Styrene	954.1	10.0	ug/L	1000	ND	95.4	70-120			
Bromoform	916.9	10.0	ug/L	1000	ND	91.7	70-124			
1,2,3-Trichloropropane	913.2	10.0	ug/L	1000	ND	91.3	62-135			
trans-1,4-Dichloro-2-butene	838.0	50.0	ug/L	1030	ND	81.5	50-120			
1,1,2,2-Tetrachloroethane	904.0	10.0	ug/L	1000	ND	90.4	63-126			
1,4-Dichlorobenzene	954.5	10.0	ug/L	1000	ND	95.4	72-119			
1,2-Dichlorobenzene	985.2	10.0	ug/L	1000	ND	98.5	71-117			
1,2-Dibromo-3-chloropropane	960.8	50.0	ug/L	1000	ND	96.1	49-134			
Surrogate: Dibromofluoromethane	*484*		ug/L	*502*		*96.5*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*498*		ug/L	*504*		*98.8*	*61-142*			
Surrogate: Toluene-d8	*500*		ug/L	*505*		*99.2*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*503*		ug/L	*502*		*100*	*80-116*			
Matrix Spike Dup (1HJ0102-MSD1)	**Source: 1HI1560-20**	Prepared & Analyzed: 10/01/24 19:11								
Chloromethane	311.7	10.0	ug/L	300	ND	104	61-152	1.88	26	
Vinyl Chloride	274.2	10.0	ug/L	300	ND	91.4	66-149	4.46	23	
Bromomethane	288.5	10.0	ug/L	300	ND	96.2	43-171	3.81	29	
Chloroethane	297.0	10.0	ug/L	300	ND	99.0	69-148	3.44	25	
Trichlorofluoromethane	299.9	10.0	ug/L	300	ND	100	62-163	3.09	25	
1,1-Dichloroethylene	868.9	10.0	ug/L	1000	ND	86.9	70-148	4.41	22	
Acetone	923.0	100	ug/L	1010	ND	91.2	45-173	4.60	30	

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ0102 - EPA 5030B - EPA 8260B										
Matrix Spike Dup (1HJ0102-MSD1)	**Source: 1HI1560-20**	Prepared & Analyzed: 10/01/24 19:11								
Methyl Iodide	921.4	10.0	ug/L	1020	ND	90.4	62-167	0.370	24	
Carbon Disulfide	882.0	10.0	ug/L	1030	ND	85.9	71-163	3.75	22	
Methylene Chloride	882.1	50.0	ug/L	1000	ND	88.2	69-140	2.63	19	
trans-1,2-Dichloroethylene	858.2	10.0	ug/L	1000	ND	85.8	69-144	4.23	22	
1,1-Dichloroethane	846.0	10.0	ug/L	1000	ND	84.6	70-138	3.44	20	
Vinyl Acetate	902.3	50.0	ug/L	1000	ND	90.2	58-142	0.455	24	
cis-1,2-Dichloroethylene	775.2	10.0	ug/L	1000	ND	77.5	68-151	3.39	22	
2-Butanone (MEK)	874.0	100	ug/L	1020	ND	85.9	50-160	5.46	23	
Bromochloromethane	926.6	10.0	ug/L	1000	ND	92.7	65-143	3.15	22	
Chloroform	884.4	10.0	ug/L	1000	ND	88.4	71-143	3.15	21	
1,1,1-Trichloroethane	837.4	10.0	ug/L	1000	ND	83.7	63-133	3.30	23	
Carbon Tetrachloride	1008	10.0	ug/L	1000	ND	101	63-142	0.830	22	
Benzene	937.5	10.0	ug/L	1000	ND	93.8	69-133	2.41	18	
1,2-Dichloroethane	957.3	10.0	ug/L	1000	ND	95.7	63-138	1.99	20	
Trichloroethylene	868.7	10.0	ug/L	1000	ND	86.9	71-133	2.42	23	
1,2-Dichloropropane	880.3	10.0	ug/L	1000	ND	88.0	69-132	1.31	20	
Dibromomethane	902.8	10.0	ug/L	1000	ND	90.3	70-147	1.44	22	
Bromodichloromethane	878.4	10.0	ug/L	1000	ND	87.8	67-130	0.974	21	
cis-1,3-Dichloropropene	881.9	10.0	ug/L	1000	ND	88.2	61-126	0.351	21	
4-Methyl-2-pentanone (MIBK)	901.6	50.0	ug/L	1000	ND	90.1	55-147	0.410	23	
Toluene	926.7	10.0	ug/L	1000	ND	92.7	71-133	2.85	19	
trans-1,3-Dichloropropene	919.7	10.0	ug/L	1000	ND	92.0	63-124	1.17	21	
1,1,2-Trichloroethane	928.7	10.0	ug/L	1000	ND	92.9	69-133	1.75	19	
Tetrachloroethylene	890.7	10.0	ug/L	1000	ND	89.1	70-124	3.59	24	
2-Hexanone (MBK)	921.3	50.0	ug/L	993	ND	92.8	53-141	0.653	24	
Dibromochloromethane	945.6	10.0	ug/L	1000	ND	94.6	74-122	0.454	21	
1,2-Dibromoethane	901.2	10.0	ug/L	1000	ND	90.1	66-127	1.00	23	
Chlorobenzene	940.4	10.0	ug/L	1000	ND	94.0	76-116	2.24	21	
1,1,1,2-Tetrachloroethane	937.0	10.0	ug/L	1000	ND	93.7	77-121	0.0747	25	
Ethylbenzene	908.0	10.0	ug/L	1000	ND	90.8	73-124	2.15	20	
Xylenes, total	2722	20.0	ug/L	3000	ND	90.7	75-123	2.54	20	
Styrene	934.6	10.0	ug/L	1000	ND	93.5	70-120	2.06	23	
Bromoform	930.9	10.0	ug/L	1000	ND	93.1	70-124	1.52	22	
1,2,3-Trichloropropane	904.1	10.0	ug/L	1000	ND	90.4	62-135	1.00	28	
trans-1,4-Dichloro-2-butene	835.1	50.0	ug/L	1030	ND	81.2	50-120	0.347	26	
1,1,2,2-Tetrachloroethane	899.6	10.0	ug/L	1000	ND	90.0	63-126	0.488	24	
1,4-Dichlorobenzene	941.2	10.0	ug/L	1000	ND	94.1	72-119	1.40	24	
1,2-Dichlorobenzene	974.5	10.0	ug/L	1000	ND	97.4	71-117	1.09	24	
1,2-Dibromo-3-chloropropane	966.5	50.0	ug/L	1000	ND	96.6	49-134	0.592	28	
Surrogate: Dibromofluoromethane	*484*		ug/L	*502*		*96.5*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*490*		ug/L	*504*		*97.3*	*61-142*			
Surrogate: Toluene-d8	*502*		ug/L	*505*		*99.4*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*506*		ug/L	*502*		*101*	*80-116*			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HI1400 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Blank (1HI1400-BLK1)			Prepared: 09/25/24 16:04 Analyzed: 09/26/24 19:29							
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							B1
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							
Vanadium, total	<0.0200	0.0200	mg/L							
Zinc, total	<0.0200	0.0200	mg/L							
LCS (1HI1400-BS1)			Prepared: 09/25/24 16:04 Analyzed: 09/26/24 19:35							
Antimony, total	0.0962	0.0020	mg/L	0.100		96.2	80-120			
Arsenic, total	0.0961	0.0040	mg/L	0.100		96.1	80-120			
Barium, total	0.103	0.0040	mg/L	0.100		103	80-120			
Beryllium, total	0.101	0.0040	mg/L	0.100		101	80-120			
Cadmium, total	0.0987	0.0008	mg/L	0.100		98.7	80-120			
Chromium, total	0.102	0.0080	mg/L	0.100		102	80-120			
Cobalt, total	0.104	0.0004	mg/L	0.100		104	80-120			
Copper, total	0.104	0.0040	mg/L	0.100		104	80-120			
Lead, total	0.101	0.0040	mg/L	0.100		101	80-120			
Nickel, total	0.107	0.0040	mg/L	0.100		107	80-120			
Selenium, total	0.0902	0.0040	mg/L	0.100		90.2	80-120			
Silver, total	0.101	0.0040	mg/L	0.100		101	80-120			
Thallium, total	0.103	0.0020	mg/L	0.100		103	80-120			
Vanadium, total	0.103	0.0200	mg/L	0.100		103	80-120			
Zinc, total	0.0972	0.0200	mg/L	0.100		97.2	80-120			
Matrix Spike (1HI1400-MS1)	**Source: 1HI1560-01**		Prepared: 09/25/24 16:04 Analyzed: 09/26/24 20:06							
Antimony, total	0.0910	0.0020	mg/L	0.100	ND	91.0	75-125			
Arsenic, total	0.103	0.0040	mg/L	0.100	0.0119	91.0	75-125			
Barium, total	0.228	0.0040	mg/L	0.100	0.142	85.5	75-125			
Beryllium, total	0.0857	0.0040	mg/L	0.100	ND	85.7	75-125			
Cadmium, total	0.0918	0.0008	mg/L	0.100	ND	91.8	75-125			
Chromium, total	0.0933	0.0080	mg/L	0.100	0.0007	92.6	75-125			
Cobalt, total	0.104	0.0004	mg/L	0.100	0.0103	93.3	75-125			
Copper, total	0.0899	0.0040	mg/L	0.100	ND	89.9	75-125			

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HI1400 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Matrix Spike (1HI1400-MS1)	**Source: 1HI1560-01**		Prepared: 09/25/24 16:04 Analyzed: 09/26/24 20:06							
Lead, total	0.0901	0.0040	mg/L	0.100	ND	90.1	75-125			
Nickel, total	0.103	0.0040	mg/L	0.100	0.0109	91.8	75-125			
Selenium, total	0.0867	0.0040	mg/L	0.100	ND	86.7	75-125			
Silver, total	0.0921	0.0040	mg/L	0.100	ND	92.1	75-125			
Thallium, total	0.0919	0.0020	mg/L	0.100	0.0007	91.1	75-125			
Vanadium, total	0.0978	0.0200	mg/L	0.100	ND	97.8	75-125			
Zinc, total	0.0956	0.0200	mg/L	0.100	ND	95.6	75-125			
Matrix Spike Dup (1HI1400-MSD1)	**Source: 1HI1560-01**		Prepared: 09/25/24 16:04 Analyzed: 09/26/24 20:12							
Antimony, total	0.0972	0.0020	mg/L	0.100	ND	97.2	75-125	6.60	20	
Arsenic, total	0.111	0.0040	mg/L	0.100	0.0119	98.7	75-125	7.22	20	
Barium, total	0.243	0.0040	mg/L	0.100	0.142	101	75-125	6.65	20	
Beryllium, total	0.0919	0.0040	mg/L	0.100	ND	91.9	75-125	6.95	20	
Cadmium, total	0.0985	0.0008	mg/L	0.100	ND	98.5	75-125	7.05	20	
Chromium, total	0.0996	0.0080	mg/L	0.100	0.0007	98.9	75-125	6.53	20	
Cobalt, total	0.112	0.0004	mg/L	0.100	0.0103	102	75-125	7.63	20	
Copper, total	0.0960	0.0040	mg/L	0.100	ND	96.0	75-125	6.54	20	
Lead, total	0.0945	0.0040	mg/L	0.100	ND	94.5	75-125	4.80	20	
Nickel, total	0.110	0.0040	mg/L	0.100	0.0109	98.7	75-125	6.47	20	
Selenium, total	0.0922	0.0040	mg/L	0.100	ND	92.2	75-125	6.19	20	
Silver, total	0.0965	0.0040	mg/L	0.100	ND	96.5	75-125	4.63	20	
Thallium, total	0.0961	0.0020	mg/L	0.100	0.0007	95.3	75-125	4.46	20	
Vanadium, total	0.102	0.0200	mg/L	0.100	ND	102	75-125	4.56	20	
Zinc, total	0.0970	0.0200	mg/L	0.100	ND	97.0	75-125	1.40	20	
Post Spike (1HI1400-PS1)	**Source: 1HI1560-01**		Prepared: 09/25/24 16:04 Analyzed: 09/26/24 20:18							
Antimony, total	0.0774		mg/L	0.0800	0.0001	96.6	80-120			
Arsenic, total	0.0883		mg/L	0.0800	0.0116	95.9	80-120			
Barium, total	0.214		mg/L	0.0800	0.139	93.2	80-120			
Beryllium, total	0.0707		mg/L	0.0800	0.00005	88.3	80-120			
Cadmium, total	0.0762		mg/L	0.0800	0.00003	95.2	80-120			
Chromium, total	0.0761		mg/L	0.0800	0.0007	94.2	80-120			
Cobalt, total	0.0896		mg/L	0.0800	0.0100	99.4	80-120			
Copper, total	0.0751		mg/L	0.0800	0.0004	93.4	80-120			
Lead, total	0.0762		mg/L	0.0800	0.00007	95.2	80-120			
Nickel, total	0.0879		mg/L	0.0800	0.0107	96.5	80-120			
Selenium, total	0.0706		mg/L	0.0800	0.0003	87.8	80-120			
Silver, total	0.0775		mg/L	0.0800	0.0002	96.6	80-120			
Thallium, total	0.0769		mg/L	0.0800	0.0007	95.2	80-120			
Vanadium, total	0.0803		mg/L	0.0800	0.0018	98.1	80-120			
Zinc, total	0.0769		mg/L	0.0800	0.0078	86.4	80-120			
Batch 1HI1402 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Blank (1HI1402-BLK1)			Prepared: 09/25/24 16:07 Analyzed: 09/26/24 22:39							
Antimony, total	<0.0020	0.0020	mg/L							

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HI1402 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Blank (1HI1402-BLK1)			Prepared: 09/25/24 16:07 Analyzed: 09/26/24 22:39							
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							
Vanadium, total	<0.0200	0.0200	mg/L							
Zinc, total	<0.0200	0.0200	mg/L							
LCS (1HI1402-BS1)			Prepared: 09/25/24 16:07 Analyzed: 09/26/24 22:45							
Antimony, total	0.0940	0.0020	mg/L	0.100		94.0	80-120			
Arsenic, total	0.0962	0.0040	mg/L	0.100		96.2	80-120			
Barium, total	0.101	0.0040	mg/L	0.100		101	80-120			
Beryllium, total	0.0980	0.0040	mg/L	0.100		98.0	80-120			
Cadmium, total	0.0968	0.0008	mg/L	0.100		96.8	80-120			
Chromium, total	0.0990	0.0080	mg/L	0.100		99.0	80-120			
Cobalt, total	0.104	0.0004	mg/L	0.100		104	80-120			
Copper, total	0.102	0.0040	mg/L	0.100		102	80-120			
Lead, total	0.101	0.0040	mg/L	0.100		101	80-120			
Nickel, total	0.102	0.0040	mg/L	0.100		102	80-120			
Selenium, total	0.0889	0.0040	mg/L	0.100		88.9	80-120			
Silver, total	0.100	0.0040	mg/L	0.100		100	80-120			
Thallium, total	0.102	0.0020	mg/L	0.100		102	80-120			
Vanadium, total	0.100	0.0200	mg/L	0.100		100	80-120			
Zinc, total	0.0976	0.0200	mg/L	0.100		97.6	80-120			
Matrix Spike (1HI1402-MS1)	**Source: 1HI1560-21**		Prepared: 09/25/24 16:07 Analyzed: 09/26/24 22:57							
Antimony, total	0.0966	0.0020	mg/L	0.100	ND	96.6	75-125			
Arsenic, total	0.0993	0.0040	mg/L	0.100	0.0010	98.3	75-125			
Barium, total	0.345	0.0040	mg/L	0.100	0.238	106	75-125			
Beryllium, total	0.0958	0.0040	mg/L	0.100	ND	95.8	75-125			
Cadmium, total	0.0969	0.0008	mg/L	0.100	0.0004	96.5	75-125			
Chromium, total	0.0977	0.0080	mg/L	0.100	ND	97.7	75-125			
Cobalt, total	0.104	0.0004	mg/L	0.100	0.0013	103	75-125			
Copper, total	0.0950	0.0040	mg/L	0.100	0.0012	93.8	75-125			
Lead, total	0.0973	0.0040	mg/L	0.100	ND	97.3	75-125			
Nickel, total	0.128	0.0040	mg/L	0.100	0.0292	98.8	75-125			
Selenium, total	0.0924	0.0040	mg/L	0.100	ND	92.4	75-125			
Silver, total	0.0978	0.0040	mg/L	0.100	ND	97.8	75-125			

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HI1402 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Matrix Spike (1HI1402-MS1)	**Source: 1HI1560-21**	Prepared: 09/25/24 16:07 Analyzed: 09/26/24 22:57								
Thallium, total	0.100	0.0020	mg/L	0.100	0.0002	100	75-125			
Vanadium, total	0.102	0.0200	mg/L	0.100	ND	102	75-125			
Zinc, total	0.102	0.0200	mg/L	0.100	ND	102	75-125			
Matrix Spike Dup (1HI1402-MSD1)	**Source: 1HI1560-21**	Prepared: 09/25/24 16:07 Analyzed: 09/26/24 23:03								
Antimony, total	0.0956	0.0020	mg/L	0.100	ND	95.6	75-125	1.10	20	
Arsenic, total	0.0971	0.0040	mg/L	0.100	0.0010	96.1	75-125	2.19	20	
Barium, total	0.340	0.0040	mg/L	0.100	0.238	102	75-125	1.38	20	
Beryllium, total	0.0957	0.0040	mg/L	0.100	ND	95.7	75-125	0.0514	20	
Cadmium, total	0.0969	0.0008	mg/L	0.100	0.0004	96.5	75-125	0.0421	20	
Chromium, total	0.0971	0.0080	mg/L	0.100	ND	97.1	75-125	0.650	20	
Cobalt, total	0.106	0.0004	mg/L	0.100	0.0013	104	75-125	1.45	20	
Copper, total	0.0960	0.0040	mg/L	0.100	0.0012	94.8	75-125	1.12	20	
Lead, total	0.0975	0.0040	mg/L	0.100	ND	97.5	75-125	0.267	20	
Nickel, total	0.130	0.0040	mg/L	0.100	0.0292	101	75-125	1.68	20	
Selenium, total	0.0902	0.0040	mg/L	0.100	ND	90.2	75-125	2.41	20	
Silver, total	0.0978	0.0040	mg/L	0.100	ND	97.8	75-125	0.00245	20	
Thallium, total	0.0998	0.0020	mg/L	0.100	0.0002	99.6	75-125	0.610	20	
Vanadium, total	0.101	0.0200	mg/L	0.100	ND	101	75-125	1.29	20	
Zinc, total	0.103	0.0200	mg/L	0.100	ND	103	75-125	0.680	20	
Post Spike (1HI1402-PS1)	**Source: 1HI1560-21**	Prepared: 09/25/24 16:07 Analyzed: 09/26/24 23:10								
Antimony, total	0.0735		mg/L	0.0800	0.00006	91.7	80-120			
Arsenic, total	0.0759		mg/L	0.0800	0.0010	93.6	80-120			
Barium, total	0.310		mg/L	0.0800	0.234	95.1	80-120			
Beryllium, total	0.0721		mg/L	0.0800	0.000002	90.1	80-120			
Cadmium, total	0.0728		mg/L	0.0800	0.0004	90.5	80-120			
Chromium, total	0.0733		mg/L	0.0800	0.0005	91.0	80-120			
Cobalt, total	0.0823		mg/L	0.0800	0.0012	101	80-120			
Copper, total	0.0766		mg/L	0.0800	0.0012	94.2	80-120			
Lead, total	0.0734		mg/L	0.0800	0.00002	91.7	80-120			
Nickel, total	0.107		mg/L	0.0800	0.0287	98.0	80-120			
Selenium, total	0.0688		mg/L	0.0800	0.0002	85.7	80-120			
Silver, total	0.0752		mg/L	0.0800	0.0001	93.8	80-120			
Thallium, total	0.0754		mg/L	0.0800	0.0002	94.0	80-120			
Vanadium, total	0.0778		mg/L	0.0800	0.0031	93.4	80-120			
Zinc, total	0.0814		mg/L	0.0800	0.0138	84.5	80-120			

Definitions

A15:	Proper preservation cannot be achieved due to the sample matrix.
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.
M1:	Matrix spike recovery is above acceptance limits.
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
S2:	Surrogate recovery is below acceptance limits.

Cooler Receipt Log

Cooler ID: Default Cooler   Temp: 0.0ºC

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

Heather Murphy
Customer Relationship Specialist
heather.murphy@microbac.com
10/07/24 11:13

CHAIN OF CUS

MICROBAC®

600 East 17th Street South
Newton, IA 50208
641-792-8451

1HI1560
HLW Engineering
PM: Heather Murphy

Page 1 of

ed: 7/31/2024 12:15:31P

www.keystonelabs.com

SITE INFORMATION

Sampler: TODD WHIPPLE

Project: City of Newton SLF New Regs-COC1 6002

REPORT TO

Todd Whipple
HLW Engineering
PO Box 314
Story City, IA 50248

INVOICE TO

Joe Grife
City of Newton
403 W 4th St N Ste 501
Newton, IA 50208

SPECIAL INSTRUCTIONS

None

Turn Around Time
☐ Standard ☐ RUSH, need by ___/___/___

LAB USE ONLY

Work Order 1HI1560

Temperature 0.0

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-45R DRY	Aqueous	GRAB	9/23/24	DRY	—	lndfill-app1-voc-group	lndfl-app1-metals-6020	—
-001	MW-44	Aqueous	GRAB	9/23/24	10:23	7	lndfill-app1-voc-group	lndfl-app1-metals-6020	01
-001	MW-57	Aqueous	GRAB	9/23/24	11:20	7	lndfill-app1-voc-group	lndfl-app1-metals-6020	02
-001	MW-56	Aqueous	GRAB	9/23/24	10:55	7	lndfill-app1-voc-group	lndfl-app1-metals-6020	03
-001	MW-64	Aqueous	GRAB	9/23/24	11:07	7	lndfill-app1-voc-group	lndfl-app1-metals-6020	04
-001	MW-65	Aqueous	GRAB	9/23/24	10:37	7	lndfill-app1-voc-group	lndfl-app1-metals-6020	05
-001	SW-101R	Aqueous	GRAB	9/23/24	11:54	7	lndfill-app1-voc-group	lndfl-app1-metals-6020	06

Relinquished By: Todd Whipple Date/Time: 9/23/24 16:05

Relinquished By Date/Time

Received By Date/Time

Received for Lab By: Mya Martin Date/Time: 9/23/24 16:05

Remarks:

Original - Lab Copy Yellow - Sampler Copy

CHAIN OF CUSTODY

MICROBAC®

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Newton, IA 50208
641-792-8451

1 H I 1 5 6 0
HLW Engineering
PM: Heather Murphy

Printed: 7/31/2024 12:15:31P

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SITE INFORMATION

Sampler: TODD WHIPPLE

Project: City of Newton SLF New Regs-COC1
6002

REPORT TO

Todd Whipple
HLW Engineering
PO Box 314
Story City, IA 50248

INVOICE TO

Joe Grife
City of Newton
403 W 4th St N Ste 501
Newton, IA 50208

SPECIAL INSTRUCTIONS

None

Turn Around Time
☐ Standard ☐ RUSH, need by __/__/__

LAB USE ONLY

Work Order: 1HI1560
Temperature: 0.0
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	PECS-1	Aqueous	GRAB	9/23/24	12:05	6	lndfill-app1-voc-group		07
-001	SW-102	Aqueous	GRAB	9/23/24	12:11	7	lndfill-app1-voc-group	lndfil-app1-metals-6020	08
-001	SW-103	Aqueous	GRAB	9/23/24	10:47	7	lndfill-app1-voc-group	lndfil-app1-metals-6020	09
-001	MW-48 (B)	Aqueous	GRAB	9/23/24	11:36	7	lndfill-app1-voc-group	lndfil-app1-metals-6020	10
-001	MW-39 (B)	Aqueous	GRAB	9/23/24	13:42	7	lndfill-app1-voc-group	lndfil-app1-metals-6020	11
-001	MW-78 (B)	Aqueous	GRAB	9/23/24	14:07	7	lndfill-app1-voc-group	lndfil-app1-metals-6020	12
-001	MW-62R	Aqueous	GRAB	9/23/24	13:56	7	lndfill-app1-voc-group	lndfil-app1-metals-6020	13

Relinquished By: Todd Whipple   Date/Time: 9/23/24 16:05

Relinquished By   Date/Time

Received By   Date/Time

Received for Lab By: Mya Martin   Date/Time: 9/23/24 16:05

Remarks:

Original - Lab Copy   Yellow - Sampler Copy

CHAIN OF CU[STODY]

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600 East 17th Street So
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HLW Engineering
PM: Heather Murphy

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SITE INFORMATION

Sampler: Todd Whipple

Project: City of Newton SLF New Regs-COC1 6002

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Joe Grife
City of Newton
403 W 4th St N Ste 501
Newton, IA 50208

SPECIAL INSTRUCTIONS

None

Turn Around Time

☐ Standard ☐ RUSH, need by __/__/__

LAB USE ONLY

Work Order: 1HI1560

Temperature: 0.0

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-60	Aqueous	GRAB	9/23/24	13:16	7	lndfill-app1-voc-group	lndfill-app1-metals-6020	21
-001	MW-61	Aqueous	GRAB	9/23/24	14:44	7	lndfill-app1-voc-group	lndfill-app1-metals-6020	22
-001	Duplicate	Aqueous	GRAB	9/23/24	✓	1	~~lndfill-app1-voc-group~~	lndfill-app1-metals-6020	23

Relinquished By: [signature] Date/Time: 9/23/24 16:05

Relinquished By: Date/Time:

Received By: Date/Time:

Received for Lab By: Mya Martin Date/Time: 9/23/24 16:05

Remarks:

Original - Lab Copy Yellow - Sampler Copy

Appendix F

Comparison of Results to Prediction Limits and Confidence Interval

Table 7
Summary of Ongoing & Newly Identified SSI
Annual Water Quality Report
Newton Sanitary Landfill
Permit No.50-SDP-01-75P

