

**2024 ANNUAL GROUNDWATER QUALITY REPORT
FOR THE
NORTHERN PLAINS REGIONAL
SANITARY LANDFILL
74-SDP-2-76P
GRAETTINGER, IOWA**

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Certification

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Section 1.0 Background Information

1.1 Report Priority

No priority for review of this document is requested.

This report recommends the continued semi-annual detection, assessment, and corrective action monitoring as outlined in Table 1 below. Quarterly gas monitoring is also recommended.

Additional ACM activities near MW-8 and MW-14 are not warranted at this time based on evaluation of the Confidence Intervals. Reevaluation of the confidence interval at MW-8 and MW-14 will again be included in the 2025 AWQR to be submitted in January, 2026.

1.2 Period of Report Coverage

Water quality data evaluation is based on a running compilation of data beginning April 21, 2008. Statistical evaluations herein include April 4, 2024, and October 16, 2024 water quality data.

1.3 Current Site Map

Figure 1 is attached illustrating the current site features, monitoring well locations, and leachate piezometer locations.

1.4 Site Status and Applicable Rules

Site Location

The Northern Plains Regional Landfill is located in the NW ¼ of Section 21, T97N, R33W, Palo Alto County, Iowa. The facility is situated at 3032 420th Avenue, Graettinger, Iowa. The facility operates under the Iowa Department of Natural Resources (IDNR) Permit Number 74-SDP-2-76P.

Landfill Layout

The site is situated in the uplands above a tributary creek to the West Fork of the Des Moines River (to the east).

The facility includes a closed landfill, an abutting RCRA Subtitle D Expansion Area (Cell A, Cell B, Cell C, Cell D1, and Cell D2), and the Cell E1 Expansion Area completed in December 2023. Expansion Cells C, D1, D2, and E1 are actively receiving waste from the planning area.

Applicable Rules

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

1.5 Summary of Hydrologic Monitoring System Plan (HMSP)

The HMSP includes thirteen (13) monitoring wells and two (2) groundwater underdrains. MW-11, MW-12, MW-13, MW-17, MW-18, MW-19, MW-20, and MW-21 are the designated background wells for the facility. MW-3AR, MW-6B, MW-7A, MW-7B, MW-8, MW-9, MW-10, MW-14, MW-15, MW-16, GU-1, and GU-2 are the downgradient monitoring points. The Site Plan including the

approved monitoring network is illustrated on Figure 1. The Water Table Contour Map is included as Figure 2.

Background water quality sampling was initiated in 2023 at MW-13, MW-18, MW-19, MW-20, and MW-21. The background water sampling consists of Appendix I metals and is collected in advance of required use of the data associated with a future expansion beyond Cell E1.

GU-3 is connected to leachate collection system as documented in the Construction Certification Report dated November 13, 2015 (Doc# 84671).

Table 1 - Hydrologic Monitoring System Plan (HMSP) & Proposed Sampling

WELL	Monitoring Phase	4/2025	10/2025	Appendix II History
MW-3AR	Assessment	Appendix I	Appendix I	10/31/11, 4/25/12, 4/17/17, 4/6/23
MW-6B	Assessment	Appendix II	Appendix I	4/8/19, 4/27/20
MW-7A	Assessment	Appendix II	Appendix I	6/9/09, 10/29/09, 10/20/10, 4/2/2015, 4/27/20
MW-7B	Assessment	Appendix II	Appendix I	6/9/09, 10/29/09, 10/20/10, 4/2/2015, 4/27/20
MW-8	POC - CA	Appendix II	Appendix I	6/9/09, 10/29/09, 10/20/10, 4/2/2015, 4/27/20
MW-9	Detection	Appendix I	Appendix I	
MW-10	Assessment	Appendix I	Appendix I	4/17/17, 6/1/2018, 4/4/24
MW-11(b)	Detection	Appendix I	Appendix I	
MW-12(b)	Detection	Appendix I	Appendix I	
MW-14	POC - CA	Appendix II	Appendix I	6/9/09, 4/19/10, 4/2/2015, 4/27/20
MW-15	Assessment	Appendix II	Appendix I	6/9/09, 4/19/10, 4/2/2015, 4/27/20
MW-16	Assessment	Appendix I	Appendix I	4/13/22, 4/6/23
MW-17(b)	Detection	Appendix I	Appendix I	
GU-1	Detection	Appendix I	Appendix I	
GU-2	Detection	Appendix I	Appendix I	4/6/23
MW-13	Detection	Appendix I metals	Appendix I metals	
MW-18	Detection	Appendix I metals	Appendix I metals	
MW-19	Detection	Appendix I metals	Appendix I metals	
MW-20	Detection	Appendix I metals	Appendix I metals	
MW-21	Detection	Appendix I metals	Appendix I metals	
Duplicate	QA/QC	Appendix I	Appendix I	

(b) background well. POC – CA = Point of compliance Corrective Action Monitoring Well

(1) = detected Appendix II compound bis(2ethylhexyl) phthalate

Section 2.0 Reporting Period Monitoring Activities

Appendix B includes information related to the Monitoring Activities at this facility. A summary of all well testing performed beginning April 21, 2008 is included in Appendix B.1.

Field data for April 4, 2024, and October 16, 2024 sampling episodes are included on the field forms (IDNR Form 542-1322) in Appendix B.2.

A summary of Analytical Data for the episodes between April 21, 2008 and October 16, 2024 is included in Appendix C.

2.1 Current Detection Monitoring Activities

Background wells are MW-11, MW-12, MW-13, MW-18, MW-19, MW-20, and MW-21, located in the upland portion of the site, and MW-17 located in the lowland portion of the site.

Downgradient monitoring points are monitoring wells MW-3AR, MW-6B, MW-7A, MW-7B, MW-8, MW-9, MW-10, MW-14, MW-15, MW-16; and groundwater underdrains GU-1 and GU-2.

MW-9, GU-1 and GU-2 remain in detection monitoring.

2.2 Current Assessment Monitoring Activities

Monitoring points MW-3AR, MW-6B, MW-7A, MW-7B, MW-10, MW-15, and MW-16 are included in the assessment monitoring. The five (5) year sample for the full Appendix II sample parameter list was most recently completed April 27, 2020, at MW-6B, MW-7A, MW-7B, MW-8, MW-14, and MW-15. The five (5) year sample for the full Appendix II sample parameter list was most recently completed April 6, 2023 at MW-3AR. The full Appendix II sample collection event was most recently completed April 4, 2024 at MW-10.

2.3 Current Corrective Actions

Monitoring points MW-8 and MW-14 are included in the Corrective Action monitoring

Assessment of Corrective Measures (ACM) was submitted February 28, 2012 related to MW-7B. The historic vinyl chloride SSL at MW-7B (December, 2010) has not been reported since December, 2010. Both the 95% LCL and 95% UCL values were below the MCL of 2.0 ug/L. The delineation of the plume in the vicinity of MW-7B was approved as complete in the IDNR Letter dated November 4, 2014 (Doc # 81707).

A leachate collection toe drain was installed along the east side of the landfill waste boundary in October, 1999 immediately upgradient from MW-14. MW-14 is utilized as the Point of Compliance Corrective Action Monitoring Point. MW-14 is also positioned as a step-out well to the corrective action system.

The recommendation has been made to continue monitoring the confidence interval at MW-14 to verify water quality trends and the performance of the completed ACM near MW-14. This recommendation is still applicable based on the 2024 data presented herein.

A corrective action consisting of landfill vents in the south end of the Original Landfill, re-grading along the south side of the Original Landfill, and monitored natural attenuation near MW-8 was completed in November, 2023.

The recommendation is made to continue monitoring of the confidence interval at MW-8 to verify water quality trends and the sufficient performance of the completed ACM near MW-8.

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 Northern Plains Regional Landfill, First Semi-Annual Monitoring Event in 2024, dated May, 2024 is included in Appendix D.1. The Groundwater Statistics Report for the Northern Plains Regional Landfill, Second Semi-Annual Monitoring Event in 2024, dated November, 2024 is included in Appendix D.2.

The Keystone Analytical Reports for the laboratory testing April 4, 2024, and October 16, 2024 are included in Appendix E.

QUALITY ASSURANCE/QUALITY CONTROL

A blind duplicate sample was collected at MW-20 during the April 4, 2024 sampling episode. A blind duplicate was collected at MW-13 during the October 16, 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 for April 4, 2024, and October 16, 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 # 80750). A TSS and Field Turbidity Evaluation Report was prepared and submitted on March 6, 2015 (Doc# 82726), and was approved by IDNR on July 23, 2015 (Doc #83939). The approved TSS and Field Turbidity Evaluation Report 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 includes only sample results that have been collected by “No Purge” methods in order to avoid turbidity related issues that may have been related to historic sample collection methods. Summary tables of field turbidity readings are included in Appendix D.3.

Upgradient Data, Table 1, Attachment B, to the November 2024 Statistical Evaluation Report (Appendix D.2) includes a summary of the background data. The water quality results tagged with an asterisk failed on one, or more, of the statistical tests and are excluded from use in calculating the Prediction Limits.

The site prediction limits are summarized in Attachment B, Table 5, in the November 2024 Statistical Evaluation Reports (Appendix D.2) and are based on the validated background.

STATISTICALLY SIGNIFICANT INCREASES

If a compound concentration in a *detection* monitoring well exceeds the prediction limit, the exceedance is recorded as a Statistically Significant Increase (SSI).

The instances where the detected compound concentrations exceed the prediction limit are identified to occur only at existing Assessment Monitoring/Corrective Action Monitoring wells. The exceedances at Assessment/Corrective Action wells are not required to be reported as SSI, but a running summary of recorded exceedances is included in Appendix D.4. The current year prediction limit exceedances are listed below:

Table 2 –Prediction Limit Exceedance Summary at *assessment wells* – Current Year

Spring 2024		Fall 2024	
MW-7B	None	MW-7B	Barium
MW-8	Lead	MW-8	None
	Selenium		
MW-10	None	MW-10	Cadmium
			Copper
			Nickel
MW-14	None	MW-14	Barium
MW-15	Nickel	MW-15	Nickel
MW-16	Barium	MW-16	Barium
			Nickel

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

A summary of current inorganic exceedances of the prediction limit is included on page 3 of the Otter Creek Reports (Appendix D.1 and D.2). Table 8, Attachment B to the Statistical Evaluation Report (Appendix D.2) is a summary of historic inorganic compound detections that exceed the *current* prediction limit.

There were no VOC detected at the site on April 4, 2024, or October 16, 2024 . Table 1, Attachment D to the Fall Statistical Evaluation Report (Appendix D.2) is a summary of volatile organic compound detections at the site to date.

ASSESSMENT MONITORING

Assessment Monitoring has been completed at MW-7A (5 episodes), MW-7B (5 episodes), MW-8 (5 episodes), MW-14 (4 episodes), MW-15 (4 episodes), MW-3AR (4 episodes), MW-10 (3 episodes), MW-6B (2 episode), and at MW-16 (2 episodes) in accordance with IAC 567-113.10(6)a. A five (5) year full Appendix II sampling frequency is approved for all site Assessment Monitoring Wells where at least two (2) full Appendix II samples have been collected. Table 3a-3c below summarize Appendix II detections (beyond the Appendix I compound list). Full Appendix II sample collection events are highlighted in green.

Table 3a - bis(2-ethylhexyl)phthalate (ug/L)

Date	MW-3AR	MW-6B	MW-7A	MW-7B	MW-8	MW-10	MW-14	MW-15	MW-16
6/9/09	NT	NT	<10	<10	<10	NT	<10	<10	NT
10/29/09	NT	NT	<10	<10	<10	NT	<8	<8	NT
4/19/10	NT	NT	NT	NT	NT	NT	<10	<10	NT
10/20/10	NT	NT	<10	<10	<10	NT	NT	NT	NT
10/31/11	10.0	NT	NT	NT	NT	NT	NT	NT	NT
4/25/12	10.0	NT	NT	NT	NT	NT	NT	NT	NT
4/15/13	<10.	NT	NT	NT	NT	NT	NT	NT	NT
8/9/13	<10.	NT	NT	NT	NT	NT	NT	NT	NT
4/7/14	<10.	NT	NT	NT	NT	NT	NT	NT	NT
10/23/14	<10.	NT	NT	NT	NT	NT	NT	NT	NT
4/2/15	NT	NT	<10	<10	<10	NT	<10	<10	NT
10/26/15	<10.	NT	Dry	NT	NT	NT	NT	NT	NT
4/1/16	<10.	NT	NT	NT	NT	NT	NT	NT	NT
10/19/16	<10.	NT	NT	NT	NT	NT	NT	NT	NT
4/17/17	<6	NT	NT	NT	NT	<6	NT	NT	NT
10/11/17	NT	NT	NT	NT	NT	NT	NT	NT	NT
6/01/18	NT	NT	NT	NT	NT	7.0	NT	NT	NT
10/3/2018	NT	NT	NT	NT	NT	NT	NT	NT	NT
4/8/2019	NT	8.0/29.0	NT	NT	NT	<6	NT	NT	NT
10/11/2019	NT	<6	NT	NT	NT	<6	NT	NT	NT
4/27/2020	NT	13.0	<6	<6	<6	<6	<6	11.0	NT
10/9/2020	NT	Dry	NT	NT	NT	<6	NT	<6	NT
4/9/2021	NT	<6	NT	NT	NT	NT	NT	<6	NT
10/25/2021	NT	<6	NT	NT	NT	NT	NT	<6	NT
4/11/2022	frozen	<6	NT	NT	NT	NT	NT	NT	10.0
10/12/2022	dry	dry	dry	NT	NT	NT	NT	NT	<6
4/6/2023	<6	<6	NT	NT	NT	NT	NT	NT	<6
6/27/2023	NT	NT	NT	NT	NT	NT	NT	NT	NT
10/9/2023	dry	dry	dry	NT	NT	NT	NT	NT	NT
4/4/2024	NT	<6	NT	NT	NT	<6	NT	NT	NT
10/16/2024	NT	dry	dry	NT	NT	NT	NT	NT	NT

Table 3b - Sulfide (mg/L)

Date	MW-3AR	MW-6B	MW-7A	MW-7B	MW-8	MW-10	MW-14	MW-15	MW-16
6/9/09	NT	NT	<0.1	<0.1	<0.1	NT	0.11	0.18	NT
10/29/09	NT	NT	<0.1	<0.1	<0.1	NT	<0.1	<0.1	NT
4/19/10	NT	NT	NT	NT	NT	NT	0.4	<0.1	NT
10/20/10	NT	NT	<0.1	<0.1	<0.1	NT	NT	NT	NT
10/31/11	<0.1	NT	NT	NT	NT	NT	NT	NT	NT
4/25/12	<0.1	NT	NT	NT	NT	NT	<0.1	NT	NT
4/15/13	NT	NT	NT	NT	NT	NT	<0.1	<0.1	NT
8/9/13	NT	NT	NT	NT	NT	NT	<0.1	<0.1	NT
4/7/14	NT	NT	NT	NT	NT	NT	<0.1	<0.1	NT
10/23/14	NT	NT	NT	NT	NT	NT	<0.1	0.12	NT
4/2/15	NT	NT	<0.1	<0.1	0.55	NT	<0.1	<0.1	NT
10/26/15	NT	NT	Dry	NT	<0.1	NT	<0.1	<0.1	NT
4/1/16	NT	NT	NT	NT	0.16	NT	<0.1	0.11	NT
10/19/16	NT	NT	NT	NT	<0.1	NT	<0.1	<0.1	NT
4/17/17	<0.1	NT	NT	NT	<0.1	<0.1	<0.1	<0.1	NT
10/11/17	NT	NT	NT	NT	<0.1	NT	<0.1	<0.1	NT
6/01/18	NT	NT	NT	NT	0.32	<0.2	<0.2	<0.2	NT
10/3/2018	NT	NT	NT	NT	<0.1	NT	<0.1	<0.1	NT
4/8/2019	NT	<0.1	NT	NT	<0.1	NT	<0.1	<0.1	NT
10/11/2019	NT	NT	NT	NT	<0.1	NT	<0.1	<0.1	NT
4/27/2020	NT	<0.1	<0.1	<0.1	<0.3	NT	<0.1	<0.1	NT
10/9/2020	NT	NT	NT	NT	<0.1	NT	NT	NT	NT
4/9/2021	NT	NT	NT	NT	<0.1	NT	NT	NT	NT
10/25/2021	NT	NT	NT	NT	<0.1	NT	NT	NT	NT
4/11/2022	frozen	NT	NT	NT	NT	NT	NT	NT	1.8
10/12/2022	dry	dry	dry	NT	NT	NT	NT	NT	NT
4/6/2023	<0.1	NT	NT	NT	NT	NT	NT	NT	<1.5
10/9/2023	dry	dry	dry	NT	NT	NT	NT	NT	NT
4/4/2024	NT	NT	NT	NT	NT	<0.3	NT	NT	NT
10/16/2024	NT	dry	dry	NT	NT	NT	NT	NT	NT

Table 3c - Methacrylonitrile (ug/L)

Date	MW-3AR	MW-6B	MW-7A	MW-7B	MW-8	MW-10	MW-14	MW-15	MW-16
6/9/09	NT	NT	<1	<1	<1	NT	<1	<1	NT
10/29/09	NT	NT	<1	<1	<1	NT	<0.1	<0.1	NT
4/19/10	NT	NT	NT	NT	NT	NT	<1	<1	NT
10/20/10	NT	NT	<1	<1	<1	NT	NT	NT	NT
10/31/11	<1	NT	NT	NT	NT	NT	NT	NT	NT
4/25/12	<1	NT	NT	NT	NT	NT	NT	NT	NT
4/15/13	NT	NT	NT	NT	NT	NT	NT	NT	NT
8/9/13	NT	NT	NT	NT	NT	NT	NT	NT	NT
4/7/14	NT	NT	NT	NT	NT	NT	NT	NT	NT
10/23/14	NT	NT	NT	NT	NT	NT	NT	NT	NT
4/2/15	NT	NT	<1	<1	<1	NT	<1	<1	NT
10/26/15	NT	NT	Dry	NT	NT	NT	NT	NT	NT
4/1/16	NT	NT	NT	NT	NT	NT	NT	NT	NT
10/19/16	NT	NT	NT	NT	NT	NT	NT	NT	NT
4/17/17	<1	NT	NT	NT	NT	<1	NT	NT	NT
10/11/17	NT	NT	NT	NT	NT	NT	NT	NT	NT
6/01/18	NT	NT	NT	NT	NT	<1	NT	NT	NT
10/3/2018	NT	NT	NT	NT	NT	NT	NT	NT	NT
4/8/2019	NT	<1	NT	NT	NT	NT	NT	NT	NT
10/11/2019	NT	NT	NT	NT	NT	NT	NT	NT	NT
4/27/2020	NT	<1	<1	<1	<1	NT	1.2	<1	NT
10/9/2020	NT	NT	NT	NT	NT	NT	<1	NT	NT
4/9/2021	NT	NT	NT	NT	NT	NT	NT	NT	NT
10/25/2021	NT	NT	NT	NT	NT	NT	NT	NT	NT
4/11/2022	frozen	NT	NT	NT	NT	NT	NT	NT	<1
10/12/2022	dry	dry	dry	NT	NT	NT	NT	NT	NT
4/6/2023	<1	NT	NT	NT	NT	NT	NT	NT	<1
10/9/2023	dry	dry	dry	NT	NT	NT	NT	NT	NT
4/4/2024	NT	NT	NT	NT	NT	<1	NT	NT	NT
10/16/2024	NT	dry	dry	NT	NT	NT	NT	NT	NT

NT = Not tested

= Full Appendix II Sample Collected

GU-3 was connected to the leachate collection system in lieu of Assessment Monitoring on September 15, 2015 in accordance with IAC 567, Chapter 113.10(2)a(3). A certification report was submitted November 13, 2015 (Doc# 84671).

SITE SPECIFIC GWPS

Review of the inorganic Prediction Limits (Table 5 of Attachment B in the Statistical Evaluation Reports in Appendix D.1 and D.2) indicates that the prediction limits for arsenic (49.3 ug/L) and cobalt (4.0 ug/L) calculated from the background data exceed the published IAC 567, Chapter 137 Statewide Standard (10.0 ug/L and 2.1 ug/L, respectively). The Site-Specific GWPS should not be set lower than the Site Prediction Limit calculated from the site background data. For this report, the previously utilized values for Arsenic (53.7 ug/L) and Cobalt (4.0 ug/L) are utilized as the Site-Specific GWPS. For all other compounds the published IAC 567, Chapter 137 Statewide Standards are utilized as the GWPS.

STATISTICALLY SIGNIFICANT LEVELS (SSL)

The detections that exceed a site prediction limit 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 then compared to applicable GWPS. Any 95% LCL value that exceeds an applicable GWPS is recorded as a Statistically Significant Level (SSL). All wells with a recorded SSL require the plume of impact to be defined in the horizontal and vertical directions and require completion of an Assessment of Corrective Action (ACM).

An evaluation of the LCL versus GWPS over time is presented in Appendix F. Exceedances of the Prediction Limit (SSI) are highlighted in brown. Instances where the 95% LCL exceeds the GWPS (SSL) are highlighted in yellow.

All 95% LCL values for VOC compounds at assessment monitoring wells are below the Statewide Standards published in IAC 567, Chapter 137. No SSL for VOC are recorded at the HMSP wells.

The instances where the 95% LCL for inorganic compounds exceeds the applicable GWPS is limited to arsenic at MW-8 (2021) and cobalt at MW-14 in 2016 & 2017.

The remedy for arsenic at MW-8 was constructed in late 2023. Corrective Action Monitoring at MW-8 started in April, 2024.

MW-14 was placed in Corrective Action Monitoring System as a Point of Compliance Corrective Action Monitoring Well in 2016.

ASSESSMENT OF CORRECTIVE MEASURES

MW-14 1999 SRAMP System Evaluation

This remedy is effective. A Site Remedial Action Mitigation Plan (SRAMP) System was installed at the Closed Landfill in 1999 (See Appendix G). An evaluation of the SRAMP is included in Appendix G.

MW-7B Corrective Action Evaluation

This remedy is effective and complete. Assessment of Corrective Measures (ACM) was submitted February 28, 2012 related to MW-7B. The historic vinyl chloride SSL at MW-7B (December, 2010) has not been reported since December, 2010. Both the 95% LCL and 95% UCL values have remained below the GWPS of 2.0 ug/L for three (3) years or more and continue to be below the GWPS in 2023. The delineation of the plume in the vicinity of MW-7B was approved as complete in the IDNR Letter dated November 4, 2014 (Doc # 81707).

MW-8 Corrective Action Evaluation

This remedy is new. Corrective measures consisting of landfill gas vents in the south side of the Original Landfill, re-grading of the site south of the Original Landfill, and monitored natural attenuation was completed in November, 2023. An evaluation of the Corrective Measures is included in Appendix G.

CORRECTIVE ACTION MONITORING & EVALUATIONS

MW-14 is located immediately downgradient of the leachate toe drain and within 50 feet of the toe drain system. ***MW-14*** is utilized as the Attenuation Zone Point of Compliance Corrective Action Monitoring Point.

The Confidence Interval of Corrective Action Monitoring Well ***MW-14*** is utilized to determine the success of the toe drain system. The Corrective Action Monitoring Evaluation based on the 95% UCL Value for the most recent data is summarized in the Table in Appendix F. The instances where the 95% UCL for cobalt exceeds the GWPS are highlighted in green. The 95% UCL decreased to a value below the GWPS during both sampling episodes in 2024. For the remedy to be considered complete, the 95% UCL for cobalt must remain below the GWPS for three (3) consecutive years. ***MW-14*** should remain in Corrective Action Monitoring. Based on the downward trend in the Confidence Interval (both 95% LCL and 95% UCL), it is recommended that the Confidence Interval evaluations continue at ***MW-14*** through 2026 at a minimum.

MW-8 is located immediately downgradient of the 2023 corrective measures. ***MW-8*** is utilized as the Attenuation Zone Point of Compliance Corrective Action Monitoring Point.

The Confidence Interval of Corrective Action Monitoring Well ***MW-8*** will be utilized to determine the success of the 2023 corrective measures. The Corrective Action Monitoring Evaluation based on the 95% UCL Value will again be included in the 2025 Annual Groundwater Quality Report (due January 2026).

MONITORING WELL MAINTENANCE PERFORMANCE EVALUATION

Monitoring Well Maintenance Performance Reevaluation activities associated with the HMSP monitoring wells are discussed in the information presented in Appendix A.

LEACHATE COLLECTION SYSTEM PERFORMANCE EVALUATION

See Appendix H.

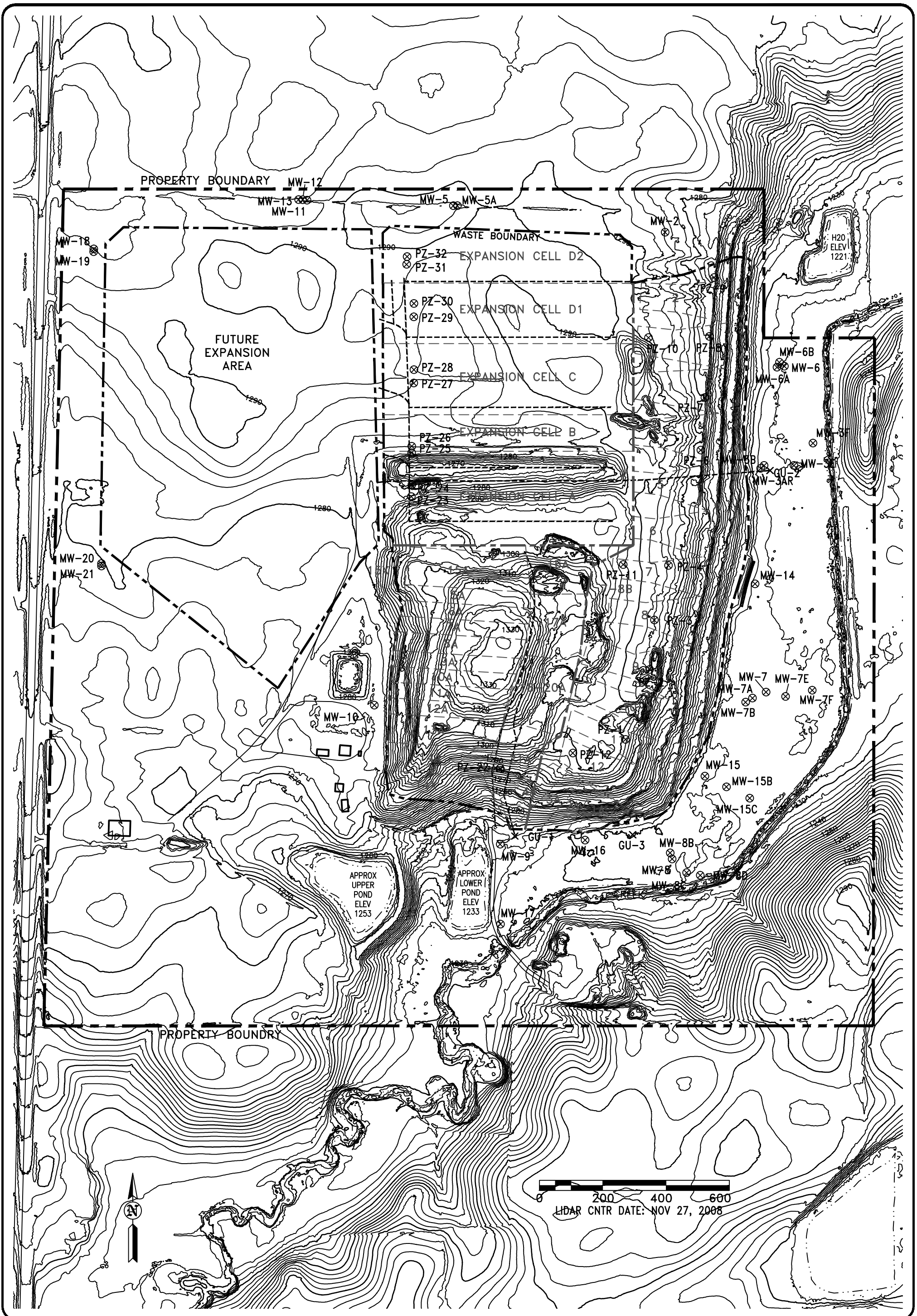

GAS MONITORING EVALUATION

See Appendix I.

Section 4.0 Recommendations

- 1) Continue monitoring as outlined in Table 1 above.
- 2) Continue the evaluation of Corrective Measures near MW-14 based on data collected in 2025.
- 3) Continue the evaluation of Corrective Measures near MW-8 based on data collected in 2025.
- 4) Continue to operate the Leachate Collection, Recirculation, and Disposal Systems in accordance with the Permit in 2025.
- 5) Perform explosive gas monitoring on a quarterly frequency.

Figures

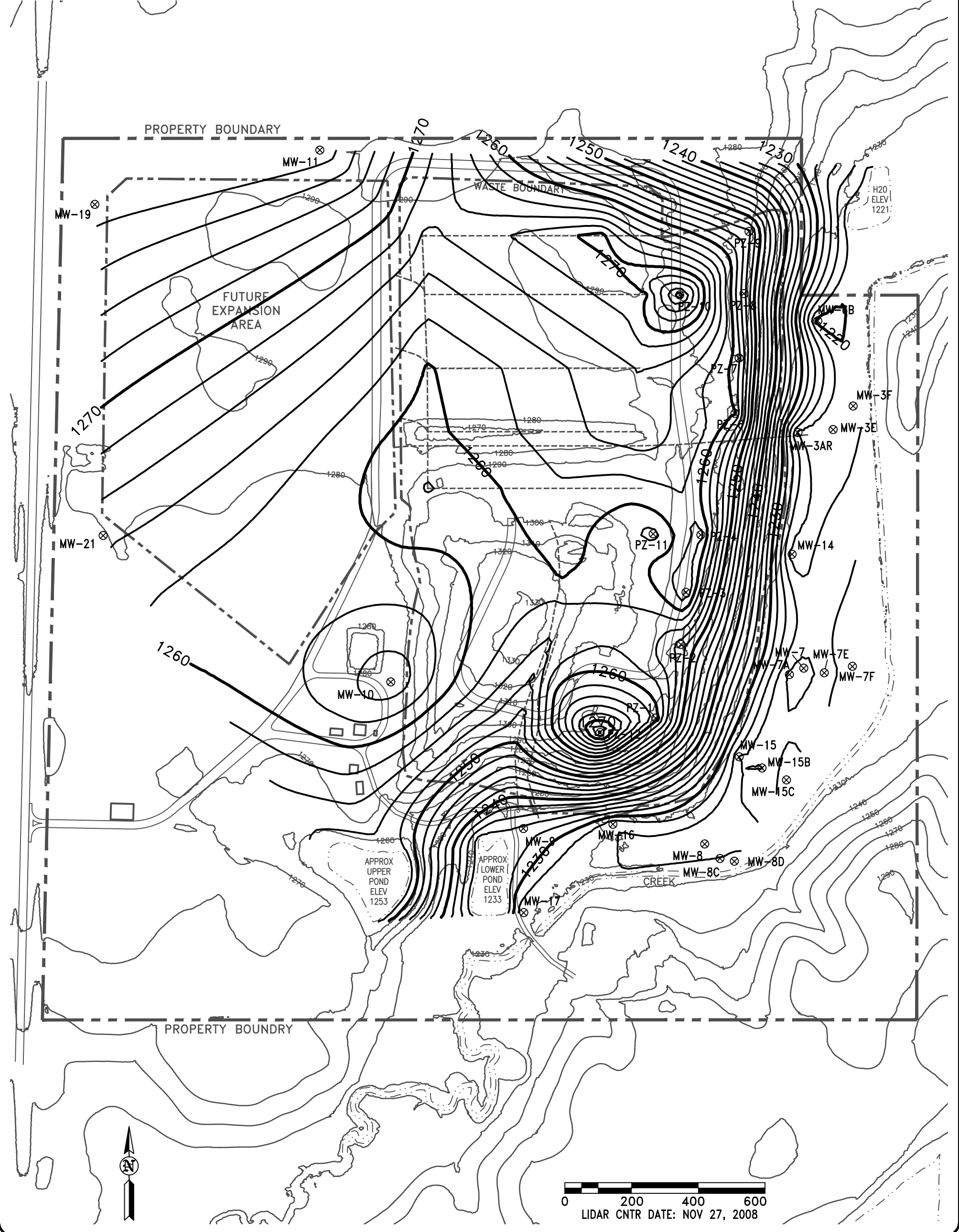
HLW Engineering Group
 204 West Broad Street, P.O. Box 314
 Story City, Iowa 50248
 Phone: (515) 733-4144
 FAX: (515) 733-4146

SITE PLAN
 NORTHERN PLAINS REGIONAL SANITARY LANDFILL
 GRAETTINGER, IOWA

FIGURE:		1
REVISION	NO.	DATE
DRAWN DRA	PROJECT NO. 6021	DATE 12-17-23

WATER ELEVATION OCTOBER 16, 2024

WELL	ELEV.	WELL	ELEV.	WELL	ELEV.	WELL	ELEV.	WELL	ELEV.	WELL	ELEV.	WELL	ELEV.
MW-3AR	1221.40	MW-7A	1221.30	MW-8D	1226.75	MW-15	1223.90	MW-19	1279.00	PZ-4	1262.99	PZ-9	1254.43
MW-3E	1221.56	MW-7E	1222.34	MW-9	1233.50	MW-15B	1224.07	MW-21	1264.40	PZ-6	1260.37	PZ-10	1279.08
MW-3F	1220.60	MW-7F	1225.70	MW-10	1265.80	MW-15C	1220.89	PZ-1	1261.05	PZ-7	1258.82	PZ-11	1257.30
MW-6B	1219.10	MW-8	1224.00	MW-11	1279.70	MW-16	1226.20	PZ-2	1253.10	PZ-8	1254.94	PZ-12	1274.56
MW-7	1221.50	MW-8C	1226.15	MW-14	1220.90	MW-17	1226.00	PZ-3	1264.08				



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GROUNDWATER CONTOUR MAP
 NORTHERN PLAINS REGIONAL SANITARY LANDFILL
 GRAETTINGER, IOWA

FIGURE: 2	
REVISION	NO. DATE
DRAWN DRA	PROJECT NO. 6021 DATE 12-10-24

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	2008	2009	2010	2011	2012	2013	2014	2015
Annual water-quality report	X	X	X	X	X	X	X	X
High and low water levels	X	X	X	X	X	X	X	X
Six-month water levels	X	X	X	X	X	X	X	X
Well-depth measurement	X	X	X	X	X	X	X	X
Evaluation of recharge rates and chemistry		X	X	X	X	X		X

X, completed; O, scheduled.

Years	2016	2017	2018	2019	2020	2021	2022	2023
Annual water-quality report	X	X	X	X	X	X	X	X
High and low water levels	X	X	X	X	X	X	X	X
Six-month water levels	X	X	X	X	X	X	X	X
Well-depth measurement	X	X	X	X	X	X	X	X
Evaluation of recharge rates and chemistry	X		X		X		X	

X, completed; O, scheduled.

Years	2024	2025	2026	2027	2028	2029	2030	2031
Annual water-quality report	X	O	O	O	O	O	O	O
High and low water levels	X	O	O	O	O	O	O	O
Six-month water levels	X	O	O	O	O	O	O	O
Well-depth measurement	X	O	O	O	O	O	O	O
Evaluation of recharge rates and chemistry	X		O		O		O	

X, completed; O, scheduled.

Historic water elevation data is summarized in Appendix A.1. Review of the water elevation data for 2024 does not indicate excessive variability compared to the previous data. The recorded sedimentation in each well was recorded to be 1.0 ft or less based on well depth measurements made October 16, 2024.

Monitoring well recharge reevaluation is due biennially according to 113.10(2)f. Information included on the IDNR Form 542-1322 for April 11, 2022 indicated that the wells recovered within 4 hours, or less, following purging activities. The April 4, 2024, well recovery data again confirms that the wells recovered within 4 hours, or less, following purging activities. Based on this recorded data, recharge to the individual wells is interpreted to remain sufficient to promote collection of representative water quality samples and the wells are functioning as intended. Monitoring well recharge reevaluation is due again in 2026.

A Water Table Contour Map (Figure 2) dated October 16, 2024 is attached. This map includes leachate piezometer levels from the unlined landfill area (to accommodate mounding) but excludes leachate piezometer levels from the lined landfill areas. Review of the map confirms little change in the water table surface. Based on the apparent static condition of the water table across the site and the existing water elevation data, it appears that the semi-annual water elevation data is sufficient to adequately monitor the hydrologic condition of the site. Based on information presented herein, the monitoring wells are appropriately located to detect any impact from the site, should it occur.

Appendix A.1 -
Historic Water Elevation Data

Northern Plains Regional Sanitary Landfill

Monit. Well No.	Date Installed	Meets Current Design Standards	Up or Down Gradient Well	Water Strata Monitored	Elevation at Grade	Elevation of Well Head	Elevation at Bottom of Well	Initial Depth of Well from Head	Measured Depth of Well from Head (ft)	Measured Depth of Well from Head (ft)	4/4/2024		10/16/2024	
											Depth to Water from Head (ft)	Elevation Water MSL (ft)	Depth to Water from Head (ft)	Elevation Water MSL (ft)
2	09/11/79	Yes	Up	Aquifer	1287.4	1291.00	1240.50	50.5'	(Oct. 2005) 47.20	(Oct. 2024) buried	buried	buried	buried	buried
3AR	11/25/96	Yes	Down	Groundwater	1231.3	1229.52	1221.30	13.0'	10.05*	10.05	2.81	1226.71	8.12	1221.4
3B	10/24/94	Yes	Down	Aquifer	1227.4	1231.00	1207.45	23.55'	28.45	NR	6.7	1224.3	10.8	1220.2
MW-5 E	4/25/1984	Yes	Up	Aquifer	1293.4	1293.70	1251.07	45.93'	45.93'	NR	22.21	1271.5	22.79	1270.9
MW-5 (W)	03/21/95	Yes	Up	Groundwater	1295.9	1297.40	1272.73	24.27'	24.73	NR	22.38	1275.0	22.46	1274.9
6A	10/25/94	Yes	Down	Aquifer	1227.0	1231.00	1207.10	23.9'	24.73	NR	7.94	1223.1	11.99	1219.0
6B	10/25/94	Yes	Down	Groundwater	1227.0	1229.02	1218.80	12.20'	10.5*	10.50	6.77	1222.3	9.95	1219.1
7	9/28/1988	Yes	Down	Aquifer	1228.8	1230.00	1210.00	22	22.00	22.00	3.69	1226.3	8.55	1221.5
7A	10/26/94	Yes	Down	Groundwater	1227.4	1232.00	1221.70	10.80'	11.20	10.75	6.37	1225.6	10.72	1221.3
7B	10/26/94	Yes	Down	Aquifer	1227.5	1231.00	1197.10	33.90'	34.00	35.00	4.79	1226.2	9.64	1221.4
8	05/22/92	Yes	Down	Groundwater	1229.5	1229.70	1220.30	11.70'	10.0*	10.25*	5.25	1224.5	5.75	1224.0
8B	11/25/96	Yes	Down	Aquifer	1229.5	1232.50	1199.50	33.0'	16.35	NR	6.75	1225.8	7.03	1225.5
9	05/22/92	Yes	Down	Aquifer	1235.5	1238.50	1225.60	12.90'	12.96	14.60	3.83	1234.7	5.05	1233.5
10	11/25/96	Yes	Up	Groundwater	1277.0	1280.00	1253.00	27.0'	25.12	25.10	4.93	1275.1	14.21	1265.8
11	10/05/04	Yes	Up	Groundwater	1287.5	1289.80	1269.80	20	20.00	20.55	7.66	1282.1	10.06	1279.7
12	10/05/04	Yes	Up	Groundwater	1287.5	1289.10	1232.10	57	57.20	56.70	30.1	1259.0	29.06	1260.0
13	10/05/04	Yes	Up	Groundwater	1287.5	1288.60	1213.60	75	74.8	75.1	34.22	1254.4	34.04	1254.6
14	10/30/08	Yes	Down	Groundwater	1227.3	1229.76	1217.26	12.5	12.5	12.3	4.26	1225.5	8.88	1220.9
15	10/30/08	Yes	Down	Groundwater	1228.8	1231.22	1218.72	12.5	12.5	12.5	4.07	1227.2	7.33	1223.9
16	10/30/08	Yes	Down	Groundwater	1230.1	1232.43	1219.93	12.5	12.5	12.3	5.21	1227.2	6.21	1226.2
17	04/01/12	Yes	Up	Groundwater	1230.1	1234.33	1214.13	20.2	20.2	20.55	7.42	1226.9	8.3	1226.0
18	06/06/19	Yes	Up	Groundwater	1230.1	1289.30	1212.70	76.6		76.6	34.5	1254.8	34.45	1254.9
19	06/06/19	Yes	Up	Groundwater	1230.1	1289.61	1261.81	27.8		27.8	7.75	1281.9	10.58	1279.0
20	06/06/19	Yes	Up	Groundwater	1230.1	1282.77	1216.22	66.55		66.55	28.51	1254.3	28.9	1253.9
21	06/06/19	Yes	Up	Groundwater	1230.1	1282.69	1254.89	27.8		27.8	6.91	1275.8	13.29	1269.4

* casing cut-off .

Northern Plains Regional Sanitary Landfill

4/6/2023	4/4/2024			10/16/2024		
	PVC Elevation	Depth Water	Water Elevation	PVC Elevation	Depth Water	Water Elevation
MW-13	1288.6	34.22	1254.38	1288.6	34.04	1254.56
MW-6		4.82			9	
MW-3E	1227.86	2.84	1225.02	1227.86	6.3	1221.56
MW-3F	1227.72	3.41	1224.31	1227.72	7.12	1220.6
MW-7E	1228.89	2.5	1226.39	1228.89	6.55	1222.34
MW-7F	1228.38	2.92	1225.46	1228.38	2.68	1225.7
MW-15B	1230.19	3.3	1226.89	1230.19	6.12	1224.07
MW-15C	1229.44	4.3	1225.14	1229.44	8.55	1220.89
MW-8C	1230.17	3.75	1226.42	1230.17	4.02	1226.15

Northern Plains Regional Sanitary Landfill

Monit. Well No.	Date Installed	Meets Current Design Standards	Up or Down Gradient Well	Water Strata Monitored	Elevation at Grade	Elevation of Well Head	Elevation at Bottom of Well	Initial Depth of Well from Head	Measured Depth of Well from Head (ft)	Measured Depth of Well from Head (ft)	4/6/2023		10/9/2023	
											Depth to Water from Head (ft)	Elevation Water MSL (ft)	Depth to Water from Head (ft)	Elevation Water MSL (ft)
2	09/11/79	Yes	Up	Aquifer	1287.4	1291.00	1240.50	50.5'	(Oct. 2005) 47.20	(Oct. 2023) buried	buried	buried	buried	buried
3AR	11/25/96	Yes	Down	Groundwater	1231.3	1229.52	1221.30	13.0'	10.05*	10.05	1.95	1227.57	8.74	1220.8
3B	10/24/94	Yes	Down	Aquifer	1227.4	1231.00	1207.45	23.55'	28.45	NR	6.21	1224.8	11.45	1219.6
MW-5 E	4/25/1984	Yes	Up	Aquifer	1293.4	1293.70	1251.07	45.93'	45.93'	NR	22.91	1270.8	22.98	1270.7
MW-5 (W)	03/21/95	Yes	Up	Groundwater	1295.9	1297.40	1272.73	24.27'	24.73	NR	23.34	1274.1	23.33	1274.1
6A	10/25/94	Yes	Down	Aquifer	1227.0	1231.00	1207.10	23.9'	24.73	NR	7.9	1223.1	12.8	1218.2
6B	10/25/94	Yes	Down	Groundwater	1227.0	1229.02	1218.80	12.20'	10.5*	10.50	6.79	1222.2	10.05	1219.0
7	9/28/1988	Yes	Down	Aquifer	1228.8	1230.00	1210.00	22	22.00	22.00	3.65	1226.4	8.95	1221.1
7A	10/26/94	Yes	Down	Groundwater	1227.4	1232.00	1221.70	10.80'	11.20	10.75	6.4	1225.6	9.75	1222.3
7B	10/26/94	Yes	Down	Aquifer	1227.5	1231.00	1197.10	33.90'	34.00	35.00	4.68	1226.3	10.47	1220.5
8	05/22/92	Yes	Down	Groundwater	1229.5	1229.70	1220.30	11.70'	10.0*	10.25*	4.81	1224.9	7.1	1222.6
8B	11/25/96	Yes	Down	Aquifer	1229.5	1232.50	1199.50	33.0'	16.35	NR	6.68	1225.8	8.65	1223.9
9	05/22/92	Yes	Down	Aquifer	1235.5	1238.50	1225.60	12.90'	12.96	14.60	3.86	1234.6	5.41	1233.1
10	11/25/96	Yes	Up	Groundwater	1277.0	1280.00	1253.00	27.0'	25.12	25.10	6.64	1273.4	15.93	1264.1
11	10/05/04	Yes	Up	Groundwater	1287.5	1289.80	1269.80	20	20.00	20.55	7.6	1282.2	10.79	1279.0
12	10/05/04	Yes	Up	Groundwater	1287.5	1289.10	1232.10	57	57.20	56.70	31.52	1257.6	30.66	1258.4
13	10/05/04	Yes	Up	Groundwater	1287.5	1288.60	1213.60	75	74.8	75.1	34.93	1253.7	35.21	1253.4
14	10/30/08	Yes	Down	Groundwater	1227.3	1229.76	1217.26	12.5	12.5	12.3	4.1	1225.7	9.16	1220.6
15	10/30/08	Yes	Down	Groundwater	1228.8	1231.22	1218.72	12.5	12.5	12.5	3.99	1227.2	8.92	1222.3
16	10/30/08	Yes	Down	Groundwater	1230.1	1232.43	1219.93	12.5	12.5	12.3	4.38	1228.1	6.38	1226.1
17	04/01/12	Yes	Up	Groundwater	1230.1	1234.33	1214.13	20.2	20.2	20.55	7.37	1227.0	8.7	1225.6
18	06/06/19	Yes	Up	Groundwater	1230.1	1289.30	1212.70	76.6	76.6	76.6	35.21	1254.1	35.55	1253.8
19	06/06/19	Yes	Up	Groundwater	1230.1	1289.61	1261.81	27.8	27.8	27.8	7.75	1281.9	11.29	1278.3
20	06/06/19	Yes	Up	Groundwater	1230.1	1282.77	1216.22	66.55	66.55	66.55	29.15	1253.6	29.71	1253.1
21	06/06/19	Yes	Up	Groundwater	1230.1	1282.69	1254.89	27.8	27.8	27.8	7.7	1275.0	13.47	1269.2

** casing cut-off .

Northern Plains Regional Sanitary Landfill

4/6/2023	4/6/2023			10/9/2023		
	PVC Elevation	Depth Water	Water Elevation	PVC Elevation	Depth Water	Water Elevation
MW-13	1288.6	34.93	1253.67	1288.6	35.21	1253.39
MW-6		4.88			9.32	
MW-3E	1227.86	2.74	1225.12	1227.86	6.85	1221.01
MW-3F	1227.72	3.3	1224.42	1227.72	7.73	1219.99
MW-7E	1228.89	2.47	1226.42	1228.89	7.1	1221.79
MW-7F	1228.38	2.68	1225.7	1228.38	4.11	1224.27
MW-15B	1230.19	3.24	1226.95	1230.19	7.67	1222.52
MW-15C	1229.44	4.03	1225.41	1229.44	7	1222.44
MW-8C	1230.17	3.5	1226.67	1230.17	5.38	1224.79

Northern Plains Regional Sanitary Landfill

Monit. Well No.	Date Installed	Meets Current Design Standards	Up or Down Gradient Well	Water Strata Monitored	Elevation at Grade	Elevation of Well Head	Elevation at Bottom of Well	Initial Depth of Well from Head	Measured Depth of Well from Head (ft)	Measured Depth of Well from Head (ft)	4/11/2022		10/12/2022	
											Depth to Water from Head (ft)	Elevation Water MSL (ft)	Depth to Water from Head (ft)	Elevation Water MSL (ft)
2	09/11/79	Yes	Up	Aquifer	1287.4	1291.00	1240.50	50.5'	(Oct. 2005) 47.20	(Oct. 2021) buried	buried	buried	buried	buried
3AR	11/25/96	Yes	Down	Groundwater	1231.3	1229.52	1221.30	13.0'	10.05*	10.05	frozen]	frozen	8.81	1220.7
3B	10/24/94	Yes	Down	Aquifer	1227.4	1231.00	1207.45	23.55'	28.45	NR	6.73	1224.3	11.35	1219.7
MW-5 E	4/25/1984	Yes	Up	Aquifer	1293.4	1293.70	1251.07	45.93'	45.93'	NR	23.08	1270.6	23.19	1270.5
MW-5 (W)	03/21/95	Yes	Up	Groundwater	1295.9	1297.40	1272.73	24.27'	24.73	NR	22.18	1275.2	23.22	1274.2
6A	10/25/94	Yes	Down	Aquifer	1227.0	1231.00	1207.10	23.9'	24.73	NR	9.65	1221.4	12.94	1218.1
6B	10/25/94	Yes	Down	Groundwater	1227.0	1229.02	1218.80	12.20'	10.5*	10.50	7.43	1221.6	dry	dry
7	9/28/1988	Yes	Down	Aquifer	1228.8	1230.00	1210.00	22	22.00	22.00	4.41	1225.6	8.92	1221.1
7A	10/26/94	Yes	Down	Groundwater	1227.4	1232.00	1221.70	10.80'	11.20	10.75	7.2	1224.8	dry	dry
7B	10/26/94	Yes	Down	Aquifer	1227.5	1231.00	1197.10	33.90'	34.00	34.50	5.6	1225.4	10.44	1220.6
8	05/22/92	Yes	Down	Groundwater	1229.5	1229.70	1220.30	11.70'	10.0*	10.00	4.85	1224.9	7.33	1222.4
8B	11/25/96	Yes	Down	Aquifer	1229.5	1232.50	1199.50	33.0'	16.35	NR	6.73	1225.8	8.8	1223.7
9	05/22/92	Yes	Down	Aquifer	1235.5	1238.50	1225.60	12.90'	12.96	14.40	3.95	1234.6	5.32	1233.2
10	11/25/96	Yes	Up	Groundwater	1277.0	1280.00	1253.00	27.0'	25.12	24.80	13.45	1266.6	16.48	1263.5
11	10/05/04	Yes	Up	Groundwater	1287.5	1289.80	1269.80	20	20.00	20.10	9.22	1280.6	9.99	1279.8
12	10/05/04	Yes	Up	Groundwater	1287.5	1289.10	1232.10	57	57.20	56.20	30.98	1258.1	30.53	1258.6
13	10/05/04	Yes	Up	Groundwater	1287.5	1288.60	1213.60	75	74.8	NR	35.03	1253.6	35.23	1253.4
14	10/30/08	Yes	Down	Groundwater	1227.3	1229.76	1217.26	12.5	12.5	12.25	4.33	1225.4	9.06	1220.7
15	10/30/08	Yes	Down	Groundwater	1228.8	1231.22	1218.72	12.5	12.5	12.2	4.79	1226.4	8.8	1222.4
16	10/30/08	Yes	Down	Groundwater	1230.1	1232.43	1219.93	12.5	12.5	11.9	4.8	1227.6	6.25	1226.2
17	04/01/12	Yes	Up	Groundwater	1230.1	1234.33	1214.13	20.2	20.2	20.1	7.7	1226.6	8.62	1225.7
18	06/06/19	Yes	Up	Groundwater	1230.1	1289.30	1212.70	76.6	76.6	76.6	35.35	1254.0	35.57	1253.7
19	06/06/19	Yes	Up	Groundwater	1230.1	1289.61	1261.81	27.8	27.8	27.8	10.45	1279.2	11.41	1278.2
20	06/06/19	Yes	Up	Groundwater	1230.1	1282.77	1216.22	66.55	66.55	66.55	29.43	1253.3	29.74	1253.0
21	06/06/19	Yes	Up	Groundwater	1230.1	1282.69	1254.89	27.8	27.8	27.8	10.15	1272.5	14.28	1268.4

** casing cut-off .

Northern Plains Regional Sanitary Landfill

10/12/2022

	PVC Elevation	Depth Water	Water Elevation
MW-13	1288.6	35.23	1253.37
MW-6			
MW-3E	1227.86	6.75	1221.11
MW-3F	1227.72	7.62	1220.1
MW-7E	1228.89	7.07	1221.82
MW-7F	1228.38	4.05	1224.33
MW-15B	1230.19	7.55	1222.64
MW-15C	1229.44	6.93	1222.51
MW-8C	1230.17	5.38	1224.79

Northern Plains Regional Sanitary Landfill

Monit. Well No.	Date Installed	Meets Current Design Standards	Up or Down Gradient Well	Water Strata Monitored	Elevation at Grade	Elevation of Well Head	Elevation at Bottom of Well	Initial Depth of Well from Head	Measured Depth of Well from Head (ft)	Measured Depth of Well from Head (ft)	4/9/2021		10/25/2021	
											Depth to Water from Head (ft)	Elevation Water MSL (ft)	Depth to Water from Head (ft)	Elevation Water MSL (ft)
2	09/11/79	Yes	Up	Aquifer	1287.4	1291.00	1240.50	50.5'	(Oct. 2005) 47.20	(Oct. 2021) buried	buried	buried	buried	buried
3AR	11/25/96	Yes	Down	Groundwater	1231.3	1229.52	1221.30	13.0'	10.05*	10.05	2.52	1227.0	4.18	1225.3
3B	10/24/94	Yes	Down	Aquifer	1227.4	1231.00	1207.45	23.55'	28.45	NR	6.58	1224.4	7.83	1223.2
MW-5 E	4/25/1984	Yes	Up	Aquifer	1293.4	1293.70	1251.07	45.93'	45.93'	NR	22.8	1270.9	22.43	1271.3
MW-5 (W)	03/21/95	Yes	Up	Groundwater	1295.9	1297.40	1272.73	24.27'	24.73	NR	23.59	1273.8	24.05	1273.4
6A	10/25/94	Yes	Down	Aquifer	1227.0	1231.00	1207.10	23.9'	24.73	NR	8.58	1222.4	9.36	1221.6
6B	10/25/94	Yes	Down	Groundwater	1227.0	1229.02	1218.80	12.20'	10.5*	10.50	7.47	1221.6	8.23	1220.8
7	9/28/1988	Yes	Down	Aquifer	1228.8	1230.00	1210.00	22	22.00	22.00	3.49	1226.5	4.22	1225.8
7A	10/26/94	Yes	Down	Groundwater	1227.4	1232.00	1221.70	10.80'	11.20	10.75	6.41	1225.6	7.5	1224.5
7B	10/26/94	Yes	Down	Aquifer	1227.5	1231.00	1197.10	33.90'	34.00	34.50	5.22	1225.8	6.28	1224.7
8	05/22/92	Yes	Down	Groundwater	1229.5	1229.70	1220.30	11.70'	10.0*	10.00	4.74	1225.0	5.37	1224.3
8B	11/25/96	Yes	Down	Aquifer	1229.5	1232.50	1199.50	33.0'	16.35	NR	6.57	1225.9	7.34	1225.2
9	05/22/92	Yes	Down	Aquifer	1235.5	1238.50	1225.60	12.90'	12.96	14.40	3.46	1235.0	4.44	1234.1
10	11/25/96	Yes	Up	Groundwater	1277.0	1280.00	1253.00	27.0'	25.12	24.80	7.43	1272.6	12.77	1267.2
11	10/05/04	Yes	Up	Groundwater	1287.5	1289.80	1269.80	20	20.00	20.10	10.69	1279.1	8.96	1280.8
12	10/05/04	Yes	Up	Groundwater	1287.5	1289.10	1232.10	57	57.20	56.20	31.61	1257.5	32.04	1257.1
13	10/05/04	Yes	Up	Groundwater	1287.5	1288.60	1213.60	75	74.8	NR	35.59	1253.0	35.63	1253.0
14	10/30/08	Yes	Down	Groundwater	1227.3	1229.76	1217.26	12.5	12.5	12.25	4.28	1225.5	4.57	1225.2
15	10/30/08	Yes	Down	Groundwater	1228.8	1231.22	1218.72	12.5	12.5	12.2	4.44	1226.8	5.59	1225.6
16	10/30/08	Yes	Down	Groundwater	1230.1	1232.43	1219.93	12.5	12.5	11.9	4.71	1227.7	4.83	1227.6
17	04/01/12	Yes	Up	Groundwater	1230.1	1234.33	1214.13	20.2	20.2	20.1	7.92	1226.4	7.85	1226.5
18	06/06/19	Yes	Up	Groundwater	1230.1	1289.30	1212.70	76.6	76.6	76.6	35.9	1253.4	35.92	1253.4
19	06/06/19	Yes	Up	Groundwater	1230.1	1289.61	1261.81	27.8	27.8	27.8	11.51	1278.1	8.75	1280.9
20	06/06/19	Yes	Up	Groundwater	1230.1	1282.77	1216.22	66.55	66.55	66.55	29.99	1252.8	29.89	1252.9
21	06/06/19	Yes	Up	Groundwater	1230.1	1282.69	1254.89	27.8	27.8	27.8	15.75	1266.9	8.76	1273.9

** casing cut-off .

Northern Plains Regional Sanitary Landfill

10/25/2021

	PVC Elevation	Depth Water	Water Elevation
MW-13	1288.6	35.63	1252.97
MW-6		6.4	-6.4
MW-3E	1227.86	3.33	1224.53
MW-3F	1227.72	3.68	1224.04
MW-7E	1228.89	3.22	1225.67
MW-7F	1228.38	2.64	1225.74
MW-15B	1230.19	4.45	1225.74
MW-15C	1229.44	4.56	1224.88
MW-8C	1230.17	3.8	1226.37

Northern Plains Regional Sanitary Landfill

Monit. Well No.	Date Installed	Meets Current Design Standards	Up or Down Gradient Well	Water Strata Monitored	Elevation at Grade	Elevation of Well Head	Elevation at Bottom of Well	Initial Depth of Well from Head	Measured Depth of Well from Head (ft)	Measured Depth of Well from Head (ft)	4/27/2020		10/9/2020	
											Depth to Water from Head (ft)	Elevation Water MSL (ft)	Depth to Water from Head (ft)	Elevation Water MSL (ft)
2	09/11/79	Yes	Up	Aquifer	1287.4	1291.00	1240.50	50.5'	(Oct. 2005) 47.20	(Oct. 2020) buried	buried	buried	buried	buried
3AR	11/25/96	Yes	Down	Groundwater	1231.3	1229.52	1221.30	13.0'	10.05*	10.05	7.85	1221.7	8.19	1221.3
3B	10/24/94	Yes	Down	Aquifer	1227.4	1231.00	1207.45	23.55'	28.45	NR	6.55	1224.5	10.94	1220.1
5	4/25/1984	Yes	Up	Aquifer	1293.4	1293.70	1251.07	45.93'	45.93'	NR	18.8	1274.9	20.21	1273.5
5A	03/21/95	Yes	Up	Groundwater	1295.9	1297.40	1272.73	24.27'	24.73	NR	20.33	1277.1	23.12	1274.3
6A	10/25/94	Yes	Down	Aquifer	1227.0	1231.00	1207.10	23.9'	24.73	NR	7.55	1223.5	12.23	1218.8
6B	10/25/94	Yes	Down	Groundwater	1227.0	1229.02	1218.80	12.20'	10.5*	10.50	8.36	1220.7	9	1220.0
7	9/28/1988	Yes	Down	Aquifer	1228.8	1230.00	1210.00	22	22.00	22.00	4.1	1225.9	8.8	1221.2
7A	10/26/94	Yes	Down	Groundwater	1227.4	1232.00	1221.70	10.80'	11.20	10.75	6.73	1225.3	10.75	1221.3
7B	10/26/94	Yes	Down	Aquifer	1227.5	1231.00	1197.10	33.90'	34.00	34.50	5.02	1226.0	10.05	1221.0
8	05/22/92	Yes	Down	Groundwater	1229.5	1229.70	1220.30	11.70'	10.0*	10.00	5.15	1224.6	6.19	1223.5
8B	11/25/96	Yes	Down	Aquifer	1229.5	1232.50	1199.50	33.0'	16.35	NR	6.42	1226.1		
9	05/22/92	Yes	Down	Aquifer	1235.5	1238.50	1225.60	12.90'	12.96	14.40	3.73	1234.8	4.84	1233.7
10	11/25/96	Yes	Up	Groundwater	1277.0	1280.00	1253.00	27.0'	25.12	24.80	9.31	1270.7	14.63	1265.4
11	10/05/04	Yes	Up	Groundwater	1287.5	1289.80	1269.80	20	20.00	20.10	7.7	1282.1	10.43	1279.4
12	10/05/04	Yes	Up	Groundwater	1287.5	1289.10	1232.10	57	57.20	56.20	27.09	1262.0	28.87	1260.2
13	10/05/04	Yes	Up	Groundwater	1287.5	1288.60	1213.60	75	74.8	NR	32.09	1256.5	34.33	1254.3
14	10/30/08	Yes	Down	Groundwater	1227.3	1229.76	1217.26	12.5	12.5	12.25	4.31	1225.5	8.95	1220.8
15	10/30/08	Yes	Down	Groundwater	1228.8	1231.22	1218.72	12.5	12.5	12.2	3.9	1227.3	7.9	1223.3
16	10/30/08	Yes	Down	Groundwater	1230.1	1232.43	1219.93	12.5	12.5	11.9	4.79	1227.6	5.26	1227.2
17	04/01/12	Yes	Up	Groundwater	1230.1	1234.33	1214.13	20.2	20.2	20.1	7.47	1226.9	8.56	1225.8
18	06/06/19	Yes	Up	Groundwater	1230.1	1289.30	1212.70	76.6	76.6	76.6	33.05	1256.3	34.71	1254.6
19	06/06/19	Yes	Up	Groundwater	1230.1	1289.61	1261.81	27.8	27.8	27.8	8.85	1280.8	11.06	1278.6
20	06/06/19	Yes	Up	Groundwater	1230.1	1282.77	1216.22	66.55	66.55	66.55	27.45	1255.3	29.18	1253.6
21	06/06/19	Yes	Up	Groundwater	1230.1	1282.69	1254.89	27.8	27.8	27.8	6.97	1275.7	14.65	1268.0

** casing cut-off .

Northern Plains Regional Sanitary Landfill

Monit. Well No.	Date Installed	Meets Current Design Standards	Up or Down Gradient Well	Water Strata Monitored	Elevation at Grade	Elevation of Well Head	Elevation at Bottom of Well	Initial Depth of Well from Head	Measured Depth of Well from Head (ft)	Measured Depth of Well from Head (ft)	4/2/2015	4/2/2015	10/26/2015	10/26/2015
											Depth to Water from Head (ft)	Elevation Water MSL (ft)	Depth to Water from Head (ft)	Elevation Water MSL (ft)
2	09/11/79	Yes	Up	Aquifer	1287.4	1291.00	1240.50	50.5'	47.20	buried			buried	buried
3AR	11/25/96	Yes	Down	Groundwater	1231.3	1234.30	1221.30	13.0'	14.83	14.40	6.11	1228.2	6.9	1227.4
3B	10/24/94	Yes	Down	Aquifer	1227.4	1231.00	1207.45	23.55'	28.45	NR	5.75	1225.3	6.45	1224.6
5	4/25/1984	Yes	Up	Aquifer	1293.4	1293.70	1251.07	45.93'	45.93'	NR	11	1282.7	12.15	1281.6
5A	03/21/95	Yes	Up	Groundwater	1295.9	1297.40	1272.73	24.27'	24.73	NR	15.3	1282.1	15.2	1282.2
6A	10/25/94	Yes	Down	Aquifer	1227.0	1231.00	1207.10	23.9'	24.73	NR	8.13	1222.9	8.75	1222.3
6B	10/25/94	Yes	Down	Groundwater	1227.0	1231.00	1218.80	12.20'	12.48	12.30	8.72	1222.3	9.32	1221.7
7	9/28/1988	Yes	Down	Aquifer	1228.8	1230.00	1210.00	22	22.00	22.00	5.15	1224.9	7	1223.0
7A	10/26/94	Yes	Down	Groundwater	1227.4	1232.00	1221.70	10.80'	11.20	10.90	7.35	1224.7	9.65	1222.4
7B	10/26/94	Yes	Down	Aquifer	1227.5	1231.00	1197.10	33.90'	34.00	34.15	6.3	1224.7	8.13	1222.9
8	05/22/92	Yes	Down	Groundwater	1229.5	1232.00	1220.30	11.70'	12.49	9.95*	6.93	1225.1	5.85	1226.2
8B	11/25/96	Yes	Down	Aquifer	1229.5	1232.50	1199.50	33.0'	16.35	NR	6.09	1226.4	7.27	1225.2
9	05/22/92	Yes	Down	Aquifer	1235.5	1238.50	1225.60	12.90'	12.96	13.90	3.58	1234.9	4.2	1234.3
10	11/25/96	Yes	Up	Groundwater	1277.0	1280.00	1253.00	27.0'	25.12	24.80	16.35	1263.7	15.75	1264.3
11	10/05/04	Yes	Up	Groundwater	1287.5	1289.80	1269.80	20	20.00	20.10	8.46	1281.3	8.1	1281.7
12	10/05/04	Yes	Up	Groundwater	1287.5	1289.10	1232.10	57	57.20	56.20	31.27	1257.8	29.3	1259.8
13	10/05/04	Yes	Up	Groundwater	1287.5	1288.60	1213.60	75	74.8	NR	35.15	1253.5	34.2	1254.4
14	10/30/08	Yes	Down	Groundwater	1227.3	1229.76	1217.26	12.5	12.5	12.25	3.85	1225.9	6.4	1223.4
15	10/30/08	Yes	Down	Groundwater	1228.8	1231.22	1218.72	12.5	12.5	12.2	5.2	1226.0	6.6	1224.6
16	10/30/08	Yes	Down	Groundwater	1230.1	1232.43	1219.93	12.5	12.5	11.7	3.76	1228.7	5.05	1227.4
17	04/01/12	Yes	Up	Groundwater	1230.1	1234.33	12414.13	20.2	20.2	20.1	7.75	1226.6	7.75	1226.6

** 2.3 ft of casing cut-off April 2, 2015.

Northern Plains Regional Sanitary Landfill

Monit. Well No.	Date Installed	Meets Current Design Standards	Up or Down Gradient Well	Water Strata Monitored	Elevation at Grade	Elevation of Well Head	Elevation at Bottom of Well	Initial Depth of Well from Head	Measured Depth of Well from Head (ft)	4/19/2010	4/19/2010	10/20/2010	10/20/2010
										Depth to Water from Head (ft)	Elevation Water MSL (ft)	Depth to Water from Head (ft)	Elevation Water MSL (ft)
2	09/11/79	Yes	Up	Aquifer	1287.4	1291.00	1240.50	50.5'	(Oct. 2005) 47.20	37.4	1253.6	37.6	1253.4
3AR	11/25/96	Yes	Down	Groundwater	1231.3	1234.30	1221.30	13.0'	14.83	6.2	1228.1	8.45	1225.9
3B	10/24/94	Yes	Down	Aquifer	1227.4	1231.00	1207.45	23.55'	28.45	5.5	1225.5	7.3	1223.7
5	4/25/1984	Yes	Up	Aquifer	1293.4	1293.70	1251.07	45.93'	45.93'	10.4	1283.3	12.5	1281.2
5A	03/21/95	Yes	Up	Groundwater	1295.9	1297.40	1272.73	24.27'	24.73	Removed	Removed	Removed	Removed
6A	10/25/94	Yes	Down	Aquifer	1227.0	1231.00	1207.10	23.9'	24.73	6.45	1224.6	8.35	1222.7
6B	10/25/94	Yes	Down	Groundwater	1227.0	1231.00	1218.80	12.20'	12.48	6.75	1224.3	8.75	1222.3
7	9/28/1988	Yes	Down	Aquifer	1228.8	1230.00	1210.00	22	22.00	NT	NT	6.2	1223.8
7A	10/26/94	Yes	Down	Groundwater	1227.4	1232.00	1221.70	10.80'	11.20	6.3	1225.7	8.4	1223.6
7B	10/26/94	Yes	Down	Aquifer	1227.5	1231.00	1197.10	33.90'	34.00	4.8	1226.2	7	1224.0
8	05/22/92	Yes	Down	Groundwater	1229.5	1232.00	1220.30	11.70'	12.49	6.1	1225.9	6.2	1225.8
8B	11/25/96	Yes	Down	Aquifer	1229.5	1232.50	1199.50	33.0'	16.35	5.1	1227.4	5.3	1227.2
9	05/22/92	Yes	Down	Aquifer	1235.5	1238.50	1225.60	12.90'	12.96	3.5	1235.0	5.3	1233.2
10	11/25/96	Yes	Up	Groundwater	1277.0	1280.00	1253.00	27.0'	25.12	9.9	1270.1	13.8	1266.2
11	10/05/04	Yes	Up	Groundwater	1287.5	1289.80	1269.80	20	20.00	4.6	1285.2	6.4	1283.4
12	10/05/04	Yes	Up	Groundwater	1287.5	1289.10	1232.10	57	57.20	26.4	1262.7	26.6	1262.5
13	10/05/04	Yes	Up	Groundwater	1287.5	1288.60	1213.60	75	74.8	32.2	1256.4	32.35	1256.3
14	10/30/08	Yes	Down	Groundwater	1227.3	1229.76	1217.26	12.5	12.5	3.7	1226.1	5.5	1224.3
15	10/30/08	Yes	Down	Groundwater	1228.8	1231.22	1218.72	12.5	12.5	3.5	1227.7	5.3	1225.9
16	10/30/08	Yes	Down	Groundwater	1230.1	1232.43	1219.93	12.5	12.5	2.85	1229.6	3.25	1229.2

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	4/21/08	6/23/08	8/1/08	10/31/08	1/5/09	2/10/09
MW-3AR	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I	
MW-6B	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I	
MW-7A	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I	
MW-7B	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I	
MW-8	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I	
MW-9	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I	
MW-10	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I	
MW-11	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I	
MW-12	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I	
MW-14				Appendix I	Appendix I	Appendix I
MW-15				Appendix I	Appendix I	Appendix I
MW-16				Appendix I		Appendix I
GU-1	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I	
GU-2	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I	
GU-3	submerged	submerged	submerged	Appendix I	submerged	submerged
Duplicate				At MW-15	At MW-9	At MW-16

WELL	4/14/09	6/9/09	10/29/09	4/19/10	10/20/10	4/20/11
MW-3AR	Appendix I		Appendix I	Appendix I	Appendix I	Appendix I++
MW-6B	Appendix I		Appendix I	Appendix I	Appendix I	Appendix I
MW-7A	Appendix I	Appendix II	Appendix II	Appendix I	Appendix II	Appendix I++
MW-7B	Appendix I	Appendix II	Appendix II	Appendix I	Appendix II	Appendix I
MW-8	Appendix I	Appendix II	Appendix II	Appendix I	Appendix II	Appendix I
MW-9	Appendix I		Appendix I	Appendix I	Appendix I	Appendix I
MW-10	Appendix I		Appendix I	Appendix I	Appendix I	Appendix I++
MW-11	Appendix I		Appendix I	Appendix I	Appendix I	Appendix I++
MW-12	Appendix I		Appendix I	Appendix I	Appendix I	Appendix I++
MW-14	Appendix I	Appendix II	Appendix I ^(1,3)	Appendix II	Appendix I	Appendix I++
MW-15	Appendix I	Appendix II	Appendix I ⁽¹⁾	Appendix II	Appendix I	Appendix I++
MW-16	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I++
GU-1	Appendix I	Appendix II	Appendix I ^(1,2)	Dry	Dry	Dry
GU-2	Appendix I		Appendix I	Appendix I	Appendix I	Appendix I
GU-3	submerged	submerged	submerged	Dry	submerged	Dry
Duplicate	At MW-10	At MW-16	At MW-15	At MW-15	At GU-2	At MW-15

WELL	10/13/11	3/30/12	4/25/12	10/22/12	4/15/13	8/9/13
MW-3AR	Appendix II		Appendix II	Appendix I*	Appendix I*	Appendix I*
MW-6B	Appendix I		Appendix I	Dry	Appendix I	Appendix I
MW-7A	Appendix I		Appendix I	Dry	Appendix I	Appendix I
MW-7B	Appendix I		Appendix I	Appendix I	Appendix I	Appendix I
MW-8	Appendix I		Appendix I	Appendix I	Appendix I	Appendix I
MW-9	Appendix I		Appendix I	Appendix I	Appendix I	Appendix I
MW-10	Appendix I		Appendix I	Dry	Appendix I	Appendix I
MW-11	Appendix I		Appendix I	Appendix I	Appendix I	Appendix I
MW-12	Appendix I		Appendix I	Appendix I	Appendix I	Appendix I
MW-14	Appendix I		Appendix I	Appendix I	Appendix I ^(1,3)	Appendix I ^(1,3)
MW-15	Appendix I		Appendix I	Appendix I	Appendix I ⁽¹⁾	Appendix I ⁽¹⁾
MW-16	Appendix I		Appendix I	Appendix I	Appendix I	Appendix I
MW-17		Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
GU-1	Appendix I		Appendix II	Appendix I	Appendix I ^(1,2)	Appendix I ^(1,2)
GU-2	Appendix I		Appendix I	Appendix I	Appendix I	Appendix I
GU-3	submerged		submerged	submerged	submerged	submerged
Duplicate	At MW-14		At MW-17	At GU-2	At MW-12	At MW-8C

WELL	4/7/14	10/23/14	1/16/15	4/2/15	9/15/15	10/26/15
MW-3AR	App I ⁽⁴⁾	TSS+App I ⁽⁴⁾	---	App I	---	App I ⁽⁴⁾
MW-6B	App I	TSS+App I	---	App I	---	App I
MW-7A	App I*	TSS+App I*	---	App II	---	App I*
MW-7B	App I*	TSS+App I*	---	App II	---	App I*
MW-8	App I*	TSS+App I*	---	App II	---	App I ⁽¹⁾
MW-9	App I	TSS+App I	---	App I	---	App I
MW-10	App I	TSS+App I	---	App I	---	App I
MW-11	App I	TSS+App I	App I	App I	App I	App I
MW-12	App I	TSS+App I	App I	App I	App I	App I
MW-14	App I ^{(1),(2)}	TSS+App I ^{(1),(2)}	---	App II	---	App I ^{(1),(2)}
MW-15	App I ⁽¹⁾	TSS+App I ⁽¹⁾	---	App II	---	App I ⁽¹⁾
MW-16	App I	TSS+App I	---	App I	---	App I
MW-17	App I	TSS+App I	App I	App I	App I	App I
GU-1	Plugged	Plugged	Plugged	Plugged	Plugged	Plugged
GU-2	App I	TSS+App I	---	App I	---	App I
GU-3	No Sample	TSS+App I	---	App II	---	Connected to LCP
Duplicate	At MW-17	At MW-3F	---	At MW-6B	---	At MW-11

WELL	4/1/16	10/19/16	4/17/17	10/11/17
MW-3AR	App I ⁽⁴⁾	App I ⁽⁴⁾	App II	App I
MW-6B	App I	App I	App I	App I
MW-7A	App I*	App I*	App I*	App I*
MW-7B	App I*	App I*	App I*	App I*
MW-8	App I ⁽¹⁾	App I ⁽¹⁾	App I ⁽¹⁾	App I ⁽¹⁾
MW-9	App I	App I	App I	App I
MW-10	App I	App I	App II	App I
MW-11	App I	App I	App I	App I
MW-12	App I	App I	App I	App I
MW-14	App I ^{(1),(2)}	App I ^{(1),(2)}	App I ^{(1),(2)}	App I ⁽¹⁾
MW-15	App I ⁽¹⁾	App I ⁽¹⁾	App I ⁽¹⁾	App I ⁽¹⁾
MW-16	App I	App I	App I	App I
MW-17	App I	App I	App I	App I
GU-1	App I	App I	App I	Dry
GU-2	App I	App I	App I	App I
GU-3	Connected to LCP	Connected to LCP	Connected to LCP	Connected to LCP
Duplicate	At MW-8	At MW-17	At MW-3AR	At MW-3AR

WELL	6/1/18	10/3/18	1/3/19	Notes
MW-3AR	Appendix I	Appendix I	R- Cu	<i>Frozen 1/3/19</i>
MW-6B	Appendix I	Appendix I	R- Zn	
MW-7A	Appendix I	Appendix I		
MW-7B	Appendix I	Appendix I		
MW-8	Appendix I ⁽¹⁾	Appendix I ⁽¹⁾	R-Cd, chloroethane	<i>Frozen 1/3/19</i>
MW-9	Appendix I	Appendix I		
MW-10	Appendix II	Appendix I		
MW-11	Appendix I	Appendix I		
MW-12	Appendix I	Appendix I		
MW-14	Appendix I ⁽¹⁾	Appendix I ⁽¹⁾		
MW-15	Appendix I ⁽¹⁾	Appendix I ⁽¹⁾		
MW-16	Appendix I	Appendix I		
MW-17	Appendix I	Appendix I		
GU-1	Appendix I	Appendix I		
GU-2	Appendix I	Appendix I	R- Cu, Zn	
GU-3	Connected to LCP	Connected to LCP		
Duplicate	At MW-14	At MW-14		

(b) background well. App I = Appendix I App II = Appendix II TSS = Total Suspended Solids

* = Appendix I compounds plus no detected Appendix II compounds in accordance with 113.10(6)e.

(1) = detected Appendix II compound sulfide

(2) = detected Appendix II compound 0,0,0 triethyl phosphorothioate

(3) = detected Appendix II compound 4 nitroaniline

(4) = detected Appendix II compounds (bis(2ethylhexyl)phthalate: dimethoate: famphur)

++=dissolved metals

WELL	4/8/19	10/11/19	4/27/2020	10/9/2020	1/8/2021
MW-3AR	Appendix I	Appendix I	Appendix I	Appendix I	
MW-6B	Appendix II	Appendix I ⁽²⁾	Appendix II	Appendix I ⁽²⁾	
MW-7A	Appendix I	Appendix I	Appendix II	Appendix I	
MW-7B	Appendix I	Appendix I	Appendix II	Appendix I	
MW-8	Appendix I ⁽¹⁾	Appendix I ⁽¹⁾	Appendix II	Appendix I ⁽¹⁾	
MW-9	Appendix I	Appendix I	Appendix I	Appendix I	(R) - Cu
MW-10	Appendix I ⁽²⁾	Appendix I ⁽²⁾	Appendix I ⁽²⁾	Appendix I ⁽²⁾	
MW-11	Appendix I	Appendix I	Appendix I	Appendix I	
MW-12	Appendix I	Appendix I	Appendix I	Appendix I	
MW-14	Appendix I ⁽¹⁾	Appendix I ⁽¹⁾	Appendix II	Appendix I ⁽³⁾	
MW-15	Appendix I ⁽¹⁾	Appendix I ⁽¹⁾	Appendix II	Appendix I ⁽²⁾	
MW-16	Appendix I	Appendix I	Appendix I	Appendix I	
MW-17	Appendix I	Appendix I	Appendix I	Appendix I	
GU-1	Appendix I	Appendix I	Appendix I	Appendix I	
GU-2	Appendix I	Appendix I	Appendix I	Appendix I	
GU-3	Connected to LCP	Connected to LCP	Connected to LCP	Connected to LCP	
Duplicate	At MW-6B	At MW-9	At MW-14	At MW-17	

WELL	4/9/2021	6/23/2021	10/25/2021	1/13/2022	
MW-3AR	Appendix I		Appendix I		
MW-6B	Appendix I ⁽²⁾		Appendix I ⁽²⁾		
MW-7A	Appendix I		Appendix I		
MW-7B	Appendix I		Appendix I		
MW-8	Appendix I ⁽¹⁾	App.I VOC + As	Appendix I ⁽¹⁾		
MW-9	Appendix I		Appendix I		
MW-10	Appendix I		Appendix I		
MW-11	Appendix I		Appendix I		
MW-12	Appendix I		Appendix I		
MW-14	Appendix I		Appendix I		
MW-15	Appendix I ⁽²⁾		Appendix I ⁽²⁾		
MW-16	Appendix I	(R) - Ni	Appendix I	(R) - Ni	
MW-17	Appendix I		Appendix I		
GU-1	Appendix I		Appendix I		
GU-2	Appendix I		Appendix I	(R) - Se	
GU-3	Connected to LCP		Connected to LCP		
Duplicate	At MW-16		At MW-17		

* = Appendix I compounds plus no detected Appendix II compounds in accordance with 113.10(6)e.

- (1) = detected Appendix II compound sulfide
- (2) = detected Appendix II compound bis(2ethylhexyl)phthalate
- (3) = detected Appendix II compound methylacrylonitrile
- (R) = verification resample - compound

WELL	4/11/2022	7/6/2022	10/12/2022	1/6/2023	
MW-3AR	Frozen		Dry		
MW-6B	Appendix I ⁽¹⁾		Dry		
MW-7A	Appendix I		Dry		
MW-7B	Appendix I		Appendix I		
MW-8	Appendix I	(R) – Co, Cr, Cu, Ni, Se, V	Appendix I		
MW-9	Appendix I		Appendix I		
MW-10	Appendix I		Appendix I		
MW-11	Appendix I		Appendix I		
MW-12	Appendix I		Appendix I		
MW-14	Appendix I		Appendix I		
MW-15	Appendix I		Appendix I		
MW-16	Appendix II		Appendix I ⁽¹⁾		
MW-17	Appendix I		Appendix I		
GU-1	Appendix I	(R) – Ba, Ni	Appendix I		
GU-2	Appendix I		Appendix I	(R) – Cu, Pb, Zn	
GU-3	Connected to LCP		Connected to LCP		
Duplicate	At MW-9		At MW-16		

(1) = detected Appendix II compound bis(2ethylhexyl)phthalate

(R) = verification resample - compound

WELL	4/6/2023	6/27/2023	10/9/2023	4/4/2024	10/16/2024
MW-3AR	Appendix II		Dry	Appendix I	Appendix I
MW-6B	Appendix I ⁽¹⁾		Dry	Appendix I ⁽¹⁾	Dry
MW-7A	Appendix I		Dry	Appendix I	Dry
MW-7B	Appendix I		Appendix I	Appendix I	Appendix I
MW-8	Appendix I		Appendix I	Appendix I	Appendix I
MW-9	Appendix I		Appendix I	Appendix I	Appendix I
MW-10	Appendix I		Appendix I	Appendix II	Appendix I
MW-11	Appendix I		Appendix I	Appendix I	Appendix I
MW-12	Appendix I		Appendix I	Appendix I	Appendix I
MW-13	---	Appendix I Metals	Appendix I Metals	Appendix I Metals	Appendix I Metals
MW-14	Appendix I		Appendix I	Appendix I	Appendix I
MW-15	Appendix I		Appendix I	Appendix I	Appendix I
MW-16	Appendix II		Appendix I	Appendix I	Appendix I
MW-17	Appendix I		Appendix I	Appendix I	Appendix I
MW-18	Appendix I Metals		Appendix I Metals	Appendix I Metals	Appendix I Metals
MW-19	Appendix I Metals		Appendix I Metals	Appendix I Metals	Appendix I Metals
MW-20	Appendix I Metals		Appendix I Metals	Appendix I Metals	Appendix I Metals
MW-21	Appendix I Metals		Appendix I Metals	Appendix I Metals	Appendix I Metals
GU-1	Appendix I		Appendix I	Appendix I	Appendix I
GU-2	Appendix II	R ⁽¹⁾	Appendix I ⁽¹⁾	Appendix I	Appendix I
GU-3	Connected to LCP		Connected to LCP	Connected to LCP	Connected to LCP
Duplicate	At MW-20		At MW-21	At MW-20	At MW-13

(1) = detected Appendix II compound bis(2ethylhexyl)phthalate

(R) = verification resample - compound

Appendix B.2 –
Field Sampling Forms

**Northern Plains Sanitary Landfill
PERMIT # 74-SDP-02-76P**

4/4/2024

Sampled by: Todd Whipple

Weather conditions: Sunny - windy, 35-49 degrees

IDNR Form 542-1322

Monitoring Well: MW-3AR (dg)

Primary Sampling Method:
Secondary Sampling Method:

No-Purge for Appendix I
Purge & Sample for all analytes beyond Appendix I

GENERAL INFORMATION

TOC	1229.52
Well Depth	10.05
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	1229.52
Well Depth	10.05
Top Screen	1224.47
Bottom Screen	1219.47
Bottom Well	1219.47
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	4.00
Top sample	1225.52
Bottom sample	1221.52
Turbidity(NTU)	3.00

Date	Time	Water Level	Water Elevation	Notes
4/4/2024	14:21	2.81	1226.71	dry

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	3.00
Appendix I	Metals	150	150	3.00
Appendix I	VOC	240	240	3.00
Full Appendix II	10 more containers	5620		
TSS	TSS	1000		
Supplemental	BEHP	2-QT		
Supplemental		250		
Total		400	0	

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

TOC	1229.52	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	10.05	Before purging	4/4/2024	14:21	2.81	1226.71	2	1.7	yes
		After purging				1229.52			
		Top of Screen New				1224.47			
						5.05			feet above (+) or below (-) top screen
		Bottom of Well New				1219.47			
		Bottom of Well Now	4/4/2024		10.05	1219.47			
						0.00			feet sedimentation
		Before Sampling				1229.52			
		Recovery	4/4/2024	14:30	7.93	1221.59			
		Recovery	4/4/2024	15:14	2.80	1226.72			
		Recovery				1229.52			
		Recovery				1229.52			

IDNR Form 542-1322

Monitoring Well: MW-6B (dg)

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

GENERAL INFORMATION

TOC	1229.02
Well Depth	10.50
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	1229.02
Well Depth	10.50
Top Screen	1221.52
Bottom Screen	1218.52
Bottom Well	1218.52
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	6.77
Top sample	1222.25
Bottom sample	1218.25
Turbidity(NTU)	3.23

Date	Time	Water Level	Water Elevation	Notes
4/4/2024	14:47	6.77	1222.25	

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	3.23
Appendix I	Metals	150	150	3.23
Appendix I	VOC	240	240	3.23
Full Appendix II	10 more containers	5620		
TSS	TSS	1000		
Supplemental	BEHP	2-QT		
Supplemental		250		
Total		400	0	

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

TOC	1229.02	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	10.50	Before purging	4/4/2024	14:47	6.77	1222.25	3	4.9	no
		After purging				1229.02			
		Top of Screen New				1221.52			
						7.50			feet above (+) or below (-) top screen
		Bottom of Well New				1218.52			
		Bottom of Well Now	4/4/2024		10.50	1218.52			
						0.00			feet sedimentation
		Before Sampling				1229.02			
		Recovery	4/4/2024	15:00	7.32	1221.70			
		Recovery	4/4/2024	15:05	6.78	1222.24			
		Recovery				1229.02			
		Recovery				1229.02			

IDNR Form 542-1322

Monitoring Well: MW-7A (dg)

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

GENERAL INFORMATION

TOC	1232
Well Depth	11.20
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	1232
Well Depth	11.20
Top Screen	1225.80
Bottom Screen	1220.80
Bottom Well	1220.80
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	6.50
Top sample	1225.50
Bottom sample	1221.50
Turbidity(NTU)	2.77

Date	Time	Water Level	Water Elevation	Notes
4/4/2024	13:27	6.37	1225.63	

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	2.77
Appendix I	Metals	150	150	2.77
Appendix I	VOC	240	240	2.77
Full Appendix II	10 more containers	5620		
TSS	TSS	1000		
Supplemental	2-QT			
Supplemental	250			
Total		400	0	

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

TOC	1232	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	11.20	Before purging	4/4/2024	13:27	6.37	1225.63	3	3.8	no
		After purging				1232.00			
		Top of Screen New				1225.80			
						6.20			feet above (+) or below (-) top screen
		Bottom of Well New				1220.80			
		Bottom of Well Now	4/4/2024		10.75	1221.25			
						0.45			feet sedimentation
		Before Sampling				1232.00			
		Recovery	4/4/2024	13:36	6.80	1225.20			
		Recovery	4/4/2024	15:20	6.37	1225.63			
		Recovery				1232.00			
		Recovery				1232.00			

IDNR Form 542-1322

Monitoring Well: MW-7B (dg)

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

GENERAL INFORMATION

TOC	1231
Well Depth	34.00
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	1231
Well Depth	34.15
Top Screen	1202.00
Bottom Screen	1197.00
Bottom Well	1197.00
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	30.00
Top sample	1201.00
Bottom sample	1197.00
Turbidity(NTU)	6.09

Date	Time	Water Level	Water Elevation	Notes
4/4/2024	13:11	4.79	1226.21	

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	6.09
Appendix I	Metals	150	150	6.09
Appendix I	VOC	240	240	6.09
Full Appendix II	10 more containers	5620		
TSS	TSS	1000		
Supplemental	2-QT			
Supplemental	250			
Total		400	0	

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

TOC	1231	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	34.00	Before purging	4/4/2024	13:11	4.79	1226.21	4	0.8	No
		After purging				1231.00			
		Top of Screen New				1202.00			
						29.00			feet above (+) or below (-) top screen
		Bottom of Well New				1197.00			
		Bottom of Well Now	4/4/2024		35.00	1196.00			
						-1.00			feet sedimentation
		Before Sampling				1231.00			
		Recovery	4/4/2024	13:22	12.60	1218.40			
		Recovery	4/4/2024	15:19	4.78	1226.22			
		Recovery				1231.00			
		Recovery				1231.00			

Monitoring Well: MW-8 (dg)

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

GENERAL INFORMATION

TOC	1229.7
Well Depth	10.05
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	1229.7
Well Depth	10.05
Top Screen	1224.51
Bottom Screen	1219.51
Bottom Well	1219.51
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	5.25
Top sample	1224.45
Bottom sample	1220.45
Turbidity(NTU)	410.80

red- fe bacteria

Date	Time	Water Level	Water Elevation	Notes
4/4/2024	12:25	5.25	1224.45	

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	410.80
Appendix I	Metals	150	150	410.80
Appendix I	VOC	240	240	410.80
Full Appendix II	10 more containers	5620		
TSS	TSS	1000		
Supplemental	Sulfide	2-QT		
Supplemental		250		
Total		400	0	

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

TOC	1229.7	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	10.05	Before purging	4/4/2024	12:25	5.25	1224.45	2	2.6	No
		After purging				1229.70			
		Top of Screen New				1224.51			
						5.19			feet above (+) or below (-) top screen
		Bottom of Well New				1219.51			
		Bottom of Well Now	4/4/2024		10.25	1219.45			
						-0.06			feet sedimentation
		Before Sampling				1229.70			
		Recovery	4/4/2024	12:37	7.90	1221.80			
		Recovery	4/4/2024	15:25	5.30	1224.40			
		Recovery				1229.70			
		Recovery				1229.70			

Monitoring Well: MW-9 (dg)

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

GENERAL INFORMATION

TOC	1238.5
Well Depth	12.96
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	1238.5
Well Depth	12.96
Top Screen	1230.54
Bottom Screen	1225.54
Bottom Well	1225.54
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	9.60
Top sample	1228.90
Bottom sample	1224.90
Turbidity(NTU)	5.23

Date	Time	Water Level	Water Elevation	Notes
4/4/2024	11:49	3.83	1234.67	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte	Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10	5.23
Appendix I	Metals	150	150	5.23
Appendix I	VOC	240	240	5.23
Full Appendix II	10 more containers	5620		
TSS	TSS	1000		
Supplemental	2-QT			
Supplemental	250			
Total		400	0	

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

TOC	1238.5	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	12.96	Before purging	4/4/2024	11:49	3.83	1234.67	5	3.4	No
		After purging				1238.50			
		Top of Screen New				1230.54			
						7.96			feet above (+) or below (-) top screen
		Bottom of Well New				1225.54			
		Bottom of Well Now	4/4/2024		14.60	1223.90			
						-1.64			feet sedimentation
		Before Sampling				1238.50			
		Recovery	4/4/2024	12:00	5.32	1233.18			
		Recovery	4/4/2024	15:31	3.86	1234.64			
		Recovery				1238.50			
		Recovery				1238.50			

Monitoring Well: MW-10 (ug)

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

GENERAL INFORMATION

TOC	1280
Well Depth	25.12
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	1280
Well Depth	25.12
Top Screen	1265.00
Bottom Screen	1255.00
Bottom Well	1255.00
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	20.00
Top sample	1260.00
Bottom sample	1256.00
Turbidity(NTU)	2.87

Date	Time	Water Level	Water Elevation	Notes
4/4/2024	9:03	4.93	1275.07	

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	2.87
Appendix I	Metals	150	150	2.87
Appendix I	VOC	240	240	2.87
Full Appendix II	10 more containers	5620		
TSS	TSS	1000		
Supplemental	BEHP	2-QT		
Supplemental		250		
Total		400	0	

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

TOC	1280	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	25.12	Before purging	4/4/2024	9:03	4.93	1275.07	5	1.5	no
		After purging				1280.00			
		Top of Screen New				1265.00			
						15.00			feet above (+) or below (-) top screen
		Bottom of Well New				1255.00			
		Bottom of Well Now	4/4/2024		25.10	1254.90			
						-0.10			feet sedimentation
		Before Sampling				1280.00			
		Recovery	4/4/2024	9:15	22.45	1257.55			
		Recovery	4/4/2024	15:46	4.92	1275.08			
		Recovery				1280.00			
		Recovery				1280.00			

Monitoring Well: MW-11 (ug)

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

GENERAL INFORMATION

TOC	1289.8
Well Depth	20.00
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	1289.8
Well Depth	20.00
Top Screen	1279.80
Bottom Screen	1269.80
Bottom Well	1269.80
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	15.00
Top sample	1274.80
Bottom sample	1270.80
Turbidity(NTU)	7.28

Date	Time	Water Level	Water Elevation	Notes
4/4/2024	10:26	7.66	1282.14	

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	7.28
Appendix I	Metals	150	150	7.28
Appendix I	VOC	240	240	7.28
Full Appendix II	10 more containers	5620		
TSS	TSS	1000		
Supplemental	2-QT			
Supplemental	250			
Total		400	0	

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

TOC	1289.8	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	20.00	Before purging	4/4/2024	10:26	7.66	1282.14	3.5	1.7	No
		After purging				1289.80			
		Top of Screen New				1279.80			
						10.00			feet above (+) or below (-) top screen
		Bottom of Well New				1269.80			
		Bottom of Well Now	4/4/2024		20.55	1269.25			
						-0.55			feet sedimentation
		Before Sampling				1289.80			
		Recovery	4/4/2024	10:38	7.75	1282.05			
		Recovery	No significant draw down			1289.80			
		Recovery				1289.80			
		Recovery				1289.80			

Monitoring Well: MW-12 (ug)

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

GENERAL INFORMATION

TOC	1289.1
Well Depth	57.20
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	1289.1
Well Depth	57.20
Top Screen	1251.90
Bottom Screen	1231.90
Bottom Well	1231.90
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	50.00
Top sample	1239.10
Bottom sample	1235.10
Turbidity(NTU)	2.74

Date	Time	Water Level	Water Elevation	Notes
4/4/2024	10:39	30.1	1259	

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	2.74
Appendix I	Metals	150	150	2.74
Appendix I	VOC	240	240	2.74
Full Appendix II	10 more containers	5620		
TSS	TSS	1000		
Supplemental	2-QT			
Supplemental	250			
Total		400	0	

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

TOC	1289.1	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	57.20	Before purging	4/4/2024	10:39	30.10	1258.50	4	0.9	NO
		After purging				1288.60			
		Top of Screen New				1251.90			
						36.70			feet above (+) or below (-) top screen
		Bottom of Well New				1231.90			
		Bottom of Well Now	4/4/2024		56.70	1231.90			
						0.00			feet sedimentation
		Before Sampling				1288.60			
		Recovery	4/4/2024	10:50	30.15	1258.45			
		Recovery	No significant draw down			1288.60			
		Recovery				1288.60			
		Recovery				1288.60			

IDNR Form 542-1322

Monitoring Well: MW-13 (ug)

Primary Sampling Method:
Secondary Sampling Method:

No-Purge for Appendix I
Purge & Sample for all analytes beyond Appendix I

GENERAL INFORMATION

TOC	1288.6
Well Depth	75.30
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1288.6
Well Depth	75.30
Top Screen	1223.30
Bottom Screen	1213.30
Bottom Well	1213.30
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	69.00
Top sample	1219.60
Bottom sample	1215.60
Turbidity(NTU)	3.84

Date	Time	Water Level	Water Elevation	Notes
4/4/2024	10:51	34.22	1254.38	

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		3.84
Appendix I	Metals	150		3.84
Appendix I	VOC	240		3.84
Full Appendix II	10 more containers	5620		
TSS	TSS	1000		
Supplemental	2-QT			
Supplemental	250			
Total		0	0	

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

TOC	1288.6	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	75.30	Before purging	4/4/2024	10:51	34.22	1254.38	5	0.7	NO
		After purging				1288.60			
		Top of Screen New				1223.30			
						65.30			feet above (+) or below (-) top screen
		Bottom of Well New				1213.30			
		Bottom of Well Now	4/4/2024		75.10	1213.50			
						0.20			feet sedimentation
		Before Sampling				1288.60			
		Recovery	4/4/2024	11:02	34.26	1254.34			
		Recovery		No significant draw down		1288.60			
		Recovery				1288.60			
		Recovery				1288.60			

IDNR Form 542-1322

Monitoring Well: MW-14 (dg)

Primary Sampling Method:
Secondary Sampling Method:

No-Purge for Appendix I
Purge & Sample for all analytes beyond Appendix I

GENERAL INFORMATION

TOC	1229.76
Well Depth	12.50
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	1229.76
Well Depth	12.50
Top Screen	1222.26
Bottom Screen	1217.26
Bottom Well	1217.26
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	7.00
Top sample	1222.76
Bottom sample	1218.76
Turbidity(NTU)	25.62

Date	Time	Water Level	Water Elevation	Notes
4/4/2024	14:00	4.26	1225.5	

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	25.62
Appendix I	Metals	150	150	25.62
Appendix I	VOC	240	240	25.62
Full Appendix II	10 more containers	5620		
TSS	TSS	1000		
Supplemental	BEHP	2-QT		
Supplemental	Sulfide	250		
Total		400	0	

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

TOC	1229.76	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	12.50	Before purging	4/4/2024	14:00	4.26	1225.50	3	2.2	no
		After purging				1229.76			
		Top of Screen New				1222.26			
						7.50			feet above (+) or below (-) top screen
		Bottom of Well New				1217.26			
		Bottom of Well Now	4/4/2024		12.30	1217.46			
						0.20			feet sedimentation
		Before Sampling				1229.76			
		Recovery	4/4/2024	14:10	6.28	1223.48			
		Recovery	4/4/2024	15:16	4.25	1225.51			
		Recovery				1229.76			
		Recovery				1229.76			

Monitoring Well: MW-15 (dg)

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

GENERAL INFORMATION

TOC	1231.22
Well Depth	12.50
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	1231.22
Well Depth	12.50
Top Screen	1223.92
Bottom Screen	1218.72
Bottom Well	1218.72
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	7.00
Top sample	1224.22
Bottom sample	1220.22
Turbidity(NTU)	4.77

Date	Time	Water Level	Water Elevation	Notes
4/4/2024	12:53	4.07	1227.15	

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	4.77
Appendix I	Metals	150	150	4.77
Appendix I	VOC	240	240	4.77
Full Appendix II	10 more containers	5620		
TSS	TSS	1000		
Supplemental	Sulfide	2-QT		
Supplemental	BEHP	250		
Total		400	0	

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

TOC	1231.22	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	12.50	Before purging	4/4/2024	12:53	4.07	1227.15	3	2.2	no
		After purging				1231.22			
		Top of Screen New				1223.72			
						7.50			feet above (+) or below (-) top screen
		Bottom of Well New				1218.72			
		Bottom of Well Now	4/4/2024		12.50	1218.72			
						0.00			feet sedimentation
		Before Sampling				1231.22			
		Recovery	4/4/2024	13:04	4.80	1226.42			
		Recovery	4/4/2024	15:22	4.10	1227.12			
		Recovery				1231.22			
		Recovery				1231.22			

IDNR Form 542-1322

Monitoring Well: MW-16 (dg)

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

GENERAL INFORMATION

TOC	1232.43
Well Depth	12.50
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	1232.43
Well Depth	12.50
Top Screen	1224.93
Bottom Screen	1219.43
Bottom Well	1219.43
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	7.00
Top sample	1225.43
Bottom sample	1221.43
Turbidity(NTU)	103.60

Date	Time	Water Level	Water Elevation	Notes
4/4/2024	12:10	5.21	1227.22	

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	103.60
Appendix I	Metals	150	150	103.60
Appendix I	VOC	240	240	103.60
Full Appendix II	10 more containers	5620		
TSS	TSS	1000		
Supplemental	bis(2-EH)Phthalate	2-QT		
Supplemental	Sulfide	250		
Total		400	0	

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

TOC	1232.43	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	12.50	Before purging	4/4/2024	12:10	5.21	1227.22	3	2.5	No
		After purging				1232.43			
		Top of Screen New				1224.93			
						7.50			feet above (+) or below (-) top screen
		Bottom of Well New				1219.93			
		Bottom of Well Now	4/4/2024		12.30	1220.13			
						0.20			feet sedimentation
		Before Sampling				1232.43			
		Recovery	4/4/2024	12:20	5.61	1226.82			
		Recovery	No significant drawdown			1232.43			
		Recovery				1232.43			
		Recovery				1232.43			

Monitoring Well: MW-17 (ug)

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

GENERAL INFORMATION

TOC	1234.33
Well Depth	20.20
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	1234.33
Well Depth	20.20
Top Screen	1224.13
Bottom Screen	1214.13
Bottom Well	1214.13
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	15.00
Top sample	1219.33
Bottom sample	1215.33
Turbidity(NTU)	28.33

red

Date	Time	Water Level	Water Elevation	Notes
4/4/2024	11:24	7.42	1226.91	

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	28.33
Appendix I	Metals	150	150	28.33
Appendix I	VOC	240	240	28.33
Full Appendix II	10 more containers	5620		
TSS	TSS	1000		
Supplemental	2-QT			
Supplemental	250			
Total		400	0	

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

TOC	1234.33	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	20.20	Before purging	4/4/2024	11:24	7.42	1226.91	3.5	1.7	NO
		After purging				1234.33			
		Top of Screen New				1224.13			
						10.20			feet above (+) or below (-) top screen
		Bottom of Well New				1214.13			
		Bottom of Well Now	4/4/2024		20.55	1213.78			
						-0.35			feet sedimentation
		Before Sampling				1234.33			
		Recovery	4/4/2024	11:35	7.51	1226.82			
		Recovery	No significant draw down			1234.33			
		Recovery				1234.33			
		Recovery				1234.33			

IDNR Form 542-1322

Monitoring Well: MW-18 (up)

Primary Sampling Method:
Secondary Sampling Method:

No-Purge for Appendix I
Purge & Sample for all analytes beyond Appendix I

GENERAL INFORMATION

TOC	1289.3
Well Depth	76.60
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	1289.3
Well Depth	76.60
Top Screen	1222.70
Bottom Screen	1212.70
Bottom Well	1212.70
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	70.00
Top sample	1219.30
Bottom sample	1215.30
Turbidity(NTU)	1.49

Date	Time	Water Level	Water Elevation	Notes
4/4/2024	10:02	34.5	1254.8	

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	1.49
Appendix I	Metals	150	150	1.49
Appendix I	VOC	240	240	1.49
Full Appendix II	10 more containers	5620		
TSS	TSS	1000		
Supplemental	bis(2-EH)Phthalate	2-QT		
Supplemental	Sulfide	250		
Total		400	0	

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

TOC	1289.3	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	76.60	Before purging	4/4/2024	10:02	34.50	1254.80	5	0.7	No
		After purging				1289.30			
		Top of Screen New				1222.70			
						66.60			feet above (+) or below (-) top screen
		Bottom of Well New				1212.70			
		Bottom of Well Now	4/4/2024		76.60	1212.70			
						0.00			feet sedimentation
		Before Sampling				1289.30			
		Recovery	4/4/2024	10:11	54.80	1234.50			
		Recovery	4/4/2024	15:56	34.50	1254.80			
		Recovery				1289.30			
		Recovery				1289.30			

Monitoring Well: MW-19 (up)

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

GENERAL INFORMATION

TOC	1289.61
Well Depth	27.80
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1289.61
Well Depth	27.80
Top Screen	1271.81
Bottom Screen	1261.81
Bottom Well	1261.81
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	22.00
Top sample	1267.61
Bottom sample	1263.61
Turbidity(NTU)	1.95

Date	Time	Water Level	Water Elevation	Notes
4/4/2024	10:08	7.75	1281.86	

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	1.95
Appendix I	Metals	150	150	1.95
Appendix I	VOC	240	240	1.95
Full Appendix II	10 more containers	5620		
TSS	TSS	1000		
Supplemental	bis(2-EH)Phthalate	2-QT		
Supplemental	Sulfide	250		
Total		400	0	

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

TOC	1289.61	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	27.80	Before purging	4/4/2024	10:08	7.75	1281.86	3	0.9	No
		After purging				1289.61			
		Top of Screen New				1271.81			
						17.80			feet above (+) or below (-) top screen
		Bottom of Well New				1261.81			
		Bottom of Well Now	4/4/2024		27.80	1261.81			
						0.00			feet sedimentation
		Before Sampling				1289.61			
		Recovery	4/4/2024	10:15	18.10	1271.51			
		Recovery	4/4/2024	15:55	16.96	1272.65			
		Recovery				1289.61			
		Recovery				1289.61			

IDNR Form 542-1322

Monitoring Well: MW-20 (up)

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

GENERAL INFORMATION

TOC	1282.77
Well Depth	66.55
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	1282.77
Well Depth	66.55
Top Screen	1226.22
Bottom Screen	1216.22
Bottom Well	1216.22
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	60.00
Top sample	1222.77
Bottom sample	1218.77
Turbidity(NTU)	1.39

Date	Time	Water Level	Water Elevation	Notes
4/4/2024	9:33	28.51	1254.26	

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	1.39
Appendix I	Metals	150	150	1.39
Appendix I	VOC	240	240	1.39
Full Appendix II	10 more containers	5620		
TSS	TSS	1000		
Supplemental	bis(2-EH)Phthalate	2-QT		
Supplemental	Sulfide	250		
Total		400	0	

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

TOC	1282.77	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	66.55	Before purging	4/4/2024	9:33	28.51	1254.26	5	0.8	No
		After purging				1282.77			
		Top of Screen New				1226.22			
						56.55			feet above (+) or below (-) top screen
		Bottom of Well New				1216.22			
		Bottom of Well Now	4/4/2024		66.55	1216.22			
						0.00			feet sedimentation
		Before Sampling				1282.77			
		Recovery	4/4/2024	9:50	44.73	1238.04			
		Recovery	4/4/2024	15:53	28.52	1254.25			
		Recovery				1282.77			
		Recovery				1282.77			

Monitoring Well: MW-21 (up)

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

GENERAL INFORMATION

TOC	1282.69
Well Depth	27.80
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1282.69
Well Depth	27.80
Top Screen	1264.89
Bottom Screen	1254.89
Bottom Well	1254.89
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	22.00
Top sample	1260.69
Bottom sample	1256.69
Turbidity(NTU)	2.06

Date	Time	Water Level	Water Elevation	Notes
4/4/2024	9:46	6.91	1275.78	

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	2.06
Appendix I	Metals	150	150	2.06
Appendix I	VOC	240	240	2.06
Full Appendix II	10 more containers	5620		
TSS	TSS	1000		
Supplemental	bis(2-EH)Phthalate	2-QT		
Supplemental	Sulfide	250		
Total		400	0	

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

TOC	1282.69	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	27.80	Before purging	4/4/2024	9:46	6.91	1275.78	3	0.9	No
		After purging				1282.69			
		Top of Screen New				1264.89			
						17.80			feet above (+) or below (-) top screen
		Bottom of Well New				1254.89			
		Bottom of Well Now	4/4/2024		27.80	1254.89			
						0.00			feet sedimentation
		Before Sampling				1282.69			
		Recovery	4/4/2024	9:55	14.00	1268.69			
		Recovery	4/4/2024	15:52	6.91	1275.78			
		Recovery				1282.69			
		Recovery				1282.69			

**Northern Plains Sanitary Landfill
PERMIT # 74-SDP-02-76P**

4/4/2024

Sampled by: Todd Whipple

Weather conditions:

Sunny - windy, 35-49 degrees

IDNR Form 542-1324

Date	Time	Type	Flowing	Quantity	Discolored	Odor	Litter	
4/4/2024	11:57	grd water underdrain	yes	250 ml/9 sec	No	No	No	
					pH	Conductivity	Temp.(C)	Turbidity(NTU)
					NT	NT	NT	3.14

IDNR Form 542-1324

Date	Time	Type	Flowing	Quantity	Discolored	Odor	Litter	
4/4/2024	14:34	groundwater underdrain	yes	250 mL/min	No	No	No	
					pH	Conductivity	Temp.(C)	Turbidity(NTU)
					NT	NT	NT	1.83

**Northern Plains Sanitary Landfill
PERMIT # 74-SDP-02-76P**

10/16/2024

Sampled by: Todd Whipple

Weather conditions:

Sunny - calm, 40-55 degrees

IDNR Form 542-1322

Monitoring Well: MW-3AR (dg)

Primary Sampling Method:
Secondary Sampling Method:

No-Purge for Appendix I
Purge & Sample for all analytes beyond Appendix I

GENERAL INFORMATION

TOC	1229.52
Well Depth	10.05
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	1229.52
Well Depth	10.05
Top Screen	1224.47
Bottom Screen	1219.47
Bottom Well	1219.47
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	6.00
Top sample	1223.52
Bottom sample	1219.52
Turbidity(NTU)	6.01

Date	Time	Water Level	Water Elevation	Notes
10/16/2024	14:20	8.12	1221.4	

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	BEHP	2-QT		
Supplemental		250		
Total		400	0	

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

TOC	1229.52	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	10.05	Before purging	10/16/2024	14:20	8.12	1221.40		0.0	
		After purging				1229.52			
		Top of Screen New				1224.47			
						5.05			feet above (+) or below (-) top screen
		Bottom of Well New				1219.47			
		Bottom of Well Now	10/16/2024		10.05	1219.47			
						0.00			feet sedimentation
		Before Sampling				1229.52			
		Recovery				1229.52			
		Recovery				1229.52			
		Recovery				1229.52			
		Recovery				1229.52			

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Monitoring Well: MW-6B (dg)

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

GENERAL INFORMATION

TOC	1229.02
Well Depth	10.50
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	1229.02
Well Depth	10.50
Top Screen	1221.52
Bottom Screen	1218.52
Bottom Well	1218.52
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	
Top sample	1229.02
Bottom sample	1225.02
Turbidity(NTU)	

Date	Time	Water Level	Water Elevation	Notes
10/16/2024			1229.02	dry

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	0.00
Appendix I	Metals	150	150	0.00
Appendix I	VOC	240	240	0.00
Full Appendix II	10 more containers	5620		
TSS	TSS	1000		
Supplemental	BEHP	2-QT		
Supplemental		250		
Total		400	0	

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

TOC	1229.02	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	10.50	Before purging	10/16/2024	0:00	0.00	1229.02		0.0	
		After purging				1229.02			
		Top of Screen New				1221.52			
						7.50			feet above (+) or below (-) top screen
		Bottom of Well New				1218.52			
		Bottom of Well Now	10/16/2024		10.50	1218.52			
						0.00			feet sedimentation
		Before Sampling				1229.02			
		Recovery				1229.02			
		Recovery				1229.02			
		Recovery				1229.02			
		Recovery				1229.02			

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Monitoring Well: MW-7A (dg)

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

GENERAL INFORMATION

TOC	1232
Well Depth	11.20
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	1232
Well Depth	11.20
Top Screen	1225.80
Bottom Screen	1220.80
Bottom Well	1220.80
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	
Top sample	1232.00
Bottom sample	1228.00
Turbidity(NTU)	

Date	Time	Water Level	Water Elevation	Notes
10/16/2024			1232	dry

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	0.00
Appendix I	Metals	150	150	0.00
Appendix I	VOC	240	240	0.00
Full Appendix II	10 more containers	5620		
TSS	TSS	1000		
Supplemental	2-QT			
Supplemental	250			
Total		400	0	

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

TOC	1232	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	11.20	Before purging	10/16/2024	0:00	0.00	1232.00		0.0	
		After purging				1232.00			
		Top of Screen New				1225.80			
						6.20			feet above (+) or below (-) top screen
		Bottom of Well New				1220.80			
		Bottom of Well Now	10/16/2024		10.75	1221.25			
						0.45			feet sedimentation
		Before Sampling				1232.00			
		Recovery				1232.00			
		Recovery				1232.00			
		Recovery				1232.00			
		Recovery				1232.00			

Monitoring Well: MW-7B (dg)

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

GENERAL INFORMATION

TOC	1231
Well Depth	34.00
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	1231
Well Depth	34.15
Top Screen	1202.00
Bottom Screen	1197.00
Bottom Well	1197.00
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	29.00
Top sample	1202.00
Bottom sample	1198.00
Turbidity(NTU)	2.42

Date	Time	Water Level	Water Elevation	Notes
10/16/2024	13:42	9.64	1221.36	

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	2.42
Appendix I	Metals	150	150	2.42
Appendix I	VOC	240	240	2.42
Full Appendix II	10 more containers	5620		
TSS	TSS	1000		
Supplemental	2-QT			
Supplemental	250			
Total		400	0	

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

TOC	1231	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	34.00	Before purging	10/16/2024	13:42	9.64	1221.36		0.0	
		After purging				1231.00			
		Top of Screen New				1202.00			
						29.00			feet above (+) or below (-) top screen
		Bottom of Well New				1197.00			
		Bottom of Well Now	10/16/2024		35.00	1196.00			
						-1.00			feet sedimentation
		Before Sampling				1231.00			
		Recovery				1231.00			
		Recovery				1231.00			
		Recovery				1231.00			
		Recovery				1231.00			

Monitoring Well: MW-8 (dg)

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

GENERAL INFORMATION

TOC	1229.7
Well Depth	10.05
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	1229.7
Well Depth	10.05
Top Screen	1224.51
Bottom Screen	1219.51
Bottom Well	1219.51
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	5.00
Top sample	1224.70
Bottom sample	1220.70
Turbidity(NTU)	40.64

red

Date	Time	Water Level	Water Elevation	Notes
10/16/2024	13:08	5.75	1223.95	

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	40.64
Appendix I	Metals	150	150	40.64
Appendix I	VOC	240	240	40.64
Full Appendix II	10 more containers	5620		
TSS	TSS	1000		
Supplemental	Sulfide	2-QT		
Supplemental		250		
Total		400	0	

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

TOC	1229.7	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	10.05	Before purging	10/16/2024	13:08	5.75	1223.95		0.0	
		After purging				1229.70			
		Top of Screen New				1224.51			
						5.19			feet above (+) or below (-) top screen
		Bottom of Well New				1219.51			
		Bottom of Well Now	10/16/2024		10.25	1219.45			
						-0.06			feet sedimentation
		Before Sampling				1229.70			
		Recovery				1229.70			
		Recovery				1229.70			
		Recovery				1229.70			
		Recovery				1229.70			

Monitoring Well: MW-9 (dg)

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

GENERAL INFORMATION

TOC	1238.5
Well Depth	12.96
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	1238.5
Well Depth	12.96
Top Screen	1230.54
Bottom Screen	1225.54
Bottom Well	1225.54
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	9.50
Top sample	1229.00
Bottom sample	1225.00
Turbidity(NTU)	4.01

Date	Time	Water Level	Water Elevation	Notes
10/16/2024	12:38	5.05	1233.45	

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	4.01
Appendix I	Metals	150	150	4.01
Appendix I	VOC	240	240	4.01
Full Appendix II	10 more containers	5620		
TSS	TSS	1000		
Supplemental	2-QT			
Supplemental	250			
Total		400	0	

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

TOC	1238.5	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	12.96	Before purging	10/16/2024	12:38	5.05	1233.45		0.0	
		After purging				1238.50			
		Top of Screen New				1230.54			
						7.96			feet above (+) or below (-) top screen
		Bottom of Well New				1225.54			
		Bottom of Well Now	10/16/2024		14.60	1223.90			
						-1.64			feet sedimentation
		Before Sampling				1238.50			
		Recovery				1238.50			
		Recovery				1238.50			
		Recovery				1238.50			
		Recovery				1238.50			

Monitoring Well: MW-10 (ug)

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

GENERAL INFORMATION

TOC	1280
Well Depth	25.12
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	1280
Well Depth	25.12
Top Screen	1265.00
Bottom Screen	1255.00
Bottom Well	1255.00
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	20.00
Top sample	1260.00
Bottom sample	1256.00
Turbidity(NTU)	3.99

Date	Time	Water Level	Water Elevation	Notes
10/16/2024	10:11	14.21	1265.79	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte	Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10	3.99
Appendix I	Metals	150	150	3.99
Appendix I	VOC	240	240	3.99
Full Appendix II	10 more containers	5620		
TSS	TSS	1000		
Supplemental	BEHP	2-QT		
Supplemental		250		
Total		400	0	

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

TOC	1280	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	25.12	Before purging	10/16/2024	10:11	14.21	1265.79		0.0	
		After purging				1280.00			
		Top of Screen New				1265.00			
						15.00			feet above (+) or below (-) top screen
		Bottom of Well New				1255.00			
		Bottom of Well Now	10/16/2024		25.10	1254.90			
						-0.10			feet sedimentation
		Before Sampling				1280.00			
		Recovery	4/4/2024	9:15	22.45	1257.55			
		Recovery	4/4/2024	15:46	4.92	1275.08			
		Recovery				1280.00			
		Recovery				1280.00			

Monitoring Well: MW-11 (ug)

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

GENERAL INFORMATION

TOC	1289.8
Well Depth	20.00
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	1289.8
Well Depth	20.00
Top Screen	1279.80
Bottom Screen	1269.80
Bottom Well	1269.80
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	15.00
Top sample	1274.80
Bottom sample	1270.80
Turbidity(NTU)	4.36

Date	Time	Water Level	Water Elevation	Notes
10/16/2024	11:26	10.06	1279.74	

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	4.36
Appendix I	Metals	150	150	4.36
Appendix I	VOC	240	240	4.36
Full Appendix II	10 more containers	5620		
TSS	TSS	1000		
Supplemental	2-QT			
Supplemental	250			
Total		400	0	

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

TOC	1289.8	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	20.00	Before purging	10/16/2024	11:26	10.06	1279.74		0.0	
		After purging				1289.80			
		Top of Screen New				1279.80			
						10.00			feet above (+) or below (-) top screen
		Bottom of Well New				1269.80			
		Bottom of Well Now	10/16/2024		20.55	1269.25			
						-0.55			feet sedimentation
		Before Sampling				1289.80			
		Recovery				1289.80			
		Recovery				1289.80			
		Recovery				1289.80			
		Recovery				1289.80			

Monitoring Well: MW-12 (ug)

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

GENERAL INFORMATION

TOC	1289.1
Well Depth	57.20
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	1289.1
Well Depth	57.20
Top Screen	1251.90
Bottom Screen	1231.90
Bottom Well	1231.90
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	50.00
Top sample	1239.10
Bottom sample	1235.10
Turbidity(NTU)	5.49

Date	Time	Water Level	Water Elevation	Notes
10/16/2024	11:34	29.06	1260.04	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte	Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10	5.49
Appendix I	Metals	150	150	5.49
Appendix I	VOC	240	240	5.49
Full Appendix II	10 more containers	5620		
TSS	TSS	1000		
Supplemental	2-QT			
Supplemental	250			
Total		400	0	

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

TOC	1289.1	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	57.20	Before purging	10/16/2024	11:34	29.06	1259.54		0.0	
		After purging				1288.60			
		Top of Screen New				1251.90			
						36.70			feet above (+) or below (-) top screen
		Bottom of Well New				1231.90			
		Bottom of Well Now	10/16/2024		56.70	1231.90			
						0.00			feet sedimentation
		Before Sampling				1288.60			
		Recovery				1288.60			
		Recovery				1288.60			
		Recovery				1288.60			
		Recovery				1288.60			

Monitoring Well: MW-13 (ug)

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

GENERAL INFORMATION

TOC	1288.6
Well Depth	75.30
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1288.6
Well Depth	75.30
Top Screen	1223.30
Bottom Screen	1213.30
Bottom Well	1213.30
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	69.00
Top sample	1219.60
Bottom sample	1215.60
Turbidity(NTU)	2.87

Date	Time	Water Level	Water Elevation	Notes
10/16/2024	11:41	34.04	1254.56	

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		2.87
Appendix I	Metals	150		2.87
Appendix I	VOC	240		2.87
Full Appendix II	10 more containers	5620		
TSS	TSS	1000		
Supplemental	2-QT			
Supplemental	250			
Total		0	0	

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

TOC	1288.6	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	75.30	Before purging	10/16/2024	11:41	34.04	1254.56		0.0	
		After purging				1288.60			
		Top of Screen New				1223.30			
						65.30			feet above (+) or below (-) top screen
		Bottom of Well New				1213.30			
		Bottom of Well Now	10/16/2024		75.10	1213.50			
						0.20			feet sedimentation
		Before Sampling				1288.60			
		Recovery	4/4/2024	11:02	34.26	1254.34			
		Recovery		No significant draw down		1288.60			
		Recovery				1288.60			
		Recovery				1288.60			

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Monitoring Well: MW-14 (dg)

Primary Sampling Method:
Secondary Sampling Method:

No-Purge for Appendix I
Purge & Sample for all analytes beyond Appendix I

GENERAL INFORMATION

TOC	1229.76
Well Depth	12.50
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	1229.76
Well Depth	12.50
Top Screen	1222.26
Bottom Screen	1217.26
Bottom Well	1217.26
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	8.80
Top sample	1220.96
Bottom sample	1216.96
Turbidity(NTU)	3.58

Date	Time	Water Level	Water Elevation	Notes
10/16/2024	14:05	8.88	1220.88	

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	3.58
Appendix I	Metals	150	150	3.58
Appendix I	VOC	240	240	3.58
Full Appendix II	10 more containers	5620		
TSS	TSS	1000		
Supplemental	BEHP	2-QT		
Supplemental	Sulfide	250		
Total		400	0	

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

TOC	1229.76	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	12.50	Before purging	10/16/2024	14:05	8.88	1220.88		0.0	
		After purging				1229.76			
		Top of Screen New				1222.26			
						7.50			feet above (+) or below (-) top screen
		Bottom of Well New				1217.26			
		Bottom of Well Now	10/16/2024		12.30	1217.46			
						0.20			feet sedimentation
		Before Sampling				1229.76			
		Recovery				1229.76			
		Recovery				1229.76			
		Recovery				1229.76			
		Recovery				1229.76			

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Monitoring Well: MW-15 (dg)

Primary Sampling Method:
Secondary Sampling Method:

No-Purge for Appendix I
Purge & Sample for all analytes beyond Appendix I

GENERAL INFORMATION

TOC	1231.22
Well Depth	12.50
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	1231.22
Well Depth	12.50
Top Screen	1223.92
Bottom Screen	1218.72
Bottom Well	1218.72
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	7.50
Top sample	1223.72
Bottom sample	1219.72
Turbidity(NTU)	3.62

Date	Time	Water Level	Water Elevation	Notes
10/16/2024	13:32	7.33	1223.89	

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	3.62
Appendix I	Metals	150	150	3.62
Appendix I	VOC	240	240	3.62
Full Appendix II	10 more containers	5620		
TSS	TSS	1000		
Supplemental	Sulfide	2-QT		
Supplemental	BEHP	250		
Total		400	0	

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

TOC	1231.22	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	12.50	Before purging	10/16/2024	13:32	7.33	1223.89		0.0	
		After purging				1231.22			
		Top of Screen New				1223.72			
						7.50			feet above (+) or below (-) top screen
		Bottom of Well New				1218.72			
		Bottom of Well Now	10/16/2024		12.50	1218.72			
						0.00			feet sedimentation
		Before Sampling				1231.22			
		Recovery				1231.22			
		Recovery				1231.22			
		Recovery				1231.22			
		Recovery				1231.22			

Monitoring Well: MW-16 (dg)

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

GENERAL INFORMATION

TOC	1232.43
Well Depth	12.50
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	1232.43
Well Depth	12.50
Top Screen	1224.93
Bottom Screen	1219.43
Bottom Well	1219.43
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	7.00
Top sample	1225.43
Bottom sample	1221.43
Turbidity(NTU)	13.01

Date	Time	Water Level	Water Elevation	Notes
10/16/2024	12:55	6.21	1226.22	

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	13.01
Appendix I	Metals	150	150	13.01
Appendix I	VOC	240	240	13.01
Full Appendix II	10 more containers	5620		
TSS	TSS	1000		
Supplemental	bis(2-EH)Phthalate	2-QT		
Supplemental	Sulfide	250		
Total		400	0	

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

TOC	1232.43	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	12.50	Before purging	10/16/2024	12:55	6.21	1226.22		0.0	
		After purging				1232.43			
		Top of Screen New				1224.93			
						7.50			feet above (+) or below (-) top screen
		Bottom of Well New				1219.93			
		Bottom of Well Now	10/16/2024		12.30	1220.13			
						0.20			feet sedimentation
		Before Sampling				1232.43			
		Recovery				1232.43			
		Recovery				1232.43			
		Recovery				1232.43			
		Recovery				1232.43			

Monitoring Well: MW-17 (ug)

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

GENERAL INFORMATION

TOC	1234.33
Well Depth	20.20
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	1234.33
Well Depth	20.20
Top Screen	1224.13
Bottom Screen	1214.13
Bottom Well	1214.13
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	15.00
Top sample	1219.33
Bottom sample	1215.33
Turbidity(NTU)	7.86

red

Date	Time	Water Level	Water Elevation	Notes
10/16/2024	12:25	8.3	1226.03	

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	7.86
Appendix I	Metals	150	150	7.86
Appendix I	VOC	240	240	7.86
Full Appendix II	10 more containers	5620		
TSS	TSS	1000		
Supplemental	2-QT			
Supplemental	250			
Total		400	0	

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

TOC	1234.33	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	20.20	Before purging	10/16/2024	12:25	8.30	1226.03		0.0	
		After purging				1234.33			
		Top of Screen New				1224.13			
						10.20			feet above (+) or below (-) top screen
		Bottom of Well New				1214.13			
		Bottom of Well Now	10/16/2024		20.55	1213.78			
						-0.35			feet sedimentation
		Before Sampling				1234.33			
		Recovery				1234.33			
		Recovery				1234.33			
		Recovery				1234.33			
		Recovery				1234.33			

Monitoring Well: MW-18 (up)

Primary Sampling Method:
Secondary Sampling Method:

No-Purge for Appendix I
Purge & Sample for all analytes beyond Appendix I

GENERAL INFORMATION

TOC	1289.3
Well Depth	76.60
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	1289.3
Well Depth	76.60
Top Screen	1222.70
Bottom Screen	1212.70
Bottom Well	1212.70
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	70.00
Top sample	1219.30
Bottom sample	1215.30
Turbidity(NTU)	4.24

Date	Time	Water Level	Water Elevation	Notes
10/16/2024	10:45	34.45	1254.85	

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	4.24
Appendix I	Metals	150	150	4.24
Appendix I	VOC	240	240	4.24
Full Appendix II	10 more containers	5620		
TSS	TSS	1000		
Supplemental	bis(2-EH)Phthalate	2-QT		
Supplemental	Sulfide	250		
Total		400	0	

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

TOC	1289.3	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	76.60	Before purging	10/16/2024	10:45	34.45	1254.85		0.0	
		After purging				1289.30			
		Top of Screen New				1222.70			
						66.60			feet above (+) or below (-) top screen
		Bottom of Well New				1212.70			
		Bottom of Well Now	10/16/2024		76.60	1212.70			
						0.00			feet sedimentation
		Before Sampling				1289.30			
		Recovery				1289.30			
		Recovery				1289.30			
		Recovery				1289.30			
		Recovery				1289.30			

Monitoring Well: MW-19 (up)

Primary Sampling Method:
Secondary Sampling Method:

No-Purge for Appendix I
Purge & Sample for all analytes beyond Appendix I

GENERAL INFORMATION

TOC	1289.61
Well Depth	27.80
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1289.61
Well Depth	27.80
Top Screen	1271.81
Bottom Screen	1261.81
Bottom Well	1261.81
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	22.00
Top sample	1267.61
Bottom sample	1263.61
Turbidity(NTU)	1.95

Date	Time	Water Level	Water Elevation	Notes
10/16/2024	10:53	10.58	1279.03	

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	1.95
Appendix I	Metals	150	150	1.95
Appendix I	VOC	240	240	1.95
Full Appendix II	10 more containers	5620		
TSS	TSS	1000		
Supplemental	bis(2-EH)Phthalate	2-QT		
Supplemental	Sulfide	250		
Total		400	0	

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

TOC	1289.61	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	27.80	Before purging	10/16/2024	10:53	10.58	1279.03		0.0	
		After purging				1289.61			
		Top of Screen New				1271.81			
						17.80			feet above (+) or below (-) top screen
		Bottom of Well New				1261.81			
		Bottom of Well Now	10/16/2024		27.80	1261.81			
						0.00			feet sedimentation
		Before Sampling				1289.61			
		Recovery				1289.61			
		Recovery				1289.61			
		Recovery				1289.61			
		Recovery				1289.61			

Monitoring Well: MW-20 (up)

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

GENERAL INFORMATION

TOC	1282.77
Well Depth	66.55
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	1282.77
Well Depth	66.55
Top Screen	1226.22
Bottom Screen	1216.22
Bottom Well	1216.22
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	60.00
Top sample	1222.77
Bottom sample	1218.77
Turbidity(NTU)	1.91

Date	Time	Water Level	Water Elevation	Notes
10/16/2024	10:29	28.9	1253.87	

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	1.91
Appendix I	Metals	150	150	1.91
Appendix I	VOC	240	240	1.91
Full Appendix II	10 more containers	5620		
TSS	TSS	1000		
Supplemental	bis(2-EH)Phthalate	2-QT		
Supplemental	Sulfide	250		
Total		400	0	

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

TOC	1282.77	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	66.55	Before purging	10/16/2024	10:29	28.90	1253.87		0.0	
		After purging				1282.77			
		Top of Screen New				1226.22			
						56.55			feet above (+) or below (-) top screen
		Bottom of Well New				1216.22			
		Bottom of Well Now	10/16/2024		66.55	1216.22			
						0.00			feet sedimentation
		Before Sampling				1282.77			
		Recovery				1282.77			
		Recovery				1282.77			
		Recovery				1282.77			
		Recovery				1282.77			

IDNR Form 542-1322

Monitoring Well: MW-21 (up)

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

GENERAL INFORMATION

TOC	1282.69
Well Depth	27.80
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1282.69
Well Depth	27.80
Top Screen	1264.89
Bottom Screen	1254.89
Bottom Well	1254.89
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	22.00
Top sample	1260.69
Bottom sample	1256.69
Turbidity(NTU)	1.45

Date	Time	Water Level	Water Elevation	Notes
10/16/2024	10:34	13.29	1269.4	

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		
TSS	TSS	1000		
Supplemental	bis(2-EH)Phthalate	2-QT		
Supplemental	Sulfide	250		
Total		400	0	

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

TOC	1282.69	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	27.80	Before purging	10/16/2024	10:34	13.29	1269.40		0.0	
		After purging				1282.69			
		Top of Screen New				1264.89			
						17.80			feet above (+) or below (-) top screen
		Bottom of Well New				1254.89			
		Bottom of Well Now	10/16/2024		27.80	1254.89			
						0.00			feet sedimentation
		Before Sampling				1282.69			
		Recovery				1282.69			
		Recovery				1282.69			
		Recovery				1282.69			
		Recovery				1282.69			

**Northern Plains Sanitary Landfill
PERMIT # 74-SDP-02-76P**

10/16/2024

Sampled by: Todd Whipple

Weather conditions:

Sunny - calm, 40-55 degrees

IDNR Form 542-1324

Date	Time	Type	Flowing	Quantity	Discolored	Odor	Litter	
10/16/2024	12:09	grd water underdrain	yes	4 gpm	No	No	No	
					pH	Conductivity	Temp.(C)	Turbidity(NTU)
					NT	NT	NT	4.57

IDNR Form 542-1324

Date	Time	Type	Flowing	Quantity	Discolored	Odor	Litter	
10/16/2024	14:31	groundwater underdrain	yes	2 gpm	No	No	No	
					pH	Conductivity	Temp.(C)	Turbidity(NTU)
					NT	NT	NT	2.82

Appendix C

Analytical Data Summary Tables

Table 1

Analytical Data Summary for GU-1

Constituents	Units	4/1/2016	10/19/2016	4/17/2017	6/1/2018	10/3/2018	4/8/2019	10/11/2019	4/27/2020	10/9/2020
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	<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	<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	9.8	12.5	17.9	13.9	16.1	14.7	10.9	13.6	11.1
Barium, total	ug/L		501	516	427	428	483	421	465	434
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		<.8	<.8	<.8	<.8	<.8	<.8	<.4	<.4
Copper, total	ug/L		<4	<4	<4	<4	<4	<4	<4	<4
Dibromochloromethane	ug/L		<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L		<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L		<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	ug/L		<4	<4	<4	<4	<4	<4	<4	<4
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		12.6	11.0	9.3	9.0	8.8	7.5	7.8	6.3
Selenium, total	ug/L		<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	ug/L		<4	<4	<8	<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	<4	<4	<2	<2	<2	<2
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	<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	<20	<8	<20	<20	<20

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

Table 1

Analytical Data Summary for GU-1

Constituents	4/9/2021	4/11/2022	7/6/2022	10/12/2022	4/6/2023	10/9/2023	4/4/2024	10/16/2024
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
Antimony, total	<2	<2		<2	<2	<2	<2	<2
Arsenic, total	<4.0	29.3		4.1	<4.0	<4.0	<4.0	<4.0
Barium, total	396	902	436	447	432	490	454	438
Benzene	<1	<1		<1	<1	<1	<1	<1
Beryllium, total	<4	<4		<4	<4	<4	<4	<4
Bromochloromethane	<1	<1		<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1		<1	<1	<1	<1	<1
Bromoform	<1	<1		<1	<1	<1	<1	<1
Bromomethane	<1	<1		<1	<1	<1	<1	<1
Cadmium, total	<.8	<.8		<.8	<.8	<.8	<.8	<.8
Carbon disulfide	<1	<1		<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1		<1	<1	<1	<1	<1
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		2.2	<.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
Lead, total	<4	<4		<4	<4	<4	<4	<4
Methyl iodide	<1	<1		<1	<1	<1	<1	<1
Methylene chloride	<5	<5		<5	<5	<5	<5	<5
Nickel, total	6.5	23.7	14.1	15.2	12.7	15.7	14.8	10.3
Selenium, total	<4	<4		<4	<4	<4	<4	<4
Silver, total	<4	<4		<4	<4	<4	<4	<4
Styrene	<1	<1		<1	<1	<1	<1	<1
Tetrachloroethylene	<1	<1		<1	<1	<1	<1	<1
Thallium, total	<2	<2		<2	<2	<2	<2	<2
Toluene	<1	<1		<1	<1	<1	<1	<1
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	<20	<20		<20	<20	<20	<20	<20

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

Table 2

Analytical Data Summary for GU-2

Constituents	Units	4/7/2014	8/15/2014	10/23/2014	4/2/2015	10/26/2015	4/1/2016	10/19/2016	4/17/2017
(3 4)-methylphenol	ug/L								
1,1,1,2-tetrachloroethane	ug/L	<1		<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1		<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1		<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1		<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1		<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	ug/L	<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
1,2,4,5-tetrachlorobenzene	ug/L								
1,2,4-trichlorobenzene	ug/L								
1,2-dibromo-3-chloropropane	ug/L	<1		<1	<1	<1	<1	<1	<1
1,2-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								
1,3,5-trinitrobenzene	ug/L								
1,3-dichlorobenzene	ug/L								
1,3-dichloropropane	ug/L								
1,3-dinitrobenzene	ug/L								
1,4-dichlorobenzene	ug/L	<1		<1	<1	<1	<1	<1	<1
1,4-naphthoquinone	ug/L								
1,4-phenylenediamine	ug/L								
1-naphthylamine	ug/L								
2,2-dichloropropane	ug/L								
2,3,4,6-tetrachlorophenol	ug/L								
2,4,5-t	ug/L								
2,4,5-tp (silvex)	ug/L								
2,4,5-trichlorophenol	ug/L								
2,4,6-trichlorophenol	ug/L								
2,4-d	ug/L								
2,4-dichlorophenol	ug/L								
2,4-dimethylphenol	ug/L								
2,4-dinitrophenol	ug/L								
2,4-dinitrotoluene	ug/L								
2,6-dichlorophenol	ug/L								
2,6-dinitrotoluene	ug/L								
2-acetylaminofluorene	ug/L								
2-butanone (mek)	ug/L	<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
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
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	<10.0	<10.0	<10.0	<10.0
Acetonitrile	ug/L								
Acetophenone	ug/L								
Acrolein	ug/L								
Acrylonitrile	ug/L	<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 2

Analytical Data Summary for GU-2

Constituents	10/11/2017	6/1/2018	10/3/2018	1/3/2019	4/8/2019	10/11/2019	4/27/2020	10/9/2020	4/9/2021
(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	<1	<1	<1		<1	<1	<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	<5		<5	<5	<5	<5	<5
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	18.7	<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	<5
Aldrin									
Allyl chloride									
Alpha-bhc									
Anthracene									

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

Table 2

Analytical Data Summary for GU-2

Constituents	10/25/2021	1/13/2022	4/11/2022	10/12/2022	1/6/2023	4/6/2023	6/27/2023	10/9/2023	4/4/2024
(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)	<5		<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	<10.0		<10.0	<10.0		^		<10.0	<10.0
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 2

Analytical Data Summary for GU-2

Constituents	10/16/2024
(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	<10.0
Acetonitrile	
Acetophenone	
Acrolein	
Acrylonitrile	<5
Aldrin	
Allyl chloride	
Alpha-bhc	
Anthracene	

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

Table 2

Analytical Data Summary for GU-2

Constituents	Units	4/7/2014	8/15/2014	10/23/2014	4/2/2015	10/26/2015	4/1/2016	10/19/2016	4/17/2017
Antimony, total	ug/L	<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	<4.0		<4.0	<4.0	8.0	<4.0	4.1	<4.0
Azobenzene	ug/L								
Barium, total	ug/L	134		133	111	256	123	140	136
Benzene	ug/L	<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
Beta-bhc	ug/L								
Bis (2-chloroethoxy) methane	ug/L								
Bis(2-chloroethyl) ether	ug/L								
Bis(2-chloroisopropyl) ether	ug/L								
Bis(2-ethylhexyl) phthalate	ug/L								
Bromochloromethane	ug/L	<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								
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								
Chlorobenzene	ug/L	<1		<1	<1	<1	<1	<1	<1
Chlorobenzilate	ug/L								
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								
Chromium, total	ug/L	<8		<8	<8	<8	<8	<8	<8
Chrysene	ug/L								
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	<4.0		<.8	<.8	<.8	<.8	<.8	<.8
Copper, total	ug/L	5.7		7.4	<4.0	<4.0	<4.0	<4.0	<4.0
Cyanide, total	mg/L								
Delta-bhc	ug/L								
Diallate	ug/L								
Dibenzo(a,h)anthracene	ug/L								
Dibenzofuran	ug/L								
Dibromochloromethane	ug/L	<1		<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<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
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 2

Analytical Data Summary for GU-2

Constituents	10/11/2017	6/1/2018	10/3/2018	1/3/2019	4/8/2019	10/11/2019	4/27/2020	10/9/2020	4/9/2021
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	<4.0	4.3	<4.0		<4.0	<4.0	<4.0	<4.0	<4.0
Azobenzene									
Barium, total	169	200	137		126	141	174	191	165
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-chloroisopropyl) ether									
Bis(2-ethylhexyl) phthalate									
Bromochloromethane	<1	<1	<1		<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1		<1	<1	<1	<1	<1
Bromoform	<1	<1	<1		<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1		<1	<1	<1	<1	<1
Butyl benzyl phthalate									
Cadmium, total	<.8	<.8	<.8		<.8	<.8	<.8	<.8	<.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	<.8	<.8	<.8		<.8	<.8	.7	<.4	<.4
Copper, total	<4.0	6.2	22.7	4.1	<4.0	<4.0	<4.0	<4.0	<4.0
Cyanide, total									
Delta-bhc									
Diallate									
Dibenzo(a,h)anthracene									
Dibenzofuran									
Dibromochloromethane	<1	<1	<1		<1	<1	<1	<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 2
Analytical Data Summary for GU-2

Constituents	10/25/2021	1/13/2022	4/11/2022	10/12/2022	1/6/2023	4/6/2023	6/27/2023	10/9/2023	4/4/2024
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	460		180	193		142		232	207
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-chloroisopropyl) ether						<.8			
Bis(2-ethylhexyl) phthalate						7	7	<6	
Bromochloromethane	<1		<1	<1		<1		<1	<1
Bromodichloromethane	<1		<1	<1		<1		<1	<1
Bromoform	<1		<1	<1		<1		<1	<1
Bromomethane	<1		<1	<1		<1		<1	<1
Butyl benzyl phthalate						<.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		<.4	2.6		<.4		<.4	<.4
Copper, total	<4.0		<4.0	19.0	<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			
Heptachlor						<.05			
Heptachlor epoxide						<.05			
Hexachlorobenzene						<.05			

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

Table 2

Analytical Data Summary for GU-2

Constituents	10/16/2024
Antimony, total	<2
Arochlor 1016	
Arochlor 1221	
Arochlor 1232	
Arochlor 1242	
Arochlor 1248	
Arochlor 1254	
Arochlor 1260	
Arsenic, total	6.3
Azobenzene	
Barium, total	250
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-chloroisopropyl) ether	
Bis(2-ethylhexyl) phthalate	
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	<1
Cis-1,3-dichloropropene	<1
Cobalt, total	.9
Copper, total	<4.0
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 2

Analytical Data Summary for GU-2

Constituents	Units	4/7/2014	8/15/2014	10/23/2014	4/2/2015	10/26/2015	4/1/2016	10/19/2016	4/17/2017
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	<4.0		<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Mercury, total	ug/L								
Methacrylonitrile	ug/L								
Methapyrilene	ug/L								
Methoxychlor	ug/L								
Methyl iodide	ug/L	<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
Naphthalene	ug/L								
Nickel, total	ug/L	8.6		7.2	4.1	<4.0	<4.0	<4.0	<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								
Parathion	ug/L								
P-dimethylaminoazobenzene	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	34.3	6.8	6.0	4.6	4.5	<4.0	<4.0	<4.0
Silver, total	ug/L	<4		<4	<4	<4	<4	<4	<4
Solids, total suspended	mg/L			<2	<2				
Styrene	ug/L	<1		<1	<1	<1	<1	<1	<1
Sulfide, total	mg/L								
Tetrachloroethylene	ug/L	<1		<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4		<4	<4	<4	<4	<4	<4
Thionazin	ug/L								
Tin, total	ug/L								
Toluene	ug/L	<1		<1	<1	<1	<1	<1	<1
Toxaphene	ug/L								
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	39.9		24.6	<8.0	24.5	<8.0	12.9	10.9

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

Table 2

Analytical Data Summary for GU-2

Constituents	10/11/2017	6/1/2018	10/3/2018	1/3/2019	4/8/2019	10/11/2019	4/27/2020	10/9/2020	4/9/2021
Hexachlorobutadiene									
Hexachlorocyclopentadiene									
Hexachloroethane									
Hexachloropropene									
Indeno(1,2,3-cd)pyrene									
Isobutanol									
Isodrin									
Isophorone									
Isosafrole									
Kepone									
Lead, total	<4.0	<4.0	<4.0		<4.0	<4.0	<4.0	<4.0	<4.0
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	5.1	<4.0		<4.0	<4.0	4.8	<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									
Parathion									
P-dimethylaminoazobenzene									
Pentachlorobenzene									
Pentachloronitrobenzene (pcnb)									
Pentachlorophenol									
Phenacetin									
Phenanthrene									
Phenol									
Phorate									
Pronamide									
Propionitrile									
Pyrene									
Safrole									
Selenium, total	<4.0	<4.0	<4.0		<4.0	<4.0	<4.0	<4.0	<4.0
Silver, total	<4	<8	<4		<4	<4	<4	<4	<4
Solids, total suspended									
Styrene	<1	<1	<1		<1	<1	<1	<1	<1
Sulfide, total									
Tetrachloroethylene	<1	<1	<1		<1	<1	<1	<1	<1
Thallium, total	<4	<4	<4		<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	<8.0	13.5	60.6	15.2	10.2	<20.0	21.5	<20.0	<20.0

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

Table 2
Analytical Data Summary for GU-2

Constituents	10/25/2021	1/13/2022	4/11/2022	10/12/2022	1/6/2023	4/6/2023	6/27/2023	10/9/2023	4/4/2024
Hexachlorobutadiene						△△			
Hexachlorocyclopentadiene						△△			
Hexachloroethane						△△			
Hexachloropropene						△△			
Indeno(1,2,3-cd)pyrene						△△			
Isobutanol						<1000			
Isodrin						△△			
Isophorone						△△			
Isosafrole						△△			
Kepone						△△			
Lead, total	<4.0		<4.0	4.9	<4.0	△△		<4.0	<4.0
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	4.9		<4.0	<4.0		△△		<4.0	7.5
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						△△			
Parathion						△△			
P-dimethylaminoazobenzene						△△			
Pentachlorobenzene						△△			
Pentachloronitrobenzene (pcnb)						△△			
Pentachlorophenol						△△			
Phenacetin						△△			
Phenanthrene						△△			
Phenol						△△			
Phorate						△△			
Pronamide						△△			
Propionitrile						△△			
Pyrene						△△			
Safrole						△△			
Selenium, total	7.2	<4.0	<4.0	<4.0		△△		<4.0	<4.0
Silver, total	<4		<4	<4		△△		<4	<4
Solids, total suspended						△△			
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	33.1		<20.0	74.1	53.3	<20.0		<20.0	<20.0