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-41	1,1-dichloroethane	9/15/2016	**26.20**	1.0	23.034	140	9/15/2016	NA	9/15/2016
MW-41	1,1-dichloroethane	3/23/2017	**24.40**	1.0	23.809	140	9/15/2016	NA	9/15/2016
MW-41	1,1-dichloroethane	9/8/2017	**23.40**	1.0	23.122	140	9/15/2016	NA	9/15/2016
MW-41	1,1-dichloroethane	3/19/2018	**26.70**	1.0	23.362	140	9/15/2016	NA	9/15/2016
MW-41	1,1-dichloroethane	9/11/2018	**24.60**	1.0	23.144	140	9/15/2016	NA	9/15/2016
MW-41	1,1-dichloroethane	3/26/2019	**24.60**	1.0	23.211	140	9/15/2016	NA	9/15/2016
MW-41	1,1-dichloroethane	9/4/2019	**26.30**	1.0	24.245	140	9/15/2016	NA	9/15/2016
MW-41	1,1-dichloroethane	3/26/2020	**30.80**	1.0	23.130	140	9/15/2016	NA	9/15/2016
MW-41	1,1-dichloroethane	9/15/2020	**25.80**	1.0	23.685	140	9/15/2016	NA	9/15/2016
MW-41	1,1-dichloroethane	3/2/2021	**24.50**	1.0	23.626	140	9/15/2016	NA	9/15/2016
MW-41	1,1-dichloroethane	9/7/2021	**24.40**	1.0	22.825	140	9/15/2016	NA	9/15/2016
MW-41	1,1-dichloroethane	3/24/2022	**25.10**	1.0	24.191	140	9/15/2016	NA	9/15/2016
MW-41	1,1-dichloroethane	8/31/2022	**22.00**	1.0	22.390	140	9/15/2016	NA	9/15/2016
MW-41	1,1-dichloroethane	3/2/2023	**23.90**	1.0	22.288	140	9/15/2016	NA	9/15/2016
MW-41	1,1-dichloroethane	9/12/2023	**23.00**	1.0	21.948	140	9/15/2016	NA	9/15/2016
MW-41	1,1-dichloroethane	3/4/2024	**19.00**	1.0	19.470	140	9/15/2016	NA	9/15/2016
MW-41	1,1-dichloroethane	9/23/2024	**22.00**	1.0	19.470	140	9/15/2016	NA	9/15/2016
MW-41	1,2-dichloropropane	9/15/2016	<1.0	1.0	---	5	3/26/2020	NA	9/15/2016
MW-41	1,2-dichloropropane	3/23/2017	<1.0	1.0	---	5	3/26/2020	NA	9/15/2016
MW-41	1,2-dichloropropane	9/8/2017	<1.0	1.0	---	5	3/26/2020	NA	9/15/2016
MW-41	1,2-dichloropropane	3/19/2018	<1.0	1.0	0.500	5	3/26/2020	NA	9/15/2016
MW-41	1,2-dichloropropane	9/11/2018	<1.0	1.0	0.500	5	3/26/2020	NA	9/15/2016
MW-41	1,2-dichloropropane	3/26/2019	<1.0	1.0	0.500	5	3/26/2020	NA	9/15/2016
MW-41	1,2-dichloropropane	9/4/2019	<1.0	1.0	0.500	5	3/26/2020	NA	9/15/2016
MW-41	1,2-dichloropropane	3/26/2020	**1.2**	1.0	0.263	5	3/26/2020	NA	9/15/2016
MW-41	1,2-dichloropropane	9/15/2020	<1.0	1.0	0.263	5	3/26/2020	NA	9/15/2016
MW-41	1,2-dichloropropane	3/2/2021	<1.0	1.0	0.263	5	3/26/2020	NA	9/15/2016
MW-41	1,2-dichloropropane	9/7/2021	<1.0	1.0	0.263	5	3/26/2020	NA	9/15/2016
MW-41	1,2-dichloropropane	3/24/2022	<1.0	1.0	0.500	5	3/26/2020	NA	9/15/2016
MW-41	1,2-dichloropropane	8/31/2022	<1.0	1.0	0.500	5	3/26/2020	NA	9/15/2016
MW-41	1,2-dichloropropane	3/2/2023	**1.0**	1.0	0.331	5	3/26/2020	NA	9/15/2016
MW-41	1,2-dichloropropane	9/12/2023	<1.0	1.0	0.331	5	3/26/2020	NA	9/15/2016
MW-41	1,2-dichloropropane	3/4/2024	<1.0	1.0	0.331	5	3/26/2020	NA	9/15/2016
MW-41	1,2-dichloropropane	9/23/2024	**1.0**	1.0	0.410	5	3/26/2020	NA	9/15/2016
MW-41	bis (2-ethylhexyl) phthalate	9/15/2016	<10	6.0	---	6.0	3/26/2020	NA	3/26/2020
MW-41	bis (2-ethylhexyl) phthalate	3/23/2017	<10	6.0	---	6.0	3/26/2020	NA	3/26/2020
MW-41	bis (2-ethylhexyl) phthalate	9/8/2017	<10	6.0	---	6.0	3/26/2020	NA	3/26/2020
MW-41	bis (2-ethylhexyl) phthalate	3/19/2018	NT	6.0	---	6.0	3/26/2020	NA	3/26/2020
MW-41	bis (2-ethylhexyl) phthalate	9/11/2018	NT	6.0	---	6.0	3/26/2020	NA	3/26/2020
MW-41	bis (2-ethylhexyl) phthalate	3/26/2019	NT	6.0	---	6.0	3/26/2020	NA	3/26/2020
MW-41	bis (2-ethylhexyl) phthalate	9/4/2019	NT	6.0	---	6.0	3/26/2020	NA	3/26/2020
MW-41	bis (2-ethylhexyl) phthalate	3/26/2020	**8.00**	6.0	3.986	6.0	3/26/2020	NA	3/26/2020
MW-41	bis (2-ethylhexyl) phthalate	9/15/2020	<6	6.0	3.986	6.0	3/26/2020	NA	3/26/2020
MW-41	bis (2-ethylhexyl) phthalate	3/2/2021	NT	6.0	3.986	6.0	3/26/2020	NA	3/26/2020
MW-41	bis (2-ethylhexyl) phthalate	9/7/2021	NT	6.0	3.986	6.0	3/26/2020	NA	3/26/2020
MW-41	bis (2-ethylhexyl) phthalate	3/24/2022	NT	6.0	3.986	6.0	3/26/2020	NA	3/26/2020
MW-41	bis (2-ethylhexyl) phthalate	8/31/2022	NT	6.0	3.986	6.0	3/26/2020	NA	3/26/2020
MW-41	bis (2-ethylhexyl) phthalate	3/2/2023	NT	6.0	3.986	6.0	3/26/2020	NA	3/26/2020
MW-41	bis (2-ethylhexyl) phthalate	9/12/2023	NT	6.0	3.986	6.0	3/26/2020	NA	3/26/2020
MW-41	bis (2-ethylhexyl) phthalate	3/4/2024	NT	6.0	3.986	6.0	3/26/2020	NA	3/26/2020
MW-41	bis (2-ethylhexyl) phthalate	9/23/2024	NT	6.0	3.986	6.0	3/26/2020	NA	3/26/2020
MW-41	cis-1,2-dichloroethylene	9/15/2016	**2.70**	1.0	2.024	70	9/15/2016	NA	9/15/2016
MW-41	cis-1,2-dichloroethylene	3/23/2017	**2.70**	1.0	2.325	70	9/15/2016	NA	9/15/2016
MW-41	cis-1,2-dichloroethylene	9/8/2017	**2.20**	1.0	2.247	70	9/15/2016	NA	9/15/2016
MW-41	cis-1,2-dichloroethylene	3/19/2018	**2.20**	1.0	2.110	70	9/15/2016	NA	9/15/2016
MW-41	cis-1,2-dichloroethylene	9/11/2018	**2.60**	1.0	2.116	70	9/15/2016	NA	9/15/2016
MW-41	cis-1,2-dichloroethylene	3/26/2019	**3.90**	1.0	1.777	70	9/15/2016	NA	9/15/2016
MW-41	cis-1,2-dichloroethylene	9/4/2019	**3.90**	1.0	2.113	70	9/15/2016	NA	9/15/2016
MW-41	cis-1,2-dichloroethylene	3/26/2020	**5.30**	1.0	2.628	70	9/15/2016	NA	9/15/2016
MW-41	cis-1,2-dichloroethylene	9/15/2020	**5.00**	1.0	3.664	70	9/15/2016	NA	9/15/2016
MW-41	cis-1,2-dichloroethylene	3/2/2021	**4.60**	1.0	3.988	70	9/15/2016	NA	9/15/2016
MW-41	cis-1,2-dichloroethylene	9/7/2021	**4.90**	1.0	4.610	70	9/15/2016	NA	9/15/2016
MW-41	cis-1,2-dichloroethylene	3/24/2022	**4.90**	1.0	4.646	70	9/15/2016	NA	9/15/2016
MW-41	cis-1,2-dichloroethylene	8/31/2022	**4.00**	1.0	4.101	70	9/15/2016	NA	9/15/2016
MW-41	cis-1,2-dichloroethylene	3/2/2023	**4.10**	1.0	3.896	70	9/15/2016	NA	9/15/2016
MW-41	cis-1,2-dichloroethylene	9/12/2023	**3.60**	1.0	3.509	70	9/15/2016	NA	9/15/2016
MW-41	cis-1,2-dichloroethylene	3/4/2024	**2.40**	1.0	2.607	70	9/15/2016	NA	9/15/2016
MW-41	cis-1,2-dichloroethylene	9/23/2024	**3.10**	1.0	2.446	70	9/15/2016	NA	9/15/2016
MW-41	tetrachloroethene (PCE)	9/15/2016	<1.0	1.0	0.500	5	9/11/2018	NA	9/15/2016
MW-41	tetrachloroethene (PCE)	3/23/2017	<1.0	1.0	0.500	5	9/11/2018	NA	9/15/2016
MW-41	tetrachloroethene (PCE)	9/8/2017	<1.0	1.0	0.500	5	9/11/2018	NA	9/15/2016
MW-41	tetrachloroethene (PCE)	3/19/2018	<1.0	1.0	0.500	5	9/11/2018	NA	9/15/2016
MW-41	tetrachloroethene (PCE)	9/11/2018	**1.00**	1.0	0.331	5	9/11/2018	NA	9/15/2016
MW-41	tetrachloroethene (PCE)	3/26/2019	<1.0	1.0	0.331	5	9/11/2018	NA	9/15/2016
MW-41	tetrachloroethene (PCE)	9/4/2019	<1.0	1.0	0.331	5	9/11/2018	NA	9/15/2016
MW-41	tetrachloroethene (PCE)	3/26/2020	<1.0	1.0	0.331	5	9/11/2018	NA	9/15/2016
MW-41	tetrachloroethene (PCE)	9/15/2020	<1.0	1.0	0.500	5	9/11/2018	NA	9/15/2016
MW-41	tetrachloroethene (PCE)	3/2/2021	<1.0	1.0	0.500	5	9/11/2018	NA	9/15/2016
MW-41	tetrachloroethene (PCE)	9/7/2021	<1.0	1.0	0.500	5	9/11/2018	NA	9/15/2016
MW-41	tetrachloroethene (PCE)	3/24/2022	<1.0	1.0	0.500	5	9/11/2018	NA	9/15/2016
MW-41	tetrachloroethene (PCE)	8/31/2022	<1.0	1.0	0.500	5	9/11/2018	NA	9/15/2016
MW-41	tetrachloroethene (PCE)	3/2/2023	<1.0	1.0	0.500	5	9/11/2018	NA	9/15/2016
MW-41	tetrachloroethene (PCE)	9/12/2023	<1.0	1.0	0.500	5	9/11/2018	NA	9/15/2016
MW-41	tetrachloroethene (PCE)	3/4/2024	<1.0	1.0	0.500	5	9/11/2018	NA	9/15/2016
MW-41	tetrachloroethene (PCE)	9/23/2024	<1.0	1.0	0.500	5	9/11/2018	NA	9/15/2016
MW-41	trichloroethene (TCE)	9/15/2016	<1.0	1.0	0.500	5	9/11/2018	NA	9/15/2016
MW-41	trichloroethene (TCE)	3/23/2017	<1.0	1.0	0.500	5	9/11/2018	NA	9/15/2016
MW-41	trichloroethene (TCE)	9/8/2017	<1.0	1.0	0.500	5	9/11/2018	NA	9/15/2016
MW-41	trichloroethene (TCE)	3/19/2018	<1.0	1.0	0.500	5	9/11/2018	NA	9/15/2016
MW-41	trichloroethene (TCE)	9/11/2018	**1.10**	1.0	0.297	5	9/11/2018	NA	9/15/2016
MW-41	trichloroethene (TCE)	3/26/2019	<1.0	1.0	0.297	5	9/11/2018	NA	9/15/2016
MW-41	trichloroethene (TCE)	9/4/2019	<1.0	1.0	0.297	5	9/11/2018	NA	9/15/2016
MW-41	trichloroethene (TCE)	3/26/2020	<1.0	1.0	0.297	5	9/11/2018	NA	9/15/2016
MW-41	trichloroethene (TCE)	9/15/2020	<1.0	1.0	0.500	5	9/11/2018	NA	9/15/2016
MW-41	trichloroethene (TCE)	3/2/2021	<1.0	1.0	0.500	5	9/11/2018	NA	9/15/2016
MW-41	trichloroethene (TCE)	9/7/2021	<1.0	1.0	0.500	5	9/11/2018	NA	9/15/2016
MW-41	trichloroethene (TCE)	3/24/2022	<1.0	1.0	0.500	5	9/11/2018	NA	9/15/2016
MW-41	trichloroethene (TCE)	8/31/2022	<1.0	1.0	0.500	5	9/11/2018	NA	9/15/2016
MW-41	trichloroethene (TCE)	3/2/2023	<1.0	1.0	0.500	5	9/11/2018	NA	9/15/2016
MW-41	trichloroethene (TCE)	9/12/2023	<1.0	1.0	0.500	5	9/11/2018	NA	9/15/2016
MW-41	trichloroethene (TCE)	3/4/2024	<1.0	1.0	0.500	5	9/11/2018	NA	9/15/2016
MW-41	trichloroethene (TCE)	9/23/2024	<1.0	1.0	0.500	5	9/11/2018	NA	9/15/2016
MW-41	chloroethane	9/15/2016	<1.0	1.0	0.500	2,800.00	3/26/2019	NA	9/15/2016
MW-41	chloroethane	3/23/2017	<1.0	1.0	0.500	2,800.00	3/26/2019	NA	9/15/2016
MW-41	chloroethane	9/8/2017	<1.0	1.0	0.500	2,800.00	3/26/2019	NA	9/15/2016
MW-41	chloroethane	3/19/2018	<1.0	1.0	0.500	2,800.00	3/26/2019	NA	9/15/2016
MW-41	chloroethane	9/11/2018	<1.0	1.0	0.500	2,800.00	3/26/2019	NA	9/15/2016
MW-41	chloroethane	3/26/2019	**1.10**	1.0	0.297	2,800.00	3/26/2019	NA	9/15/2016
MW-41	chloroethane	9/4/2019	<1.0	1.0	0.297	2,800.00	3/26/2019	NA	9/15/2016
MW-41	chloroethane	3/26/2020	**1.00**	1.0	0.398	2,800.00	3/26/2019	NA	9/15/2016
MW-41	chloroethane	9/15/2020	<1.0	1.0	0.398	2,800.00	3/26/2019	NA	9/15/2016
MW-41	chloroethane	3/2/2021	<1.0	1.0	0.408	2,800.00	3/26/2019	NA	9/15/2016
MW-41	chloroethane	9/7/2021	**1.00**	1.0	0.410	2,800.00	3/26/2019	NA	9/15/2016
MW-41	chloroethane	3/24/2022	<1.0	1.0	0.331	2,800.00	3/26/2019	NA	9/15/2016
MW-41	chloroethane	8/31/2022	<1.0	1.0	0.331	2,800.00	3/26/2019	NA	9/15/2016
MW-41	chloroethane	3/2/2023	<1.0	1.0	0.331	2,800.00	3/26/2019	NA	9/15/2016
MW-41	chloroethane	9/12/2023	<1.0	1.0	0.500	2,800.00	3/26/2019	NA	9/15/2016
MW-41	chloroethane	3/4/2024	<1.0	1.0	0.500	2,800.00	3/26/2019	NA	9/15/2016
MW-41	chloroethane	9/23/2024	<1.0	1.0	0.500	2,800.00	3/26/2019	NA	9/15/2016

** = documented false positive*
Bold *= 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

Newton Sanitary Landfill

Permit No.50-SDP-01-75P

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-42	Cobalt	9/15/2016	4.80	**4.5**	0.584	**6.9**	9/15/2016	NA	9/15/2016
MW-42	Cobalt	10/30/2016	4.80	**4.5**	0.584	**6.9**	9/15/2016	NA	9/15/2016
MW-42	Cobalt	3/23/2017	<0.8	**4.5**	1.498	**6.9**	9/15/2016	NA	9/15/2016
MW-42	Cobalt	9/8/2017	4.00	**6.9**	2.345	**6.9**	9/15/2016	NA	9/15/2016
MW-42	Cobalt	3/19/2018	<0.8	**6.9**	1.525	**6.9**	9/15/2016	NA	9/15/2016
MW-42	Cobalt	9/11/2018	1.70	**6.9**	1.179	**6.9**	9/15/2016	NA	9/15/2016
MW-42	Cobalt	3/26/2019	<0.8	**6.9**	0.000	**6.9**	9/15/2016	NA	9/15/2016
MW-42	Cobalt	9/4/2019	4.50	**6.9**	0.000	**6.9**	9/15/2016	NA	9/15/2016
MW-42	Cobalt	3/26/2020	2.90	**6.9**	0.162	**6.9**	9/15/2016	NA	9/15/2016
MW-42	Cobalt	9/15/2020	2.10	**6.9**	0.469	**6.9**	9/15/2016	NA	9/15/2016
MW-42	Cobalt	3/2/2021	0.70	**6.9**	0.684	**6.9**	9/15/2016	NA	9/15/2016
MW-42	Cobalt	9/7/2021	1.00	**6.9**	0.482	**6.9**	9/15/2016	NA	9/15/2016
MW-42	Cobalt	3/24/2022	0.40	**6.9**	0.000	**6.9**	9/15/2016	NA	9/15/2016
MW-42	Cobalt	8/31/2022	1.50	**6.9**	0.035	**6.9**	9/15/2016	NA	9/15/2016
MW-42	Cobalt	3/2/2023	0.60	**6.9**	0.304	**6.9**	9/15/2016	NA	9/15/2016
MW-42	Cobalt	9/12/2023	4.90	**6.9**	0.000	**6.9**	9/15/2016	NA	9/15/2016
MW-42	Cobalt	3/4/2024	0.70	**6.9**	0.000	**6.9**	9/15/2016	NA	9/15/2016
MW-42	Cobalt	9/23/2024	1.60	**6.9**	0.000	**6.9**	9/15/2016	NA	9/15/2016

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Table 7
Summary of Ongoing & Newly Identified SSI
Annual Water Quality Report
Newton Sanitary Landfill
Permit No.50-SDP-01-75P

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-58	Nickel	9/15/2016	13.30	8.7	7.855	100	9/15/2016	NA	9/15/2016
MW-58	Nickel	3/23/2017	23.80	8.7	11.232	100	9/15/2016	NA	9/15/2016
MW-58	Nickel	9/8/2017	21.10	8.7	14.507	100	9/15/2016	NA	9/15/2016
MW-58	Nickel	3/19/2018	25.50	8.7	14.577	100	9/15/2016	NA	9/15/2016
MW-58	Nickel	9/11/2018	18.40	8.7	18.536	100	9/15/2016	NA	9/15/2016
MW-58	Nickel	12/5/2018	18.40	8.7	18.536	100	9/15/2016	NA	9/15/2016
MW-58	Nickel	3/26/2019	22.90	8.7	17.168	100	9/15/2016	NA	9/15/2016
MW-58	Nickel	9/4/2019	4.30	8.7	6.492	100	9/15/2016	NA	9/15/2016
MW-58	Nickel	3/26/2020	19.90	8.7	6.654	100	9/15/2016	NA	9/15/2016
MW-58	Nickel	9/15/2020	17.70	8.7	6.537	100	9/15/2016	NA	9/15/2016
MW-58	Nickel	3/2/2021	14.70	8.7	6.029	100	9/15/2016	NA	9/15/2016
MW-58	Nickel	9/7/2021	16.30	8.7	14.556	100	9/15/2016	NA	9/15/2016
MW-58	Nickel	3/24/2022	18.30	8.7	14.864	100	9/15/2016	NA	9/15/2016
MW-58	Nickel	8/31/2022	14.70	8.7	13.990	100	9/15/2016	NA	9/15/2016
MW-58	Nickel	3/2/2023	15.50	8.7	14.383	100	9/15/2016	NA	9/15/2016
MW-58	Nickel	9/12/2023	13.90	8.7	13.348	100	9/15/2016	NA	9/15/2016
MW-58	Nickel	3/4/2024	16.70	8.7	13.795	100	9/15/2016	NA	9/15/2016
MW-58	Nickel	9/23/2024	12.60	8.7	12.561	100	9/15/2016	NA	9/15/2016
MW-58	bis (2-ethylhexyl) phthalate	9/15/2016	NT	6.00	---	6.00	3/26/2020	NA	3/26/2020
MW-58	bis (2-ethylhexyl) phthalate	3/23/2017	NT	6.00	---	6.00	3/26/2020	NA	3/26/2020
MW-58	bis (2-ethylhexyl) phthalate	9/8/2017	NT	6.00	---	6.00	3/26/2020	NA	3/26/2020
MW-58	bis (2-ethylhexyl) phthalate	3/19/2018	NT	6.00	---	6.00	3/26/2020	NA	3/26/2020
MW-58	bis (2-ethylhexyl) phthalate	9/11/2018	NT	6.00	---	6.00	3/26/2020	NA	3/26/2020
MW-58	bis (2-ethylhexyl) phthalate	3/26/2019	NT	6.00	---	6.00	3/26/2020	NA	3/26/2020
MW-58	bis (2-ethylhexyl) phthalate	9/4/2019	NT	6.00	---	6.00	3/26/2020	NA	3/26/2020
MW-58	bis (2-ethylhexyl) phthalate	3/26/2020	6.00	6.00	3.324	6.00	3/26/2020	NA	3/26/2020
MW-58	bis (2-ethylhexyl) phthalate	9/15/2020	<6.0	6.00	3.324	6.00	3/26/2020	NA	3/26/2020
MW-58	bis (2-ethylhexyl) phthalate	3/2/2021	NT	6.00	3.324	6.00	3/26/2020	NA	3/26/2020
MW-58	bis (2-ethylhexyl) phthalate	9/7/2021	NT	6.00	3.324	6.00	3/26/2020	NA	3/26/2020
MW-58	bis (2-ethylhexyl) phthalate	3/24/2022	NT	6.00	3.324	6.00	3/26/2020	NA	3/26/2020
MW-58	bis (2-ethylhexyl) phthalate	8/31/2022	NT	6.00	3.324	6.00	3/26/2020	NA	3/26/2020
MW-58	bis (2-ethylhexyl) phthalate	3/2/2023	NT	6.00	3.324	6.00	3/26/2020	NA	3/26/2020
MW-58	bis (2-ethylhexyl) phthalate	9/12/2023	NT	6.00	3.324	6.00	3/26/2020	NA	3/26/2020
MW-58	bis (2-ethylhexyl) phthalate	3/4/2024	NT	6.00	3.324	6.00	3/26/2020	NA	3/26/2020
MW-58	bis (2-ethylhexyl) phthalate	9/23/2024	NT	6.00	3.324	6.00	3/26/2020	NA	3/26/2020
MW-58	cis-1,2-dichloroethylene	9/15/2016	5.80	1.0	4.307	70	9/15/2016	NA	9/15/2016
MW-58	cis-1,2-dichloroethylene	3/23/2017	4.80	1.0	4.146	70	9/15/2016	NA	9/15/2016
MW-58	cis-1,2-dichloroethylene	9/8/2017	5.20	1.0	4.136	70	9/15/2016	NA	9/15/2016
MW-58	cis-1,2-dichloroethylene	3/19/2018	4.00	1.0	4.062	70	9/15/2016	NA	9/15/2016
MW-58	cis-1,2-dichloroethylene	9/11/2018	3.90	1.0	3.735	70	9/15/2016	NA	9/15/2016
MW-58	cis-1,2-dichloroethylene	3/26/2019	2.70	1.0	2.748	70	9/15/2016	NA	9/15/2016
MW-58	cis-1,2-dichloroethylene	9/4/2019	3.60	1.0	2.854	70	9/15/2016	NA	9/15/2016
MW-58	cis-1,2-dichloroethylene	3/26/2020	2.80	1.0	2.554	70	9/15/2016	NA	9/15/2016
MW-58	cis-1,2-dichloroethylene	9/15/2020	2.90	1.0	2.520	70	9/15/2016	NA	9/15/2016
MW-58	cis-1,2-dichloroethylene	3/2/2021	1.70	1.0	1.826	70	9/15/2016	NA	9/15/2016
MW-58	cis-1,2-dichloroethylene	9/7/2021	2.10	1.0	1.700	70	9/15/2016	NA	9/15/2016
MW-58	cis-1,2-dichloroethylene	3/24/2022	1.70	1.0	1.435	70	9/15/2016	NA	9/15/2016
MW-58	cis-1,2-dichloroethylene	8/31/2022	1.70	1.0	1.565	70	9/15/2016	NA	9/15/2016
MW-58	cis-1,2-dichloroethylene	3/2/2023	1.80	1.0	1.602	70	9/15/2016	NA	9/15/2016
MW-58	cis-1,2-dichloroethylene	9/12/2023	1.70	1.0	1.666	70	9/15/2016	NA	9/15/2016
MW-58	cis-1,2-dichloroethylene	3/4/2024	1.00	1.0	1.115	70	9/15/2016	NA	9/15/2016
MW-58	cis-1,2-dichloroethylene	9/23/2024	<1.0	1.0	0.528	70	9/15/2016	NA	9/15/2016

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Table 7
Summary of Ongoing & Newly Identified SSI
Annual Water Quality Report
Newton Sanitary Landfill
Permit No.50-SDP-01-75P

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-59	Copper	9/15/2016	<4.0	4.0	1.087	1300	9/15/2016	NA	9/15/2016
MW-59	Copper	3/23/2017	<4.0	4.0	1.087	1300	9/15/2016	NA	9/15/2016
MW-59	Copper	9/8/2017	<4.0	4.0	1.087	1300	9/15/2016	NA	9/15/2016
MW-59	Copper	3/19/2018	**4.80**	4.0	1.053	1300	9/15/2016	NA	9/15/2016
MW-59	Copper	6/5/2018	<4.0	4.0	1.053	1300	9/15/2016	NA	9/15/2016
MW-59	Copper	9/11/2018	**4.60**	4.0	1.514	1300	9/15/2016	NA	9/15/2016
MW-59	Copper	12/5/2018	**4.10**	4.0	1.514	1300	9/15/2016	NA	9/15/2016
MW-59	Copper	3/26/2019	**5.50**	4.0	2.304	1300	9/15/2016	NA	9/15/2016
MW-59	Copper	9/4/2019	<4.0	4.0	2.304	1300	9/15/2016	NA	9/15/2016
MW-59	Copper	3/26/2020	**6.90**	4.0	2.166	1300	9/15/2016	NA	9/15/2016
MW-59	Copper	9/15/2020	<4.0	4.0	2.166	1300	9/15/2016	NA	9/15/2016
MW-59	Copper	3/2/2021	<4.0	4.0	1.103	1300	9/15/2016	NA	9/15/2016
MW-59	Copper	9/7/2021	<4.0	4.0	1.103	1300	9/15/2016	NA	9/15/2016
MW-59	Copper	3/24/2022	**8.20**	4.0	0.000	1300	9/15/2016	NA	9/15/2016
MW-59	Copper	8/31/2022	**6.00**	4.0	0.929	1300	9/15/2016	NA	9/15/2016
MW-59	Copper	3/2/2023	**6.80**	4.0	2.261	1300	9/15/2016	NA	9/15/2016
MW-59	Copper	9/12/2023	<4.0	4.0	2.261	1300	9/15/2016	NA	9/15/2016
MW-59	Copper	3/4/2024	<4.0	4.0	0.929	1300	9/15/2016	NA	9/15/2016
MW-59	Copper	9/23/2024	<4.0	4.0	1.103	1300	9/15/2016	NA	9/15/2016
MW-59	bis (2-ethylhexyl) phthalate	3/26/2019	**15.00**	6.0	---	6	3/19/2018	NA	9/15/2016
MW-59	bis (2-ethylhexyl) phthalate	6/6/2019	<6	6.0	---	6	3/19/2018	NA	9/15/2016
MW-59	bis (2-ethylhexyl) phthalate	9/4/2019	<6	6.0	---	6	3/19/2018	NA	9/15/2016
MW-59	bis (2-ethylhexyl) phthalate	12/4/2019	**6.00**	6.0	---	6	3/19/2018	NA	9/15/2016
MW-59	bis (2-ethylhexyl) phthalate	3/26/2020	<6	6.0	1.986	6	3/19/2018	NA	9/15/2016
MW-59	bis (2-ethylhexyl) phthalate	9/15/2020	<6	6.0	1.986	6	3/19/2018	NA	9/15/2016
MW-59	bis (2-ethylhexyl) phthalate	3/2/2021	NT	6.0	1.986	6	3/19/2018	NA	9/15/2016
MW-59	bis (2-ethylhexyl) phthalate	9/7/2021	NT	6.0	1.986	6	3/19/2018	NA	9/15/2016
MW-59	bis (2-ethylhexyl) phthalate	3/24/2022	NT	6.0	1.986	6	3/19/2018	NA	9/15/2016
MW-59	bis (2-ethylhexyl) phthalate	8/31/2022	NT	6.0	1.986	6	3/19/2018	NA	9/15/2016
MW-59	bis (2-ethylhexyl) phthalate	3/2/2023	NT	6.0	1.986	6	3/19/2018	NA	9/15/2016
MW-59	bis (2-ethylhexyl) phthalate	9/12/2023	NT	6.0	1.986	6	3/19/2018	NA	9/15/2016
MW-59	bis (2-ethylhexyl) phthalate	3/4/2024	NT	6.0	1.986	6	3/19/2018	NA	9/15/2016
MW-59	bis (2-ethylhexyl) phthalate	9/23/2024	NT	6.0	1.986	6	3/19/2018	NA	9/15/2016

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Table 7

Summary of Ongoing & Newly Identified SSI

Annual Water Quality Report

Newton Sanitary Landfill

Permit No.50-SDP-01-75P

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-60	Copper	9/15/2016	<4.0	4.0	---	1300	8/31/2022	NA	9/15/2016
MW-60	Copper	3/23/2017	<4.0	4.0	---	1300	8/31/2022	NA	9/15/2016
MW-60	Copper	9/8/2017	<4.0	4.0	---	1300	8/31/2022	NA	9/15/2016
MW-60	Copper	3/19/2018	<4.0	4.0	---	1300	8/31/2022	NA	9/15/2016
MW-60	Copper	9/11/2018	<4.0	4.0	---	1300	8/31/2022	NA	9/15/2016
MW-60	Copper	3/26/2019	<4.0	4.0	---	1300	8/31/2022	NA	9/15/2016
MW-60	Copper	9/4/2019	<4.0	4.0	---	1300	8/31/2022	NA	9/15/2016
MW-60	Copper	3/26/2020	<4.0	4.0	---	1300	8/31/2022	NA	9/15/2016
MW-60	Copper	9/15/2020	<4.0	4.0	---	1300	8/31/2022	NA	9/15/2016
MW-60	Copper	3/2/2021	<4.0	4.0	---	1300	8/31/2022	NA	9/15/2016
MW-60	Copper	9/7/2021	<4.0	4.0	---	1300	8/31/2022	NA	9/15/2016
MW-60	Copper	3/24/2022	<4.0	4.0	---	1300	8/31/2022	NA	9/15/2016
MW-60	Copper	8/31/2022	**10.3**	4.0	0.000	1300	8/31/2022	NA	9/15/2016
MW-60	Copper	3/2/2023	<4.0	4.0	0.000	1300	8/31/2022	NA	9/15/2016
MW-60	Copper	9/12/2023	<4.0	4.0	0.000	1300	8/31/2022	NA	9/15/2016
MW-60	Copper	3/4/2024	<4.0	4.0	0.000	1300	8/31/2022	NA	9/15/2016
MW-60	Copper	9/23/2024	<4.0	4.0	2.000	1300	8/31/2022	NA	9/15/2016
MW-60	Nickel	9/15/2016	**17.30**	8.7	2.324	100	9/15/2016	NA	9/15/2016
MW-60	Nickel	3/23/2017	<4.0	8.7	0.000	100	9/15/2016	NA	9/15/2016
MW-60	Nickel	9/8/2017	**7.50**	8.7	1.207	100	9/15/2016	NA	9/15/2016
MW-60	Nickel	3/19/2018	<4.0	8.7	0.000	100	9/15/2016	NA	9/15/2016
MW-60	Nickel	9/11/2018	<4.0	8.7	0.140	100	9/15/2016	NA	9/15/2016
MW-60	Nickel	3/26/2019	**15.20**	8.7	0.000	100	9/15/2016	NA	9/15/2016
MW-60	Nickel	9/4/2019	**24.80**	8.7	0.000	100	9/15/2016	NA	9/15/2016
MW-60	Nickel	3/26/2020	**19.40**	8.7	3.906	100	9/15/2016	NA	9/15/2016
MW-60	Nickel	9/15/2020	**34.40**	8.7	13.698	100	9/15/2016	NA	9/15/2016
MW-60	Nickel	3/2/2021	**22.00**	8.7	17.446	100	9/15/2016	NA	9/15/2016
MW-60	Nickel	9/7/2021	**30.10**	8.7	18.268	100	9/15/2016	NA	9/15/2016
MW-60	Nickel	3/24/2022	**18.20**	8.7	17.476	100	9/15/2016	NA	9/15/2016
MW-60	Nickel	8/31/2022	**45.70**	8.7	14.662	100	9/15/2016	NA	9/15/2016
MW-60	Nickel	3/2/2023	**11.50**	8.7	8.725	100	9/15/2016	NA	9/15/2016
MW-60	Nickel	9/12/2023	**26.40**	8.7	8.028	100	9/15/2016	NA	9/15/2016
MW-60	Nickel	3/4/2024	<4.0	8.7	0.000	100	9/15/2016	NA	9/15/2016
MW-60	Nickel	9/23/2024	**29.20**	8.7	2.209	100	9/15/2016	NA	9/15/2016

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Newton Sanitary Landfill
Permit No.50-SDP-01-75P

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-61	Nickel	9/15/2016	14.90	8.7	0.000	100	9/15/2016	NA	9/15/2016
MW-61	Nickel	10/31/2016	27.70	8.7	0.000	100	9/15/2016	NA	9/15/2016
MW-61	Nickel	3/23/2017	<4.0	8.7	0.000	100	9/15/2016	NA	9/15/2016
MW-61	Nickel	9/8/2017	5.70	8.7	0.000	100	9/15/2016	NA	9/15/2016
MW-61	Nickel	3/19/2018	<4.0	8.7	0.000	100	9/15/2016	NA	9/15/2016
MW-61	Nickel	9/11/2018	<4.0	8.7	0.749	100	9/15/2016	NA	9/15/2016
MW-61	Nickel	3/26/2019	4.30	8.7	1.355	100	9/15/2016	NA	9/15/2016
MW-61	Nickel	9/4/2019	8.90	8.7	0.474	100	9/15/2016	NA	9/15/2016
MW-61	Nickel	3/26/2020	9.30	8.7	1.932	100	9/15/2016	NA	9/15/2016
MW-61	Nickel	9/15/2020	8.50	8.7	5.017	100	9/15/2016	NA	9/15/2016
MW-61	Nickel	3/2/2021	6.10	8.7	6.509	100	9/15/2016	NA	9/15/2016
MW-61	Nickel	9/7/2021	13.70	8.7	5.668	100	9/15/2016	NA	9/15/2016
MW-61	Nickel	3/24/2022	6.60	8.7	4.638	100	9/15/2016	NA	9/15/2016
MW-61	Nickel	8/31/2022	15.30	8.7	4.832	100	9/15/2016	NA	9/15/2016
MW-61	Nickel	3/2/2023	4.80	8.7	4.013	100	9/15/2016	NA	9/15/2016
MW-61	Nickel	9/12/2023	<4.0	8.7	0.426	100	9/15/2016	NA	9/15/2016
MW-61	Nickel	3/4/2024	4.80	8.7	0.000	100	9/15/2016	NA	9/15/2016
MW-61	Nickel	9/23/2024	5.60	8.7	2.443	100	9/15/2016	NA	9/15/2016

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

Table 7

Summary of Ongoing & Newly Identified SSI

Annual Water Quality Report

Newton Sanitary Landfill

Permit No.50-SDP-01-75P

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-62R	barium	9/15/2016	784	393.8	771.13	2000	9/15/2016	NA	9/15/2016
MW-62R	barium	3/23/2017	831	393.8	784.769	2000	9/15/2016	NA	9/15/2016
MW-62R	barium	9/8/2017	864	393.8	784.999	2000	9/15/2016	NA	9/15/2016
MW-62R	barium	3/19/2018	858	393.8	791.380	2000	9/15/2016	NA	9/15/2016
MW-62R	barium	9/11/2018	816	393.8	815.627	2000	9/15/2016	NA	9/15/2016
MW-62R	barium	3/26/2019	891	393.8	820.761	2000	9/15/2016	NA	9/15/2016
MW-62R	barium	9/4/2019	917	393.8	819.186	2000	9/15/2016	NA	9/15/2016
MW-62R	barium	3/26/2020	1060	392.3	800.923	2000	9/15/2016	NA	9/15/2016
MW-62R	barium	9/15/2020	1070	392.5	874.345	2000	9/15/2016	NA	9/15/2016
MW-62R	barium	3/2/2021	1010	391.6	931.975	2000	9/15/2016	NA	9/15/2016
MW-62R	barium	9/7/2021	1060	392.8	1018.146	2000	9/15/2016	NA	9/15/2016
MW-62R	barium	3/24/2022	1020	391.1	1005.371	2000	9/15/2016	NA	9/15/2016
MW-62R	barium	8/31/2022	1060	392.9	1006.564	2000	9/15/2016	NA	9/15/2016
MW-62R	barium	3/2/2023	1170	357.0	1001.647	2000	9/15/2016	NA	9/15/2016
MW-62R	barium	9/12/2023	1050	357.0	1018.211	2000	9/15/2016	NA	9/15/2016
MW-62R	barium	3/4/2024	1010	357.0	991.929	2000	9/15/2016	NA	9/15/2016
MW-62R	barium	9/23/2024	945	357.0	932.429	2000	9/15/2016	NA	9/15/2016
MW-62R	trichlorofluoromethane	9/15/2016	6.50	1.0	5.108	2000	9/15/2016	NA	9/15/2016
MW-62R	trichlorofluoromethane	3/23/2017	6.00	1.0	5.563	2000	9/15/2016	NA	9/15/2016
MW-62R	trichlorofluoromethane	9/8/2017	5.10	1.0	5.060	2000	9/15/2016	NA	9/15/2016
MW-62R	trichlorofluoromethane	3/19/2018	4.80	1.0	4.674	2000	9/15/2016	NA	9/15/2016
MW-62R	trichlorofluoromethane	9/11/2018	5.10	1.0	4.639	2000	9/15/2016	NA	9/15/2016
MW-62R	trichlorofluoromethane	3/26/2019	3.40	1.0	3.644	2000	9/15/2016	NA	9/15/2016
MW-62R	trichlorofluoromethane	9/4/2019	3.40	1.0	3.113	2000	9/15/2016	NA	9/15/2016
MW-62R	trichlorofluoromethane	3/26/2020	2.20	1.0	2.122	2000	9/15/2016	NA	9/15/2016
MW-62R	trichlorofluoromethane	9/15/2020	1.70	1.0	1.661	2000	9/15/2016	NA	9/15/2016
MW-62R	trichlorofluoromethane	3/2/2021	2.00	1.0	1.448	2000	9/15/2016	NA	9/15/2016
MW-62R	trichlorofluoromethane	9/7/2021	1.30	1.0	1.339	2000	9/15/2016	NA	9/15/2016
MW-62R	trichlorofluoromethane	3/24/2022	<1.0	1.0	0.610	2000	9/15/2016	NA	9/15/2016
MW-62R	trichlorofluoromethane	8/31/2022	1.60	1.0	0.603	2000	9/15/2016	NA	9/15/2016
MW-62R	trichlorofluoromethane	3/2/2023	1.90	1.0	0.617	2000	9/15/2016	NA	9/15/2016
MW-62R	trichlorofluoromethane	9/12/2023	1.40	1.0	0.641	2000	9/15/2016	NA	9/15/2016
MW-62R	trichlorofluoromethane	3/4/2024	1.00	1.0	1.031	2000	9/15/2016	NA	9/15/2016
MW-62R	trichlorofluoromethane	9/23/2024	<1.0	1.0	0.501	2000	9/15/2016	NA	9/15/2016

***Bold** = 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
Newton Sanitary Landfill
Permit No.50-SDP-01-75P

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-80	arsenic	9/15/2016	**9.30**	7.3	0.761	10	9/15/2016	NA	9/15/2016
MW-80	arsenic	3/23/2017	**10.80**	7.3	0.511	10	9/15/2016	NA	9/15/2016
MW-80	arsenic	9/8/2017	<4.0	7.3	0.511	10	9/15/2016	NA	9/15/2016
MW-80	arsenic	3/19/2018	<4.0	7.3	0.511	10	9/15/2016	NA	9/15/2016
MW-80	arsenic	9/11/2018	<4.0	7.3	0.000	10	9/15/2016	NA	9/15/2016
MW-80	arsenic	3/26/2019	**59.00**	7.3	0.000	10	9/15/2016	NA	9/15/2016
MW-80	arsenic	9/4/2019	<4.0	7.3	0.000	10	9/15/2016	NA	9/15/2016
MW-80	arsenic	3/26/2020	<4.0	7.3	0.000	10	9/15/2016	NA	9/15/2016
MW-80	arsenic	9/15/2020	**4.10**	7.3	0.000	10	9/15/2016	NA	9/15/2016
MW-80	arsenic	3/2/2021	<4.0	7.3	1.290	10	9/15/2016	NA	9/15/2016
MW-80	arsenic	9/7/2021	**5.40**	7.3	1.406	10	9/15/2016	NA	9/15/2016
MW-80	arsenic	3/24/2022	<4.0	7.3	1.406	10	9/15/2016	NA	9/15/2016
MW-80	arsenic	8/31/2022	**240.0**	7.3	0.000	10	9/15/2016	NA	9/15/2016
MW-80	arsenic	3/2/2023	**4.60**	7.3	0.000	10	9/15/2016	NA	9/15/2016
MW-80	arsenic	9/12/2023	<4.0	7.3	0.000	10	9/15/2016	NA	9/15/2016
MW-80	arsenic	3/4/2024	<4.0	7.3	0.000	10	9/15/2016	NA	9/15/2016
MW-80	arsenic	9/23/2024	<4.0	7.3	1.121	10	9/15/2016	NA	9/15/2016
MW-80	barium	9/15/2016	**276.00**	393.8	---	2000	8/31/2022	NA	9/15/2016
MW-80	barium	3/23/2017	**276.00**	393.8	---	2000	8/31/2022	NA	9/15/2016
MW-80	barium	9/8/2017	**288.00**	393.8	---	2000	8/31/2022	NA	9/15/2016
MW-80	barium	3/19/2018	**216.00**	393.8	---	2000	8/31/2022	NA	9/15/2016
MW-80	barium	9/11/2018	**228.00**	393.8	---	2000	8/31/2022	NA	9/15/2016
MW-80	barium	3/26/2019	**380.00**	393.8	---	2000	8/31/2022	NA	9/15/2016
MW-80	barium	9/4/2019	**228.00**	393.8	---	2000	8/31/2022	NA	9/15/2016
MW-80	barium	3/26/2020	**172.00**	392.3	---	2000	8/31/2022	NA	9/15/2016
MW-80	barium	9/15/2020	**201.00**	392.5	---	2000	8/31/2022	NA	9/15/2016
MW-80	barium	3/2/2021	**154.00**	391.6	---	2000	8/31/2022	NA	9/15/2016
MW-80	barium	9/7/2021	**168.00**	392.8	---	2000	8/31/2022	NA	9/15/2016
MW-80	barium	3/24/2022	**145.00**	391.1	---	2000	8/31/2022	NA	9/15/2016
MW-80	barium	8/31/2022	**562.0**	392.9	18.008	2000	8/31/2022	NA	9/15/2016
MW-80	barium	3/2/2023	**145.00**	357.0	13.915	2000	8/31/2022	NA	9/15/2016
MW-80	barium	9/12/2023	**146.00**	357.0	4.439	2000	8/31/2022	NA	9/15/2016
MW-80	barium	3/4/2024	**131.00**	357.0	0.000	2000	8/31/2022	NA	9/15/2016
MW-80	barium	9/23/2024	**135.00**	357.0	130.533	2000	8/31/2022	NA	9/15/2016
MW-80	cadmium	9/15/2016	<0.8	0.8	0.400	5	3/23/2017	NA	9/15/2016
MW-80	cadmium	3/23/2017	**1.10**	0.8	0.163	5	3/23/2017	NA	9/15/2016
MW-80	cadmium	9/8/2017	<0.8	0.8	0.163	5	3/23/2017	NA	9/15/2016
MW-80	cadmium	3/19/2018	<0.8	0.8	0.163	5	3/23/2017	NA	9/15/2016
MW-80	cadmium	9/11/2018	<0.8	0.8	0.163	5	3/23/2017	NA	9/15/2016
MW-80	cadmium	3/26/2019	<0.8	0.8	0.400	5	3/23/2017	NA	9/15/2016
MW-80	cadmium	9/4/2019	**1.00**	0.8	0.197	5	3/23/2017	NA	9/15/2016
MW-80	cadmium	3/26/2020	<0.8	0.8	0.197	5	3/23/2017	NA	9/15/2016
MW-80	cadmium	9/15/2020	<0.8	0.8	0.197	5	3/23/2017	NA	9/15/2016
MW-80	cadmium	3/2/2021	<0.8	0.8	0.197	5	3/23/2017	NA	9/15/2016
MW-80	cadmium	9/7/2021	<0.8	0.8	0.400	5	3/23/2017	NA	9/15/2016
MW-80	cadmium	3/24/2022	<0.8	0.8	0.400	5	3/23/2017	NA	9/15/2016
MW-80	cadmium	8/31/2022	**2.60**	0.8	0.000	5	3/23/2017	NA	9/15/2016
MW-80	cadmium	3/2/2023	<0.8	0.8	0.000	5	3/23/2017	NA	9/15/2016
MW-80	cadmium	9/12/2023	<0.8	0.8	0.000	5	3/23/2017	NA	9/15/2016
MW-80	cadmium	3/4/2024	<0.8	0.8	0.000	5	3/23/2017	NA	9/15/2016
MW-80	cadmium	9/23/2024	<0.8	0.8	0.400	5	3/23/2017	NA	9/15/2016
MW-80	cobalt	9/15/2016	**2.10**	6.9	---	**6.9**	8/31/2022	NA	9/15/2016
MW-80	cobalt	3/23/2017	**1.70**	6.9	---	**6.9**	8/31/2022	NA	9/15/2016
MW-80	cobalt	9/8/2017	**3.00**	6.9	---	**6.9**	8/31/2022	NA	9/15/2016
MW-80	cobalt	3/19/2018	**0.80**	6.9	---	**6.9**	8/31/2022	NA	9/15/2016
MW-80	cobalt	9/11/2018	<0.80	6.9	---	**6.9**	8/31/2022	NA	9/15/2016
MW-80	cobalt	3/26/2019	<0.80	6.9	---	**6.9**	8/31/2022	NA	9/15/2016
MW-80	cobalt	9/4/2019	**0.90**	6.9	---	**6.9**	8/31/2022	NA	9/15/2016
MW-80	cobalt	3/26/2020	**1.40**	6.9	---	**6.9**	8/31/2022	NA	9/15/2016
MW-80	cobalt	9/15/2020	**2.50**	6.9	---	**6.9**	8/31/2022	NA	9/15/2016
MW-80	cobalt	3/2/2021	**1.70**	6.9	---	**6.9**	8/31/2022	NA	9/15/2016
MW-80	cobalt	9/7/2021	**2.70**	6.9	---	**6.9**	8/31/2022	NA	9/15/2016
MW-80	cobalt	3/24/2022	**2.90**	6.9	---	**6.9**	8/31/2022	NA	9/15/2016
MW-80	cobalt	8/31/2022	**7.40**	6.9	0.689	**6.9**	8/31/2022	NA	9/15/2016
MW-80	cobalt	3/2/2023	**1.20**	6.9	0.402	**6.9**	8/31/2022	NA	9/15/2016
MW-80	cobalt	9/12/2023	**0.70**	6.9	0.000	**6.9**	8/31/2022	NA	9/15/2016
MW-80	cobalt	3/4/2024	**1.30**	6.9	0.000	**6.9**	8/31/2022	NA	9/15/2016
MW-80	cobalt	9/23/2024	**0.80**	6.9	0.654	**6.9**	8/31/2022	NA	9/15/2016
MW-80	selenium	9/15/2016	<4.0	10.6	---	50	8/31/2022	NA	9/15/2016
MW-80	selenium	3/23/2017	<4.0	10.6	---	50	8/31/2022	NA	9/15/2016
MW-80	selenium	9/8/2017	<4.0	10.6	---	50	8/31/2022	NA	9/15/2016
MW-80	selenium	3/19/2018	<4.0	10.6	---	50	8/31/2022	NA	9/15/2016
MW-80	selenium	9/11/2018	<4.0	10.6	---	50	8/31/2022	NA	9/15/2016
MW-80	selenium	3/26/2019	<4.0	10.6	---	50	8/31/2022	NA	9/15/2016
MW-80	selenium	9/4/2019	<4.0	10.6	---	50	8/31/2022	NA	9/15/2016
MW-80	selenium	3/26/2020	<4.0	10.6	---	50	8/31/2022	NA	9/15/2016
MW-80	selenium	9/15/2020	<4.0	10.6	---	50	8/31/2022	NA	9/15/2016
MW-80	selenium	3/2/2021	<4.0	10.6	---	50	8/31/2022	NA	9/15/2016
MW-80	selenium	9/7/2021	<4.0	10.6	---	50	8/31/2022	NA	9/15/2016
MW-80	selenium	3/24/2022	<4.0	10.6	---	50	8/31/2022	NA	9/15/2016
MW-80	selenium	8/31/2022	**31.60**	10.6	0.000	50	8/31/2022	NA	9/15/2016
MW-80	selenium	3/2/2023	<4.0	10.6	0.000	50	8/31/2022	NA	9/15/2016
MW-80	selenium	9/12/2023	<4.0	10.6	0.000	50	8/31/2022	NA	9/15/2016
MW-80	selenium	3/4/2024	<4.0	10.6	0.000	50	8/31/2022	NA	9/15/2016
MW-80	selenium	9/23/2024	<4.0	10.6	2.000	50	8/31/2022	NA	9/15/2016

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

Appendix G

Site Remedial Action System Evaluation
Area A & Area B, C, D

EVALUATION OF THE SRAMP –
AREA A-NEWTON SANITARY LANDFILL

A remedial groundwater collection system is complete along the west and northwest side of Area A and is currently in operation (see Doc # 44263 through 44267 and the Record Drawings in this Appendix G). Note that the west one-half of Area A is, at times, referred to as the 1975 Landfill. This Site Remedial Action and Mitigation Plan (SRAMP) was completed to control seeps along the west side of Area A (the 1975 Landfill). This system was incorporated in the Permit by Amendment #3 dated August 4, 2010. The interpretation is made that the SRAMP collection line is actively intercepting impacted groundwater.

MW-58 and MW-59 are located downgradient of the remedial groundwater collection system and demonstrate that the system is effective in maintaining water quality.

The SSI reported at MW-58 are limited to cis-1,2-dichloroethylene and nickel. Assessment monitoring at MW-58 in 2024 indicates that the detected cis-1,2-dichloroethylene concentrations (1.0 ug/L on March 4, 2024 and <1.0 ug/L on September 23, 2024) are well below the GWPS of 70.0 ug/L. Assessment monitoring at MW-58 in 2024 indicates that the detected nickel concentrations (16.7 ug/L on March 4, 2024 and 12.6 ug/L on September 23, 2024) are well below the GWPS of 100 ug/L.

The SSI reported at MW-59 are limited to copper. Assessment monitoring at MW-59 in 2024 indicates that the detected copper concentrations (<4.0 ug/L on March 4, 2024 and <4.0 ug/L on September 23, 2024) are well below the GWPS of 1,300 ug/L.

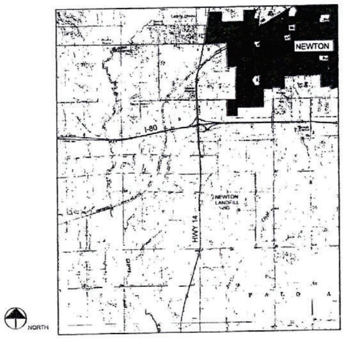
Evaluation of the Confidence Intervals for both metals and VOC indicate that the 95% UCL are below the applicable GWPS. For trace metals data see Table 1, Attachment C of each Statistical Report (Appendix D.1 and D.2) and for VOC data see Table 2, Attachment E of each Statistical Report (Appendix D.1 and D.2). The fact that all 95% UCL values at MW-58 and MW-59 are below the applicable GWPS indicates that the Corrective Action is successful.

EVALUATION OF THE SRAMP –
AREA B, C, D - NEWTON SANITARY LANDFILL

GWD-1 was connected to the leachate collection system on August 15, 2013 in satisfaction of IAC 567-113(10)2(3). Additional remedial actions are not warranted in Area B, C, or D. A Site Remedial Action Plan (SRAMP) or an Assessment of Corrective Measures (ACM) Report for Areas B, C, and D is not warranted.

LEACHATE COLLECTION, 1975 SLF

NEWTON SANITARY LANDFILL
JASPER COUNTY, IOWA
2009



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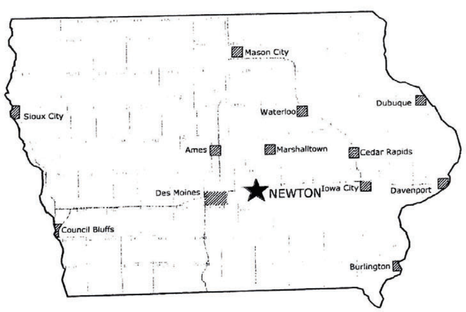
RECORD DRAWING

SHEET INDEX:

COVER	G1
SITE PLAN	C1
LEACHATE PLAN & PROFILE	C2
DETAILS	C3



DOUGLAS J. LUZBETAK LICENSED 12654 IOWA PROFESSIONAL ENGINEER

I HEREBY CERTIFY THAT THESE RECORD DRAWINGS WERE PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA.

SIGNED, DATE 7/8, 2010

DOUGLAS J. LUZBETAK
IOWA REG. NO. 12654

DOUGLAS J. LUZBETAK LICENSED 12654 IOWA PROFESSIONAL ENGINEER

I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.

DOUGLAS J. LUZBETAK, P.E. 6/19/09 DATE
License number 12654

My license renewal date is December 31, 2010.