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Table 2

Analytical Data Summary for GU-2

Constituents	10/16/2024
Hexachlorobutadiene	
Hexachlorocyclopentadiene	
Hexachloroethane	
Hexachloropropene	
Indeno(1,2,3-cd)pyrene	
Isobutanol	
Isodrin	
Isophorone	
Isosafrole	
Kepone	
Lead, total	<4.0
Mercury, total	
Methacrylonitrile	
Methapyrilene	
Methoxychlor	
Methyl iodide	<1
Methyl methacrylate	
Methyl methanesulfonate	
Methyl parathion	
Methylene chloride	<5
Naphthalene	
Nickel, total	5.4
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	
Parathion	
P-dimethylaminoazobenzene	
Pentachlorobenzene	
Pentachloronitrobenzene (pcnb)	
Pentachlorophenol	
Phenacetin	
Phenanthrene	
Phenol	
Phorate	
Pronamide	
Propionitrile	
Pyrene	
Safrole	
Selenium, total	<4.0
Silver, total	<4
Solids, total suspended	
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	<1
Xylenes, total	<2
Zinc, total	<20.0

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

Table 3

Analytical Data Summary for GU-3

Constituents	Units	10/23/2014	4/2/2015	6/23/2021
(3,4)-methylphenol	ug/L			<8
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	3.1		1.7
1,1-dichloroethylene	ug/L	<1		<1
1,1-dichloropropene	ug/L			<1
1,2,3-trichloropropane	ug/L	<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
1,2-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			<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	1.4		1.4
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
2-chloronaphthalene	ug/L			<8
2-chlorophenol	ug/L			<8
2-hexanone (mbk)	ug/L	<5		<5
2-methylnaphthalene	ug/L			<8
2-methylphenol	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
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
Acetonitrile	ug/L			<10
Acetophenone	ug/L			<8
Acrolein	ug/L			<10
Acrylonitrile	ug/L	<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 GU-3

Constituents	Units	10/23/2014	4/2/2015	6/23/2021
Antimony, total	ug/L	<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	46.5	9.2	31.3
Azobenzene	ug/L		<8	
Barium, total	ug/L	792	717	
Benzene	ug/L	<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	
Beta-bhc	ug/L		<.05	
Bis (2-chloroethoxy) methane	ug/L		<8	
Bis(2-chloroethyl) ether	ug/L		<8	
Bis(2-chloroisopropyl) ether	ug/L		<8	
Bis(2-ethylhexyl) phthalate	ug/L		51	
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		<8	
Cadmium, total	ug/L	<.8	<.8	
Carbon disulfide	ug/L	<1	<1	
Carbon tetrachloride	ug/L	<1	<1	
Chlordane	ug/L		<.1	
Chlorobenzene	ug/L	<1	<1	
Chlorobenzilate	ug/L		<8	
Chloroethane	ug/L	2.8	9.5	
Chloroform	ug/L	<1	<1	
Chloromethane	ug/L	<1	<1	
Chloroprene	ug/L		<1	
Chromium, total	ug/L	<8	<8	
Chrysene	ug/L		<8	
Cis-1,2-dichloroethylene	ug/L	2	<1	
Cis-1,3-dichloropropene	ug/L	<1	<1	
Cobalt, total	ug/L	<.8	<.8	
Copper, total	ug/L	<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	
Dibromomethane	ug/L	<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	
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	
Famphur	ug/L		<.4	
Fluoranthene	ug/L		<8	
Fluorene	ug/L		<8	
Gamma-bhc (lindane)	ug/L		<.05	
Heptachlor	ug/L		<.05	
Heptachlor epoxide	ug/L		<.05	
Hexachlorobenzene	ug/L		<.05	
Hexachlorobutadiene	ug/L		<8	

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

Table 3

Analytical Data Summary for GU-3

Constituents	Units	10/23/2014	4/2/2015	6/23/2021
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	
Mercury, total	ug/L		<5	
Methacrylonitrile	ug/L		<1	
Methapyrilene	ug/L		<8	
Methoxychlor	ug/L		<.05	
Methyl iodide	ug/L	<1	<1	
Methyl methacrylate	ug/L		<1	
Methyl methanesulfonate	ug/L		<8	
Methylene chloride	ug/L	<5	<5	
Naphthalene	ug/L		<8	
Nickel, total	ug/L	14.0	12.7	
Nitrobenzene	ug/L		<8	
N-nitrosodiethylamine	ug/L		<8	
N-nitrosodimethylamine	ug/L		<8	
N-nitrosodi-n-butylamine	ug/L		<8	
N-nitroso-di-n-propylamine	ug/L		<8	
N-nitrosodiphenylamine	ug/L		<8	
N-nitrosomethylethylamine	ug/L		<8	
N-nitrosopiperidine	ug/L		<8	
N-nitrosopyrrolidine	ug/L		<8	
O-toluidine	ug/L		<8	
P-dimethylaminoazobenzene	ug/L		<8	
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	
Pronamide	ug/L		<8	
Propionitrile	ug/L		<10	
Pyrene	ug/L		<8	
Safrole	ug/L		<8	
Selenium, total	ug/L	<4	<4	
Silver, total	ug/L	<4	<4	
Solids, total suspended	mg/L	69	14	
Styrene	ug/L	<1	<1	
Sulfide, total	mg/L		<.1	
Tetrachloroethylene	ug/L	<1	<1	
Thallium, total	ug/L	<4	<4	
Tin, total	ug/L		<20	
Toluene	ug/L	<1	<1	
Toxaphene	ug/L		<.2	
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	
Vanadium, total	ug/L	<20	<20	
Vinyl acetate	ug/L	<5	<5	
Vinyl chloride	ug/L	1.1	<1.0	
Xylenes, total	ug/L	<2	<2	
Zinc, total	ug/L	<8	<8	

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

Table 4

Analytical Data Summary for MW-10

Constituents	Units	4/7/2014	10/23/2014	4/2/2015	10/26/2015	4/1/2016	10/19/2016	4/17/2017	10/11/2017
(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	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	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	16.7
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	

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

Table 4

Analytical Data Summary for MW-10

Constituents	6/1/2018	10/3/2018	4/8/2019	10/11/2019	4/27/2020	10/9/2020	4/9/2021	10/25/2021	4/11/2022
(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)	<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	<10
2-chloronaphthalene	<8								
2-chlorophenol	<8								
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-methylnaphthalene	<8								
2-methylphenol	<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	<10.0	<10.0	<10.0	<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	<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-10

Constituents	10/12/2022	4/6/2023	10/9/2023	4/4/2024	10/16/2024
(3,4)-methylphenol				<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	
1,2,3-trichloropropane	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene				<8	
1,2,4-trichlorobenzene				<1	
1,2-dibromo-3-chloropropane	<5	<5	<5	<1	<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	
1,3,5-trinitrobenzene				<8	
1,3-dichlorobenzene				<1	
1,3-dichloropropane				<1	
1,3-dinitrobenzene				<8	
1,4-dichlorobenzene	<1	<1	<1	<1	<1
1,4-naphthoquinone				<8	
1,4-phenylenediamine				<8	
1-naphthylamine				<8	
2,2-dichloropropane				<1	
2,3,4,6-tetrachlorophenol				<8	
2,4,5-t				<5	
2,4,5-tp (silvex)				<5	
2,4,5-trichlorophenol				<8	
2,4,6-trichlorophenol				<8	
2,4-d				<2	
2,4-dichlorophenol				<8	
2,4-dimethylphenol				<8	
2,4-dinitrophenol				<8	
2,4-dinitrotoluene				<8	
2,6-dichlorophenol				<8	
2,6-dinitrotoluene				<8	
2-acetylaminofluorene				<8	
2-butanone (mek)	<10	<10	<10	<5	<10
2-chloronaphthalene				<8	
2-chlorophenol				<8	
2-hexanone (mbk)	<5	<5	<5	<5	<5
2-methylnaphthalene				<8	
2-methylphenol				<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
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
Acetonitrile				<10	
Acetophenone				<8	
Acrolein				<10	
Acrylonitrile	<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 4

Analytical Data Summary for MW-10

Constituents	Units	4/7/2014	10/23/2014	4/2/2015	10/26/2015	4/1/2016	10/19/2016	4/17/2017	10/11/2017
Anthracene	ug/L							<8	
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	330.0	149.0	279.0	88.2	77.3	123.0	152.0	91.1
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	<4	<4	<4	<4
Beta-bhc	ug/L							<.05	
Bis (2-chloroethoxy) methane	ug/L							<8	
Bis(2-chloroethyl) ether	ug/L							<8	
Bis(2-chloroisopropyl) ether	ug/L							<8	
Bis(2-ethylhexyl) phthalate	ug/L							<6	
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
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	<4.0	<.8	1.2	<.8	<.8	<.8	1.8	<.8
Copper, total	ug/L	10.4	10.9	<4.0	20.1	9.3	5.3	<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							<.05	
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	

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

Table 4

Analytical Data Summary for MW-10

Constituents	6/1/2018	10/3/2018	4/8/2019	10/11/2019	4/27/2020	10/9/2020	4/9/2021	10/25/2021	4/11/2022
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	133.0	119.0	149.0	106.0	180.0	159.0	115.0	145.0	176.0
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-chloroisopropyl) ether	<8								
Bis(2-ethylhexyl) phthalate	7		<6	<6	<6	<6			
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate	<8								
Cadmium, total	<8	8.6	<8	<8	<8	<8	1.7	<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	2.1	<8	.9	3.4	10.8	<4	<4	1.6
Copper, total	<4.0	4.6	20.3	8.6	<4.0	<4.0	11.9	<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 4

Analytical Data Summary for MW-10

Constituents	10/12/2022	4/6/2023	10/9/2023	4/4/2024	10/16/2024
Anthracene				<8	
Antimony, total	<2	<2	<2	<2	<2
Arochlor 1016				<2	
Arochlor 1221				<2	
Arochlor 1232				<2	
Arochlor 1242				<2	
Arochlor 1248				<2	
Arochlor 1254				<2	
Arochlor 1260				<2	
Arsenic, total	<4	<4	<4	<4	<4
Azobenzene				<8	
Barium, total	145.0	104.0	139.0	120.0	91.2
Benzene	<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	
Bis (2-chloroethoxy) methane				<8	
Bis(2-chloroethyl) ether				<8	
Bis(2-chloroisopropyl) ether				<8	
Bis(2-ethylhexyl) phthalate				<6	
Bromochloromethane	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1
Butyl benzyl phthalate				<8	
Cadmium, total	<.8	<.8	<.8	<.8	4.0
Carbon disulfide	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1
Chlordane				<.1	
Chlorobenzene	<1	<1	<1	<1	<1
Chlorobenzilate				<8	
Chloroethane	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1
Chloromethane	<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
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1
Cobalt, total	2.3	<.4	.8	<.4	1.0
Copper, total	<4.0	<4.0	18.2	13.9	29.5
Cyanide, total				<.005	
Delta-bhc				<.05	
Diallate				<8	
Dibenzo(a,h)anthracene				<8	
Dibenzofuran				<8	
Dibromochloromethane	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1
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
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-10

Constituents	Units	4/7/2014	10/23/2014	4/2/2015	10/26/2015	4/1/2016	10/19/2016	4/17/2017	10/11/2017
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	<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							<8	
Methylene chloride	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene	ug/L							<8	
Nickel, total	ug/L	29.6	10.5	21.4	<4.0	<4.0	5.1	16.8	<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							<8	
O-toluidine	ug/L							<8	
Parathion	ug/L							<8	
P-dimethylaminoazobenzene	ug/L							<8	
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							<8	
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
Solids, total suspended	mg/L		1420	7					
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	<4	<4	<4	<4	<4	<4
Thionazin	ug/L							<8	
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	69.1	<8.0	<8.0	<20.0	<8.0	<8.0	<8.0	<8.0

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

Table 4

Analytical Data Summary for MW-10

Constituents	6/1/2018	10/3/2018	4/8/2019	10/11/2019	4/27/2020	10/9/2020	4/9/2021	10/25/2021	4/11/2022
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	12.7	4.8	<4.0	14.1	19.0	16.9	5.0	<4.0	11.1
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								
Parathion	<.4								
P-dimethylaminoazobenzene	<8								
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
Solids, total suspended									
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfide, total	<.2								
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	23.7	<8.0	21.1	<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-10

Constituents	10/12/2022	4/6/2023	10/9/2023	4/4/2024	10/16/2024
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
Mercury, total				<.5	
Methacrylonitrile				<1	
Methapyrilene				<8	
Methoxychlor				<.05	
Methyl iodide	<1	<1	<1	<2	<1
Methyl methacrylate				<1	
Methyl methanesulfonate				<8	
Methyl parathion				<.4	
Methylene chloride	<5	<5	<5	<5	<5
Naphthalene				<8	
Nickel, total	<4.0	<4.0	5.4	<4.0	25.9
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	
Parathion				<.4	
P-dimethylaminoazobenzene				<8	
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
Silver, total	<4	<4	<4	<4	<4
Solids, total suspended					
Styrene	<1	<1	<1	<1	<1
Sulfide, total				<.3	
Tetrachloroethylene	<1	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2	<2
Thionazin				<.4	
Tin, total				<20	
Toluene	<1	<1	<1	<1	<1
Toxaphene				<.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	<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-11

Constituents	Units	4/7/2014	10/23/2014	1/16/2015	4/2/2015	9/15/2015	10/26/2015	4/1/2016	10/19/2016	4/17/2017
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	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Antimony, total	ug/L	3.2	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Arsenic, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Barium, total	ug/L	360.0	47.5	56.8	58.4	49.6	74.5	68.2	68.5	66.2
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	16.4	<.8	<.8	<.8	<.8	.8	.8	<.8	<.8
Copper, total	ug/L	4.2	<4.0	<4.0	<4.0	<4.0	<4.0	4.4	<4.0	8.4
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	98.9	8.2	4.7	4.9	9.1	12.6	8.1	6.2	6.2
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
Solids, total suspended	mg/L		272		15					
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	<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	45.3	8.3	<20.0	<8.0	<8.0	26.3	<8.0	24.8	28.4

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

Table 5

Analytical Data Summary for MW-11

Constituents	10/11/2017	6/1/2018	10/3/2018	4/8/2019	10/11/2019	4/27/2020	10/9/2020	4/9/2021	10/25/2021
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	<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
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	<5	<5	<5	<5	<5	<5	<5	<5	<5
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	17.9	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5
Antimony, total	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	3.4	<2.0	<2.0
Arsenic, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Barium, total	63.8	80.0	89.3	88.4	132.0	85.5	205.0	82.7	53.4
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	<2.0	1.3	<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	<2.0	1.0	<8	4.0	.5	11.2	<4	1.3
Copper, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
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	12.1	11.2	5.2	36.2	6.3	42.5	8.8	10.5
Selenium, total	<4	<4	<4	<4	<4	<4	<4	4	<4
Silver, total	<4	<8	<4	<4	<4	<4	<4	<4	<4
Solids, total suspended									
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4	<4	<4	<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	<8.0	30.5	<20.0	20.1	<20.0	<20.0

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

Table 5

Analytical Data Summary for MW-11

Constituents	4/11/2022	10/12/2022	4/6/2023	10/9/2023	4/4/2024	10/16/2024
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
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<5	<5	<5	<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
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1
2-butanone (mek)	<10	<10	<10	<10	<10	<10
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5	<5
Acetone	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Acrylonitrile	<5	<5	<5	<5	<5	<5
Antimony, total	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Arsenic, total	<4	<4	<4	<4	<4	<4
Barium, total	82.2	69.8	44.2	103.0	40.1	67.0
Benzene	<1	<1	<1	<1	<1	<1
Beryllium, total	<4	<4	<4	<4	<4	<4
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
Cadmium, total	<.8	<.8	<.8	<.8	1.4	<.8
Carbon disulfide	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1
Chlorobenzene	<1	<1	<1	<1	<1	<1
Chloroethane	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1
Chromium, total	<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1
Cobalt, total	1.9	3.0	<4	3.0	<4	.5
Copper, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Dibromochloromethane	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1	<1	<1
Lead, total	<4	<4	<4	<4	<4	<4
Methyl iodide	<1	<1	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5	<5	<5
Nickel, total	15.6	7.4	<4.0	17.1	<4.0	5.2
Selenium, total	<4	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4	<4
Solids, total suspended						
Styrene	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	<1	<1	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2	<2	<2
Toluene	<1	<1	<1	<1	<1	<1
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 6

Analytical Data Summary for MW-12

Constituents	Units	4/7/2014	10/23/2014	1/16/2015	4/2/2015	9/15/2015	10/26/2015	4/1/2016	10/19/2016	4/17/2017
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	21.7	4.1	<4.0	<4.0	6.5	<4.0	<4.0	89.9	137.0
Barium, total	ug/L	484.0	244.0	199.0	248.0	142.0	269.0	247.0	1320.0	1390.0
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	1.1	<.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	<4.0	<.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	<4.0
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
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	<4.0	<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	<4
Solids, total suspended	mg/L		125		21					
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	<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	16.3	<8.0	<20.0	<8.0	<8.0	<20.0	<8.0	20.4	14.8

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

Table 6

Analytical Data Summary for MW-12

Constituents	10/11/2017	6/1/2018	10/3/2018	4/8/2019	10/11/2019	4/27/2020	10/9/2020	4/9/2021	10/25/2021
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	<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
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	<5	<5	<5	<5	<5	<5	<5	<5	<5
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	24.3	<4.0	5.7	<4.0	9.4	4.9	6.0	4.1	4.0
Barium, total	189.0	223.0	173.0	196.0	186.0	150.0	258.0	122.0	153.0
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	1.2	4.0	<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	1.2	<4	<4
Copper, total	<4.0	<4.0	6.2	<4.0	<4.0	<4.0	5.1	<4.0	<4.0
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
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	<4.0	<4.0	<4.0	<4.0
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	<4	<8	<4	<4	<4	<4	<4	<4	<4
Solids, total suspended									
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4	<4	<4	<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	<8.0	22.1	<8.0	<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 6

Analytical Data Summary for MW-12

Constituents	4/11/2022	10/12/2022	4/6/2023	10/9/2023	4/4/2024	10/16/2024
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
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<5	<5	<5	<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
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1
2-butanone (mek)	<10	<10	<10	<10	<10	<10
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5	<5
Acetone	<10	<10	<10	<10	<10	<10
Acrylonitrile	<5	<5	<5	<5	<5	<5
Antimony, total	<2	<2	<2	<2	<2	<2
Arsenic, total	<4.0	6.1	4.4	<4.0	4.8	<4.0
Barium, total	99.9	129.0	55.7	66.4	102.0	139.0
Benzene	<1	<1	<1	<1	<1	<1
Beryllium, total	<4	<4	<4	<4	<4	<4
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
Cadmium, total	<8	<8	<8	<8	<8	<8
Carbon disulfide	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1
Chlorobenzene	<1	<1	<1	<1	<1	<1
Chloroethane	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1
Chromium, total	<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1
Cobalt, total	<4	2.6	<4	<4	<4	<4
Copper, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Dibromochloromethane	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1	<1	<1
Lead, total	<4	<4	<4	<4	<4	<4
Methyl iodide	<1	<1	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5	<5	<5
Nickel, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Selenium, total	<4	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4	<4
Solids, total suspended						
Styrene	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	<1	<1	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2	<2	<2
Toluene	<1	<1	<1	<1	<1	<1
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 7

Analytical Data Summary for MW-13

Constituents	Units	6/27/2023	10/9/2023	4/4/2024	10/16/2024
1,1,1,2-tetrachloroethane	ug/L	<1			
1,1,1-trichloroethane	ug/L	<1			
1,1,2,2-tetrachloroethane	ug/L	<1			
1,1,2-trichloroethane	ug/L	<1			
1,1-dichloroethane	ug/L	<1			
1,1-dichloroethylene	ug/L	<1			
1,2,3-trichloropropane	ug/L	<1			
1,2-dibromo-3-chloropropane	ug/L	<5			
1,2-dibromoethane	ug/L	<1			
1,2-dichlorobenzene	ug/L	<1			
1,2-dichloroethane	ug/L	<1			
1,2-dichloropropane	ug/L	<1			
1,4-dichlorobenzene	ug/L	<1			
2-butanone (mek)	ug/L	<10			
2-hexanone (mbk)	ug/L	<5			
4-methyl-2-pentanone (mibk)	ug/L	<5			
Acetone	ug/L	<10			
Acrylonitrile	ug/L	<5			
Antimony, total	ug/L	<2	<2	<2	<2
Arsenic, total	ug/L	<4	<4	<4	<4
Barium, total	ug/L	25.7	57.8	32.8	42.8
Benzene	ug/L	<1			
Beryllium, total	ug/L	<4	<4	<4	<4
Bromochloromethane	ug/L	<1			
Bromodichloromethane	ug/L	<1			
Bromoform	ug/L	<1			
Bromomethane	ug/L	<1			
Cadmium, total	ug/L	<.8	<.8	<.8	<.8
Carbon disulfide	ug/L	<1			
Carbon tetrachloride	ug/L	<1			
Chlorobenzene	ug/L	<1			
Chloroethane	ug/L	<1			
Chloroform	ug/L	<1			
Chloromethane	ug/L	<1			
Chromium, total	ug/L	<8	<8	<8	<8
Cis-1,2-dichloroethylene	ug/L	<1			
Cis-1,3-dichloropropene	ug/L	<1			
Cobalt, total	ug/L	.4	1.3	.5	.6
Copper, total	ug/L	<4	<4	<4	<4
Dibromochloromethane	ug/L	<1			
Dibromomethane	ug/L	<1			
Ethylbenzene	ug/L	<1			
Lead, total	ug/L	<4	<4	<4	<4
Methyl iodide	ug/L	<1			
Methylene chloride	ug/L	<5			
Nickel, total	ug/L	<4	4	<4	<4
Selenium, total	ug/L	<4	<4	<4	<4
Silver, total	ug/L	<4	<4	<4	<4
Styrene	ug/L	<1			
Tetrachloroethylene	ug/L	<1			
Thallium, total	ug/L	<2	<2	<2	<2
Toluene	ug/L	<1			
Trans-1,2-dichloroethylene	ug/L	<1			
Trans-1,3-dichloropropene	ug/L	<1			
Trans-1,4-dichloro-2-butene	ug/L	<5			
Trichloroethylene	ug/L	<1			
Trichlorofluoromethane	ug/L	<1			
Vanadium, total	ug/L	<20	<20	<20	<20
Vinyl acetate	ug/L	<5			
Vinyl chloride	ug/L	<1			
Xylenes, total	ug/L	<2			
Zinc, total	ug/L	<20	<20	<20	<20

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

Table 8

Analytical Data Summary for MW-14

Constituents	Units	4/7/2014	10/23/2014	4/2/2015	10/26/2015	4/1/2016	10/19/2016	4/17/2017	10/11/2017
(3 4)-methylphenol	ug/L			<δ					
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			<δ					
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			<δ					
1,3,5-trinitrobenzene	ug/L			<δ					
1,3-dichlorobenzene	ug/L			<1					
1,3-dichloropropane	ug/L			<1					
1,3-dinitrobenzene	ug/L			<δ					
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,4-naphthoquinone	ug/L			<δ					
1,4-phenylenediamine	ug/L			<δ					
1-naphthylamine	ug/L			<δ					
2,2-dichloropropane	ug/L			<1					
2,3,4,6-tetrachlorophenol	ug/L			<δ					
2,4,5-t	ug/L			<δ					
2,4,5-tp (silvex)	ug/L			<δ					
2,4,5-trichlorophenol	ug/L			<δ					
2,4,6-trichlorophenol	ug/L			<δ					
2,4-d	ug/L			<δ					
2,4-dichlorophenol	ug/L			<δ					
2,4-dimethylphenol	ug/L			<δ					
2,4-dinitrophenol	ug/L			<δ					
2,4-dinitrotoluene	ug/L			<δ					
2,6-dichlorophenol	ug/L			<δ					
2,6-dinitrotoluene	ug/L			<δ					
2-acetylaminofluorene	ug/L			<δ					
2-butanone (mek)	ug/L	<5	<5	<δ	<5	<5	<5	<5	<5
2-chloronaphthalene	ug/L			<δ					
2-chlorophenol	ug/L			<δ					
2-hexanone (mbk)	ug/L	<5	<5	<δ	<5	<5	<5	<5	<5
2-methylnaphthalene	ug/L			<δ					
2-methylphenol	ug/L			<δ					
2-naphthylamine	ug/L			<δ					
2-nitroaniline	ug/L			<δ					
2-nitrophenol	ug/L			<δ					
3,3'-dichlorobenzidine	ug/L			<δ					
3,3'-dimethylbenzidine	ug/L			<δ					
3-methylcholanthrene	ug/L			<δ					
3-nitroaniline	ug/L			<δ					
4,4'-ddd	ug/L			<δ					
4,4'-dde	ug/L			<δ					
4,4'-ddt	ug/L			<δ					
4,6-dinitro-2-methylphenol	ug/L			<δ					
4-aminobiphenyl	ug/L			<δ					
4-bromophenyl phenyl ether	ug/L			<δ					
4-chloro-3-methylphenol	ug/L			<δ					
4-chloroaniline	ug/L			<δ					
4-chlorophenyl phenyl ether	ug/L			<δ					
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<δ	<5	<5	<5	<5	<5
4-nitroaniline	ug/L			<δ					
4-nitrophenol	ug/L			<δ					
5-nitro-o-toluidine	ug/L			<δ					
7,12-dimethylbenz(a)anthracene	ug/L			<δ					
Acenaphthene	ug/L			<δ					
Acenaphthylene	ug/L			<δ					
Acetone	ug/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	16.9
Acetonitrile	ug/L			<10					
Acetophenone	ug/L			<δ					
Acrolein	ug/L			<10					
Acrylonitrile	ug/L	<5	<5	<δ	<5	<5	<5	<5	<5
Aldrin	ug/L			<δ					
Allyl chloride	ug/L			<1					
Alpha-bhc	ug/L			<δ					
Anthracene	ug/L			<δ					

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

Table 8

Analytical Data Summary for MW-14

Constituents	6/1/2018	10/3/2018	4/8/2019	10/11/2019	4/27/2020	10/9/2020	4/9/2021	10/25/2021	4/11/2022
(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	<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	<10
2-chloronaphthalene					<8				
2-chlorophenol					<8				
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-methylnaphthalene					<8				
2-methylphenol					<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	<10.0	<10.0	<10.0	<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	<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 8

Analytical Data Summary for MW-14

Constituents	10/12/2022	4/6/2023	10/9/2023	4/4/2024	10/16/2024
(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					
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	<10.0	<10.0	<10.0	<10.0	<10.0
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 8

Analytical Data Summary for MW-14

Constituents	Units	4/7/2014	10/23/2014	4/2/2015	10/26/2015	4/1/2016	10/19/2016	4/17/2017	10/11/2017
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	107.0	16.7	16.4	114.0	76.8	16.3	68.9	11.1
Azobenzene	ug/L			<.8					
Barium, total	ug/L	2000.0	1060.0	508.0	923.0	1690.0	1190.0	1790.0	1320.0
Benzene	ug/L	<1.0	<1.0	<1.0	1.3	<1.0	<1.0	1.2	<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	<4	<4	<4	<4	<4
Beta-bhc	ug/L			<.05					
Bis (2-chloroethoxy) methane	ug/L			<.8					
Bis(2-chloroethyl) ether	ug/L			<.8					
Bis(2-chloroisopropyl) ether	ug/L			<.8					
Bis(2-ethylhexyl) phthalate	ug/L			<.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	3.7	<.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	7.7	4.8	5.9	7.1	9.4	4.1	9.2	4.6
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					
Dissolved oxygen	mg/L								
Disulfoton	ug/L								
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					

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

Table 8

Analytical Data Summary for MW-14

Constituents	6/1/2018	10/3/2018	4/8/2019	10/11/2019	4/27/2020	10/9/2020	4/9/2021	10/25/2021	4/11/2022
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	55.2	27.6	18.6	13.7	46.6	18.8	10.8	7.2	61.2
Azobenzene					<8				
Barium, total	1620.0	1100.0	1070.0	1000.0	1170.0	1630.0	592.0	612.0	1080.0
Benzene	1.6	1.0	<1.0	<1.0	1.0	1.9	<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-chloroisopropyl) ether					<8				
Bis(2-ethylhexyl) phthalate					<6				
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate					<8				
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	2.2
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	5.4	3.1	4.7	3.2	5.6	2.4	1.3	1.1	3.1
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				
Dissolved oxygen	.61								
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 8

Analytical Data Summary for MW-14

Constituents	10/12/2022	4/6/2023	10/9/2023	4/4/2024	10/16/2024
Antimony, total	<2	<2	<2	<2	<2
Arochlor 1016					
Arochlor 1221					
Arochlor 1232					
Arochlor 1242					
Arochlor 1248					
Arochlor 1254					
Arochlor 1260					
Arsenic, total	34.3	4.7	17.9	<4.0	22.5
Azobenzene					
Barium, total	1660.0	411.0	1430.0	53.7	1370.0
Benzene	1.9	<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	<4
Beta-bhc					
Bis (2-chloroethoxy) methane					
Bis(2-chloroethyl) ether					
Bis(2-chloroisopropyl) ether					
Bis(2-ethylhexyl) phthalate					
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	1.0	<.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	4.1	.9	2.1	<.4	1.7
Copper, total	<4	<4	<4	6	<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					
Dissolved oxygen					
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					

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

Table 8

Analytical Data Summary for MW-14

Constituents	Units	4/7/2014	10/23/2014	4/2/2015	10/26/2015	4/1/2016	10/19/2016	4/17/2017	10/11/2017
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	<4	<4
Mercury, total	ug/L			<.5					
Methacrylonitrile	ug/L			<1.0					
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			△8					
Methylene chloride	ug/L	<5	<5	△5	<5	<5	<5	<5	<5
Naphthalene	ug/L			△8					
Nickel, total	ug/L	18.8	16.5	19.6	17.1	14.0	12.1	15.6	16.6
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	<.4		<.4	<.4	<.4	<.4	
O-toluidine	ug/L			△8					
Parathion	ug/L			△8					
P-dimethylaminoazobenzene	ug/L			△8					
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			△8					
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
Solids, total suspended	mg/L		143	126					
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Sulfide, total	mg/L	<.1	<.1	<.1	<.1	<.1	<1.0	<.1	<.1
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4	<4	△4	<4	<4	<4	<4	<4
Thionazin	ug/L			△8					
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	10.9	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0

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

Table 8

Analytical Data Summary for MW-14

Constituents	6/1/2018	10/3/2018	4/8/2019	10/11/2019	4/27/2020	10/9/2020	4/9/2021	10/25/2021	4/11/2022
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					1.2	<1.0			
Methapyrilene					<8				
Methoxychlor					<.05				
Methyl iodide	<1	<1	<1	<1	<2	<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	13.1	13.6	12.5	12.7	15.0	12.5	10.6	11.8	11.2
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				
Parathion					<4				
P-dimethylaminoazobenzene					<8				
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
Solids, total suspended									
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfide, total	<.2	<.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
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	<20.0	<8.0	22.2	<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-14

Constituents	10/12/2022	4/6/2023	10/9/2023	4/4/2024	10/16/2024
Hexachlorobenzene					
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	13.8	8.9	11.4	<4.0	7.8
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					
Parathion					
P-dimethylaminoazobenzene					
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
Solids, total suspended					
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 9

Analytical Data Summary for MW-15

Constituents	Units	4/7/2014	10/23/2014	4/2/2015	10/26/2015	4/1/2016	10/19/2016	4/17/2017	10/11/2017
(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	<1.0	1.6	<1.0	1.4	<1.0	<1.0	<1.0	<1.0
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	<.8	<5	<5	<5	<5	<5
2-chloronaphthalene	ug/L			<.8					
2-chlorophenol	ug/L			<.8					
2-hexanone (mbk)	ug/L	<5	<5	<.8	<5	<5	<5	<5	<5
2-methylnaphthalene	ug/L			<.8					
2-methylphenol	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 9

Analytical Data Summary for MW-15

Constituents	6/1/2018	10/3/2018	4/8/2019	10/11/2019	4/27/2020	10/9/2020	4/9/2021	10/25/2021	4/11/2022
(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	<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-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	<10
2-chloronaphthalene					<8				
2-chlorophenol					<8				
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-methylnaphthalene					<8				
2-methylphenol					<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 9

Analytical Data Summary for MW-15

Constituents	10/12/2022	4/6/2023	10/9/2023	4/4/2024	10/16/2024
(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	<1.0	<1.0	<1.0	<1.0	<1.0
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					
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 9

Analytical Data Summary for MW-15

Constituents	Units	4/7/2014	10/23/2014	4/2/2015	10/26/2015	4/1/2016	10/19/2016	4/17/2017	10/11/2017
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	8.7	13.1	5.8	6.2	<4.0	<4.0	9.0	<4.0
Azobenzene	ug/L			<.8					
Barium, total	ug/L	304.0	655.0	370.0	409.0	101.0	216.0	304.0	165.0
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-chloroisopropyl) ether	ug/L			<.8					
Bis(2-ethylhexyl) phthalate	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	1.6	9.1	1.2	<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	<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	<4.0	1.2	<.8	<.8	1.2	<.8	2.3	.8
Copper, total	ug/L	<4	21	<.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			<.5					
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 9

Analytical Data Summary for MW-15

Constituents	6/1/2018	10/3/2018	4/8/2019	10/11/2019	4/27/2020	10/9/2020	4/9/2021	10/25/2021	4/11/2022
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	<4.0	4.5	<4.0	<4.0	4.0	<4.0	<4.0	<4.0
Azobenzene					<8				
Barium, total	278.0	276.0	157.0	253.0	234.0	349.0	190.0	283.0	130.0
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-chloroisopropyl) ether					<8				
Bis(2-ethylhexyl) phthalate					11	<6	<6	<6	
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate					<8				
Cadmium, total	<.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	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroprene					<1				
Chromium, total	<8	<8	<8	<8	<8	<8	<8	<8	<8
Chrysene					<8				
Cis-1,2-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	1.0	2.4	.9	.5	.4	.5	.4	2.1
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 9

Analytical Data Summary for MW-15

Constituents	10/12/2022	4/6/2023	10/9/2023	4/4/2024	10/16/2024
Antimony, total	<2	<2	<2	<2	<2
Arochlor 1016					
Arochlor 1221					
Arochlor 1232					
Arochlor 1242					
Arochlor 1248					
Arochlor 1254					
Arochlor 1260					
Arsenic, total	12.5	<4.0	10.5	<4.0	4.6
Azobenzene					
Barium, total	521.0	98.4	489.0	86.0	388.0
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-chloroisopropyl) ether					
Bis(2-ethylhexyl) phthalate					
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	<1.0	<1.0	<1.0	<1.0	<1.0
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	2.7	.4	.9	.4	.6
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					
Fluorene					
Gamma-bhc (lindane)					
Heptachlor					
Heptachlor epoxide					
Hexachlorobenzene					

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

Table 9

Analytical Data Summary for MW-15

Constituents	Units	4/7/2014	10/23/2014	4/2/2015	10/26/2015	4/1/2016	10/19/2016	4/17/2017	10/11/2017
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	<4.0	5.9	<4.0	<4.0	<4.0	<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	<1	<1	<1	<1	<1
Methyl methacrylate	ug/L			<.1					
Methyl methanesulfonate	ug/L			<.8					
Methyl parathion	ug/L			<.8					
Methylene chloride	ug/L	<5	<5	<.5	<5	<5	<5	<5	<5
Naphthalene	ug/L			<.8					
Nickel, total	ug/L	30.3	51.9	48.0	51.7	18.8	24.7	20.2	16.5
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			<.8					
O-toluidine	ug/L			<.8					
Parathion	ug/L			<.8					
P-dimethylaminoazobenzene	ug/L			<.8					
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			<.8					
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
Solids, total suspended	mg/L		266	80					
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Sulfide, total	mg/L	<.10	.12	<.10	<.10	.11	<.10	<.10	<.10
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Thionazin	ug/L			<.8					
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	<20.0	20.5	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0
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	9.3	38.8	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0

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

Table 9

Analytical Data Summary for MW-15

Constituents	6/1/2018	10/3/2018	4/8/2019	10/11/2019	4/27/2020	10/9/2020	4/9/2021	10/25/2021	4/11/2022
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	<4.0	<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	<2	<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	32.2	34.8	14.3	18.8	15.1	29.7	17.7	16.2	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				
Parathion					<.4				
P-dimethylaminoazobenzene					<8				
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
Solids, total suspended									
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfide, total	<.20	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<.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	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5	<5	<5
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	<20.0	<8.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 9

Analytical Data Summary for MW-15

Constituents	10/12/2022	4/6/2023	10/9/2023	4/4/2024	10/16/2024
Hexachlorobutadiene					
Hexachlorocyclopentadiene					
Hexachloroethane					
Hexachloropropene					
Indeno(1,2,3-cd)pyrene					
Isobutanol					
Isodrin					
Isophorone					
Isosafrole					
Kepone					
Lead, total	<4.0	<4.0	<4.0	<4.0	<4.0
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	34.2	14.4	47.6	17.6	28.9
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					
Parathion					
P-dimethylaminoazobenzene					
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
Solids, total suspended					
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	<20.0	<20.0	<20.0	<20.0	<20.0
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 10

Analytical Data Summary for MW-16

Constituents	Units	4/7/2014	10/23/2014	4/2/2015	10/26/2015	4/1/2016	10/19/2016	4/17/2017	10/11/2017
(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	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	16.3
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 10

Analytical Data Summary for MW-16

Constituents	6/1/2018	10/3/2018	4/8/2019	10/11/2019	4/27/2020	10/9/2020	4/9/2021	6/23/2021	10/25/2021
(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	<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									
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									
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	<5	<5
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	<10.0	<10.0	<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	<5	<5
Aldrin									
Allyl chloride									
Alpha-bhc									
Anthracene									

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

Table 10

Analytical Data Summary for MW-16

Constituents	1/13/2022	4/11/2022	10/12/2022	4/6/2023	10/9/2023	4/4/2024	10/16/2024
(3,4)-methylphenol		<8		<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			
1,2,3-trichloropropane		<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	<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		<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
1,4-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		<6		<5			
2,4,5-tp (silvex)		<6		<5			
2,4,5-trichlorophenol		<8		<8			
2,4,6-trichlorophenol		<8		<8			
2,4-d		<2.6		<2.0			
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	<10	<5	<10	<10	<10
2-chloronaphthalene		<8		<8			
2-chlorophenol		<8		<8			
2-hexanone (mbk)		<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
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		<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Acetonitrile		<10		<10			
Acetophenone		<8		<8			
Acrolein		<10		<10			
Acrylonitrile		<5	<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 10

Analytical Data Summary for MW-16

Constituents	Units	4/7/2014	10/23/2014	4/2/2015	10/26/2015	4/1/2016	10/19/2016	4/17/2017	10/11/2017
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	10.9	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Azobenzene	ug/L								
Barium, total	ug/L	519	542	534	572	602	525	414	286
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-chloroisopropyl) ether	ug/L								
Bis(2-ethylhexyl) phthalate	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	<4.0	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Copper, total	ug/L	4.4	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Cyanide, total	mg/L								
Delta-bhc	ug/L								
Diallate	ug/L								
Dibenzo(a,h)anthracene	ug/L								
Dibenzofuran	ug/L								
Dibromochloromethane	ug/L	<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 10

Analytical Data Summary for MW-16

Constituents	6/1/2018	10/3/2018	4/8/2019	10/11/2019	4/27/2020	10/9/2020	4/9/2021	6/23/2021	10/25/2021
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	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	4.4		7.5
Azobenzene									
Barium, total	528	274	241	236	420	264	526		450
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-chloroisopropyl) ether									
Bis(2-ethylhexyl) phthalate									
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1		<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1		<1
Bromoform	<1	<1	<1	<1	<1	<1	<1		<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1		<1
Butyl benzyl phthalate									
Cadmium, total	<.8	1.1	<.8	.9	<.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	<.8	<.8	<.8	<.8	.5	<.4	.7		.8
Copper, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0		<4.0
Cyanide, total									
Delta-bhc									
Diallate									
Dibenzo(a,h)anthracene									
Dibenzofuran									
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<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 10

Analytical Data Summary for MW-16

Constituents	1/13/2022	4/11/2022	10/12/2022	4/6/2023	10/9/2023	4/4/2024	10/16/2024
Antimony, total		<2	<2	<2	<2	<2	<2
Arochlor 1016		<.13		<.10			
Arochlor 1221		<.26		<.20			
Arochlor 1232		<.26		<.20			
Arochlor 1242		<.26		<.20			
Arochlor 1248		<.26		<.20			
Arochlor 1254		<.13		<.10			
Arochlor 1260		<.13		<.10			
Arsenic, total		<4.0	<4.0	<4.0	<4.0	4.5	9.3
Azobenzene		<8		<8			
Barium, total	557	350	548	321	974	869	
Benzene		<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
Beta-bhc		<.05		<.05			
Bis (2-chloroethoxy) methane		<8		<8			
Bis(2-chloroethyl) ether		<8		<8			
Bis(2-chloroisopropyl) ether		<8		<8			
Bis(2-ethylhexyl) phthalate		10	<6	<6			
Bromochloromethane		<1	<1	<1	<1	<1	<1
Bromodichloromethane		<1	<1	<1	<1	<1	<1
Bromoform		<1	<1	<1	<1	<1	<1
Bromomethane		<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate		<8		<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		<.1			
Chlorobenzene		<1	<1	<1	<1	<1	<1
Chlorobenzilate		<8		<8			
Chloroethane		<1	<1	<1	<1	<1	<1
Chloroform		<1	<1	<1	<1	<1	<1
Chloromethane		<1	<1	<1	<1	<1	<1
Chloroprene		<1		<1			
Chromium, total		<8	<8	<8	<8	<8	<8
Chrysene		<8		<8			
Cis-1,2-dichloroethylene		<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene		<1	<1	<1	<1	<1	<1
Cobalt, total	1.0	2.7	.9	<.4	.8	1.5	
Copper, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Cyanide, total		<.005		<.005			
Delta-bhc		<.05		<.05			
Diallate		<8		<8			
Dibenzo(a,h)anthracene		<8		<8			
Dibenzofuran		<8		<8			
Dibromochloromethane		<1	<1	<1	<1	<1	<1
Dibromomethane		<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		<.6		<.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
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 10

Analytical Data Summary for MW-16

Constituents	Units	4/7/2014	10/23/2014	4/2/2015	10/26/2015	4/1/2016	10/19/2016	4/17/2017	10/11/2017
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	21.4	15.4	16.1	15.6	16.0	11.2	12.8	9.0
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								
Parathion	ug/L								
P-dimethylaminoazobenzene	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
Solids, total suspended	mg/L		696	65					
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	<4	<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	19.9	<8.0	<8.0	20.6	<8.0	<8.0	<8.0	<8.0

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

Table 10

Analytical Data Summary for MW-16

Constituents	6/1/2018	10/3/2018	4/8/2019	10/11/2019	4/27/2020	10/9/2020	4/9/2021	6/23/2021	10/25/2021
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	11.3	8.0	5.6	7.2	12.1	8.7	14.1	12.2	14.4
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									
Parathion									
P-dimethylaminoazobenzene									
Pentachlorobenzene									
Pentachloronitrobenzene (pcnb)									
Pentachlorophenol									
Phenacetin									
Phenanthrene									
Phenol									
Phorate									
Pronamide									
Propionitrile									
Pyrene									
Safrole									
Selenium, total	<4	<4	<4	<4	<4	<4	<4		<4
Silver, total	<8	<4	<4	<4	<4	<4	<4		<4
Solids, total suspended									
Styrene	<1	<1	<1	<1	<1	<1	<1		<1
Sulfide, total									
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1		<1
Thallium, total	<4	<4	<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	<8.0	27.7	<8.0	30.2	<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-16

Constituents	1/13/2022	4/11/2022	10/12/2022	4/6/2023	10/9/2023	4/4/2024	10/16/2024
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	<4
Mercury, total		<.5		<.5			
Methacrylonitrile		<1		<1			
Methapyrilene		<8		<8			
Methoxychlor		<.05		<.05			
Methyl iodide		<2	<1	<2	<1	<1	<1
Methyl methacrylate		<1		<1			
Methyl methanesulfonate		<8		<8			
Methyl parathion		<.4		<.4			
Methylene chloride		<5	<5	<5	<5	<5	<5
Naphthalene		<8		<8			
Nickel, total	14.8	12.1	11.2	14.4	11.5	14.5	31.3
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			
Parathion		<.4		<.4			
P-dimethylaminoazobenzene		<8		<8			
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	<4
Silver, total		<4	<4	<4	<4	<4	<4
Solids, total suspended							
Styrene		<1	<1	<1	<1	<1	<1
Sulfide, total		1.8	<.1	<1.5			
Tetrachloroethylene		<1	<1	<1	<1	<1	<1
Thallium, total		<2	<2	<2	<2	<2	<2
Thionazin		<.4		<.4			
Tin, total		<20		<20			
Toluene		<1	<1	<1	<1	<1	<1
Toxaphene		<2		<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 11

Analytical Data Summary for MW-17

Constituents	Units	4/7/2014	10/23/2014	1/16/2015	4/2/2015	9/15/2015	10/26/2015	4/1/2016	10/19/2016	4/17/2017
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	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
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	30.9	11.5	17.0	53.7	7.9	7.7	22.1	4.9	136.0
Barium, total	ug/L	374	167	293	589	148	140	475	183	1010
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	1.0	<.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	<4.0	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Copper, total	ug/L	61.5	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
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	7.8	<4.0	4.7	5.6	<4.0	<4.0	<4.0	5.1	6.0
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	<4
Solids, total suspended	mg/L		140		113					
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	<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	<20.0	<8.0	<20.0	<8.0	<8.0	<20.0	<8.0	14.4	<8.0

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

Table 11

Analytical Data Summary for MW-17

Constituents	10/11/2017	6/1/2018	10/3/2018	4/8/2019	10/11/2019	4/27/2020	10/9/2020	4/9/2021	10/25/2021
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	<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
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	<5	<5	<5	<5	<5	<5	<5	<5	<5
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	20.1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	8.0	49.3	12.1	11.1	12.9	12.2	6.9	4.2	<4.0
Barium, total	168	373	174	217	222	338	161	235	146
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	1.0	<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	<4	<4	<4
Copper, total	<4.0	<4.0	4.8	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
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	4.6	4.3	4.6	<4.0	<4.0	<4.0	<4.0	4.7
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	<4	<8	<4	<4	<4	<4	<4	<4	<4
Solids, total suspended									
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4	<4	<4	<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	<8.0	21.0	<8.0	32.2	<20.0	<20.0	<20.0	<20.0

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

Table 11

Analytical Data Summary for MW-17

Constituents	4/11/2022	10/12/2022	4/6/2023	10/9/2023	4/4/2024	10/16/2024
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
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<5	<5	<5	<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
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1
2-butanone (mek)	<10	<10	<10	<10	<10	<10
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5	<5
Acetone	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Acrylonitrile	<5	<5	<5	<5	<5	<5
Antimony, total	<2	<2	<2	<2	<2	<2
Arsenic, total	15.5	8.2	12.7	4.4	30.3	5.6
Barium, total	421	175	263	151	358	135
Benzene	<1	<1	<1	<1	<1	<1
Beryllium, total	<4	<4	<4	<4	<4	<4
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
Cadmium, total	<8	<8	1.7	<8	<8	<8
Carbon disulfide	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1
Chlorobenzene	<1	<1	<1	<1	<1	<1
Chloroethane	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1
Chromium, total	<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1
Cobalt, total	<4	2.2	<4	<4	<4	<4
Copper, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Dibromochloromethane	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1	<1	<1
Lead, total	<4	<4	<4	<4	<4	<4
Methyl iodide	<1	<1	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5	<5	<5
Nickel, total	5.0	<4.0	<4.0	<4.0	<4.0	<4.0
Selenium, total	<4	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4	<4
Solids, total suspended						
Styrene	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	<1	<1	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2	<2	<2
Toluene	<1	<1	<1	<1	<1	<1
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 12

Analytical Data Summary for MW-18

Constituents	Units	4/29/2020	4/6/2023	10/9/2023	4/4/2024	10/16/2024
1,1,1,2-tetrachloroethane	ug/L	<1				
1,1,1-trichloroethane	ug/L	<1				
1,1,2,2-tetrachloroethane	ug/L	<1				
1,1,2-trichloroethane	ug/L	<1				
1,1-dichloroethane	ug/L	<1				
1,1-dichloroethylene	ug/L	<1				
1,2,3-trichloropropane	ug/L	<1				
1,2-dibromo-3-chloropropane	ug/L	<5				
1,2-dibromoethane	ug/L	<1				
1,2-dichlorobenzene	ug/L	<1				
1,2-dichloroethane	ug/L	<1				
1,2-dichloropropane	ug/L	<1				
1,4-dichlorobenzene	ug/L	<1				
2-butanone (mek)	ug/L	<5				
2-hexanone (mbk)	ug/L	<5				
4-methyl-2-pentanone (mibk)	ug/L	<5				
Acetone	ug/L	14.2				
Acrylonitrile	ug/L	<5				
Antimony, total	ug/L	<2	<2	<2	<2	<2
Arsenic, total	ug/L	4.3	6.9	4.5	6.7	6.0
Barium, total	ug/L	65.7	48.1	46.8	43.8	45.6
Benzene	ug/L	<1				
Beryllium, total	ug/L	<4	<4	<4	<4	<4
Bromochloromethane	ug/L	<1				
Bromodichloromethane	ug/L	<1				
Bromoform	ug/L	<1				
Bromomethane	ug/L	<1				
Cadmium, total	ug/L	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	ug/L	<1				
Carbon tetrachloride	ug/L	<1				
Chlorobenzene	ug/L	<1				
Chloroethane	ug/L	<1				
Chloroform	ug/L	<1				
Chloromethane	ug/L	<1				
Chromium, total	ug/L	<8	<8	<8	<8	<8
Cis-1,2-dichloroethylene	ug/L	<1				
Cis-1,3-dichloropropene	ug/L	<1				
Cobalt, total	ug/L	.5	<.4	<.4	<.4	<.4
Copper, total	ug/L	<4.0	23.9	<4.0	<4.0	<4.0
Dibromochloromethane	ug/L	<1				
Dibromomethane	ug/L	<1				
Ethylbenzene	ug/L	<1				
Lead, total	ug/L	<4	<4	<4	<4	<4
Methyl iodide	ug/L	<1				
Methylene chloride	ug/L	<5				
Nickel, total	ug/L	<4	<4	<4	<4	<4
Selenium, total	ug/L	<4	<4	<4	<4	<4
Silver, total	ug/L	<4	<4	<4	<4	<4
Styrene	ug/L	<1				
Tetrachloroethylene	ug/L	<1				
Thallium, total	ug/L	<2	<2	<2	<2	<2
Toluene	ug/L	<1				
Trans-1,2-dichloroethylene	ug/L	<1				
Trans-1,3-dichloropropene	ug/L	<1				
Trans-1,4-dichloro-2-butene	ug/L	<5				
Trichloroethylene	ug/L	<1				
Trichlorofluoromethane	ug/L	<1				
Vanadium, total	ug/L	<20	<20	<20	<20	<20
Vinyl acetate	ug/L	<5				
Vinyl chloride	ug/L	<1				
Xylenes, total	ug/L	<2				
Zinc, total	ug/L	<20	<20	<20	<20	<20

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

Table 13

Analytical Data Summary for MW-19

Constituents	Units	4/29/2020	4/6/2023	10/9/2023	4/4/2024	10/16/2024
1,1,1,2-tetrachloroethane	ug/L	<1				
1,1,1-trichloroethane	ug/L	<1				
1,1,2,2-tetrachloroethane	ug/L	<1				
1,1,2-trichloroethane	ug/L	<1				
1,1-dichloroethane	ug/L	<1				
1,1-dichloroethylene	ug/L	<1				
1,2,3-trichloropropane	ug/L	<1				
1,2-dibromo-3-chloropropane	ug/L	<5				
1,2-dibromoethane	ug/L	<1				
1,2-dichlorobenzene	ug/L	<1				
1,2-dichloroethane	ug/L	<1				
1,2-dichloropropane	ug/L	<1				
1,4-dichlorobenzene	ug/L	<1				
2-butanone (mek)	ug/L	<5				
2-hexanone (mbk)	ug/L	<5				
4-methyl-2-pentanone (mibk)	ug/L	<5				
Acetone	ug/L	<10				
Acrylonitrile	ug/L	<5				
Antimony, total	ug/L	<2	<2	<2	<2	<2
Arsenic, total	ug/L	<4.0	4.1	4.2	4.8	4.5
Barium, total	ug/L	184	210	220	211	207
Benzene	ug/L	<1				
Beryllium, total	ug/L	<4	<4	<4	<4	<4
Bromochloromethane	ug/L	<1				
Bromodichloromethane	ug/L	<1				
Bromoform	ug/L	<1				
Bromomethane	ug/L	<1				
Cadmium, total	ug/L	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	ug/L	<1				
Carbon tetrachloride	ug/L	<1				
Chlorobenzene	ug/L	<1				
Chloroethane	ug/L	<1				
Chloroform	ug/L	<1				
Chloromethane	ug/L	<1				
Chromium, total	ug/L	<8	<8	<8	<8	<8
Cis-1,2-dichloroethylene	ug/L	<1				
Cis-1,3-dichloropropene	ug/L	<1				
Cobalt, total	ug/L	<.4	<.4	<.4	<.4	<.4
Copper, total	ug/L	<4	<4	<4	<4	<4
Dibromochloromethane	ug/L	<1				
Dibromomethane	ug/L	<1				
Ethylbenzene	ug/L	<1				
Lead, total	ug/L	<4	<4	<4	<4	<4
Methyl iodide	ug/L	<1				
Methylene chloride	ug/L	<5				
Nickel, total	ug/L	<4	<4	<4	<4	<4
Selenium, total	ug/L	<4	<4	<4	<4	<4
Silver, total	ug/L	<4	<4	<4	<4	<4
Styrene	ug/L	<1				
Tetrachloroethylene	ug/L	<1				
Thallium, total	ug/L	<2	<2	<2	<2	<2
Toluene	ug/L	<1				
Trans-1,2-dichloroethylene	ug/L	<1				
Trans-1,3-dichloropropene	ug/L	<1				
Trans-1,4-dichloro-2-butene	ug/L	<5				
Trichloroethylene	ug/L	<1				
Trichlorofluoromethane	ug/L	<1				
Vanadium, total	ug/L	<20	<20	<20	<20	<20
Vinyl acetate	ug/L	<5				
Vinyl chloride	ug/L	<1				
Xylenes, total	ug/L	<2				
Zinc, total	ug/L	<20	<20	<20	<20	<20

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

Table 14

Analytical Data Summary for MW-20

Constituents	Units	4/29/2020	4/6/2023	10/9/2023	4/4/2024	10/16/2024
1,1,1,2-tetrachloroethane	ug/L	<1				
1,1,1-trichloroethane	ug/L	<1				
1,1,2,2-tetrachloroethane	ug/L	<1				
1,1,2-trichloroethane	ug/L	<1				
1,1-dichloroethane	ug/L	<1				
1,1-dichloroethylene	ug/L	<1				
1,2,3-trichloropropane	ug/L	<1				
1,2-dibromo-3-chloropropane	ug/L	<5				
1,2-dibromoethane	ug/L	<1				
1,2-dichlorobenzene	ug/L	<1				
1,2-dichloroethane	ug/L	<1				
1,2-dichloropropane	ug/L	<1				
1,4-dichlorobenzene	ug/L	<1				
2-butanone (mek)	ug/L	<5				
2-hexanone (mbk)	ug/L	<5				
4-methyl-2-pentanone (mibk)	ug/L	<5				
Acetone	ug/L	<10				
Acrylonitrile	ug/L	<5				
Antimony, total	ug/L	<2	<2	<2	<2	<2
Arsenic, total	ug/L	<4.0	<4.0	6.0	5.7	6.4
Barium, total	ug/L	127	123	127	127	103
Benzene	ug/L	<1				
Beryllium, total	ug/L	<4	<4	<4	<4	<4
Bromochloromethane	ug/L	<1				
Bromodichloromethane	ug/L	<1				
Bromoform	ug/L	<1				
Bromomethane	ug/L	<1				
Cadmium, total	ug/L	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	ug/L	<1				
Carbon tetrachloride	ug/L	<1				
Chlorobenzene	ug/L	<1				
Chloroethane	ug/L	<1				
Chloroform	ug/L	<1				
Chloromethane	ug/L	<1				
Chromium, total	ug/L	<8	<8	<8	<8	<8
Cis-1,2-dichloroethylene	ug/L	<1				
Cis-1,3-dichloropropene	ug/L	<1				
Cobalt, total	ug/L	<.4	<.4	<.4	.7	.4
Copper, total	ug/L	<4	<4	<4	<4	<4
Dibromochloromethane	ug/L	<1				
Dibromomethane	ug/L	<1				
Ethylbenzene	ug/L	<1				
Lead, total	ug/L	<4	<4	<4	<4	<4
Methyl iodide	ug/L	<1				
Methylene chloride	ug/L	<5				
Nickel, total	ug/L	<4	<4	<4	<4	<4
Selenium, total	ug/L	<4	<4	<4	<4	<4
Silver, total	ug/L	<4	<4	<4	<4	<4
Styrene	ug/L	<1				
Tetrachloroethylene	ug/L	<1				
Thallium, total	ug/L	<2	<2	<2	<2	<2
Toluene	ug/L	<1				
Trans-1,2-dichloroethylene	ug/L	<1				
Trans-1,3-dichloropropene	ug/L	<1				
Trans-1,4-dichloro-2-butene	ug/L	<5				
Trichloroethylene	ug/L	<1				
Trichlorofluoromethane	ug/L	<1				
Vanadium, total	ug/L	<20	<20	<20	<20	<20
Vinyl acetate	ug/L	<5				
Vinyl chloride	ug/L	<1				
Xylenes, total	ug/L	<2				
Zinc, total	ug/L	<20	<20	<20	<20	<20

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

Table 15

Analytical Data Summary for MW-21

Constituents	Units	4/29/2020	4/6/2023	10/9/2023	4/4/2024	10/16/2024
1,1,1,2-tetrachloroethane	ug/L	<1				
1,1,1-trichloroethane	ug/L	<1				
1,1,2,2-tetrachloroethane	ug/L	<1				
1,1,2-trichloroethane	ug/L	<1				
1,1-dichloroethane	ug/L	<1				
1,1-dichloroethylene	ug/L	<1				
1,2,3-trichloropropane	ug/L	<1				
1,2-dibromo-3-chloropropane	ug/L	<5				
1,2-dibromoethane	ug/L	<1				
1,2-dichlorobenzene	ug/L	<1				
1,2-dichloroethane	ug/L	<1				
1,2-dichloropropane	ug/L	<1				
1,4-dichlorobenzene	ug/L	<1				
2-butanone (mek)	ug/L	<5				
2-hexanone (mbk)	ug/L	<5				
4-methyl-2-pentanone (mibk)	ug/L	<5				
Acetone	ug/L	<10				
Acrylonitrile	ug/L	<5				
Antimony, total	ug/L	<2	<2	<2	<2	<2
Arsenic, total	ug/L	<4	<4	<4	<4	<4
Barium, total	ug/L	233	192	177	207	215
Benzene	ug/L	<1				
Beryllium, total	ug/L	<4	<4	<4	<4	<4
Bromochloromethane	ug/L	<1				
Bromodichloromethane	ug/L	<1				
Bromoform	ug/L	<1				
Bromomethane	ug/L	<1				
Cadmium, total	ug/L	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	ug/L	<1				
Carbon tetrachloride	ug/L	<1				
Chlorobenzene	ug/L	<1				
Chloroethane	ug/L	<1				
Chloroform	ug/L	<1				
Chloromethane	ug/L	<1				
Chromium, total	ug/L	<8	<8	<8	<8	<8
Cis-1,2-dichloroethylene	ug/L	<1				
Cis-1,3-dichloropropene	ug/L	<1				
Cobalt, total	ug/L	<.4	<.4	<.4	<.4	<.4
Copper, total	ug/L	<4	<4	<4	<4	<4
Dibromochloromethane	ug/L	<1				
Dibromomethane	ug/L	<1				
Ethylbenzene	ug/L	<1				
Lead, total	ug/L	<4	<4	<4	<4	<4
Methyl iodide	ug/L	<1				
Methylene chloride	ug/L	<5				
Nickel, total	ug/L	<4	<4	<4	<4	<4
Selenium, total	ug/L	<4	<4	<4	<4	<4
Silver, total	ug/L	<4	<4	<4	<4	<4
Styrene	ug/L	<1				
Tetrachloroethylene	ug/L	<1				
Thallium, total	ug/L	<2	<2	<2	<2	<2
Toluene	ug/L	<1				
Trans-1,2-dichloroethylene	ug/L	<1				
Trans-1,3-dichloropropene	ug/L	<1				
Trans-1,4-dichloro-2-butene	ug/L	<5				
Trichloroethylene	ug/L	<1				
Trichlorofluoromethane	ug/L	<1				
Vanadium, total	ug/L	<20	<20	<20	<20	<20
Vinyl acetate	ug/L	<5				
Vinyl chloride	ug/L	<1				
Xylenes, total	ug/L	<2				
Zinc, total	ug/L	<20	<20	<20	<20	<20

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

Table 16

Analytical Data Summary for MW-3AR

Constituents	Units	4/7/2014	10/23/2014	4/2/2015	10/26/2015	4/1/2016	10/19/2016	4/17/2017	10/11/2017
(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	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	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	19.2
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	

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

Table 16

Analytical Data Summary for MW-3AR

Constituents	6/1/2018	10/3/2018	10/11/2019	4/27/2020	4/9/2021	10/25/2021	4/6/2023	4/4/2024	10/16/2024
(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	<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							<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	<10.0	<10.0	<10.0	<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	<5	<5	<5
Aldrin							<.05		
Allyl chloride							<1		
Alpha-bhc							<.05		

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

Table 16

Analytical Data Summary for MW-3AR

Constituents	Units	4/7/2014	10/23/2014	4/2/2015	10/26/2015	4/1/2016	10/19/2016	4/17/2017	10/11/2017
Anthracene	ug/L							<8	
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	5.5	<4.0	<4.0	4.5	10.0	<4.0	<4.0	<4.0
Azobenzene	ug/L							<8	
Barium, total	ug/L	137.0	51.7	44.9	89.2	73.7	66.2	43.8	45.9
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-chloroisopropyl) ether	ug/L							<8	
Bis(2-ethylhexyl) phthalate	ug/L	<13	<10		<10	<10	<10	<6	
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	1.5	4.9	1.5	.8	.8	<.8	1.6
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	10.7	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0
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	4.5	<.8	.8	4.2	2.3	1.7	1.3	<.8
Copper, total	ug/L	18.9	<4.0	8.3	<4.0	7.2	<4.0	<4.0	4.9
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	<.4		<.4	<.4	<.4	<.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								
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	<.4		<.4	<.4	<.4	<.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 16

Analytical Data Summary for MW-3AR

Constituents	6/1/2018	10/3/2018	10/11/2019	4/27/2020	4/9/2021	10/25/2021	4/6/2023	4/4/2024	10/16/2024
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	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	7.0	<4.0
Azobenzene							<.8		
Barium, total	36.8	49.1	82.5	49.9	42.6	85.6	40.3	357.0	154.0
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-chloroisopropyl) ether							<.8		
Bis(2-ethylhexyl) phthalate							<.6		
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate							<.8		
Cadmium, total	<.8	1.3	.8	<.8	<.8	<.8	1.2	<.8	1.0
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	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0
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	<.4	<.4	1.1	<.4	.8	.8
Copper, total	4.0	9.8	4.3	<4.0	4.2	4.4	10.2	<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 16

Analytical Data Summary for MW-3AR

Constituents	Units	4/7/2014	10/23/2014	4/2/2015	10/26/2015	4/1/2016	10/19/2016	4/17/2017	10/11/2017
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	7.7	<4.0	<4.0	<4.0	<4.0	<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	<1	<1	<1	<1	<1
Methyl methacrylate	ug/L							<1	
Methyl methanesulfonate	ug/L							<8	
Methyl parathion	ug/L							<8	
Methylene chloride	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene	ug/L							<8	
Nickel, total	ug/L	20.8	5.4	5.9	20.3	15.9	12.9	10.2	<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								
O-toluidine	ug/L							<8	
Parathion	ug/L								
P-dimethylaminoazobenzene	ug/L							<8	
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								
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
Solids, total suspended	mg/L		798	155					
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	<4	<4	<4	<4	<4	<4
Thionazin	ug/L								
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	25.2	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0
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	50.1	8.9	18.4	22.8	<8.0	12.4	<8.0	10.5

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

Table 16

Analytical Data Summary for MW-3AR

Constituents	6/1/2018	10/3/2018	10/11/2019	4/27/2020	4/9/2021	10/25/2021	4/6/2023	4/4/2024	10/16/2024
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	<4.0	<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	4.7	5.4	7.4	<4.0	<4.0	5.1	<4.0	6.2	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		
Parathion							<.4		
P-dimethylaminoazobenzene							<8		
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
Solids, total suspended									
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	<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	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5	<5	<5
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	22.0	23.4	<20.0	<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-6B

Constituents	Units	4/7/2014	10/23/2014	4/2/2015	10/26/2015	4/1/2016	10/19/2016	4/17/2017	10/11/2017
(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	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 17

Analytical Data Summary for MW-6B

Constituents	6/1/2018	10/3/2018	1/3/2019	4/8/2019	10/11/2019	4/27/2020	4/9/2021	10/25/2021	4/11/2022
(3 4)-methylphenol				<8		<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			
1,2,3-trichloropropane	<1	<1		<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene				<8		<8			
1,2,4-trichlorobenzene				<1		<1			
1,2-dibromo-3-chloropropane	<1	<1		<1	<1	<1	<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		<8			
1,3,5-trinitrobenzene				<8		<8			
1,3-dichlorobenzene				<1		<1			
1,3-dichloropropane				<1		<1			
1,3-dinitrobenzene				<8		<8			
1,4-dichlorobenzene	<1	<1		<1	<1	<1	<1	<1	<1
1,4-naphthoquinone				<8		<8			
1,4-phenylenediamine				<8		<8			
1-naphthylamine				<8		<8			
2,2-dichloropropane				<1		<1			
2,3,4,6-tetrachlorophenol				<8		<8			
2,4,5-t				<.5		<.5			
2,4,5-tp (silvex)				<.5		<.5			
2,4,5-trichlorophenol				<8		<8			
2,4,6-trichlorophenol				<8		<8			
2,4-d				<2		<2			
2,4-dichlorophenol				<8		<8			
2,4-dimethylphenol				<8		<8			
2,4-dinitrophenol				<8		<8			
2,4-dinitrotoluene				<8		<8			
2,6-dichlorophenol				<8		<8			
2,6-dinitrotoluene				<8		<8			
2-acetylaminofluorene				<8		<8			
2-butanone (mek)	<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
2-methylnaphthalene				<8		<8			
2-methylphenol				<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
4-nitroaniline				<8		<8			
4-nitrophenol				<8		<8			
5-nitro-o-toluidine				<8		<8			
7,12-dimethylbenz(a)anthracene				<8		<8			
Acenaphthene				<8		<8			
Acenaphthylene				<8		<8			
Acetone	<10	<10		<10	<10	<10	<10	<10	<10
Acetonitrile				<10		<10			
Acetophenone				<8		<8			
Acrolein				<10		<10			
Acrylonitrile	<5	<5		<5	<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 17

Analytical Data Summary for MW-6B

Constituents	4/6/2023	4/4/2024
(3,4)-methylphenol		
1,1,1,2-tetrachloroethane	<1	<1
1,1,1-trichloroethane	<1	<1
1,1,2,2-tetrachloroethane	<1	<1
1,1,2-trichloroethane	<1	<1
1,1-dichloroethane	<1	<1
1,1-dichloroethylene	<1	<1
1,1-dichloropropene		
1,2,3-trichloropropane	<1	<1
1,2,4,5-tetrachlorobenzene		
1,2,4-trichlorobenzene		
1,2-dibromo-3-chloropropane	<5	<5
1,2-dibromoethane	<1	<1
1,2-dichlorobenzene	<1	<1
1,2-dichloroethane	<1	<1
1,2-dichloropropane	<1	<1
1,2-dinitrobenzene		
1,3,5-trinitrobenzene		
1,3-dichlorobenzene		
1,3-dichloropropane		
1,3-dinitrobenzene		
1,4-dichlorobenzene	<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
2-chloronaphthalene		
2-chlorophenol		
2-hexanone (mbk)	<5	<5
2-methylnaphthalene		
2-methylphenol		
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
4-nitroaniline		
4-nitrophenol		
5-nitro-o-toluidine		
7,12-dimethylbenz(a)anthracene		
Acenaphthene		
Acenaphthylene		
Acetone	<10	<10
Acetonitrile		
Acetophenone		
Acrolein		
Acrylonitrile	<5	<5
Aldrin		
Allyl chloride		
Alpha-bhc		
Anthracene		

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

Table 17

Analytical Data Summary for MW-6B

Constituents	Units	4/7/2014	10/23/2014	4/2/2015	10/26/2015	4/1/2016	10/19/2016	4/17/2017	10/11/2017
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	4.2	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Azobenzene	ug/L								
Barium, total	ug/L	187.0	145.0	87.2	163.0	72.4	158.0	68.4	159.0
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-chloroisopropyl) ether	ug/L								
Bis(2-ethylhexyl) phthalate	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	1.7	<.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	7.4	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Copper, total	ug/L	26.5	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Cyanide, total	mg/L								
Delta-bhc	ug/L								
Diallate	ug/L								
Dibenzo(a,h)anthracene	ug/L								
Dibenzofuran	ug/L								
Dibromochloromethane	ug/L	<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 17

Analytical Data Summary for MW-6B

Constituents	6/1/2018	10/3/2018	1/3/2019	4/8/2019	10/11/2019	4/27/2020	4/9/2021	10/25/2021	4/11/2022
Antimony, total	<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		<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Azobenzene				<8		<8			
Barium, total	111.0	146.0		87.2	166.0	105.0	98.3	144.0	86.1
Benzene	<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
Beta-bhc				<.05		<.05			
Bis (2-chloroethoxy) methane				<8		<8			
Bis(2-chloroethyl) ether				<8		<8			
Bis(2-chloroisopropyl) ether				<8		<8			
Bis(2-ethylhexyl) phthalate				19 *	<6	13	<6	<6	<6
Bromochloromethane	<1	<1		<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1		<1	<1	<1	<1	<1	<1
Bromoform	<1	<1		<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1		<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate				<8		<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		<.1			
Chlorobenzene	<1	<1		<1	<1	<1	<1	<1	<1
Chlorobenzilate				<8		<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		<1			
Chromium, total	<8	<8		<8	<8	<8	<8	<8	<8
Chrysene				<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	<.8		<.8	<.8	<.4	<.4	.5	<.4
Copper, total	<4.0	<4.0		<4.0	<4.0	<4.0	<4.0	<4.0	4.1
Cyanide, total				<.005		<.005			
Delta-bhc				<.05		<.05			
Diallate				<8		<8			
Dibenzo(a,h)anthracene				<8		<8			
Dibenzofuran				<8		<8			
Dibromochloromethane	<1	<1		<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1		<1	<1	<1	<1	<1	<1
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
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 17

Analytical Data Summary for MW-6B

Constituents	4/6/2023	4/4/2024
Antimony, total	<2	<2
Arochlor 1016		
Arochlor 1221		
Arochlor 1232		
Arochlor 1242		
Arochlor 1248		
Arochlor 1254		
Arochlor 1260		
Arsenic, total	<4.0	<4.0
Azobenzene		
Barium, total	52.4	65.8
Benzene	<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
Beta-bhc		
Bis (2-chloroethoxy) methane		
Bis(2-chloroethyl) ether		
Bis(2-chloroisopropyl) ether		
Bis(2-ethylhexyl) phthalate	<6	<6
Bromochloromethane	<1	<1
Bromodichloromethane	<1	<1
Bromoform	<1	<1
Bromomethane	<1	<1
Butyl benzyl phthalate		
Cadmium, total	<.8	<.8
Carbon disulfide	<1	<1
Carbon tetrachloride	<1	<1
Chlordane		
Chlorobenzene	<1	<1
Chlorobenzilate		
Chloroethane	<1	<1
Chloroform	<1	<1
Chloromethane	<1	<1
Chloroprene		
Chromium, total	<8	<8
Chrysene		
Cis-1,2-dichloroethylene	<1	<1
Cis-1,3-dichloropropene	<1	<1
Cobalt, total	<.4	<.4
Copper, total	6.1	4.8
Cyanide, total		
Delta-bhc		
Diallate		
Dibenzo(a,h)anthracene		
Dibenzofuran		
Dibromochloromethane	<1	<1
Dibromomethane	<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
Famphur		
Fluoranthene		
Fluorene		
Gamma-bhc (lindane)		
Heptachlor		
Heptachlor epoxide		
Hexachlorobenzene		