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PLOT STYLE TABLE	LAYER MNGR NAME	LAYOUT NAME
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LEACHATE COLLECTION, 1975 SLF
NEWTON SANITARY LANDFILL
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SHEET G1

DRAWING FILENAME		
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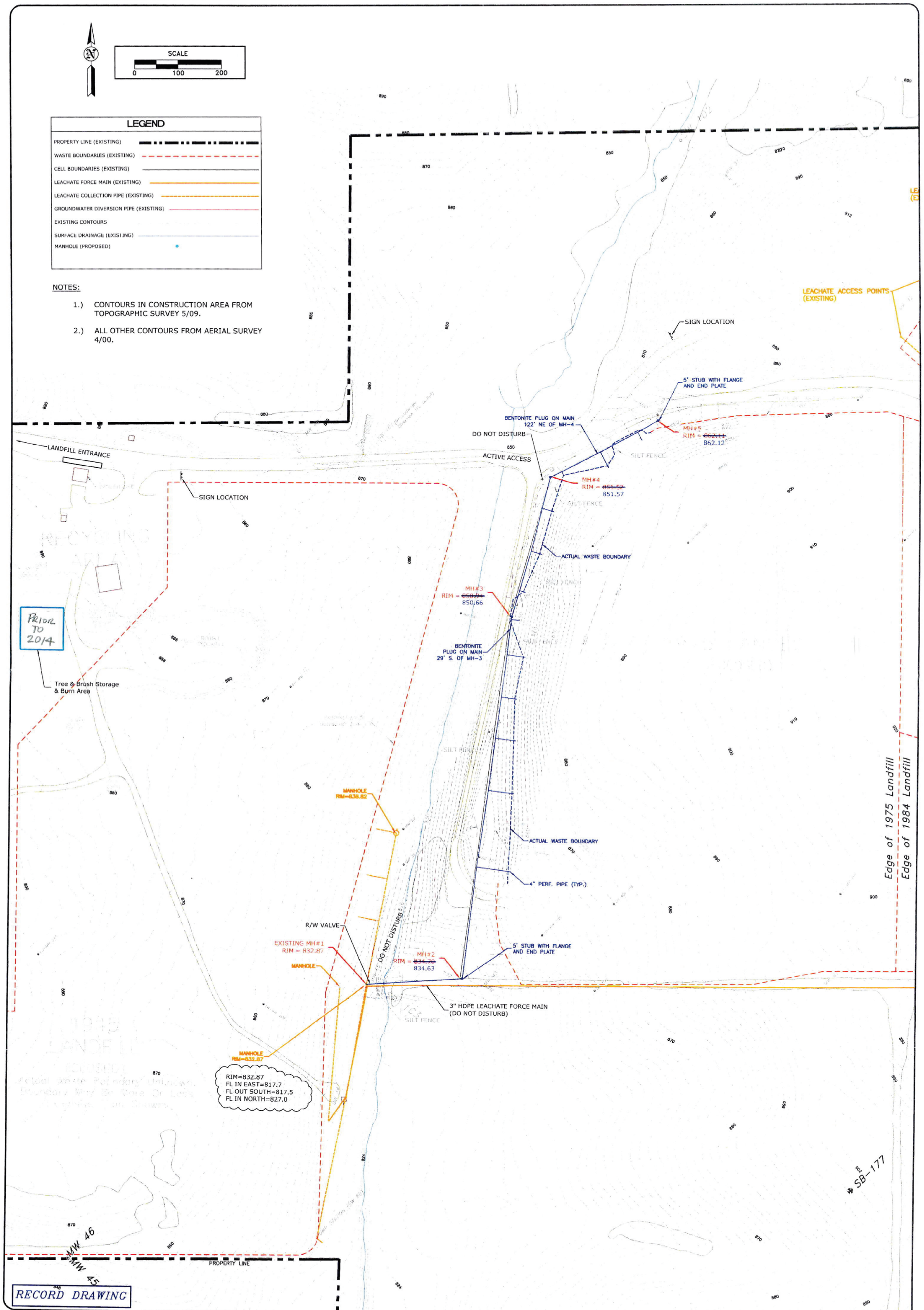
Color.ctb		----



PROJECT NO. 2642-09B.600	SITE PLAN LEACHATE COLLECTION, 1975 SLF NEWTON SANITARY LANDFILL NEWTON, IOWA	FOX engineering	FOX Engineering Associates, Inc. 1601 Golden Aspen Drive, Suite 103 Ames, Iowa 50010 Phone: (515) 233-0000 FAX: (515) 233-0103
SHEET C1			

DATE	REVISION		BY	DATE
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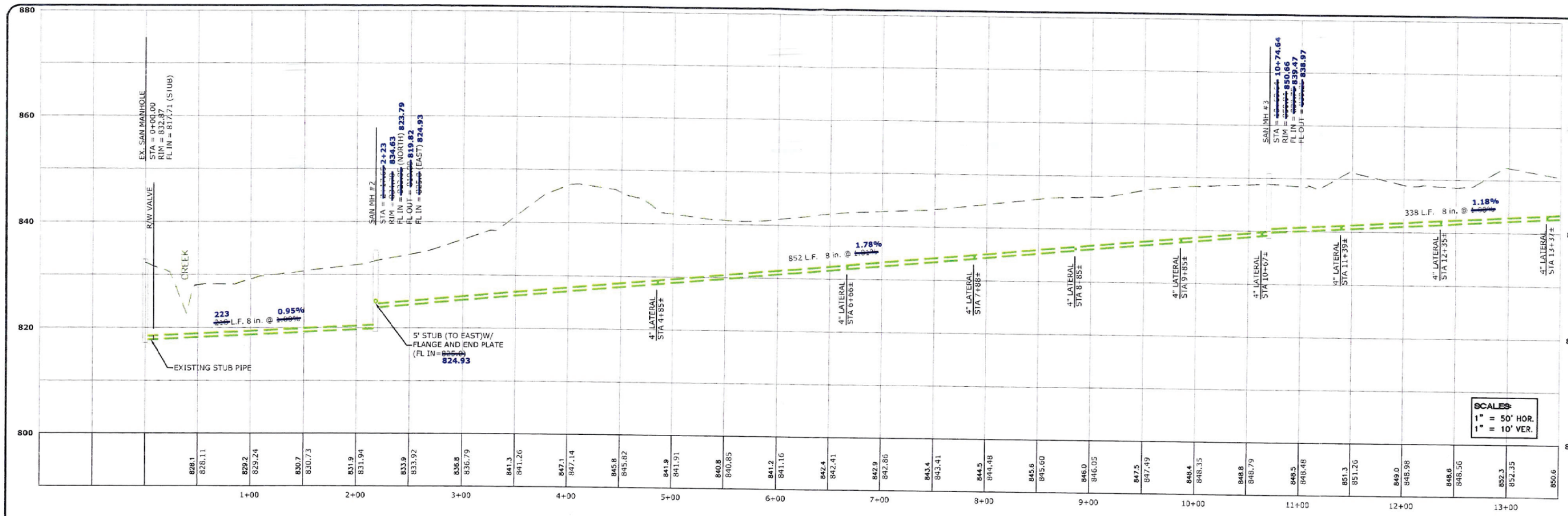
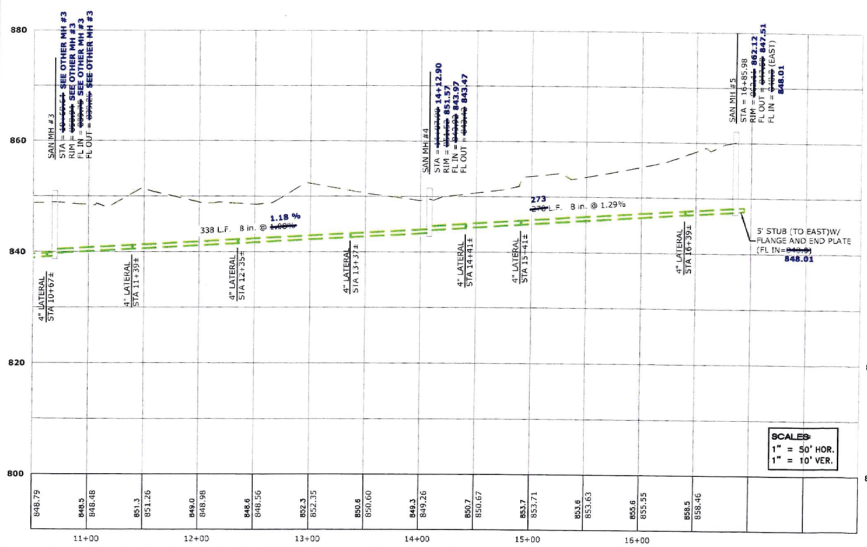
		DRAWN:	JAK	
		CHECKED:		
		LAST UPDATE: 6-22-09		





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LAYOUT NAME

RECORD DRAWING

DATE	REVISION	BY	DATE
4-01-2010	RECORD DRAWINGS		

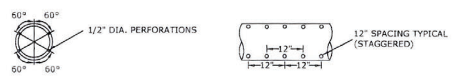
DESIGNED: DJL
DRAWN: JAK
CHECKED:
LAST UPDATE: 7-2-10

FOX engineering
FOX Engineering Associates, Inc.
1601 Golden Aspen Drive, Suite 103
Ames, Iowa 50010
Phone: (515) 233-0000
FAX: (515) 233-0103

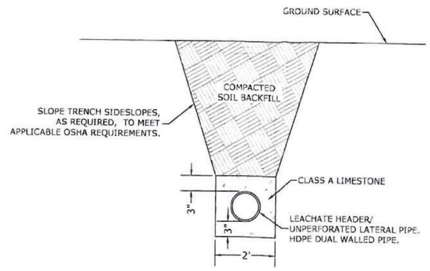
LEACHATE PLAN & PROFILE

LEACHATE COLLECTION, 1975 SLF
NEWTON SANITARY LANDFILL
NEWTON, IOWA

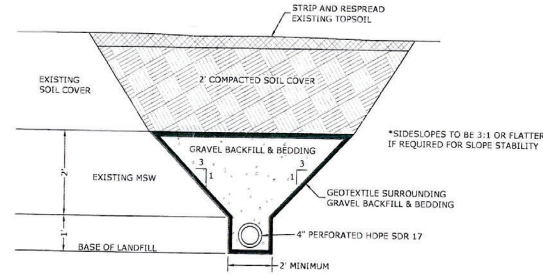
PROJECT NO. 2642-09B.600
SHEET C2



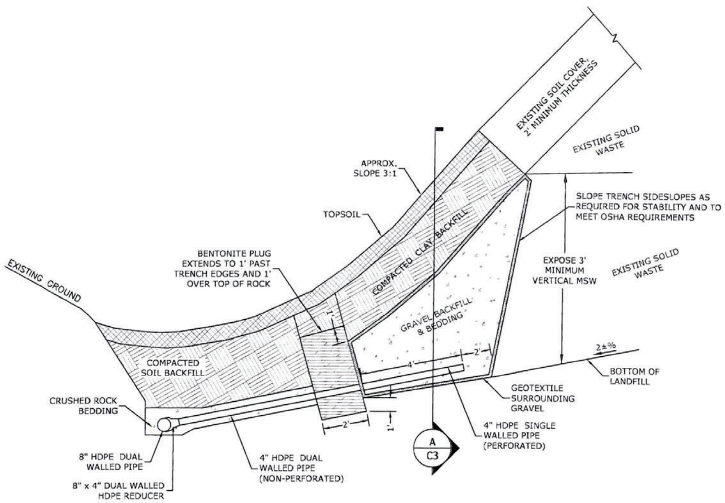
PERFORATION PATTERN (1/C3)
NO SCALE



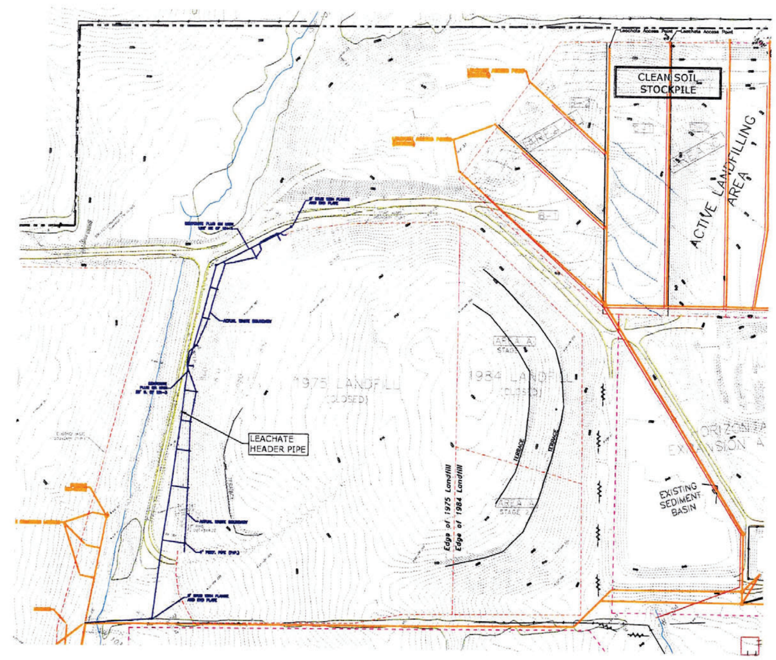
LEACHATE HEADER/UNPERFORATED LATERAL PIPE INSTALLATION (2/C3)
NO SCALE



A - A TYPICAL PERFORATED LEACHATE COLLECTION TRENCH (3/C3)
NO SCALE



LEACHATE LATERAL (3/C3)
NO SCALE



LARGE SCALE SITE PLAN (4/C3)
1" = 200'

RECORD DRAWING

DATE	REVISION
5-01-2010	RECORD DRAWINGS

	BY	DATE
DESIGNED:	DJL	
DRAWN:	JAK	
CHECKED:		
LAST UPDATE:		5-21-09

FOX engineering

FOX Engineering Associates, Inc.
1601 Golden Aspen Drive, Suite 103
Ames, Iowa 50010
Phone: (515) 233-0000
FAX: (515) 233-0103

DETAILS
LEACHATE COLLECTION, 1975 SLF
NEWTON SANITARY LANDFILL
NEWTON, IOWA

PROJECT NO. 2642-09B
SHEET C3

DRAWING FILENAME: K:\proj\2500\2642-09b leachate collection 1975 sif\600\SITE-2009.dwg
LAYOUT NAME
LAYER MNGR NAME
PLOT STYLE TABLE: Color.ctb

Appendix H

Leachate Collection System Performance Evaluation Report

Leachate Collection System Performance Evaluation Report

Between January 1, 2024 and December 31, 2024, approximately 3,666,000 gallons of leachate were discharged to the Newton Water Pollution Control Plant (WPCP) (Appendix H.1). Chemical analysis of the waste stream – weekly (results on the Monthly Operation Reports in Appendix H.1) and annual (Appendix H.2) is conducted in accordance with the pretreatment agreement between the City of Newton WPCP and the City of Newton – Sanitary Landfill (Appendix H.3).

Leachate Line Cleaning

The leachate collection lines are required to be cleaned every three (3) years in accordance with IAC 113.7(5)b(5). LCP lines are cleaned by Landfill personnel using equipment from the Newton Water Pollution Control Plant. Based on information provided by landfill personnel, the most recent line cleanings are listed below:

Area B1	Line #1	– Cleaned 2024
	Line #2	– Cleaned 2024
Area B2	Line #3	– Cleaned 2024
	Line #4	– Cleaned 2024
Area C1	Line #5	– Cleaned 2024
Area C2	Line #6	– Cleaned 2024
Area C3	Line #7	– Cleaned 2024
Area C1/C2/C3	Line #8	- Cleaned 2023
Cell D-1	Line #9	- Cleaned 2024
Cell D-2	Line #10	- Cleaned 2024

Accumulated sediment was also removed from leachate collection system manholes in 2024, from the leachate storage lagoon in 2024, and from the leachate pump stations in 2024 and will continue to be removed on a regular basis.

Areas B, C, and D LCP

The Leachate Collection System Construction Certification Report for Expansion Area B-1 was submitted December 13, 1995, while the Leachate Collection System Construction Certification Report for Expansion Area B-2 was submitted August 15, 1997. The Leachate Collection System also extends to Area C-1 (approved October 5, 1999), Area C-2 (approved March 15, 2002), Area C-3 (Approved November 8, 2004), and Cell D-1 and Cell D-2 (both approved October 2, 2013).

A leachate head monitoring point was constructed at the downgradient end of Area B & Area C (LPZ-101) and is currently located at the leachate manhole. The leachate head monitoring point LPZ-

101 was measured monthly in 2024. All readings collected in 2024 indicate that LPZ-101 was measured dry, or near dry (3 inches or less).

Leachate head monitoring points were constructed during the Cell D-1 and D-2 Expansion in 2013. LPZ-102 measures leachate head on the liner and LPZ-103 measures leachate head in the leachate collection pipe trench in Cell D-1. LPZ-104 measures leachate head on the liner and LPZ-105 measures leachate head in the leachate collection pipe trench in Cell D-2.

Solid waste deposition in Cell D-1 started in October, 2013. Solid waste deposition in Cell D-2 started in July, 2014. LPZ-102 (Cell D-1) and LPZ-104 (Cell D-2) were measured monthly in 2024. Note that LPZ-103 and LPZ-105 were measured quarterly to coincide with quarterly explosive gas monitoring. Readings are included in Appendix H.4. All readings from LPZ-102, LPZ-103, LPZ-104, and LPZ-105 were recorded at less than 1' in 2024.

Groundwater Separation from the MSWLF Base

Special Provision X.4.j. of the Permit, dated December 20, 2023 (Doc #108517) requires semi-annual monitoring of liquid levels in the Groundwater Diversion Layer Monitoring Points in Cell D-1 and Cell D-2 to document 5 ft of separation between the MSWLF base and the water table. The required documentation is provided in Appendix A, Monitoring Well Maintenance and Performance Re-evaluation, of this AWQR.

Area A LCP

A Human Health Risk Assessment was completed for the Newton Sanitary Landfill on June 29, 1995. Based on the low risk designation, Newton applied for an exemption to additional leachate collection system requirements in Area A. This exemption was approved March 29, 1996.

In 2009, a remedial groundwater collection system was completed along the west and northwest side Area A – 1975 SLF and is currently in operation (see Record Drawings, Appendix G). This Site Remedial Action and Mitigation Plan (SRAMP) was completed to control seeps along the west side of Area A – 1975 SLF. This system was incorporated in the Permit by Amendment #3 dated August 4, 2010.

Leachate head monitoring wells LHMW-201 through LHMW-208 are located in Area A. Leachate depth measurements were measured quarterly in 2024. The leachate measurement data (Appendix H.4) indicates that the 2024 leachate thickness in Area A ranges from 1.15 ft (LHMW-201 on June 3, 2024) to 20.14 ft (LHMW-208 on September 23, 2024).

The saturated thickness of waste recorded in Area A is not considered problematic.

Appendix H.1-
Leachate Volumes Conveyed & Weekly Leachate Analyses

CITY OF NEWTON SANITARY LANDFILL
IDNR PERMIT NO. 50-SDP-1-75P
LEACHATE VOLUMES TO NEWTON WPC

2024

Month	Gallons
January	278,000
February	259,000
March	191,000
April	311,000
May	68,000
June	495,000
July	536,000
August	358,000
September	238,000
October	218,000
November	409,000
December	305,000
TOTAL	**3,666,000**

Permit # 5059002
Facility Name: NEWTON CITY OF STP

SIU: CITY OF NEWTON - SANITARY LANDFILL
Outfall #: 001
Month/Year: 1-2024

Monthly Operation Report
IOWA DEPARTMENT OF NATURAL RESOURCES
NPDS - Operation Permit System
EFFLUENT Data

Mon. Point	PRIOR TO DISCHARGE TO CITY SEWER								
Parameter	FLOW	BOD5		TSS		NH3-N		LEACHAT	PH
Units	MGD	MG/L	LBS/DAY	MG/L	LBS/DAY	MG/L	LBS/DAY	Yes/ No	STD UNITS
Frequency	7/WEEK OR DAILY	1 TIME PER WEEK	1 TIME PER WEEK	1 TIME PER WEEK	1 TIME PER WEEK	1 TIME PER WEEK	1 TIME PER WEEK	1 EVERY 12 MONTHS	1 TIME PER WEEK
Start Date / End Date	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration
No Discharge								06 - NOT REQ / MP	
LOQ									
Day: 1	0.004								
2	0.05								
3	0.005	<5.000	<	3	0.1251	7.89	0.329013		7.33
4	0.005								
5	0.004								
6	0.004								
7	0.004								
8	0.004								
9	0.006								
10	0.006	7	0.35028	6	0.30024	31.3	1.566252		7.3
11	0.005								
12	0.004								
13	0.004								
14	0.004								
15	0.003								
16	0.004								
17	0.004	12	0.40032	18	0.60048	52.1	1.738056		7.24
18	0.005								
19	0.004								
20	0.004								
21	0.004								
22	0.005								
23	0.007								
24	0.005	5	0.2085	14	0.5838	15.9	0.66303		7.34
25	0.014								
26	0.015								
27	0.015								
28	0.015								
29	0.021								
30	0.02								
31	0.024	10	2.0016	17	3.40272	24.2	4.843872		7.64
Total	0.278	34	2.9607	58	5.01234	131.39	9.140223		36.85
Monthly Avg.	0.008967742	6.8	0.59214	11.6	1.002468	26.278	1.8280446		7.37
Daily Max.	0.05	12	2.0016	18	3.40272	52.1	4.843872		7.64
Daily Min.	0.003			3	0.1251	7.89	0.329013		7.24
Max. 7/Avg.	0.010857143	12	0.40032	18	0.60048	52.1	1.738056		7.34

Permit # 5059002
Facility Name: NEWTON CITY OF STP

SIU: CITY OF NEWTON - SANITARY LANDFILL
Outfall #: 001
Month/Year: 2-2024

Monthly Operation Report
IOWA DEPARTMENT OF NATURAL RESOURCES
NPDS - Operation Permit System
EFFLUENT Data

Mon. Point	PRIOR TO DISCHARGE TO CITY SEWER								
Parameter	FLOW	BOD5		TSS		NH3-N		LEACHAT	PH
Units	MGD	MG/L	LBS/DAY	MG/L	LBS/DAY	MG/L	LBS/DAY	Yes/ No	STD UNITS
Frequency	7/WEEK OR DAILY	1 TIME PER WEEK	1 TIME PER WEEK	1 TIME PER WEEK	1 TIME PER WEEK	1 TIME PER WEEK	1 TIME PER WEEK	1 EVERY 12 MONTHS	1 TIME PER WEEK
Start Date									
End Date	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration
No Discharge								06 - NOT REQ / MP	
LOQ									
Day: 1	0.021								
2	0.017								
3	0.017								
4	0.017								
5	0.007								
6	0.012								
7	0.013	11	1.19262	15	1.6263	46.2	5.009004		7.5
8	0.012								
9	0.008								
10	0.008								
11	0.008								
12	0.007								
13	0.008								
14	0.009	17	1.27602	20	1.5012	61	4.57866		7.61
15	0.006								
16	0.007								
17	0.007								
18	0.007								
19	0.007								
20	0.006								
21	0.007	8	0.46704	15	0.8757	25.3	1.477014		7.32
22	0.006								
23	0.006								
24	0.006								
25	0.006								
26	0.007								
27	0.006								
28	0.005	7	0.2919	15	0.6255	41.8	1.74306		7.45
29	0.006								
30									
31									
Total	0.259	43	3.22758	65	4.6287	174.3	12.807738		29.88
Monthly Avg.	0.008931034	10.75	0.806895	16.25	1.157175	43.575	3.2019345		7.47
Daily Max.	0.021	17	1.27602	20	1.6263	61	5.009004		7.61
Daily Min.	0.005	7	0.2919	15	0.6255	25.3	1.477014		7.32
Max. 7/Avg.	0.014857143	17	1.27602	20	1.6263	61	5.009004		7.61

Permit # 5059002
Facility Name: NEWTON CITY OF STP

SIU: CITY OF NEWTON - SANITARY LANDFILL
Outfall #: 001
Month/Year: 3-2024

Monthly Operation Report
IOWA DEPARTMENT OF NATURAL RESOURCES
NPDS - Operation Permit System
EFFLUENT Data

Mon. Point	PRIOR TO DISCHARGE TO CITY SEWER								
Parameter	FLOW	BOD5		TSS		NH3-N		LEACHAT	PH
Units	MGD	MG/L	LBS/DAY	MG/L	LBS/DAY	MG/L	LBS/DAY	Yes/ No	STD UNITS
Frequency	7/WEEK OR DAILY	1 TIME PER WEEK	1 TIME PER WEEK	1 TIME PER WEEK	1 TIME PER WEEK	1 TIME PER WEEK	1 TIME PER WEEK	1 EVERY 12 MONTHS	1 TIME PER WEEK
Start Date End Date	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration
No Discharge								06 - NOT REQ / MP	
LOQ									
Day: 1	0.006								
2	0.006								
3	0.006								
4	0.006								
5	0.005								
6	0.005	6	0.2502	32	1.3344	13.3	0.55461		7.1
7	0.007								
8	0.005								
9	0.005								
10	0.005								
11	0.005								
12	0.005								
13	0.006	14	0.70056	101	5.05404	31.5	1.57626		7.2
14	0.005								
15	0.005								
16	0.005								
17	0.005								
18	0.005								
19	0.005								
20	0.005	8	0.3336	19	0.7923	32.4	1.35108		7.54
21	0.004								
22	0.009								
23	0.009								
24	0.009								
25	0.01								
26	0.007								
27	0.008	10	0.6672	20	1.3344	39.2	2.615424		7.54
28	0.007								
29	0.007								
30	0.007								
31	0.007								
Total	0.191	38	1.95156	172	8.51514	116.4	6.097374		29.38
Monthly Avg.	0.00616129	9.5	0.48789	43	2.128785	29.1	1.5243435		7.345
Daily Max.	0.01	14	0.70056	101	5.05404	39.2	2.615424		7.54
Daily Min.	0.004	6	0.2502	19	0.7923	13.3	0.55461		7.1
Max. 7/Avg.	0.008428571	14	0.70056	101	5.05404	39.2	2.615424		7.54

Permit # 5059002
Facility Name: NEWTON CITY OF STP

SIU: CITY OF NEWTON - SANITARY LANDFILL
Outfall #: 001
Month/Year: 4-2024

Monthly Operation Report
IOWA DEPARTMENT OF NATURAL RESOURCES
NPDS - Operation Permit System
EFFLUENT Data

Mon. Point	PRIOR TO DISCHARGE TO CITY SEWER								
Parameter	FLOW	BOD5		TSS		NH3-N		LEACHAT	PH
Units	MGD	MG/L	LBS/DAY	MG/L	LBS/DAY	MG/L	LBS/DAY	Yes/ No	STD UNITS
Frequency	7/WEEK OR DAILY	1 TIME PER WEEK	1 TIME PER WEEK	1 TIME PER WEEK	1 TIME PER WEEK	1 TIME PER WEEK	1 TIME PER WEEK	1 EVERY 12 MONTHS	1 TIME PER WEEK
Start Date									
End Date	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration
No Discharge									
LOQ									
Day: 1	0.007								
2	0.014								
3	0.01	14	1.1676	20	1.668	31	2.5854		7.71
4	0.009								
5	0.008								
6	0.008								
7	0.008								
8	0.006								
9	0.007								
10	0.006	9	0.45036	22	1.10088	27.3	1.366092		7.27
11	0.006							1	7.15
12	0.006								
13	0.006								
14	0.006								
15	0.006								
16	0.017								
17	0.01	<6.000	<	27	2.2518	21.8	1.81812		7.31
18	0.012								
19	0.008								
20	0.008								
21	0.008								
22	0.008								
23	0.007								
24	0.007	6	0.35028	19	1.10922	53.2	3.105816		7.57
25	0.006								
26	0.021								
27	0.021								
28	0.021								
29	0.024								
30	0.02								
31									
Total	0.311	29	1.96824	88	6.1299	133.3	8.875428	1	37.01
Monthly Avg.	0.010366667	7.25	0.49206	22	1.532475	33.325	2.218857	1	7.402
Daily Max.	0.024	14	1.1676	27	2.2518	53.2	3.105816	1	7.71
Daily Min.	0.006			19	1.10088	21.8	1.366092	1	7.15
Max. 7/Avg.	0.013	14	1.1676	27	2.2518	53.2	3.105816	1	7.71

Permit # 5059002
Facility Name: NEWTON CITY OF STP

SIU: CITY OF NEWTON - SANITARY LANDFILL
Outfall #: 001
Month/Year: 5-2024

Monthly Operation Report
IOWA DEPARTMENT OF NATURAL RESOURCES
NPDS - Operation Permit System
EFFLUENT Data