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

Table 17

Analytical Data Summary for MW-6B

Constituents	Units	4/7/2014	10/23/2014	4/2/2015	10/26/2015	4/1/2016	10/19/2016	4/17/2017	10/11/2017
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	4.1	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
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	21.2	6.5	<4.0	8.4	<4.0	7.3	<4.0	7.3
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								
Parathion	ug/L								
P-dimethylaminoazobenzene	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	<4.0	<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
Solids, total suspended	mg/L		145	23					
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	<4	<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	47.7	<8.0	<8.0	21.6	<8.0	<8.0	<8.0	<8.0

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

Table 17

Analytical Data Summary for MW-6B

Constituents	6/1/2018	10/3/2018	1/3/2019	4/8/2019	10/11/2019	4/27/2020	4/9/2021	10/25/2021	4/11/2022
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	<4.0	<4.0		<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Mercury, total				<.5		<.5			
Methacrylonitrile				<1		<1			
Methapyrilene				<8		<8			
Methoxychlor				<.05		<.05			
Methyl iodide	<1	<1		<1	<1	<2	<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
Naphthalene				<8		<8			
Nickel, total	4.3	6.4		<4.0	7.6	<4.0	7.7	12.0	4.3
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			
Parathion				<.4		<.4			
P-dimethylaminoazobenzene				<8		<8			
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	<4.0	<4.0		<4.0	<4.0	<4.0	7.4	<4.0	<4.0
Silver, total	<8	<4		<4	<4	<4	<4	<4	<4
Solids, total suspended									
Styrene	<1	<1		<1	<1	<1	<1	<1	<1
Sulfide, total				<.1		<.1			
Tetrachloroethylene	<1	<1		<1	<1	<1	<1	<1	<1
Thallium, total	<4	<4		<2	<2	<2	<2	<2	<2
Thionazin				<.4		<.4			
Tin, total				<20		<20			
Toluene	<1	<1		<1	<1	<1	<1	<1	<1
Toxaphene				<.2		<.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	<8.0	47.7	122.0	<8.0	<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-6B

Constituents	4/6/2023	4/4/2024
Hexachlorobutadiene		
Hexachlorocyclopentadiene		
Hexachloroethane		
Hexachloropropene		
Indeno(1,2,3-cd)pyrene		
Isobutanol		
Isodrin		
Isophorone		
Isosafrole		
Kepone		
Lead, total	<4.0	<4.0
Mercury, total		
Methacrylonitrile		
Methapyrilene		
Methoxychlor		
Methyl iodide	<1	<1
Methyl methacrylate		
Methyl methanesulfonate		
Methyl parathion		
Methylene chloride	<5	<5
Naphthalene		
Nickel, total	<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		
Parathion		
P-dimethylaminoazobenzene		
Pentachlorobenzene		
Pentachloronitrobenzene (pcnb)		
Pentachlorophenol		
Phenacetin		
Phenanthrene		
Phenol		
Phorate		
Pronamide		
Propionitrile		
Pyrene		
Safrole		
Selenium, total	6.1	<4.0
Silver, total	<4	<4
Solids, total suspended		
Styrene	<1	<1
Sulfide, total		
Tetrachloroethylene	<1	<1
Thallium, total	<2	<2
Thionazin		
Tin, total		
Toluene	<1	<1
Toxaphene		
Trans-1,2-dichloroethylene	<1	<1
Trans-1,3-dichloropropene	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5
Trichloroethylene	<1	<1
Trichlorofluoromethane	<1	<1
Vanadium, total	<20	<20
Vinyl acetate	<5	<5
Vinyl chloride	<1	<1
Xylenes, total	<2	<2
Zinc, total	<20.0	<20.0

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

Table 18

Analytical Data Summary for MW-7A

Constituents	Units	4/7/2014	10/24/2014	4/2/2015	4/1/2016	10/19/2016	4/17/2017	10/11/2017	6/1/2018
(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	2.5	<1.0	<1.0	<1.0	2.2	<1.0	3.2	2.2
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			<.6					
2,4,5-tp (silvex)	ug/L			<.6					
2,4,5-trichlorophenol	ug/L			<.8					
2,4,6-trichlorophenol	ug/L			<.8					
2,4-d	ug/L			<.6					
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	<.8	<5	<5	<5	<5	<5
2-chloronaphthalene	ug/L			<.8					
2-chlorophenol	ug/L			<.8					
2-hexanone (mbk)	ug/L	<5	<5	<.8	<5	<5	<5	<5	<5
2-methylnaphthalene	ug/L			<.8					
2-methylphenol	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	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	21.8	<10.0
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 18

Analytical Data Summary for MW-7A

Constituents	10/3/2018	4/8/2019	10/11/2019	4/27/2020	4/9/2021	10/25/2021	4/11/2022	4/6/2023	4/4/2024
(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	2.6	<1.0	1.1	<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-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)				<.5					
2,4,5-trichlorophenol				<8					
2,4,6-trichlorophenol				<8					
2,4-d				<2.0					
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				<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	<10.0	<10.0	<10.0	<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	<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 18

Analytical Data Summary for MW-7A

Constituents	Units	4/7/2014	10/24/2014	4/2/2015	4/1/2016	10/19/2016	4/17/2017	10/11/2017	6/1/2018
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	5.6		13.5	10.2	4.9	6.4	5.8	4.5
Azobenzene	ug/L			<.8					
Barium, total	ug/L	159.0		340.0	178.0	341.0	427.0	298.0	256.0
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
Beta-bhc	ug/L			<.05					
Bis (2-chloroethoxy) methane	ug/L			<.8					
Bis(2-chloroethyl) ether	ug/L			<.8					
Bis(2-chloroisopropyl) ether	ug/L			<.8					
Bis(2-ethylhexyl) phthalate	ug/L			<.8					
Bromochloromethane	ug/L	<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	1.1	1.5	<.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
Chrysene	ug/L			<.8					
Cis-1,2-dichloroethylene	ug/L	2.0	<1.0	<1.0	<1.0	2.0	<1.0	3.4	1.7
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	<4.0		2.2	.8	<.8	1.2	.8	<.8
Copper, total	ug/L	12.2		<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			<.6					
Diphenylamine	ug/L			<.8					
Disulfoton	ug/L			<.05					
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 18

Analytical Data Summary for MW-7A

Constituents	10/3/2018	4/8/2019	10/11/2019	4/27/2020	4/9/2021	10/25/2021	4/11/2022	4/6/2023	4/4/2024
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	9.1	4.9	7.1	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Azobenzene				<8					
Barium, total	379.0	264.0	495.0	107.0	342.0	170.0	169.0	70.0	74.3
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-chloroisopropyl) ether				<8					
Bis(2-ethylhexyl) phthalate				<6					
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate				<8					
Cadmium, total	.9	<.8	.9	<.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	2.5	<1.0	2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	<.8	.9	1.6	.7	1.1	.9	.9	1.6	<.4
Copper, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	4.5	<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 18

Analytical Data Summary for MW-7A

Constituents	Units	4/7/2014	10/24/2014	4/2/2015	4/1/2016	10/19/2016	4/17/2017	10/11/2017	6/1/2018
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
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			<8					
Methylene chloride	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene	ug/L			<8					
Nickel, total	ug/L	35.5		44.8	43.4	42.5	62.4	37.9	32.3
Nitrobenzene	ug/L			<8					
N-nitrosodiethylamine	ug/L			<8					
N-nitrosodimethylamine	ug/L			<8					
N-nitrosodi-n-butylamine	ug/L			<8					
N-nitroso-di-n-propylamine	ug/L			<8					
N-nitrosodiphenylamine	ug/L			<8					
N-nitrosomethylethylamine	ug/L			<8					
N-nitrosopiperidine	ug/L			<8					
N-nitrosopyrrolidine	ug/L			<8					
O,o,o-triethyl phosphorothioate	ug/L			<8					
O-toluidine	ug/L			<8					
Parathion	ug/L			<8					
P-dimethylaminoazobenzene	ug/L			<8					
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			<8					
Pronamide	ug/L			<8					
Propionitrile	ug/L			<10					
Pyrene	ug/L			<8					
Safrole	ug/L			<8					
Selenium, total	ug/L	5.3		<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Silver, total	ug/L	<4		<4	<4	<4	<4	<4	<8
Solids, total suspended	mg/L			101					
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	<4	<4	<4	<4	<4
Thionazin	ug/L			<8					
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
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	1.1	<1.0	<1.0	<1.0	<1.0	<1.0	1.3	1.1
Xylenes, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	32.5		<8.0	<8.0	<8.0	11.4	9.2	<8.0

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

Table 18

Analytical Data Summary for MW-7A

Constituents	10/3/2018	4/8/2019	10/11/2019	4/27/2020	4/9/2021	10/25/2021	4/11/2022	4/6/2023	4/4/2024
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	<2	<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	40.2	34.9	40.9	26.3	46.3	25.8	54.8	27.8	12.6
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					
Parathion				<.4					
P-dimethylaminoazobenzene				<8					
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	<4.0
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Solids, total suspended									
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	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Xylenes, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	65.0	<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 19

Analytical Data Summary for MW-7B

Constituents	Units	4/7/2014	10/23/2014	4/2/2015	10/26/2015	4/1/2016	10/19/2016	4/17/2017	10/11/2017
(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	<1.0	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	1.4	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
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			<.8					
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	<.8	<5	<5	<5	<5	<5
2-chloronaphthalene	ug/L			<.8					
2-chlorophenol	ug/L			<.8					
2-hexanone (mbk)	ug/L	<5	<5	<.8	<5	<5	<5	<5	<5
2-methylnaphthalene	ug/L			<.8					
2-methylphenol	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-7B

Constituents	6/1/2018	10/3/2018	4/8/2019	10/11/2019	4/27/2020	10/9/2020	4/9/2021	10/25/2021	4/11/2022
(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	<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-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	<10
2-chloronaphthalene					<8				
2-chlorophenol					<8				
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-methylnaphthalene					<8				
2-methylphenol					<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-7B

Constituents	10/12/2022	4/6/2023	10/9/2023	4/4/2024	10/16/2024
(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	<1.0	<1.0	<1.0	<1.0	<1.0
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					
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 19

Analytical Data Summary for MW-7B

Constituents	Units	4/7/2014	10/23/2014	4/2/2015	10/26/2015	4/1/2016	10/19/2016	4/17/2017	10/11/2017
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	941	736	689	760	573	652	616	614
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-chloroisopropyl) ether	ug/L			<.8					
Bis(2-ethylhexyl) phthalate	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	5.4	<.8	<.8	<.8	<.8	<.8	3.6	2.3
Copper, total	ug/L	9.5	<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			<.05					
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-7B

Constituents	6/1/2018	10/3/2018	4/8/2019	10/11/2019	4/27/2020	10/9/2020	4/9/2021	10/25/2021	4/11/2022
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	668	665	501	596	542	776	636	647	602
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-chloroisopropyl) ether					<8				
Bis(2-ethylhexyl) phthalate					<6				
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate					<8				
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	3.2
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	2.3	1.7	<.8	1.2	.6	1.8	1.4	.4	.8
Copper, total	<4.0	<4.0	<4.0	<4.0	<4.0	4.6	<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-7B

Constituents	10/12/2022	4/6/2023	10/9/2023	4/4/2024	10/16/2024
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	744		684	643	678
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
Beta-bhc					
Bis (2-chloroethoxy) methane					
Bis(2-chloroethyl) ether					
Bis(2-chloroisopropyl) ether					
Bis(2-ethylhexyl) phthalate					
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
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
Chrysene					
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1
Cobalt, total	2.1		<.4	<.4	<.4
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	<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 19

Analytical Data Summary for MW-7B

Constituents	Units	4/7/2014	10/23/2014	4/2/2015	10/26/2015	4/1/2016	10/19/2016	4/17/2017	10/11/2017
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	5.7	<4.0	<4.0	<4.0	<4.0	<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	<1	<1	<1	<1	<1
Methyl methacrylate	ug/L			<.1					
Methyl methanesulfonate	ug/L			<.8					
Methyl parathion	ug/L			<.8					
Methylene chloride	ug/L	<5	<5	<.5	<5	<5	<5	<5	<5
Naphthalene	ug/L			<.8					
Nickel, total	ug/L	35.3	15.9	15.3	15.4	15.4	14.8	19.4	14.4
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			<.8					
O-toluidine	ug/L			<.8					
Parathion	ug/L			<.8					
P-dimethylaminoazobenzene	ug/L			<.8					
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			<.8					
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
Solids, total suspended	mg/L		322	30					
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	<4	<4	<4	<4	<4	<4
Thionazin	ug/L			<.8					
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	1.2	<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
Zinc, total	ug/L	25.0	<8.0	<8.0	<20.0	<8.0	<8.0	<8.0	<8.0

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

Table 19

Analytical Data Summary for MW-7B

Constituents	6/1/2018	10/3/2018	4/8/2019	10/11/2019	4/27/2020	10/9/2020	4/9/2021	10/25/2021	4/11/2022
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	<4.0	<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	<2	<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	16.9	16.7	16.5	18.3	18.9	26.0	12.6	9.7	16.1
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				
Parathion					<.4				
P-dimethylaminoazobenzene					<8				
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
Solids, total suspended									
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	<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	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Xylenes, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	<8.0	23.0	<8.0	21.7	<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-7B

Constituents	10/12/2022	4/6/2023	10/9/2023	4/4/2024	10/16/2024
Hexachlorobutadiene					
Hexachlorocyclopentadiene					
Hexachloroethane					
Hexachloropropene					
Indeno(1,2,3-cd)pyrene					
Isobutanol					
Isodrin					
Isophorone					
Isosafrole					
Kepone					
Lead, total	<4.0		<4.0	<4.0	<4.0
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	9.7		10.5	12.1	10.5
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					
Parathion					
P-dimethylaminoazobenzene					
Pentachlorobenzene					
Pentachloronitrobenzene (pcnb)					
Pentachlorophenol					
Phenacetin					
Phenanthrene					
Phenol					
Phorate					
Pronamide					
Propionitrile					
Pyrene					
Safrole					
Selenium, total	<4		<4	<4	<4
Silver, total	<4		<4	<4	<4
Solids, total suspended					
Styrene	<1	<1	<1	<1	<1
Sulfide, total					
Tetrachloroethylene	<1	<1	<1	<1	<1
Thallium, total	<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
Vinyl acetate	<5	<5	<5	<5	<5
Vinyl chloride	<1.0	<1.0	<1.0	<1.0	<1.0
Xylenes, total	<2	<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 MW-8

Constituents	Units	4/7/2014	10/23/2014	4/2/2015	10/26/2015	4/1/2016	10/19/2016	4/17/2017	10/11/2017
(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	<1.0	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	1.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
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	<.8	<5	<5	<5	<5	<5
2-chloronaphthalene	ug/L			<.8					
2-chlorophenol	ug/L			<.8					
2-hexanone (mbk)	ug/L	<5	<5	<.8	<5	<5	<5	<5	<5
2-methylnaphthalene	ug/L			<.8					
2-methylphenol	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					
Alkalinity, as cacO3	mg/L								
Allyl chloride	ug/L			<1					
Alpha-bhc	ug/L			<.05					

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

Table 20

Analytical Data Summary for MW-8

Constituents	6/1/2018	10/3/2018	4/8/2019	10/11/2019	4/27/2020	10/9/2020	4/9/2021	6/23/2021	10/25/2021
(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	<1.0	<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-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-chloronaphthalene					<8				
2-chlorophenol					<8				
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-methylnaphthalene					<8				
2-methylphenol					<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				
Alkalinity, as cacO3								438	
Allyl chloride					<1				
Alpha-bhc					<.05				

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

Table 20

Analytical Data Summary for MW-8

Constituents	4/11/2022	7/7/2022	10/12/2022	4/6/2023	10/9/2023	4/4/2024	10/16/2024
(3,4)-methylphenol							
1,1,1,2-tetrachloroethane	<5		<1	<1	<1	<1	<1
1,1,1-trichloroethane	<5		<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<5		<1	<1	<1	<1	<1
1,1,2-trichloroethane	<5		<1	<1	<1	<1	<1
1,1-dichloroethane	<5.0		<1.0	<1.0	<1.0	<1.0	<1.0
1,1-dichloroethylene	<5		<1	<1	<1	<1	<1
1,1-dichloropropene							
1,2,3-trichloropropane	<5		<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene							
1,2,4-trichlorobenzene							
1,2-dibromo-3-chloropropane	<25		<5	<5	<5	<5	<5
1,2-dibromoethane	<5		<1	<1	<1	<1	<1
1,2-dichlorobenzene	<5		<1	<1	<1	<1	<1
1,2-dichloroethane	<5		<1	<1	<1	<1	<1
1,2-dichloropropane	<5		<1	<1	<1	<1	<1
1,2-dinitrobenzene							
1,3,5-trinitrobenzene							
1,3-dichlorobenzene							
1,3-dichloropropane							
1,3-dinitrobenzene							
1,4-dichlorobenzene	<5		<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)	<50		<10	<10	<10	<10	<10
2-chloronaphthalene							
2-chlorophenol							
2-hexanone (mbk)	<25		<5	<5	<5	<5	<5
2-methylnaphthalene							
2-methylphenol							
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)	<25		<5	<5	<5	<5	<5
4-nitroaniline							
4-nitrophenol							
5-nitro-o-toluidine							
7,12-dimethylbenz(a)anthracene							
Acenaphthene							
Acenaphthylene							
Acetone	<50		<10	<10	<10	<10	<10
Acetonitrile							
Acetophenone							
Acrolein							
Acrylonitrile	<25		<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 20

Analytical Data Summary for MW-8

Constituents	Units	4/7/2014	10/23/2014	4/2/2015	10/26/2015	4/1/2016	10/19/2016	4/17/2017	10/11/2017
Anthracene	ug/L			<.8					
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	74.0	117.0	48.3	90.3	63.5	107.0	55.9	47.2
Azobenzene	ug/L			<.8					
Barium, total	ug/L	1060	772	536	717	547	871	623	649
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-chloroisopropyl) ether	ug/L			<.8					
Bis(2-ethylhexyl) phthalate	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	1.3	<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	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0
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	11.3	<.8	<.8	1.1	<.8	<.8	<.8	<.8
Copper, total	ug/L	9.3	<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			<.8					
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					

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

Table 20

Analytical Data Summary for MW-8

Constituents	6/1/2018	10/3/2018	4/8/2019	10/11/2019	4/27/2020	10/9/2020	4/9/2021	6/23/2021	10/25/2021
Anthracene					<.8				
Antimony, total	<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	32.5	9.7	33.1	75.7	56.2	72.9	95.1	57.7	125.0
Azobenzene					<.8				
Barium, total	738	220	716	1060	680	920	833		1160
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
Beta-bhc					<.05				
Bis (2-chloroethoxy) methane					<.8				
Bis(2-chloroethyl) ether					<.8				
Bis(2-chloroisopropyl) ether					<.8				
Bis(2-ethylhexyl) phthalate					<.6				
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
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	1.9	<.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	1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroprene					<.1				
Chromium, total	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0		<8.0
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	1.2	.5	.6	<.4		.8
Copper, total	<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 20

Analytical Data Summary for MW-8

Constituents	4/11/2022	7/7/2022	10/12/2022	4/6/2023	10/9/2023	4/4/2024	10/16/2024
Anthracene							
Antimony, total	<2		<2	<2	<2	<2	<2
Arochlor 1016							
Arochlor 1221							
Arochlor 1232							
Arochlor 1242							
Arochlor 1248							
Arochlor 1254							
Arochlor 1260							
Arsenic, total	220.0		360.0	31.7	165.0	30.9	33.5
Azobenzene							
Barium, total	2160		2840	399	1610	613	516
Benzene	<5		<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
Beta-bhc							
Bis (2-chloroethoxy) methane							
Bis(2-chloroethyl) ether							
Bis(2-chloroisopropyl) ether							
Bis(2-ethylhexyl) phthalate							
Bromochloromethane	<5		<1	<1	<1	<1	<1
Bromodichloromethane	<5		<1	<1	<1	<1	<1
Bromoform	<5		<1	<1	<1	<1	<1
Bromomethane	<5		<1	<1	<1	<1	<1
Butyl benzyl phthalate							
Cadmium, total	.8		<.8	<.8	<.8	<.8	<.8
Carbon disulfide	<5		<1	<1	<1	<1	<1
Carbon tetrachloride	<5		<1	<1	<1	<1	<1
Chlordane							
Chlorobenzene	<5		<1	<1	<1	<1	<1
Chlorobenzilate							
Chloroethane	<5.0		<1.0	<1.0	<1.0	<1.0	<1.0
Chloroform	<5		<1	<1	<1	<1	<1
Chloromethane	<5		<1	<1	<1	<1	<1
Chloroprene							
Chromium, total	8.4	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0
Chrysene							
Cis-1,2-dichloroethylene	<5		<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<5		<1	<1	<1	<1	<1
Cobalt, total	4.6	<.4	1.7	1.8	.5	2.6	.4
Copper, total	13.9	<4.0	4.0	<4.0	<4.0	<4.0	<4.0
Cyanide, total							
Delta-bhc							
Diallate							
Dibenzo(a,h)anthracene							
Dibenzofuran							
Dibromochloromethane	<5		<1	<1	<1	<1	<1
Dibromomethane	<5		<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	<5		<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 20

Analytical Data Summary for MW-8

Constituents	Units	4/7/2014	10/23/2014	4/2/2015	10/26/2015	4/1/2016	10/19/2016	4/17/2017	10/11/2017
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	10.7	<4.0	<4.0	<4.0	<4.0	<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	<1	<1	<1	<1	<1
Methyl methacrylate	ug/L			△1					
Methyl methanesulfonate	ug/L			△8					
Methyl parathion	ug/L			△8					
Methylene chloride	ug/L	<5	<5	△5	<5	<5	<5	<5	<5
Naphthalene	ug/L			△8					
Nickel, total	ug/L	34.1	10.8	7.4	10.3	6.1	10.5	8.2	9.8
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			△8					
O-toluidine	ug/L			△8					
Parathion	ug/L			△8					
P-dimethylaminoazobenzene	ug/L			△8					
Pentachlorobenzene	ug/L			△8					
Pentachloronitrobenzene (pcnb)	ug/L			△8					
Pentachlorophenol	ug/L			△8					
pH	SU								
Phenacetin	ug/L			△8					
Phenanthrene	ug/L			△8					
Phenol	ug/L			△8					
Phorate	ug/L			△8					
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
Solids, total suspended	mg/L		1410	93					
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Sulfide, total	mg/L			.55	<.10	.16	<1.00	<.10	<.10
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Thionazin	ug/L			△8					
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	29.9	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0
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	61.8	<8.0	<8.0	<20.0	<8.0	<8.0	<8.0	<8.0

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

Table 20

Analytical Data Summary for MW-8

Constituents	6/1/2018	10/3/2018	4/8/2019	10/11/2019	4/27/2020	10/9/2020	4/9/2021	6/23/2021	10/25/2021
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	<4.0	<4.0	6.4	<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	<2	<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	9.7	5.4	9.7	15.6	9.0	11.3	5.8		7.5
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				
Parathion					<4				
P-dimethylaminoazobenzene					<8				
Pentachlorobenzene					<8				
Pentachloronitrobenzene (pcnb)					<8				
Pentachlorophenol					<8				
pH								6.9	
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
Silver, total	<8	<4	<4	<4	<4	<4	<4		<4
Solids, total suspended									
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfide, total	.32	<.10	<.10	<.10	<.30	<.10	<.10		<.10
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4	<4	<2	<2	<2	<2	<2		<2
Thionazin					<4				
Tin, total					<20				
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<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	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0		<20.0
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5	<5	<5
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	<8.0	31.3	<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 MW-8

Constituents	4/11/2022	7/7/2022	10/12/2022	4/6/2023	10/9/2023	4/4/2024	10/16/2024
Hexachlorobenzene							
Hexachlorobutadiene							
Hexachlorocyclopentadiene							
Hexachloroethane							
Hexachloropropene							
Indeno(1,2,3-cd)pyrene							
Isobutanol							
Isodrin							
Isophorone							
Isosafrole							
Kepone							
Lead, total	6.9		<4.0	<4.0	<4.0	5.8	<4.0
Mercury, total							
Methacrylonitrile							
Methapyrilene							
Methoxychlor							
Methyl iodide	<5		<1	<1	<1	<1	<1
Methyl methacrylate							
Methyl methanesulfonate							
Methyl parathion							
Methylene chloride	<25		<5	<5	<5	<5	<5
Naphthalene							
Nickel, total	16.5	7.5	7.4	7.3	9.6	6.3	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							
Parathion							
P-dimethylaminoazobenzene							
Pentachlorobenzene							
Pentachloronitrobenzene (pcnb)							
Pentachlorophenol							
pH							
Phenacetin							
Phenanthrene							
Phenol							
Phorate							
Pronamide							
Propionitrile							
Pyrene							
Safrole							
Selenium, total	7.8	<4.0	<4.0	<4.0	<4.0	4.2	<4.0
Silver, total	<4		<4	<4	<4	<4	<4
Solids, total suspended							
Styrene	<5		<1	<1	<1	<1	<1
Sulfide, total							
Tetrachloroethylene	<5		<1	<1	<1	<1	<1
Thallium, total	<2		<2	<2	<2	<2	<2
Thionazin							
Tin, total							
Toluene	<5		<1	<1	<1	<1	<1
Toxaphene							
Trans-1,2-dichloroethylene	<5		<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<5		<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<25		<5	<5	<5	<5	<5
Trichloroethylene	<5		<1	<1	<1	<1	<1
Trichlorofluoromethane	<5		<1	<1	<1	<1	<1
Vanadium, total	25.1	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0
Vinyl acetate	<25		<5	<5	<5	<5	<5
Vinyl chloride	<5		<1	<1	<1	<1	<1
Xylenes, total	<10		<2	<2	<2	<2	<2
Zinc, total	31.7		<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 21

Analytical Data Summary for MW-9

Constituents	Units	4/7/2014	10/23/2014	4/2/2015	10/26/2015	4/1/2016	10/19/2016	4/17/2017	10/11/2017	6/1/2018
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	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	11.2	<10.0
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	18.8	4.8	20.2	9.4	8.1	9.2	<4.0	<4.0	<4.0
Barium, total	ug/L	134.0	91.0	132.0	82.4	90.9	83.3	76.0	63.7	70.4
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	1.2	<.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	<4.0	<.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	<4.0
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
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	6.8	<4.0	4.4	<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	<4
Solids, total suspended	mg/L		1280	74						
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	<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	20.0	<8.0	<8.0	21.0	9.4	<8.0	<8.0	<8.0	<8.0

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

Table 21

Analytical Data Summary for MW-9

Constituents	10/3/2018	4/8/2019	10/11/2019	4/27/2020	10/9/2020	1/8/2021	4/9/2021	10/25/2021	4/11/2022
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	<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
1,4-dichlorobenzene	<1	<1	<1	<1	<1		<1	<1	<1
2-butanone (mek)	<5	<5	<5	<5	<5		<5	<5	<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	<10.0	<10.0	<10.0	<10.0	<10.0		<10.0	<10.0	<10.0
Acrylonitrile	<5	<5	<5	<5	<5		<5	<5	<5
Antimony, total	<2	<2	<2	<2	<2		<2	<2	<2
Arsenic, total	4.0	<4.0	9.9	15.9	<4.0		<4.0	<4.0	6.2
Barium, total	57.9	75.6	72.9	83.2	63.9		54.4	46.7	90.3
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	2.3
Carbon disulfide	<1	<1	<1	<1	<1		<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1		<1	<1	<1
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	<.8	<.8	<.4	<.4		.5	<.4	1.5
Copper, total	<4.0	<4.0	<4.0	<4.0	13.9	<4.0	<4.0	<4.0	5.3
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
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	6.2		<4.0	<4.0	5.5
Selenium, total	<4	<4	<4	<4	<4		<4	<4	<4
Silver, total	<4	<4	<4	<4	<4		<4	<4	<4
Solids, total suspended									
Styrene	<1	<1	<1	<1	<1		<1	<1	<1
Tetrachloroethylene	<1	<1	<1	<1	<1		<1	<1	<1
Thallium, total	<4	<2	<2	<2	<2		<2	<2	<2
Toluene	<1	<1	<1	<1	<1		<1	<1	<1
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	<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 21

Analytical Data Summary for MW-9

Constituents	10/12/2022	4/6/2023	10/9/2023	4/4/2024	10/16/2024
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	<10.0	<10.0	<10.0	<10.0	<10.0
Acrylonitrile	<5	<5	<5	<5	<5
Antimony, total	<2	<2	<2	<2	<2
Arsenic, total	5.9	5.3	7.4	5.7	4.1
Barium, total	53.9	57.2	62.0	56.2	40.8
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	1.8	.7	<.4	.5	<.4
Copper, total	<4.0	5.7	4.9	<4.0	<4.0
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	<4.0	<4.0	<4.0	<4.0	<4.0
Selenium, total	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4
Solids, total suspended					
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.

Appendix D
Statistical Reports

Appendix D.1 –
Statistical Evaluation – Spring

GROUND WATER STATISTICS

FOR THE

NORTHERN PLAINS REGIONAL LANDFILL

First Semi-Annual Monitoring Event in 2024

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May 2024

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 Northern Plains Regional Landfill in Graettinger, Iowa. The interwell methodology is described and then applied to the Northern Plains Regional Landfill data. 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 statistical plan conforms with IAC 567, Chapter 113.10 and the USEPA Unified Guidance document (“*Statistical Analysis of Ground-Water Monitoring Data at RCRA Facilities*”, March 2009).

Ground Water Monitoring Program

The groundwater monitoring network for the Northern Plains Regional Landfill includes sample points GU-1, GU-2, GU-3, MW-10, MW-11 (upgradient), MW-12 (upgradient), MW-14, MW-15, MW-16, MW-17, MW-3AR, MW-6B, MW-7A, MW-7B, MW-8, and MW-9. 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	<i>trans</i> -1,4-Dichloro-2-butene	Iodomethane
Acrylonitrile	1,1-Dichloroethane	4-Methyl-2-pentanone
Benzene	1,2-Dichloroethane	Styrene
Bromochloromethane	1,1-Dichloroethene	1,1,1,2-Tetrachloroethane
Bromodichloromethane	<i>cis</i> -1,2-Dichloroethene	1,1,2,2-Tetrachloroethane
Bromoform	<i>trans</i> -1,2-Dichloroethene	Tetrachloroethene
Carbon disulfide	1,2-Dichloropropane	Toluene
Carbon tetrachloride	<i>cis</i> -1,3-Dichloropropene	1,1,1-Trichloroethane
Chlorobenzene	<i>trans</i> -1,3-Dichloropropene	1,1,2-Trichloroethane
Chloroethane	Ethylbenzene	Trichloroethene
Chloroform	2-Hexanone	Trichlorofluoromethane
Dibromochloromethane	Bromomethane	1,2,3-Trichloropropane
1,2-Dibromo-3-chloropropane	Chloromethane	Vinyl acetate
1,2-Dibromoethane	Dibromomethane	Vinyl chloride
1,2-Dichlorobenzene	Methylene chloride	Xylenes (Total)
1,4-Dichlorobenzene	2-Butanone	

Inorganic constituents:

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

The ground water data obtained during the first semi-annual monitoring event in 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 methodology was applied to the Northern Plains Regional 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.

Results of the Interwell Statistics

The background data used in this statistical analysis includes the ground water data collected from ground water wells MW-11, MW-12, and MW-17 during the period from April 2014 through the current data. Additionally, upgradient wells MW-13, MW-18, MW-19, MW-20, and MW-21 were included as background. A summary of the background data from monitoring wells MW-11, MW-12, MW-13, MW-17, MW-18, MW-19, MW-20, and MW-21, used to determine the site prediction limits, is listed in Attachment B, Table 1 “Upgradient Data”. This statistical method compares the current downgradient determinations to site prediction limits and checks for exceedances.

Table 2 “Most Current Downgradient Monitoring Data”, summarizes the current data from downgradient wells GU-1, GU-2, MW-10, MW-14, MW-15, MW-16, MW-3AR, MW-6B, MW-7A, MW-7B, MW-8, and MW-9 compared to the site prediction limits. Prediction limit exceedances are flagged with asterisks. For the most current data, the site prediction limit exceedances detected are summarized in the table below.

**Trace Metal Prediction Limit Exceedances at Northern Plains Landfill
during the First Semi-Annual Monitoring Event in 2024**

Well	Trace Metal	Result, µg/L	Prediction Limit, µg/L	Prediction Limit Type	Verified/ Awaiting verification
MW-15	Nickel	17.6	17.1000	Nonparametric	Verified
MW-16	Barium	974	685.3309	Lognormal	Awaiting verification
MW-8	Lead	5.8	4.0000	Nonparametric	Awaiting verification
	Selenium	4.2	4.0000	Nonparametric	Awaiting verification

The detection frequencies of the parameters in the up and down gradient monitoring wells are summarized in Table 3. Only barium was detected at a frequency equal to or greater than 50% in the upgradient wells so only barium was tested for normality. The remainder of the metals are rarely detected (less than 50%) in the upgradient wells so nonparametric prediction limits were be used in those cases.

Table 4 summarizes the results of the Shapiro-Wilk test. Table 5 is a summary of the statistics and prediction limits determined for the metals. 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 current 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 (Attachment C). The analysis was conducted to evaluate whether verified concentrations are significantly above the water quality standard. The 95% lower confidence limit (LCL) for the mean of the historical data was used to evaluate whether the regulated unit is in compliance with the ground-water protection standards under 40 CFR 264 (e.g. whether the verified constituent is detected at a significant level above the GWPS). An exceedance is verified if the LCL is above the Regulatory GWPS.

The calculated 95% LCLs 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. There were no organic compounds detected in the ground water at Northern Plains Regional Landfill during the first semi-annual monitoring event in 2024. Historical VOC detections in the ground water are summarized in Attachment D. The VOCs detected are typically associated with landfill gas migration.

The past and current verified VOC detections were evaluated against the ground water protection standards (GWPS) using confidence limits (Attachment E). 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 each of the 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 Northern Plains Regional Landfill. The ground water data was compared to background using prediction limits. For the most current data, there is a verified site prediction limit exceedance detected for nickel at MW-15. Additionally, there are site prediction limit exceedances detected for barium at MW-16, lead at MW-8, and selenium at MW-8 awaiting verification.

Attachment A

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

Table 1

Analytical Data Summary for 4/4/2024

Constituents	Units	GU-1	GU-2	MW-10	MW-11	MW-12	MW-13	MW-14	MW-15	MW-16	MW-17	MW-18
(3 4)-methylphenol	ug/L			<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								
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1		<1	<1	<1	<1	
1,2,4,5-tetrachlorobenzene	ug/L			<8								
1,2,4-trichlorobenzene	ug/L			<1								
1,2-dibromo-3-chloropropane	ug/L	<5	<5	<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								
1,3,5-trinitrobenzene	ug/L			<8								
1,3-dichlorobenzene	ug/L			<1								
1,3-dichloropropane	ug/L			<1								
1,3-dinitrobenzene	ug/L			<8								
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1	<1		<1	<1	<1	<1	
1,4-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	<10	<10	<5	<10	<10		<10	<10	<10	<10	
2-chloronaphthalene	ug/L			<8								
2-chlorophenol	ug/L			<8								
2-hexanone (mbk)	ug/L	<5	<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	<5	
4-nitroaniline	ug/L			<8								
4-nitrophenol	ug/L			<8								
5-nitro-o-toluidine	ug/L			<8								
7,12-dimethylbenz(a)anthracene	ug/L			<8								
Acenaphthene	ug/L			<8								
Acenaphthylene	ug/L			<8								
Acetone	ug/L	<10	<10	<10	<10	<10		<10	<10	<10	<10	
Acetonitrile	ug/L			<10								
Acetophenone	ug/L			<8								
Acrolein	ug/L			<10								
Acrylonitrile	ug/L	<5	<5	<5	<5	<5		<5	<5	<5	<5	
Aldrin	ug/L			<.05								
Allyl chloride	ug/L			<1								
Alpha-bhc	ug/L			<.05								
Anthracene	ug/L			<8								

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

Table 1

Analytical Data Summary for 4/4/2024

Constituents	MW-19	MW-20	MW-21	MW-3AR	MW-6B	MW-7A	MW-7B	MW-8	MW-9
(3 4)-methylphenol									
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									
1,2,3-trichloropropane				<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
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									
1,3,5-trinitrobenzene									
1,3-dichlorobenzene									
1,3-dichloropropane									
1,3-dinitrobenzene									
1,4-dichlorobenzene				<1	<1	<1	<1	<1	<1
1,4-naphthoquinone									
1,4-phenylenediamine									
1-naphthylamine									
2,2-dichloropropane									
2,3,4,6-tetrachlorophenol									
2,4,5-t									
2,4,5-tp (silvex)									
2,4,5-trichlorophenol									
2,4,6-trichlorophenol									
2,4-d									
2,4-dichlorophenol									
2,4-dimethylphenol									
2,4-dinitrophenol									
2,4-dinitrotoluene									
2,6-dichlorophenol									
2,6-dinitrotoluene									
2-acetylaminofluorene									
2-butanone (mek)				<10	<10	<10	<10	<10	<10
2-chloronaphthalene									
2-chlorophenol									
2-hexanone (mbk)				<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
4-nitroaniline									
4-nitrophenol									
5-nitro-o-toluidine									
7,12-dimethylbenz(a)anthracene									
Acenaphthene									
Acenaphthylene									
Acetone				<10	<10	<10	<10	<10	<10
Acetonitrile									
Acetophenone									
Acrolein									
Acrylonitrile				<5	<5	<5	<5	<5	<5
Aldrin									
Allyl chloride									
Alpha-bhc									
Anthracene									

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

Table 1

Analytical Data Summary for 4/4/2024

Constituents	Units	GU-1	GU-2	MW-10	MW-11	MW-12	MW-13	MW-14	MW-15	MW-16	MW-17	MW-18
Antimony, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arochlor 1016	ug/L			<.2								
Arochlor 1221	ug/L			<.2								
Arochlor 1232	ug/L			<.2								
Arochlor 1242	ug/L			<.2								
Arochlor 1248	ug/L			<.2								
Arochlor 1254	ug/L			<.2								
Arochlor 1260	ug/L			<.2								
Arsenic, total	ug/L	<4.0	<4.0	<4.0	<4.0	4.8	<4.0	<4.0	<4.0	4.5	30.3	6.7
Azobenzene	ug/L			<8								
Barium, total	ug/L	454.0	207.0	120.0	40.1	102.0	32.8	53.7	86.0	974.0	358.0	43.8
Benzene	ug/L	<1	<1	<1	<1	<1		<1	<1	<1	<1	
Benzo(a)anthracene	ug/L			<8								
Benzo(a)pyrene	ug/L			<8								
Benzo(b)fluoranthene	ug/L			<8								
Benzo(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	<4	<4	<4
Beta-bhc	ug/L			<.05								
Bis (2-chloroethoxy) methane	ug/L			<8								
Bis(2-chloroethyl) ether	ug/L			<8								
Bis(2-chloroisopropyl) ether	ug/L			<8								
Bis(2-ethylhexyl) phthalate	ug/L			<6								
Bromochloromethane	ug/L	<1	<1	<1	<1	<1		<1	<1	<1	<1	
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								
Cadmium, total	ug/L	<.8	<.8	<.8	1.4	<.8	<.8	1.0	<.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								
Chlorobenzene	ug/L	<1	<1	<1	<1	<1		<1	<1	<1	<1	
Chlorobenzilate	ug/L			<8								
Chloroethane	ug/L	<1	<1	<1	<1	<1		<1	<1	<1	<1	
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								
Chromium, total	ug/L	<8	<8	<8	<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	<1	
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1		<1	<1	<1	<1	
Cobalt, total	ug/L	<.4	<.4	<.4	<.4	<.4	.5	<.4	.4	.8	<.4	<.4
Copper, total	ug/L	<4.0	<4.0	13.9	<4.0	<4.0	<4.0	6.0	<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	<1	
Dibromomethane	ug/L	<1	<1	<1	<1	<1		<1	<1	<1	<1	
Dichlorodifluoromethane	ug/L			<1								
Dieldrin	ug/L			<.05								
Diethyl phthalate	ug/L			<8								
Dimethoate	ug/L			<.4								
Dimethylphthalate	ug/L			<8								
Di-n-butyl phthalate	ug/L			<8								
Di-n-octyl phthalate	ug/L			<8								
Dinoseb	ug/L			<.5								
Diphenylamine	ug/L			<8								
Disulfoton	ug/L			<.4								
Endosulfan i	ug/L			<.05								
Endosulfan ii	ug/L			<.05								
Endosulfan sulfate	ug/L			<.05								
Endrin	ug/L			<.05								
Endrin aldehyde	ug/L			<.05								
Ethyl methacrylate	ug/L			<10								
Ethyl methanesulfonate	ug/L			<8								
Ethylbenzene	ug/L	<1	<1	<1	<1	<1		<1	<1	<1	<1	
Famphur	ug/L			<.4								
Fluoranthene	ug/L			<8								
Fluorene	ug/L			<8								
Gamma-bhc (lindane)	ug/L			<.05								
Heptachlor	ug/L			<.05								
Heptachlor epoxide	ug/L			<.05								
Hexachlorobenzene	ug/L			<.05								

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

Table 1

Analytical Data Summary for 4/4/2024

Constituents	MW-19	MW-20	MW-21	MW-3AR	MW-6B	MW-7A	MW-7B	MW-8	MW-9
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	4.8	5.7	<4.0	7.0	<4.0	<4.0	<4.0	30.9	5.7
Azobenzene									
Barium, total	211.0	127.0	207.0	357.0	65.8	74.3	643.0	613.0	56.2
Benzene				<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-chloroisopropyl) ether									
Bis(2-ethylhexyl) phthalate					<6				
Bromochloromethane				<1	<1	<1	<1	<1	<1
Bromodichloromethane				<1	<1	<1	<1	<1	<1
Bromoform				<1	<1	<1	<1	<1	<1
Bromomethane				<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate									
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide				<1	<1	<1	<1	<1	<1
Carbon tetrachloride				<1	<1	<1	<1	<1	<1
Chlordane									
Chlorobenzene				<1	<1	<1	<1	<1	<1
Chlorobenzilate									
Chloroethane				<1	<1	<1	<1	<1	<1
Chloroform				<1	<1	<1	<1	<1	<1
Chloromethane				<1	<1	<1	<1	<1	<1
Chloroprene									
Chromium, total	<8	<8	<8	<8	<8	<8	<8	<8	<8
Chrysene									
Cis-1,2-dichloroethylene				<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene				<1	<1	<1	<1	<1	<1
Cobalt, total	<.4	.7	<.4	.8	<.4	<.4	<.4	2.6	.5
Copper, total	<4.0	<4.0	<4.0	<4.0	4.8	<4.0	<4.0	<4.0	<4.0
Cyanide, total									
Delta-bhc									
Diallate									
Dibenzo(a,h)anthracene									
Dibenzofuran									
Dibromochloromethane				<1	<1	<1	<1	<1	<1
Dibromomethane				<1	<1	<1	<1	<1	<1
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
Famphur									
Fluoranthene									
Fluorene									
Gamma-bhc (lindane)									
Heptachlor									
Heptachlor epoxide									
Hexachlorobenzene									

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

Table 1

Analytical Data Summary for 4/4/2024

Constituents	Units	GU-1	GU-2	MW-10	MW-11	MW-12	MW-13	MW-14	MW-15	MW-16	MW-17	MW-18
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	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<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	<2	<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	<5	
Naphthalene	ug/L			<8								
Nickel, total	ug/L	14.8	7.5	<4.0	<4.0	<4.0	<4.0	<4.0	17.6	14.5	<4.0	<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								
Parathion	ug/L			<.4								
P-dimethylaminoazobenzene	ug/L			<8								
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	<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	
Sulfide, total	mg/L			<.3								
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	<2	<2
Thionazin	ug/L			<.4								
Tin, total	ug/L			<20								
Toluene	ug/L	<1	<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	<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	<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	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20

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

Table 1

Analytical Data Summary for 4/4/2024

Constituents	MW-19	MW-20	MW-21	MW-3AR	MW-6B	MW-7A	MW-7B	MW-8	MW-9
Hexachlorobutadiene									
Hexachlorocyclopentadiene									
Hexachloroethane									
Hexachloropropene									
Indeno(1,2,3-cd)pyrene									
Isobutanol									
Isodrin									
Isophorone									
Isosafrole									
Kepone									
Lead, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	5.8	<4.0
Mercury, total									
Methacrylonitrile									
Methapyrilene									
Methoxychlor									
Methyl iodide				<1	<1	<1	<1	<1	<1
Methyl methacrylate									
Methyl methanesulfonate									
Methyl parathion									
Methylene chloride				<5	<5	<5	<5	<5	<5
Naphthalene									
Nickel, total	<4.0	<4.0	<4.0	6.2	<4.0	12.6	12.1	6.3	<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									
Parathion									
P-dimethylaminoazobenzene									
Pentachlorobenzene									
Pentachloronitrobenzene (pcnb)									
Pentachlorophenol									
Phenacetin									
Phenanthrene									
Phenol									
Phorate									
Pronamide									
Propionitrile									
Pyrene									
Safrole									
Selenium, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	4.2	<4.0
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Styrene				<1	<1	<1	<1	<1	<1
Sulfide, total									
Tetrachloroethylene				<1	<1	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Thionazin									
Tin, total									
Toluene				<1	<1	<1	<1	<1	<1
Toxaphene									
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	<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	<20	<20	<20	<20	<20	<20	<20	<20

* - 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-11	04/07/2014		3.2000		
Antimony, total	ug/L	MW-11	10/23/2014	ND	2.0000		
Antimony, total	ug/L	MW-11	01/16/2015	ND	2.0000		
Antimony, total	ug/L	MW-11	04/02/2015	ND	2.0000		
Antimony, total	ug/L	MW-11	09/15/2015	ND	2.0000		
Antimony, total	ug/L	MW-11	10/26/2015	ND	2.0000		
Antimony, total	ug/L	MW-11	04/01/2016	ND	2.0000		
Antimony, total	ug/L	MW-11	10/19/2016	ND	2.0000		
Antimony, total	ug/L	MW-11	04/17/2017	ND	2.0000		
Antimony, total	ug/L	MW-11	10/11/2017	ND	2.0000		
Antimony, total	ug/L	MW-11	06/01/2018	ND	2.0000		
Antimony, total	ug/L	MW-11	10/03/2018	ND	2.0000		
Antimony, total	ug/L	MW-11	04/08/2019	ND	2.0000		
Antimony, total	ug/L	MW-11	10/11/2019	ND	2.0000		
Antimony, total	ug/L	MW-11	04/27/2020	ND	2.0000		
Antimony, total	ug/L	MW-11	10/09/2020		3.4000		
Antimony, total	ug/L	MW-11	04/09/2021	ND	2.0000		
Antimony, total	ug/L	MW-11	10/25/2021	ND	2.0000		
Antimony, total	ug/L	MW-11	04/11/2022	ND	2.0000		
Antimony, total	ug/L	MW-11	10/12/2022	ND	2.0000		
Antimony, total	ug/L	MW-11	04/06/2023	ND	2.0000		
Antimony, total	ug/L	MW-11	10/09/2023	ND	2.0000		
Antimony, total	ug/L	MW-11	04/04/2024	ND	2.0000		
Arsenic, total	ug/L	MW-11	04/07/2014	ND	4.0000		
Arsenic, total	ug/L	MW-11	10/23/2014	ND	4.0000		
Arsenic, total	ug/L	MW-11	01/16/2015	ND	4.0000		
Arsenic, total	ug/L	MW-11	04/02/2015	ND	4.0000		
Arsenic, total	ug/L	MW-11	09/15/2015	ND	4.0000		
Arsenic, total	ug/L	MW-11	10/26/2015	ND	4.0000		
Arsenic, total	ug/L	MW-11	04/01/2016	ND	4.0000		
Arsenic, total	ug/L	MW-11	10/19/2016	ND	4.0000		
Arsenic, total	ug/L	MW-11	04/17/2017	ND	4.0000		
Arsenic, total	ug/L	MW-11	10/11/2017	ND	4.0000		
Arsenic, total	ug/L	MW-11	06/01/2018	ND	4.0000		
Arsenic, total	ug/L	MW-11	10/03/2018	ND	4.0000		
Arsenic, total	ug/L	MW-11	04/08/2019	ND	4.0000		
Arsenic, total	ug/L	MW-11	10/11/2019	ND	4.0000		
Arsenic, total	ug/L	MW-11	04/27/2020	ND	4.0000		
Arsenic, total	ug/L	MW-11	10/09/2020	ND	4.0000		
Arsenic, total	ug/L	MW-11	04/09/2021	ND	4.0000		
Arsenic, total	ug/L	MW-11	10/25/2021	ND	4.0000		
Arsenic, total	ug/L	MW-11	04/11/2022	ND	4.0000		
Arsenic, total	ug/L	MW-11	10/12/2022	ND	4.0000		
Arsenic, total	ug/L	MW-11	04/06/2023	ND	4.0000		
Arsenic, total	ug/L	MW-11	10/09/2023	ND	4.0000		
Arsenic, total	ug/L	MW-11	04/04/2024	ND	4.0000		
Barium, total	ug/L	MW-11	04/07/2014		360.0000		*
Barium, total	ug/L	MW-11	10/23/2014		47.5000		
Barium, total	ug/L	MW-11	01/16/2015		56.8000		
Barium, total	ug/L	MW-11	04/02/2015		58.4000		
Barium, total	ug/L	MW-11	09/15/2015		49.6000		
Barium, total	ug/L	MW-11	10/26/2015		74.5000		
Barium, total	ug/L	MW-11	04/01/2016		68.2000		
Barium, total	ug/L	MW-11	10/19/2016		68.5000		
Barium, total	ug/L	MW-11	04/17/2017		66.2000		
Barium, total	ug/L	MW-11	10/11/2017		63.8000		
Barium, total	ug/L	MW-11	06/01/2018		80.0000		
Barium, total	ug/L	MW-11	10/03/2018		89.3000		
Barium, total	ug/L	MW-11	04/08/2019		88.4000		
Barium, total	ug/L	MW-11	10/11/2019		132.0000		
Barium, total	ug/L	MW-11	04/27/2020		85.5000		
Barium, total	ug/L	MW-11	10/09/2020		205.0000		
Barium, total	ug/L	MW-11	04/09/2021		82.7000		
Barium, total	ug/L	MW-11	10/25/2021		53.4000		
Barium, total	ug/L	MW-11	04/11/2022		82.2000		
Barium, total	ug/L	MW-11	10/12/2022		69.8000		
Barium, total	ug/L	MW-11	04/06/2023		44.2000		
Barium, total	ug/L	MW-11	10/09/2023		103.0000		
Barium, total	ug/L	MW-11	04/04/2024		40.1000		
Beryllium, total	ug/L	MW-11	04/07/2014	ND	4.0000		
Beryllium, total	ug/L	MW-11	10/23/2014	ND	4.0000		
Beryllium, total	ug/L	MW-11	01/16/2015	ND	4.0000		
Beryllium, total	ug/L	MW-11	04/02/2015	ND	4.0000		
Beryllium, total	ug/L	MW-11	09/15/2015	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-11	10/26/2015	ND	4.0000		
Beryllium, total	ug/L	MW-11	04/01/2016	ND	4.0000		
Beryllium, total	ug/L	MW-11	10/19/2016	ND	4.0000		
Beryllium, total	ug/L	MW-11	04/17/2017	ND	4.0000		
Beryllium, total	ug/L	MW-11	10/11/2017	ND	4.0000		
Beryllium, total	ug/L	MW-11	06/01/2018	ND	4.0000		
Beryllium, total	ug/L	MW-11	10/03/2018	ND	4.0000		
Beryllium, total	ug/L	MW-11	04/08/2019	ND	4.0000		
Beryllium, total	ug/L	MW-11	10/11/2019	ND	4.0000		
Beryllium, total	ug/L	MW-11	04/27/2020	ND	4.0000		
Beryllium, total	ug/L	MW-11	10/09/2020	ND	4.0000		
Beryllium, total	ug/L	MW-11	04/09/2021	ND	4.0000		
Beryllium, total	ug/L	MW-11	10/25/2021	ND	4.0000		
Beryllium, total	ug/L	MW-11	04/11/2022	ND	4.0000		
Beryllium, total	ug/L	MW-11	10/12/2022	ND	4.0000		
Beryllium, total	ug/L	MW-11	04/06/2023	ND	4.0000		
Beryllium, total	ug/L	MW-11	10/09/2023	ND	4.0000		
Beryllium, total	ug/L	MW-11	04/04/2024	ND	4.0000		
Cadmium, total	ug/L	MW-11	04/07/2014	ND	0.8000		
Cadmium, total	ug/L	MW-11	10/23/2014	ND	0.8000		
Cadmium, total	ug/L	MW-11	01/16/2015	ND	0.8000		
Cadmium, total	ug/L	MW-11	04/02/2015	ND	0.8000		
Cadmium, total	ug/L	MW-11	09/15/2015	ND	0.8000		
Cadmium, total	ug/L	MW-11	10/26/2015	ND	0.8000		
Cadmium, total	ug/L	MW-11	04/01/2016	ND	0.8000		
Cadmium, total	ug/L	MW-11	10/19/2016	ND	0.8000		
Cadmium, total	ug/L	MW-11	04/17/2017	ND	0.8000		
Cadmium, total	ug/L	MW-11	10/11/2017	ND	0.8000		
Cadmium, total	ug/L	MW-11	06/01/2018	ND	2.0000	0.8000	**
Cadmium, total	ug/L	MW-11	10/03/2018		1.3000		
Cadmium, total	ug/L	MW-11	04/08/2019	ND	0.8000		
Cadmium, total	ug/L	MW-11	10/11/2019	ND	0.8000		
Cadmium, total	ug/L	MW-11	04/27/2020	ND	0.8000		
Cadmium, total	ug/L	MW-11	10/09/2020	ND	0.8000		
Cadmium, total	ug/L	MW-11	04/09/2021	ND	0.8000		
Cadmium, total	ug/L	MW-11	10/25/2021	ND	0.8000		
Cadmium, total	ug/L	MW-11	04/11/2022	ND	0.8000		
Cadmium, total	ug/L	MW-11	10/12/2022	ND	0.8000		
Cadmium, total	ug/L	MW-11	04/06/2023	ND	0.8000		
Cadmium, total	ug/L	MW-11	10/09/2023	ND	0.8000		
Cadmium, total	ug/L	MW-11	04/04/2024		1.4000		
Chromium, total	ug/L	MW-11	04/07/2014	ND	8.0000		
Chromium, total	ug/L	MW-11	10/23/2014	ND	8.0000		
Chromium, total	ug/L	MW-11	01/16/2015	ND	8.0000		
Chromium, total	ug/L	MW-11	04/02/2015	ND	8.0000		
Chromium, total	ug/L	MW-11	09/15/2015	ND	8.0000		
Chromium, total	ug/L	MW-11	10/26/2015	ND	8.0000		
Chromium, total	ug/L	MW-11	04/01/2016	ND	8.0000		
Chromium, total	ug/L	MW-11	10/19/2016	ND	8.0000		
Chromium, total	ug/L	MW-11	04/17/2017	ND	8.0000		
Chromium, total	ug/L	MW-11	10/11/2017	ND	8.0000		
Chromium, total	ug/L	MW-11	06/01/2018	ND	8.0000		
Chromium, total	ug/L	MW-11	10/03/2018	ND	8.0000		
Chromium, total	ug/L	MW-11	04/08/2019	ND	8.0000		
Chromium, total	ug/L	MW-11	10/11/2019	ND	8.0000		
Chromium, total	ug/L	MW-11	04/27/2020	ND	8.0000		
Chromium, total	ug/L	MW-11	10/09/2020	ND	8.0000		
Chromium, total	ug/L	MW-11	04/09/2021	ND	8.0000		
Chromium, total	ug/L	MW-11	10/25/2021	ND	8.0000		
Chromium, total	ug/L	MW-11	04/11/2022	ND	8.0000		
Chromium, total	ug/L	MW-11	10/12/2022	ND	8.0000		
Chromium, total	ug/L	MW-11	04/06/2023	ND	8.0000		
Chromium, total	ug/L	MW-11	10/09/2023	ND	8.0000		
Chromium, total	ug/L	MW-11	04/04/2024	ND	8.0000		
Cobalt, total	ug/L	MW-11	04/07/2014		16.4000		*
Cobalt, total	ug/L	MW-11	10/23/2014	ND	0.8000		
Cobalt, total	ug/L	MW-11	01/16/2015	ND	0.8000		
Cobalt, total	ug/L	MW-11	04/02/2015	ND	0.8000		
Cobalt, total	ug/L	MW-11	09/15/2015	ND	0.8000		
Cobalt, total	ug/L	MW-11	10/26/2015		0.8000		
Cobalt, total	ug/L	MW-11	04/01/2016		0.8000		
Cobalt, total	ug/L	MW-11	10/19/2016	ND	0.8000		
Cobalt, total	ug/L	MW-11	04/17/2017	ND	0.8000		
Cobalt, total	ug/L	MW-11	10/11/2017	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-11	06/01/2018	ND	2.0000	0.8000	**
Cobalt, total	ug/L	MW-11	10/03/2018		1.0000		
Cobalt, total	ug/L	MW-11	04/08/2019	ND	0.8000		
Cobalt, total	ug/L	MW-11	10/11/2019		4.0000		
Cobalt, total	ug/L	MW-11	04/27/2020		0.5000		
Cobalt, total	ug/L	MW-11	10/09/2020		11.2000		*
Cobalt, total	ug/L	MW-11	04/09/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-11	10/25/2021		1.3000		
Cobalt, total	ug/L	MW-11	04/11/2022		1.9000		
Cobalt, total	ug/L	MW-11	10/12/2022		3.0000		
Cobalt, total	ug/L	MW-11	04/06/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-11	10/09/2023		3.0000		
Cobalt, total	ug/L	MW-11	04/04/2024	ND	0.4000	0.8000	**
Copper, total	ug/L	MW-11	04/07/2014		4.2000		
Copper, total	ug/L	MW-11	10/23/2014	ND	4.0000		
Copper, total	ug/L	MW-11	01/16/2015	ND	4.0000		
Copper, total	ug/L	MW-11	04/02/2015	ND	4.0000		
Copper, total	ug/L	MW-11	09/15/2015	ND	4.0000		
Copper, total	ug/L	MW-11	10/26/2015	ND	4.0000		
Copper, total	ug/L	MW-11	04/01/2016		4.4000		
Copper, total	ug/L	MW-11	10/19/2016	ND	4.0000		
Copper, total	ug/L	MW-11	04/17/2017		8.4000		
Copper, total	ug/L	MW-11	10/11/2017	ND	4.0000		
Copper, total	ug/L	MW-11	06/01/2018	ND	4.0000		
Copper, total	ug/L	MW-11	10/03/2018	ND	4.0000		
Copper, total	ug/L	MW-11	04/08/2019	ND	4.0000		
Copper, total	ug/L	MW-11	10/11/2019	ND	4.0000		
Copper, total	ug/L	MW-11	04/27/2020	ND	4.0000		
Copper, total	ug/L	MW-11	10/09/2020	ND	4.0000		
Copper, total	ug/L	MW-11	04/09/2021	ND	4.0000		
Copper, total	ug/L	MW-11	10/25/2021	ND	4.0000		
Copper, total	ug/L	MW-11	04/11/2022	ND	4.0000		
Copper, total	ug/L	MW-11	10/12/2022	ND	4.0000		
Copper, total	ug/L	MW-11	04/06/2023	ND	4.0000		
Copper, total	ug/L	MW-11	10/09/2023	ND	4.0000		
Copper, total	ug/L	MW-11	04/04/2024	ND	4.0000		
Lead, total	ug/L	MW-11	04/07/2014	ND	4.0000		
Lead, total	ug/L	MW-11	10/23/2014	ND	4.0000		
Lead, total	ug/L	MW-11	01/16/2015	ND	4.0000		
Lead, total	ug/L	MW-11	04/02/2015	ND	4.0000		
Lead, total	ug/L	MW-11	09/15/2015	ND	4.0000		
Lead, total	ug/L	MW-11	10/26/2015	ND	4.0000		
Lead, total	ug/L	MW-11	04/01/2016	ND	4.0000		
Lead, total	ug/L	MW-11	10/19/2016	ND	4.0000		
Lead, total	ug/L	MW-11	04/17/2017	ND	4.0000		
Lead, total	ug/L	MW-11	10/11/2017	ND	4.0000		
Lead, total	ug/L	MW-11	06/01/2018	ND	4.0000		
Lead, total	ug/L	MW-11	10/03/2018	ND	4.0000		
Lead, total	ug/L	MW-11	04/08/2019	ND	4.0000		
Lead, total	ug/L	MW-11	10/11/2019	ND	4.0000		
Lead, total	ug/L	MW-11	04/27/2020	ND	4.0000		
Lead, total	ug/L	MW-11	10/09/2020	ND	4.0000		
Lead, total	ug/L	MW-11	04/09/2021	ND	4.0000		
Lead, total	ug/L	MW-11	10/25/2021	ND	4.0000		
Lead, total	ug/L	MW-11	04/11/2022	ND	4.0000		
Lead, total	ug/L	MW-11	10/12/2022	ND	4.0000		
Lead, total	ug/L	MW-11	04/06/2023	ND	4.0000		
Lead, total	ug/L	MW-11	10/09/2023	ND	4.0000		
Lead, total	ug/L	MW-11	04/04/2024	ND	4.0000		
Nickel, total	ug/L	MW-11	04/07/2014		98.9000		*
Nickel, total	ug/L	MW-11	10/23/2014		8.2000		
Nickel, total	ug/L	MW-11	01/16/2015		4.7000		
Nickel, total	ug/L	MW-11	04/02/2015		4.9000		
Nickel, total	ug/L	MW-11	09/15/2015		9.1000		
Nickel, total	ug/L	MW-11	10/26/2015		12.6000		
Nickel, total	ug/L	MW-11	04/01/2016		8.1000		
Nickel, total	ug/L	MW-11	10/19/2016		6.2000		
Nickel, total	ug/L	MW-11	04/17/2017		6.2000		
Nickel, total	ug/L	MW-11	10/11/2017	ND	4.0000		
Nickel, total	ug/L	MW-11	06/01/2018		12.1000		
Nickel, total	ug/L	MW-11	10/03/2018		11.2000		
Nickel, total	ug/L	MW-11	04/08/2019		5.2000		
Nickel, total	ug/L	MW-11	10/11/2019		36.2000		*
Nickel, total	ug/L	MW-11	04/27/2020		6.3000		

* - Outlier for that well and constituent.
 ** - ND value replaced with median RL.
 *** - ND value replaced with manual RL.
 ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Nickel, total	ug/L	MW-11	10/09/2020		42.5000		*
Nickel, total	ug/L	MW-11	04/09/2021		8.8000		
Nickel, total	ug/L	MW-11	10/25/2021		10.5000		
Nickel, total	ug/L	MW-11	04/11/2022		15.6000		
Nickel, total	ug/L	MW-11	10/12/2022		7.4000		
Nickel, total	ug/L	MW-11	04/06/2023	ND	4.0000		
Nickel, total	ug/L	MW-11	10/09/2023		17.1000		
Nickel, total	ug/L	MW-11	04/04/2024	ND	4.0000		
Selenium, total	ug/L	MW-11	04/07/2014	ND	4.0000		
Selenium, total	ug/L	MW-11	10/23/2014	ND	4.0000		
Selenium, total	ug/L	MW-11	01/16/2015	ND	4.0000		
Selenium, total	ug/L	MW-11	04/02/2015	ND	4.0000		
Selenium, total	ug/L	MW-11	09/15/2015	ND	4.0000		
Selenium, total	ug/L	MW-11	10/26/2015	ND	4.0000		
Selenium, total	ug/L	MW-11	04/01/2016	ND	4.0000		
Selenium, total	ug/L	MW-11	10/19/2016	ND	4.0000		
Selenium, total	ug/L	MW-11	04/17/2017	ND	4.0000		
Selenium, total	ug/L	MW-11	10/11/2017	ND	4.0000		
Selenium, total	ug/L	MW-11	06/01/2018	ND	4.0000		
Selenium, total	ug/L	MW-11	10/03/2018	ND	4.0000		
Selenium, total	ug/L	MW-11	04/08/2019	ND	4.0000		
Selenium, total	ug/L	MW-11	10/11/2019	ND	4.0000		
Selenium, total	ug/L	MW-11	04/27/2020	ND	4.0000		
Selenium, total	ug/L	MW-11	10/09/2020	ND	4.0000		
Selenium, total	ug/L	MW-11	04/09/2021		4.0000		
Selenium, total	ug/L	MW-11	10/25/2021	ND	4.0000		
Selenium, total	ug/L	MW-11	04/11/2022	ND	4.0000		
Selenium, total	ug/L	MW-11	10/12/2022	ND	4.0000		
Selenium, total	ug/L	MW-11	04/06/2023	ND	4.0000		
Selenium, total	ug/L	MW-11	10/09/2023	ND	4.0000		
Selenium, total	ug/L	MW-11	04/04/2024	ND	4.0000		
Silver, total	ug/L	MW-11	04/07/2014	ND	4.0000		
Silver, total	ug/L	MW-11	10/23/2014	ND	4.0000		
Silver, total	ug/L	MW-11	01/16/2015	ND	4.0000		
Silver, total	ug/L	MW-11	04/02/2015	ND	4.0000		
Silver, total	ug/L	MW-11	09/15/2015	ND	4.0000		
Silver, total	ug/L	MW-11	10/26/2015	ND	4.0000		
Silver, total	ug/L	MW-11	04/01/2016	ND	4.0000		
Silver, total	ug/L	MW-11	10/19/2016	ND	4.0000		
Silver, total	ug/L	MW-11	04/17/2017	ND	4.0000		
Silver, total	ug/L	MW-11	10/11/2017	ND	4.0000		
Silver, total	ug/L	MW-11	06/01/2018	ND	8.0000	4.0000	**
Silver, total	ug/L	MW-11	10/03/2018	ND	4.0000		
Silver, total	ug/L	MW-11	04/08/2019	ND	4.0000		
Silver, total	ug/L	MW-11	10/11/2019	ND	4.0000		
Silver, total	ug/L	MW-11	04/27/2020	ND	4.0000		
Silver, total	ug/L	MW-11	10/09/2020	ND	4.0000		
Silver, total	ug/L	MW-11	04/09/2021	ND	4.0000		
Silver, total	ug/L	MW-11	10/25/2021	ND	4.0000		
Silver, total	ug/L	MW-11	04/11/2022	ND	4.0000		
Silver, total	ug/L	MW-11	10/12/2022	ND	4.0000		
Silver, total	ug/L	MW-11	04/06/2023	ND	4.0000		
Silver, total	ug/L	MW-11	10/09/2023	ND	4.0000		
Silver, total	ug/L	MW-11	04/04/2024	ND	4.0000		
Thallium, total	ug/L	MW-11	04/07/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-11	10/23/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-11	01/16/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-11	04/02/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-11	09/15/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-11	10/26/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-11	04/01/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-11	10/19/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-11	04/17/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-11	10/11/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-11	06/01/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-11	10/03/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-11	04/08/2019	ND	2.0000		
Thallium, total	ug/L	MW-11	10/11/2019	ND	2.0000		
Thallium, total	ug/L	MW-11	04/27/2020	ND	2.0000		
Thallium, total	ug/L	MW-11	10/09/2020	ND	2.0000		
Thallium, total	ug/L	MW-11	04/09/2021	ND	2.0000		
Thallium, total	ug/L	MW-11	10/25/2021	ND	2.0000		
Thallium, total	ug/L	MW-11	04/11/2022	ND	2.0000		
Thallium, total	ug/L	MW-11	10/12/2022	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-11	04/06/2023	ND	2.0000		
Thallium, total	ug/L	MW-11	10/09/2023	ND	2.0000		
Thallium, total	ug/L	MW-11	04/04/2024	ND	2.0000		
Vanadium, total	ug/L	MW-11	04/07/2014	ND	20.0000		
Vanadium, total	ug/L	MW-11	10/23/2014	ND	20.0000		
Vanadium, total	ug/L	MW-11	01/16/2015	ND	20.0000		
Vanadium, total	ug/L	MW-11	04/02/2015	ND	20.0000		
Vanadium, total	ug/L	MW-11	09/15/2015	ND	20.0000		
Vanadium, total	ug/L	MW-11	10/26/2015	ND	20.0000		
Vanadium, total	ug/L	MW-11	04/01/2016	ND	20.0000		
Vanadium, total	ug/L	MW-11	10/19/2016	ND	20.0000		
Vanadium, total	ug/L	MW-11	04/17/2017	ND	20.0000		
Vanadium, total	ug/L	MW-11	10/11/2017	ND	20.0000		
Vanadium, total	ug/L	MW-11	06/01/2018	ND	20.0000		
Vanadium, total	ug/L	MW-11	10/03/2018	ND	20.0000		
Vanadium, total	ug/L	MW-11	04/08/2019	ND	20.0000		
Vanadium, total	ug/L	MW-11	10/11/2019	ND	20.0000		
Vanadium, total	ug/L	MW-11	04/27/2020	ND	20.0000		
Vanadium, total	ug/L	MW-11	10/09/2020	ND	20.0000		
Vanadium, total	ug/L	MW-11	04/09/2021	ND	20.0000		
Vanadium, total	ug/L	MW-11	10/25/2021	ND	20.0000		
Vanadium, total	ug/L	MW-11	04/11/2022	ND	20.0000		
Vanadium, total	ug/L	MW-11	10/12/2022	ND	20.0000		
Vanadium, total	ug/L	MW-11	04/06/2023	ND	20.0000		
Vanadium, total	ug/L	MW-11	10/09/2023	ND	20.0000		
Vanadium, total	ug/L	MW-11	04/04/2024	ND	20.0000		
Zinc, total	ug/L	MW-11	04/07/2014		45.3000		
Zinc, total	ug/L	MW-11	10/23/2014		8.3000		
Zinc, total	ug/L	MW-11	01/16/2015	ND	20.0000		
Zinc, total	ug/L	MW-11	04/02/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-11	09/15/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-11	10/26/2015		26.3000		
Zinc, total	ug/L	MW-11	04/01/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-11	10/19/2016		24.8000		
Zinc, total	ug/L	MW-11	04/17/2017		28.4000		
Zinc, total	ug/L	MW-11	10/11/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-11	06/01/2018	ND	20.0000		
Zinc, total	ug/L	MW-11	10/03/2018	ND	20.0000		
Zinc, total	ug/L	MW-11	04/08/2019	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-11	10/11/2019		30.5000		
Zinc, total	ug/L	MW-11	04/27/2020	ND	20.0000		
Zinc, total	ug/L	MW-11	10/09/2020		20.1000		
Zinc, total	ug/L	MW-11	04/09/2021	ND	20.0000		
Zinc, total	ug/L	MW-11	10/25/2021	ND	20.0000		
Zinc, total	ug/L	MW-11	04/11/2022	ND	20.0000		
Zinc, total	ug/L	MW-11	10/12/2022	ND	20.0000		
Zinc, total	ug/L	MW-11	04/06/2023	ND	20.0000		
Zinc, total	ug/L	MW-11	10/09/2023	ND	20.0000		
Zinc, total	ug/L	MW-11	04/04/2024	ND	20.0000		
Antimony, total	ug/L	MW-12	04/07/2014	ND	2.0000		
Antimony, total	ug/L	MW-12	10/23/2014	ND	2.0000		
Antimony, total	ug/L	MW-12	01/16/2015	ND	2.0000		
Antimony, total	ug/L	MW-12	04/02/2015	ND	2.0000		
Antimony, total	ug/L	MW-12	09/15/2015	ND	2.0000		
Antimony, total	ug/L	MW-12	10/26/2015	ND	2.0000		
Antimony, total	ug/L	MW-12	04/01/2016	ND	2.0000		
Antimony, total	ug/L	MW-12	10/19/2016	ND	2.0000		
Antimony, total	ug/L	MW-12	04/17/2017	ND	2.0000		
Antimony, total	ug/L	MW-12	10/11/2017	ND	2.0000		
Antimony, total	ug/L	MW-12	06/01/2018	ND	2.0000		
Antimony, total	ug/L	MW-12	10/03/2018	ND	2.0000		
Antimony, total	ug/L	MW-12	04/08/2019	ND	2.0000		
Antimony, total	ug/L	MW-12	10/11/2019	ND	2.0000		
Antimony, total	ug/L	MW-12	04/27/2020	ND	2.0000		
Antimony, total	ug/L	MW-12	10/09/2020	ND	2.0000		
Antimony, total	ug/L	MW-12	04/09/2021	ND	2.0000		
Antimony, total	ug/L	MW-12	10/25/2021	ND	2.0000		
Antimony, total	ug/L	MW-12	04/11/2022	ND	2.0000		
Antimony, total	ug/L	MW-12	10/12/2022	ND	2.0000		
Antimony, total	ug/L	MW-12	04/06/2023	ND	2.0000		
Antimony, total	ug/L	MW-12	10/09/2023	ND	2.0000		
Antimony, total	ug/L	MW-12	04/04/2024	ND	2.0000		
Arsenic, total	ug/L	MW-12	04/07/2014		21.7000		*
Arsenic, total	ug/L	MW-12	10/23/2014		4.1000		

* - Outlier for that well and constituent.
 ** - ND value replaced with median RL.
 *** - ND value replaced with manual RL.
 ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Arsenic, total	ug/L	MW-12	01/16/2015	ND	4.0000		
Arsenic, total	ug/L	MW-12	04/02/2015	ND	4.0000		
Arsenic, total	ug/L	MW-12	09/15/2015		6.5000		
Arsenic, total	ug/L	MW-12	10/26/2015	ND	4.0000		
Arsenic, total	ug/L	MW-12	04/01/2016	ND	4.0000		
Arsenic, total	ug/L	MW-12	10/19/2016		89.9000		*
Arsenic, total	ug/L	MW-12	04/17/2017		137.0000		*
Arsenic, total	ug/L	MW-12	10/11/2017		24.3000		*
Arsenic, total	ug/L	MW-12	06/01/2018	ND	4.0000		
Arsenic, total	ug/L	MW-12	10/03/2018		5.7000		
Arsenic, total	ug/L	MW-12	04/08/2019	ND	4.0000		
Arsenic, total	ug/L	MW-12	10/11/2019		9.4000		
Arsenic, total	ug/L	MW-12	04/27/2020		4.9000		
Arsenic, total	ug/L	MW-12	10/09/2020		6.0000		
Arsenic, total	ug/L	MW-12	04/09/2021		4.1000		
Arsenic, total	ug/L	MW-12	10/25/2021		4.0000		
Arsenic, total	ug/L	MW-12	04/11/2022	ND	4.0000		
Arsenic, total	ug/L	MW-12	10/12/2022		6.1000		
Arsenic, total	ug/L	MW-12	04/06/2023		4.4000		
Arsenic, total	ug/L	MW-12	10/09/2023	ND	4.0000		
Arsenic, total	ug/L	MW-12	04/04/2024		4.8000		
Barium, total	ug/L	MW-12	04/07/2014		484.0000		
Barium, total	ug/L	MW-12	10/23/2014		244.0000		
Barium, total	ug/L	MW-12	01/16/2015		199.0000		
Barium, total	ug/L	MW-12	04/02/2015		248.0000		
Barium, total	ug/L	MW-12	09/15/2015		142.0000		
Barium, total	ug/L	MW-12	10/26/2015		269.0000		
Barium, total	ug/L	MW-12	04/01/2016		247.0000		
Barium, total	ug/L	MW-12	10/19/2016		1320.0000		*
Barium, total	ug/L	MW-12	04/17/2017		1390.0000		*
Barium, total	ug/L	MW-12	10/11/2017		189.0000		
Barium, total	ug/L	MW-12	06/01/2018		223.0000		
Barium, total	ug/L	MW-12	10/03/2018		173.0000		
Barium, total	ug/L	MW-12	04/08/2019		196.0000		
Barium, total	ug/L	MW-12	10/11/2019		186.0000		
Barium, total	ug/L	MW-12	04/27/2020		150.0000		
Barium, total	ug/L	MW-12	10/09/2020		258.0000		
Barium, total	ug/L	MW-12	04/09/2021		122.0000		
Barium, total	ug/L	MW-12	10/25/2021		153.0000		
Barium, total	ug/L	MW-12	04/11/2022		99.9000		
Barium, total	ug/L	MW-12	10/12/2022		129.0000		
Barium, total	ug/L	MW-12	04/06/2023		55.7000		
Barium, total	ug/L	MW-12	10/09/2023		66.4000		
Barium, total	ug/L	MW-12	04/04/2024		102.0000		
Beryllium, total	ug/L	MW-12	04/07/2014	ND	4.0000		
Beryllium, total	ug/L	MW-12	10/23/2014	ND	4.0000		
Beryllium, total	ug/L	MW-12	01/16/2015	ND	4.0000		
Beryllium, total	ug/L	MW-12	04/02/2015	ND	4.0000		
Beryllium, total	ug/L	MW-12	09/15/2015	ND	4.0000		
Beryllium, total	ug/L	MW-12	10/26/2015	ND	4.0000		
Beryllium, total	ug/L	MW-12	04/01/2016	ND	4.0000		
Beryllium, total	ug/L	MW-12	10/19/2016	ND	4.0000		
Beryllium, total	ug/L	MW-12	04/17/2017	ND	4.0000		
Beryllium, total	ug/L	MW-12	10/11/2017	ND	4.0000		
Beryllium, total	ug/L	MW-12	06/01/2018	ND	4.0000		
Beryllium, total	ug/L	MW-12	10/03/2018	ND	4.0000		
Beryllium, total	ug/L	MW-12	04/08/2019	ND	4.0000		
Beryllium, total	ug/L	MW-12	10/11/2019	ND	4.0000		
Beryllium, total	ug/L	MW-12	04/27/2020	ND	4.0000		
Beryllium, total	ug/L	MW-12	10/09/2020	ND	4.0000		
Beryllium, total	ug/L	MW-12	04/09/2021	ND	4.0000		
Beryllium, total	ug/L	MW-12	10/25/2021	ND	4.0000		
Beryllium, total	ug/L	MW-12	04/11/2022	ND	4.0000		
Beryllium, total	ug/L	MW-12	10/12/2022	ND	4.0000		
Beryllium, total	ug/L	MW-12	04/06/2023	ND	4.0000		
Beryllium, total	ug/L	MW-12	10/09/2023	ND	4.0000		
Beryllium, total	ug/L	MW-12	04/04/2024	ND	4.0000		
Cadmium, total	ug/L	MW-12	04/07/2014		1.1000		
Cadmium, total	ug/L	MW-12	10/23/2014	ND	0.8000		
Cadmium, total	ug/L	MW-12	01/16/2015	ND	0.8000		
Cadmium, total	ug/L	MW-12	04/02/2015	ND	0.8000		
Cadmium, total	ug/L	MW-12	09/15/2015	ND	0.8000		
Cadmium, total	ug/L	MW-12	10/26/2015	ND	0.8000		
Cadmium, total	ug/L	MW-12	04/01/2016	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-12	10/19/2016	ND	0.8000		
Cadmium, total	ug/L	MW-12	04/17/2017	ND	0.8000		
Cadmium, total	ug/L	MW-12	10/11/2017	ND	0.8000		
Cadmium, total	ug/L	MW-12	06/01/2018	ND	0.8000		
Cadmium, total	ug/L	MW-12	10/03/2018	ND	0.8000		
Cadmium, total	ug/L	MW-12	04/08/2019	ND	0.8000		
Cadmium, total	ug/L	MW-12	10/11/2019	ND	0.8000		
Cadmium, total	ug/L	MW-12	04/27/2020		1.2000		
Cadmium, total	ug/L	MW-12	10/09/2020		4.0000		*
Cadmium, total	ug/L	MW-12	04/09/2021	ND	0.8000		
Cadmium, total	ug/L	MW-12	10/25/2021	ND	0.8000		
Cadmium, total	ug/L	MW-12	04/11/2022	ND	0.8000		
Cadmium, total	ug/L	MW-12	10/12/2022	ND	0.8000		
Cadmium, total	ug/L	MW-12	04/06/2023	ND	0.8000		
Cadmium, total	ug/L	MW-12	10/09/2023	ND	0.8000		
Cadmium, total	ug/L	MW-12	04/04/2024	ND	0.8000		
Chromium, total	ug/L	MW-12	04/07/2014	ND	8.0000		
Chromium, total	ug/L	MW-12	10/23/2014	ND	8.0000		
Chromium, total	ug/L	MW-12	01/16/2015	ND	8.0000		
Chromium, total	ug/L	MW-12	04/02/2015	ND	8.0000		
Chromium, total	ug/L	MW-12	09/15/2015	ND	8.0000		
Chromium, total	ug/L	MW-12	10/26/2015	ND	8.0000		
Chromium, total	ug/L	MW-12	04/01/2016	ND	8.0000		
Chromium, total	ug/L	MW-12	10/19/2016	ND	8.0000		
Chromium, total	ug/L	MW-12	04/17/2017	ND	8.0000		
Chromium, total	ug/L	MW-12	10/11/2017	ND	8.0000		
Chromium, total	ug/L	MW-12	06/01/2018	ND	8.0000		
Chromium, total	ug/L	MW-12	10/03/2018	ND	8.0000		
Chromium, total	ug/L	MW-12	04/08/2019	ND	8.0000		
Chromium, total	ug/L	MW-12	10/11/2019	ND	8.0000		
Chromium, total	ug/L	MW-12	04/27/2020	ND	8.0000		
Chromium, total	ug/L	MW-12	10/09/2020	ND	8.0000		
Chromium, total	ug/L	MW-12	04/09/2021	ND	8.0000		
Chromium, total	ug/L	MW-12	10/25/2021	ND	8.0000		
Chromium, total	ug/L	MW-12	04/11/2022	ND	8.0000		
Chromium, total	ug/L	MW-12	10/12/2022	ND	8.0000		
Chromium, total	ug/L	MW-12	04/06/2023	ND	8.0000		
Chromium, total	ug/L	MW-12	10/09/2023	ND	8.0000		
Chromium, total	ug/L	MW-12	04/04/2024	ND	8.0000		
Cobalt, total	ug/L	MW-12	04/07/2014	ND	4.0000		*
Cobalt, total	ug/L	MW-12	10/23/2014	ND	0.8000		
Cobalt, total	ug/L	MW-12	01/16/2015	ND	0.8000		
Cobalt, total	ug/L	MW-12	04/02/2015	ND	0.8000		
Cobalt, total	ug/L	MW-12	09/15/2015	ND	0.8000		
Cobalt, total	ug/L	MW-12	10/26/2015	ND	0.8000		
Cobalt, total	ug/L	MW-12	04/01/2016	ND	0.8000		
Cobalt, total	ug/L	MW-12	10/19/2016	ND	0.8000		
Cobalt, total	ug/L	MW-12	04/17/2017	ND	0.8000		
Cobalt, total	ug/L	MW-12	10/11/2017	ND	0.8000		
Cobalt, total	ug/L	MW-12	06/01/2018	ND	0.8000		
Cobalt, total	ug/L	MW-12	10/03/2018	ND	0.8000		
Cobalt, total	ug/L	MW-12	04/08/2019	ND	0.8000		
Cobalt, total	ug/L	MW-12	10/11/2019	ND	0.8000		
Cobalt, total	ug/L	MW-12	04/27/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-12	10/09/2020		1.2000		
Cobalt, total	ug/L	MW-12	04/09/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-12	10/25/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-12	04/11/2022	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-12	10/12/2022		2.6000		*
Cobalt, total	ug/L	MW-12	04/06/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-12	10/09/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-12	04/04/2024	ND	0.4000	0.8000	**
Copper, total	ug/L	MW-12	04/07/2014	ND	4.0000		
Copper, total	ug/L	MW-12	10/23/2014	ND	4.0000		
Copper, total	ug/L	MW-12	01/16/2015	ND	4.0000		
Copper, total	ug/L	MW-12	04/02/2015	ND	4.0000		
Copper, total	ug/L	MW-12	09/15/2015	ND	4.0000		
Copper, total	ug/L	MW-12	10/26/2015	ND	4.0000		
Copper, total	ug/L	MW-12	04/01/2016	ND	4.0000		
Copper, total	ug/L	MW-12	10/19/2016	ND	4.0000		
Copper, total	ug/L	MW-12	04/17/2017	ND	4.0000		
Copper, total	ug/L	MW-12	10/11/2017	ND	4.0000		
Copper, total	ug/L	MW-12	06/01/2018	ND	4.0000		
Copper, total	ug/L	MW-12	10/03/2018		6.2000		

* - 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-12	04/08/2019	ND	4.0000	
Copper, total	ug/L	MW-12	10/11/2019	ND	4.0000	
Copper, total	ug/L	MW-12	04/27/2020	ND	4.0000	
Copper, total	ug/L	MW-12	10/09/2020		5.1000	
Copper, total	ug/L	MW-12	04/09/2021	ND	4.0000	
Copper, total	ug/L	MW-12	10/25/2021	ND	4.0000	
Copper, total	ug/L	MW-12	04/11/2022	ND	4.0000	
Copper, total	ug/L	MW-12	10/12/2022	ND	4.0000	
Copper, total	ug/L	MW-12	04/06/2023	ND	4.0000	
Copper, total	ug/L	MW-12	10/09/2023	ND	4.0000	
Copper, total	ug/L	MW-12	04/04/2024	ND	4.0000	
Lead, total	ug/L	MW-12	04/07/2014	ND	4.0000	
Lead, total	ug/L	MW-12	10/23/2014	ND	4.0000	
Lead, total	ug/L	MW-12	01/16/2015	ND	4.0000	
Lead, total	ug/L	MW-12	04/02/2015	ND	4.0000	
Lead, total	ug/L	MW-12	09/15/2015	ND	4.0000	
Lead, total	ug/L	MW-12	10/26/2015	ND	4.0000	
Lead, total	ug/L	MW-12	04/01/2016	ND	4.0000	
Lead, total	ug/L	MW-12	10/19/2016	ND	4.0000	
Lead, total	ug/L	MW-12	04/17/2017	ND	4.0000	
Lead, total	ug/L	MW-12	10/11/2017	ND	4.0000	
Lead, total	ug/L	MW-12	06/01/2018	ND	4.0000	
Lead, total	ug/L	MW-12	10/03/2018	ND	4.0000	
Lead, total	ug/L	MW-12	04/08/2019	ND	4.0000	
Lead, total	ug/L	MW-12	10/11/2019	ND	4.0000	
Lead, total	ug/L	MW-12	04/27/2020	ND	4.0000	
Lead, total	ug/L	MW-12	10/09/2020	ND	4.0000	
Lead, total	ug/L	MW-12	04/09/2021	ND	4.0000	
Lead, total	ug/L	MW-12	10/25/2021	ND	4.0000	
Lead, total	ug/L	MW-12	04/11/2022	ND	4.0000	
Lead, total	ug/L	MW-12	10/12/2022	ND	4.0000	
Lead, total	ug/L	MW-12	04/06/2023	ND	4.0000	
Lead, total	ug/L	MW-12	10/09/2023	ND	4.0000	
Lead, total	ug/L	MW-12	04/04/2024	ND	4.0000	
Nickel, total	ug/L	MW-12	04/07/2014		4.4000	
Nickel, total	ug/L	MW-12	10/23/2014	ND	4.0000	
Nickel, total	ug/L	MW-12	01/16/2015	ND	4.0000	
Nickel, total	ug/L	MW-12	04/02/2015	ND	4.0000	
Nickel, total	ug/L	MW-12	09/15/2015	ND	4.0000	
Nickel, total	ug/L	MW-12	10/26/2015	ND	4.0000	
Nickel, total	ug/L	MW-12	04/01/2016	ND	4.0000	
Nickel, total	ug/L	MW-12	10/19/2016	ND	4.0000	
Nickel, total	ug/L	MW-12	04/17/2017	ND	4.0000	
Nickel, total	ug/L	MW-12	10/11/2017	ND	4.0000	
Nickel, total	ug/L	MW-12	06/01/2018	ND	4.0000	
Nickel, total	ug/L	MW-12	10/03/2018	ND	4.0000	
Nickel, total	ug/L	MW-12	04/08/2019	ND	4.0000	
Nickel, total	ug/L	MW-12	10/11/2019	ND	4.0000	
Nickel, total	ug/L	MW-12	04/27/2020	ND	4.0000	
Nickel, total	ug/L	MW-12	10/09/2020	ND	4.0000	
Nickel, total	ug/L	MW-12	04/09/2021	ND	4.0000	
Nickel, total	ug/L	MW-12	10/25/2021	ND	4.0000	
Nickel, total	ug/L	MW-12	04/11/2022	ND	4.0000	
Nickel, total	ug/L	MW-12	10/12/2022	ND	4.0000	
Nickel, total	ug/L	MW-12	04/06/2023	ND	4.0000	
Nickel, total	ug/L	MW-12	10/09/2023	ND	4.0000	
Nickel, total	ug/L	MW-12	04/04/2024	ND	4.0000	
Selenium, total	ug/L	MW-12	04/07/2014	ND	4.0000	
Selenium, total	ug/L	MW-12	10/23/2014	ND	4.0000	
Selenium, total	ug/L	MW-12	01/16/2015	ND	4.0000	
Selenium, total	ug/L	MW-12	04/02/2015	ND	4.0000	
Selenium, total	ug/L	MW-12	09/15/2015	ND	4.0000	
Selenium, total	ug/L	MW-12	10/26/2015	ND	4.0000	
Selenium, total	ug/L	MW-12	04/01/2016	ND	4.0000	
Selenium, total	ug/L	MW-12	10/19/2016	ND	4.0000	
Selenium, total	ug/L	MW-12	04/17/2017	ND	4.0000	
Selenium, total	ug/L	MW-12	10/11/2017	ND	4.0000	
Selenium, total	ug/L	MW-12	06/01/2018	ND	4.0000	
Selenium, total	ug/L	MW-12	10/03/2018	ND	4.0000	
Selenium, total	ug/L	MW-12	04/08/2019	ND	4.0000	
Selenium, total	ug/L	MW-12	10/11/2019	ND	4.0000	
Selenium, total	ug/L	MW-12	04/27/2020	ND	4.0000	
Selenium, total	ug/L	MW-12	10/09/2020	ND	4.0000	
Selenium, total	ug/L	MW-12	04/09/2021	ND	4.0000	
Selenium, total	ug/L	MW-12	10/09/2020	ND	4.0000	
Selenium, total	ug/L	MW-12	04/09/2021	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-12	10/25/2021	ND	4.0000		
Selenium, total	ug/L	MW-12	04/11/2022	ND	4.0000		
Selenium, total	ug/L	MW-12	10/12/2022	ND	4.0000		
Selenium, total	ug/L	MW-12	04/06/2023	ND	4.0000		
Selenium, total	ug/L	MW-12	10/09/2023	ND	4.0000		
Selenium, total	ug/L	MW-12	04/04/2024	ND	4.0000		
Silver, total	ug/L	MW-12	04/07/2014	ND	4.0000		
Silver, total	ug/L	MW-12	10/23/2014	ND	4.0000		
Silver, total	ug/L	MW-12	01/16/2015	ND	4.0000		
Silver, total	ug/L	MW-12	04/02/2015	ND	4.0000		
Silver, total	ug/L	MW-12	09/15/2015	ND	4.0000		
Silver, total	ug/L	MW-12	10/26/2015	ND	4.0000		
Silver, total	ug/L	MW-12	04/01/2016	ND	4.0000		
Silver, total	ug/L	MW-12	10/19/2016	ND	4.0000		
Silver, total	ug/L	MW-12	04/17/2017	ND	4.0000		
Silver, total	ug/L	MW-12	10/11/2017	ND	4.0000		
Silver, total	ug/L	MW-12	06/01/2018	ND	8.0000	4.0000	**
Silver, total	ug/L	MW-12	10/03/2018	ND	4.0000		
Silver, total	ug/L	MW-12	04/08/2019	ND	4.0000		
Silver, total	ug/L	MW-12	10/11/2019	ND	4.0000		
Silver, total	ug/L	MW-12	04/27/2020	ND	4.0000		
Silver, total	ug/L	MW-12	10/09/2020	ND	4.0000		
Silver, total	ug/L	MW-12	04/09/2021	ND	4.0000		
Silver, total	ug/L	MW-12	10/25/2021	ND	4.0000		
Silver, total	ug/L	MW-12	04/11/2022	ND	4.0000		
Silver, total	ug/L	MW-12	10/12/2022	ND	4.0000		
Silver, total	ug/L	MW-12	04/06/2023	ND	4.0000		
Silver, total	ug/L	MW-12	10/09/2023	ND	4.0000		
Silver, total	ug/L	MW-12	04/04/2024	ND	4.0000		
Thallium, total	ug/L	MW-12	04/07/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-12	10/23/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-12	01/16/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-12	04/02/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-12	09/15/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-12	10/26/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-12	04/01/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-12	10/19/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-12	04/17/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-12	10/11/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-12	06/01/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-12	10/03/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-12	04/08/2019	ND	2.0000		
Thallium, total	ug/L	MW-12	10/11/2019	ND	2.0000		
Thallium, total	ug/L	MW-12	04/27/2020	ND	2.0000		
Thallium, total	ug/L	MW-12	10/09/2020	ND	2.0000		
Thallium, total	ug/L	MW-12	04/09/2021	ND	2.0000		
Thallium, total	ug/L	MW-12	10/25/2021	ND	2.0000		
Thallium, total	ug/L	MW-12	04/11/2022	ND	2.0000		
Thallium, total	ug/L	MW-12	10/12/2022	ND	2.0000		
Thallium, total	ug/L	MW-12	04/06/2023	ND	2.0000		
Thallium, total	ug/L	MW-12	10/09/2023	ND	2.0000		
Thallium, total	ug/L	MW-12	04/04/2024	ND	2.0000		
Vanadium, total	ug/L	MW-12	04/07/2014	ND	20.0000		
Vanadium, total	ug/L	MW-12	10/23/2014	ND	20.0000		
Vanadium, total	ug/L	MW-12	01/16/2015	ND	20.0000		
Vanadium, total	ug/L	MW-12	04/02/2015	ND	20.0000		
Vanadium, total	ug/L	MW-12	09/15/2015	ND	20.0000		
Vanadium, total	ug/L	MW-12	10/26/2015	ND	20.0000		
Vanadium, total	ug/L	MW-12	04/01/2016	ND	20.0000		
Vanadium, total	ug/L	MW-12	10/19/2016	ND	20.0000		
Vanadium, total	ug/L	MW-12	04/17/2017	ND	20.0000		
Vanadium, total	ug/L	MW-12	10/11/2017	ND	20.0000		
Vanadium, total	ug/L	MW-12	06/01/2018	ND	20.0000		
Vanadium, total	ug/L	MW-12	10/03/2018	ND	20.0000		
Vanadium, total	ug/L	MW-12	04/08/2019	ND	20.0000		
Vanadium, total	ug/L	MW-12	10/11/2019	ND	20.0000		
Vanadium, total	ug/L	MW-12	04/27/2020	ND	20.0000		
Vanadium, total	ug/L	MW-12	10/09/2020	ND	20.0000		
Vanadium, total	ug/L	MW-12	04/09/2021	ND	20.0000		
Vanadium, total	ug/L	MW-12	10/25/2021	ND	20.0000		
Vanadium, total	ug/L	MW-12	04/11/2022	ND	20.0000		
Vanadium, total	ug/L	MW-12	10/12/2022	ND	20.0000		
Vanadium, total	ug/L	MW-12	04/06/2023	ND	20.0000		
Vanadium, total	ug/L	MW-12	10/09/2023	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-12	04/04/2024	ND	20.0000		
Zinc, total	ug/L	MW-12	04/07/2014		16.3000		
Zinc, total	ug/L	MW-12	10/23/2014	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-12	01/16/2015	ND	20.0000		
Zinc, total	ug/L	MW-12	04/02/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-12	09/15/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-12	10/26/2015	ND	20.0000		
Zinc, total	ug/L	MW-12	04/01/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-12	10/19/2016		20.4000		
Zinc, total	ug/L	MW-12	04/17/2017		14.8000		
Zinc, total	ug/L	MW-12	10/11/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-12	06/01/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-12	10/03/2018		22.1000		
Zinc, total	ug/L	MW-12	04/08/2019	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-12	10/11/2019	ND	20.0000		
Zinc, total	ug/L	MW-12	04/27/2020	ND	20.0000		
Zinc, total	ug/L	MW-12	10/09/2020	ND	20.0000		
Zinc, total	ug/L	MW-12	04/09/2021	ND	20.0000		
Zinc, total	ug/L	MW-12	10/25/2021	ND	20.0000		
Zinc, total	ug/L	MW-12	04/11/2022	ND	20.0000		
Zinc, total	ug/L	MW-12	10/12/2022	ND	20.0000		
Zinc, total	ug/L	MW-12	04/06/2023	ND	20.0000		
Zinc, total	ug/L	MW-12	10/09/2023	ND	20.0000		
Zinc, total	ug/L	MW-12	04/04/2024	ND	20.0000		
Antimony, total	ug/L	MW-13	06/27/2023	ND	2.0000		
Antimony, total	ug/L	MW-13	10/09/2023	ND	2.0000		
Antimony, total	ug/L	MW-13	04/04/2024	ND	2.0000		
Arsenic, total	ug/L	MW-13	06/27/2023	ND	4.0000		
Arsenic, total	ug/L	MW-13	10/09/2023	ND	4.0000		
Arsenic, total	ug/L	MW-13	04/04/2024	ND	4.0000		
Barium, total	ug/L	MW-13	06/27/2023		25.7000		
Barium, total	ug/L	MW-13	10/09/2023		57.8000		
Barium, total	ug/L	MW-13	04/04/2024		32.8000		
Beryllium, total	ug/L	MW-13	06/27/2023	ND	4.0000		
Beryllium, total	ug/L	MW-13	10/09/2023	ND	4.0000		
Beryllium, total	ug/L	MW-13	04/04/2024	ND	4.0000		
Cadmium, total	ug/L	MW-13	06/27/2023	ND	0.8000		
Cadmium, total	ug/L	MW-13	10/09/2023	ND	0.8000		
Cadmium, total	ug/L	MW-13	04/04/2024	ND	0.8000		
Chromium, total	ug/L	MW-13	06/27/2023	ND	8.0000		
Chromium, total	ug/L	MW-13	10/09/2023	ND	8.0000		
Chromium, total	ug/L	MW-13	04/04/2024	ND	8.0000		
Cobalt, total	ug/L	MW-13	06/27/2023		0.4000		
Cobalt, total	ug/L	MW-13	10/09/2023		1.3000		
Cobalt, total	ug/L	MW-13	04/04/2024		0.5000		
Copper, total	ug/L	MW-13	06/27/2023	ND	4.0000		
Copper, total	ug/L	MW-13	10/09/2023	ND	4.0000		
Copper, total	ug/L	MW-13	04/04/2024	ND	4.0000		
Lead, total	ug/L	MW-13	06/27/2023	ND	4.0000		
Lead, total	ug/L	MW-13	10/09/2023	ND	4.0000		
Lead, total	ug/L	MW-13	04/04/2024	ND	4.0000		
Nickel, total	ug/L	MW-13	06/27/2023	ND	4.0000		
Nickel, total	ug/L	MW-13	10/09/2023		4.0000		
Nickel, total	ug/L	MW-13	04/04/2024	ND	4.0000		
Selenium, total	ug/L	MW-13	06/27/2023	ND	4.0000		
Selenium, total	ug/L	MW-13	10/09/2023	ND	4.0000		
Selenium, total	ug/L	MW-13	04/04/2024	ND	4.0000		
Silver, total	ug/L	MW-13	06/27/2023	ND	4.0000		
Silver, total	ug/L	MW-13	10/09/2023	ND	4.0000		
Silver, total	ug/L	MW-13	04/04/2024	ND	4.0000		
Thallium, total	ug/L	MW-13	06/27/2023	ND	2.0000		
Thallium, total	ug/L	MW-13	10/09/2023	ND	2.0000		
Thallium, total	ug/L	MW-13	04/04/2024	ND	2.0000		
Vanadium, total	ug/L	MW-13	06/27/2023	ND	20.0000		
Vanadium, total	ug/L	MW-13	10/09/2023	ND	20.0000		
Vanadium, total	ug/L	MW-13	04/04/2024	ND	20.0000		
Zinc, total	ug/L	MW-13	06/27/2023	ND	20.0000		
Zinc, total	ug/L	MW-13	10/09/2023	ND	20.0000		
Zinc, total	ug/L	MW-13	04/04/2024	ND	20.0000		
Antimony, total	ug/L	MW-17	04/07/2014	ND	2.0000		
Antimony, total	ug/L	MW-17	10/23/2014	ND	2.0000		
Antimony, total	ug/L	MW-17	01/16/2015	ND	2.0000		
Antimony, total	ug/L	MW-17	04/02/2015	ND	2.0000		
Antimony, total	ug/L	MW-17	09/15/2015	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-17	10/26/2015	ND	2.0000		
Antimony, total	ug/L	MW-17	04/01/2016	ND	2.0000		
Antimony, total	ug/L	MW-17	10/19/2016	ND	2.0000		
Antimony, total	ug/L	MW-17	04/17/2017	ND	2.0000		
Antimony, total	ug/L	MW-17	10/11/2017	ND	2.0000		
Antimony, total	ug/L	MW-17	06/01/2018	ND	2.0000		
Antimony, total	ug/L	MW-17	10/03/2018	ND	2.0000		
Antimony, total	ug/L	MW-17	04/08/2019	ND	2.0000		
Antimony, total	ug/L	MW-17	10/11/2019	ND	2.0000		
Antimony, total	ug/L	MW-17	04/27/2020	ND	2.0000		
Antimony, total	ug/L	MW-17	10/09/2020	ND	2.0000		
Antimony, total	ug/L	MW-17	04/09/2021	ND	2.0000		
Antimony, total	ug/L	MW-17	10/25/2021	ND	2.0000		
Antimony, total	ug/L	MW-17	04/11/2022	ND	2.0000		
Antimony, total	ug/L	MW-17	10/12/2022	ND	2.0000		
Antimony, total	ug/L	MW-17	04/06/2023	ND	2.0000		
Antimony, total	ug/L	MW-17	10/09/2023	ND	2.0000		
Antimony, total	ug/L	MW-17	04/04/2024	ND	2.0000		
Arsenic, total	ug/L	MW-17	04/07/2014		30.9000		
Arsenic, total	ug/L	MW-17	10/23/2014		11.5000		
Arsenic, total	ug/L	MW-17	01/16/2015		17.0000		*
Arsenic, total	ug/L	MW-17	04/02/2015		53.7000		
Arsenic, total	ug/L	MW-17	09/15/2015		7.9000		
Arsenic, total	ug/L	MW-17	10/26/2015		7.7000		
Arsenic, total	ug/L	MW-17	04/01/2016		22.1000		
Arsenic, total	ug/L	MW-17	10/19/2016		4.9000		
Arsenic, total	ug/L	MW-17	04/17/2017		136.0000		*
Arsenic, total	ug/L	MW-17	10/11/2017		8.0000		
Arsenic, total	ug/L	MW-17	06/01/2018		49.3000		
Arsenic, total	ug/L	MW-17	10/03/2018		12.1000		
Arsenic, total	ug/L	MW-17	04/08/2019		11.1000		
Arsenic, total	ug/L	MW-17	10/11/2019		12.9000		
Arsenic, total	ug/L	MW-17	04/27/2020		12.2000		
Arsenic, total	ug/L	MW-17	10/09/2020		6.9000		
Arsenic, total	ug/L	MW-17	04/09/2021		4.2000		
Arsenic, total	ug/L	MW-17	10/25/2021	ND	4.0000		
Arsenic, total	ug/L	MW-17	04/11/2022		15.5000		
Arsenic, total	ug/L	MW-17	10/12/2022		8.2000		
Arsenic, total	ug/L	MW-17	04/06/2023		12.7000		
Arsenic, total	ug/L	MW-17	10/09/2023		4.4000		
Arsenic, total	ug/L	MW-17	04/04/2024		30.3000		
Barium, total	ug/L	MW-17	04/07/2014		374.0000		
Barium, total	ug/L	MW-17	10/23/2014		167.0000		
Barium, total	ug/L	MW-17	01/16/2015		293.0000		
Barium, total	ug/L	MW-17	04/02/2015		589.0000		
Barium, total	ug/L	MW-17	09/15/2015		148.0000		
Barium, total	ug/L	MW-17	10/26/2015		140.0000		
Barium, total	ug/L	MW-17	04/01/2016		475.0000		
Barium, total	ug/L	MW-17	10/19/2016		183.0000		
Barium, total	ug/L	MW-17	04/17/2017		1010.0000		*
Barium, total	ug/L	MW-17	10/11/2017		168.0000		
Barium, total	ug/L	MW-17	06/01/2018		373.0000		
Barium, total	ug/L	MW-17	10/03/2018		174.0000		
Barium, total	ug/L	MW-17	04/08/2019		217.0000		
Barium, total	ug/L	MW-17	10/11/2019		222.0000		
Barium, total	ug/L	MW-17	04/27/2020		338.0000		
Barium, total	ug/L	MW-17	10/09/2020		161.0000		
Barium, total	ug/L	MW-17	04/09/2021		235.0000		
Barium, total	ug/L	MW-17	10/25/2021		146.0000		
Barium, total	ug/L	MW-17	04/11/2022		421.0000		
Barium, total	ug/L	MW-17	10/12/2022		175.0000		
Barium, total	ug/L	MW-17	04/06/2023		263.0000		
Barium, total	ug/L	MW-17	10/09/2023		151.0000		
Barium, total	ug/L	MW-17	04/04/2024		358.0000		
Beryllium, total	ug/L	MW-17	04/07/2014	ND	4.0000		
Beryllium, total	ug/L	MW-17	10/23/2014	ND	4.0000		
Beryllium, total	ug/L	MW-17	01/16/2015	ND	4.0000		
Beryllium, total	ug/L	MW-17	04/02/2015	ND	4.0000		
Beryllium, total	ug/L	MW-17	09/15/2015	ND	4.0000		
Beryllium, total	ug/L	MW-17	10/26/2015	ND	4.0000		
Beryllium, total	ug/L	MW-17	04/01/2016	ND	4.0000		
Beryllium, total	ug/L	MW-17	10/19/2016	ND	4.0000		
Beryllium, total	ug/L	MW-17	04/17/2017	ND	4.0000		
Beryllium, total	ug/L	MW-17	10/11/2017	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-17	06/01/2018	ND	4.0000		
Beryllium, total	ug/L	MW-17	10/03/2018	ND	4.0000		
Beryllium, total	ug/L	MW-17	04/08/2019	ND	4.0000		
Beryllium, total	ug/L	MW-17	10/11/2019	ND	4.0000		
Beryllium, total	ug/L	MW-17	04/27/2020	ND	4.0000		
Beryllium, total	ug/L	MW-17	10/09/2020	ND	4.0000		
Beryllium, total	ug/L	MW-17	04/09/2021	ND	4.0000		
Beryllium, total	ug/L	MW-17	10/25/2021	ND	4.0000		
Beryllium, total	ug/L	MW-17	04/11/2022	ND	4.0000		
Beryllium, total	ug/L	MW-17	10/12/2022	ND	4.0000		
Beryllium, total	ug/L	MW-17	04/06/2023	ND	4.0000		
Beryllium, total	ug/L	MW-17	10/09/2023	ND	4.0000		
Beryllium, total	ug/L	MW-17	04/04/2024	ND	4.0000		
Cadmium, total	ug/L	MW-17	04/07/2014		1.0000		
Cadmium, total	ug/L	MW-17	10/23/2014	ND	0.8000		
Cadmium, total	ug/L	MW-17	01/16/2015	ND	0.8000		
Cadmium, total	ug/L	MW-17	04/02/2015	ND	0.8000		
Cadmium, total	ug/L	MW-17	09/15/2015	ND	0.8000		
Cadmium, total	ug/L	MW-17	10/26/2015	ND	0.8000		
Cadmium, total	ug/L	MW-17	04/01/2016	ND	0.8000		
Cadmium, total	ug/L	MW-17	10/19/2016	ND	0.8000		
Cadmium, total	ug/L	MW-17	04/17/2017	ND	0.8000		
Cadmium, total	ug/L	MW-17	10/11/2017	ND	0.8000		
Cadmium, total	ug/L	MW-17	06/01/2018	ND	0.8000		
Cadmium, total	ug/L	MW-17	10/03/2018		1.0000		
Cadmium, total	ug/L	MW-17	04/08/2019	ND	0.8000		
Cadmium, total	ug/L	MW-17	10/11/2019	ND	0.8000		
Cadmium, total	ug/L	MW-17	04/27/2020	ND	0.8000		
Cadmium, total	ug/L	MW-17	10/09/2020	ND	0.8000		
Cadmium, total	ug/L	MW-17	04/09/2021	ND	0.8000		
Cadmium, total	ug/L	MW-17	10/25/2021	ND	0.8000		
Cadmium, total	ug/L	MW-17	04/11/2022	ND	0.8000		
Cadmium, total	ug/L	MW-17	10/12/2022	ND	0.8000		
Cadmium, total	ug/L	MW-17	04/06/2023		1.7000		
Cadmium, total	ug/L	MW-17	10/09/2023	ND	0.8000		
Cadmium, total	ug/L	MW-17	04/04/2024	ND	0.8000		
Chromium, total	ug/L	MW-17	04/07/2014	ND	8.0000		
Chromium, total	ug/L	MW-17	10/23/2014	ND	8.0000		
Chromium, total	ug/L	MW-17	01/16/2015	ND	8.0000		
Chromium, total	ug/L	MW-17	04/02/2015	ND	8.0000		
Chromium, total	ug/L	MW-17	09/15/2015	ND	8.0000		
Chromium, total	ug/L	MW-17	10/26/2015	ND	8.0000		
Chromium, total	ug/L	MW-17	04/01/2016	ND	8.0000		
Chromium, total	ug/L	MW-17	10/19/2016	ND	8.0000		
Chromium, total	ug/L	MW-17	04/17/2017	ND	8.0000		
Chromium, total	ug/L	MW-17	10/11/2017	ND	8.0000		
Chromium, total	ug/L	MW-17	06/01/2018	ND	8.0000		
Chromium, total	ug/L	MW-17	10/03/2018	ND	8.0000		
Chromium, total	ug/L	MW-17	04/08/2019	ND	8.0000		
Chromium, total	ug/L	MW-17	10/11/2019	ND	8.0000		
Chromium, total	ug/L	MW-17	04/27/2020	ND	8.0000		
Chromium, total	ug/L	MW-17	10/09/2020	ND	8.0000		
Chromium, total	ug/L	MW-17	04/09/2021	ND	8.0000		
Chromium, total	ug/L	MW-17	10/25/2021	ND	8.0000		
Chromium, total	ug/L	MW-17	04/11/2022	ND	8.0000		
Chromium, total	ug/L	MW-17	10/12/2022	ND	8.0000		
Chromium, total	ug/L	MW-17	04/06/2023	ND	8.0000		
Chromium, total	ug/L	MW-17	10/09/2023	ND	8.0000		
Chromium, total	ug/L	MW-17	04/04/2024	ND	8.0000		
Cobalt, total	ug/L	MW-17	04/07/2014	ND	4.0000		*
Cobalt, total	ug/L	MW-17	10/23/2014	ND	0.8000		
Cobalt, total	ug/L	MW-17	01/16/2015	ND	0.8000		
Cobalt, total	ug/L	MW-17	04/02/2015	ND	0.8000		
Cobalt, total	ug/L	MW-17	09/15/2015	ND	0.8000		
Cobalt, total	ug/L	MW-17	10/26/2015	ND	0.8000		
Cobalt, total	ug/L	MW-17	04/01/2016	ND	0.8000		
Cobalt, total	ug/L	MW-17	10/19/2016	ND	0.8000		
Cobalt, total	ug/L	MW-17	04/17/2017	ND	0.8000		
Cobalt, total	ug/L	MW-17	10/11/2017	ND	0.8000		
Cobalt, total	ug/L	MW-17	06/01/2018	ND	0.8000		
Cobalt, total	ug/L	MW-17	10/03/2018	ND	0.8000		
Cobalt, total	ug/L	MW-17	04/08/2019	ND	0.8000		
Cobalt, total	ug/L	MW-17	10/11/2019	ND	0.8000		
Cobalt, total	ug/L	MW-17	04/27/2020	ND	0.8000		
Cobalt, total	ug/L	MW-17	04/27/2020	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	
Cobalt, total	ug/L	MW-17	10/09/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-17	04/09/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-17	10/25/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-17	04/11/2022	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-17	10/12/2022		2.2000		
Cobalt, total	ug/L	MW-17	04/06/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-17	10/09/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-17	04/04/2024	ND	0.4000	0.8000	**
Copper, total	ug/L	MW-17	04/07/2014		61.5000		*
Copper, total	ug/L	MW-17	10/23/2014	ND	4.0000		
Copper, total	ug/L	MW-17	01/16/2015	ND	4.0000		
Copper, total	ug/L	MW-17	04/02/2015	ND	4.0000		
Copper, total	ug/L	MW-17	09/15/2015	ND	4.0000		
Copper, total	ug/L	MW-17	10/26/2015	ND	4.0000		
Copper, total	ug/L	MW-17	04/01/2016	ND	4.0000		
Copper, total	ug/L	MW-17	10/19/2016	ND	4.0000		
Copper, total	ug/L	MW-17	04/17/2017	ND	4.0000		
Copper, total	ug/L	MW-17	10/11/2017	ND	4.0000		
Copper, total	ug/L	MW-17	06/01/2018	ND	4.0000		
Copper, total	ug/L	MW-17	10/03/2018		4.8000		
Copper, total	ug/L	MW-17	04/08/2019	ND	4.0000		
Copper, total	ug/L	MW-17	10/11/2019	ND	4.0000		
Copper, total	ug/L	MW-17	04/27/2020	ND	4.0000		
Copper, total	ug/L	MW-17	10/09/2020	ND	4.0000		
Copper, total	ug/L	MW-17	04/09/2021	ND	4.0000		
Copper, total	ug/L	MW-17	10/25/2021	ND	4.0000		
Copper, total	ug/L	MW-17	04/11/2022	ND	4.0000		
Copper, total	ug/L	MW-17	10/12/2022	ND	4.0000		
Copper, total	ug/L	MW-17	04/06/2023	ND	4.0000		
Copper, total	ug/L	MW-17	10/09/2023	ND	4.0000		
Copper, total	ug/L	MW-17	04/04/2024	ND	4.0000		
Lead, total	ug/L	MW-17	04/07/2014	ND	4.0000		
Lead, total	ug/L	MW-17	10/23/2014	ND	4.0000		
Lead, total	ug/L	MW-17	01/16/2015	ND	4.0000		
Lead, total	ug/L	MW-17	04/02/2015	ND	4.0000		
Lead, total	ug/L	MW-17	09/15/2015	ND	4.0000		
Lead, total	ug/L	MW-17	10/26/2015	ND	4.0000		
Lead, total	ug/L	MW-17	04/01/2016	ND	4.0000		
Lead, total	ug/L	MW-17	10/19/2016	ND	4.0000		
Lead, total	ug/L	MW-17	04/17/2017	ND	4.0000		
Lead, total	ug/L	MW-17	10/11/2017	ND	4.0000		
Lead, total	ug/L	MW-17	06/01/2018	ND	4.0000		
Lead, total	ug/L	MW-17	10/03/2018	ND	4.0000		
Lead, total	ug/L	MW-17	04/08/2019	ND	4.0000		
Lead, total	ug/L	MW-17	10/11/2019	ND	4.0000		
Lead, total	ug/L	MW-17	04/27/2020	ND	4.0000		
Lead, total	ug/L	MW-17	10/09/2020	ND	4.0000		
Lead, total	ug/L	MW-17	04/09/2021	ND	4.0000		
Lead, total	ug/L	MW-17	10/25/2021	ND	4.0000		
Lead, total	ug/L	MW-17	04/11/2022	ND	4.0000		
Lead, total	ug/L	MW-17	10/12/2022	ND	4.0000		
Lead, total	ug/L	MW-17	04/06/2023	ND	4.0000		
Lead, total	ug/L	MW-17	10/09/2023	ND	4.0000		
Lead, total	ug/L	MW-17	04/04/2024	ND	4.0000		
Nickel, total	ug/L	MW-17	04/07/2014		7.8000		
Nickel, total	ug/L	MW-17	10/23/2014	ND	4.0000		
Nickel, total	ug/L	MW-17	01/16/2015		4.7000		
Nickel, total	ug/L	MW-17	04/02/2015		5.6000		
Nickel, total	ug/L	MW-17	09/15/2015	ND	4.0000		
Nickel, total	ug/L	MW-17	10/26/2015	ND	4.0000		
Nickel, total	ug/L	MW-17	04/01/2016	ND	4.0000		
Nickel, total	ug/L	MW-17	10/19/2016		5.1000		
Nickel, total	ug/L	MW-17	04/17/2017		6.0000		
Nickel, total	ug/L	MW-17	10/11/2017	ND	4.0000		
Nickel, total	ug/L	MW-17	06/01/2018		4.6000		
Nickel, total	ug/L	MW-17	10/03/2018		4.3000		
Nickel, total	ug/L	MW-17	04/08/2019		4.6000		
Nickel, total	ug/L	MW-17	10/11/2019	ND	4.0000		
Nickel, total	ug/L	MW-17	04/27/2020	ND	4.0000		
Nickel, total	ug/L	MW-17	10/09/2020	ND	4.0000		
Nickel, total	ug/L	MW-17	04/09/2021	ND	4.0000		
Nickel, total	ug/L	MW-17	10/25/2021		4.7000		
Nickel, total	ug/L	MW-17	04/11/2022		5.0000		
Nickel, total	ug/L	MW-17	10/12/2022	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	
Nickel, total	ug/L	MW-17	04/06/2023	ND	4.0000		
Nickel, total	ug/L	MW-17	10/09/2023	ND	4.0000		
Nickel, total	ug/L	MW-17	04/04/2024	ND	4.0000		
Selenium, total	ug/L	MW-17	04/07/2014	ND	4.0000		
Selenium, total	ug/L	MW-17	10/23/2014	ND	4.0000		
Selenium, total	ug/L	MW-17	01/16/2015	ND	4.0000		
Selenium, total	ug/L	MW-17	04/02/2015	ND	4.0000		
Selenium, total	ug/L	MW-17	09/15/2015	ND	4.0000		
Selenium, total	ug/L	MW-17	10/26/2015	ND	4.0000		
Selenium, total	ug/L	MW-17	04/01/2016	ND	4.0000		
Selenium, total	ug/L	MW-17	10/19/2016	ND	4.0000		
Selenium, total	ug/L	MW-17	04/17/2017	ND	4.0000		
Selenium, total	ug/L	MW-17	10/11/2017	ND	4.0000		
Selenium, total	ug/L	MW-17	06/01/2018	ND	4.0000		
Selenium, total	ug/L	MW-17	10/03/2018	ND	4.0000		
Selenium, total	ug/L	MW-17	04/08/2019	ND	4.0000		
Selenium, total	ug/L	MW-17	10/11/2019	ND	4.0000		
Selenium, total	ug/L	MW-17	04/27/2020	ND	4.0000		
Selenium, total	ug/L	MW-17	10/09/2020	ND	4.0000		
Selenium, total	ug/L	MW-17	04/09/2021	ND	4.0000		
Selenium, total	ug/L	MW-17	10/25/2021	ND	4.0000		
Selenium, total	ug/L	MW-17	04/11/2022	ND	4.0000		
Selenium, total	ug/L	MW-17	10/12/2022	ND	4.0000		
Selenium, total	ug/L	MW-17	04/06/2023	ND	4.0000		
Selenium, total	ug/L	MW-17	10/09/2023	ND	4.0000		
Selenium, total	ug/L	MW-17	04/04/2024	ND	4.0000		
Silver, total	ug/L	MW-17	04/07/2014	ND	4.0000		
Silver, total	ug/L	MW-17	10/23/2014	ND	4.0000		
Silver, total	ug/L	MW-17	01/16/2015	ND	4.0000		
Silver, total	ug/L	MW-17	04/02/2015	ND	4.0000		
Silver, total	ug/L	MW-17	09/15/2015	ND	4.0000		
Silver, total	ug/L	MW-17	10/26/2015	ND	4.0000		
Silver, total	ug/L	MW-17	04/01/2016	ND	4.0000		
Silver, total	ug/L	MW-17	10/19/2016	ND	4.0000		
Silver, total	ug/L	MW-17	04/17/2017	ND	4.0000		
Silver, total	ug/L	MW-17	10/11/2017	ND	4.0000		
Silver, total	ug/L	MW-17	06/01/2018	ND	8.0000	4.0000	**
Silver, total	ug/L	MW-17	10/03/2018	ND	4.0000		
Silver, total	ug/L	MW-17	04/08/2019	ND	4.0000		
Silver, total	ug/L	MW-17	10/11/2019	ND	4.0000		
Silver, total	ug/L	MW-17	04/27/2020	ND	4.0000		
Silver, total	ug/L	MW-17	10/09/2020	ND	4.0000		
Silver, total	ug/L	MW-17	04/09/2021	ND	4.0000		
Silver, total	ug/L	MW-17	10/25/2021	ND	4.0000		
Silver, total	ug/L	MW-17	04/11/2022	ND	4.0000		
Silver, total	ug/L	MW-17	10/12/2022	ND	4.0000		
Silver, total	ug/L	MW-17	04/06/2023	ND	4.0000		
Silver, total	ug/L	MW-17	10/09/2023	ND	4.0000		
Silver, total	ug/L	MW-17	04/04/2024	ND	4.0000		
Thallium, total	ug/L	MW-17	04/07/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-17	10/23/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-17	01/16/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-17	04/02/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-17	09/15/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-17	10/26/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-17	04/01/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-17	10/19/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-17	04/17/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-17	10/11/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-17	06/01/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-17	10/03/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-17	04/08/2019	ND	2.0000		
Thallium, total	ug/L	MW-17	10/11/2019	ND	2.0000		
Thallium, total	ug/L	MW-17	04/27/2020	ND	2.0000		
Thallium, total	ug/L	MW-17	10/09/2020	ND	2.0000		
Thallium, total	ug/L	MW-17	04/09/2021	ND	2.0000		
Thallium, total	ug/L	MW-17	10/25/2021	ND	2.0000		
Thallium, total	ug/L	MW-17	04/11/2022	ND	2.0000		
Thallium, total	ug/L	MW-17	10/12/2022	ND	2.0000		
Thallium, total	ug/L	MW-17	04/06/2023	ND	2.0000		
Thallium, total	ug/L	MW-17	10/09/2023	ND	2.0000		
Thallium, total	ug/L	MW-17	04/04/2024	ND	2.0000		
Vanadium, total	ug/L	MW-17	04/07/2014	ND	20.0000		
Vanadium, total	ug/L	MW-17	10/23/2014	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-17	01/16/2015	ND	20.0000		
Vanadium, total	ug/L	MW-17	04/02/2015	ND	20.0000		
Vanadium, total	ug/L	MW-17	09/15/2015	ND	20.0000		
Vanadium, total	ug/L	MW-17	10/26/2015	ND	20.0000		
Vanadium, total	ug/L	MW-17	04/01/2016	ND	20.0000		
Vanadium, total	ug/L	MW-17	10/19/2016	ND	20.0000		
Vanadium, total	ug/L	MW-17	04/17/2017	ND	20.0000		
Vanadium, total	ug/L	MW-17	10/11/2017	ND	20.0000		
Vanadium, total	ug/L	MW-17	06/01/2018	ND	20.0000		
Vanadium, total	ug/L	MW-17	10/03/2018	ND	20.0000		
Vanadium, total	ug/L	MW-17	04/08/2019	ND	20.0000		
Vanadium, total	ug/L	MW-17	10/11/2019	ND	20.0000		
Vanadium, total	ug/L	MW-17	04/27/2020	ND	20.0000		
Vanadium, total	ug/L	MW-17	10/09/2020	ND	20.0000		
Vanadium, total	ug/L	MW-17	04/09/2021	ND	20.0000		
Vanadium, total	ug/L	MW-17	10/25/2021	ND	20.0000		
Vanadium, total	ug/L	MW-17	04/11/2022	ND	20.0000		
Vanadium, total	ug/L	MW-17	10/12/2022	ND	20.0000		
Vanadium, total	ug/L	MW-17	04/06/2023	ND	20.0000		
Vanadium, total	ug/L	MW-17	10/09/2023	ND	20.0000		
Vanadium, total	ug/L	MW-17	04/04/2024	ND	20.0000		
Zinc, total	ug/L	MW-17	04/07/2014	ND	20.0000		
Zinc, total	ug/L	MW-17	10/23/2014	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-17	01/16/2015	ND	20.0000		
Zinc, total	ug/L	MW-17	04/02/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-17	09/15/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-17	10/26/2015	ND	20.0000		
Zinc, total	ug/L	MW-17	04/01/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-17	10/19/2016	ND	14.4000		
Zinc, total	ug/L	MW-17	04/17/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-17	10/11/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-17	06/01/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-17	10/03/2018	ND	21.0000		
Zinc, total	ug/L	MW-17	04/08/2019	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-17	10/11/2019	ND	32.2000		
Zinc, total	ug/L	MW-17	04/27/2020	ND	20.0000		
Zinc, total	ug/L	MW-17	10/09/2020	ND	20.0000		
Zinc, total	ug/L	MW-17	04/09/2021	ND	20.0000		
Zinc, total	ug/L	MW-17	10/25/2021	ND	20.0000		
Zinc, total	ug/L	MW-17	04/11/2022	ND	20.0000		
Zinc, total	ug/L	MW-17	10/12/2022	ND	20.0000		
Zinc, total	ug/L	MW-17	04/06/2023	ND	20.0000		
Zinc, total	ug/L	MW-17	10/09/2023	ND	20.0000		
Zinc, total	ug/L	MW-17	04/04/2024	ND	20.0000		
Antimony, total	ug/L	MW-18	04/29/2020	ND	2.0000		
Antimony, total	ug/L	MW-18	04/06/2023	ND	2.0000		
Antimony, total	ug/L	MW-18	10/09/2023	ND	2.0000		
Antimony, total	ug/L	MW-18	04/04/2024	ND	2.0000		
Arsenic, total	ug/L	MW-18	04/29/2020	ND	4.3000		
Arsenic, total	ug/L	MW-18	04/06/2023	ND	6.9000		
Arsenic, total	ug/L	MW-18	10/09/2023	ND	4.5000		
Arsenic, total	ug/L	MW-18	04/04/2024	ND	6.7000		
Barium, total	ug/L	MW-18	04/29/2020	ND	65.7000		
Barium, total	ug/L	MW-18	04/06/2023	ND	48.1000		
Barium, total	ug/L	MW-18	10/09/2023	ND	46.8000		
Barium, total	ug/L	MW-18	04/04/2024	ND	43.8000		
Beryllium, total	ug/L	MW-18	04/29/2020	ND	4.0000		
Beryllium, total	ug/L	MW-18	04/06/2023	ND	4.0000		
Beryllium, total	ug/L	MW-18	10/09/2023	ND	4.0000		
Beryllium, total	ug/L	MW-18	04/04/2024	ND	4.0000		
Cadmium, total	ug/L	MW-18	04/29/2020	ND	0.8000		
Cadmium, total	ug/L	MW-18	04/06/2023	ND	0.8000		
Cadmium, total	ug/L	MW-18	10/09/2023	ND	0.8000		
Cadmium, total	ug/L	MW-18	04/04/2024	ND	0.8000		
Chromium, total	ug/L	MW-18	04/29/2020	ND	8.0000		
Chromium, total	ug/L	MW-18	04/06/2023	ND	8.0000		
Chromium, total	ug/L	MW-18	10/09/2023	ND	8.0000		
Chromium, total	ug/L	MW-18	04/04/2024	ND	8.0000		
Cobalt, total	ug/L	MW-18	04/29/2020	ND	0.5000		
Cobalt, total	ug/L	MW-18	04/06/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-18	10/09/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-18	04/04/2024	ND	0.4000	0.8000	**
Copper, total	ug/L	MW-18	04/29/2020	ND	4.0000		
Copper, total	ug/L	MW-18	04/06/2023	ND	23.9000		

* - Outlier for that well and constituent.
 ** - ND value replaced with median RL.
 *** - ND value replaced with manual RL.
 ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Copper, total	ug/L	MW-18	10/09/2023	ND	4.0000		
Copper, total	ug/L	MW-18	04/04/2024	ND	4.0000		
Lead, total	ug/L	MW-18	04/29/2020	ND	4.0000		
Lead, total	ug/L	MW-18	04/06/2023	ND	4.0000		
Lead, total	ug/L	MW-18	10/09/2023	ND	4.0000		
Lead, total	ug/L	MW-18	04/04/2024	ND	4.0000		
Nickel, total	ug/L	MW-18	04/29/2020	ND	4.0000		
Nickel, total	ug/L	MW-18	04/06/2023	ND	4.0000		
Nickel, total	ug/L	MW-18	10/09/2023	ND	4.0000		
Nickel, total	ug/L	MW-18	04/04/2024	ND	4.0000		
Selenium, total	ug/L	MW-18	04/29/2020	ND	4.0000		
Selenium, total	ug/L	MW-18	04/06/2023	ND	4.0000		
Selenium, total	ug/L	MW-18	10/09/2023	ND	4.0000		
Selenium, total	ug/L	MW-18	04/04/2024	ND	4.0000		
Silver, total	ug/L	MW-18	04/29/2020	ND	4.0000		
Silver, total	ug/L	MW-18	04/06/2023	ND	4.0000		
Silver, total	ug/L	MW-18	10/09/2023	ND	4.0000		
Silver, total	ug/L	MW-18	04/04/2024	ND	4.0000		
Thallium, total	ug/L	MW-18	04/29/2020	ND	2.0000		
Thallium, total	ug/L	MW-18	04/06/2023	ND	2.0000		
Thallium, total	ug/L	MW-18	10/09/2023	ND	2.0000		
Thallium, total	ug/L	MW-18	04/04/2024	ND	2.0000		
Vanadium, total	ug/L	MW-18	04/29/2020	ND	20.0000		
Vanadium, total	ug/L	MW-18	04/06/2023	ND	20.0000		
Vanadium, total	ug/L	MW-18	10/09/2023	ND	20.0000		
Vanadium, total	ug/L	MW-18	04/04/2024	ND	20.0000		
Zinc, total	ug/L	MW-18	04/29/2020	ND	20.0000		
Zinc, total	ug/L	MW-18	04/06/2023	ND	20.0000		
Zinc, total	ug/L	MW-18	10/09/2023	ND	20.0000		
Zinc, total	ug/L	MW-18	04/04/2024	ND	20.0000		
Antimony, total	ug/L	MW-19	04/29/2020	ND	2.0000		
Antimony, total	ug/L	MW-19	04/06/2023	ND	2.0000		
Antimony, total	ug/L	MW-19	10/09/2023	ND	2.0000		
Antimony, total	ug/L	MW-19	04/04/2024	ND	2.0000		
Arsenic, total	ug/L	MW-19	04/29/2020	ND	4.0000		
Arsenic, total	ug/L	MW-19	04/06/2023		4.1000		
Arsenic, total	ug/L	MW-19	10/09/2023		4.2000		
Arsenic, total	ug/L	MW-19	04/04/2024		4.8000		
Barium, total	ug/L	MW-19	04/29/2020		184.0000		
Barium, total	ug/L	MW-19	04/06/2023		210.0000		
Barium, total	ug/L	MW-19	10/09/2023		220.0000		
Barium, total	ug/L	MW-19	04/04/2024		211.0000		
Beryllium, total	ug/L	MW-19	04/29/2020	ND	4.0000		
Beryllium, total	ug/L	MW-19	04/06/2023	ND	4.0000		
Beryllium, total	ug/L	MW-19	10/09/2023	ND	4.0000		
Beryllium, total	ug/L	MW-19	04/04/2024	ND	4.0000		
Cadmium, total	ug/L	MW-19	04/29/2020	ND	0.8000		
Cadmium, total	ug/L	MW-19	04/06/2023	ND	0.8000		
Cadmium, total	ug/L	MW-19	10/09/2023	ND	0.8000		
Cadmium, total	ug/L	MW-19	04/04/2024	ND	0.8000		
Chromium, total	ug/L	MW-19	04/29/2020	ND	8.0000		
Chromium, total	ug/L	MW-19	04/06/2023	ND	8.0000		
Chromium, total	ug/L	MW-19	10/09/2023	ND	8.0000		
Chromium, total	ug/L	MW-19	04/04/2024	ND	8.0000		
Cobalt, total	ug/L	MW-19	04/29/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-19	04/06/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-19	10/09/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-19	04/04/2024	ND	0.4000	0.8000	**
Copper, total	ug/L	MW-19	04/29/2020	ND	4.0000		
Copper, total	ug/L	MW-19	04/06/2023	ND	4.0000		
Copper, total	ug/L	MW-19	10/09/2023	ND	4.0000		
Copper, total	ug/L	MW-19	04/04/2024	ND	4.0000		
Lead, total	ug/L	MW-19	04/29/2020	ND	4.0000		
Lead, total	ug/L	MW-19	04/06/2023	ND	4.0000		
Lead, total	ug/L	MW-19	10/09/2023	ND	4.0000		
Lead, total	ug/L	MW-19	04/04/2024	ND	4.0000		
Nickel, total	ug/L	MW-19	04/29/2020	ND	4.0000		
Nickel, total	ug/L	MW-19	04/06/2023	ND	4.0000		
Nickel, total	ug/L	MW-19	10/09/2023	ND	4.0000		
Nickel, total	ug/L	MW-19	04/04/2024	ND	4.0000		
Selenium, total	ug/L	MW-19	04/29/2020	ND	4.0000		
Selenium, total	ug/L	MW-19	04/06/2023	ND	4.0000		
Selenium, total	ug/L	MW-19	10/09/2023	ND	4.0000		
Selenium, total	ug/L	MW-19	04/04/2024	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-19	04/29/2020	ND	4.0000		
Silver, total	ug/L	MW-19	04/06/2023	ND	4.0000		
Silver, total	ug/L	MW-19	10/09/2023	ND	4.0000		
Silver, total	ug/L	MW-19	04/04/2024	ND	4.0000		
Thallium, total	ug/L	MW-19	04/29/2020	ND	2.0000		
Thallium, total	ug/L	MW-19	04/06/2023	ND	2.0000		
Thallium, total	ug/L	MW-19	10/09/2023	ND	2.0000		
Thallium, total	ug/L	MW-19	04/04/2024	ND	2.0000		
Vanadium, total	ug/L	MW-19	04/29/2020	ND	20.0000		
Vanadium, total	ug/L	MW-19	04/06/2023	ND	20.0000		
Vanadium, total	ug/L	MW-19	10/09/2023	ND	20.0000		
Vanadium, total	ug/L	MW-19	04/04/2024	ND	20.0000		
Zinc, total	ug/L	MW-19	04/29/2020	ND	20.0000		
Zinc, total	ug/L	MW-19	04/06/2023	ND	20.0000		
Zinc, total	ug/L	MW-19	10/09/2023	ND	20.0000		
Zinc, total	ug/L	MW-19	04/04/2024	ND	20.0000		
Antimony, total	ug/L	MW-20	04/29/2020	ND	2.0000		
Antimony, total	ug/L	MW-20	04/06/2023	ND	2.0000		
Antimony, total	ug/L	MW-20	10/09/2023	ND	2.0000		
Antimony, total	ug/L	MW-20	04/04/2024	ND	2.0000		
Arsenic, total	ug/L	MW-20	04/29/2020	ND	4.0000		
Arsenic, total	ug/L	MW-20	04/06/2023	ND	4.0000		
Arsenic, total	ug/L	MW-20	10/09/2023		6.0000		
Arsenic, total	ug/L	MW-20	04/04/2024		5.7000		
Barium, total	ug/L	MW-20	04/29/2020		127.0000		
Barium, total	ug/L	MW-20	04/06/2023		123.0000		
Barium, total	ug/L	MW-20	10/09/2023		127.0000		
Barium, total	ug/L	MW-20	04/04/2024		127.0000		
Beryllium, total	ug/L	MW-20	04/29/2020	ND	4.0000		
Beryllium, total	ug/L	MW-20	04/06/2023	ND	4.0000		
Beryllium, total	ug/L	MW-20	10/09/2023	ND	4.0000		
Beryllium, total	ug/L	MW-20	04/04/2024	ND	4.0000		
Cadmium, total	ug/L	MW-20	04/29/2020	ND	0.8000		
Cadmium, total	ug/L	MW-20	04/06/2023	ND	0.8000		
Cadmium, total	ug/L	MW-20	10/09/2023	ND	0.8000		
Cadmium, total	ug/L	MW-20	04/04/2024	ND	0.8000		
Chromium, total	ug/L	MW-20	04/29/2020	ND	8.0000		
Chromium, total	ug/L	MW-20	04/06/2023	ND	8.0000		
Chromium, total	ug/L	MW-20	10/09/2023	ND	8.0000		
Chromium, total	ug/L	MW-20	04/04/2024	ND	8.0000		
Cobalt, total	ug/L	MW-20	04/29/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-20	04/06/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-20	10/09/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-20	04/04/2024		0.7000		
Copper, total	ug/L	MW-20	04/29/2020	ND	4.0000		
Copper, total	ug/L	MW-20	04/06/2023	ND	4.0000		
Copper, total	ug/L	MW-20	10/09/2023	ND	4.0000		
Copper, total	ug/L	MW-20	04/04/2024	ND	4.0000		
Lead, total	ug/L	MW-20	04/29/2020	ND	4.0000		
Lead, total	ug/L	MW-20	04/06/2023	ND	4.0000		
Lead, total	ug/L	MW-20	10/09/2023	ND	4.0000		
Lead, total	ug/L	MW-20	04/04/2024	ND	4.0000		
Nickel, total	ug/L	MW-20	04/29/2020	ND	4.0000		
Nickel, total	ug/L	MW-20	04/06/2023	ND	4.0000		
Nickel, total	ug/L	MW-20	10/09/2023	ND	4.0000		
Nickel, total	ug/L	MW-20	04/04/2024	ND	4.0000		
Selenium, total	ug/L	MW-20	04/29/2020	ND	4.0000		
Selenium, total	ug/L	MW-20	04/06/2023	ND	4.0000		
Selenium, total	ug/L	MW-20	10/09/2023	ND	4.0000		
Selenium, total	ug/L	MW-20	04/04/2024	ND	4.0000		
Silver, total	ug/L	MW-20	04/29/2020	ND	4.0000		
Silver, total	ug/L	MW-20	04/06/2023	ND	4.0000		
Silver, total	ug/L	MW-20	10/09/2023	ND	4.0000		
Silver, total	ug/L	MW-20	04/04/2024	ND	4.0000		
Thallium, total	ug/L	MW-20	04/29/2020	ND	2.0000		
Thallium, total	ug/L	MW-20	04/06/2023	ND	2.0000		
Thallium, total	ug/L	MW-20	10/09/2023	ND	2.0000		
Thallium, total	ug/L	MW-20	04/04/2024	ND	2.0000		
Vanadium, total	ug/L	MW-20	04/29/2020	ND	20.0000		
Vanadium, total	ug/L	MW-20	04/06/2023	ND	20.0000		
Vanadium, total	ug/L	MW-20	10/09/2023	ND	20.0000		
Vanadium, total	ug/L	MW-20	04/04/2024	ND	20.0000		
Zinc, total	ug/L	MW-20	04/29/2020	ND	20.0000		
Zinc, total	ug/L	MW-20	04/06/2023	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	
Zinc, total	ug/L	MW-20	10/09/2023	ND	20.0000		
Zinc, total	ug/L	MW-20	04/04/2024	ND	20.0000		
Antimony, total	ug/L	MW-21	04/29/2020	ND	2.0000		
Antimony, total	ug/L	MW-21	04/06/2023	ND	2.0000		
Antimony, total	ug/L	MW-21	10/09/2023	ND	2.0000		
Antimony, total	ug/L	MW-21	04/04/2024	ND	2.0000		
Arsenic, total	ug/L	MW-21	04/29/2020	ND	4.0000		
Arsenic, total	ug/L	MW-21	04/06/2023	ND	4.0000		
Arsenic, total	ug/L	MW-21	10/09/2023	ND	4.0000		
Arsenic, total	ug/L	MW-21	04/04/2024	ND	4.0000		
Barium, total	ug/L	MW-21	04/29/2020		233.0000		
Barium, total	ug/L	MW-21	04/06/2023		192.0000		
Barium, total	ug/L	MW-21	10/09/2023		177.0000		
Barium, total	ug/L	MW-21	04/04/2024		207.0000		
Beryllium, total	ug/L	MW-21	04/29/2020	ND	4.0000		
Beryllium, total	ug/L	MW-21	04/06/2023	ND	4.0000		
Beryllium, total	ug/L	MW-21	10/09/2023	ND	4.0000		
Beryllium, total	ug/L	MW-21	04/04/2024	ND	4.0000		
Cadmium, total	ug/L	MW-21	04/29/2020	ND	0.8000		
Cadmium, total	ug/L	MW-21	04/06/2023	ND	0.8000		
Cadmium, total	ug/L	MW-21	10/09/2023	ND	0.8000		
Cadmium, total	ug/L	MW-21	04/04/2024	ND	0.8000		
Chromium, total	ug/L	MW-21	04/29/2020	ND	8.0000		
Chromium, total	ug/L	MW-21	04/06/2023	ND	8.0000		
Chromium, total	ug/L	MW-21	10/09/2023	ND	8.0000		
Chromium, total	ug/L	MW-21	04/04/2024	ND	8.0000		
Cobalt, total	ug/L	MW-21	04/29/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-21	04/06/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-21	10/09/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-21	04/04/2024	ND	0.4000	0.8000	**
Copper, total	ug/L	MW-21	04/29/2020	ND	4.0000		
Copper, total	ug/L	MW-21	04/06/2023	ND	4.0000		
Copper, total	ug/L	MW-21	10/09/2023	ND	4.0000		
Copper, total	ug/L	MW-21	04/04/2024	ND	4.0000		
Lead, total	ug/L	MW-21	04/29/2020	ND	4.0000		
Lead, total	ug/L	MW-21	04/06/2023	ND	4.0000		
Lead, total	ug/L	MW-21	10/09/2023	ND	4.0000		
Lead, total	ug/L	MW-21	04/04/2024	ND	4.0000		
Nickel, total	ug/L	MW-21	04/29/2020	ND	4.0000		
Nickel, total	ug/L	MW-21	04/06/2023	ND	4.0000		
Nickel, total	ug/L	MW-21	10/09/2023	ND	4.0000		
Nickel, total	ug/L	MW-21	04/04/2024	ND	4.0000		
Selenium, total	ug/L	MW-21	04/29/2020	ND	4.0000		
Selenium, total	ug/L	MW-21	04/06/2023	ND	4.0000		
Selenium, total	ug/L	MW-21	10/09/2023	ND	4.0000		
Selenium, total	ug/L	MW-21	04/04/2024	ND	4.0000		
Silver, total	ug/L	MW-21	04/29/2020	ND	4.0000		
Silver, total	ug/L	MW-21	04/06/2023	ND	4.0000		
Silver, total	ug/L	MW-21	10/09/2023	ND	4.0000		
Silver, total	ug/L	MW-21	04/04/2024	ND	4.0000		
Thallium, total	ug/L	MW-21	04/29/2020	ND	2.0000		
Thallium, total	ug/L	MW-21	04/06/2023	ND	2.0000		
Thallium, total	ug/L	MW-21	10/09/2023	ND	2.0000		
Thallium, total	ug/L	MW-21	04/04/2024	ND	2.0000		
Vanadium, total	ug/L	MW-21	04/29/2020	ND	20.0000		
Vanadium, total	ug/L	MW-21	04/06/2023	ND	20.0000		
Vanadium, total	ug/L	MW-21	10/09/2023	ND	20.0000		
Vanadium, total	ug/L	MW-21	04/04/2024	ND	20.0000		
Zinc, total	ug/L	MW-21	04/29/2020	ND	20.0000		
Zinc, total	ug/L	MW-21	04/06/2023	ND	20.0000		
Zinc, total	ug/L	MW-21	10/09/2023	ND	20.0000		
Zinc, total	ug/L	MW-21	04/04/2024	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 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Antimony, total	ug/L	GU-1	04/04/2024	ND	2.0000		3.4000
Arsenic, total	ug/L	GU-1	04/04/2024	ND	4.0000		49.3000
Barium, total	ug/L	GU-1	04/04/2024		454.0000		685.3309
Beryllium, total	ug/L	GU-1	04/04/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	GU-1	04/04/2024	ND	0.8000		1.7000
Chromium, total	ug/L	GU-1	04/04/2024	ND	8.0000		8.0000
Cobalt, total	ug/L	GU-1	04/04/2024	ND	0.4000		4.0000
Copper, total	ug/L	GU-1	04/04/2024	ND	4.0000		23.9000
Lead, total	ug/L	GU-1	04/04/2024	ND	4.0000		4.0000
Nickel, total	ug/L	GU-1	04/04/2024		14.8000		17.1000
Selenium, total	ug/L	GU-1	04/04/2024	ND	4.0000		4.0000
Silver, total	ug/L	GU-1	04/04/2024	ND	4.0000		4.0000
Thallium, total	ug/L	GU-1	04/04/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	GU-1	04/04/2024	ND	20.0000		20.0000
Zinc, total	ug/L	GU-1	04/04/2024	ND	20.0000		45.3000
Antimony, total	ug/L	GU-2	04/04/2024	ND	2.0000		3.4000
Arsenic, total	ug/L	GU-2	04/04/2024	ND	4.0000		49.3000
Barium, total	ug/L	GU-2	04/04/2024		207.0000		685.3309
Beryllium, total	ug/L	GU-2	04/04/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	GU-2	04/04/2024	ND	0.8000		1.7000
Chromium, total	ug/L	GU-2	04/04/2024	ND	8.0000		8.0000
Cobalt, total	ug/L	GU-2	04/04/2024	ND	0.4000		4.0000
Copper, total	ug/L	GU-2	04/04/2024	ND	4.0000		23.9000
Lead, total	ug/L	GU-2	04/04/2024	ND	4.0000		4.0000
Nickel, total	ug/L	GU-2	04/04/2024		7.5000		17.1000
Selenium, total	ug/L	GU-2	04/04/2024	ND	4.0000		4.0000
Silver, total	ug/L	GU-2	04/04/2024	ND	4.0000		4.0000
Thallium, total	ug/L	GU-2	04/04/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	GU-2	04/04/2024	ND	20.0000		20.0000
Zinc, total	ug/L	GU-2	04/04/2024	ND	20.0000		45.3000
Antimony, total	ug/L	MW-10	04/04/2024	ND	2.0000		3.4000
Arsenic, total	ug/L	MW-10	04/04/2024	ND	4.0000		49.3000
Barium, total	ug/L	MW-10	04/04/2024		120.0000		685.3309
Beryllium, total	ug/L	MW-10	04/04/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-10	04/04/2024	ND	0.8000		1.7000
Chromium, total	ug/L	MW-10	04/04/2024	ND	8.0000		8.0000
Cobalt, total	ug/L	MW-10	04/04/2024	ND	0.4000		4.0000
Copper, total	ug/L	MW-10	04/04/2024		13.9000		23.9000
Lead, total	ug/L	MW-10	04/04/2024	ND	4.0000		4.0000
Nickel, total	ug/L	MW-10	04/04/2024	ND	4.0000		17.1000
Selenium, total	ug/L	MW-10	04/04/2024	ND	4.0000		4.0000
Silver, total	ug/L	MW-10	04/04/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW-10	04/04/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-10	04/04/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-10	04/04/2024	ND	20.0000		45.3000
Antimony, total	ug/L	MW-14	04/04/2024	ND	2.0000		3.4000
Arsenic, total	ug/L	MW-14	04/04/2024	ND	4.0000		49.3000
Barium, total	ug/L	MW-14	04/04/2024		53.7000	**	685.3309
Beryllium, total	ug/L	MW-14	04/04/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-14	04/04/2024		1.0000		1.7000
Chromium, total	ug/L	MW-14	04/04/2024	ND	8.0000		8.0000
Cobalt, total	ug/L	MW-14	04/04/2024	ND	0.4000		4.0000
Copper, total	ug/L	MW-14	04/04/2024		6.0000		23.9000
Lead, total	ug/L	MW-14	04/04/2024	ND	4.0000		4.0000
Nickel, total	ug/L	MW-14	04/04/2024	ND	4.0000		17.1000
Selenium, total	ug/L	MW-14	04/04/2024	ND	4.0000		4.0000
Silver, total	ug/L	MW-14	04/04/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW-14	04/04/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-14	04/04/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-14	04/04/2024	ND	20.0000		45.3000
Antimony, total	ug/L	MW-15	04/04/2024	ND	2.0000		3.4000
Arsenic, total	ug/L	MW-15	04/04/2024	ND	4.0000		49.3000
Barium, total	ug/L	MW-15	04/04/2024		86.0000		685.3309
Beryllium, total	ug/L	MW-15	04/04/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-15	04/04/2024	ND	0.8000		1.7000
Chromium, total	ug/L	MW-15	04/04/2024	ND	8.0000		8.0000
Cobalt, total	ug/L	MW-15	04/04/2024		0.4000		4.0000
Copper, total	ug/L	MW-15	04/04/2024	ND	4.0000		23.9000
Lead, total	ug/L	MW-15	04/04/2024	ND	4.0000		4.0000
Nickel, total	ug/L	MW-15	04/04/2024		17.6000	***	17.1000
Selenium, total	ug/L	MW-15	04/04/2024	ND	4.0000		4.0000
Silver, total	ug/L	MW-15	04/04/2024	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
Thallium, total	ug/L	MW-15	04/04/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-15	04/04/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-15	04/04/2024	ND	20.0000		45.3000
Antimony, total	ug/L	MW-16	04/04/2024	ND	2.0000		3.4000
Arsenic, total	ug/L	MW-16	04/04/2024		4.5000		49.3000
Barium, total	ug/L	MW-16	04/04/2024		974.0000	*	685.3309
Beryllium, total	ug/L	MW-16	04/04/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-16	04/04/2024	ND	0.8000		1.7000
Chromium, total	ug/L	MW-16	04/04/2024	ND	8.0000		8.0000
Cobalt, total	ug/L	MW-16	04/04/2024		0.8000		4.0000
Copper, total	ug/L	MW-16	04/04/2024	ND	4.0000		23.9000
Lead, total	ug/L	MW-16	04/04/2024	ND	4.0000		4.0000
Nickel, total	ug/L	MW-16	04/04/2024		14.5000		17.1000
Selenium, total	ug/L	MW-16	04/04/2024	ND	4.0000		4.0000
Silver, total	ug/L	MW-16	04/04/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW-16	04/04/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-16	04/04/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-16	04/04/2024	ND	20.0000		45.3000
Antimony, total	ug/L	MW-3AR	04/04/2024	ND	2.0000		3.4000
Arsenic, total	ug/L	MW-3AR	04/04/2024		7.0000		49.3000
Barium, total	ug/L	MW-3AR	04/04/2024		357.0000		685.3309
Beryllium, total	ug/L	MW-3AR	04/04/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-3AR	04/04/2024	ND	0.8000		1.7000
Chromium, total	ug/L	MW-3AR	04/04/2024	ND	8.0000		8.0000
Cobalt, total	ug/L	MW-3AR	04/04/2024		0.8000		4.0000
Copper, total	ug/L	MW-3AR	04/04/2024	ND	4.0000		23.9000
Lead, total	ug/L	MW-3AR	04/04/2024	ND	4.0000		4.0000
Nickel, total	ug/L	MW-3AR	04/04/2024		6.2000		17.1000
Selenium, total	ug/L	MW-3AR	04/04/2024	ND	4.0000		4.0000
Silver, total	ug/L	MW-3AR	04/04/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW-3AR	04/04/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-3AR	04/04/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-3AR	04/04/2024	ND	20.0000		45.3000
Antimony, total	ug/L	MW-6B	04/04/2024	ND	2.0000		3.4000
Arsenic, total	ug/L	MW-6B	04/04/2024	ND	4.0000		49.3000
Barium, total	ug/L	MW-6B	04/04/2024		65.8000		685.3309
Beryllium, total	ug/L	MW-6B	04/04/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-6B	04/04/2024	ND	0.8000		1.7000
Chromium, total	ug/L	MW-6B	04/04/2024	ND	8.0000		8.0000
Cobalt, total	ug/L	MW-6B	04/04/2024	ND	0.4000		4.0000
Copper, total	ug/L	MW-6B	04/04/2024		4.8000		23.9000
Lead, total	ug/L	MW-6B	04/04/2024	ND	4.0000		4.0000
Nickel, total	ug/L	MW-6B	04/04/2024	ND	4.0000		17.1000
Selenium, total	ug/L	MW-6B	04/04/2024	ND	4.0000	**	4.0000
Silver, total	ug/L	MW-6B	04/04/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW-6B	04/04/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-6B	04/04/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-6B	04/04/2024	ND	20.0000		45.3000
Antimony, total	ug/L	MW-7A	04/04/2024	ND	2.0000		3.4000
Arsenic, total	ug/L	MW-7A	04/04/2024	ND	4.0000		49.3000
Barium, total	ug/L	MW-7A	04/04/2024		74.3000		685.3309
Beryllium, total	ug/L	MW-7A	04/04/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-7A	04/04/2024	ND	0.8000		1.7000
Chromium, total	ug/L	MW-7A	04/04/2024	ND	8.0000		8.0000
Cobalt, total	ug/L	MW-7A	04/04/2024	ND	0.4000		4.0000
Copper, total	ug/L	MW-7A	04/04/2024	ND	4.0000		23.9000
Lead, total	ug/L	MW-7A	04/04/2024	ND	4.0000		4.0000
Nickel, total	ug/L	MW-7A	04/04/2024		12.6000	**	17.1000
Selenium, total	ug/L	MW-7A	04/04/2024	ND	4.0000		4.0000
Silver, total	ug/L	MW-7A	04/04/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW-7A	04/04/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-7A	04/04/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-7A	04/04/2024	ND	20.0000		45.3000
Antimony, total	ug/L	MW-7B	04/04/2024	ND	2.0000		3.4000
Arsenic, total	ug/L	MW-7B	04/04/2024	ND	4.0000		49.3000
Barium, total	ug/L	MW-7B	04/04/2024		643.0000		685.3309
Beryllium, total	ug/L	MW-7B	04/04/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-7B	04/04/2024	ND	0.8000		1.7000
Chromium, total	ug/L	MW-7B	04/04/2024	ND	8.0000		8.0000
Cobalt, total	ug/L	MW-7B	04/04/2024	ND	0.4000		4.0000
Copper, total	ug/L	MW-7B	04/04/2024	ND	4.0000		23.9000
Lead, total	ug/L	MW-7B	04/04/2024	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-7B	04/04/2024		12.1000		17.1000
Selenium, total	ug/L	MW-7B	04/04/2024	ND	4.0000		4.0000
Silver, total	ug/L	MW-7B	04/04/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW-7B	04/04/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-7B	04/04/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-7B	04/04/2024	ND	20.0000		45.3000
Antimony, total	ug/L	MW-8	04/04/2024	ND	2.0000		3.4000
Arsenic, total	ug/L	MW-8	04/04/2024		30.9000	**	49.3000
Barium, total	ug/L	MW-8	04/04/2024		613.0000	**	685.3309
Beryllium, total	ug/L	MW-8	04/04/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-8	04/04/2024	ND	0.8000		1.7000
Chromium, total	ug/L	MW-8	04/04/2024	ND	8.0000		8.0000
Cobalt, total	ug/L	MW-8	04/04/2024		2.6000		4.0000
Copper, total	ug/L	MW-8	04/04/2024	ND	4.0000		23.9000
Lead, total	ug/L	MW-8	04/04/2024		5.8000	*	4.0000
Nickel, total	ug/L	MW-8	04/04/2024		6.3000		17.1000
Selenium, total	ug/L	MW-8	04/04/2024		4.2000	*	4.0000
Silver, total	ug/L	MW-8	04/04/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW-8	04/04/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-8	04/04/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-8	04/04/2024	ND	20.0000		45.3000
Antimony, total	ug/L	MW-9	04/04/2024	ND	2.0000		3.4000
Arsenic, total	ug/L	MW-9	04/04/2024		5.7000		49.3000
Barium, total	ug/L	MW-9	04/04/2024		56.2000		685.3309
Beryllium, total	ug/L	MW-9	04/04/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-9	04/04/2024	ND	0.8000		1.7000
Chromium, total	ug/L	MW-9	04/04/2024	ND	8.0000		8.0000
Cobalt, total	ug/L	MW-9	04/04/2024		0.5000		4.0000
Copper, total	ug/L	MW-9	04/04/2024	ND	4.0000		23.9000
Lead, total	ug/L	MW-9	04/04/2024	ND	4.0000		4.0000
Nickel, total	ug/L	MW-9	04/04/2024	ND	4.0000		17.1000
Selenium, total	ug/L	MW-9	04/04/2024	ND	4.0000		4.0000
Silver, total	ug/L	MW-9	04/04/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW-9	04/04/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-9	04/04/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-9	04/04/2024	ND	20.0000		45.3000