Mon. Point	PRIOR TO DISCHARGE TO CITY SEWER								
Parameter	FLOW	BOD5		TSS		NH3-N		LEACHAT	PH
Units	MGD	MG/L	LBS/DAY	MG/L	LBS/DAY	MG/L	LBS/DAY	Yes/ No	STD UNITS
Frequency	7/WEEK OR DAILY	1 TIME PER WEEK	1 TIME PER WEEK	1 TIME PER WEEK	1 TIME PER WEEK	1 TIME PER WEEK	1 TIME PER WEEK	1 EVERY 12 MONTHS	1 TIME PER WEEK
Start Date / End Date	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration
No Discharge								06 - NOT REQ / MP	
LOQ									
Day: 1	0.024	<6.000	<	12	2.40192	21.8	4.363488		7.27
2	0.023								
3	0.023								
4	0.023								
5	0.023								
6	0.023								
7	0.023								
8	0.022	6	1.10088	16	2.93568	22.9	4.201692		7.03
9	0.023								
10	0.022								
11	0.022								
12	0.022								
13	0.022								
14	0.022								
15	0.022	9	1.65132	13	2.38524	37.7	6.917196		7.45
16	0.022								
17	0.021								
18	0.021								
19	0.021								
20	0.021								
21	0.019								
22	0.021	7	1.22598	24	4.20336	9.18	1.6077852		7.17
23	0.019								
24	0.022								
25	0.022								
26	0.022								
27	0.022								
28	0.023								
29	0.022	7	1.28436	8	1.46784	11.3	2.073324		7.6
30	0.023								
31	0.02								
Total	0.68	29	5.26254	73	13.39404	102.88	19.1634852		36.52
Monthly Avg.	0.021935484	5.8	1.052508	14.6	2.678808	20.576	3.83269704		7.304
Daily Max.	0.024	9	1.65132	24	4.20336	37.7	6.917196		7.6
Daily Min.	0.019			8	1.46784	9.18	1.6077852		7.03
Max. 7/Avg.	0.023142857	9	1.65132	24	4.20336	37.7	6.917196		7.45

Permit # 5059002
Facility Name: NEWTON CITY OF STP

SIU: CITY OF NEWTON - SANITARY LANDFILL
Outfall #: 001
Month/Year: 6-2024

Monthly Operation Report
IOWA DEPARTMENT OF NATURAL RESOURCES
NPDS - Operation Permit System
EFFLUENT Data

Mon. Point	PRIOR TO DISCHARGE TO CITY SEWER								
Parameter	FLOW	BOD5		TSS		NH3-N		LEACHAT	PH
Units	MGD	MG/L	LBS/DAY	MG/L	LBS/DAY	MG/L	LBS/DAY	Yes/ No	STD UNITS
Frequency	7/WEEK OR DAILY	1 TIME PER WEEK	1 TIME PER WEEK	1 TIME PER WEEK	1 TIME PER WEEK	1 TIME PER WEEK	1 TIME PER WEEK	1 EVERY 12 MONTHS	1 TIME PER WEEK
Start Date / End Date	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration
No Discharge								06 - NOT REQ / MP	
LOQ									
Day: 1	0.02								
2	0.02								
3	0.019								
4	0.018								
5	0.019	13	2.05998	25	3.9615	<0.100	<		7.22
6	0.019								
7	0.019								
8	0.019								
9	0.019								
10	0.02								
11	0.019								
12	0.018	24	3.60288	35	5.2542	37	5.55444		7.51
13	0.018								
14	0.019								
15	0.019								
16	0.019								
17	0.015								
18	0.009								
19	0.01	21	1.7514	57.7	4.81218	46	3.8364		7.21
20	0.01								
21	0.009								
22	0.009								
23	0.009								
24	0.01								
25	0.018								
26	0.023	15	2.8773	29	5.56278	25	4.7955		7.18
27	0.021								
28	0.016								
29	0.016								
30	0.016								
31									
Total	0.495	73	10.29156	146.7	19.59066	108	14.18634		29.12
Monthly Avg.	0.0165	18.25	2.57289	36.675	4.897665	27	3.546585		7.28
Daily Max.	0.023	24	3.60288	57.7	5.56278	46	5.55444		7.51
Daily Min.	0.009	13	1.7514	25	3.9615				7.18
Max. 7/Avg.	0.019142857	24	3.60288	57.7	5.56278	46	5.55444		7.51

Permit # 5059002
Facility Name: NEWTON CITY OF STP

SIU: CITY OF NEWTON - SANITARY LANDFILL
Outfall #: 001
Month/Year: 7-2024

Monthly Operation Report
IOWA DEPARTMENT OF NATURAL RESOURCES
NPDS - Operation Permit System
EFFLUENT Data

Mon. Point	PRIOR TO DISCHARGE TO CITY SEWER								
Parameter	FLOW	BOD5		TSS		NH3-N		LEACHAT	PH
Units	MGD	MG/L	LBS/DAY	MG/L	LBS/DAY	MG/L	LBS/DAY	Yes/ No	STD UNITS
Frequency	7/WEEK OR DAILY	1 TIME PER WEEK	1 TIME PER WEEK	1 TIME PER WEEK	1 TIME PER WEEK	1 TIME PER WEEK	1 TIME PER WEEK	1 EVERY 12 MONTHS	1 TIME PER WEEK
Start Date									
End Date	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration
No Discharge								06 - NOT REQ / MP	
LOQ									
Day: 1	0.011								
2	0.023								
3	0.022	<24.000	<	32	5.87136	15.6	2.862288		7.25
4	0.022								
5	0.021								
6	0.021								
7	0.021								
8	0.021								
9	0.019								
10	0.019	10	1.5846	28	4.43688	37.1	5.878866		7.21
11	0.018								
12	0.02								
13	0.02								
14	0.02								
15	0.019								
16	0.019								
17	0.02	18	3.0024	35	5.838	42.4	7.07232		7.42
18	0.02								
19	0.018								
20	0.018								
21	0.018								
22	0.01								
23	0.01								
24	0.012	15	1.5012	26	2.60208	63.7	6.375096		7.81
25	0.011								
26	0.011								
27	0.011								
28	0.011								
29	0.01								
30	0.015								
31	0.025	7	1.4595	24	5.004	19	3.9615		7.01
Total	0.536	50	7.5477	145	23.75232	177.8	26.15007	0	36.7
Monthly Avg.	0.017290323	10	1.50954	29	4.750464	35.56	5.230014		7.34
Daily Max.	0.025	18	3.0024	35	5.87136	63.7	7.07232		7.81
Daily Min.	0.01			24	2.60208	15.6	2.862288		7.01
Max. 7/Avg.	0.020142857	18	3.0024	35	5.87136	63.7	7.07232		7.81

Permit # 5059002
Facility Name: NEWTON CITY OF STP

SIU: CITY OF NEWTON - SANITARY LANDFILL
Outfall #: 001
Month/Year: 8-2024

Monthly Operation Report
IOWA DEPARTMENT OF NATURAL RESOURCES
NPDS - Operation Permit System
EFFLUENT Data

Mon. Point	PRIOR TO DISCHARGE TO CITY SEWER								
Parameter	FLOW	BOD5		TSS		NH3-N		LEACHAT	PH
Units	MGD	MG/L	LBS/DAY	MG/L	LBS/DAY	MG/L	LBS/DAY	Yes/ No	STD UNITS
Frequency	7/WEEK OR DAILY	1 TIME PER WEEK	1 TIME PER WEEK	1 TIME PER WEEK	1 TIME PER WEEK	1 TIME PER WEEK	1 TIME PER WEEK	1 EVERY 12 MONTHS	1 TIME PER WEEK
Start Date									
End Date	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration
No Discharge								06 - NOT REQ / MP	
LOQ									
Day: 1	0.021								
2	0.019								
3	0.019								
4	0.019								
5	0.012								
6	0.009								
7	0.009	15	1.1259	31	2.32686	72.7	5.456862		7.38
8	0.01								
9	0.01								
10	0.01								
11	0.01								
12	0.012								
13	0.008								
14	0.015	12	1.5012	27	3.3777	43	5.3793		7.23
15	0.016								
16	0.01								
17	0.01								
18	0.01								
19	0.008								
20	0.01								
21	0.009	15	1.1259	30	2.2518	47	3.52782		7.08
22	0.008								
23	0.008								
24	0.008								
25	0.008								
26	0.008								
27	0.017								
28	0.007	15	0.8757	37	2.16006	64.1	3.742158		7.27
29	0.014								
30	0.012								
31	0.012								
Total	0.358	57	4.6287	125	10.11642	226.8	18.10614		28.96
Monthly Avg.	0.011548387	14.25	1.157175	31.25	2.529105	56.7	4.526535		7.24
Daily Max.	0.021	15	1.5012	37	3.3777	72.7	5.456862		7.38
Daily Min.	0.007	12	0.8757	27	2.16006	43	3.52782		7.08
Max. 7/Avg.	0.015428571	15	1.5012	37	3.3777	72.7	5.456862		7.38

Permit # 5059002
Facility Name: NEWTON CITY OF STP

SIU: CITY OF NEWTON - SANITARY LANDFILL
Outfall #: 001
Month/Year: 9-2024

Monthly Operation Report
IOWA DEPARTMENT OF NATURAL RESOURCES
NPDS - Operation Permit System
EFFLUENT Data

Mon. Point	PRIOR TO DISCHARGE TO CITY SEWER								
Parameter	FLOW	BOD5		TSS		NH3-N		LEACHAT	PH
Units	MGD	MG/L	LBS/DAY	MG/L	LBS/DAY	MG/L	LBS/DAY	Yes/ No	STD UNITS
Frequency	7/WEEK OR DAILY	1 TIME PER WEEK	1 TIME PER WEEK	1 TIME PER WEEK	1 TIME PER WEEK	1 TIME PER WEEK	1 TIME PER WEEK	1 EVERY 12 MONTHS	1 TIME PER WEEK
Start Date / End Date	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration
No Discharge								06 - NOT REQ / MP	
LOQ									
Day: 1	0.012								
2	0.012								
3	0.008								
4	0.007	8	0.46704	50	2.919	29.1	1.698858		7.13
5	0.009								
6	0.007								
7	0.007								
8	0.007								
9	0.001								
10	0.011								
11	0.013	14	1.51788	32	3.46944	29.8	3.230916		7.19
12	0.007								
13	0.005								
14	0.005								
15	0.005								
16	0.005								
17	0.004								
18	0.004	26	0.86736	62	2.06832	140	4.6704		7.96
19	0.013								
20	0.014								
21	0.014								
22	0.014								
23	0.007								
24	0.007								
25	0.006	<24.000	<	15	0.7506	21.8	1.090872		7.31
26	0.007								
27	0.007								
28	0.007								
29	0.007								
30	0.006								
31									
Total	0.238	48	2.85228	159	9.20736	220.7	10.691046		29.59
Monthly Avg.	0.007933333	12	0.71307	39.75	2.30184	55.175	2.6727615		7.3975
Daily Max.	0.014	26	1.51788	62	3.46944	140	4.6704		7.96
Daily Min.	0.001			15	0.7506	21.8	1.090872		7.13
Max. 7/Avg.	0.008857143	26	1.51788	62	3.46944	140	4.6704		7.96

Permit # 5059002
Facility Name: NEWTON CITY OF STP

SIU: CITY OF NEWTON - SANITARY LANDFILL
Outfall #: 001
Month/Year: 10-2024

Monthly Operation Report
IOWA DEPARTMENT OF NATURAL RESOURCES
NPDS - Operation Permit System
EFFLUENT Data

Mon. Point	PRIOR TO DISCHARGE TO CITY SEWER								
Parameter	FLOW	BOD5		TSS		NH3-N		LEACHAT	PH
Units	MGD	MG/L	LBS/DAY	MG/L	LBS/DAY	MG/L	LBS/DAY	Yes/ No	STD UNITS
Frequency	7/WEEK OR DAILY	1 TIME PER WEEK	1 TIME PER WEEK	1 TIME PER WEEK	1 TIME PER WEEK	1 TIME PER WEEK	1 TIME PER WEEK	1 EVERY 12 MONTHS	1 TIME PER WEEK
Start Date									
End Date	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration
No Discharge								06 - NOT REQ / MP	
LOQ									
Day: 1	0.007								
2	0.007	11	0.64218	34	1.98492	61	3.56118		7.37
3	0.009								
4	0.006								
5	0.006								
6	0.006								
7	0.006								
8	0.007								
9	0.006	12	0.60048	20	1.0008	60.3	3.017412		7.6
10	0.006								
11	0.006								
12	0.006								
13	0.006								
14	0.006								
15	0.006								
16	0.005	21	0.8757	16	0.6672	61.6	2.56872		7.86
17	0.007								
18	0.006								
19	0.006								
20	0.006								
21	0.007								
22	0.006								
23	0.007	<6.000	<	74	4.32012	59.1	3.450258		7.3
24	0.008								
25	0.006								
26	0.006								
27	0.006								
28	0.006								
29	0.005								
30	0.016	<6.000	<	20	2.6688	12.7	1.694688		7.18
31	0.019								
Total	0.218	44	2.11836	164	10.64184	254.7	14.292258		37.31
Monthly Avg.	0.007032258	8.8	0.423672	32.8	2.128368	50.94	2.8584516		7.462
Daily Max.	0.019	21	0.8757	74	4.32012	61.6	3.56118		7.86
Daily Min.	0.005			16	0.6672	12.7	1.694688		7.18
Max. 7/Avg.	0.006714286	21	0.8757	74	4.32012	61.6	3.56118		7.86

Permit # 5059002
Facility Name: NEWTON CITY OF STP

SIU: CITY OF NEWTON - SANITARY LANDFILL
Outfall #: 001
Month/Year: 11-2024

Monthly Operation Report
IOWA DEPARTMENT OF NATURAL RESOURCES
NPDS - Operation Permit System
EFFLUENT Data

Mon. Point	PRIOR TO DISCHARGE TO CITY SEWER								
Parameter	FLOW	BOD5		TSS		NH3-N		LEACHAT	PH
Units	MGD	MG/L	LBS/DAY	MG/L	LBS/DAY	MG/L	LBS/DAY	Yes/ No	STD UNITS
Frequency	7/WEEK OR DAILY	1 TIME PER WEEK	1 TIME PER WEEK	1 TIME PER WEEK	1 TIME PER WEEK	1 TIME PER WEEK	1 TIME PER WEEK	1 EVERY 12 MONTHS	1 TIME PER WEEK
Start Date / End Date	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration
No Discharge								06 - NOT REQ / MP	
LOQ									
Day: 1	0.014								
2	0.014								
3	0.014								
4	0.022								
5	0.022								
6	0.022	13	2.38524	38	6.97224	26.9	4.935612		7.26
7	0.021								
8	0.02								
9	0.02								
10	0.02								
11	0.02								
12	0.011								
13	0.013	11	1.19262	33	3.57786	53.8	5.832996		7.68
14	0.011								
15	0.01								
16	0.01								
17	0.01								
18	0.014								
19	0.015								
20	0.013	7	0.75894	18	1.95156	37.5	4.06575		7.41
21	0.012								
22	0.01								
23	0.01								
24	0.01								
25	0.009								
26	0.006								
27	0.01	9	0.7506	26	2.1684	57.2	4.77048		7.58
28	0.01								
29	0.008								
30	0.008								
31									
Total	0.409	40	5.0874	115	14.67006	175.4	19.604838		29.93
Monthly Avg.	0.013633333	10	1.27185	28.75	3.667515	43.85	4.9012095		7.4825
Daily Max.	0.022	13	2.38524	38	6.97224	57.2	5.832996		7.68
Daily Min.	0.006	7	0.7506	18	1.95156	26.9	4.06575		7.26
Max. 7/Avg.	0.018428571	13	2.38524	38	6.97224	57.2	5.832996		7.68

Permit # 5059002
Facility Name: NEWTON CITY OF STP

SIU: CITY OF NEWTON - SANITARY LANDFILL
Outfall #: 001
Month/Year: 12-2024

Monthly Operation Report
IOWA DEPARTMENT OF NATURAL RESOURCES
NPDS - Operation Permit System
EFFLUENT Data

Mon. Point	PRIOR TO DISCHARGE TO CITY SEWER								
Parameter	FLOW	BOD5		TSS		NH3-N		LEACHAT	PH
Units	MGD	MG/L	LBS/DAY	MG/L	LBS/DAY	MG/L	LBS/DAY	Yes/ No	STD UNITS
Frequency	7/WEEK OR DAILY	1 TIME PER WEEK	1 TIME PER WEEK	1 TIME PER WEEK	1 TIME PER WEEK	1 TIME PER WEEK	1 TIME PER WEEK	1 EVERY 12 MONTHS	1 TIME PER WEEK
Start Date									
End Date	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration
No Discharge								06 - NOT REQ / MP	
LOQ									
Day: 1	0.008								
2	0.007								
3	0.007								
4	0.008	12	0.80064	21	1.40112	65.4	4.363488		7.45
5	0.007								
6	0.008								
7	0.008								
8	0.008								
9	0.007								
10	0.008								
11	0.006	14	0.70056	18	0.90072	77	3.85308		7.48
12	0.007								
13	0.013								
14	0.013								
15	0.013								
16	0.016								
17	0.014								
18	0.012	9	0.90072	13	1.30104	42.4	4.243392		7.47
19	0.011								
20	0.009								
21	0.009								
22	0.009								
23	0.009								
24	0.008	13	0.86736	18	1.20096	70.8	4.723776		7.49
25	0.008								
26	0.009								
27	0.013								
28	0.013								
29	0.013								
30	0.014								
31	0.01								
Total	0.305	48	3.26928	70	4.80384	255.6	17.183736		29.89
Monthly Avg.	0.00983871	12	0.81732	17.5	1.20096	63.9	4.295934		7.4725
Daily Max.	0.016	14	0.90072	21	1.40112	77	4.723776		7.49
Daily Min.	0.006	9	0.70056	13	0.90072	42.4	3.85308		7.45
Max. 7/Avg.	0.012	14	0.90072	21	1.40112	77	4.723776		7.49

Appendix H.2-
Annual Leachate Analyses

MICROBAC®

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HD0942

Newton Water Pollution Control Plant

Brad Hansen
1915 E 5th St S
Newton, IA 50208

Project Name: Landfill

Project / PO Number: Landfill
Received: 04/11/2024
Reported: 04/24/2024

Analytical Testing Parameters

Client Sample ID:	Leachate			
Sample Matrix:	Aqueous		**Collected By:**	Hanson, Lance
Lab Sample ID:	1HD0942-01		**Collection Date:**	04/11/2024 7:45

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 624								
Chloromethane	<1.0	1.0	ug/L	1		04/17/24 0000	04/17/24 1403	LNH
Vinyl Chloride	<1.0	1.0	ug/L	1		04/17/24 0000	04/17/24 1403	LNH
Bromomethane	<1.0	1.0	ug/L	1		04/17/24 0000	04/17/24 1403	LNH
Chloroethane	<1.0	1.0	ug/L	1		04/17/24 0000	04/17/24 1403	LNH
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		04/17/24 0000	04/17/24 1403	LNH
Methylene Chloride	<5.0	5.0	ug/L	1		04/17/24 0000	04/17/24 1403	LNH
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/17/24 0000	04/17/24 1403	LNH
1,1-Dichloroethane	<1.0	1.0	ug/L	1		04/17/24 0000	04/17/24 1403	LNH
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/17/24 0000	04/17/24 1403	LNH
2-Butanone (MEK)	<10.0	10.0	ug/L	1		04/17/24 0000	04/17/24 1403	LNH
Chloroform	<1.0	1.0	ug/L	1		04/17/24 0000	04/17/24 1403	LNH
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		04/17/24 0000	04/17/24 1403	LNH
Carbon Tetrachloride	<1.0	1.0	ug/L	1		04/17/24 0000	04/17/24 1403	LNH
Benzene	<1.0	1.0	ug/L	1		04/17/24 0000	04/17/24 1403	LNH
1,2-Dichloroethane	<1.0	1.0	ug/L	1		04/17/24 0000	04/17/24 1403	LNH
Trichloroethylene	<1.0	1.0	ug/L	1		04/17/24 0000	04/17/24 1403	LNH
1,2-Dichloropropane	<1.0	1.0	ug/L	1		04/17/24 0000	04/17/24 1403	LNH
Dibromomethane	<1.0	1.0	ug/L	1		04/17/24 0000	04/17/24 1403	LNH
Bromodichloromethane	<1.0	1.0	ug/L	1		04/17/24 0000	04/17/24 1403	LNH
2-Chloroethylvinyl ether	<10.0	10.0	ug/L	1	**P-02**	04/17/24 0000	04/17/24 1403	LNH
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/17/24 0000	04/17/24 1403	LNH
Toluene	<1.0	1.0	ug/L	1		04/17/24 0000	04/17/24 1403	LNH
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/17/24 0000	04/17/24 1403	LNH
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		04/17/24 0000	04/17/24 1403	LNH
Tetrachloroethylene	<1.0	1.0	ug/L	1		04/17/24 0000	04/17/24 1403	LNH
Chlorobenzene	<1.0	1.0	ug/L	1		04/17/24 0000	04/17/24 1403	LNH
Ethylbenzene	<1.0	1.0	ug/L	1		04/17/24 0000	04/17/24 1403	LNH
Xylenes, total	<2.0	2.0	ug/L	1		04/17/24 0000	04/17/24 1403	LNH
Bromoform	<1.0	1.0	ug/L	1		04/17/24 0000	04/17/24 1403	LNH
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/17/24 0000	04/17/24 1403	LNH
1,3-Dichlorobenzene	<1.0	1.0	ug/L	1		04/17/24 0000	04/17/24 1403	LNH
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		04/17/24 0000	04/17/24 1403	LNH
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		04/17/24 0000	04/17/24 1403	LNH
Surrogate: Dibromofluoromethane	99.8	Limit: 79-129	% Rec	1		04/17/24 0000	04/17/24 1403	LNH
Surrogate: 1,2-Dichloroethane-d4	102	Limit: 66-134	% Rec	1		04/17/24 0000	04/17/24 1403	LNH
Surrogate: Toluene-d8	98.1	Limit: 91-113	% Rec	1		04/17/24 0000	04/17/24 1403	LNH

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HD0942

Client Sample ID:	Leachate		
Sample Matrix:	Aqueous	**Collected By:**	Hanson, Lance
Lab Sample ID:	1HD0942-01	**Collection Date:**	04/11/2024 7:45

Determination of Volatile Organic Compounds	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
Surrogate: 4-Bromofluorobenzene	99.9	Limit: 83-112	% Rec	1		04/17/24 0000	04/17/24 1403	LNH

Determination of Base/Neutral/Acid Extractable Compounds	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
EPA 625								
N-Nitrosodimethylamine	<10	10	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
Pyridine	<10	10	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
Phenol	<10	10	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
Aniline	<10	10	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
Bis(2-Chloroethyl) Ether	<10	10	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
2-Chlorophenol	<10	10	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
1,3-Dichlorobenzene	<10	10	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
1,4-Dichlorobenzene	<10	10	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
Benzyl Alcohol	<10	10	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
1,2-Dichlorobenzene	<10	10	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
2-Methylphenol (o-Cresol)	<10	10	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
Bis[2-Chloroisopropyl]ether	<10	10	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
n-Nitroso-di-n-propylamine	<10	10	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
(3 & 4)-Methylphenol	<10	10	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
Hexachloroethane	<10	10	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
Nitrobenzene	<10	10	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
Isophorone	<10	10	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
2-Nitrophenol	<10	10	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
2,4-Dimethylphenol	<10	10	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
Bis (2-Chloroethoxy) Methane	<10	10	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
Benzoic acid	<50	50	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
2,4-Dichlorophenol	<10	10	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
1,2,4-Trichlorobenzene	<10	10	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
Naphthalene	<10	10	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
4-Chloroaniline	<10	10	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
Hexachlorobutadiene	<20	20	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
4-Chloro-3-methylphenol	<10	10	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
2-Methylnaphthalene	<10	10	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
Hexachlorocyclopentadiene	<20	20	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
2,4,6-Trichlorophenol	<10	10	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
2,4,5-Trichlorophenol	<50	50	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
2-Chloronaphthalene	<10	10	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
2-Nitroaniline	<50	50	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
Dimethylphthalate	<15	15	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
Acenaphthylene	<10	10	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
2,6-Dinitrotoluene	<10	10	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
3-Nitroaniline	<10	10	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
Acenaphthene	<10	10	ug/L	1		04/15/24 1354	04/17/24 2100	EPP

Client Sample ID:	Leachate		
Sample Matrix:	Aqueous	**Collected By:**	Hanson, Lance
Lab Sample ID:	1HD0942-01	**Collection Date:**	04/11/2024 7:45

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
2,4-Dinitrophenol	<20	20	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
Dibenzofuran	<10	10	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
2,4-Dinitrotoluene	<10	10	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
4-Nitrophenol	<10	10	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
Diethyl Phthalate	<30	30	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
Fluorene	<10	10	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
4-Chlorophenyl Phenyl Ether	<10	10	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
4-Nitroaniline	<20	20	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
4,6-Dinitro-2-methylphenol	<20	20	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
N-Nitrosodiphenylamine	<10	10	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
Azobenzene	<10	10	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
4-Bromophenyl Phenyl Ether	<10	10	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
Hexachlorobenzene	<10	10	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
Pentachlorophenol	<20	20	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
Phenanthrene	<10	10	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
Anthracene	<10	10	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
Di-n-butyl Phthalate	<10	10	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
Fluoranthene	<10	10	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
Benzidine	<50	50	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
Pyrene	<10	10	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
Butyl Benzyl Phthalate	<10	10	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
Benzo(a)anthracene	<10	10	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
Chrysene	<10	10	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
Bis(2-Ethylhexyl) Phthalate	<10	10	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
Di-n-octyl Phthalate	<10	10	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
Indeno(1,2,3-cd)Pyrene	<10	10	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
3,3´-Dichlorobenzidine	<20	20	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
Benzo(b)Fluoranthene	<10	10	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
Benzo(k)Fluoranthene	<10	10	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
Benzo(a)Pyrene	<10	10	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
Dibenzo(a,h)anthracene	<10	10	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
Benzo(g,h,i)perylene	<10	10	ug/L	1		04/15/24 1354	04/17/24 2100	EPP
Surrogate: 2-Fluorophenol	99.9	Limit: 19-139	% Rec	1		04/15/24 1354	04/17/24 2100	EPP
Surrogate: Phenol-d6	93.1	Limit: 14-154	% Rec	1		04/15/24 1354	04/17/24 2100	EPP
Surrogate: Nitrobenzene-d5	117	Limit: 17-146	% Rec	1		04/15/24 1354	04/17/24 2100	EPP
Surrogate: 2-Fluorobiphenyl	99.7	Limit: 18-122	% Rec	1		04/15/24 1354	04/17/24 2100	EPP
Surrogate: 2,4,6-Tribromophenol	102	Limit: 21-151	% Rec	1		04/15/24 1354	04/17/24 2100	EPP
Surrogate: Terphenyl-dl4	108	Limit: 27-131	% Rec	1		04/15/24 1354	04/17/24 2100	EPP

Determination of Conventional Chemistry Parameters	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 1664A								
Oil and Grease	<4	4	mg/L	1	**PH-3**	04/12/24 1044	04/15/24 1530	CCB

CERTIFICATE OF ANALYSIS

1HD0942

Client Sample ID:	Leachate		
Sample Matrix:	Aqueous	**Collected By:**	Hanson, Lance
Lab Sample ID:	1HD0942-01	**Collection Date:**	04/11/2024 7:45

Determination of Conventional Chemistry Parameters	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
EPA 351.2								
Nitrogen, Kjeldahl, total	**13.2**	0.50	mg/L	1			04/16/24 0943	AKK

Determination of Inorganic Anions	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
300.0								
Chloride	**97.2**	10.0	mg/L	10		04/17/24 0000	04/17/24 1446	MID
Sulfate	**71.0**	10.0	mg/L	10		04/17/24 0000	04/17/24 1446	MID

Determination of Total Metals	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
200.7								
Iron, total	**6.91**	0.100	mg/L	1		04/12/24 1544	04/16/24 2136	JAR
EPA 200.7								
Arsenic, total	<0.050	0.050	mg/L	1		04/12/24 1544	04/16/24 2136	JAR
Chromium, total	<0.005	0.005	mg/L	1		04/12/24 1544	04/16/24 2136	JAR
Copper, total	<0.010	0.010	mg/L	1		04/12/24 1544	04/16/24 2136	JAR
Lead, total	<0.010	0.010	mg/L	1		04/12/24 1544	04/16/24 2136	JAR
Nickel, total	**0.010**	0.010	mg/L	1		04/12/24 1544	04/16/24 2136	JAR
Selenium, total	**0.113**	0.030	mg/L	1		04/12/24 1544	04/16/24 2136	JAR
Zinc, total	**0.022**	0.020	mg/L	1		04/12/24 1544	04/16/24 2136	JAR

Definitions

P-02: Sample was incorrectly preserved for this analysis.