* - 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			Downgradient		
	Detect	N	Proportion	Detect	N	Proportion
Antimony, total	2	88	0.023	7	403	0.017
Arsenic, total	40	82	0.488	204	405	0.504
Barium, total	84	84	1.000	404	404	1.000
Beryllium, total	0	88	0.000	3	403	0.007
Cadmium, total	7	87	0.080	62	403	0.154
Chromium, total	0	88	0.000	22	404	0.054
Cobalt, total	16	83	0.193	163	404	0.403
Copper, total	7	87	0.080	134	407	0.329
Lead, total	0	88	0.000	62	404	0.153
Nickel, total	29	85	0.341	352	407	0.865
Selenium, total	1	88	0.011	35	406	0.086
Silver, total	0	88	0.000	0	403	0.000
Thallium, total	0	88	0.000	3	402	0.007
Vanadium, total	0	88	0.000	38	404	0.094
Zinc, total	14	88	0.159	201	406	0.495

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	2	88	0.023									nonpar
Arsenic, total	40	82	0.488	3.652	1.294					2.326	lognor	nonpar
Barium, total	84	84	1.000	3.811	1.200					2.326	lognor	lognor
Beryllium, total	0	88	0.000									nonpar
Cadmium, total	7	87	0.080	0.495	0.495					2.326	normal	nonpar
Chromium, total	0	88	0.000									nonpar
Cobalt, total	16	83	0.193	1.296	0.193					2.326	normal	nonpar
Copper, total	7	87	0.080	1.398	1.202					2.326	normal	nonpar
Lead, total	0	88	0.000									nonpar
Nickel, total	29	85	0.341	2.349	0.847					2.326	lognor	nonpar
Selenium, total	1	88	0.011									nonpar
Silver, total	0	88	0.000									nonpar
Thallium, total	0	88	0.000									nonpar
Vanadium, total	0	88	0.000									nonpar
Zinc, total	14	88	0.159	0.797	0.459					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	2	88					3.4000	nonpar		0.99
Arsenic, total	ug/L	40	82					49.3000	nonpar		0.99
Barium, total	ug/L	84	84	4.8867	0.6886	0.0100	2.3862	685.3309	lognor		
Beryllium, total	ug/L	0	88					4.0000	nonpar	***	0.99
Cadmium, total	ug/L	7	87					1.7000	nonpar		0.99
Chromium, total	ug/L	0	88					8.0000	nonpar	***	0.99
Cobalt, total	ug/L	16	83					4.0000	nonpar		0.99
Copper, total	ug/L	7	87					23.9000	nonpar		0.99
Lead, total	ug/L	0	88					4.0000	nonpar	***	0.99
Nickel, total	ug/L	29	85					17.1000	nonpar		0.99
Selenium, total	ug/L	1	88					4.0000	nonpar	***	0.99
Silver, total	ug/L	0	88					4.0000	nonpar	***	0.99
Thallium, total	ug/L	0	88					2.0000	nonpar	***	0.99
Vanadium, total	ug/L	0	88					20.0000	nonpar	***	0.99
Zinc, total	ug/L	14	88					45.3000	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
Arsenic, total	ug/L	MW-12	04/07/2014	21.7000		04/07/2014-04/04/2024	21	0.5381
Arsenic, total	ug/L	MW-12	10/11/2017	24.3000		04/07/2014-04/04/2024	21	0.5381
Cadmium, total	ug/L	MW-12	10/09/2020	4.0000		04/07/2014-04/04/2024	23	0.5065
Cobalt, total	ug/L	MW-12	04/07/2014	4.0000	< 4.0000	04/07/2014-04/04/2024	23	0.5162
Cobalt, total	ug/L	MW-12	10/12/2022	2.6000		04/07/2014-04/04/2024	23	0.5162
Cobalt, total	ug/L	MW-17	04/07/2014	4.0000	< 4.0000	04/07/2014-04/04/2024	23	0.5065

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
Barium, total	ug/L	MW-14	04/06/2023		411.0000	685.3309
Barium, total	ug/L	MW-14	10/09/2023		1430.0000 *	685.3309
Barium, total	ug/L	MW-14	04/04/2024		53.7000	685.3309
Nickel, total	ug/L	MW-15	10/31/2008		62.8000 *	17.1000
Nickel, total	ug/L	MW-15	01/06/2009		68.0000 *	17.1000
Nickel, total	ug/L	MW-15	02/10/2009		57.5000 *	17.1000
Nickel, total	ug/L	MW-15	04/13/2009		73.0000 *	17.1000
Nickel, total	ug/L	MW-15	06/09/2009		77.8000 *	17.1000
Nickel, total	ug/L	MW-15	10/28/2009		65.7000 *	17.1000
Nickel, total	ug/L	MW-15	04/19/2010		76.8000 *	17.1000
Nickel, total	ug/L	MW-15	10/20/2010		87.4000 *	17.1000
Nickel, total	ug/L	MW-15	04/20/2011		60.4000 *	17.1000
Nickel, total	ug/L	MW-15	10/13/2011		73.1000 *	17.1000
Nickel, total	ug/L	MW-15	04/25/2012		85.6000 *	17.1000
Nickel, total	ug/L	MW-15	10/22/2012		39.3000 *	17.1000
Nickel, total	ug/L	MW-15	04/15/2013		53.7000 *	17.1000
Nickel, total	ug/L	MW-15	08/06/2013		52.0000 *	17.1000
Nickel, total	ug/L	MW-15	04/07/2014		30.3000 *	17.1000
Nickel, total	ug/L	MW-15	10/23/2014		51.9000 *	17.1000
Nickel, total	ug/L	MW-15	04/02/2015		48.0000 *	17.1000
Nickel, total	ug/L	MW-15	10/26/2015		51.7000 *	17.1000
Nickel, total	ug/L	MW-15	04/01/2016		18.8000 *	17.1000
Nickel, total	ug/L	MW-15	10/19/2016		24.7000 *	17.1000
Nickel, total	ug/L	MW-15	04/17/2017		20.2000 *	17.1000
Nickel, total	ug/L	MW-15	10/11/2017		16.5000 *	17.1000
Nickel, total	ug/L	MW-15	06/01/2018		32.2000 *	17.1000
Nickel, total	ug/L	MW-15	10/03/2018		34.8000 *	17.1000
Nickel, total	ug/L	MW-15	04/08/2019		14.3000 *	17.1000
Nickel, total	ug/L	MW-15	10/11/2019		18.8000 *	17.1000
Nickel, total	ug/L	MW-15	04/27/2020		15.1000 *	17.1000
Nickel, total	ug/L	MW-15	10/09/2020		29.7000 *	17.1000
Nickel, total	ug/L	MW-15	04/09/2021		17.7000 *	17.1000
Nickel, total	ug/L	MW-15	10/25/2021		16.2000 *	17.1000
Nickel, total	ug/L	MW-15	04/11/2022		13.7000 *	17.1000
Nickel, total	ug/L	MW-15	10/12/2022		34.2000 *	17.1000
Nickel, total	ug/L	MW-15	04/06/2023		14.4000 *	17.1000
Nickel, total	ug/L	MW-15	10/09/2023		47.6000 *	17.1000
Nickel, total	ug/L	MW-15	04/04/2024		17.6000 *	17.1000
Barium, total	ug/L	MW-16	10/31/2008		596.0000	685.3309
Barium, total	ug/L	MW-16	02/10/2009		616.0000	685.3309
Barium, total	ug/L	MW-16	04/13/2009		599.0000	685.3309
Barium, total	ug/L	MW-16	06/09/2009		838.0000 *	685.3309
Barium, total	ug/L	MW-16	10/28/2009		598.0000	685.3309
Barium, total	ug/L	MW-16	04/19/2010		742.0000 *	685.3309
Barium, total	ug/L	MW-16	10/20/2010		727.0000 *	685.3309
Barium, total	ug/L	MW-16	04/20/2011		567.0000	685.3309
Barium, total	ug/L	MW-16	10/13/2011		493.0000	685.3309
Barium, total	ug/L	MW-16	04/25/2012		504.0000	685.3309
Barium, total	ug/L	MW-16	10/22/2012		683.0000	685.3309
Barium, total	ug/L	MW-16	04/15/2013		485.0000	685.3309
Barium, total	ug/L	MW-16	08/06/2013		481.0000	685.3309
Barium, total	ug/L	MW-16	04/07/2014		519.0000	685.3309
Barium, total	ug/L	MW-16	10/23/2014		542.0000	685.3309
Barium, total	ug/L	MW-16	04/02/2015		534.0000	685.3309
Barium, total	ug/L	MW-16	10/26/2015		572.0000	685.3309
Barium, total	ug/L	MW-16	04/01/2016		602.0000	685.3309
Barium, total	ug/L	MW-16	10/19/2016		525.0000	685.3309
Barium, total	ug/L	MW-16	04/17/2017		414.0000	685.3309
Barium, total	ug/L	MW-16	10/11/2017		286.0000	685.3309
Barium, total	ug/L	MW-16	06/01/2018		528.0000	685.3309
Barium, total	ug/L	MW-16	10/03/2018		274.0000	685.3309
Barium, total	ug/L	MW-16	04/08/2019		241.0000	685.3309
Barium, total	ug/L	MW-16	10/11/2019		236.0000	685.3309
Barium, total	ug/L	MW-16	04/27/2020		420.0000	685.3309
Barium, total	ug/L	MW-16	10/09/2020		264.0000	685.3309
Barium, total	ug/L	MW-16	04/09/2021		526.0000	685.3309
Barium, total	ug/L	MW-16	10/25/2021		450.0000	685.3309
Barium, total	ug/L	MW-16	04/11/2022		557.0000	685.3309
Barium, total	ug/L	MW-16	10/12/2022		350.0000	685.3309
Barium, total	ug/L	MW-16	04/06/2023		548.0000	685.3309
Barium, total	ug/L	MW-16	10/09/2023		321.0000	685.3309

* - 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-16	04/04/2024		974.0000	*	685.3309
Selenium, total	ug/L	MW-6B	04/22/2008	ND	5.0000		4.0000
Selenium, total	ug/L	MW-6B	06/24/2008	ND	5.0000		4.0000
Selenium, total	ug/L	MW-6B	08/01/2008	ND	5.0000		4.0000
Selenium, total	ug/L	MW-6B	10/31/2008	ND	4.0000		4.0000
Selenium, total	ug/L	MW-6B	01/06/2009	ND	4.0000		4.0000
Selenium, total	ug/L	MW-6B	04/14/2009	ND	4.0000		4.0000
Selenium, total	ug/L	MW-6B	10/28/2009	ND	4.0000		4.0000
Selenium, total	ug/L	MW-6B	04/19/2010	ND	4.0000		4.0000
Selenium, total	ug/L	MW-6B	10/20/2010	ND	4.0000		4.0000
Selenium, total	ug/L	MW-6B	04/20/2011	ND	4.0000		4.0000
Selenium, total	ug/L	MW-6B	10/13/2011	ND	4.0000		4.0000
Selenium, total	ug/L	MW-6B	04/25/2012	ND	4.0000		4.0000
Selenium, total	ug/L	MW-6B	04/15/2013	ND	4.0000		4.0000
Selenium, total	ug/L	MW-6B	08/06/2013	ND	4.0000		4.0000
Selenium, total	ug/L	MW-6B	04/07/2014	ND	4.0000		4.0000
Selenium, total	ug/L	MW-6B	10/23/2014	ND	4.0000		4.0000
Selenium, total	ug/L	MW-6B	04/02/2015	ND	4.0000		4.0000
Selenium, total	ug/L	MW-6B	10/26/2015	ND	4.0000		4.0000
Selenium, total	ug/L	MW-6B	04/01/2016	ND	4.0000		4.0000
Selenium, total	ug/L	MW-6B	10/19/2016	ND	4.0000		4.0000
Selenium, total	ug/L	MW-6B	04/17/2017	ND	4.0000		4.0000
Selenium, total	ug/L	MW-6B	10/11/2017	ND	4.0000		4.0000
Selenium, total	ug/L	MW-6B	06/01/2018	ND	4.0000		4.0000
Selenium, total	ug/L	MW-6B	10/03/2018	ND	4.0000		4.0000
Selenium, total	ug/L	MW-6B	04/08/2019	ND	4.0000		4.0000
Selenium, total	ug/L	MW-6B	10/11/2019	ND	4.0000		4.0000
Selenium, total	ug/L	MW-6B	04/27/2020	ND	4.0000		4.0000
Selenium, total	ug/L	MW-6B	04/09/2021		7.4000	*	4.0000
Selenium, total	ug/L	MW-6B	10/25/2021	ND	4.0000		4.0000
Selenium, total	ug/L	MW-6B	04/11/2022	ND	4.0000		4.0000
Selenium, total	ug/L	MW-6B	04/06/2023		6.1000	*	4.0000
Selenium, total	ug/L	MW-6B	04/04/2024	ND	4.0000		4.0000
Nickel, total	ug/L	MW-7A	04/22/2008		28.0000	*	17.1000
Nickel, total	ug/L	MW-7A	06/24/2008		43.0000	*	17.1000
Nickel, total	ug/L	MW-7A	08/01/2008		42.0000	*	17.1000
Nickel, total	ug/L	MW-7A	10/31/2008		49.8000	*	17.1000
Nickel, total	ug/L	MW-7A	01/06/2009		46.4000	*	17.1000
Nickel, total	ug/L	MW-7A	04/13/2009		51.4000	*	17.1000
Nickel, total	ug/L	MW-7A	06/09/2009		53.5000	*	17.1000
Nickel, total	ug/L	MW-7A	10/28/2009		231.0000	*	17.1000
Nickel, total	ug/L	MW-7A	04/19/2010		168.0000	*	17.1000
Nickel, total	ug/L	MW-7A	10/20/2010		207.0000	*	17.1000
Nickel, total	ug/L	MW-7A	04/20/2011		12.6000		17.1000
Nickel, total	ug/L	MW-7A	04/25/2012		14.5000		17.1000
Nickel, total	ug/L	MW-7A	04/15/2013		12.2000		17.1000
Nickel, total	ug/L	MW-7A	04/07/2014		35.5000	*	17.1000
Nickel, total	ug/L	MW-7A	04/02/2015		44.8000	*	17.1000
Nickel, total	ug/L	MW-7A	04/01/2016		43.4000	*	17.1000
Nickel, total	ug/L	MW-7A	10/19/2016		42.5000	*	17.1000
Nickel, total	ug/L	MW-7A	04/17/2017		62.4000	*	17.1000
Nickel, total	ug/L	MW-7A	10/11/2017		37.9000	*	17.1000
Nickel, total	ug/L	MW-7A	06/01/2018		32.3000	*	17.1000
Nickel, total	ug/L	MW-7A	10/03/2018		40.2000	*	17.1000
Nickel, total	ug/L	MW-7A	04/08/2019		34.9000	*	17.1000
Nickel, total	ug/L	MW-7A	10/11/2019		40.9000	*	17.1000
Nickel, total	ug/L	MW-7A	04/27/2020		26.3000	*	17.1000
Nickel, total	ug/L	MW-7A	04/09/2021		46.3000	*	17.1000
Nickel, total	ug/L	MW-7A	10/25/2021		25.8000	*	17.1000
Nickel, total	ug/L	MW-7A	04/11/2022		54.8000	*	17.1000
Nickel, total	ug/L	MW-7A	04/06/2023		27.8000	*	17.1000
Nickel, total	ug/L	MW-7A	04/04/2024		12.6000		17.1000
Arsenic, total	ug/L	MW-8	04/22/2008		77.0000	*	49.3000
Arsenic, total	ug/L	MW-8	06/24/2008		141.0000	*	49.3000
Arsenic, total	ug/L	MW-8	08/01/2008		143.0000	*	49.3000
Arsenic, total	ug/L	MW-8	10/31/2008		178.0000	*	49.3000
Arsenic, total	ug/L	MW-8	01/06/2009		95.9000	*	49.3000
Arsenic, total	ug/L	MW-8	04/13/2009		100.0000	*	49.3000
Arsenic, total	ug/L	MW-8	06/09/2009		149.0000	*	49.3000
Arsenic, total	ug/L	MW-8	10/28/2009		173.0000	*	49.3000
Arsenic, total	ug/L	MW-8	04/19/2010		141.0000	*	49.3000

* - 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-8	10/20/2010		227.0000 *	49.3000
Arsenic, total	ug/L	MW-8	04/20/2011		124.0000 *	49.3000
Arsenic, total	ug/L	MW-8	10/13/2011		183.0000 *	49.3000
Arsenic, total	ug/L	MW-8	04/25/2012		144.0000 *	49.3000
Arsenic, total	ug/L	MW-8	10/22/2012		138.0000 *	49.3000
Arsenic, total	ug/L	MW-8	04/15/2013		68.3000 *	49.3000
Arsenic, total	ug/L	MW-8	08/06/2013		135.0000 *	49.3000
Arsenic, total	ug/L	MW-8	04/07/2014		74.0000 *	49.3000
Arsenic, total	ug/L	MW-8	10/23/2014		117.0000 *	49.3000
Arsenic, total	ug/L	MW-8	04/02/2015		48.3000 *	49.3000
Arsenic, total	ug/L	MW-8	10/26/2015		90.3000 *	49.3000
Arsenic, total	ug/L	MW-8	04/01/2016		63.5000 *	49.3000
Arsenic, total	ug/L	MW-8	10/19/2016		107.0000 *	49.3000
Arsenic, total	ug/L	MW-8	04/17/2017		55.9000 *	49.3000
Arsenic, total	ug/L	MW-8	10/11/2017		47.2000 *	49.3000
Arsenic, total	ug/L	MW-8	06/01/2018		32.5000 *	49.3000
Arsenic, total	ug/L	MW-8	10/03/2018		9.7000 *	49.3000
Arsenic, total	ug/L	MW-8	04/08/2019		33.1000 *	49.3000
Arsenic, total	ug/L	MW-8	10/11/2019		75.7000 *	49.3000
Arsenic, total	ug/L	MW-8	04/27/2020		56.2000 *	49.3000
Arsenic, total	ug/L	MW-8	10/09/2020		72.9000 *	49.3000
Arsenic, total	ug/L	MW-8	04/09/2021		95.1000 *	49.3000
Arsenic, total	ug/L	MW-8	06/23/2021		57.7000 *	49.3000
Arsenic, total	ug/L	MW-8	10/25/2021		125.0000 *	49.3000
Arsenic, total	ug/L	MW-8	04/11/2022		220.0000 *	49.3000
Arsenic, total	ug/L	MW-8	10/12/2022		360.0000 *	49.3000
Arsenic, total	ug/L	MW-8	04/06/2023		31.7000 *	49.3000
Arsenic, total	ug/L	MW-8	10/09/2023		165.0000 *	49.3000
Arsenic, total	ug/L	MW-8	04/04/2024		30.9000 *	49.3000
Barium, total	ug/L	MW-8	04/22/2008		584.0000	685.3309
Barium, total	ug/L	MW-8	06/24/2008		664.0000	685.3309
Barium, total	ug/L	MW-8	08/01/2008		508.0000	685.3309
Barium, total	ug/L	MW-8	10/31/2008		892.0000 *	685.3309
Barium, total	ug/L	MW-8	01/06/2009		556.0000	685.3309
Barium, total	ug/L	MW-8	04/13/2009		709.0000 *	685.3309
Barium, total	ug/L	MW-8	06/09/2009		740.0000 *	685.3309
Barium, total	ug/L	MW-8	10/28/2009		895.0000 *	685.3309
Barium, total	ug/L	MW-8	04/19/2010		1130.0000 *	685.3309
Barium, total	ug/L	MW-8	10/20/2010		1970.0000 *	685.3309
Barium, total	ug/L	MW-8	04/20/2011		807.0000 *	685.3309
Barium, total	ug/L	MW-8	10/13/2011		1390.0000 *	685.3309
Barium, total	ug/L	MW-8	04/25/2012		998.0000 *	685.3309
Barium, total	ug/L	MW-8	10/22/2012		864.0000 *	685.3309
Barium, total	ug/L	MW-8	04/15/2013		762.0000 *	685.3309
Barium, total	ug/L	MW-8	08/06/2013		959.0000 *	685.3309
Barium, total	ug/L	MW-8	04/07/2014		1060.0000 *	685.3309
Barium, total	ug/L	MW-8	10/23/2014		772.0000 *	685.3309
Barium, total	ug/L	MW-8	04/02/2015		536.0000	685.3309
Barium, total	ug/L	MW-8	10/26/2015		717.0000 *	685.3309
Barium, total	ug/L	MW-8	04/01/2016		547.0000	685.3309
Barium, total	ug/L	MW-8	10/19/2016		871.0000 *	685.3309
Barium, total	ug/L	MW-8	04/17/2017		623.0000	685.3309
Barium, total	ug/L	MW-8	10/11/2017		649.0000	685.3309
Barium, total	ug/L	MW-8	06/01/2018		738.0000 *	685.3309
Barium, total	ug/L	MW-8	10/03/2018		220.0000	685.3309
Barium, total	ug/L	MW-8	04/08/2019		716.0000 *	685.3309
Barium, total	ug/L	MW-8	10/11/2019		1060.0000 *	685.3309
Barium, total	ug/L	MW-8	04/27/2020		680.0000	685.3309
Barium, total	ug/L	MW-8	10/09/2020		920.0000 *	685.3309
Barium, total	ug/L	MW-8	04/09/2021		833.0000 *	685.3309
Barium, total	ug/L	MW-8	10/25/2021		1160.0000 *	685.3309
Barium, total	ug/L	MW-8	04/11/2022		2160.0000 *	685.3309
Barium, total	ug/L	MW-8	10/12/2022		2840.0000 *	685.3309
Barium, total	ug/L	MW-8	04/06/2023		399.0000	685.3309
Barium, total	ug/L	MW-8	10/09/2023		1610.0000 *	685.3309
Barium, total	ug/L	MW-8	04/04/2024		613.0000	685.3309
Lead, total	ug/L	MW-8	04/22/2008	ND	5.0000	4.0000
Lead, total	ug/L	MW-8	06/24/2008	ND	5.0000	4.0000
Lead, total	ug/L	MW-8	08/01/2008	ND	5.0000	4.0000
Lead, total	ug/L	MW-8	10/31/2008	ND	4.0000	4.0000
Lead, total	ug/L	MW-8	01/06/2009	ND	4.0000	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
Lead, total	ug/L	MW-8	04/13/2009	ND	4.0000	4.0000
Lead, total	ug/L	MW-8	06/09/2009	ND	4.0000	4.0000
Lead, total	ug/L	MW-8	10/28/2009	ND	4.0000	4.0000
Lead, total	ug/L	MW-8	04/19/2010	ND	20.0000	4.0000
Lead, total	ug/L	MW-8	10/20/2010		45.2000 *	4.0000
Lead, total	ug/L	MW-8	04/20/2011	ND	4.0000	4.0000
Lead, total	ug/L	MW-8	10/13/2011		11.1000 *	4.0000
Lead, total	ug/L	MW-8	04/25/2012		9.4000 *	4.0000
Lead, total	ug/L	MW-8	10/22/2012		5.5000 *	4.0000
Lead, total	ug/L	MW-8	04/15/2013		7.1000 *	4.0000
Lead, total	ug/L	MW-8	08/06/2013		6.9000 *	4.0000
Lead, total	ug/L	MW-8	04/07/2014		10.7000 *	4.0000
Lead, total	ug/L	MW-8	10/23/2014	ND	4.0000	4.0000
Lead, total	ug/L	MW-8	04/02/2015	ND	4.0000	4.0000
Lead, total	ug/L	MW-8	10/26/2015	ND	4.0000	4.0000
Lead, total	ug/L	MW-8	04/01/2016	ND	4.0000	4.0000
Lead, total	ug/L	MW-8	10/19/2016	ND	4.0000	4.0000
Lead, total	ug/L	MW-8	04/17/2017	ND	4.0000	4.0000
Lead, total	ug/L	MW-8	10/11/2017	ND	4.0000	4.0000
Lead, total	ug/L	MW-8	06/01/2018	ND	4.0000	4.0000
Lead, total	ug/L	MW-8	10/03/2018	ND	4.0000	4.0000
Lead, total	ug/L	MW-8	04/08/2019		6.4000 *	4.0000
Lead, total	ug/L	MW-8	10/11/2019	ND	4.0000	4.0000
Lead, total	ug/L	MW-8	04/27/2020	ND	4.0000	4.0000
Lead, total	ug/L	MW-8	10/09/2020	ND	4.0000	4.0000
Lead, total	ug/L	MW-8	04/09/2021	ND	4.0000	4.0000
Lead, total	ug/L	MW-8	10/25/2021	ND	4.0000	4.0000
Lead, total	ug/L	MW-8	04/11/2022		6.9000 *	4.0000
Lead, total	ug/L	MW-8	10/12/2022	ND	4.0000	4.0000
Lead, total	ug/L	MW-8	04/06/2023	ND	4.0000	4.0000
Lead, total	ug/L	MW-8	10/09/2023	ND	4.0000	4.0000
Lead, total	ug/L	MW-8	04/04/2024		5.8000 *	4.0000
Selenium, total	ug/L	MW-8	04/22/2008	ND	5.0000	4.0000
Selenium, total	ug/L	MW-8	06/24/2008	ND	5.0000	4.0000
Selenium, total	ug/L	MW-8	08/01/2008	ND	5.0000	4.0000
Selenium, total	ug/L	MW-8	10/31/2008	ND	4.0000	4.0000
Selenium, total	ug/L	MW-8	01/06/2009	ND	4.0000	4.0000
Selenium, total	ug/L	MW-8	04/13/2009	ND	4.0000	4.0000
Selenium, total	ug/L	MW-8	06/09/2009	ND	4.0000	4.0000
Selenium, total	ug/L	MW-8	10/28/2009	ND	4.0000	4.0000
Selenium, total	ug/L	MW-8	04/19/2010	ND	20.0000	4.0000
Selenium, total	ug/L	MW-8	10/20/2010	ND	4.0000	4.0000
Selenium, total	ug/L	MW-8	04/20/2011	ND	4.0000	4.0000
Selenium, total	ug/L	MW-8	10/13/2011		4.8000 *	4.0000
Selenium, total	ug/L	MW-8	04/25/2012	ND	4.0000	4.0000
Selenium, total	ug/L	MW-8	10/22/2012	ND	4.0000	4.0000
Selenium, total	ug/L	MW-8	04/15/2013	ND	4.0000	4.0000
Selenium, total	ug/L	MW-8	08/06/2013	ND	4.0000	4.0000
Selenium, total	ug/L	MW-8	04/07/2014	ND	4.0000	4.0000
Selenium, total	ug/L	MW-8	10/23/2014	ND	4.0000	4.0000
Selenium, total	ug/L	MW-8	04/02/2015	ND	4.0000	4.0000
Selenium, total	ug/L	MW-8	10/26/2015	ND	4.0000	4.0000
Selenium, total	ug/L	MW-8	04/01/2016	ND	4.0000	4.0000
Selenium, total	ug/L	MW-8	10/19/2016	ND	4.0000	4.0000
Selenium, total	ug/L	MW-8	04/17/2017	ND	4.0000	4.0000
Selenium, total	ug/L	MW-8	10/11/2017	ND	4.0000	4.0000
Selenium, total	ug/L	MW-8	06/01/2018	ND	4.0000	4.0000
Selenium, total	ug/L	MW-8	10/03/2018	ND	4.0000	4.0000
Selenium, total	ug/L	MW-8	04/08/2019	ND	4.0000	4.0000
Selenium, total	ug/L	MW-8	10/11/2019	ND	4.0000	4.0000
Selenium, total	ug/L	MW-8	04/27/2020	ND	4.0000	4.0000
Selenium, total	ug/L	MW-8	10/09/2020	ND	4.0000	4.0000
Selenium, total	ug/L	MW-8	04/09/2021	ND	4.0000	4.0000
Selenium, total	ug/L	MW-8	10/25/2021	ND	4.0000	4.0000
Selenium, total	ug/L	MW-8	04/11/2022		7.8000 *	4.0000
Selenium, total	ug/L	MW-8	07/07/2022	ND	4.0000	4.0000
Selenium, total	ug/L	MW-8	10/12/2022	ND	4.0000	4.0000
Selenium, total	ug/L	MW-8	04/06/2023	ND	4.0000	4.0000
Selenium, total	ug/L	MW-8	10/09/2023	ND	4.0000	4.0000
Selenium, total	ug/L	MW-8	04/04/2024		4.2000 *	4.0000
Barium, total	ug/L	MW-14	10/31/2008		2530.0000 *	685.3309

* - 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-14	01/06/2009		2550.0000	*	685.3309
Barium, total	ug/L	MW-14	02/10/2009		2660.0000	*	685.3309
Barium, total	ug/L	MW-14	04/14/2009		2320.0000	*	685.3309
Barium, total	ug/L	MW-14	06/09/2009		2800.0000	*	685.3309
Barium, total	ug/L	MW-14	10/28/2009		2280.0000	*	685.3309
Barium, total	ug/L	MW-14	04/19/2010		2190.0000	*	685.3309
Barium, total	ug/L	MW-14	10/20/2010		3020.0000	*	685.3309
Barium, total	ug/L	MW-14	04/20/2011		2500.0000	*	685.3309
Barium, total	ug/L	MW-14	10/13/2011		2330.0000	*	685.3309
Barium, total	ug/L	MW-14	04/25/2012		2200.0000	*	685.3309
Barium, total	ug/L	MW-14	10/22/2012		2540.0000	*	685.3309
Barium, total	ug/L	MW-14	04/15/2013		1200.0000	*	685.3309
Barium, total	ug/L	MW-14	08/06/2013		2490.0000	*	685.3309
Barium, total	ug/L	MW-14	04/07/2014		2000.0000	*	685.3309
Barium, total	ug/L	MW-14	10/23/2014		1060.0000	*	685.3309
Barium, total	ug/L	MW-14	04/02/2015		508.0000	*	685.3309
Barium, total	ug/L	MW-14	10/26/2015		923.0000	*	685.3309
Barium, total	ug/L	MW-14	04/01/2016		1690.0000	*	685.3309
Barium, total	ug/L	MW-14	10/19/2016		1190.0000	*	685.3309
Barium, total	ug/L	MW-14	04/17/2017		1790.0000	*	685.3309
Barium, total	ug/L	MW-14	10/11/2017		1320.0000	*	685.3309
Barium, total	ug/L	MW-14	06/01/2018		1620.0000	*	685.3309
Barium, total	ug/L	MW-14	10/03/2018		1100.0000	*	685.3309
Barium, total	ug/L	MW-14	04/08/2019		1070.0000	*	685.3309
Barium, total	ug/L	MW-14	10/11/2019		1000.0000	*	685.3309
Barium, total	ug/L	MW-14	04/27/2020		1170.0000	*	685.3309
Barium, total	ug/L	MW-14	10/09/2020		1630.0000	*	685.3309
Barium, total	ug/L	MW-14	04/09/2021		592.0000	*	685.3309
Barium, total	ug/L	MW-14	10/25/2021		612.0000	*	685.3309
Barium, total	ug/L	MW-14	04/11/2022		1080.0000	*	685.3309
Barium, total	ug/L	MW-14	10/12/2022		1660.0000	*	685.3309

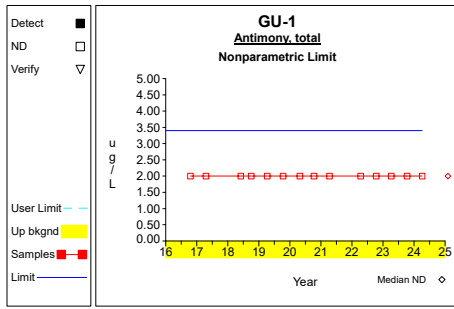
* - Significantly increased over background.

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

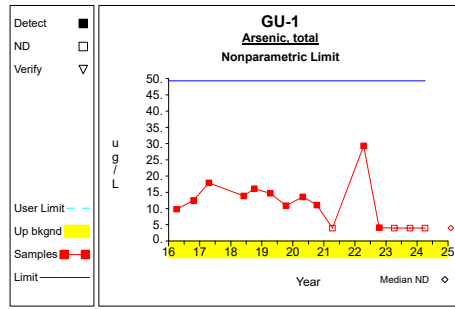
*** - Manual exclusion.

ND = Not Detected, Result = detection limit.