PH-3: Insufficient preservative to adjust the sample pH to less than 2, value measured at 3 pH units.

RL: Reporting Limit

Report Comments

Reviewed and Approved By:

Tiffannie Clymer

Tiffannie Clymer
Customer Relationship Specialist
tiffannie.clymer@microbac.com
04/24/24 11:12

CHAIN OF CU

Keystone LABORATORIES *A Microbac Company*

600 East 17th Street Sou
Newton, IA 50208
641-792-8451

1HD0942
Newton Water Pollution Control Plant
PM: Tiffannie Clymer

Printed: 4/2/2024 11:04:16A
www.keystonelabs.com

SITE INFORMATION

Sampler: Yance Hanson

Project: Landfill Annual Leachate

Landfill

REPORT TO

Brad Hansen
Newton Water Pollution Control Plant
1915 E 5th St S
Newton, IA 50208

Brad Hansen
Newton Water Pollution Control Plant
1915 E 5th St S
Newton, IA 50208

SPECIAL INSTRUCTIONS

None

Turn Around Time

☐ Standard ☐ RUSH, need by __/__/__

LAB USE ONLY

Work Order: 1HD0942
Temperature: 0.0
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	Water	GRAB	4/11/24	7:45	8	624-105	625-110	01
							as-t-200.7	cl-300.0	
							cr-t-200.7	cu-t-200.7	
							fe-t-200.7	ni-t-200.7	
							og-t-1664	pb-t-200.7	
							se-t-200.7	so4-300.0	
							tkn-351.2	zn-t-200.7	

Yance Hanson 4-11-24 8:10
Relinquished By Date/Time

Received By Date/Time

Relinquished By Date/Time

[illegible signature] 4/11/24 08:20
Received for Lab By Date/Time

Remarks:

Original - Lab Copy Yellow - Sampler Copy

Appendix H.3 –
Treatment Agreement with Newton WPCP

STATE OF IOWA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROGRAM
AMENDMENT TO NPDES PERMIT

Iowa NPDES Permit #:	5059002
Date of Issuance:	August 1, 2020
Date of Expiration:	July 31, 2025
Date of this Amendment:	**September 1, 2021**
EPA Number:	IA0027723

Name and Mailing Address of Applicant:

CITY OF NEWTON
PO BOX 399
NEWTON, IA 50208

Identity and Location of Facility:

NEWTON, CITY OF STP
Township 79N, Range 19W, Section 3, Jasper County

Pursuant to the authority Iowa Code Section 455B.174, and of Rule 567--64.3, Iowa Administrative Code, the Director of the Iowa Department of Natural Resources has issued the above referenced permit. Pursuant to the same authority the Director hereby amends said permit as set forth below:

The permit is being amended to include less stringent copper limits, calculated in the wasteload allocation (WLA) dated March 2, 2021. The facility prepared and published a notice for an antidegradation alternatives analysis (AAA) for the less stringent limits, and the Department approved the AAA on May 27, 2021.

Please replace your entire permit with the enclosed permit.

For the Department of Natural Resources:

By__________________________________
Karen Lodden
NPDES Section
ENVIRONMENTAL SERVICES DIVISION

IOWA DEPARTMENT OF NATURAL RESOURCES

National Pollutant Discharge Elimination System (NPDES) Permit

OWNER NAME & ADDRESS

CITY OF NEWTON
PO BOX 399
NEWTON, IA 50208-0399

FACILITY NAME & ADDRESS

NEWTON CITY OF STP
1915 EAST 5TH STREET SOUTH
NEWTON, IA 50208

Section 3, T79N, R19W
Jasper County

IOWA NPDES PERMIT NUMBER: 5059002
DATE OF ISSUANCE: 08/01/2020
DATE OF EXPIRATION: 07/31/2025

YOU ARE REQUIRED TO FILE FOR RENEWAL OF THIS PERMIT BY: 02/01/2025
EPA NUMBER: IA0027723

This permit is issued pursuant to the authority of section 402(b) of the Clean Water Act (33 U.S.C. 1342(b)), Iowa Code section 455B.174, and rule 567-64.3, Iowa Administrative Code. You are authorized to operate the disposal system and to discharge the pollutants specified in this permit in accordance with the effluent limitations, monitoring requirements and other terms set forth in this permit.

You may appeal any condition of this permit by filing a written notice of appeal and request for administrative hearing with the director of the department within 30 days of permit issuance.

Any existing, unexpired Iowa operation permit or Iowa NPDES permit previously issued by the department for the facility identified above is revoked by the issuance of this permit. This provision does not apply to any authorization to discharge under the terms and conditions of a general permit issued by the department or to any permit issued exclusively for the discharge of stormwater.

FOR THE DEPARTMENT OF NATURAL RESOURCES

By Karen Lodden
Digitally signed by Karen Lodden
Date: 2020.07.10 11:28:49 -05'00'

Karen Lodden
NPDES Section, Environmental Services Division

Facility Name: NEWTON CITY OF STP
Permit Number: 5059002

Outfall No.: 001 DISCHARGE FROM TRICKLING FILTER/ACTIVATED SLUDGE WASTEWATER TREATMENT FACILITY WITH UV DISINFECTION.

Receiving Stream: CARDINAL CREEK (PREVIOUSLY KNOWN AS SEWER CREEK)

Route of Flow: CARDINAL CREEK

Class A2 waters are secondary contact recreational use waters in which recreational or other uses may result in contact with the water that is either incidental or accidental. During the recreational use, the probability of ingesting appreciable quantities of water is minimal. Class A2 uses include fishing, commercial and recreational boating, any limited contact incidental to shoreline activities and activities in which users do not swim or float in the water body while on a boating activity.

Waters designated Class B(WW2) are those in which flow or other physical characteristics are capable of supporting a resident aquatic community that includes a variety of native nongame fish and invertebrate species. The flow and other physical characteristics limit the maintenance of warm water game fish populations. These waters generally consist of small perennially flowing streams.

Outfall No.: 002 BYPASS FROM THE LAMBS GROVE FLOW EQUALIZATIONAL BASIN OVERFLOW

Receiving Stream: CHERRY CREEK

Route of Flow: CHERRY CREEK

Class A2 waters are secondary contact recreational use waters in which recreational or other uses may result in contact with the water that is either incidental or accidental. During the recreational use, the probability of ingesting appreciable quantities of water is minimal. Class A2 uses include fishing, commercial and recreational boating, any limited contact incidental to shoreline activities and activities in which users do not swim or float in the water body while on a boating activity.

Waters designated Class B(WW2) are those in which flow or other physical characteristics are capable of supporting a resident aquatic community that includes a variety of native nongame fish and invertebrate species. The flow and other physical characteristics limit the maintenance of warm water game fish populations. These waters generally consist of small perennially flowing streams.

Outfall No.: 003 BYPASS FROM THE SOUTHEAST EQUALIZATION BASIN OVERFLOW

Receiving Stream: UNNAMED CREEK TO ELK CREEK

Route of Flow: UNNAMED CREEK TO ELK CREEK

Class A2 waters are secondary contact recreational use waters in which recreational or other uses may result in contact with the water that is either incidental or accidental. During the recreational use, the probability of ingesting appreciable quantities of water is minimal. Class A2 uses include fishing, commercial and recreational boating, any limited contact incidental to shoreline activities and activities in which users do not swim or float in the water body while on a boating activity.

Waters designated Class B(WW2) are those in which flow or other physical characteristics are capable of supporting a resident aquatic community that includes a variety of native nongame fish and invertebrate species. The flow and other physical characteristics limit the maintenance of warm water game fish populations. These waters generally consist of small perennially flowing streams.

Outfall No.: 004 BYPASS FROM THE CENTRAL EQUALIZATION BASIN OVERFLOW

Receiving Stream: CARDINAL CREEK

Route of Flow: CARDINAL CREEK

Class A2 waters are secondary contact recreational use waters in which recreational or other uses may result in contact with the water that is either incidental or accidental. During the recreational use, the probability of ingesting appreciable quantities of water is minimal. Class A2 uses include fishing, commercial and recreational boating, any limited contact incidental to shoreline activities and activities in which users do not swim or float in the water body while on a boating activity.

Waters designated Class B(WW2) are those in which flow or other physical characteristics are capable of supporting a resident aquatic community that includes a variety of native nongame fish and invertebrate species. The flow and other physical characteristics limit the maintenance of warm water game fish populations. These waters generally consist of small perennially flowing streams.

Outfall No.: 005 BYPASS FROM THE TREATMENT PLANT OVERFLOW LOCATED PRIOR TO THE PLANT TRANSFER STATION AFTER THE ROCK FILTER

Receiving Stream: CARDINAL CREEK

Route of Flow: CARDINAL CREEK

Class A2 waters are secondary contact recreational use waters in which recreational or other uses may result in contact with the water that is either incidental or accidental. During the recreational use, the probability of ingesting appreciable quantities of water is minimal. Class A2 uses include fishing, commercial and recreational boating, any limited contact incidental to shoreline activities and activities in which users do not swim or float in the water body while on a boating activity.

Waters designated Class B(WW2) are those in which flow or other physical characteristics are capable of supporting a resident aquatic community that includes a variety of native nongame fish and invertebrate species. The flow and other physical characteristics limit the maintenance of warm water game fish populations. These waters generally consist of small perennially flowing streams.

Bypasses from any portion of a treatment facility or from a sanitary sewer collection system designed to carry only sewage are prohibited.

Facility Name: NEWTON CITY OF STP

Permit Number: 5059002

Effluent Limitations:

You are prohibited from discharging pollutants except in compliance with the following effluent limitations:

001 DISCHARGE FROM TRICKLING FILTER/ACTIVATED SLUDGE WASTEWATER TREATMENT FACILITY WITH UV DISINFECTION.

Outfall: 001 Effective Dates: 08/01/2020 to 07/31/2025			
Parameter	**Season**	**Limit Type**	**Limits**
CBOD5			**85% Removal Required**
	Yearly	7 Day Average	40 MG/L 3070 LBS/DAY
	Yearly	30 Day Average	25 MG/L 1919 LBS/DAY
TOTAL SUSPENDED SOLIDS			**85% Removal Required**
	Yearly	7 Day Average	45 MG/L 3454 LBS/DAY
	Yearly	30 Day Average	30 MG/L 2302 LBS/DAY
AMMONIA NITROGEN (N)			
	JAN	30 Day Average	3.4 MG/L 261.3 LBS/DAY
	JAN	Daily Maximum	13.9 MG/L 991.1 LBS/DAY
	FEB	30 Day Average	4.0 MG/L 303.3 LBS/DAY
	FEB	Daily Maximum	14.2 MG/L 1089.6 LBS/DAY
	MAR	30 Day Average	3.4 MG/L 261.3 LBS/DAY
	MAR	Daily Maximum	11.7 MG/L 832.1 LBS/DAY
	APR	30 Day Average	1.5 MG/L 117.0 LBS/DAY
	APR	Daily Maximum	8.2 MG/L 579.9 LBS/DAY
	MAY	30 Day Average	1.7 MG/L 133.4 LBS/DAY
	MAY	Daily Maximum	8.2 MG/L 579.9 LBS/DAY
	JUN	30 Day Average	1.3 MG/L 100.5 LBS/DAY
	JUN	Daily Maximum	8.2 MG/L 360.7 LBS/DAY
	JUL	30 Day Average	1.0 MG/L 77.1 LBS/DAY
	JUL	Daily Maximum	8.3 MG/L 268.6 LBS/DAY
	AUG	30 Day Average	1.0 MG/L 73.2 LBS/DAY
	AUG	Daily Maximum	6.9 MG/L 299.3 LBS/DAY
	SEP	30 Day Average	1.1 MG/L 81.1 LBS/DAY
	SEP	Daily Maximum	9.8 MG/L 330.0 LBS/DAY

Facility Name: NEWTON CITY OF STP

Permit Number: 5059002

Outfall: 001 Effective Dates: 08/01/2020 to 07/31/2025			
Parameter	**Season**	**Limit Type**	**Limits**
AMMONIA NITROGEN (N)			
	OCT	30 Day Average	1.6 MG/L 119.4 LBS/DAY
	OCT	Daily Maximum	9.8 MG/L 695.5 LBS/DAY
	NOV	30 Day Average	2.3 MG/L 178.1 LBS/DAY
	NOV	Daily Maximum	8.2 MG/L 579.9 LBS/DAY
	DEC	30 Day Average	2.5 MG/L 189.9 LBS/DAY
	DEC	Daily Maximum	9.8 MG/L 695.5 LBS/DAY
CYANIDE, TOTAL (AS CN)			
	Yearly	30 Day Average	0.0052 MG/L 0.3991 LBS/DAY
	Yearly	Daily Maximum	0.0220 MG/L 1.688 LBS/DAY
OIL AND GREASE			
	Yearly	30 Day Average	10 MG/L
	Yearly	Daily Maximum	15 MG/L
PHENOLS			
	Yearly	30 Day Average	0.05 MG/L 3.837 LBS/DAY
	Yearly	Daily Maximum	2.5 MG/L 191.9 LBS/DAY
ACUTE TOXICITY, CERIODAPHNIA			
	Yearly	Daily Maximum	1 NO TOXICITY
ACUTE TOXICITY, PIMEPHALES			
	Yearly	Daily Maximum	1 NO TOXICITY
DISSOLVED OXYGEN			
	Yearly	Daily Minimum	5.0 MG/L
PH			
	Yearly	Daily Maximum	9.0 STD UNITS
	Yearly	Daily Minimum	6.5 STD UNITS
E. COLI			
	MAR	Geometric Mean	167 #/100 ML
	APR	Geometric Mean	167 #/100 ML
	MAY	Geometric Mean	167 #/100 ML
	JUN	Geometric Mean	167 #/100 ML

Facility Name: NEWTON CITY OF STP

Permit Number: 5059002

Outfall: 001 Effective Dates: 08/01/2020 to 07/31/2025			
Parameter	**Season**	**Limit Type**	**Limits**
E. COLI			
	JUL	Geometric Mean	167 #/100 ML
	AUG	Geometric Mean	167 #/100 ML
	SEP	Geometric Mean	167 #/100 ML
	OCT	Geometric Mean	167 #/100 ML
	NOV	Geometric Mean	167 #/100 ML
Outfall: 001 Effective Dates: 08/01/2020 to 08/31/2021			
Parameter	**Season**	**Limit Type**	**Limits**
COPPER, TOTAL (AS CU)			
	Yearly	30 Day Average	0.01687 MG/L 1.295 LBS/DAY
	Yearly	Daily Maximum	0.0269 MG/L 2.064 LBS/DAY
Outfall: 001 Effective Dates: 09/01/2021 to 07/31/2025			
Parameter	**Season**	**Limit Type**	**Limits**
COPPER, TOTAL (AS CU)			
	Yearly	30 Day Average	0.033 MG/L 2.46 LBS/DAY
	Yearly	Daily Maximum	0.047 MG/L 3.43 LBS/DAY

Monitoring and Reporting Requirements

(a) Samples and measurements taken shall be representative of the volume and nature of the monitored wastewater.

(b) Analytical and sampling methods specified in 40 CFR Part 136 or other methods approved in writing by the department shall be utilized. All effluent samples for which a limit applies must be analyzed using sufficiently sensitive methods (i.e. testing procedures) approved under 567 IAC Chapter 63 and 40 CFR Part 136 for the analysis of pollutants or pollutant parameters or as required under 40 CFR chapter I, subchapter N or O.

For the purposes of this paragraph, an approved method is sufficiently sensitive when:
(1) the method minimum level (ML) is at or below the level of the effluent limit established in the permit for the measured pollutant or pollutant parameter; or
(2) the method has the lowest ML of the approved analytical methods for the measured pollutant or pollutant parameter.

Samples collected for operational testing need not be analyzed by approved analytical methods; however, commonly accepted test methods should be used.

(c) You are required to report all data including calculated results needed to determine compliance with the limitations contained in this permit. The results of any monitoring not specified in this permit performed at the compliance monitoring point and analyzed according to 40 CFR Part 136 shall be included in the calculation and reporting of any data submitted in accordance with this permit. This includes daily maximums and minimums, 30-day averages and 7-day averages for all parameters that have concentration (mg/l) and mass (lbs/day) limits. In addition, flow data shall be reported in million gallons per day (MGD).

(d) Records of monitoring activities and results shall include for all samples: the date, exact place and time of the sampling; the dates the analyses were performed; who performed the analyses; the analytical techniques or methods used; and the results of such analyses.

(e) Results of all monitoring shall be recorded on forms provided by, or approved by, the department, and shall be submitted to the appropriate regional field office of the department by the fifteenth day following the close of the reporting period. Your reporting period is on a MONTHLY basis, ending on the last day of each reporting period.

(f) Operational performance monitoring for treatment unit process control shall be conducted to ensure that the facility is properly operated in accordance with its design. The results of any operational performance monitoring need not be reported to the department, but shall be maintained in accordance with rule 567 IAC 63.2 (455B). The results of any operational performance monitoring specified in this permit shall be submitted to the department in accordance with these reporting requirements.

(g) Chapter 63 of the rules provides you with further explanation of your monitoring requirements.

Facility Name: NEWTON CITY OF STP
Permit Number: 5059002

Outfall	Wastewater Parameter	Sample Frequency	Sample Type	Monitoring Location
The following monitoring requirements shall be in effect from 08/01/2020 to 07/31/2025				
001	BIOCHEMICAL OXYGEN DEMAND (BOD5)	2 TIMES PER WEEK	24 HOUR COMPOSITE	INFLUENT SAMPLER PRIOR TO PRIMARY CLARIFIERS
001	FLOW	7/WEEK OR DAILY	24 HOUR TOTAL	PARSHALL FLUME INFLUENT FLOW METER PRIOR TO SCREENING & GRIT REMOVAL
001	NITROGEN, TOTAL (AS N)	1 TIME PER WEEK	24 HOUR COMPOSITE	INFLUENT SAMPLER PRIOR TO PRIMARY CLARIFIERS
001	NITROGEN, TOTAL KJELDAHL (AS N)	1 EVERY MONTH	24 HOUR COMPOSITE	INFLUENT SAMPLER PRIOR TO PRIMARY CLARIFIERS
001	PH	2 TIMES PER WEEK	GRAB	INFLUENT SAMPLER PRIOR TO PRIMARY CLARIFIERS
001	PHOSPHORUS, TOTAL (AS P)	1 TIME PER WEEK	24 HOUR COMPOSITE	INFLUENT SAMPLER PRIOR TO PRIMARY CLARIFIERS
001	TEMPERATURE	2 TIMES PER WEEK	GRAB	INFLUENT SAMPLER PRIOR TO PRIMARY CLARIFIERS
001	TOTAL SUSPENDED SOLIDS	2 TIMES PER WEEK	24 HOUR COMPOSITE	INFLUENT SAMPLER PRIOR TO PRIMARY CLARIFIERS
001	FLOW	7/WEEK OR DAILY	24 HOUR TOTAL	PARSHALL FLUME EFFLUENT FLOW METER POST UV DISINFECTION SYSTEM
001	ACUTE TOXICITY, CERIODAPHNIA	1 EVERY 12 MONTHS	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION
001	ACUTE TOXICITY, PIMEPHALES	1 EVERY 12 MONTHS	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION
001	AMMONIA NITROGEN (N)	2 TIMES PER WEEK	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION
001	CBOD5	2 TIMES PER WEEK	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION
001	COPPER, TOTAL (AS CU)	3 TIMES PER WEEK	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION
001	CYANIDE, TOTAL (AS CN)	2 TIMES PER WEEK	GRAB	EFFLUENT AFTER DISINFECTION
001	DISSOLVED OXYGEN	2 TIMES PER WEEK	GRAB	EFFLUENT AFTER DISINFECTION
001	E. COLI	GEO. MEAN 1/3 MONTHS	GRAB	EFFLUENT AFTER DISINFECTION
001	NITROGEN, TOTAL (AS N)	1 TIME PER WEEK	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION
001	OIL AND GREASE	1 EVERY MONTH	GRAB	EFFLUENT AFTER DISINFECTION
001	PH	5 TIMES PER WEEK	GRAB	EFFLUENT AFTER DISINFECTION
001	PHENOLS	2 TIMES PER WEEK	GRAB	EFFLUENT AFTER DISINFECTION

Facility Name: NEWTON CITY OF STP

Permit Number: 5059002

Outfall	Wastewater Parameter	Sample Frequency	Sample Type	Monitoring Location
The following monitoring requirements shall be in effect from 08/01/2020 to 07/31/2025				
001	PHOSPHORUS, TOTAL (AS P)	1 TIME PER WEEK	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION
001	TOTAL SUSPENDED SOLIDS	2 TIMES PER WEEK	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION

Facility Name: NEWTON CITY OF STP
Permit Number: 5059002

Special Monitoring Requirements

Outfall #	Description
001	**PHOSPHORUS, TOTAL (AS P)**

Total phosphorus shall be reported as P.

E. COLI

The limit for E. coli specified in the limit pages of this permit is a geometric mean. The disinfection season is established in the Iowa Administrative Code, Subparagraph 567 IAC 61.3(3)“a”(1), and is in effect from March 15 to November 15. Any disinfection system (chlorine, UV light, etc.) shall be operated to comply with the limit during the entire disinfection season.

The facility must collect and analyze a minimum of five samples in one calendar month during each 3-month period from March 15 to November 15. The 3-month periods are March – May, June – August, and September – November. The collection of five samples in each 3-month period will result in a minimum of 15 samples being collected during a calendar year. For example, for the first 3-month period, the operator may choose April as the calendar month to collect the 5 individual E. coli samples to determine compliance with the limits. The operator may also choose the months of March or May as well, as long as each of the 5 samples is collected during a single calendar month. The same principle applies to the other two 3-month periods during the disinfection season. The following requirements apply to the individual samples collected in one calendar month:
Samples must be spaced over one calendar month.
No more than one sample can be collected on any one day.
There must be a minimum of two days between each sample.
No more than two samples may be collected in a period of seven consecutive days.

If the effluent has been disinfected using chlorine, ultraviolet light (UV), or any other process intended to disrupt the biological integrity of the E. coli, the samples shall be analyzed using the Most Probable Number method found in Standard Method 9223B (Colilert® or Colilert-18® made by IDEXX Laboratories, Inc.). If the effluent has not been disinfected the samples may be analyzed using either the MPN method above or EPA Method 1603: Escherichia coli (E. coli) in water by membrane filtration using modified membrane-thermotolerant E. coli agar (modified mTEC) or mColiBlue-24® made by the Hach Company.

The geometric mean must be calculated using all valid sample results collected during a month. The geometric mean formula is as follows: Geometric Mean = (Sample one * Sample two * Sample three * Sample four *Sample five…Sample N)^(1/N), which is the Nth root of the result of the multiplication of all of the sample results where N = the number of samples. If a sample result is a less than value, the value reported by the lab without the less than sign should be used in the geometric mean calculation.

The geometric mean can be calculated in one of the following ways:
Use a scientific calculator that can calculate the powers of numbers.
Enter the samples in Microsoft Excel and use the function “GEOMEAN” to perform the calculation.
Use the geometric mean calculator on the Iowa DNR webpage at: http://www.iowadnr.gov/Environmental-Protection/Water-Quality/NPDES-Wastewater-Permitting/NPDES-Operator-Information/Bacteria-Sampling

COPPER, TOTAL (AS CU)

Laboratory samples must be analyzed at a minimum Level Of Quantitation of 0.01687 mg/L.

CYANIDE, TOTAL (AS CN)

Laboratory samples must be analyzed at a minimum Level Of Quantitation of 0.0052 mg/L.

PHENOLS

Laboratory samples must be analyzed at a minimum Level Of Quantitation of 0.05 mg/L.

NITROGEN, TOTAL (AS N)

Total Nitrogen shall be determined by testing for Total Kjeldahl Nitrogen (TKN) and nitrate + nitrite nitrogen and reporting the sum of the TKN and nitrate + nitrite results (reported as N). Nitrate + nitrite can be analyzed together or separately.

Facility Name: NEWTON CITY OF STP
Permit Number: 5059002

Significant Industrial User Discharges:

Significant Industrial User: CITY OF NEWTON - SANITARY LANDFILL

Outfall #	**Outfall Description**
001	EFFLUENT PRIOR TO DISCHARGE TO THE MUNICIPAL COLLECTION SYSTEM

Significant Industrial User Effluent Limitations

You are prohibited from discharging pollutants except in compliance with the following effluent limitations:

CITY OF NEWTON - SANITARY LANDFILL
Outfall: 001 Effective Dates: 08/01/2020 to 07/31/2025

Parameter	**Season**	**Limit Type**	**Limit Values**
FLOW			
	Yearly	30 Day Average	0.025 MGD
	Yearly	DAILY MAXIMUM	0.052 MGD
BIOCHEMICAL OXYGEN DEMAND (BOD5)			
	Yearly	30 Day Average	5 LBS/DAY
	Yearly	DAILY MAXIMUM	15 LBS/DAY
TOTAL SUSPENDED SOLIDS			
	Yearly	30 Day Average	10 LBS/DAY
	Yearly	DAILY MAXIMUM	41.7 LBS/DAY
AMMONIA NITROGEN (N)			
	Yearly	30 Day Average	6 LBS/DAY
	Yearly	DAILY MAXIMUM	18.8 LBS/DAY
PH			
	Yearly	DAILY MAXIMUM	9.0 STD UNITS
	Yearly	DAILY MINIMUM	6.0 STD UNITS

Monitoring and Reporting Requirements

(a) Samples and measurements taken shall be representative of the volume and nature of the monitored wastewater.

(b) Analytical and sampling methods specified in 40 CFR Part 136 or other methods approved in writing by the department shall be utilized. All effluent samples for which a limit applies must be analyzed using sufficiently sensitive methods (i.e. testing procedures) approved under 567 IAC Chapter 63 and 40 CFR Part 136 for the analysis of pollutants or pollutant parameters or as required under 40 CFR chapter I, subchapter N or O.

For the purposes of this paragraph, an approved method is sufficiently sensitive when:
(1) the method minimum level (ML) is at or below the level of the effluent limit established in the permit for the measured pollutant or pollutant parameter; or
(2) the method has the lowest ML of the approved analytical methods for the measured pollutant or pollutant parameter.

Samples collected for operational testing need not be analyzed by approved analytical methods; however, commonly accepted test methods should be used.

(c) You are required to report all data including calculated results needed to determine compliance with the limitations contained in this permit. The results of any monitoring not specified in this permit performed at the compliance monitoring point and analyzed according to 40 CFR Part 136 shall be included in the calculation and reporting of any data submitted in accordance with this permit. This includes daily maximums and minimums, 30-day averages and 7-day averages for all parameters that have concentration (mg/l) and mass (lbs/day) limits. In addition, flow data shall be reported in million gallons per day (MGD).

(d) Records of monitoring activities and results shall include for all samples: the date, exact place and time of the sampling; the dates the analyses were performed; who performed the analyses; the analytical techniques or methods used; and the results of such analyses.

(e) Results of all monitoring shall be recorded on forms provided by, or approved by, the department, and shall be submitted to the appropriate regional field office of the department by the fifteenth day following the close of the reporting period. Your reporting period is on a MONTHLY basis, ending on the last day of each reporting period.