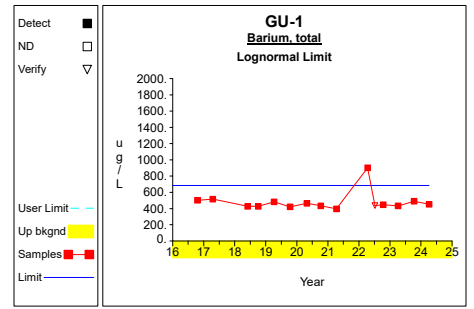
Up vs. Down Prediction Limits



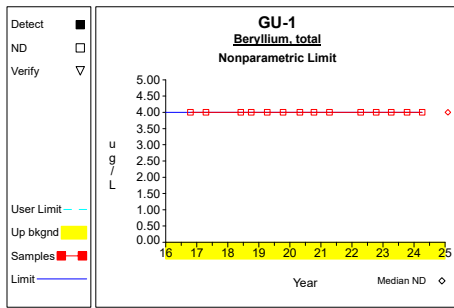
Graph 1



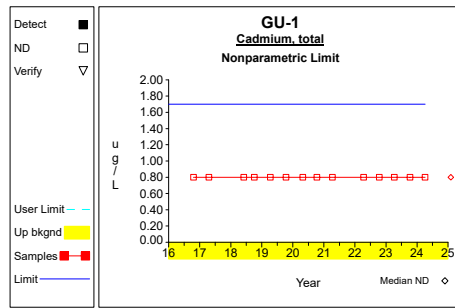
Graph 2



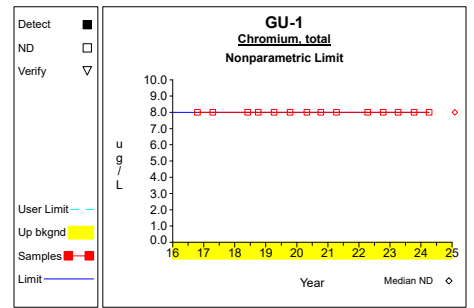
Graph 3



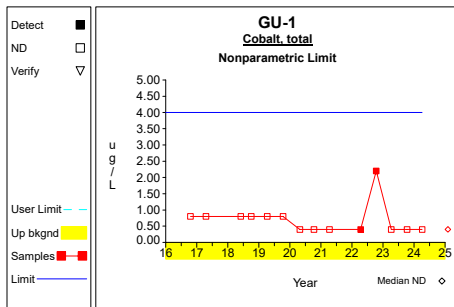
Graph 4



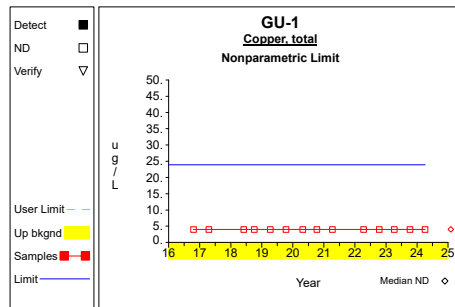
Graph 5



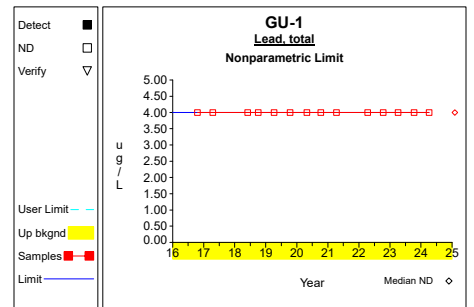
Graph 6



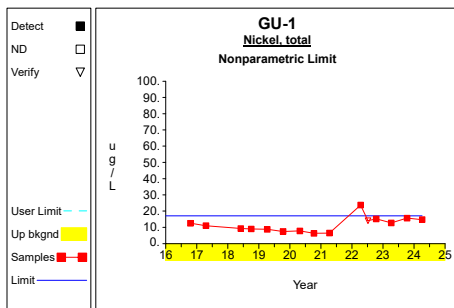
Graph 7



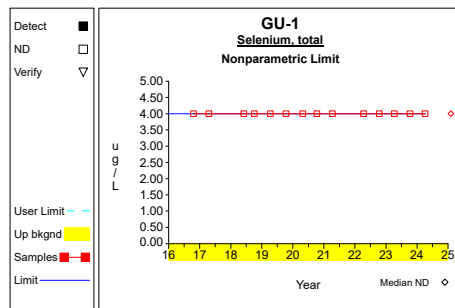
Graph 8



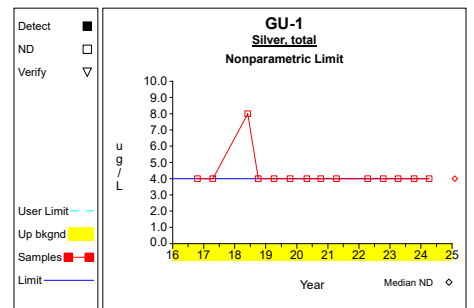
Graph 9



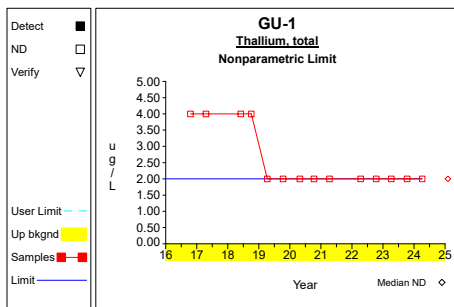
Graph 10



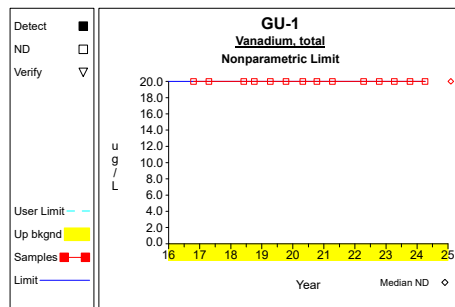
Graph 11



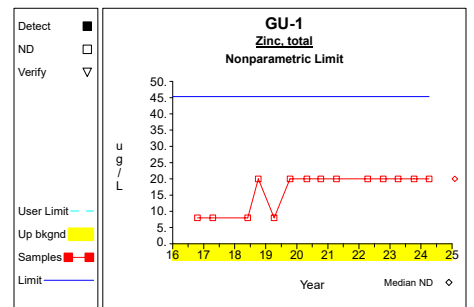
Graph 12



Graph 13

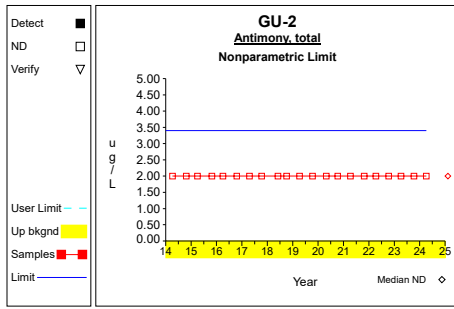


Graph 14

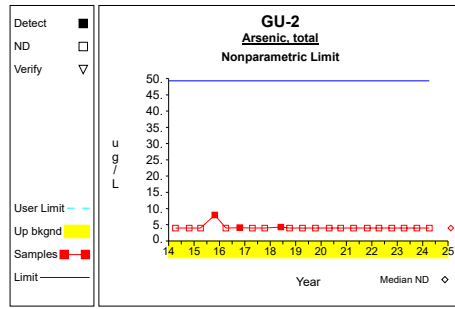


Graph 15

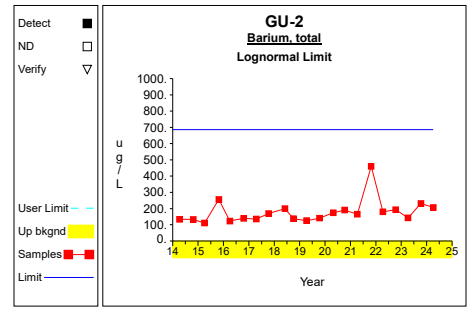
Up vs. Down Prediction Limits



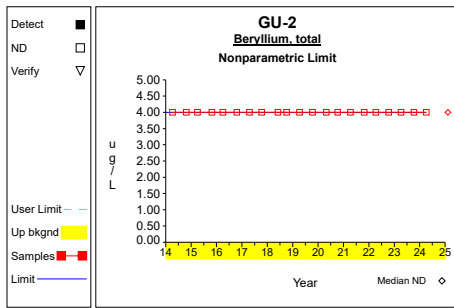
Graph 16



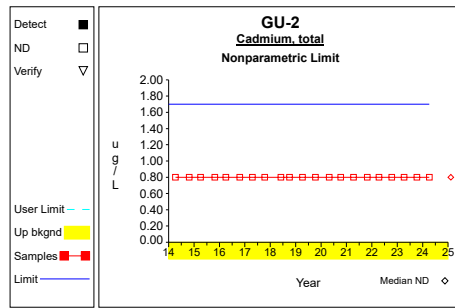
Graph 17



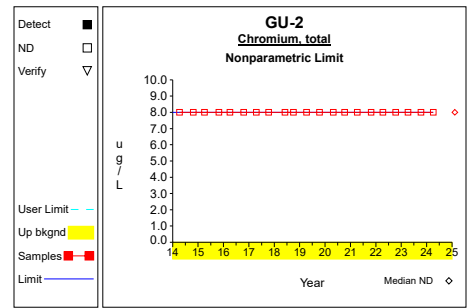
Graph 18



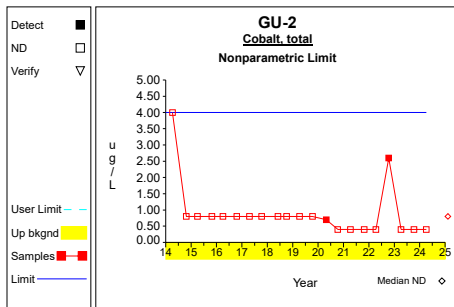
Graph 19



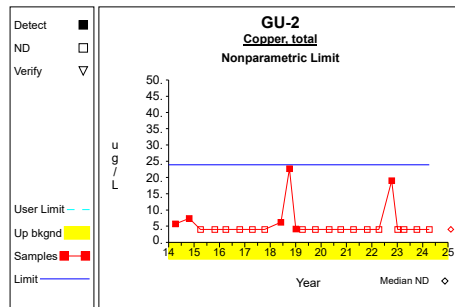
Graph 20



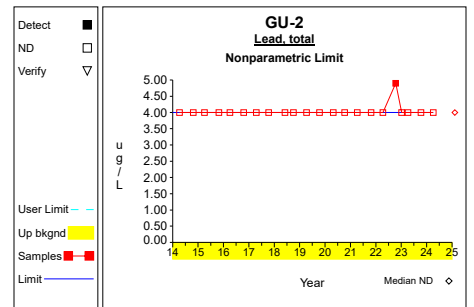
Graph 21



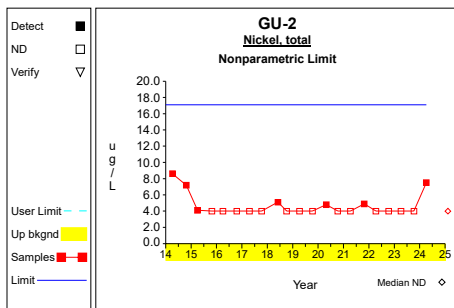
Graph 22



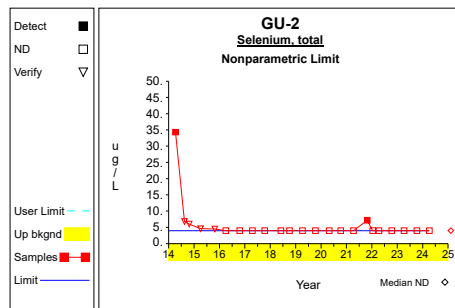
Graph 23



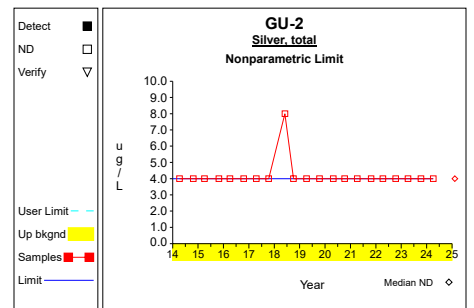
Graph 24



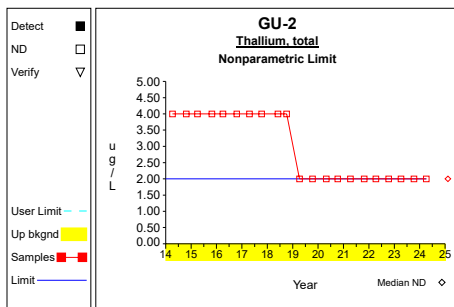
Graph 25



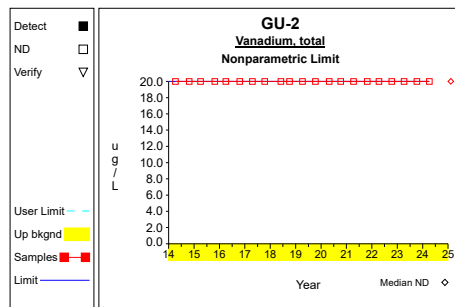
Graph 26



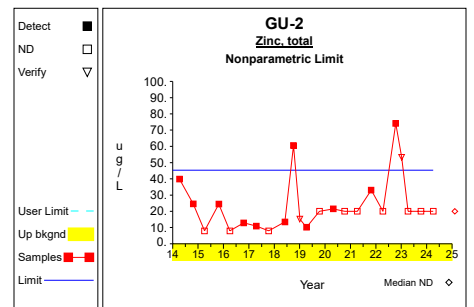
Graph 27



Graph 28

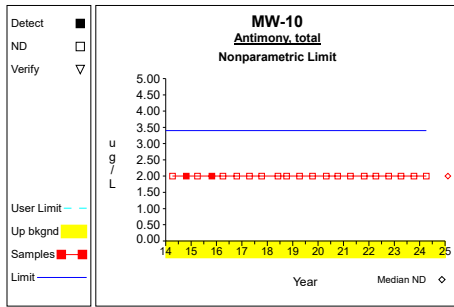


Graph 29

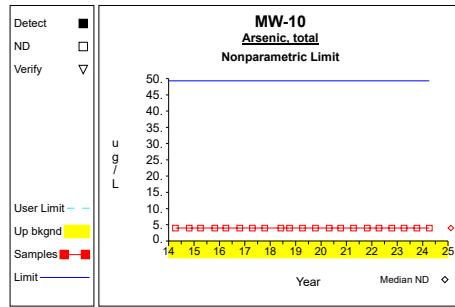


Graph 30

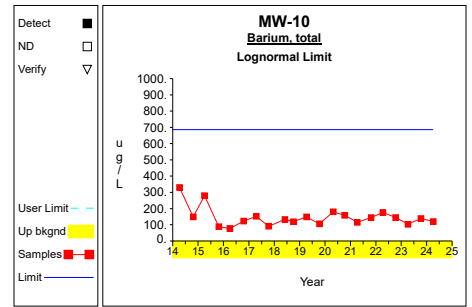
Up vs. Down Prediction Limits



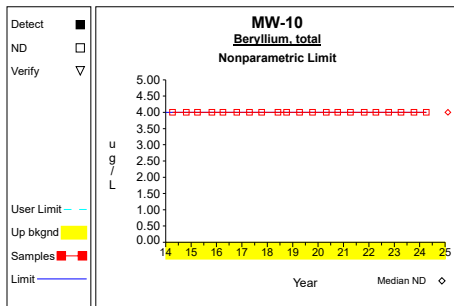
Graph 31



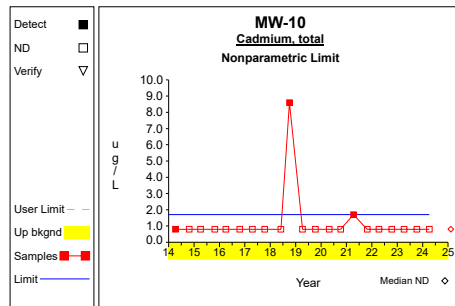
Graph 32



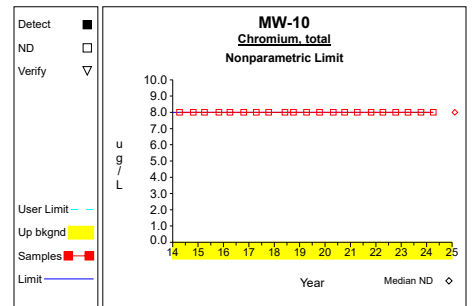
Graph 33



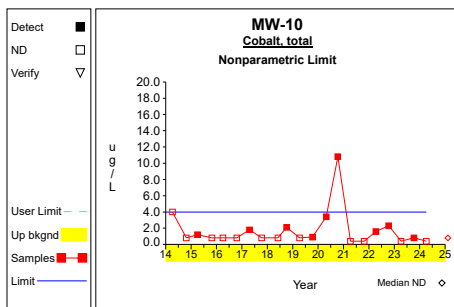
Graph 34



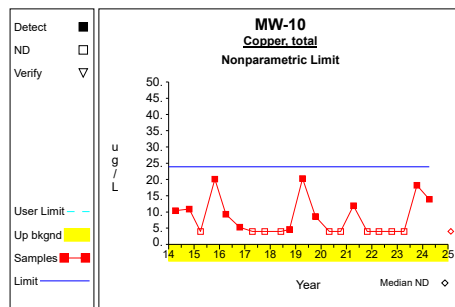
Graph 35



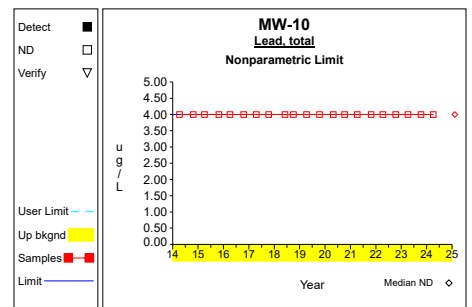
Graph 36



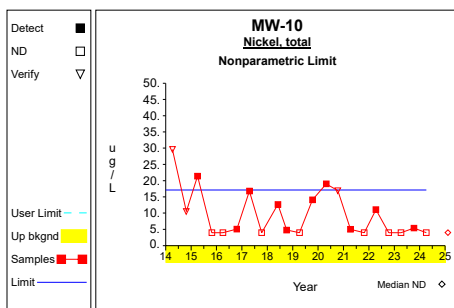
Graph 37



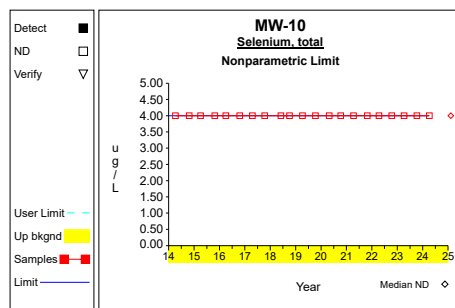
Graph 38



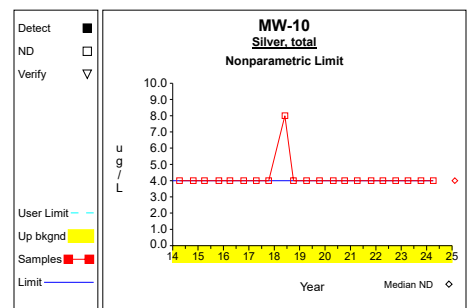
Graph 39



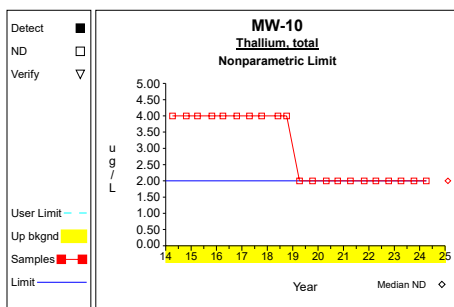
Graph 40



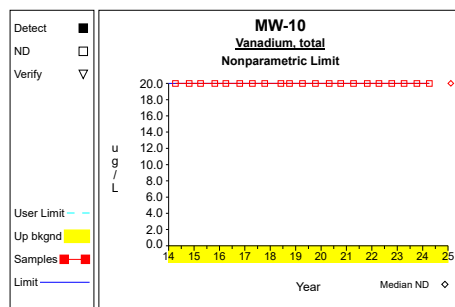
Graph 41



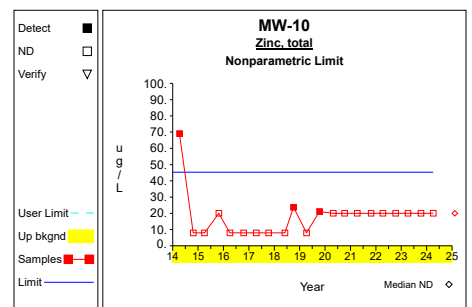
Graph 42



Graph 43

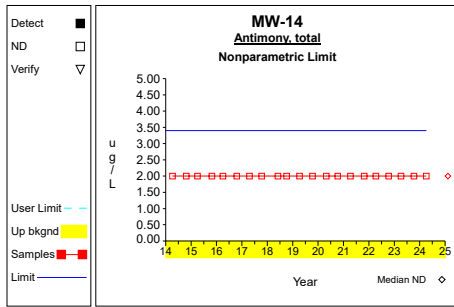


Graph 44

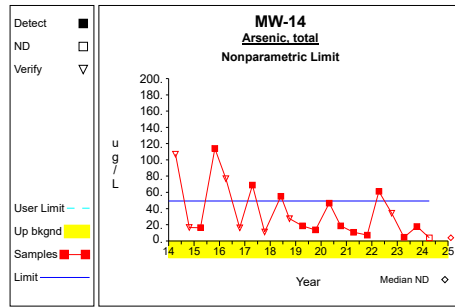


Graph 45

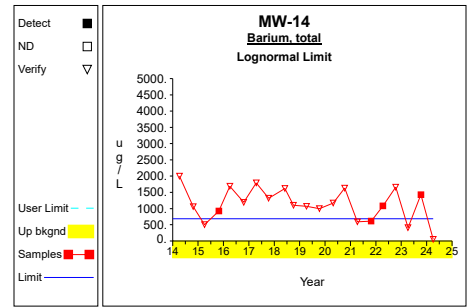
Up vs. Down Prediction Limits



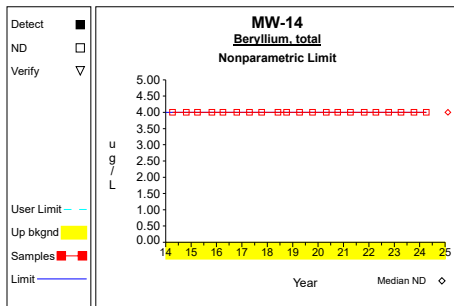
Graph 46



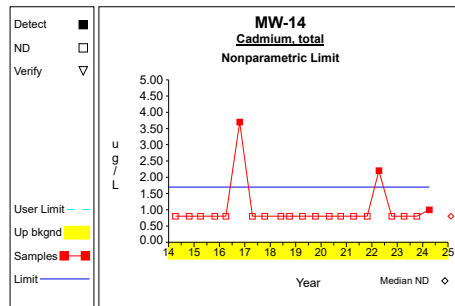
Graph 47



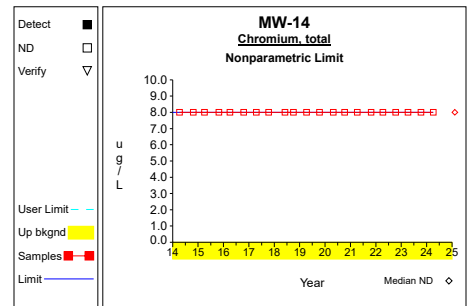
Graph 48



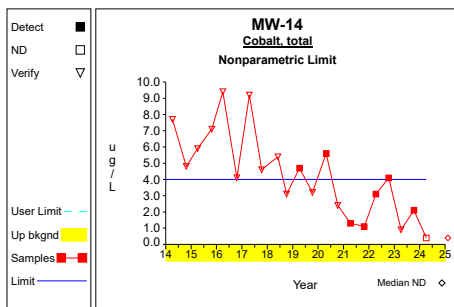
Graph 49



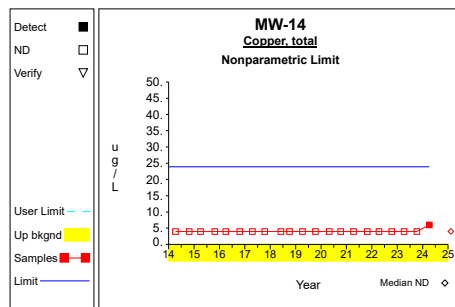
Graph 50



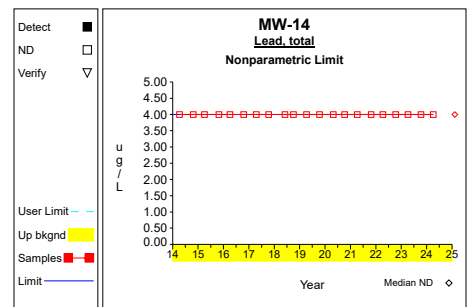
Graph 51



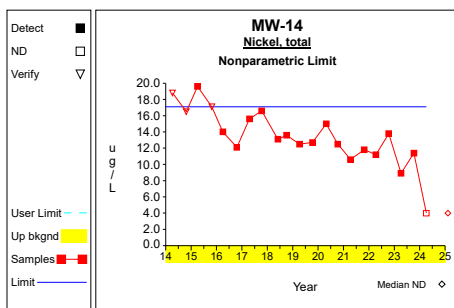
Graph 52



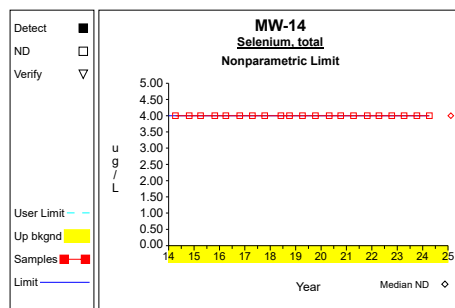
Graph 53



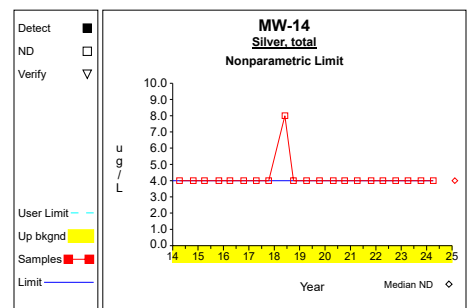
Graph 54



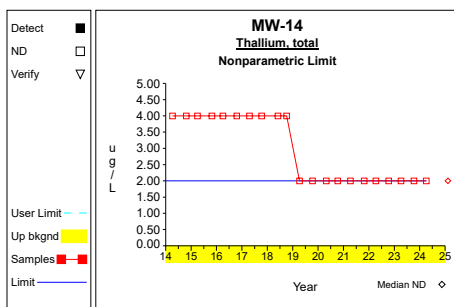
Graph 55



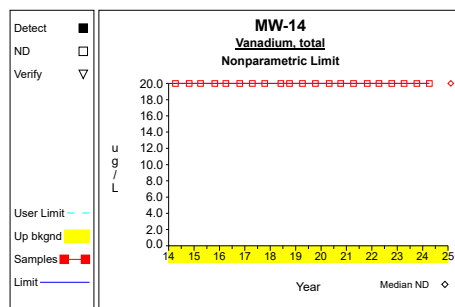
Graph 56



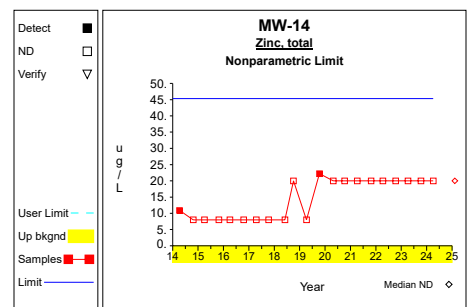
Graph 57



Graph 58

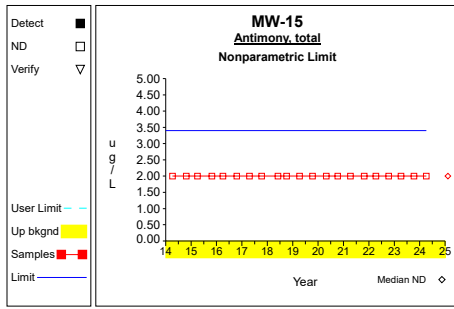


Graph 59

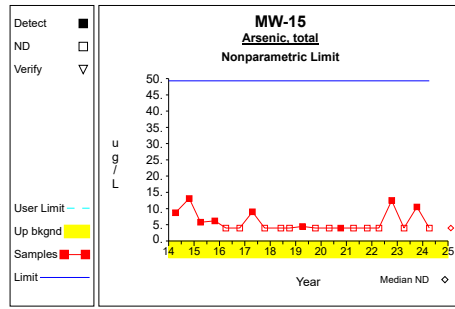


Graph 60

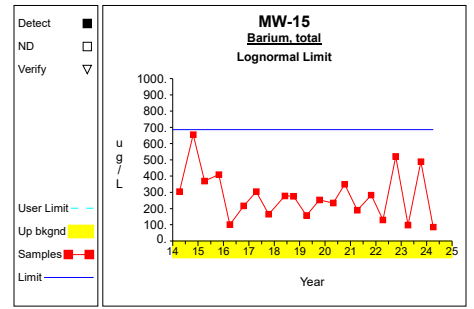
Up vs. Down Prediction Limits



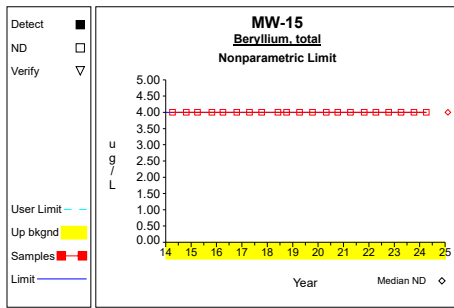
Graph 61



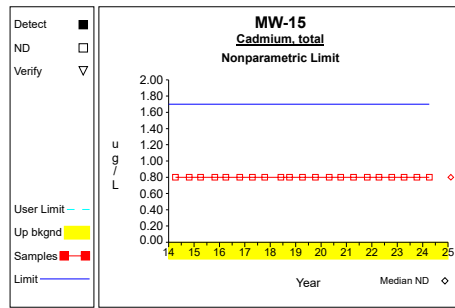
Graph 62



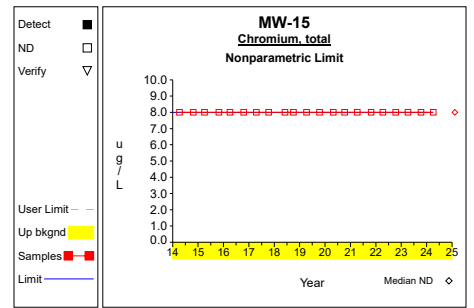
Graph 63



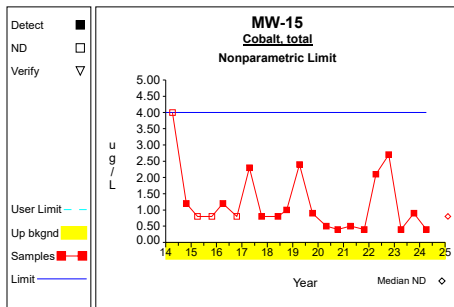
Graph 64



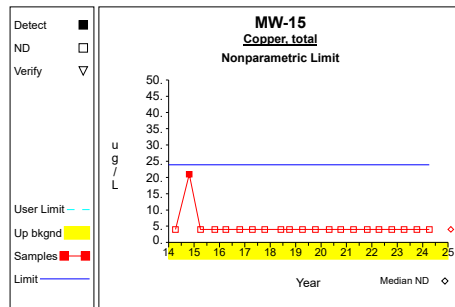
Graph 65



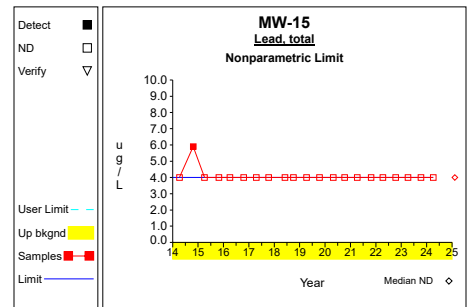
Graph 66



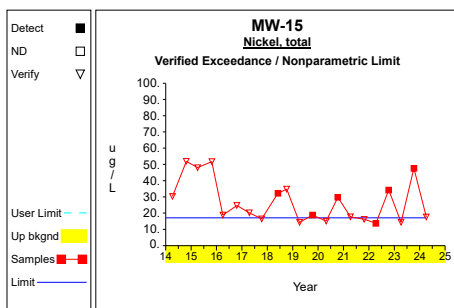
Graph 67



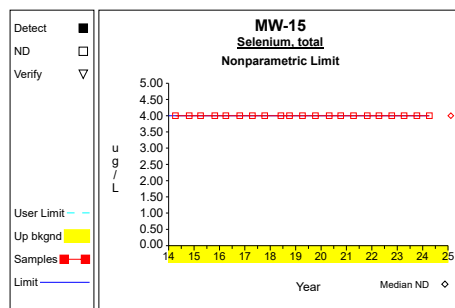
Graph 68



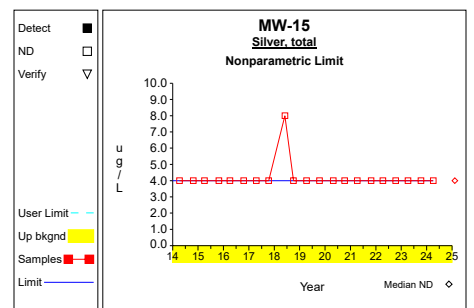
Graph 69



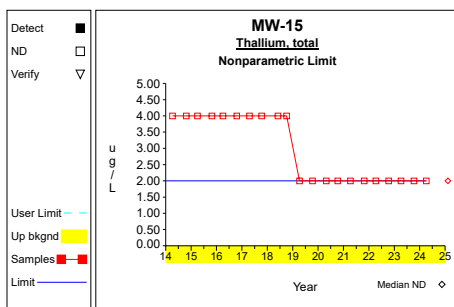
Graph 70



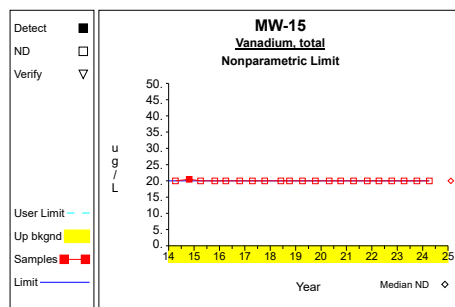
Graph 71



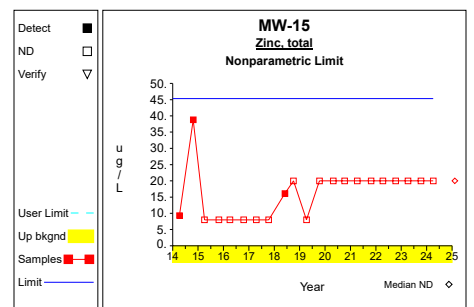
Graph 72



Graph 73

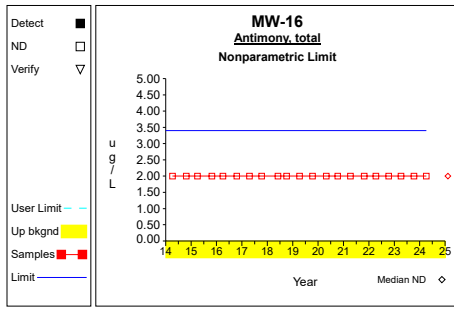


Graph 74

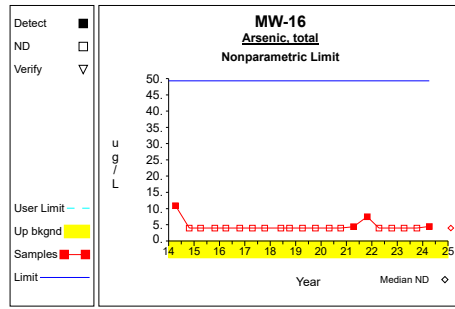


Graph 75

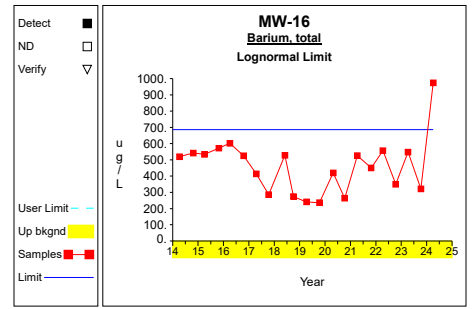
Up vs. Down Prediction Limits



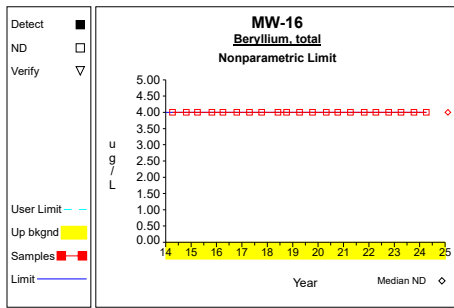
Graph 76



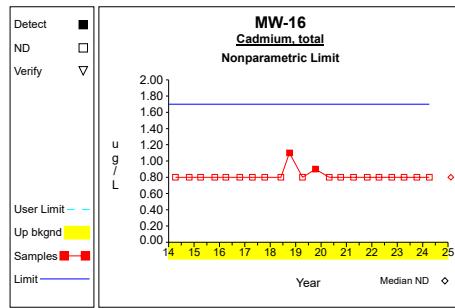
Graph 77



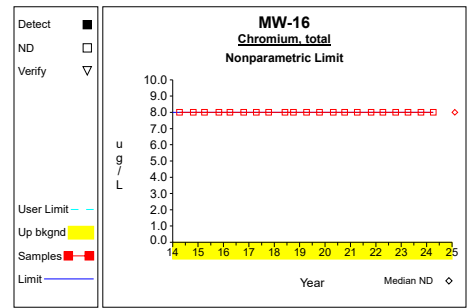
Graph 78



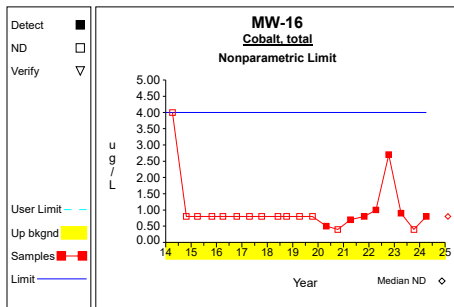
Graph 79



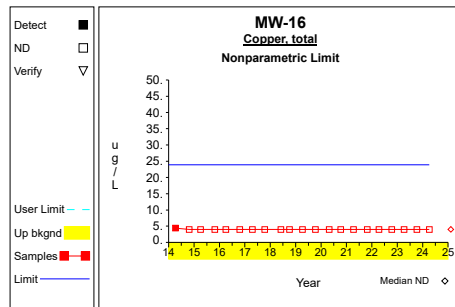
Graph 80



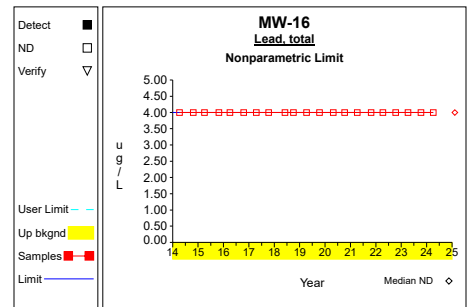
Graph 81



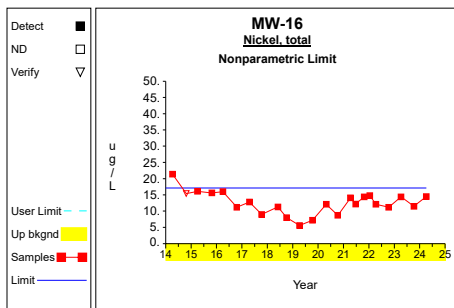
Graph 82



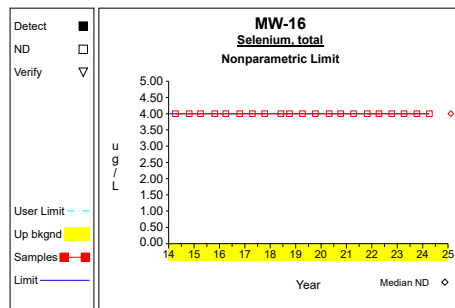
Graph 83



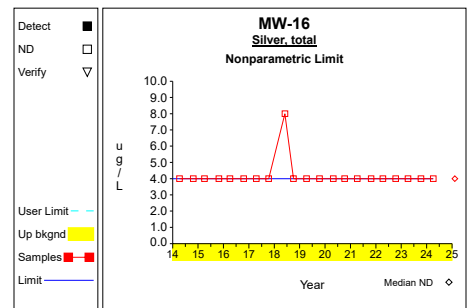
Graph 84



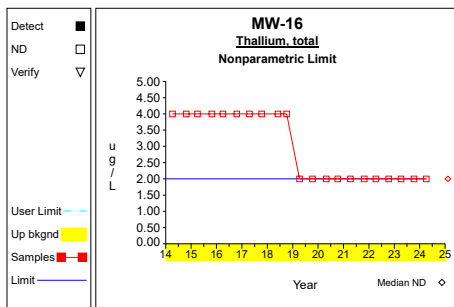
Graph 85



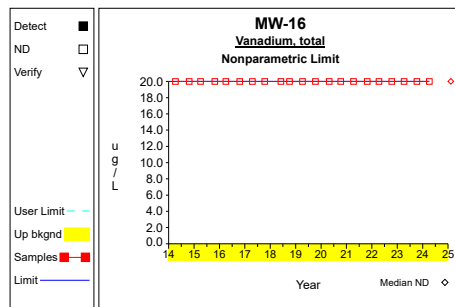
Graph 86



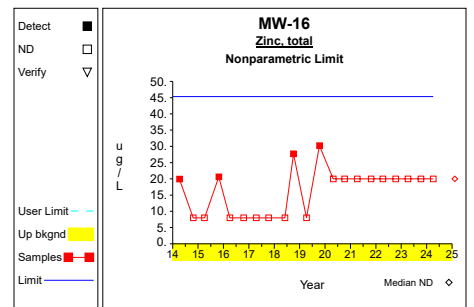
Graph 87



Graph 88

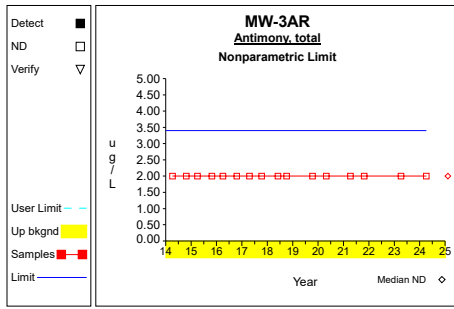


Graph 89

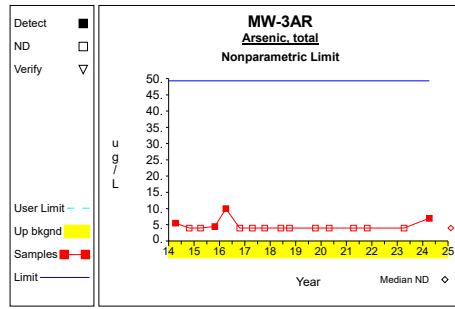


Graph 90

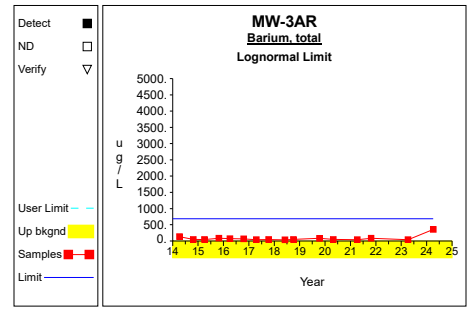
Up vs. Down Prediction Limits



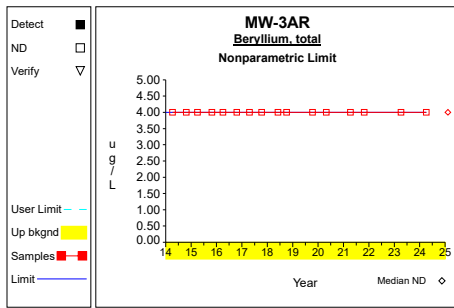
Graph 91



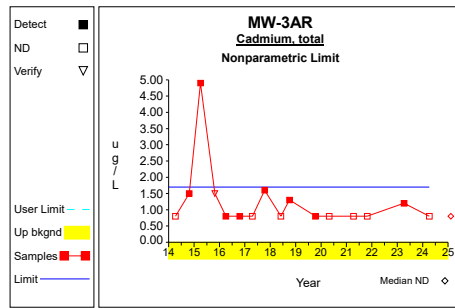
Graph 92



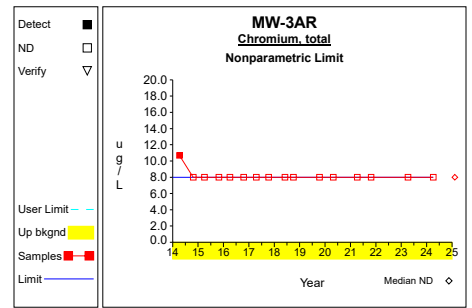
Graph 93



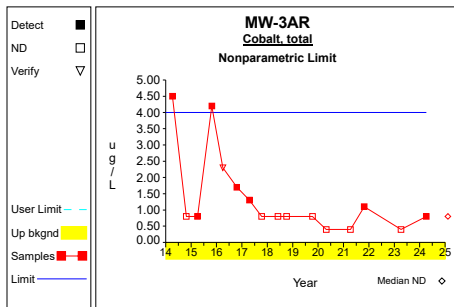
Graph 94



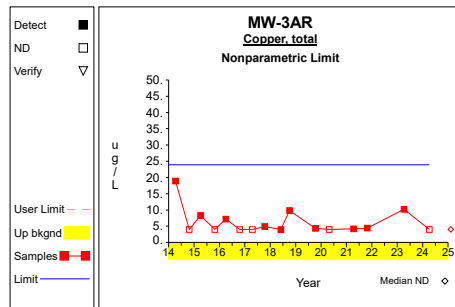
Graph 95



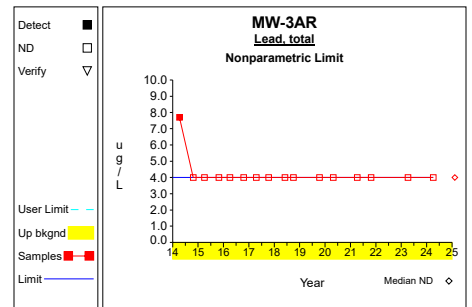
Graph 96



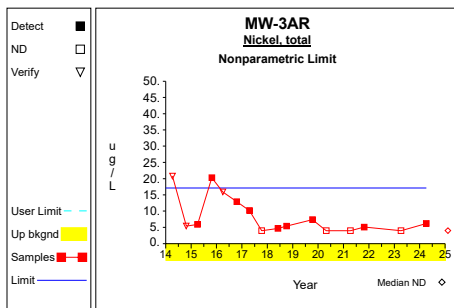
Graph 97



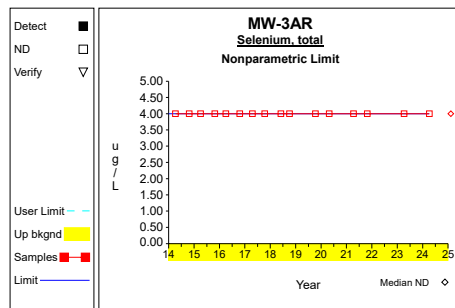
Graph 98



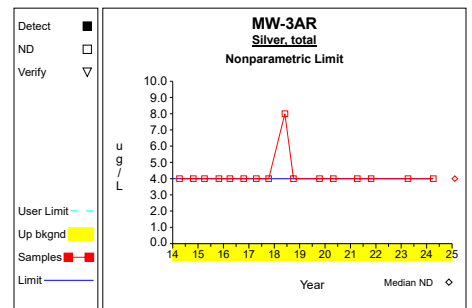
Graph 99



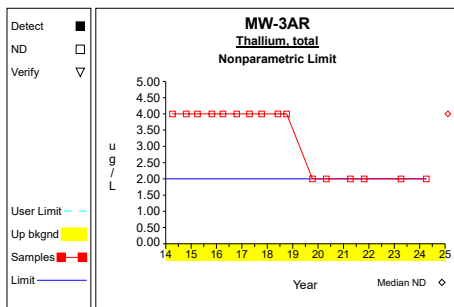
Graph 100



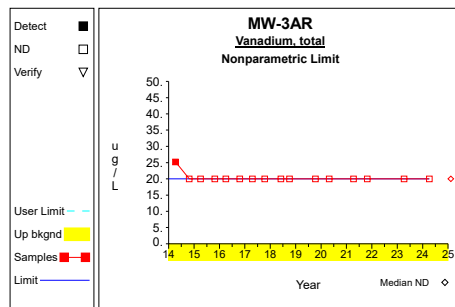
Graph 101



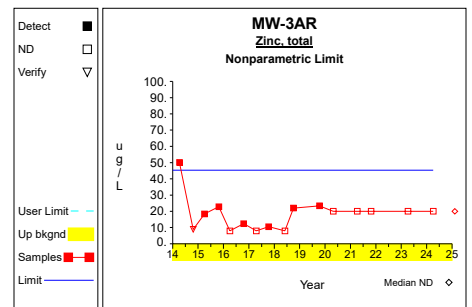
Graph 102



Graph 103

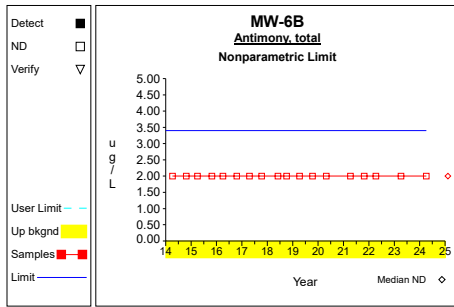


Graph 104

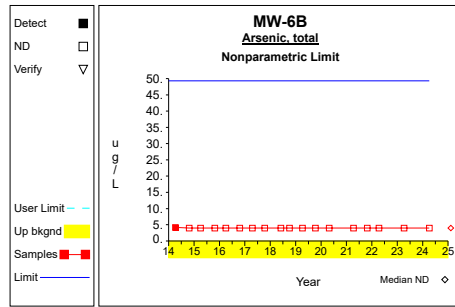


Graph 105

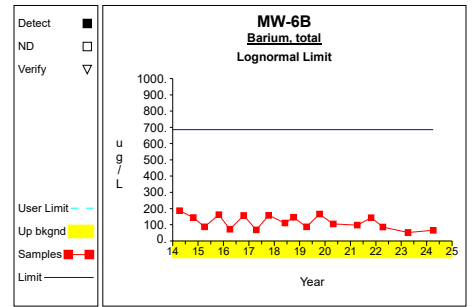
Up vs. Down Prediction Limits



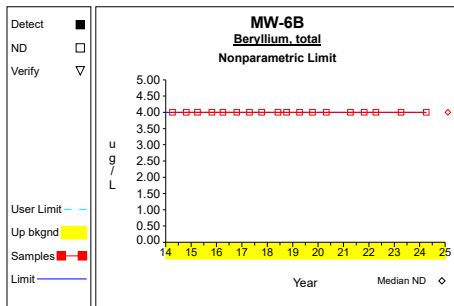
Graph 106



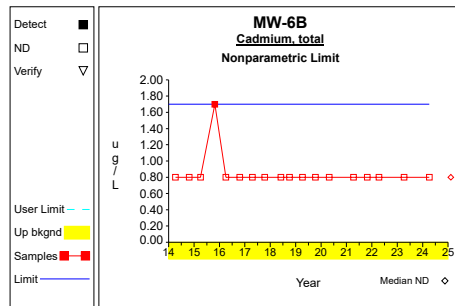
Graph 107



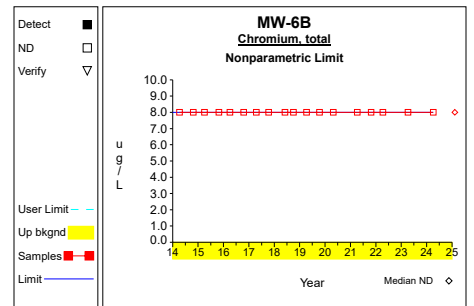
Graph 108



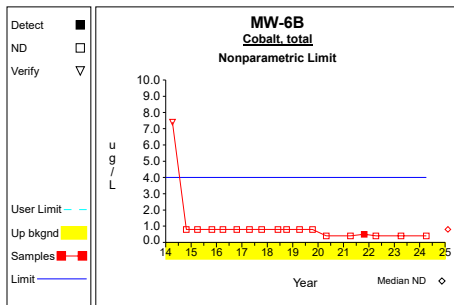
Graph 109



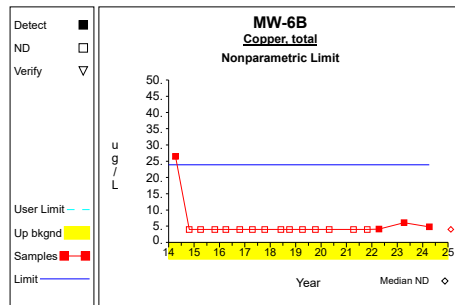
Graph 110



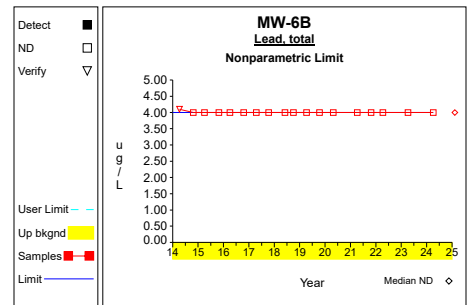
Graph 111



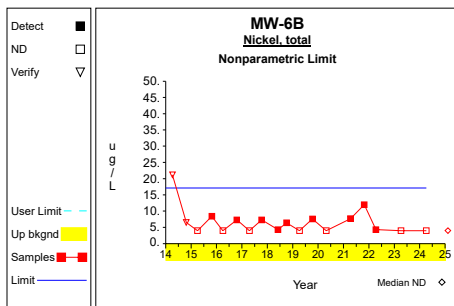
Graph 112



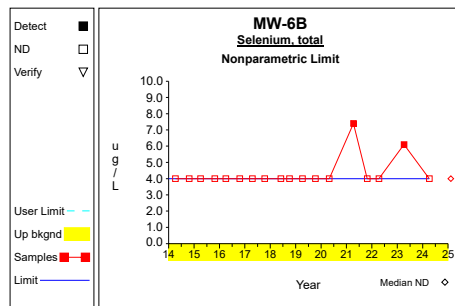
Graph 113



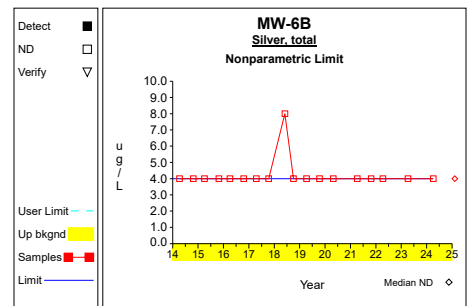
Graph 114



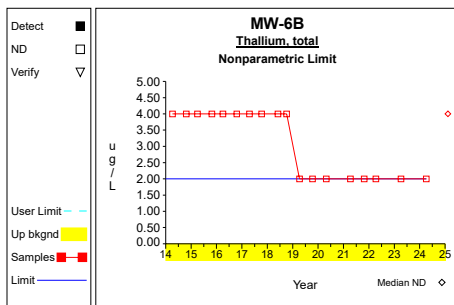
Graph 115



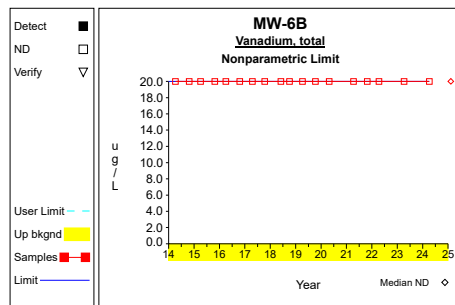
Graph 116



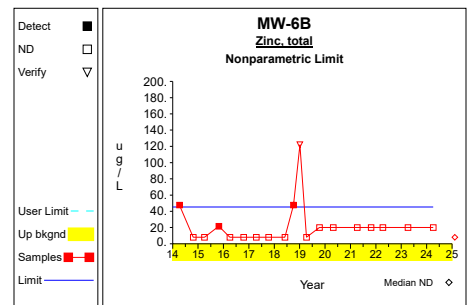
Graph 117



Graph 118

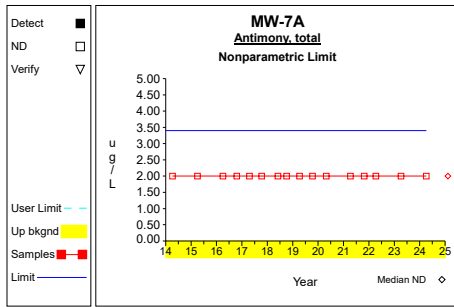


Graph 119

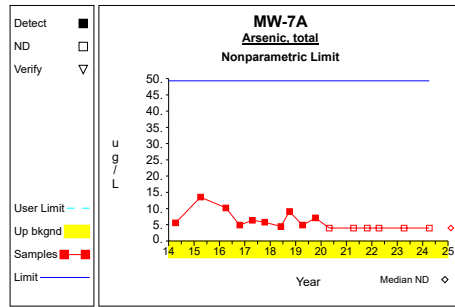


Graph 120

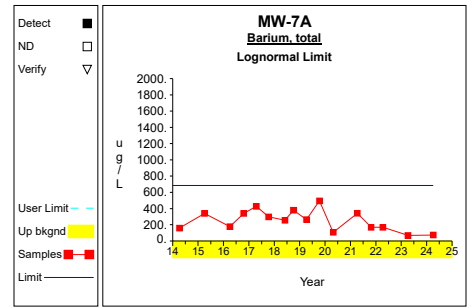
Up vs. Down Prediction Limits



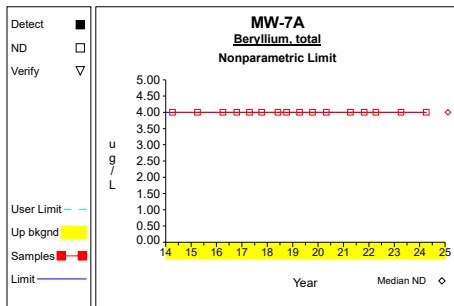
Graph 121



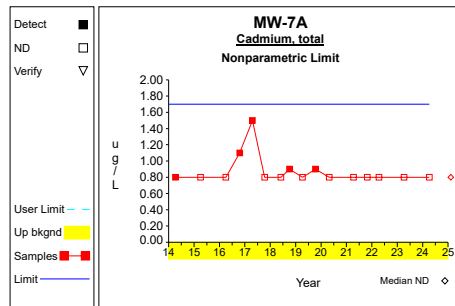
Graph 122



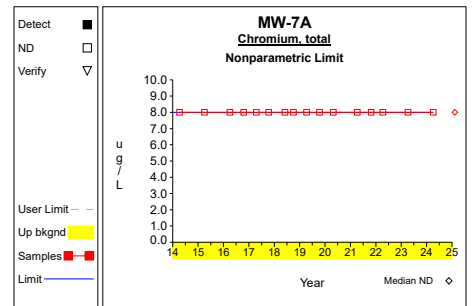
Graph 123



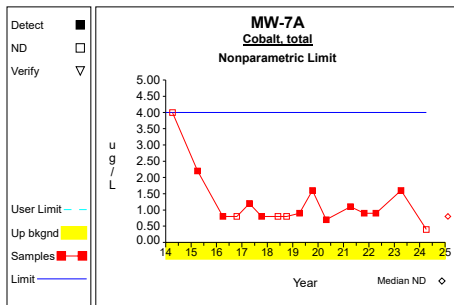
Graph 124



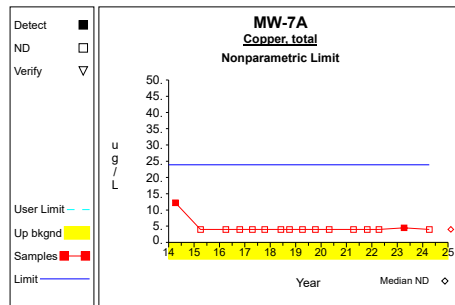
Graph 125



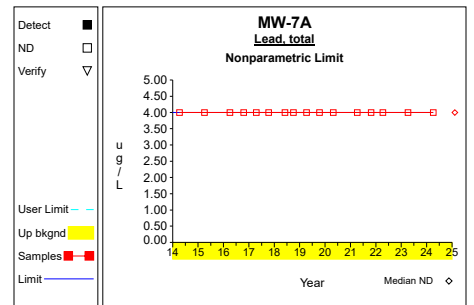
Graph 126



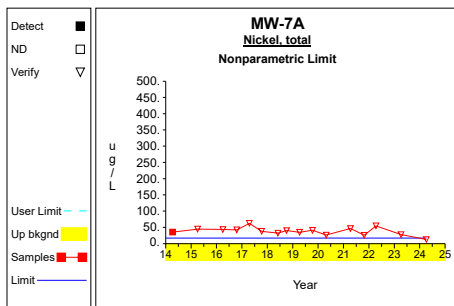
Graph 127



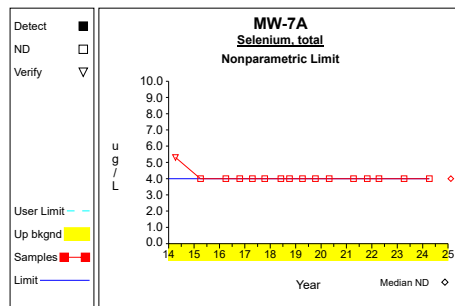
Graph 128



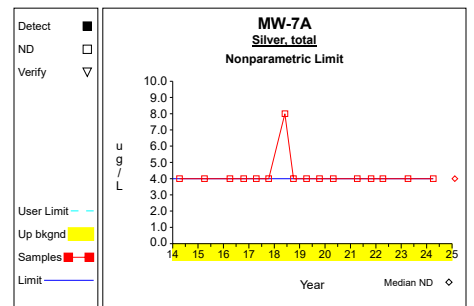
Graph 129



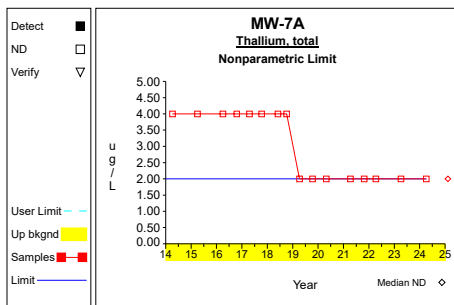
Graph 130



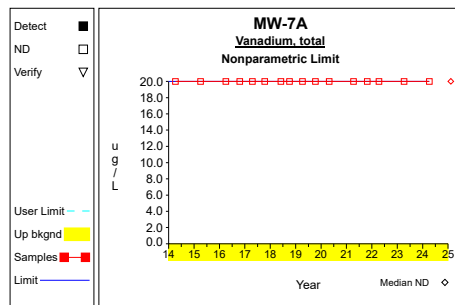
Graph 131



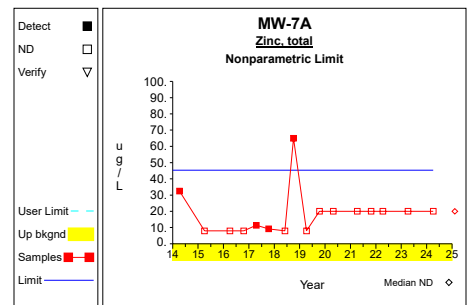
Graph 132



Graph 133

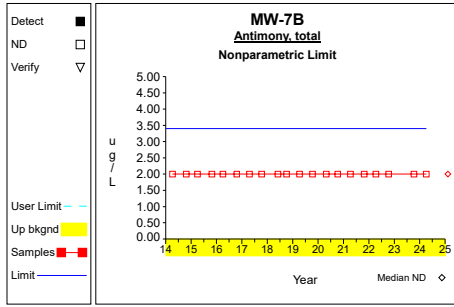


Graph 134

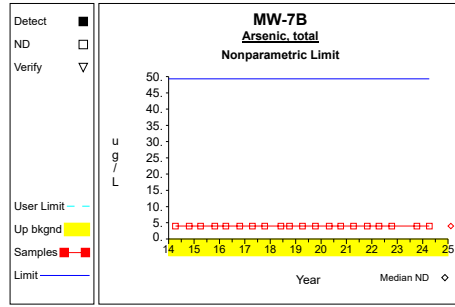


Graph 135

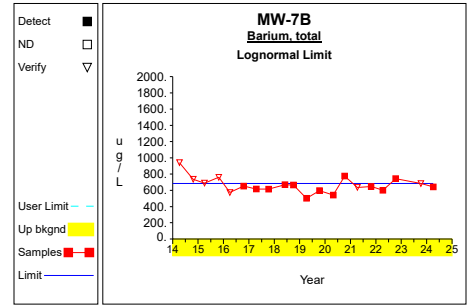
Up vs. Down Prediction Limits



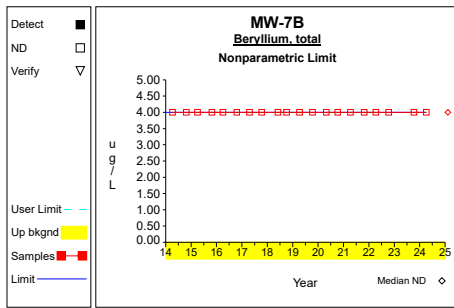
Graph 136



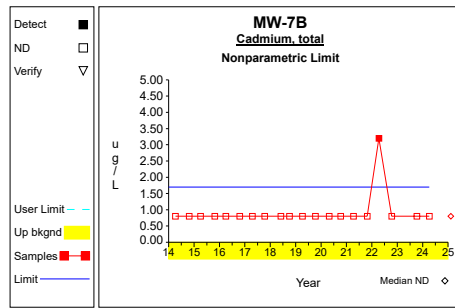
Graph 137



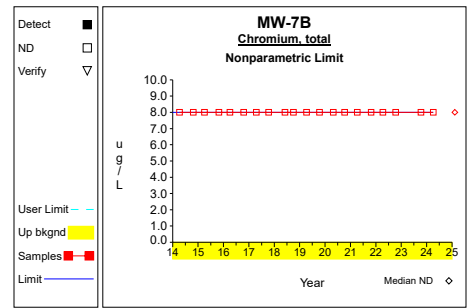
Graph 138



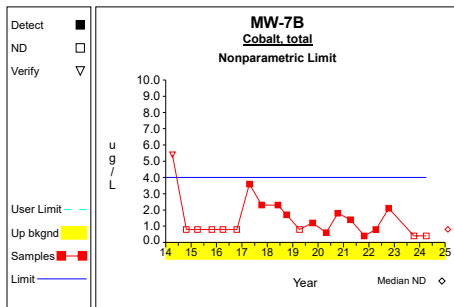
Graph 139



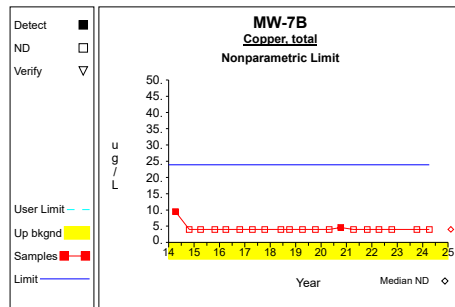
Graph 140



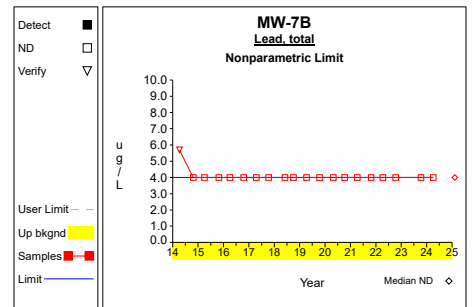
Graph 141



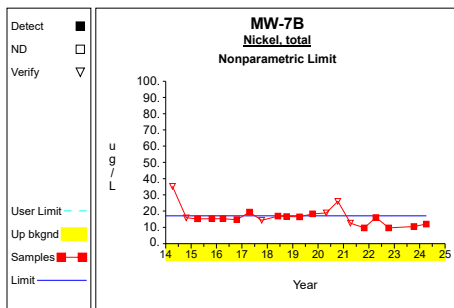
Graph 142



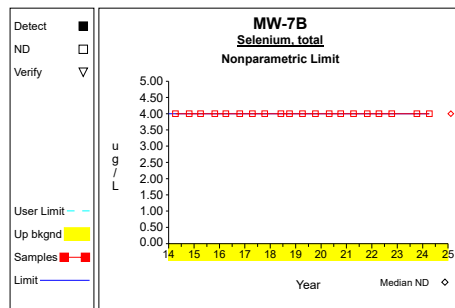
Graph 143



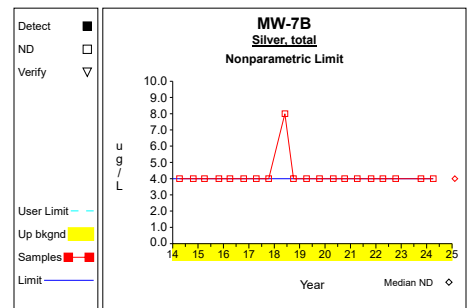
Graph 144



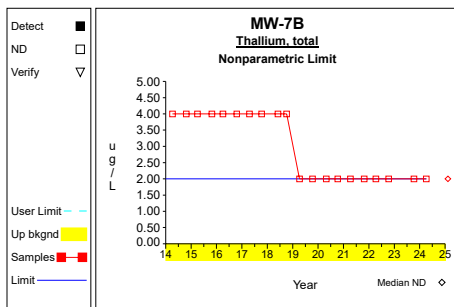
Graph 145



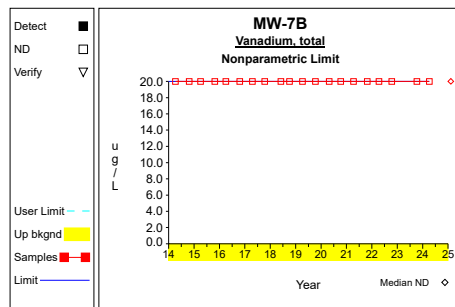
Graph 146



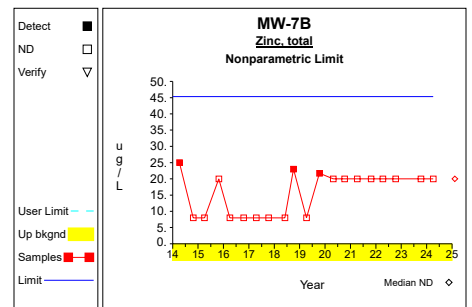
Graph 147



Graph 148

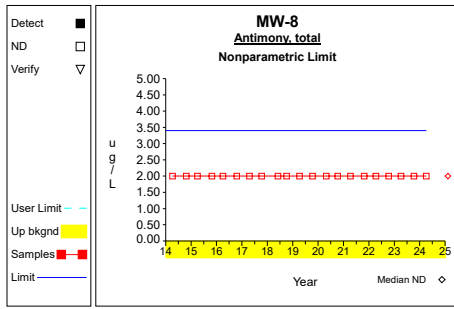


Graph 149

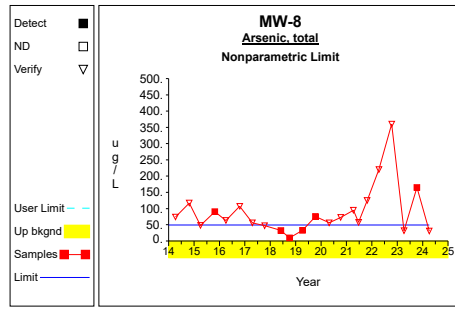


Graph 150

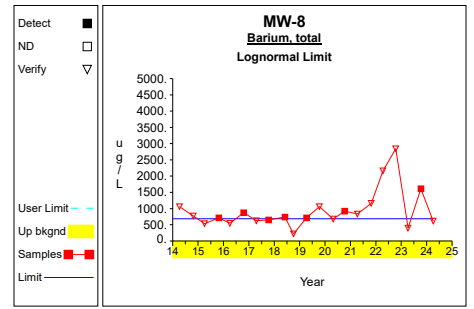
Up vs. Down Prediction Limits



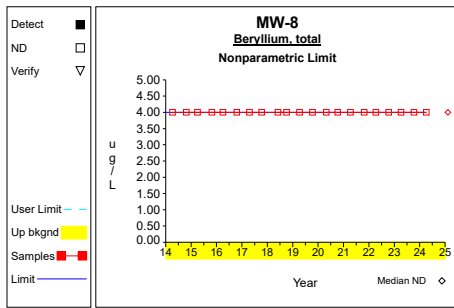
Graph 151



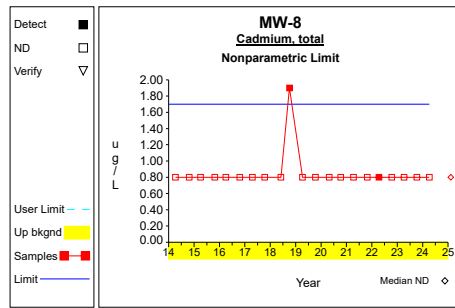
Graph 152



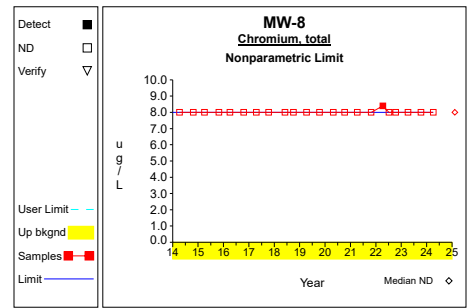
Graph 153



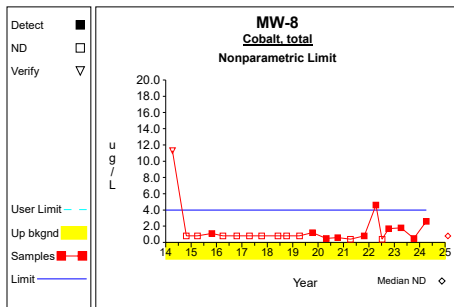
Graph 154



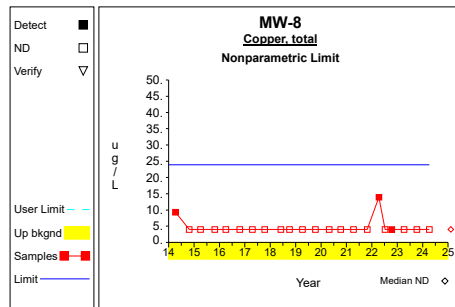
Graph 155



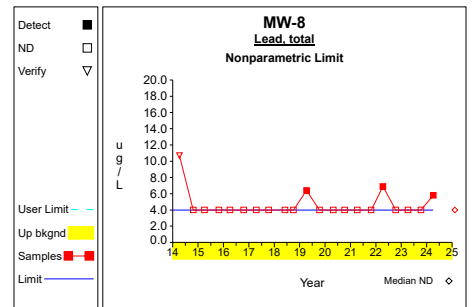
Graph 156



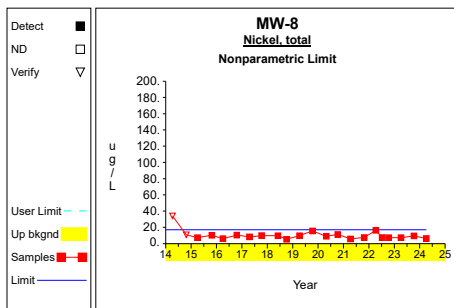
Graph 157



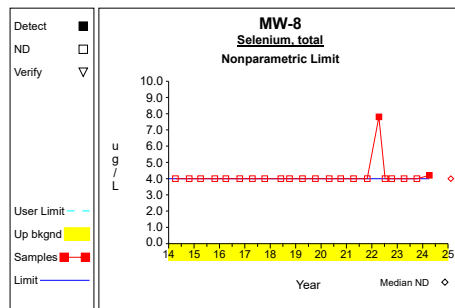
Graph 158



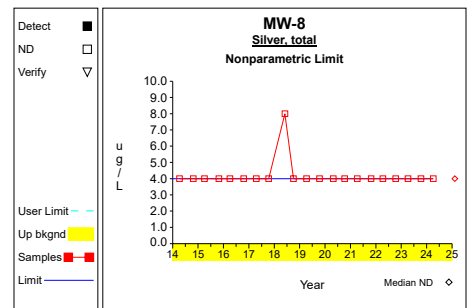
Graph 159



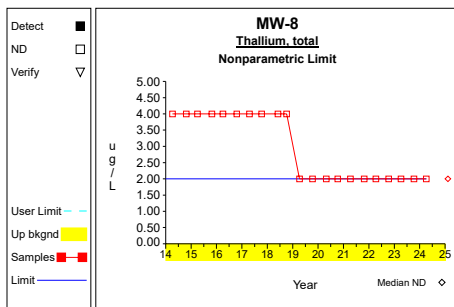
Graph 160



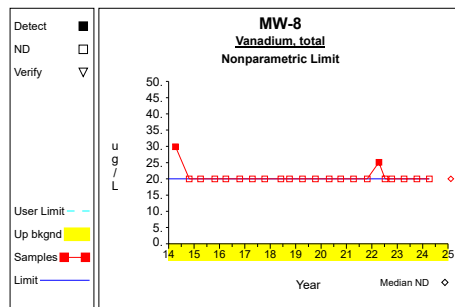
Graph 161



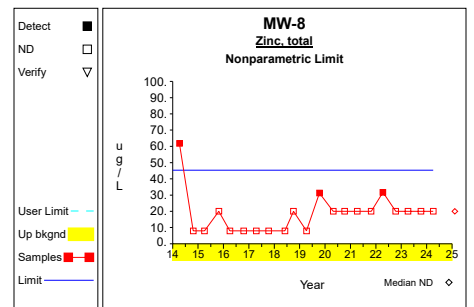
Graph 162



Graph 163

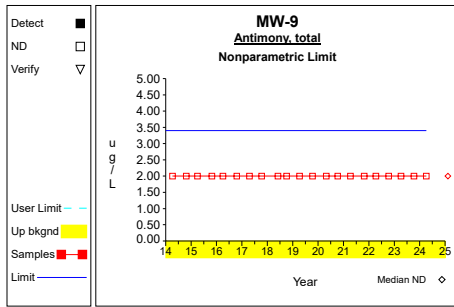


Graph 164

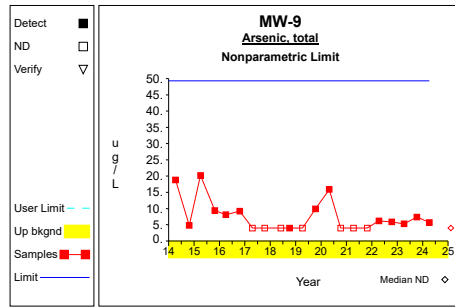


Graph 165

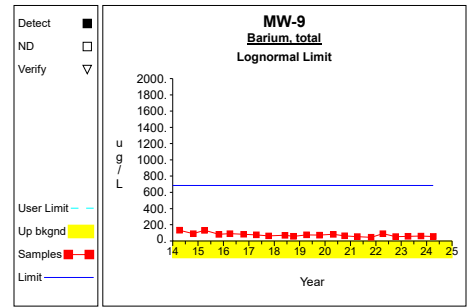
Up vs. Down Prediction Limits



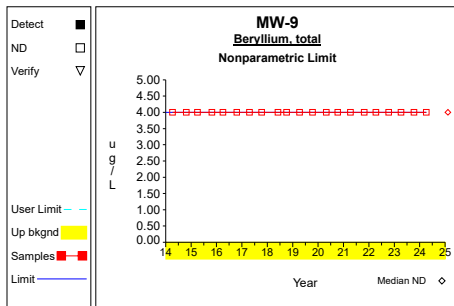
Graph 166



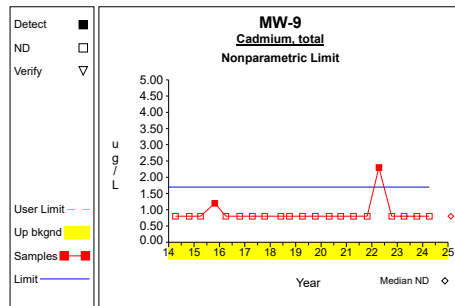
Graph 167



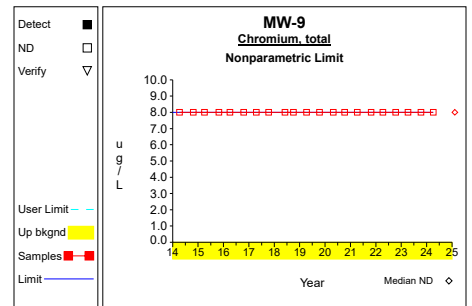
Graph 168



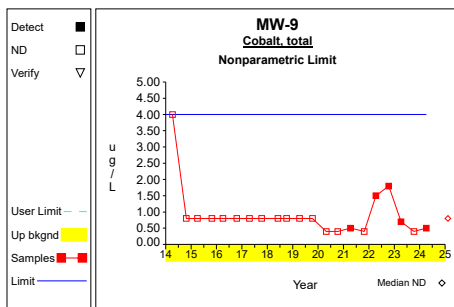
Graph 169



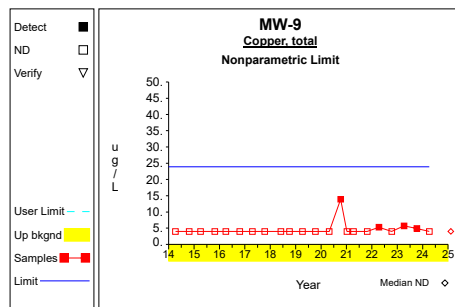
Graph 170



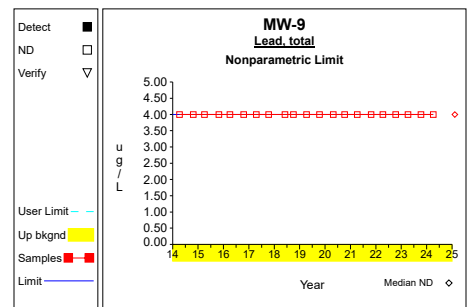
Graph 171



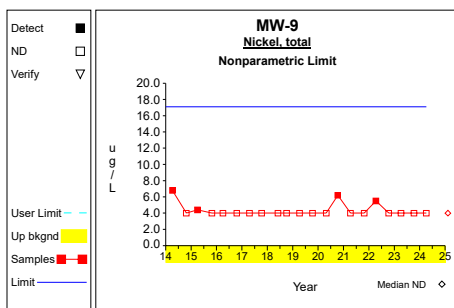
Graph 172



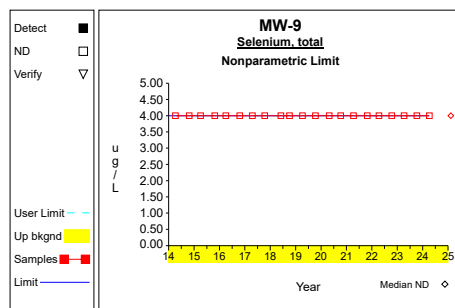
Graph 173



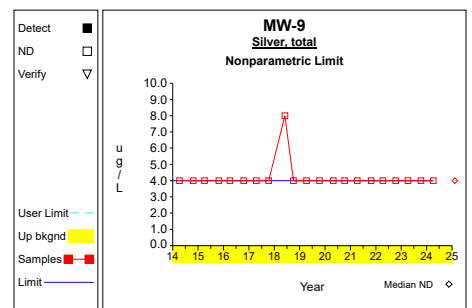
Graph 174



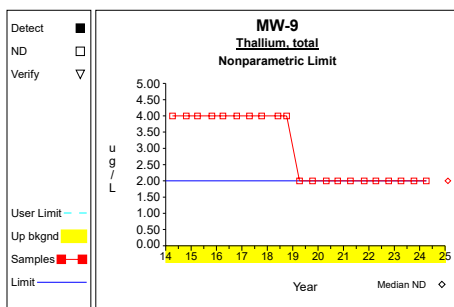
Graph 175



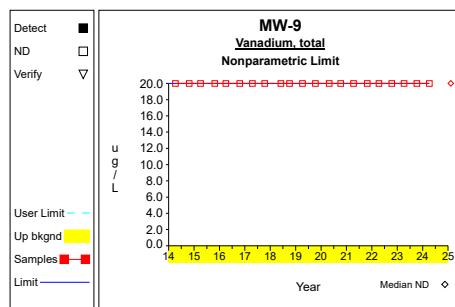
Graph 176



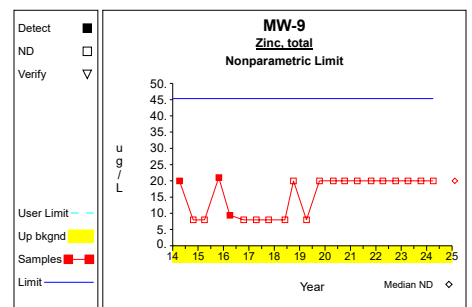
Graph 177



Graph 178

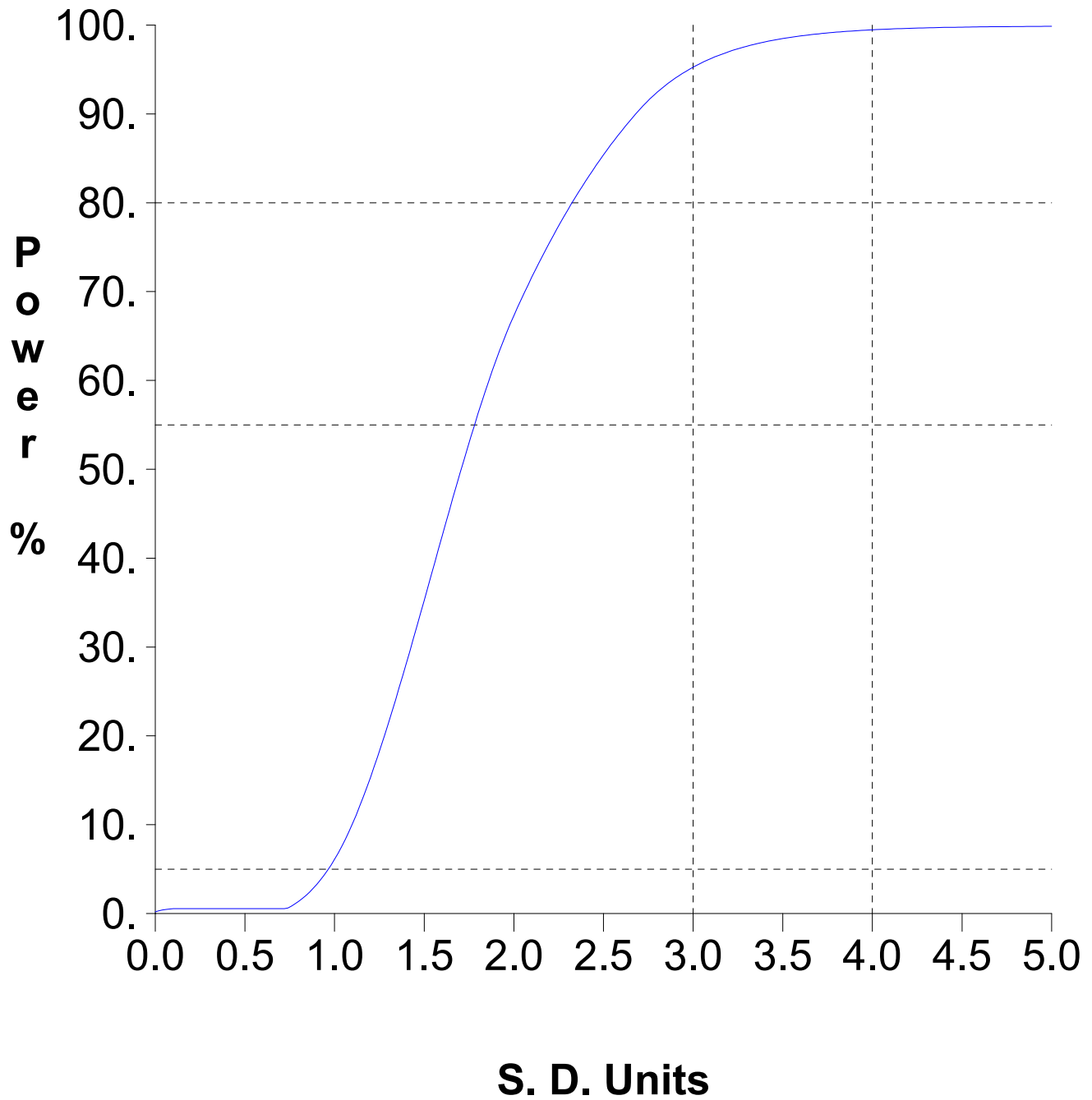


Graph 179



Graph 180

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



Attachment C

Assessment Statistics for Trace Metal Exceedances

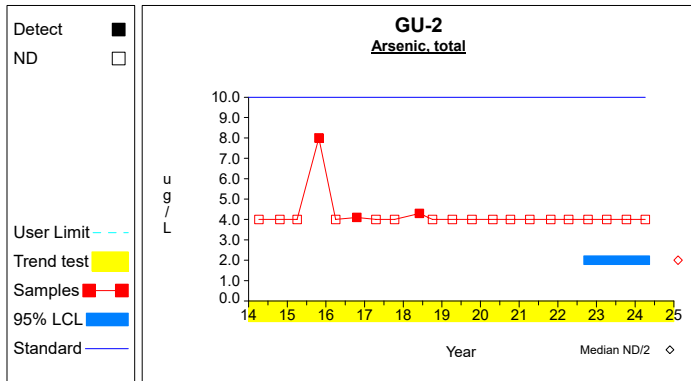
Table 1

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

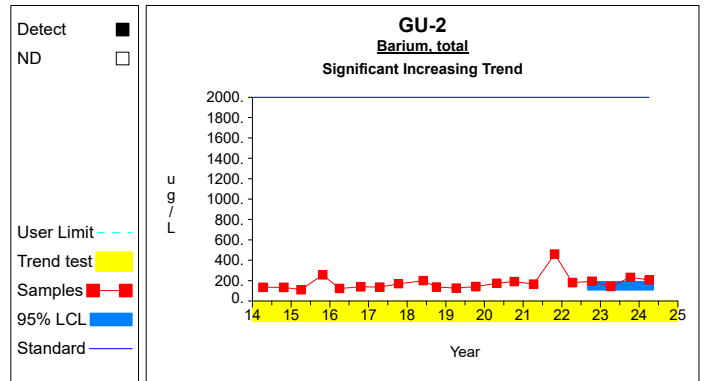
Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend
Arsenic, total	ug/L	GU-2	4	2.000	0.000	1.176	2.000	2.000	10.000	inc
Barium, total	ug/L	GU-2	4	193.500	37.934	1.176	148.878	238.122	2000.000	
Cobalt, total	ug/L	GU-2	4	0.950	1.100	1.176	0.000	2.244	2.100	
Copper, total	ug/L	GU-2	4	2.000	0.000	1.176	2.000	2.000	1300.000	
Lead, total	ug/L	GU-2	4	2.000	0.000	1.176	2.000	2.000	15.000	
Nickel, total	ug/L	GU-2	4	3.375	2.750	1.176	0.140	6.610	100.000	
Selenium, total	ug/L	GU-2	4	2.000	0.000	1.176	2.000	2.000	50.000	
Arsenic, total	ug/L	MW-10	4	2.000	0.000	1.176	2.000	2.000	10.000	
Barium, total	ug/L	MW-10	4	127.000	18.673	1.176	105.036	148.964	2000.000	
Cobalt, total	ug/L	MW-10	4	0.975	0.903	1.176	0.000	2.037	2.100	
Copper, total	ug/L	MW-10	4	9.025	8.300	1.176	0.000	18.788	1300.000	
Lead, total	ug/L	MW-10	4	2.000	0.000	1.176	2.000	2.000	15.000	
Nickel, total	ug/L	MW-10	4	2.850	1.700	1.176	0.850	4.850	100.000	
Selenium, total	ug/L	MW-10	4	2.000	0.000	1.176	2.000	2.000	50.000	
Arsenic, total	ug/L	MW-14	4	14.725	14.784	1.176	0.000	32.115	10.000	
Barium, total	ug/L	MW-14	4	888.675	777.460	1.176	0.000	1803.192	2000.000	
Cobalt, total	ug/L	MW-14	4	1.825	1.708	1.176	0.000	3.834	2.100	
Copper, total	ug/L	MW-14	4	3.000	2.000	1.176	0.647	5.353	1300.000	
Lead, total	ug/L	MW-14	4	2.000	0.000	1.176	2.000	2.000	15.000	
Nickel, total	ug/L	MW-14	4	9.025	5.093	1.176	3.034	15.016	100.000	
Selenium, total	ug/L	MW-14	4	2.000	0.000	1.176	2.000	2.000	50.000	
Arsenic, total	ug/L	MW-15	4	6.750	5.545	1.176	0.227	13.273	10.000	
Barium, total	ug/L	MW-15	4	298.600	238.742	1.176	17.771	579.429	2000.000	
Cobalt, total	ug/L	MW-15	4	1.100	1.092	1.176	0.000	2.385	2.100	
Copper, total	ug/L	MW-15	4	2.000	0.000	1.176	2.000	2.000	1300.000	
Lead, total	ug/L	MW-15	4	2.000	0.000	1.176	2.000	2.000	15.000	
Nickel, total	ug/L	MW-15	4	28.450	15.437	1.176	10.292	46.608	100.000	
Selenium, total	ug/L	MW-15	4	2.000	0.000	1.176	2.000	2.000	50.000	
Arsenic, total	ug/L	MW-16	4	2.625	1.250	1.176	1.155	4.095	10.000	
Barium, total	ug/L	MW-16	4	548.250	301.225	1.176	193.923	902.577	2000.000	
Cobalt, total	ug/L	MW-16	4	1.200	1.023	1.176	0.000	2.403	2.100	
Copper, total	ug/L	MW-16	4	2.000	0.000	1.176	2.000	2.000	1300.000	
Lead, total	ug/L	MW-16	4	2.000	0.000	1.176	2.000	2.000	15.000	
Nickel, total	ug/L	MW-16	4	12.900	1.794	1.176	10.789	15.011	100.000	
Selenium, total	ug/L	MW-16	4	2.000	0.000	1.176	2.000	2.000	50.000	
Arsenic, total	ug/L	MW-7B	4	2.000	0.000	1.176	2.000	2.000	10.000	
Barium, total	ug/L	MW-7B	4	668.250	60.588	1.176	596.981	739.519	2000.000	
Cobalt, total	ug/L	MW-7B	4	0.925	0.806	1.176	0.000	1.873	2.100	
Copper, total	ug/L	MW-7B	4	2.000	0.000	1.176	2.000	2.000	1300.000	
Lead, total	ug/L	MW-7B	4	2.000	0.000	1.176	2.000	2.000	15.000	
Nickel, total	ug/L	MW-7B	4	12.100	2.847	1.176	8.751	15.449	100.000	
Selenium, total	ug/L	MW-7B	4	2.000	0.000	1.176	2.000	2.000	50.000	
Arsenic, total	ug/L	MW-8	4	146.900	155.420	1.176	0.000	329.719	10.000	
Barium, total	ug/L	MW-8	4	1365.500	1115.692	1.176	53.124	2677.876	2000.000	
Cobalt, total	ug/L	MW-8	4	1.650	0.866	1.176	0.631	2.669	2.100	
Copper, total	ug/L	MW-8	4	2.500	1.000	1.176	1.324	3.676	1300.000	
Lead, total	ug/L	MW-8	4	2.950	1.900	1.176	0.715	5.185	15.000	
Nickel, total	ug/L	MW-8	4	7.650	1.392	1.176	6.013	9.287	100.000	
Selenium, total	ug/L	MW-8	4	2.550	1.100	1.176	1.256	3.844	50.000	
Arsenic, total	ug/L	MW-9	4	6.075	0.918	1.176	4.995	7.155	10.000	
Barium, total	ug/L	MW-9	4	57.325	3.409	1.176	53.315	61.335	2000.000	
Cobalt, total	ug/L	MW-9	4	0.850	0.645	1.176	0.091	1.609	2.100	
Copper, total	ug/L	MW-9	4	3.650	1.933	1.176	1.376	5.924	1300.000	
Lead, total	ug/L	MW-9	4	2.000	0.000	1.176	2.000	2.000	15.000	
Nickel, total	ug/L	MW-9	4	2.000	0.000	1.176	2.000	2.000	100.000	
Selenium, total	ug/L	MW-9	4	2.000	0.000	1.176	2.000	2.000	50.000	

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

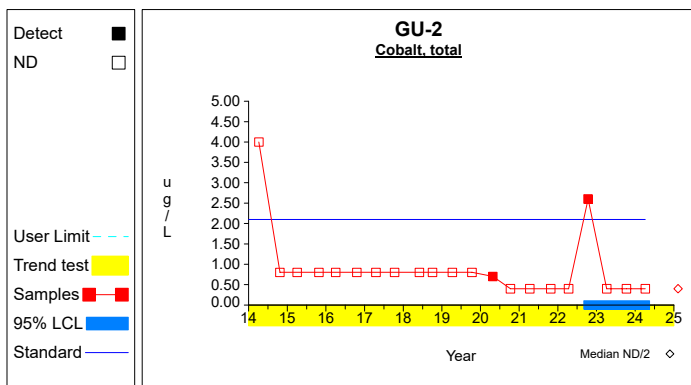
Confidence Limits (Assessment)



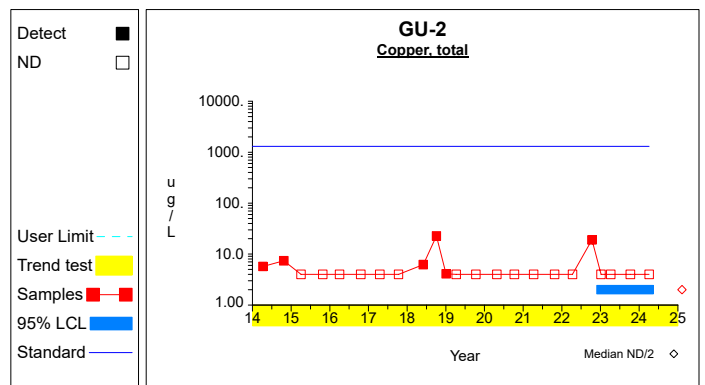
Graph 1



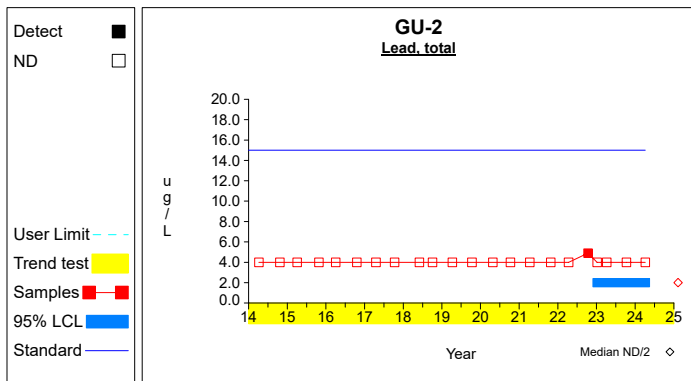
Graph 2



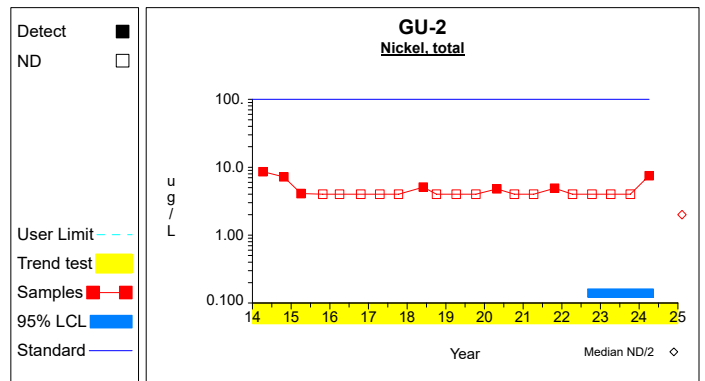
Graph 3



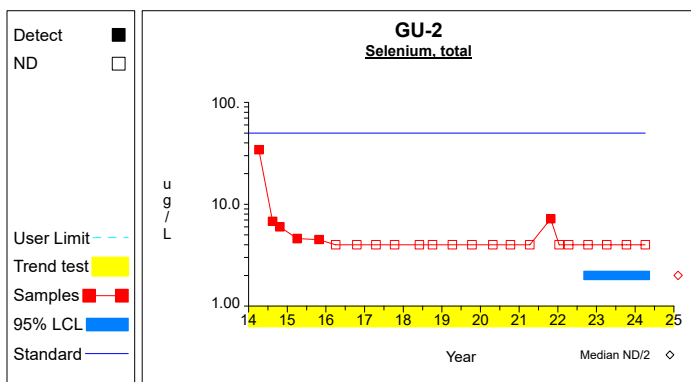
Graph 4



Graph 5

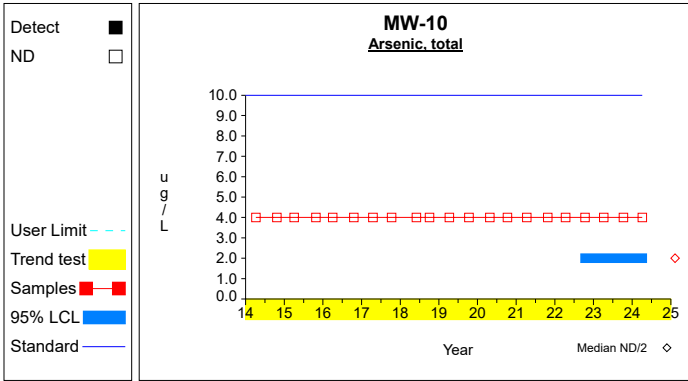


Graph 6

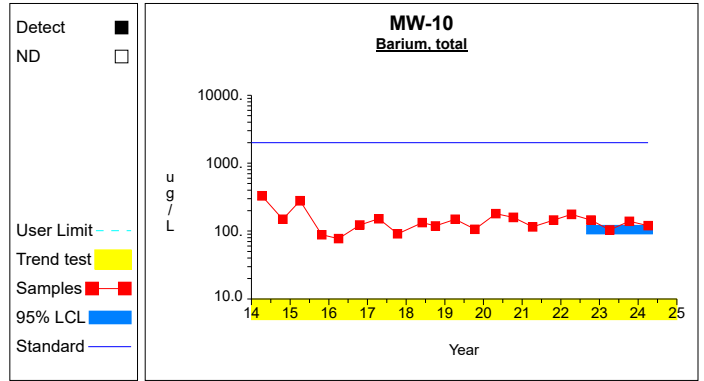


Graph 7

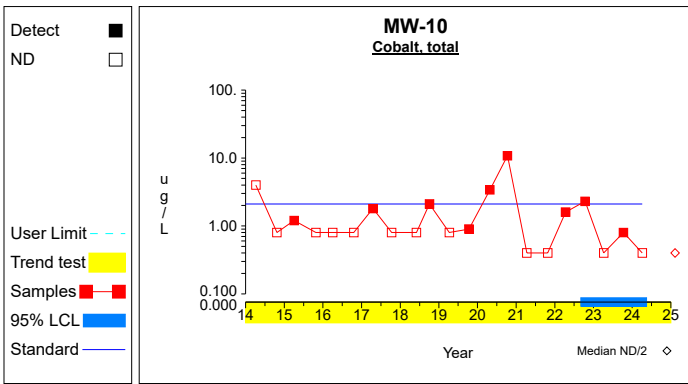
Confidence Limits (Assessment)