(f) Operational performance monitoring for treatment unit process control shall be conducted to ensure that the facility is properly operated in accordance with its design. The results of any operational performance monitoring need not be reported to the department, but shall be maintained in accordance with rule 567 IAC 63.2 (455B). The results of any operational performance monitoring specified in this permit shall be submitted to the department in accordance with these reporting requirements.

(g) Chapter 63 of the rules provides you with further explanation of your monitoring requirements.

Facility Name: NEWTON CITY OF STP
Permit Number: 5059002

CITY OF NEWTON - SANITARY LANDFILL				
Outfall	**Wastewater Parameter**	**Sample Frequency**	**Sample Type**	**Monitoring Location**
001	AMMONIA NITROGEN (N)	1 TIME PER WEEK	GRAB	PRIOR TO DISCHARGE TO CITY SEWER
001	BIOCHEMICAL OXYGEN DEMAND (BOD5)	1 TIME PER WEEK	GRAB	PRIOR TO DISCHARGE TO CITY SEWER
001	FLOW	7/WEEK OR DAILY	24 HOUR TOTAL	PRIOR TO DISCHARGE TO CITY SEWER
001	PH	1 TIME PER WEEK	GRAB	PRIOR TO DISCHARGE TO CITY SEWER
001	SANITARY LANDFILL LEACHATE	1 EVERY 12 MONTHS	GRAB	PRIOR TO DISCHARGE TO CITY SEWER
001	TOTAL SUSPENDED SOLIDS	1 TIME PER WEEK	GRAB	PRIOR TO DISCHARGE TO CITY SEWER

CITY OF NEWTON - SANITARY LANDFILL Special Monitoring Requirements

Outfall #	**Description**
001	SANITARY LANDFILL LEACHATE See the Additional Monitoring Requirements page that follows for additional landfill leachate monitoring requirements.

Facility Name: NEWTON CITY OF STP
Permit Number: 5059002

ADDITIONAL MONITORING REQUIREMENTS

CITY OF NEWTON – SANITARY LANDFILL

The permittee shall analyze a representative sample of the landfill leachate discharge from the City of Newton Sanitary Landfill at least annually for each of the pollutants listed below. In addition, the permittee shall monitor the volume of waste discharged and BOD5, TSS, Ammonia Nitrogen, and pH at the frequencies specified on page 14 of this permit.

Pollutant

TKN
Oil and Grease (O&G)
Chloride (as Cl)
Sulfate (as SO4)
Arsenic, Total (as As)
Chromium, Total (as Cr)
Copper, Total (as Cu)
Iron, Total (as Fe)
Lead, Total (as Pb)
Nickel, Total (as Ni)
Selenium, Total (as Se)
Zinc, Total (as Zn)
Benzoic Acid
Chlorobenzene
Ethylbenzene
p-Cresol
Phenol
Toluene

The permittee will indicate completion of the annual leachate monitoring by entering a "1" in the "LEACHAT" column on the Discharge Monitoring Report (DMR) spreadsheet on the day that the samples are collected. Select the No Discharge Indicator "NOT REQUIRED/MP" on the DMR spreadsheet during the months that the monitoring is not required.

Results of annual monitoring shall be submitted to the addresses below:

NPDES.mail@dnr.iowa.gov	Iowa DNR Field Office 5
Subject: Landfill Leachate Scan (5059002)	502 E. 9th St
	Des Moines, IA 50319-0034

Facility Name: NEWTON CITY OF STP

Permit Number: 5059002

Outfall Number: 001

Ceriodaphnia and Pimephales Toxicity Effluent Testing

1. For facilities that have not been required to conduct toxicity testing by a previous NPDES permit, the initial annual toxicity test shall be conducted within three (3) months of permit issuance. For facilities that have been required to conduct toxicity testing by a previous NPDES permit, the initial annual toxicity test shall be conducted within twelve months (12) of the last toxicity test.

2. The test organisms that are to be used for acute toxicity testing shall be Ceriodaphnia dubia and Pimephales promelas. The acute toxicity testing procedures used to demonstrate compliance with permit limits shall be those listed in 40 CFR Part 136 and adopted by reference in rule 567 IAC 63.1(1). The method for measuring acute toxicity is specified in USEPA, October 2002, Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition. USEPA, Office of Water, Washington, D.C., EPA 821-R-02-012.

3. The diluted effluent sample must contain a minimum of 100.00 % effluent and no more than 0.00 % of culture water.

4. One valid positive toxicity result will require, at a minimum, quarterly testing for effluent toxicity until three successive tests are determined not to be positive.

5. Two successive valid positive toxicity results or three positive results out of five successive valid effluent toxicity tests will require a toxicity reduction evaluation to be completed to eliminate the toxicity.

6. A non-toxic test result shall be indicated as a "1" on the monthly operation report. A toxic test result shall be indicated as a "2" on the monthly operation report. DNR Form 542-1381 shall also be submitted to the DNR field office along with the monthly operation report.

Ceriodaphnia and Pimephales Toxicity Effluent Limits

The maximum limit of "1" for the parameters Acute Toxicity, Ceriodaphnia and Acute Toxicity, Pimephales means no positive toxicity results.

Definition: "Positive toxicity result" means a statistical difference of mortality rate between the control and the diluted effluent sample. For more information, see USEPA, October 2002, Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition, USEPA, Office of Water, Washington, D.C., EPA 821-R-02-012.

Facility Name: NEWTON CITY OF STP

Permit Number: 5059002

Design Capacity

Design: 1

The design capacity for the treatment works is specified in the Department's Facility Plan approval letter dated April 14, 1983. The treatment plant is designed to treat:

* An average dry weather (ADW) flow of 2.9370 Million Gallons Per Day (MGD).
* An average wet weather (AWW) flow of 9.2020 Million Gallons Per Day (MGD).
* A maximum wet weather (MWW) flow of 13.0980 Million Gallons Per Day (MGD).
* A design 5-day biochemical oxygen demand (BOD5) load of 5980 lbs/day.
* A design Total Kjeldahl Nitrogen (TKN) load of 1500.00 lbs/day.
* A design Total Suspended Solids (TSS) load of 9170 lbs/day.

Operator Certification Type/Grade: WW/IV

Wastes in such volumes or quantities as to exceed the design capacity of the treatment works or reduce the effluent quality below that specified in the operation permit of the treatment works are considered to be a waste which interferes with the operation or performance of the treatment works and are prohibited by subrule IAC 567-62.1(7).

Facility Name: NEWTON CITY OF STP

Permit Number: 5059002

SEWAGE SLUDGE HANDLING AND DISPOSAL REQUIREMENTS

"Sewage sludge" is solid, semisolid, or liquid residue generated during the treatment of domestic sewage in a treatment works. Sewage sludge does not include the grit and screenings generated during preliminary treatment.

1. The permittee shall comply with all existing Federal and State laws and regulations that apply to the use and disposal of sewage sludge and with technical standards developed pursuant to Section 405(d) of the Clean Water Act when such standards are promulgated. If an applicable numerical limit or management practice for pollutants in sewage sludge is promulgated after issuance of this permit that is more stringent than a sludge pollutant limit or management practice specified in existing Federal or State laws or regulations, this permit shall be modified, or revoked and reissued, to conform to the regulations promulgated under Section 405(d) of the Clean Water Act. The permittee shall comply with the limitation no later than the compliance deadline specified in the applicable regulations.

2. The permittee shall provide written notice to the Department of Natural Resources prior to any planned changes in sludge disposal practices.

3. Land application of sewage sludge shall be conducted in accordance with criteria established in rule IAC 567 67.1 through 67.11 (455B).

MAJOR CONTRIBUTING INDUSTRIES LIMITATIONS, MONITORING AND REPORTING REQUIREMENTS

1. You are required to notify the department, in writing, of any of the following:

   (a) 180 days prior to the introduction of pollutants to your facility from a significant industrial user. A significant industrial user means an industrial user of a treatment works that:
      (1) Discharges an average of 25,000 gallons per day or more of process wastewater excluding sanitary, noncontact cooling and boiler blowdown wastewater;
      (2) Contributes a process waste stream which makes up five percent or more of the average dry weather hydraulic or organic capacity of the publicly-owned treatment works:
      (3) Is subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N; or
      (4) Is designated by the department as a significant industrial user on the basis that the contributing industry, either singly or in combination with other contributing industries, has a reasonable potential for adversely affecting the operation of or effluent quality from the publicly-owned treatment works or for violating any pretreatment standards or requirements.

   (b) 60 days prior to a proposed expansion, production increase or process modification that may result in the discharge of a new pollutant or a discharge in excess of limitations stated in the existing treatment agreement.

   (c) 10 days prior to any commitment by you to accept waste from any new significant industrial user. Your written notification must include a new or revised treatment agreement in accordance with rule 64.3(5)(455B).

2. You shall require all users of your facility to comply with Sections 204(b), 307 and 308 of the Clean Water Act.

Section 204(b) requires that all users of the treatment works constructed with funds provided under Sections 201(g) or 601 of the Act to pay their proportionate share of the costs of operation, maintenance and replacement of the treatment works.

Section 307 of the Act requires users to comply with pretreatment standards promulgated by EPA for pollutants that would cause interference with the treatment process or would pass through the treatment works.

Section 308 of the Act requires users to allow access at reasonable times to state and EPA inspectors for the purpose of sampling the discharge and reviewing and copying records.

3. You shall limit and monitor pollutants for each significant industrial user as required elsewhere in this permit, and submit sample results to the department monthly. Your report shall be submitted by the fifteenth day of the following month.

Revised: June 16, 2009 CAC

Nutrient Reduction Requirements

In support of the Iowa Nutrient Reduction Strategy you shall prepare and submit a report that evaluates the feasibility and reasonableness of reducing the amounts of nitrogen and phosphorus discharged into surface water. The report shall be submitted no later than **July 1, 2022** and shall address the following:

- A description of the existing treatment facility with particular emphasis on its capabilities for removing nitrogen and phosphorus. The description shall include monitoring data that define the current amounts of total nitrogen (TKN+nitrate+nitrite) and total phosphorus in both the raw wastewater and the final effluent.

- A description and evaluation of operational changes to the existing treatment facility that could be implemented to reduce the amounts of total nitrogen and total phosphorus discharged in the final effluent and the feasibility and reasonableness of each. Your evaluation must discuss the projected degree of total nitrogen and total phosphorus reduction achievable for each operational change. When evaluating feasibility you must consider what, if any, effect operational changes would have on the removal of other pollutants (e.g. $CBOD_5$, TSS). When evaluating reasonableness you shall include estimates of the additional cost, if any, to implement such changes and for a publicly-owned treatment works the impact on user rates.

- A description and evaluation of new or additional treatment technologies that would achieve significant reductions in the amounts of total nitrogen and total phosphorus discharged in the final effluent with a goal of achieving annual average concentrations of 10 mg/L total nitrogen and 1 mg/L total phosphorus for plants treating typical domestic strength sewage. For purposes of this evaluation typical domestic sewage is considered to contain approximately 25 – 35 mg/L total nitrogen and 4 - 8 mg/L total phosphorus. For plants treating wastewater with total nitrogen and/or total phosphorus concentrations greater than typical domestic strength sewage, the evaluation shall include the projected reductions in the total nitrogen and phosphorus effluent concentrations achievable with the application of feasible and reasonable treatment technology with a goal of achieving at least a 66 % reduction in nitrogen and 75% reduction in total phosphorus. For each treatment technology the report shall assess its feasibility, reasonableness, practicability, the availability of equipment, capital costs, annual operating costs, impact on user rates and any non-water quality environmental impacts (e.g. additional air pollution, increased sludge production, etc.).

- Based on the evaluations of operational changes and new or additional treatment technologies the report must select the preferred method(s) for reducing total nitrogen and total phosphorus in the final effluent, the rationale for the selected method(s) and an estimate of the effluent quality achievable.

- In addition to selecting operational changes and/or new or additional treatment technologies, the permittee may evaluate and propose to implement practices within the watershed that may achieve greater reductions in nitrogen or phosphorus than the preferred method(s) alone. Such evaluations are particularly encouraged when no feasible or reasonable operational changes or additional treatment technologies can be identified or when the schedule for installing the selected technology exceeds ten years.

- The report must include a schedule for making operational changes and/or installing new or additional treatment technologies to achieve the concentration and/or percentage removal goals listed above. Additional financial justification must be included in the report if no operational changes or treatment technologies are feasible or reasonable. The justification must include measures being taken to make the improvements more affordable in the future.

The schedule will be incorporated into the NPDES permit by amendment. Effluent discharge limits will be based on one full year of operating data after implementation of the operational changes or completion of plant modifications and a six month optimization period.

The report shall be sent to the following address:

NPDES.mail@dnr.iowa.gov
Subject: NRS Feasibility Report (5059002)

STANDARD CONDITIONS

1. **ADMINISTRATIVE RULES**
   Rules of this Department that govern the operation of your facility in connection with this permit are published in Part 567 of the Iowa Administrative Code (IAC) in Chapters 60-65, 67, and 121. Reference to the term "rule" in this permit means the designated provision of Part 567 of the IAC. Reference to the term "CFR" means the Code of Federal Regulations.

2. **DEFINITIONS**
   (a) 7 day average means the sum of the total daily discharges by mass, volume, or concentration during a 7 consecutive day period, divided by the total number of days during the period that measurements were made. Four 7 consecutive day periods shall be used each month to calculate the 7-day average. The first 7-day period shall begin with the first day of the month.
   (b) 30 day average means the sum of the total daily discharges by mass, volume, or concentration during a calendar month, divided by the total number of days during the month that measurements were made.
   (c) Daily maximum means the total discharge by mass, volume, or concentration during a twenty-four hour period.

3. **DUTY TO PROVIDE INFORMATION**
   You must furnish to the Director, within a reasonable time, any information the Director may request to determine compliance with this permit or determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, in accordance with 567 IAC 64.3(11)"*c*". You must also furnish to the Director, upon request, copies of any records required to be kept by this permit.

4. **MONITORING AND RECORDS OF OPERATION**
   (a) Maintenance of records. You shall retain for a minimum of three years all paper and electronic records of monitoring activities and results including all original strip chart recordings for continuous monitoring instrumentation and calibration and maintenance records. ***{See 567 IAC 63.2(3)}***
   (b) Any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000 or by imprisonment for not more than two years, or both. ***{See 40 CFR 122.41(j)(5)}***

5. **SIGNATORY REQUIREMENTS**
   Applications, reports or other information submitted to the Department in connection with this permit must be signed and certified in accordance with 567 IAC 64.3(8).

6. **OTHER INFORMATION**
   Where you become aware that you failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application, you must promptly submit such facts or information. Where you become aware that you failed to submit any relevant facts in the submission of in any report to the director, including records of operation, you shall promptly submit such facts or information.
   {See 567 IAC 60.4(2)"a" and 567 IAC 63.7}

7. **TRANSFER OF TITLE OR OWNER ADDRESS CHANGE**
   If title to your facility, or any part of it, is transferred the new owner shall be subject to this permit. You are required to notify the new owner of the requirements of this permit in writing prior to any transfer of title. The Director shall be notified in writing within 30 days of the transfer. No transfer of the authorization to discharge from the facility represented by the permit shall take place prior to notifying the department of the transfer of title. Whenever the address of the owner is changed, the department shall be notified in writing within 30 days of the address change. Electronic notification is not sufficient; all title transfers or address changes must be reported to the department by mail. ***{See 567 IAC 64.14}***

8. **PROPER OPERATION AND MAINTENANCE**
   All facilities and control systems shall be operated as efficiently as possible and maintained in good working order. A sufficient number of staff, adequately trained and knowledgeable in the operation of your facility shall be retained at all times and adequate laboratory controls and appropriate quality assurance procedures shall be provided to maintain compliance with the conditions of this permit.
   {See 40 CFR 122.41(e) and 567 IAC 64.7(7)"f"}

9. **PERMIT MODIFICATION, SUSPENSION OR REVOCATION**
   (a) This permit may be modified, suspended, or revoked and reissued for cause including but not limited to those specified in 567 IAC 64.3(11).
   (b) This permit may be modified due to conditions or information on which this permit is based, including any new standard the department may adopt that would change the required effluent limits. ***{See 567 IAC 64.3(11)}***
   (c) If a toxic pollutant is present in your discharge and more stringent standards for toxic pollutants are established under Section 307(a) of the Clean Water Act, this permit will be modified in accordance with the new standards.
   {See 40 CFR 122.62(a)(6) and 567 IAC 64.7(7)"g"}

   The filing of a request for a permit modification, revocation or suspension, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

10. **DUTY TO REAPPLY AND PERMIT CONTINUATION**
    If you wish to continue to discharge after the expiration date of this permit, you must file a complete application for reissuance at least 180 days prior to the expiration date of this permit. If a timely and sufficient application is submitted, this permit will remain in effect until the Department makes a final determination on the permit application. ***{See 567 IAC 64.8(1) and Iowa Code 17A.18}***

11. **DUTY TO COMPLY**
    You must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. Issuance of this permit does not relieve you of the responsibility to comply with all local, state and federal laws, ordinances, regulations or other legal requirements applying to the operation of your facility. ***{See 40 CFR 122.41(a) and 567 IAC 64.7(4)"e"}***

12. DUTY TO MITIGATE
You shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment. ***{See 40 CFR 122.41(d) and 567 IAC 64.7(7)"i"}***

13. TWENTY-FOUR HOUR REPORTING
You shall report any noncompliance that may endanger human health or the environment, including, but not limited to, violations of maximum daily limits for any toxic pollutant (listed as toxic under 307(a)(1) of the Clean Water Act) or hazardous substance (as designated in 40 CFR Part 116 pursuant to 311 of the Clean Water Act). Information shall be provided orally within 24 hours from the time you become aware of the circumstances. A written submission that includes a description of noncompliance and its cause; the period of noncompliance including exact dates and times, whether the noncompliance has been corrected or the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent a reoccurrence of the noncompliance must be provided within 5 days of the occurrence. ***{See 567 IAC 63.12}***

14. OTHER NONCOMPLIANCE
You shall report all instances of noncompliance not reported under Condition #13 at the time monitoring reports are submitted. You shall give advance notice to the appropriate regional field office of the department of any planned activity which may result in noncompliance with permit requirements. ***{See 567 IAC 63.14}***

15. INSPECTION OF PREMISES, RECORDS, EQUIPMENT, METHODS AND DISCHARGES
You are required to permit authorized personnel to:
(a) Enter upon the premises where a regulated facility or activity is located or conducted or where records are kept under conditions of this permit;
(b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
(c) Inspect, at reasonable times, any facilities, equipment, practices or operations regulated or required under this permit; and
(d) Sample or monitor, at reasonable times, to assure compliance or as otherwise authorized by the Clean Water Act.

16. FAILURE TO SUBMIT FEES
This permit may be revoked, in whole or in part, if the appropriate permit fees are not submitted within thirty (30) days of the date of notification that such fees are due. ***{See 567 IAC 64.16(1)}***

17. NEED TO HALT OR REDUCE ACTIVITY
It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. ***{See 40 CFR 122.41(c) and 567 IAC 64.7(7)"j"}***

18. NOTICE OF CHANGED CONDITIONS
You are required to notify the director of any changes in existing conditions or information on which this permit is based. This includes, but is not limited to, the following:
(a) If your facility is a publicly owned treatment works (POTW) or otherwise may accept waste for treatment from an indirect discharger or industrial contributor (See 567 IAC 64.3(5) for further notice requirements).
(b) If your facility is a POTW and there is any substantial change in the volume or character of pollutants being introduced to the POTW by a source introducing pollutants into the POTW at the time of issuance of the permit. ***{See 40 CFR 122.42(b)}***
(c) As soon as you know or have reason to believe that any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in this permit. ***{See 40 CFR 122.42(a)}***
(d) If you have begun or will begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant which was not reported in the permit application.

19. PLANNED CHANGES
The permittee shall give notice to the appropriate regional field office of the department 30 days prior to any planned physical alterations or additions to the permitted facility. Notice is required only when:
(a) Notice has not been given to any other section of the department. (Note: Facility expansions, production increases, or process modifications which may result in new or increased discharges of pollutants must be reported to the Director in advance. If such discharges will exceed effluent limitations, your report must include an application for a new permit. If any modification of, addition to, or construction of a disposal system is to be made, you must first obtain a written permit from this Department. In addition, no construction activity that will result in disturbance of one acre or more shall be initiated without first obtaining coverage under NPDES General Permit No. 2 for "Storm water discharge associated with construction activity.") ***{See 567 IAC 64.7(7)"a" and 64.2}***
(b) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source as defined in 567 IAC 60.2;
(c) The alteration or addition results in a significant change in the permittee's sludge use or disposal practices; or
(d) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are not subject to effluent limitations in the permit. ***{See 567 IAC 63.13 and 63.14}***

20. USE OF CERTIFIED LABORATORIES
Analyses of wastewater, groundwater or sewage sludge that are required to be submitted to the department as a result of this permit must be performed by a laboratory certified by the State of Iowa. Routine, on-site monitoring for pH, temperature, dissolved oxygen, total residual chlorine and other pollutants that must be analyzed immediately upon sample collection, settleable solids, physical measurements, and operational monitoring tests specified in 567 IAC 63.3(4) are excluded from this requirement.

21. BYPASSES

(a) Definition. "Bypass" means the diversion of waste streams from any portion of a treatment facility or collection system. A bypass does not include internal operational waste stream diversions that are part of the design of the treatment facility, maintenance diversions where redundancy is provided, diversions of wastewater from one point in a collection system to another point in a collection system, or wastewater backups into buildings that are caused in the building lateral or private sewer line.

(b) Prohibitions.

i. Bypasses from any portion of a treatment facility or from a sanitary sewer collection system designed to carry only sewage are prohibited.

ii. Bypass is prohibited and the department may not assess a civil penalty against a permittee for bypass if the permittee has complied with all of the following:

(1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; and

(2) There were no feasible alternatives to the bypass such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

(3) The permittee submitted notices as required by paragraph (d) of this section.

(c) The Director may approve an anticipated bypass after considering its adverse effects if the Director determines that it will meet the three conditions listed above and a request for bypass has been submitted to the Department in accordance with 567 IAC 63.6(2).

(d) Reporting bypasses. Bypasses shall be reported in accordance with 567 IAC 63.6.

22. UPSET PROVISION

(a) Definition. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

(b) Effect of an upset. An upset constitutes an affirmative defense in an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph *"c"* of this condition are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

(c) Conditions necessary for demonstration of an upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate through properly signed operating logs or other relevant evidence that;

i. An upset occurred and that the permittee can identify the cause(s) of the upset;

ii. The permitted facility was at the time being properly operated;

iii. The permittee submitted notice of the upset to the Department in accordance with 567 IAC 63.6(3); and

iv. The permittee complied with any remedial measures required in accordance with 567 IAC 63.6(6)"*b*".

(d) Burden of Proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

23. PROPERTY RIGHTS

This permit does not convey any property rights of any sort or any exclusive privilege. ***{See 567 IAC 64.4(3)"b"}***

24. EFFECT OF A PERMIT

Compliance with a permit during its term constitutes compliance, for purposes of enforcement, with Sections 301, 302, 306, 307, 318, 403 and 405(a)-(b) of the Clean Water Act, and equivalent limitations and standards set out in 567 IAC Chapters 61 and 62. ***{See 567 IAC 64.4(3)"a"}***

25. SEVERABILITY

The provisions of this permit are severable and if any provision or application of any provision to any circumstance is found to be invalid by this department or a court of law, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected by such finding.

Appendix H.4 –
Leachate Head & Elevation Data

NEWTON SANITARY LANDFILL 50-SDP-1-75P
LEACHATE ELEVATIONS
Area A

	LW-201	LW-202	LW-203	LW-204	LW-205	LW-206	LW-207	LW-208
TOP PVC, FT.	876.70	907.11	873.86	916.80	858.19	874.10	883.58	893.94
(Revised)			883.86					
DATE								
06/29/1992								
12/14/1992								
01/28/1993								
03/05/1993								
09/14/1993								
03/14/1994								
09/06/1994	851.50	879.11	866.06	882.00	840.79	863.80	858.78	865.94
03/14/1995	851.70	879.41	865.26	881.65	839.29	862.50	855.58	866.99
09/25/1995	851.80	879.61	867.26	881.78	841.69	863.70	855.58	867.76
03/19/1996	851.80	879.61	865.46	881.80 dry		862.30	855.78	867.24
09/05/1996	851.90	880.01	865.76	884.00	842.79	863.20	856.88	867.64
01/20/1997	851.87	879.78	866.41	882.36	841.08	862.52	855.71	868.28
03/12/1997	852.00	880.11	866.36	884.70	840.19	862.00	856.18	867.24
04/24/1997	851.89	880.11	866.33	884.63	840.09	861.98	856.28	868.29
05/24/1997	851.87	880.06	866.37	884.51	840.05	861.98	856.41	869.36
06/27/1997	851.88	880.60	866.56	884.47	840.23	862.23	856.28	868.33
07/30/1997	851.88	880.93	861.71	884.37	841.68	862.62	856.07	868.20
09/10/1997	851.80	880.11	861.76	883.50	841.79	863.30	856.18	867.94
01/15/1998	851.87	879.95	861.72	884.78	839.54	862.52	856.66	870.58
03/25/1998	852.10	880.61	861.56	885.80	839.69	862.50	858.88	873.44
07/21/1998	851.95	881.29	862.02	885.17	843.23	863.09	859.03	871.01
08/31/1998	852.06	881.19	861.05	885.19	842.07	863.98	858.24	870.09
09/08/1998	852.10	881.21	861.06	885.20	842.09	864.00	858.28	870.04
01/30/1999	851.89	879.98	862.27	884.77	839.45	862.77	856.72	869.47
03/10/1999	851.80	880.11	862.06	884.80	839.19	862.60	857.98	870.84
05/30/1999	851.90	880.07	862.28	885.21	841.83	863.71	858.43	871.38
06/26/1999	851.88	880.29	862.47	885.46	842.64	863.78	857.20	870.91
07/30/1999	851.96	880.69	863.77	885.20	842.16	864.01	858.03	870.45
08/30/1999	851.98	880.32	864.33	885.41	842.76	864.37	857.81	870.42
09/05/1999	850.00	880.31	864.46	885.20	842.69	864.30	857.88	871.34
03/27/2000	852.00	880.11	863.86	885.10	839.19	862.80	857.78	869.74
09/14/2000	851.90	880.27	864.04	884.90	841.48	864.60	857.78	870.14
03/19/1901	852.20	880.51	862.96	885.70	838.99	862.90	857.58	870.84
08/31/1901	852.00	878.91	856.96	884.80	843.09	863.90	858.08	870.74
03/19/2002	851.70	880.11	855.06	884.40	839.39	862.80	858.18	870.54
09/06/2002	851.70	879.61	862.96	884.00	843.69	863.40	858.48	871.04
03/27/2003	851.70	880.11	862.26	883.80	839.49	862.10	858.08	870.94
09/20/2003	852.00	878.13	863.38	884.52	842.21	862.98	858.62	871.56
03/24/2004	852.50	880.11	863.16	885.60	842.19	862.80	860.48	873.54
09/11/2004	851.70	880.91	863.46	884.40	844.39	864.80	860.38	873.34
03/02/2005	852.40	880.41	NT	885.20	842.39	862.80	860.18	873.14
09/09/2005	851.91	880.61	863.30	884.29	843.08	864.26	860.12	873.07
03/09/2006	852.20	880.59	862.87	884.82	840.28	863.04	860.17	872.34
06/29/2006	851.92	880.31	863.11	884.81	843.33	863.99	860.03	872.68
09/01/2006	851.92	880.66	863.40	885.50	844.09	864.33	860.39	873.34
12/26/2006	852.21	880.71	863.36	885.49	843.82	864.42	861.83	873.36
03/27/2007	852.31	879.77	863.62	885.51	844.25	864.85	861.20	872.92
06/20/2007	852.07	880.69	863.56	884.71	845.51	865.43	864.21	872.99
09/24/2007	851.92	880.73	863.40	883.29	844.69	866.19	863.12	874.21
12/21/2007	852.23	880.80	863.38	882.69	844.86	865.07	862.99	873.86
03/19/2008	852.66	881.04	863.80	884.80	844.72	865.31	862.99	873.55
06/09/2008	852.40	881.13	864.16	885.04	847.57	866.59	863.82	874.11
09/15/2008	851.70	880.81	863.56	883.70	844.99	866.10	864.18	873.64
12/22/2008	851.50	880.81	863.16	882.80	843.89	864.60	863.58	873.24
03/05/2009	852.10	880.41	862.86	883.80	843.79	864.30	863.18	873.44
06/24/2009	852.30	881.11	863.66	884.70	847.29	866.00	863.98	874.64
09/12/2009	852.00	880.91	863.66	883.40	845.89	865.90	864.78	874.64
12/07/2009	852.10	880.81	863.46	882.50	844.59	866.10	864.28	874.54
03/30/2010	852.40	880.01	865.91	885.50	846.29	865.90	864.98	875.34
06/28/2010	852.40	879.96	865.71	885.80	848.09	866.10	864.88	875.89
09/27/2010	851.90	879.81	865.06	885.60	847.29	865.30	864.28	875.54

NEWTON SANITARY LANDFILL 50-SDP-1-75P

LEACHATE ELEVATIONS

Area A

	LW-201	LW-202	LW-203	LW-204	LW-205	LW-206	LW-207	LW-208
TOP PVC, FT.	876.70	907.11	873.86	916.80	858.19	874.10	883.58	893.94
(Revised)	876.00		883.86					
DATE								
03/23/2011	855.30	880.01	862.51	885.80	843.39	864.00	862.28	872.14
09/08/2011	855.30	879.51	863.16	885.30	846.19	865.15	862.98	873.84
12/05/2011	852.00	879.46	862.56	885.60	843.99	864.20	861.98	873.34
02/15/2012	852.27	879.76	862.86	882.73	847.60	863.79	863.53	876.17
03/08/2012	851.50	880.61	862.66	885.45	843.49	863.80	862.68	873.04
04/23/2012	852.32	880.28	863.29	885.85	847.59	864.82	865.35	873.54
05/21/2012	852.38	881.17	863.55	886.16	847.80	865.10	865.08	878.80
06/21/2012	851.90	879.81	863.11	886.00	849.09	863.25	864.68	873.79
07/25/2012	852.11	880.18	863.23	885.85	847.68	864.83	864.06	874.16
08/27/2012	851.80	880.16	863.49	886.15	847.80	864.56	863.19	874.39
09/24/2012	851.70	880.91	862.56	886.00	844.99	864.40	862.98	873.44
10/30/2012	851.90	880.09	863.31	885.97	844.55	864.28	863.06	873.97
12/05/2012	851.70	880.81	862.46	885.50	844.19	864.30	862.68	873.54
01/15/2013	851.91	879.99	862.50	885.55	843.81	864.19	862.86	873.56
02/15/2013	851.91	880.04	863.19	886.12	845.51	864.79	863.21	873.72
03/15/2013	852.30	880.21	863.01	886.20	845.39	865.10	863.28	874.14
04/15/2013	852.50	880.11	863.46	#VALUE!	847.79	865.70	864.58	874.94
05/15/2013	852.55	880.21	863.61	886.52	848.43	865.95	865.36	875.59
06/21/2013	851.90	879.81	863.11	886.00	849.09	863.25	864.68	873.79
07/10/2013	852.40	881.91	863.61	890.05	848.19	866.20	865.78	874.94
08/20/2013	852.25	880.51	863.76	886.80	847.39	865.75	864.83	874.79
09/24/2013	852.20	879.91	863.06	886.45	846.79	865.15	864.63	874.84
10/09/2013	852.10	881.41	863.51	886.60	846.48	865.70	864.78	877.39
11/13/2013	852.05	880.46	862.76	886.15	847.19	864.70	864.18	874.54
12/19/2013	852.00	880.86	862.66	885.60	843.99	864.40	863.53	874.74
01/14/2014	851.10	879.71	862.46	885.00	845.49	864.20	863.48	874.54
02/19/2014	852.10	879.61	862.31	886.70	842.59	863.85	863.67	874.79
03/24/2014	851.90	880.91	862.06	886.40	841.89	863.40	863.28	873.64
04/11/2014	850.90	879.71	862.16	886.70	843.44	863.45	863.18	873.74
05/19/2014	852.00	879.81	862.66	886.60	846.29	863.87	863.33	875.99
06/09/2014	851.90	881.16	862.86	886.30	847.59	864.70	863.88	875.24
07/25/2014	852.00	880.66	863.36	885.30	848.34	865.85	867.27	876.72
08/18/2014	848.00	880.16	863.06	886.30	847.79	865.80	864.78	874.74
09/25/2014	851.70	881.11	863.21	885.95	848.69	866.40	864.88	875.04
10/28/2014	848.00	879.31	863.11	885.10	847.69	866.00	864.28	874.44
11/20/2014	851.50	879.81	863.16	885.15	847.24	866.00	864.45	874.94
12/05/2014	852.10	881.01	862.96	884.80	840.04	865.75	864.38	874.54
01/16/2015	852.05	879.81	862.86	884.40	846.29	865.10	864.08	874.64
02/11/2015	852.55	880.41	863.86	885.90	847.29	864.90	864.58	874.44
03/11/2015	852.30	880.71	862.66	885.20	845.59	863.50	863.53	874.24
04/13/2015	851.80	879.81	862.91	885.30	847.19	864.90	863.58	874.14
05/05/2015	852.68	880.01	863.16	885.50	847.89	865.10	863.78	874.74
06/16/2015	852.50	881.11	863.11	885.20	847.79	865.15	863.68	874.39
07/07/2015	853.00	881.11	864.01	886.70	847.19	865.50	864.58	883.74
08/11/2015	852.60	881.96	863.91	887.80	848.54	865.70	863.98	881.04
09/17/2015	851.90	881.11	863.26	886.40	847.84	865.82	864.38	875.44
10/06/2015	852.38	882.11	863.76	887.25	847.89	865.50	864.56	875.44
11/18/2015	852.20	881.81	863.76	887.90	846.99	865.10	865.08	875.74
12/17/2015	852.70	881.01	863.26	886.75	845.99	865.50	864.73	875.14
01/06/2016	852.80	881.29	863.51	887.60	847.54	865.39	865.01	875.44
02/19/2016	852.50	881.71	867.16	888.30	847.24	865.50	864.98	875.64
03/22/2016	852.50	880.34	866.30	887.88	848.22	865.72	864.16	881.13
04/26/2016	852.60	880.81	866.26	888.60	848.39	865.60	864.78	876.34
05/24/2016	852.90	880.61	865.76	889.80	848.69	865.70	864.10	883.94
06/23/2016	852.45	880.98	864.31	887.55	848.29	865.40	863.93	874.84
07/29/2016	852.45	880.11	863.96	887.79	848.39	865.00	864.18	883.44
08/24/2016	852.40	880.11	863.86	888.00	848.39	865.25	863.73	875.44
09/14/2016	852.19	880.91	863.39	887.43	847.79	865.15	863.28	874.88
10/14/2016	852.15	881.51	863.47	889.00	847.34	865.10	863.73	875.44
11/16/2016	852.15	880.81	863.56	889.05	847.23	864.85	864.78	875.44
12/15/2016	853.40	880.61	862.86	887.05	844.59	864.70	862.98	875.89

NEWTON SANITARY LANDFILL 50-SDP-1-75P

LEACHATE ELEVATIONS

Area A

	LW-201	LW-202	LW-203	LW-204	LW-205	LW-206	LW-207	LW-208
TOP PVC, FT.	876.70	907.11	873.86	916.80	858.19	874.10	883.58	893.94
(Revised)	876.00		883.86					
DATE								
01/11/2017	852.20	880.06	863.61	887.10	847.59	864.30	863.93	875.91
02/14/2017	852.38	880.11	862.86	887.45	847.62	864.07	863.13	881.04
03/23/2017	852.35	881.11	862.66	886.70	845.82	863.63	863.50	874.54
04/20/2017	852.60	880.91	863.16	886.65	848.19	864.10	863.58	883.44
05/22/2017	852.60	879.91	863.21	886.70	848.29	864.75	863.48	876.24
06/09/2017	852.38	881.01	863.04	886.20	848.44	864.95	863.63	875.34
07/19/2017	852.50	880.71	863.21	886.20	848.19	865.00	864.88	883.24
08/23/2017	852.20	880.11	862.61	886.20	847.89	864.75	863.58	881.93
09/08/2017	852.17	879.91	862.76	885.97	847.23	864.66	863.52	874.59
10/13/2017	852.10	880.13	862.66	886.00	847.29	864.60	863.78	874.99
11/15/2017	852.40	879.81	862.36	885.50	845.79	864.15	863.43	875.34
12/05/2017	852.20	880.71	862.61	885.85	845.12	864.35	863.33	874.91
01/09/2018	852.35	879.81	862.46	886.00	845.89	864.00	863.48	874.74
02/21/2018	852.40	879.41	862.11	884.45	845.61	863.42	863.08	873.94
03/19/2018	852.36	881.26	862.41	886.03	845.16	863.60	863.51	875.29
04/30/2018	852.50	880.21	862.26	885.20	845.69	863.60	863.88	874.74
05/30/2018	852.90	880.01	862.96	886.60	848.94	864.90	863.83	874.94
06/05/2018	852.50	881.06	862.46	886.20	848.83	865.05	863.73	875.68
07/27/2018	852.40	880.91	863.36	887.20	849.04	865.60	864.63	874.74
8/30./2018	852.30	880.86	863.26	886.50	848.49	865.55	864.38	875.54
09/11/2018	852.20	881.01	863.15	886.36	848.78	865.70	865.23	877.92
10/30/2018	852.30	881.51	860.86	886.90	848.44	865.95	864.68	875.64
11/29/2018	852.10	879.96	860.16	885.07	848.44	865.70	864.21	875.84
12/05/2018	852.28	880.94	863.21	886.30	847.18	865.65	864.36	876.63
1/28/2019	852.20	879.91	860.06	885.10	848.44	865.80	864.43	875.74
2/28/2019	852.25	880.31	860.16	886.00	848.49	865.95	864.58	875.44
3/26/2019	852.65	880.89	862.97	887.07	847.88	864.73	863.88	880.89
4/26/2019	852.32	880.41	859.96	886.40	848.69	866.00	863.48	875.96
5/15/2019	852.80	881.46	861.26	887.60	848.84	864.90	863.83	875.54
6/6/2019	853.10	881.01	863.45	887.55	849.02	865.50	864.67	880.39
7/24/2019	853.00	881.61	863.96	888.10	848.29	865.45	864.58	875.34
8/28/2019	852.55	881.46	863.66	887.90	848.09	865.30	864.18	875.14
9/4/2019	852.40	880.91	863.30	887.49	847.70	865.21	864.34	876.10
10/28/2019	852.50	882.71	863.96	887.50	847.94	865.45	864.68	877.04
11/25/2019	851.50	879.29	862.26	886.90	847.37	865.60	864.63	884.44
12/4/2019	853.10	881.01	863.45	887.55	849.02	865.50	864.67	880.39
1/30/2020	851.50	879.21	862.21	887.80	847.69	865.40	864.68	877.44
2/21/2020	852.70	880.11	863.56	888.00	845.99	864.50	863.83	877.54
3/2/2020	852.69	881.21	864.49	887.75	847.19	864.79	864.11	883.48
April, 2020	NR	NR	NR	NR	NR	NR	NR	NR
5/21/2020	853.00	879.91	863.56	887.80	848.24	865.30	866.73	877.24
6/18/2020	852.72	881.36	863.64	887.57	848.82	865.40	863.98	883.87
7/14/2020	852.80	880.81	864.16	887.70	848.22	865.40	864.33	877.74
8/29/2020	852.50	894.51	863.56	889.60	848.39	865.45	864.93	884.24
9/15/2020	852.41	880.20	863.42	887.56	847.99	865.19	863.87	883.87
12/3/2020	852.29	880.16	863.11	887.39	845.85	864.80	863.83	882.54
3/2/2021	852.84	880.38	864.93	888.00	847.21	865.15	864.01	869.69
6/2/2021	852.67	881.39	864.06	887.85	848.47	864.94	863.98	869.84
9/7/2021	852.32	881.26	862.96	887.70	848.42	865.06	864.11	877.46
12/3/2021	852.40	881.11	863.21	887.64	847.51	865.18	863.78	882.73
3/24/2022	852.38	881.36	862.96	887.55	847.19	864.30	863.86	877.07
6/13/2022	852.51	880.21	863.46	887.22	843.95	864.69	863.94	878.43
9/1/2022	852.13	884.41	862.98	886.88	847.74	864.48	863.57	882.09
12/2/2022	852.15	880.95	862.32	886.67	845.00	864.04	863.98	875.83
3/2/2023	851.80	875.86	862.04	882.50	841.04	857.10	863.08	874.99
6/8/2023	851.80	881.07	862.94	886.52	847.58	863.80	863.49	877.60
9/12/2023	852.30	880.15	863.09	886.05	848.15	864.41	863.23	876.38
12/21/2023	852.21	880.95	862.56	886.65	846.51	864.00	863.32	875.19
3/4/2024	852.23	880.78	862.51	886.70	843.66	863.42	863.38	875.19
6/3/2024	851.85	880.51	863.27	887.08	848.47	863.50	863.48	878.09
9/23/2024	852.13	881.08	863.36	885.99	848.39	864.77	864.06	884.04
12/11/2024	851.95	879.83	863.11	886.25	847.29	864.42	863.69	877.13

NEWTON SANITARY LANDFILL 50-SDP-1-75P
LEACHATE THICKNESS
Area B, C, and D

	LPZ-101	LPZ-102	LPZ-103	LPZ-104	LPZ-105	GPZ-301	GPZ-302
TOP PVC, FT.	867.00						
DEPTH TO BTM	10.2	8.9	11.8	5.7	7.15	12.3	9
	13.4						
DATE							
03/08/2012	DRY						
04/23/2012	DRY						
05/21/2012	DRY						
06/21/2012	DRY						
07/25/2012	DRY						
08/27/2012	DRY						
09/24/2012	DRY						
10/30/2012	DRY						
12/05/2012	DRY						
01/15/2013	DRY						
02/15/2013	DRY						
03/15/2013	DRY						
04/15/2013	DRY						
05/15/2013	DRY						
06/21/2013	DRY						
07/10/2013	DRY						
08/20/2013	DRY						
09/24/2013	DRY	0.05	3.00	DRY	1.55	DRY	0.00
10/09/2013	DRY	0.10	3.00	1.00	2.85	NR	NR
11/13/2013	DRY	DRY	0.45	1.35	3.15	NR	NR
12/19/2013	DRY	DRY	0.50	1.80	3.55	DRY	0.00
01/14/2014	DRY	DRY	0.45	1.70	3.35	NR	NR
02/19/2014	DRY	DRY	0.45	1.65	3.33	NR	NR
03/24/2014	DRY	DRY	0.40	1.70	3.45	DRY	0.00
04/11/2014	DRY	DRY	0.45	0.20	0.35	NR	NR
05/19/2014	DRY	DRY	0.40	1.43	3.15	NR	NR
06/09/2014	DRY	DRY	0.50	1.40	3.15	DRY	0.00
07/25/2014	DRY	DRY	0.40	DRY	0.20	NR	NR
08/18/2014	DRY	DRY	1.37	DRY	0.15	NR	NR
09/25/2014	DRY	NR	0.45	DRY	0.15	DRY	0.00
10/28/2014	DRY	DRY	0.35	DRY	0.15	NR	NR
11/20/2014	DRY	DRY	0.20	DRY	0.05	NR	NR
12/05/2014	DRY	DRY	0.45	DRY	0.20	DRY	0.00
01/16/2015	DRY	DRY	0.45	DRY	DRY	NR	NR
02/11/2015	DRY	DRY	0.40	DRY	1.25	NR	NR
03/11/2015	DRY	DRY	0.10	DRY	0.20	DRY	DRY
04/13/2015	DRY	DRY	0.25	DRY	0.15	NR	NR
05/05/2015	DRY	DRY	0.40	DRY	0.15	NR	NR
06/16/2015	DRY	DRY	0.40	DRY	0.15	DRY	DRY
07/07/2015	DRY	DRY	0.45	DRY	DRY	NR	NR
08/11/2015	DRY	DRY	0.40	DRY	DRY	NR	NR
09/17/2015	DRY	DRY	0.45	DRY	DRY	0.05	DRY
10/06/2015	DRY	DRY	0.39	DRY	DRY	NR	NR
11/18/2015	DRY	DRY	DRY	0.09	0.15	NR	NR
12/17/2015	DRY	DRY	0.45	0.10	0.20	DRY	DRY
01/06/2016	DRY	DRY	0.45	DRY	DRY	NR	NR
02/19/2016	DRY	DRY	0.45	DRY	DRY	NR	NR
03/22/2016	DRY	DRY	0.44	0.05	0.15	DRY	DRY
04/26/2016	DRY	DRY	0.40	DRY	DRY	NR	NR
05/24/2016	DRY	DRY	0.40	DRY	DRY	NR	NR
06/23/2016	DRY	DRY	0.45	DRY	0.05	DRY	DRY
07/29/2016	DRY	DRY	0.45	DRY	1.02	NR	NR
08/24/2016	DRY	DRY	0.45	DRY	DRY	NR	NR
09/14/2016	DRY	DRY	0.40	0.03	0.20	DRY	DRY

NEWTON SANITARY LANDFILL 50-SDP-1-75P
LEACHATE THICKNESS
Area B, C, and D

	LPZ-101	LPZ-102	LPZ-103	LPZ-104	LPZ-105	GPZ-301	GPZ-302
TOP PVC, FT.	867.00						
DEPTH TO BTM	10.2	8.9	11.8	5.7	7.15	12.3	9
	13.4						
10/14/2016	DRY	DRY	0.40	DRY	DRY	NR	NR
11/16/2016	DRY	DRY	0.50	DRY	DRY	NR	NR
12/15/2016	DRY	DRY	0.50	DRY	0.25	DRY	DRY
01/11/2017	DRY	DRY	0.45	DRY	DRY	NR	NR
02/14/2017	DRY	DRY	0.25	DRY	DRY	NR	NR
03/23/2017	DRY	DRY	0.35	DRY	0.10	DRY	DRY
04/20/2017	DRY	DRY	0.34	DRY	DRY	NR	NR
05/22/2017	DRY	DRY	0.50	DRY	DRY	NR	NR
06/09/2017	DRY	DRY	0.45	DRY	0.10	DRY	DRY
07/19/2017	DRY	DRY	0.45	DRY	DRY	NR	NR
08/23/2017	DRY	DRY	0.20	DRY	DRY	NR	NR
09/08/2017	DRY	DRY	0.46	0.05	DRY	DRY	DRY
10/13/2017	DRY	DRY	0.40	DRY	DRY	NR	NR
11/15/2017	DRY	DRY	0.45	DRY	DRY	NR	NR
12/05/2017	DRY	DRY	0.45	DRY	0.10	DRY	DRY
1/9/2018	DRY	DRY	0.45	DRY	DRY	NR	NR
2/21/2018	DRY	DRY	0.45	DRY	DRY	NR	NR
3/19/2018	DRY	DRY	0.45	DRY	0.35	DRY	DRY
4/30/2018	DRY	DRY	0.55	DRY	DRY	NR	NR
5/30/2018	DRY	DRY	0.45	DRY	DRY	NR	NR
6/5/2018	DRY	DRY	0.48	DRY	0.40	DRY	DRY
7/27/2018	DRY	DRY	0.50	DRY	0.40	NR	NR
8/30/2018	DRY	DRY	0.50	DRY	0.35	NR	NR
9/11/2018	DRY	DRY	0.50	0.80	2.15	DRY	DRY
10/30/2018	DRY	DRY	0.45	1.75	3.15	NR	NR
11/29/2018	DRY	DRY	0.40	2.70	3.95	NR	NR
12/5/2018	DRY	DRY	0.20	2.70	4.50	DRY	DRY
1/28/2019	DRY	DRY	0.30	DRY	DRY	NR	NR
2/28/2019	DRY	DRY	0.35	DRY	DRY	NR	NR
3/26/2019	DRY	DRY	0.45	0.05	0.10	DRY	DRY
4/26/2019	0.10	DRY	0.37	DRY	DRY	NR	NR
5/15/2019	DRY	DRY	0.40	DRY	DRY	NR	NR
6/6/2019	DRY	DRY	0.48	DRY	0.15	0.2	DRY
7/24/2019	DRY	DRY	0.40	DRY	DRY	NR	NR
8/28/2019	DRY	DRY	0.40	DRY	DRY	NR	NR
9/4/2019	DRY	DRY	0.42	0.05	0.10	DRY	DRY
10/28/2019	DRY	DRY	0.40	DRY	DRY	NR	NR
11/25/2019	DRY	DRY	0.30	DRY	DRY	NR	NR
12/4/2019	DRY	DRY	0.45	0.03	0.12	DRY	DRY
1/30/2020	DRY	DRY	0.40	DRY	DRY	NR	NR
2/21/2020	DRY	DRY	0.40	DRY	DRY	NR	NR
3/2/2020	DRY	DRY	0.45	DRY	DRY	DRY	0.2
April 2020	NR	NR	NR	NR	NR	NR	NR
5/21/2020	DRY	DRY	0.35	DRY	DRY	NR	NR
6/18/2020	DRY	DRY	0.47	0.02	0.10	DRY	0.3
7/14/2020	DRY	DRY	0.35	DRY	DRY	NR	NR
8/29/2020	DRY	DRY	0.50	DRY	DRY	NR	NR
9/15/2020	DRY	DRY	0.45	0.02	0.15	DRY	DRY
10/30/2020	DRY	DRY	*	DRY	*	NR	NR
11/10/2020	DRY	DRY	*	DRY	*	NR	NR
12/3/2020	DRY	DRY	*	0.05	*	DRY	DRY
1/8/2021	DRY	DRY	*	DRY	*	NR	NR
2/23/2021	DRY	DRY	*	DRY	*	NR	NR
3/2/2021	DRY	DRY	0.45	DRY	0.10	DRY	0.4
4/27/2021	DRY	DRY	*	DRY	*	NR	NR

NEWTON SANITARY LANDFILL 50-SDP-1-75P
LEACHATE THICKNESS
Area B, C, and D

	LPZ-101	LPZ-102	LPZ-103	LPZ-104	LPZ-105	GPZ-301	GPZ-302
TOP PVC, FT.	867.00						
DEPTH TO BTM	10.2	8.9	11.8	5.7	7.15	12.3	9
	13.4						
5/25/2021	DRY	DRY	*	DRY	*	NR	NR
6/2/2021	DRY	DRY	0.50	DRY	0.15	DRY	0.4
7/7/2021	DRY	DRY	*	DRY	*	NR	NR
8/10/2021	DRY	DRY	*	DRY	*	NR	NR
9/7/2021	DRY	DRY	0.47	0.01	0.12	DRY	DRY
10/19/2021	DRY	DRY	*	DRY	*	NR	NR
11/8/2021	DRY	DRY	*	DRY	*	NR	NR
12/3/2021	DRY	DRY	0.57	0.02	0.13	DRY	DRY
1/4/2022	DRY	DRY	*	DRY	*	*	*
2/11/2022	DRY	DRY	*	DRY	*	*	*
3/24/2022	DRY	DRY	0.55	DRY	0.10	DRY	DRY
4/28/2022	DRY	DRY	*	DRY	*	*	*
5/14/2022	DRY	DRY	*	DRY	*	*	*
6/13/2022	DRY	DRY	0.55	0.01	0.10	DRY	DRY
7/13/2022	DRY	DRY	*	DRY	*	*	*
8/11/2022	DRY	DRY	*	DRY	*	*	*
9/1/2022	DRY	DRY	0.56	DRY	0.15	DRY	DRY
10/10/2022	DRY	DRY	*	DRY	*	*	*
11/8/2022	DRY	DRY	*	DRY	*	*	*
12/2/2022	DRY	DRY	0.55	DRY	0.10	DRY	DRY
1/9/2023	DRY	DRY	*	DRY	*	*	*
2/24/2023	DRY	DRY	*	DRY	*	*	*
3/23/2023	DRY	DRY	0.30	DRY	DRY	DRY	DRY
4/27/2023	DRY	DRY	*	DRY	*	*	*
5/18/2023	DRY	DRY	*	DRY	*	*	*
6/8/2023	DRY	DRY	0.50	0.04	0.10	0.2	DRY
7/18/2023	DRY	DRY	*	DRY	*	*	*
8/3/2023	DRY	DRY	*	DRY	*	*	*
9/1/2022	DRY	DRY	0.55	0.04	0.11	DRY	DRY
10/24/2023	DRY	DRY	*	DRY	*	*	*
11/28/2023	DRY	DRY	*	DRY	*	*	*
12/21/2023	DRY	DRY	0.53	0.02	0.10	DRY	DRY
1/8/2024	DRY	DRY	*	DRY	*	*	*
2/14/2024	DRY	DRY	*	DRY	*	*	*
3/4/2024	DRY	DRY	0.53	0.02	0.10	DRY	DRY
4/15/2024	DRY	DRY	*	DRY	*	*	*
5/29/2024	DRY	DRY	*	DRY	*	*	*
6/3/2024	DRY	DRY	0.52	DRY	0.15	DRY	0.2
7/31/2024	DRY	DRY	*	DRY	*	*	*
8/20/2024	DRY	DRY	*	DRY	*	*	*
9/23/2024	DRY	DRY	0.52	0.05	0.10	DRY	DRY
10/22/2024	DRY	DRY	*	DRY	*	*	*
11/25/2024	DRY	DRY	*	DRY	*	*	*
12/11/2024	DRY	DRY	0.50	0.03	DRY	DRY	DRY

Appendix I

Gas Monitoring Report

Gas Monitoring Report

Explosive gas monitoring per 113.9(2) and the approved GMSP was conducted quarterly during the last reporting period (2024).

Monitoring points include the ten (10) subsurface gas probes, select monitoring wells, and the structures on site. Figure 1 illustrates the locations of gas probes GP-1 through GP-10.

Explosive gas concentrations were below regulatory limits during the monitoring episodes. Summary tables of gas monitoring are attached.

NEWTON SANITARY LANDFILL **Areas A, B, C & D**
50-SDP-1-75P
EXPLOSIVE GAS MONITORING RESULTS

Reference* Location	**3/4/2024** Combustible % LEL	**6/3/2024** Combustible % LEL	**9/23/2024** Combustible % LEL	**12/11/2024** Combustible % LEL
Breathing Zone				
G1 - Scale House	0	0	0	0
G2 - Under Scale	0	0	0	0
G3 - Outside Scale House	0	0	0	0
G4 - Southeast Shed	0	0	0	0
G5 - MW-47	0	0	0	0
G6 - MW-45R	0	0	0	0
G7 - MW-44	0	0	0	0
G8 - MW-42	0	0	0	0
G9 - MW-41	0	0	0	0
G10 - MW-60	0	0	0	0
G11 - Near Lagoon	0	0	0	0
G12 - MW-39	0	0	0	0
G13 - MW-62	0	0	0	0
G14 - MW-48	0	0	0	0
Subsurface Soil Gas				
GP-1	0	0	0	0
GP-2	**40.9**	**36.5**	**59.9**	**39.4**
GP-3	0	0	0	0
GP-4	0	0	0	0
GP-5	0	0	0	0
GP-6	**44.7**	**36.4**	0	**63**
GP-7	0	0	0	0
GP-8	0	0	0	0
GP-9	0	0	0	0
GP-10	0	**85.0**	0	0

Near 1945 Landfill