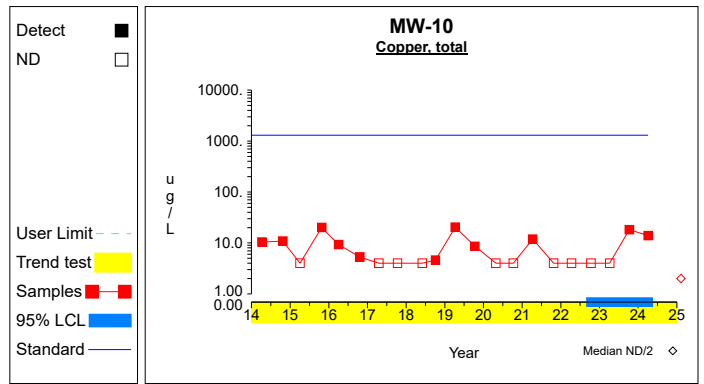
Graph 8



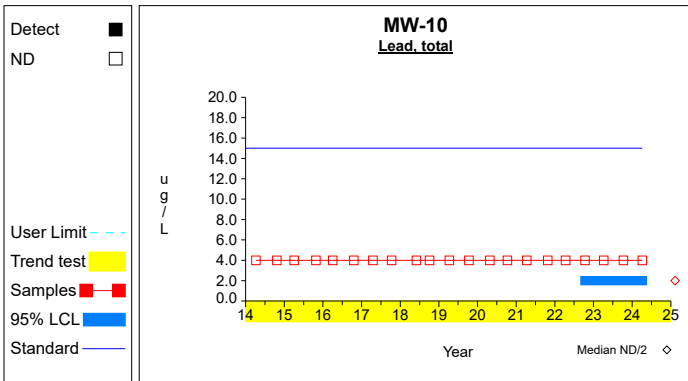
Graph 9



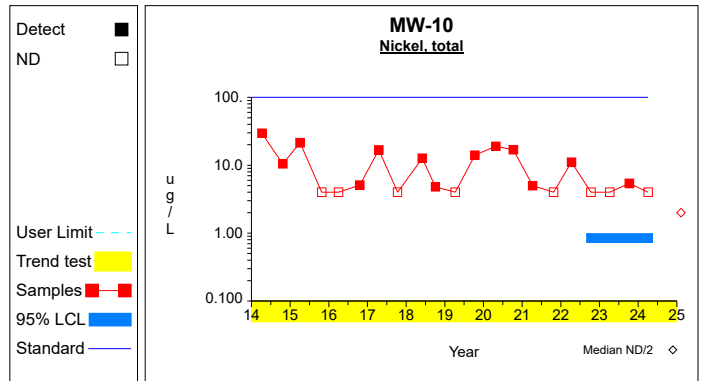
Graph 10



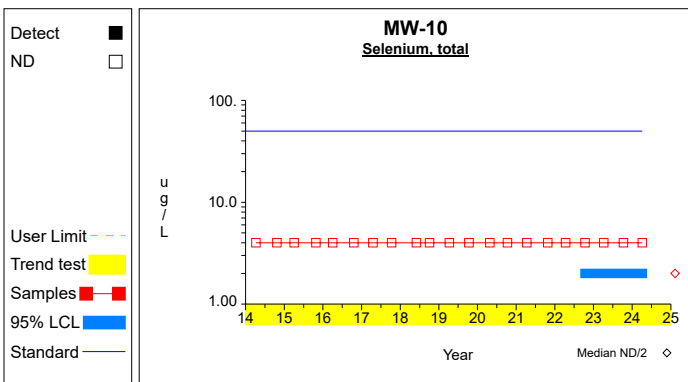
Graph 11



Graph 12

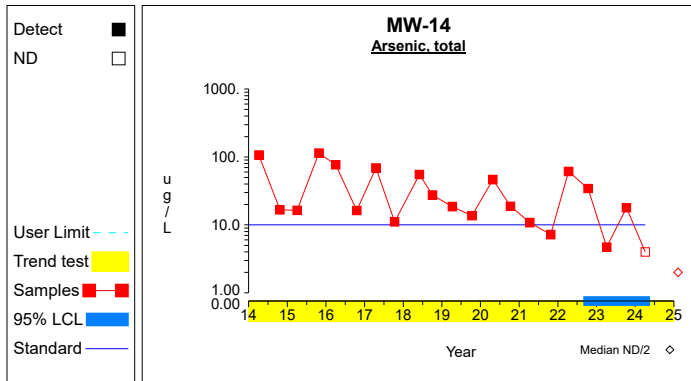


Graph 13

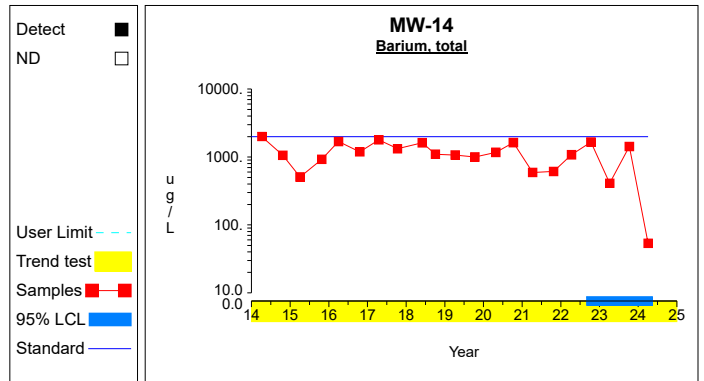


Graph 14

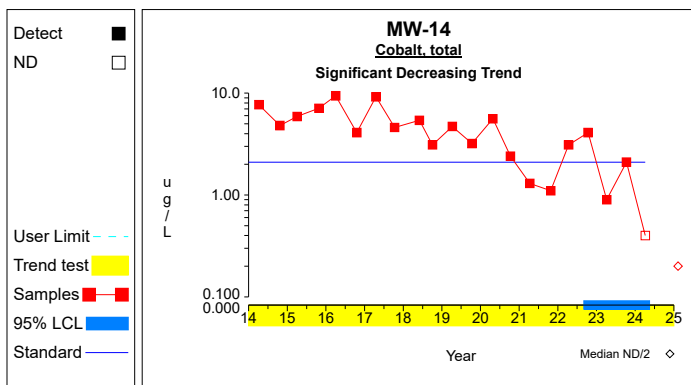
Confidence Limits (Assessment)



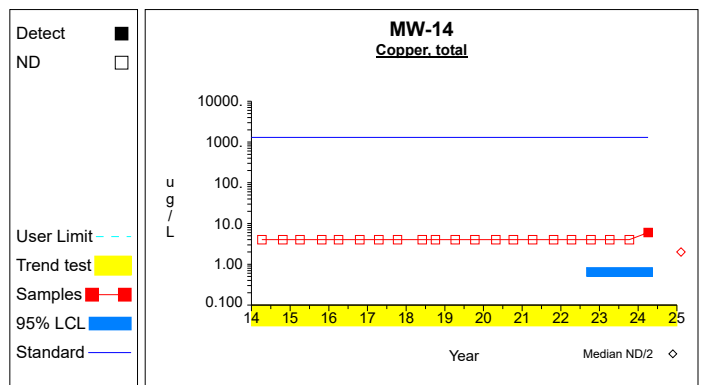
Graph 15



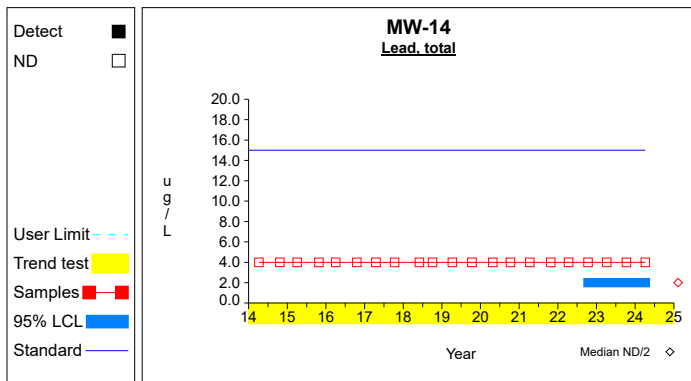
Graph 16



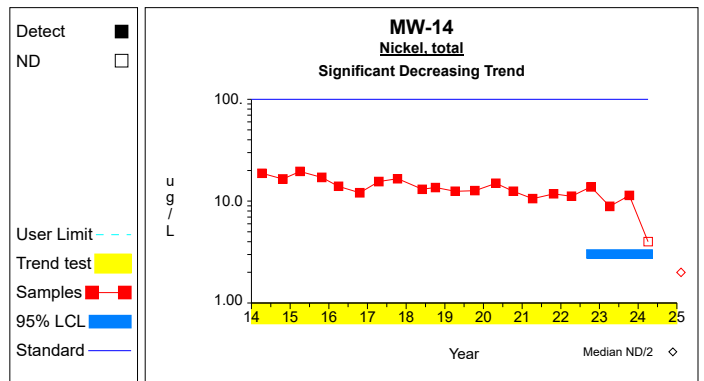
Graph 17



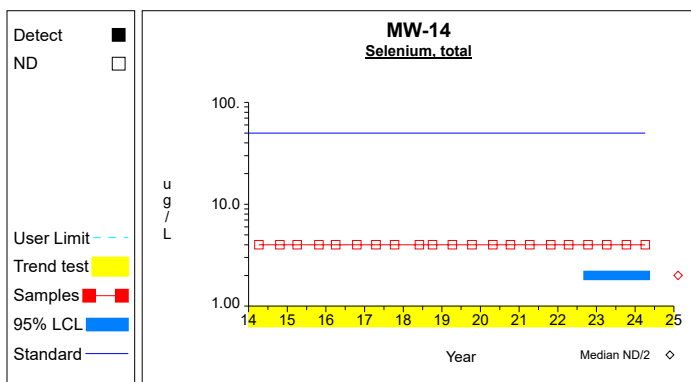
Graph 18



Graph 19

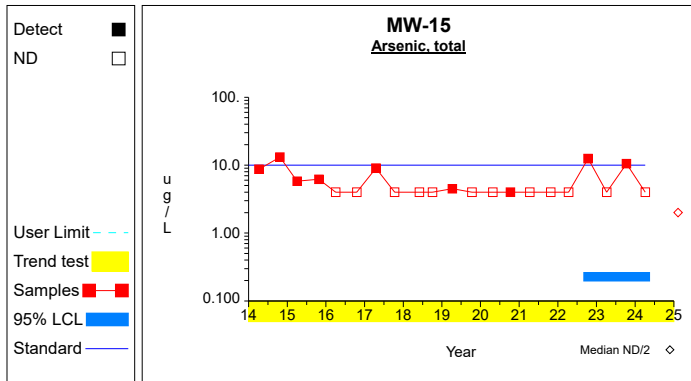


Graph 20

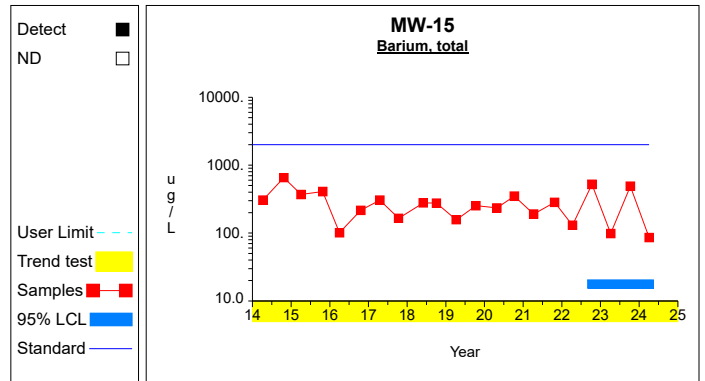


Graph 21

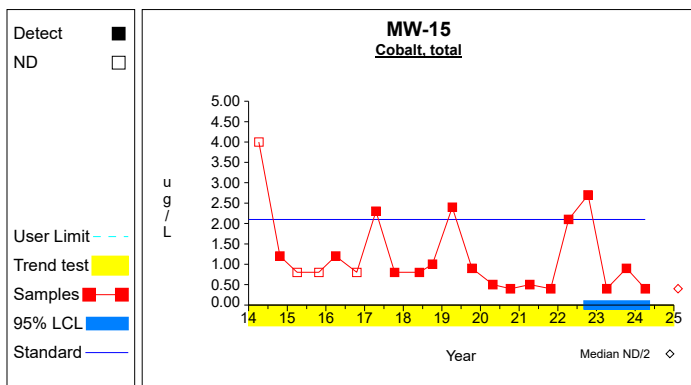
Confidence Limits (Assessment)



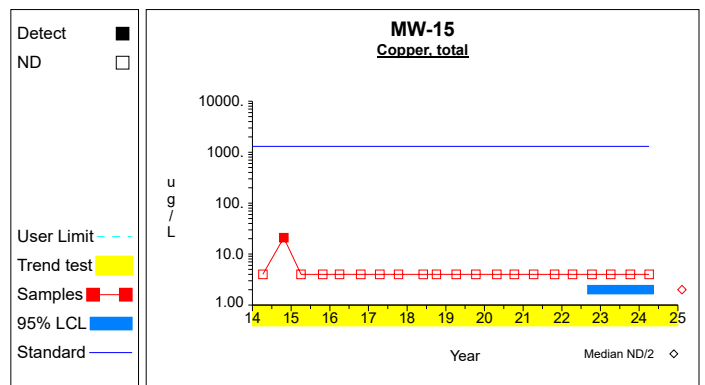
Graph 22



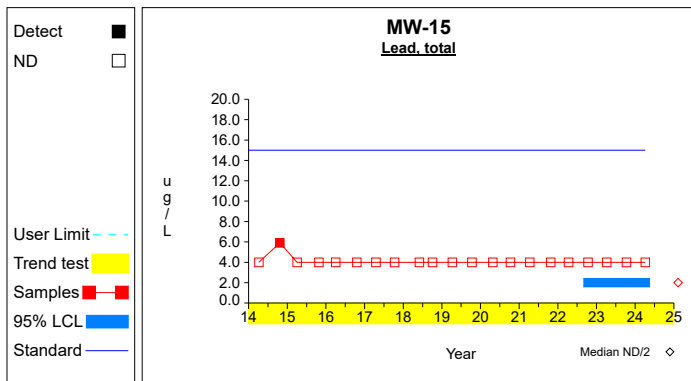
Graph 23



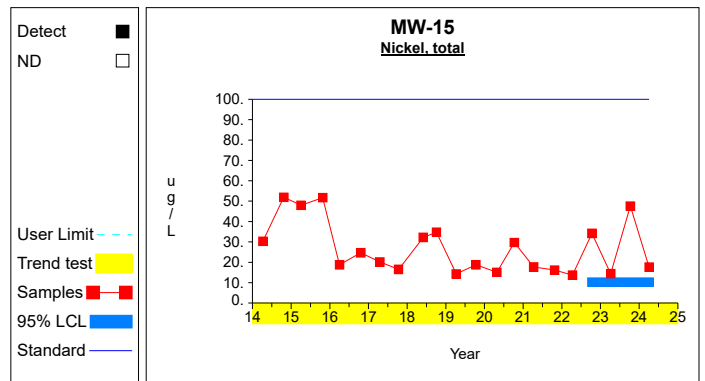
Graph 24



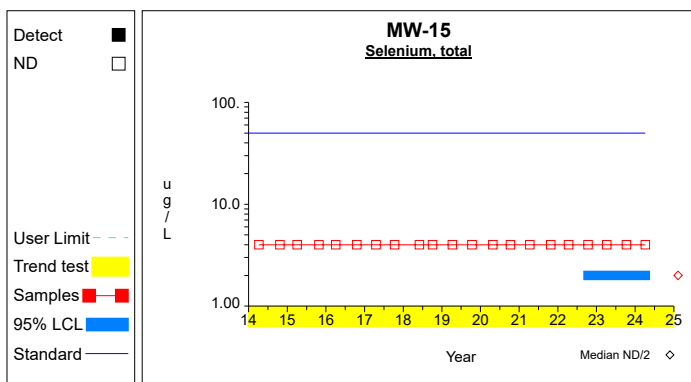
Graph 25



Graph 26

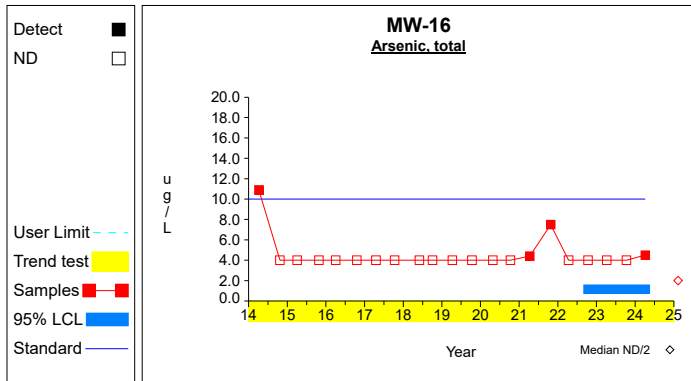


Graph 27

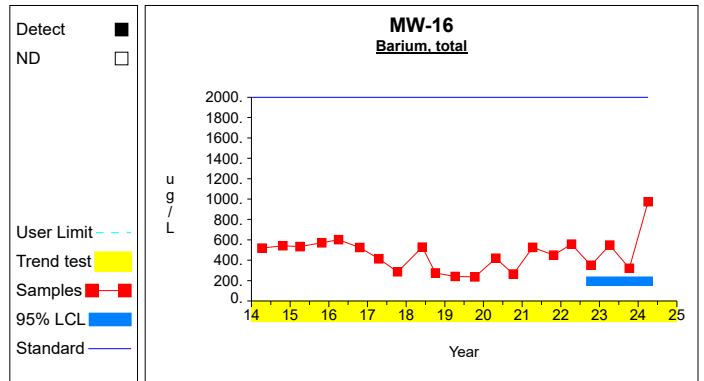


Graph 28

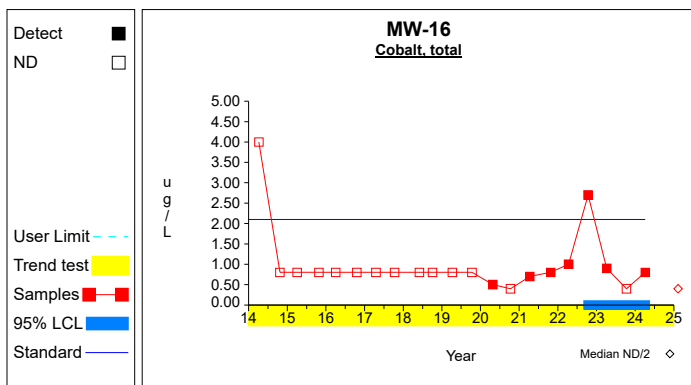
Confidence Limits (Assessment)



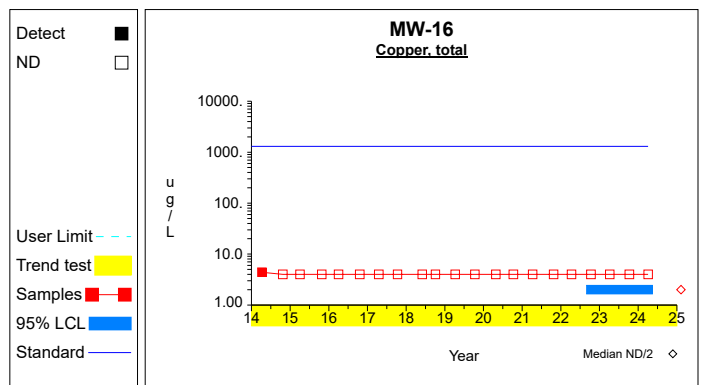
Graph 29



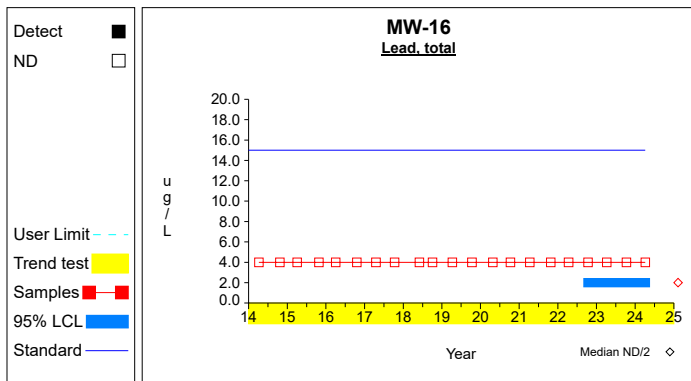
Graph 30



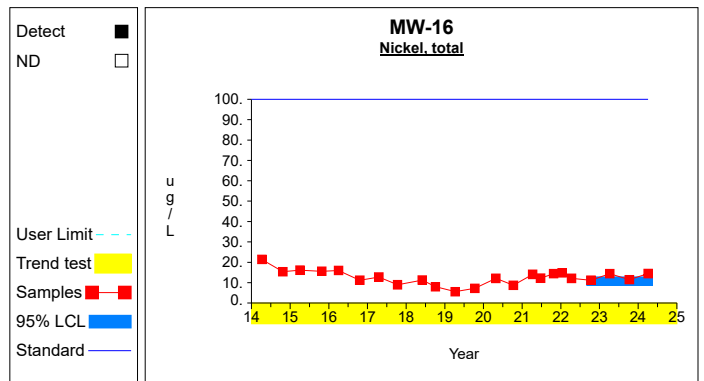
Graph 31



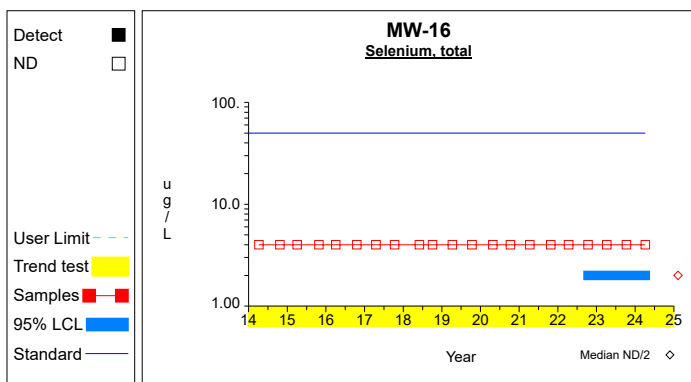
Graph 32



Graph 33

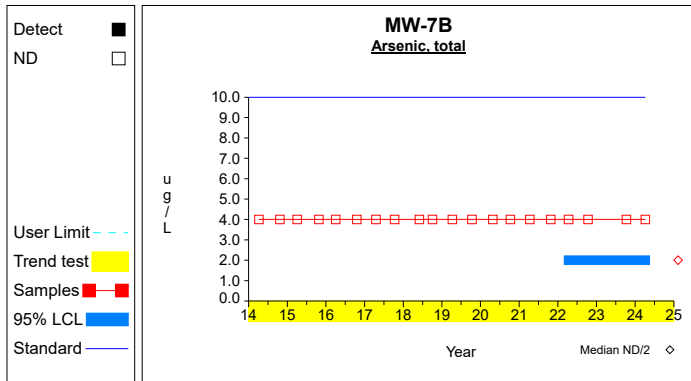


Graph 34

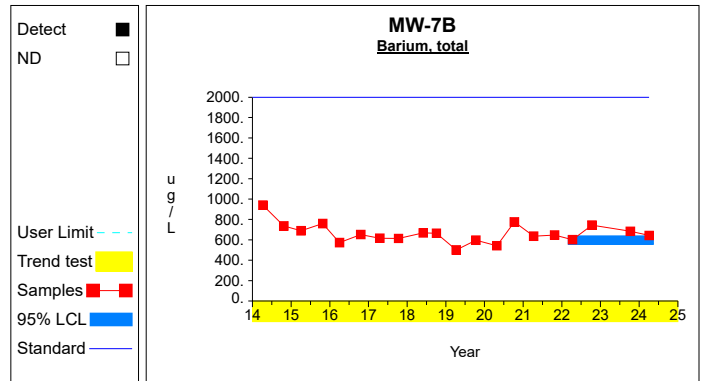


Graph 35

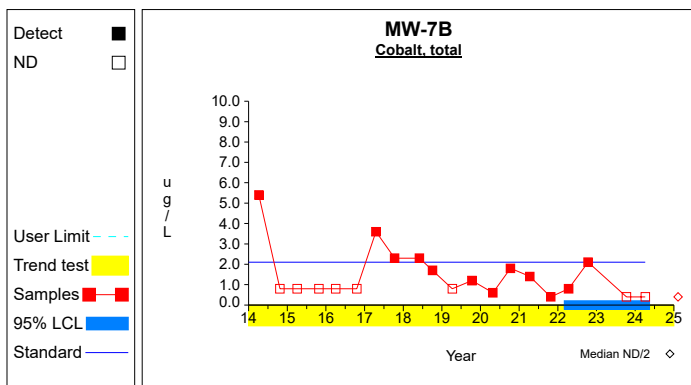
Confidence Limits (Assessment)



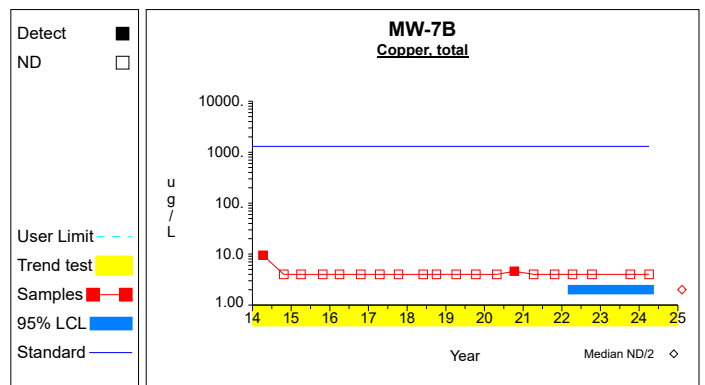
Graph 36



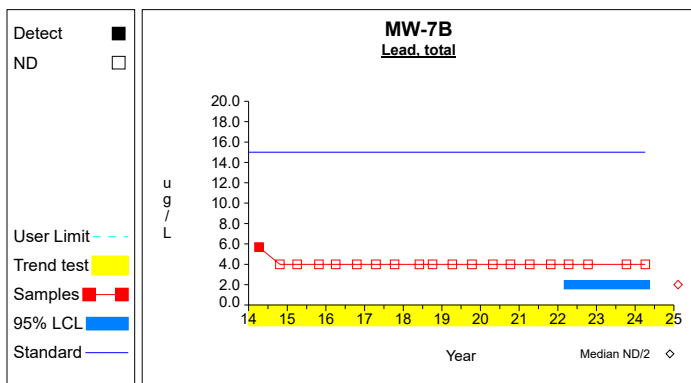
Graph 37



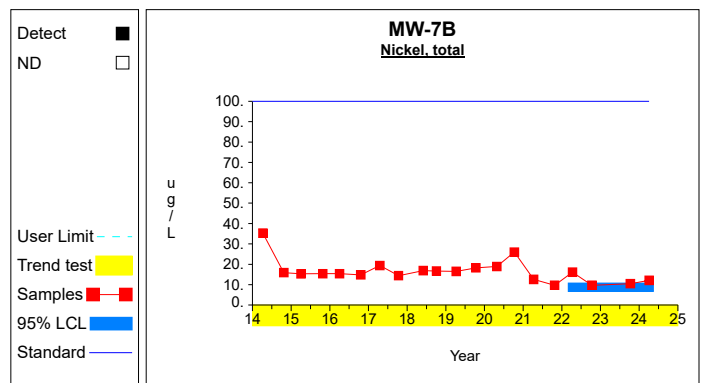
Graph 38



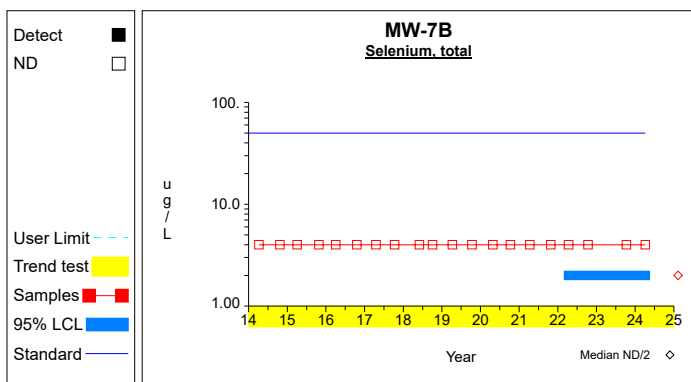
Graph 39



Graph 40

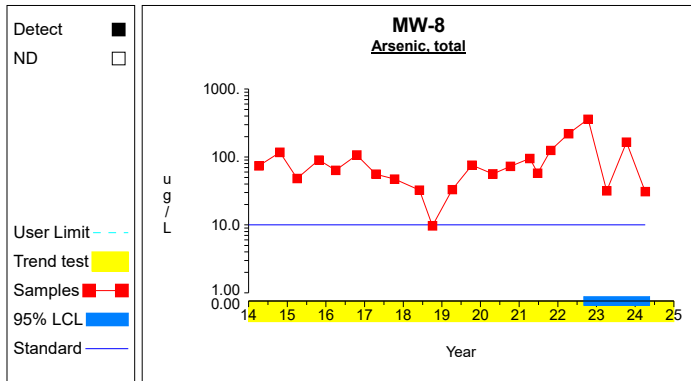


Graph 41

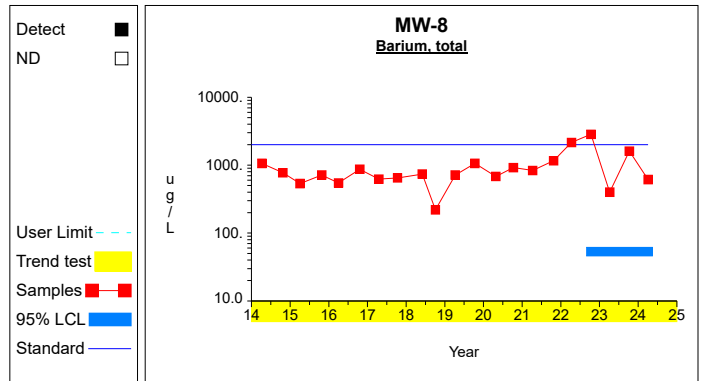


Graph 42

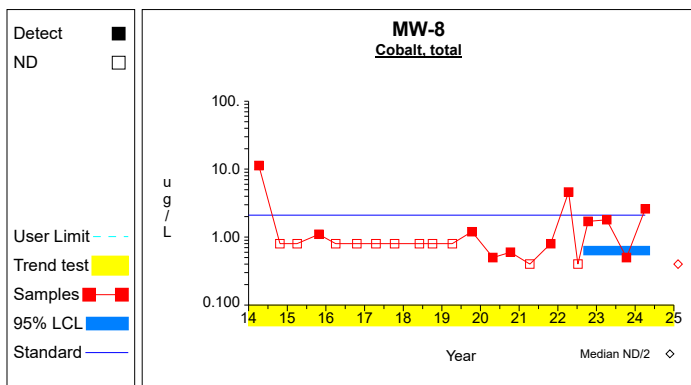
Confidence Limits (Assessment)



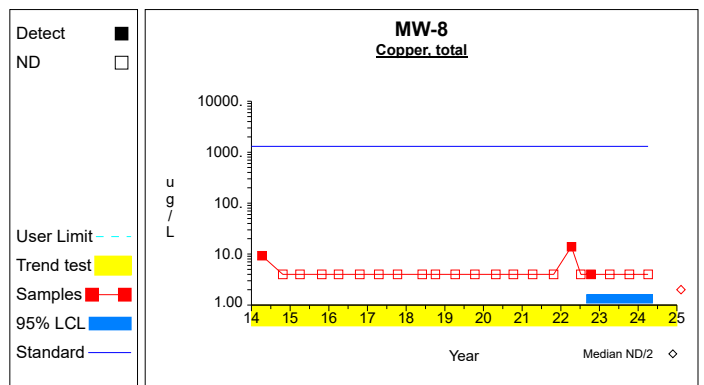
Graph 43



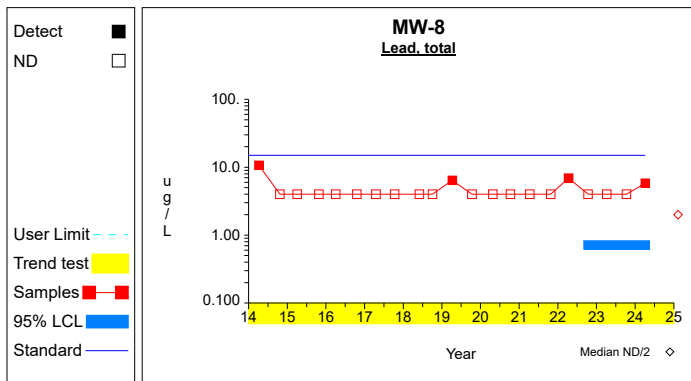
Graph 44



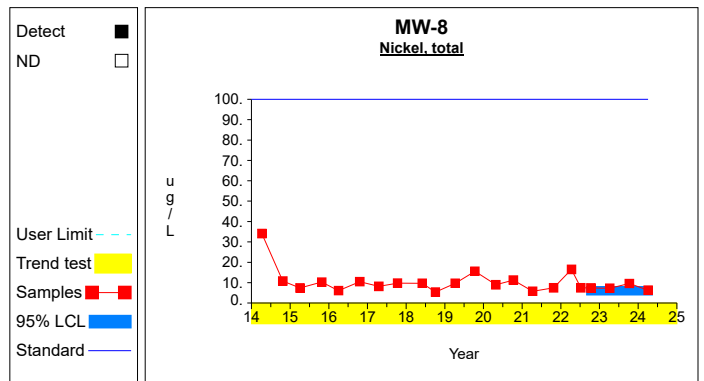
Graph 45



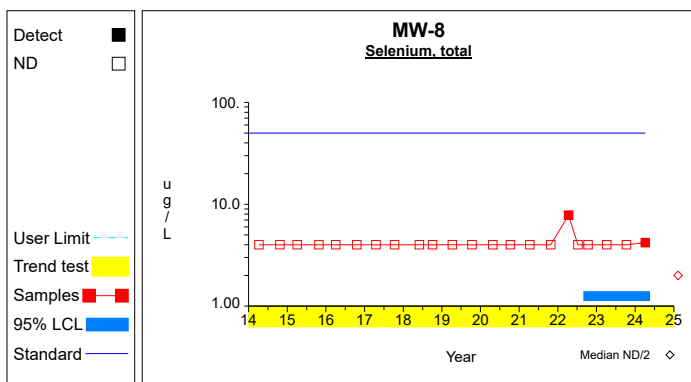
Graph 46



Graph 47

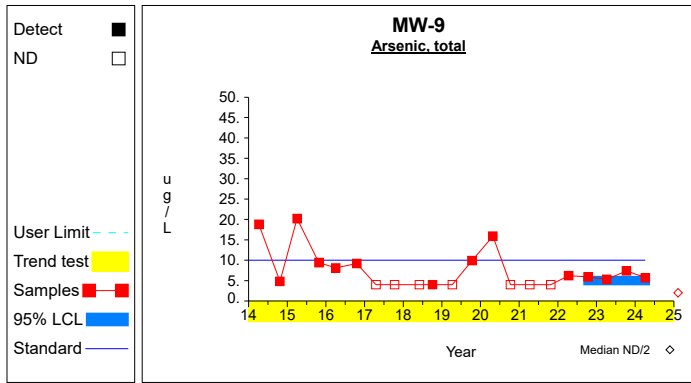


Graph 48

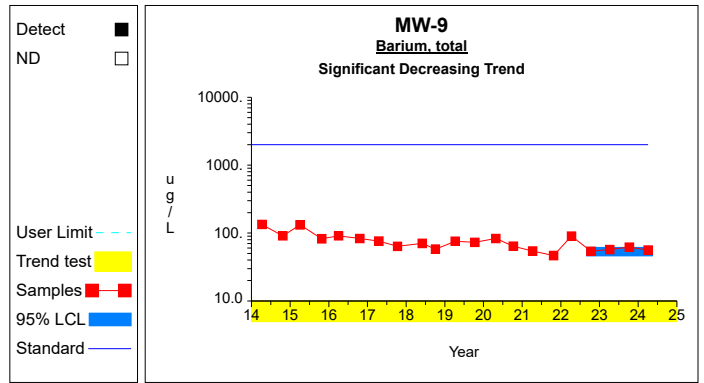


Graph 49

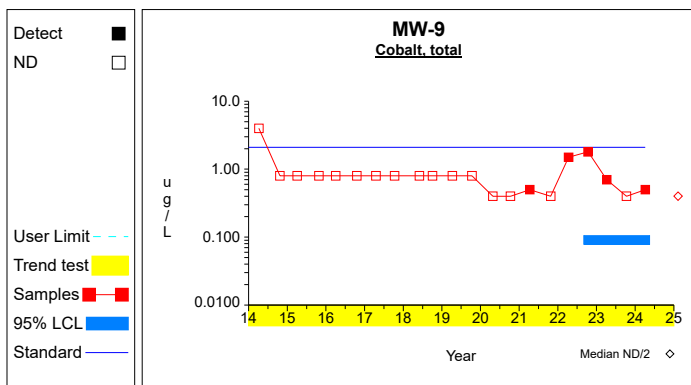
Confidence Limits (Assessment)



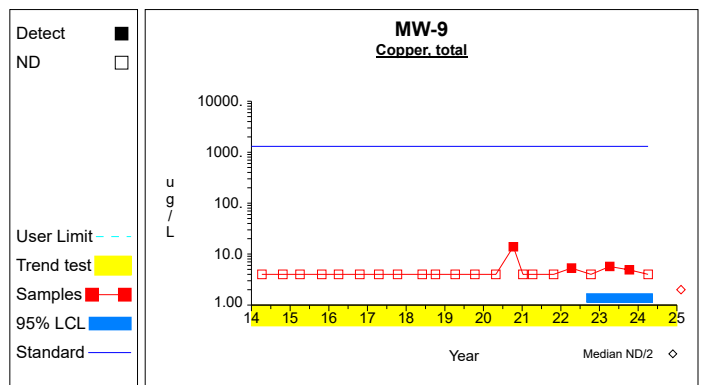
Graph 50



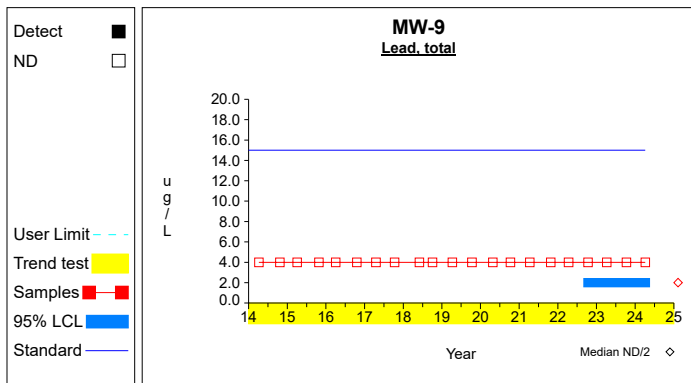
Graph 51



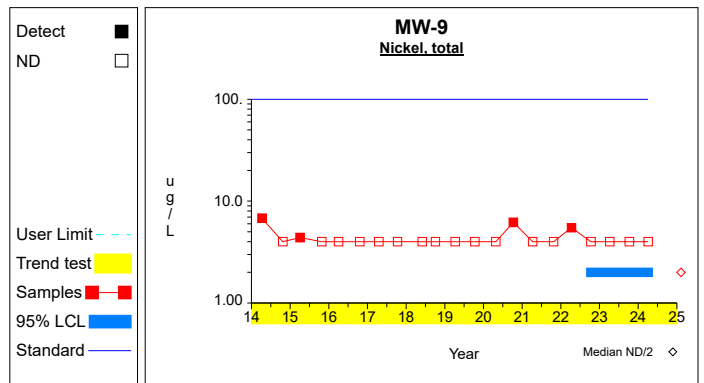
Graph 52



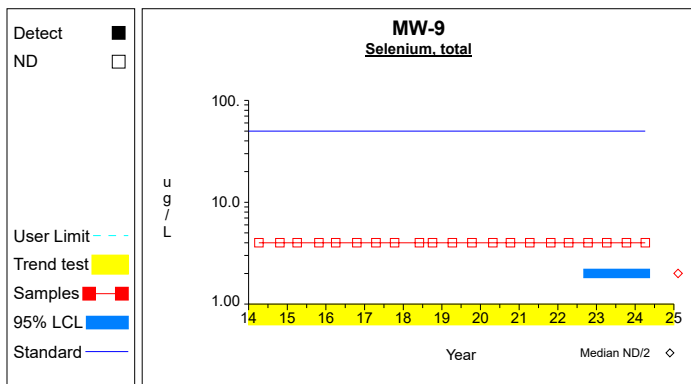
Graph 53



Graph 54



Graph 55



Graph 56

Attachment D

Summary of Historical VOC Detections

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
1,1-dichloroethane	GU-1	6/09/2009		1.2	1.0	ug/L
1,4-dichlorobenzene	GU-1	6/24/2008		1.5	1.0	ug/L
2-butanone (mek)	GU-1	6/24/2008		16.9	5.0	ug/L
4-nitroaniline	GU-1	6/09/2009		8	8	ug/L
Benzene	GU-1	4/22/2008		2.7	1.0	ug/L
Benzene	GU-1	6/24/2008		3.0	1.0	ug/L
Benzene	GU-1	4/14/2009		1.4	1.0	ug/L
Benzene	GU-1	10/28/2009		1.2	1.0	ug/L
Benzene	GU-1	8/05/2013		1.0	1.0	ug/L
Chloroethane	GU-1	4/22/2008		1.2	1.0	ug/L
Chloroethane	GU-1	6/24/2008		1.1	1.0	ug/L
Chloroethane	GU-1	8/01/2008		1.0	1.0	ug/L
Chloroethane	GU-1	10/30/2008		1.1	1.0	ug/L
Chloroethane	GU-1	4/14/2009		1.2	1.0	ug/L
Chloroethane	GU-1	6/09/2009		1.4	1.0	ug/L
Ethylbenzene	GU-1	6/24/2008		3.4	1.0	ug/L
Vinyl chloride	GU-1	4/22/2008		2.0	1.0	ug/L
Vinyl chloride	GU-1	6/24/2008		1.6	1.0	ug/L
Xylenes, total	GU-1	6/24/2008		4.9	2.0	ug/L
Acetone	GU-2	10/11/2017		18.7	10.0	ug/L
Bis(2-ethylhexyl) phthalate	GU-2	4/06/2023		7	6	ug/L
Bis(2-ethylhexyl) phthalate	GU-2	6/27/2023		7	6	ug/L
1,1-dichloroethane	GU-3	10/30/2008		6.4	1.0	ug/L
1,1-dichloroethane	GU-3	10/23/2014		3.1	1.0	ug/L
1,1-dichloroethane	GU-3	4/02/2015		1.7	1.0	ug/L
1,4-dichlorobenzene	GU-3	10/23/2014		1.4	1.0	ug/L
1,4-dichlorobenzene	GU-3	4/02/2015		1.4	1.0	ug/L
Benzene	GU-3	10/30/2008		1.2	1.0	ug/L
Bis(2-ethylhexyl) phthalate	GU-3	4/02/2015		51	8	ug/L
Chloroethane	GU-3	10/30/2008		4.3	1.0	ug/L
Chloroethane	GU-3	10/23/2014		2.8	1.0	ug/L
Chloroethane	GU-3	4/02/2015		9.5	1.0	ug/L
Cis-1,2-dichloroethylene	GU-3	10/30/2008		3.6	1.0	ug/L
Cis-1,2-dichloroethylene	GU-3	10/23/2014		2.0	1.0	ug/L
Trichloroethylene	GU-3	10/30/2008		1.6	1.0	ug/L
Vinyl chloride	GU-3	10/30/2008		3.7	1.0	ug/L
Vinyl chloride	GU-3	10/23/2014		1.1	1.0	ug/L
Chlorobenzene	LPZ-8	10/25/2021		8.2	5.0	ug/L
Acetone	MW-10	10/11/2017		16.7	10.0	ug/L
Bis(2-ethylhexyl) phthalate	MW-10	6/01/2018		7	6	ug/L
Toluene	MW-10	10/20/2010		15.8	1.0	ug/L
Trichloroethylene	MW-10	4/22/2008		2.8	1.0	ug/L
Acetone	MW-11	10/11/2017		17.9	10.0	ug/L
Acetone	MW-14	10/31/2008		10.8	10.0	ug/L
Acetone	MW-14	10/11/2017		16.9	10.0	ug/L
Benzene	MW-14	10/31/2008		2.6	1.0	ug/L
Benzene	MW-14	1/06/2009		1.8	1.0	ug/L
Benzene	MW-14	2/10/2009		2.0	1.0	ug/L
Benzene	MW-14	4/14/2009		2.2	1.0	ug/L
Benzene	MW-14	6/09/2009		2.8	1.0	ug/L
Benzene	MW-14	10/28/2009		1.7	1.0	ug/L
Benzene	MW-14	4/19/2010		1.9	1.0	ug/L
Benzene	MW-14	10/20/2010		1.7	1.0	ug/L
Benzene	MW-14	4/20/2011		1.4	1.0	ug/L
Benzene	MW-14	10/13/2011		2.0	1.0	ug/L
Benzene	MW-14	4/25/2012		2.0	1.0	ug/L
Benzene	MW-14	10/26/2015		1.3	1.0	ug/L
Benzene	MW-14	4/17/2017		1.2	1.0	ug/L
Benzene	MW-14	6/01/2018		1.6	1.0	ug/L
Benzene	MW-14	10/03/2018		1.0	1.0	ug/L
Benzene	MW-14	4/27/2020		1.0	1.0	ug/L
Benzene	MW-14	10/09/2020		1.9	1.0	ug/L
Benzene	MW-14	10/12/2022		1.9	1.0	ug/L
Carbon disulfide	MW-14	8/06/2013		1	1	ug/L
Chlorobenzene	MW-14	10/31/2008		1	1	ug/L
Chlorobenzene	MW-14	4/14/2009		1	1	ug/L
Chlorobenzene	MW-14	6/09/2009		1	1	ug/L
Chlorobenzene	MW-14	10/28/2009		1	1	ug/L
Chloroethane	MW-14	10/31/2008		1.3	1.0	ug/L
Chloroethane	MW-14	1/06/2009		1.2	1.0	ug/L
Chloroethane	MW-14	4/14/2009		1.2	1.0	ug/L
Chloroethane	MW-14	6/09/2009		1.4	1.0	ug/L
Ethylbenzene	MW-14	10/31/2008		1.7	1.0	ug/L
Ethylbenzene	MW-14	1/06/2009		1.8	1.0	ug/L
Ethylbenzene	MW-14	2/10/2009		1.8	1.0	ug/L
Ethylbenzene	MW-14	4/14/2009		12.6	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
Ethylbenzene	MW-14	6/09/2009		12.8	1.0	ug/L
Ethylbenzene	MW-14	10/28/2009		8.8	1.0	ug/L
Ethylbenzene	MW-14	4/19/2010		15.4	1.0	ug/L
Ethylbenzene	MW-14	10/20/2010		2.7	1.0	ug/L
Ethylbenzene	MW-14	4/20/2011		11.2	1.0	ug/L
Ethylbenzene	MW-14	10/13/2011		1.2	1.0	ug/L
Methacrylonitrile	MW-14	4/27/2020		1.2	1.0	ug/L
O,o,o-triethyl phosphorothioate	MW-14	6/09/2009		1.6	.4	ug/L
Vinyl chloride	MW-14	10/31/2008		1.6	1.0	ug/L
Vinyl chloride	MW-14	1/06/2009		1.3	1.0	ug/L
Vinyl chloride	MW-14	2/10/2009		1.6	1.0	ug/L
Vinyl chloride	MW-14	4/14/2009		1.3	1.0	ug/L
Vinyl chloride	MW-14	6/09/2009		1.4	1.0	ug/L
Xylenes, total	MW-14	4/14/2009		2.4	2.0	ug/L
Xylenes, total	MW-14	6/09/2009		2.9	2.0	ug/L
Xylenes, total	MW-14	4/19/2010		2.1	2.0	ug/L
Xylenes, total	MW-14	10/13/2011		2.3	2.0	ug/L
1,1-dichloroethane	MW-15	10/31/2008		2.3	1.0	ug/L
1,1-dichloroethane	MW-15	1/06/2009		1.8	1.0	ug/L
1,1-dichloroethane	MW-15	6/09/2009		1.5	1.0	ug/L
1,1-dichloroethane	MW-15	10/28/2009		1.0	1.0	ug/L
1,1-dichloroethane	MW-15	10/20/2010		3.3	1.0	ug/L
1,1-dichloroethane	MW-15	10/13/2011		3.5	1.0	ug/L
1,1-dichloroethane	MW-15	4/25/2012		1.0	1.0	ug/L
1,1-dichloroethane	MW-15	10/22/2012		1.7	1.0	ug/L
1,1-dichloroethane	MW-15	8/06/2013		1.1	1.0	ug/L
1,1-dichloroethane	MW-15	10/23/2014		1.6	1.0	ug/L
1,1-dichloroethane	MW-15	10/26/2015		1.4	1.0	ug/L
Benzene	MW-15	10/09/2023		1	1	ug/L
Bis(2-ethylhexyl) phthalate	MW-15	4/27/2020		11	6	ug/L
Chloroethane	MW-15	10/31/2008		2.0	1.0	ug/L
Chloroethane	MW-15	1/06/2009		1.4	1.0	ug/L
Chloroethane	MW-15	10/20/2010		1.8	1.0	ug/L
Chloroethane	MW-15	10/13/2011		2.6	1.0	ug/L
Chloroethane	MW-15	10/22/2012		1.7	1.0	ug/L
Chloroethane	MW-15	10/23/2014		1.6	1.0	ug/L
Chloroethane	MW-15	4/02/2015		9.1	1.0	ug/L
Chloroethane	MW-15	10/26/2015		1.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-15	10/31/2008		1.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-15	10/20/2010		2.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-15	10/13/2011		1.4	1.0	ug/L
Vinyl chloride	MW-15	10/20/2010		1.7	1.0	ug/L
Vinyl chloride	MW-15	10/13/2011		1.8	1.0	ug/L
Acetone	MW-16	10/11/2017		16.3	10.0	ug/L
Bis(2-ethylhexyl) phthalate	MW-16	4/11/2022		10	6	ug/L
Xylenes, total	MW-16	10/28/2009		2	2	ug/L
Acetone	MW-17	10/11/2017		20.1	10.0	ug/L
Acetone	MW-18	4/29/2020		14.2	10.0	ug/L
Acetone	MW-3AR	4/25/2012		33.8	10.0	ug/L
Acetone	MW-3AR	10/22/2012		28.0	10.0	ug/L
Acetone	MW-3AR	10/11/2017		19.2	10.0	ug/L
Bis(2-ethylhexyl) phthalate	MW-3AR	10/13/2011		10	8	ug/L
Bis(2-ethylhexyl) phthalate	MW-3AR	4/25/2012		10	8	ug/L
Dimethoate	MW-3AR	10/13/2011		.9	.4	ug/L
Famphur	MW-3AR	10/13/2011		.9	.4	ug/L
Bis(2-ethylhexyl) phthalate	MW-6B	4/08/2019		8	6	ug/L
Bis(2-ethylhexyl) phthalate	MW-6B	4/08/2019		29	6	ug/L
Bis(2-ethylhexyl) phthalate	MW-6B	4/27/2020		13	6	ug/L
1,1-dichloroethane	MW-7A	6/24/2008		3.7	1.0	ug/L
1,1-dichloroethane	MW-7A	8/01/2008		4.5	1.0	ug/L
1,1-dichloroethane	MW-7A	10/31/2008		5.5	1.0	ug/L
1,1-dichloroethane	MW-7A	1/06/2009		4.4	1.0	ug/L
1,1-dichloroethane	MW-7A	6/09/2009		4.9	1.0	ug/L
1,1-dichloroethane	MW-7A	4/19/2010		1.4	1.0	ug/L
1,1-dichloroethane	MW-7A	10/20/2010		3.2	1.0	ug/L
1,1-dichloroethane	MW-7A	4/07/2014		2.5	1.0	ug/L
1,1-dichloroethane	MW-7A	10/19/2016		2.2	1.0	ug/L
1,1-dichloroethane	MW-7A	10/11/2017		3.2	1.0	ug/L
1,1-dichloroethane	MW-7A	6/01/2018		2.2	1.0	ug/L
1,1-dichloroethane	MW-7A	10/03/2018		2.6	1.0	ug/L
1,1-dichloroethane	MW-7A	10/11/2019		1.1	1.0	ug/L
Acetone	MW-7A	10/11/2017		21.8	10.0	ug/L
Chloroethane	MW-7A	6/24/2008		1.1	1.0	ug/L
Chloroethane	MW-7A	8/01/2008		1.7	1.0	ug/L
Chloroethane	MW-7A	10/31/2008		2.1	1.0	ug/L
Chloroethane	MW-7A	1/06/2009		1.5	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
Chloroethane	MW-7A	6/09/2009		1.6	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7A	6/24/2008		3.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7A	8/01/2008		3.7	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7A	10/31/2008		5.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7A	1/06/2009		3.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7A	6/09/2009		3.7	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7A	10/20/2010		2.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7A	4/07/2014		2.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7A	10/19/2016		2.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7A	10/11/2017		3.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7A	6/01/2018		1.7	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7A	10/03/2018		2.5	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7A	10/11/2019		2.0	1.0	ug/L
Vinyl chloride	MW-7A	6/24/2008		2.4	1.0	ug/L
Vinyl chloride	MW-7A	8/01/2008		2.7	1.0	ug/L
Vinyl chloride	MW-7A	10/31/2008		3.8	1.0	ug/L
Vinyl chloride	MW-7A	1/06/2009		2.5	1.0	ug/L
Vinyl chloride	MW-7A	6/09/2009		2.6	1.0	ug/L
Vinyl chloride	MW-7A	10/20/2010		1.5	1.0	ug/L
Vinyl chloride	MW-7A	4/07/2014		1.1	1.0	ug/L
Vinyl chloride	MW-7A	10/11/2017		1.3	1.0	ug/L
Vinyl chloride	MW-7A	6/01/2018		1.1	1.0	ug/L
1,1-dichloroethane	MW-7B	4/22/2008		3.2	1.0	ug/L
1,1-dichloroethane	MW-7B	6/24/2008		3.2	1.0	ug/L
1,1-dichloroethane	MW-7B	8/01/2008		2.8	1.0	ug/L
1,1-dichloroethane	MW-7B	10/31/2008		5.3	1.0	ug/L
1,1-dichloroethane	MW-7B	1/06/2009		2.5	1.0	ug/L
1,1-dichloroethane	MW-7B	4/13/2009		3.1	1.0	ug/L
1,1-dichloroethane	MW-7B	6/09/2009		3.0	1.0	ug/L
1,1-dichloroethane	MW-7B	10/28/2009		2.7	1.0	ug/L
1,1-dichloroethane	MW-7B	4/19/2010		3.3	1.0	ug/L
1,1-dichloroethane	MW-7B	10/20/2010		2.4	1.0	ug/L
1,1-dichloroethane	MW-7B	10/13/2011		1.6	1.0	ug/L
1,1-dichloroethane	MW-7B	4/25/2012		2.7	1.0	ug/L
1,1-dichloroethane	MW-7B	10/22/2012		1.2	1.0	ug/L
1,1-dichloroethane	MW-7B	4/15/2013		2.1	1.0	ug/L
1,1-dichloroethane	MW-7B	8/06/2013		1.9	1.0	ug/L
1,1-dichloroethane	MW-7B	4/07/2014		1.4	1.0	ug/L
Chloroethane	MW-7B	10/31/2008		1.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7B	6/24/2008		1.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7B	10/31/2008		4.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7B	4/13/2009		1.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7B	6/09/2009		1.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7B	10/28/2009		1.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7B	4/19/2010		1.5	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7B	10/20/2010		1.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7B	4/25/2012		1.0	1.0	ug/L
Vinyl chloride	MW-7B	4/22/2008		2.5	1.0	ug/L
Vinyl chloride	MW-7B	6/24/2008		2.8	1.0	ug/L
Vinyl chloride	MW-7B	8/01/2008		2.3	1.0	ug/L
Vinyl chloride	MW-7B	10/31/2008		3.7	1.0	ug/L
Vinyl chloride	MW-7B	1/06/2009		1.8	1.0	ug/L
Vinyl chloride	MW-7B	4/13/2009		2.3	1.0	ug/L
Vinyl chloride	MW-7B	6/09/2009		2.3	1.0	ug/L
Vinyl chloride	MW-7B	10/28/2009		2.0	1.0	ug/L
Vinyl chloride	MW-7B	4/19/2010		2.5	1.0	ug/L
Vinyl chloride	MW-7B	10/20/2010		1.5	1.0	ug/L
Vinyl chloride	MW-7B	10/13/2011		1.2	1.0	ug/L
Vinyl chloride	MW-7B	4/25/2012		1.8	1.0	ug/L
Vinyl chloride	MW-7B	4/15/2013		1.5	1.0	ug/L
Vinyl chloride	MW-7B	8/06/2013		1.3	1.0	ug/L
Vinyl chloride	MW-7B	4/07/2014		1.2	1.0	ug/L
1,1-dichloroethane	MW-8	4/22/2008		1.6	1.0	ug/L
1,1-dichloroethane	MW-8	6/24/2008		2.3	1.0	ug/L
1,1-dichloroethane	MW-8	8/01/2008		3.0	1.0	ug/L
1,1-dichloroethane	MW-8	10/31/2008		1.3	1.0	ug/L
1,1-dichloroethane	MW-8	4/13/2009		1.2	1.0	ug/L
1,1-dichloroethane	MW-8	6/09/2009		1.9	1.0	ug/L
1,1-dichloroethane	MW-8	10/22/2012		1.0	1.0	ug/L
1,1-dichloroethane	MW-8	8/06/2013		1.4	1.0	ug/L
1,1-dichloroethane	MW-8	4/07/2014		1.3	1.0	ug/L
Chloroethane	MW-8	8/01/2008		1.9	1.0	ug/L
Chloroethane	MW-8	6/09/2009		1.0	1.0	ug/L
Chloroethane	MW-8	8/06/2013		1.0	1.0	ug/L
Chloroethane	MW-8	4/07/2014		1.3	1.0	ug/L
Chloroethane	MW-8	10/03/2018		1.0	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-8	6/24/2008		1.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-8	8/01/2008		2.3	1.0	ug/L
Cis-1,2-dichloroethylene	MW-8	10/31/2008		1.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW-8	6/09/2009		1.0	1.0	ug/L
Vinyl chloride	MW-8	8/01/2008		1.2	1.0	ug/L
Acetone	MW-9	10/11/2017		11.2	10.0	ug/L

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

Attachment E

Assessment Statistics for VOC Detections

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
Benzene	ug/L	MW-14	4	0.850	0.700	1.176	0.027	1.673	5.000	
Benzene	ug/L	MW-15	4	0.625	0.250	1.176	0.331	0.919	5.000	

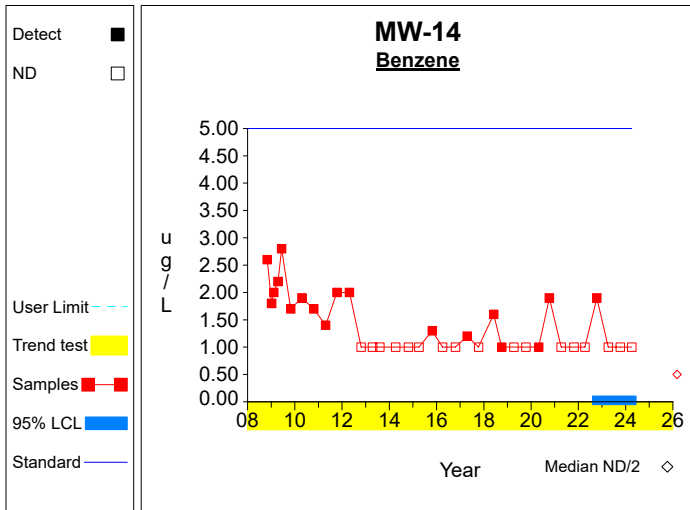
* - Insufficient Data

** - Significant Exceedance

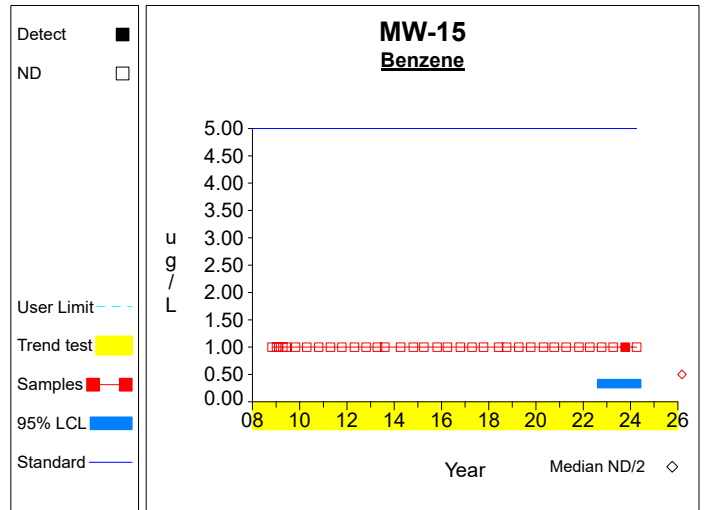
LCL = Lower Confidence Limit

UCL = Upper Confidence Limit

Confidence Limits (Assessment)



Graph 1



Graph 2

Worksheet 6 - Assessment Monitoring
Benzene (ug/L) at MW-14

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 3.4 / 4$ $= 0.85$	Compute the mean of the last 4 measurements.
2	$S = ((\text{sum}[X^2] - \text{sum}[X]^2/N) / (N-1))^{1/2}$ $= ((4.36 - 11.56/4) / (4-1))^{1/2}$ $= 0.7$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 0.85 - 2.353 * 0.7/4^{1/2}$ $= 0.027$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 0.85 + 2.353 * 0.7/4^{1/2}$ $= 1.673$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 35 * (35-1) / 2$ $= 595$	Number of sample pairs during trend detection period.
6	$S = -0.083$	Sen's estimator of trend.
7	$\text{var}(S) = 4359.667$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (595 \pm 2.576 * 4359.667^{1/2}) / 2$ $= [212.456, 382.544]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [-0.14, 0.0]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Benzene (ug/L) at MW-15

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 2.5 / 4$ $= 0.625$	Compute the mean of the last 4 measurements.
2	$S = \left(\frac{\text{sum}[X^2] - \text{sum}[X]^2/N}{N-1} \right)^{1/2}$ $= \left(\frac{(1.75 - 6.25/4)}{4-1} \right)^{1/2}$ $= 0.25$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 0.625 - 2.353 * 0.25/4^{1/2}$ $= 0.331$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 0.625 + 2.353 * 0.25/4^{1/2}$ $= 0.919$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 35 * (35-1) / 2$ $= 595$	Number of sample pairs during trend detection period.
6	$S = 0.0$	Sen's estimator of trend.
7	$\text{var}(S) = 408.0$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (595 \pm 2.576 * 408.0^{1/2}) / 2$ $= [271.484, 323.516]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [0.0, 0.0]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Appendix D.2 –
Statistical Evaluation – Fall

GROUND WATER STATISTICS

FOR THE

NORTHERN PLAINS REGIONAL LANDFILL

Second Semi-Annual Monitoring Event in 2024

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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 second semi-annual monitoring event in 2024 at the Northern Plains Regional Landfill in Graettinger, Iowa. The interwell methodology is described and then applied to the Northern Plains Regional Landfill data. 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 statistical plan conforms with IAC 567, Chapter 113.10 and the USEPA Unified Guidance document (“*Statistical Analysis of Ground-Water Monitoring Data at RCRA Facilities*”, March 2009).

Ground Water Monitoring Program

The groundwater monitoring network for the Northern Plains Regional Landfill includes sample points GU-1, GU-2, GU-3, MW-10, MW-11 (upgradient), MW-12 (upgradient), MW-14, MW-15, MW-16, MW-17, MW-3AR, MW-6B, MW-7A, MW-7B, MW-8, and MW-9. 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	<i>trans</i> -1,4-Dichloro-2-butene	Iodomethane
Acrylonitrile	1,1-Dichloroethane	4-Methyl-2-pentanone
Benzene	1,2-Dichloroethane	Styrene
Bromochloromethane	1,1-Dichloroethene	1,1,1,2-Tetrachloroethane
Bromodichloromethane	<i>cis</i> -1,2-Dichloroethene	1,1,2,2-Tetrachloroethane
Bromoform	<i>trans</i> -1,2-Dichloroethene	Tetrachloroethene
Carbon disulfide	1,2-Dichloropropane	Toluene
Carbon tetrachloride	<i>cis</i> -1,3-Dichloropropene	1,1,1-Trichloroethane
Chlorobenzene	<i>trans</i> -1,3-Dichloropropene	1,1,2-Trichloroethane
Chloroethane	Ethylbenzene	Trichloroethene
Chloroform	2-Hexanone	Trichlorofluoromethane
Dibromochloromethane	Bromomethane	1,2,3-Trichloropropane
1,2-Dibromo-3-chloropropane	Chloromethane	Vinyl acetate
1,2-Dibromoethane	Dibromomethane	Vinyl chloride
1,2-Dichlorobenzene	Methylene chloride	Xylenes (Total)
1,4-Dichlorobenzene	2-Butanone	

Inorganic constituents:

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

The ground water data obtained during the second semi-annual monitoring event in 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 methodology was applied to the Northern Plains Regional 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.

Results of the Interwell Statistics

The background data used in this statistical analysis includes the ground water data collected from ground water wells MW-11, MW-12, and MW-17 during the period from April 2014 through the current data. Additionally, upgradient wells MW-13, MW-18, MW-19, MW-20, and MW-21 were included as background. A summary of the background data from monitoring wells MW-11, MW-12, MW-13, MW-17, MW-18, MW-19, MW-20, and MW-21, used to determine the site prediction limits, is listed in Attachment B, Table 1 “Upgradient Data”. This statistical method compares the current downgradient determinations to site prediction limits and checks for exceedances.

Table 2 “Most Current Downgradient Monitoring Data”, summarizes the current data from downgradient wells GU-1, GU-2, MW-10, MW-14, MW-15, MW-16, MW-3AR, MW-6B, MW-7A, MW-7B, MW-8, and MW-9 compared to the site prediction limits. Prediction limit exceedances are flagged with asterisks. For the most current data, the site prediction limit exceedances detected are summarized in the table below.

**Trace Metal Prediction Limit Exceedances at Northern Plains Landfill
during the Second Semi-Annual Monitoring Event in 2024**

Well	Trace Metal	Result, µg/L	Prediction Limit, µg/L	Prediction Limit Type	Verified/ Awaiting verification
MW-10	Cadmium	4.0	1.7000	Nonparametric	Awaiting verification
	Copper	29.5	8.4000	Nonparametric	Verified
	Nickel	25.9	17.1000	Nonparametric	Awaiting verification
MW-14	Barium	1370	661.2919	Lognormal	Awaiting verification
MW-15	Nickel	28.9	17.1000	Nonparametric	Verified
MW-16	Barium	869	661.2919	Lognormal	Verified
	Nickel	31.3	17.1000	Nonparametric	Awaiting verification
MW-7B	Barium	678	661.2919	Lognormal	Awaiting verification

The detection frequencies of the parameters in the up and down gradient monitoring wells are summarized in Table 3. Only barium was detected at a frequency equal to or greater than 50% in the upgradient wells so only barium was tested for normality. The remainder of the metals are rarely detected (less than 50%) in the upgradient wells so nonparametric prediction limits were be used in those cases.

Table 4 summarizes the results of the Shapiro-Wilk test. Table 5 is a summary of the statistics and prediction limits determined for the metals. 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 current 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 (Attachment C). The analysis was conducted to evaluate whether verified concentrations are significantly above the water quality standard. The 95% lower confidence limit (LCL) for the mean of the historical data was used to evaluate whether the regulated unit is in compliance with the ground-water protection standards under 40 CFR 264 (e.g. whether the verified constituent is detected at a significant level above the GWPS). An exceedance is verified if the LCL is above the Regulatory GWPS.

The calculated 95% LCLs 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. There were no organic compounds detected in the ground water at Northern Plains Regional Landfill during the second semi-annual monitoring event in 2024. Historical VOC detections in the ground water are summarized in Attachment D. The VOCs detected are typically associated with landfill gas migration.

The past and current verified VOC detections were evaluated against the ground water protection standards (GWPS) using confidence limits (Attachment E). 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 each of the 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 Northern Plains Regional Landfill. The ground water data was compared to background using prediction limits. For the most current data, there are verified site prediction limit exceedances detected for copper at MW-10, nickel at MW-15, and barium at MW-16. Additionally, there are site prediction limit exceedances detected for cadmium and nickel at MW-10, barium at MW-14, nickel at MW-16, and barium at MW-7B awaiting verification.

Attachment A

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

Table 1

Analytical Data Summary for 10/16/2024

Constituents	Units	GU-1	GU-2	MW-10	MW-11	MW-12	MW-13	MW-14	MW-15	MW-16	MW-17	MW-18
1,1,1,2-tetrachloroethane	ug/L	<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
1,1,2,2-tetrachloroethane	ug/L	<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-dichloroethane	ug/L	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1
1,1-dichloroethylene	ug/L	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1
1,2,3-trichloropropane	ug/L	<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
1,2-dibromoethane	ug/L	<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
1,2-dichloroethane	ug/L	<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
1,4-dichlorobenzene	ug/L	<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
2-hexanone (mbk)	ug/L	<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
Acetone	ug/L	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10
Acrylonitrile	ug/L	<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	6.3	<4.0	<4.0	<4.0	<4.0	22.5	4.6	9.3	5.6	6.0
Barium, total	ug/L	438.0	250.0	91.2	67.0	139.0	42.8	1370.0	388.0	869.0	135.0	45.6
Benzene	ug/L	<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
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1
Cadmium, total	ug/L	<8	<8	4.0	<8	<8	<8	<8	<8	<8	<8	<8
Carbon disulfide	ug/L	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1
Chloroethane	ug/L	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1
Chloroform	ug/L	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1
Chloromethane	ug/L	<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	<1	<1	<1	<1		<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1
Cobalt, total	ug/L	<4	.9	1.0	.5	<4	.6	1.7	.6	1.5	<4	<4
Copper, total	ug/L	<4.0	<4.0	29.5	<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
Dibromomethane	ug/L	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<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
Methylene chloride	ug/L	<5	<5	<5	<5	<5		<5	<5	<5	<5	<5
Nickel, total	ug/L	10.3	5.4	25.9	5.2	<4.0	<4.0	7.8	28.9	31.3	<4.0	<4.0
Selenium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	ug/L	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1
Tetrachloroethylene	ug/L	<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	<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
Trans-1,3-dichloropropene	ug/L	<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
Trichloroethylene	ug/L	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<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
Vinyl chloride	ug/L	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1
Xylenes, total	ug/L	<2	<2	<2	<2	<2		<2	<2	<2	<2	<2
Zinc, total	ug/L	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20

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

Table 1

Analytical Data Summary for 10/16/2024

Constituents	MW-19	MW-20	MW-21	MW-3AR	MW-7B	MW-8	MW-9
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
1,2,3-trichloropropane				<1	<1	<1	<1
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
1,4-dichlorobenzene				<1	<1	<1	<1
2-butanone (mek)				<10	<10	<10	<10
2-hexanone (mbk)				<5	<5	<5	<5
4-methyl-2-pentanone (mibk)				<5	<5	<5	<5
Acetone				<10	<10	<10	<10
Acrylonitrile				<5	<5	<5	<5
Antimony, total	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	4.5	6.4	<4.0	<4.0	<4.0	33.5	4.1
Barium, total	207.0	103.0	215.0	154.0	678.0	516.0	40.8
Benzene				<1	<1	<1	<1
Beryllium, total	<4	<4	<4	<4	<4	<4	<4
Bromochloromethane				<1	<1	<1	<1
Bromodichloromethane				<1	<1	<1	<1
Bromoform				<1	<1	<1	<1
Bromomethane				<1	<1	<1	<1
Cadmium, total	<.8	<.8	<.8	1.0	<.8	<.8	<.8
Carbon disulfide				<1	<1	<1	<1
Carbon tetrachloride				<1	<1	<1	<1
Chlorobenzene				<1	<1	<1	<1
Chloroethane				<1	<1	<1	<1
Chloroform				<1	<1	<1	<1
Chloromethane				<1	<1	<1	<1
Chromium, total	<8	<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethylene				<1	<1	<1	<1
Cis-1,3-dichloropropene				<1	<1	<1	<1
Cobalt, total	<.4	.4	<.4	.8	<.4	.4	<.4
Copper, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Dibromochloromethane				<1	<1	<1	<1
Dibromomethane				<1	<1	<1	<1
Ethylbenzene				<1	<1	<1	<1
Lead, total	<4	<4	<4	<4	<4	<4	<4
Methyl iodide				<1	<1	<1	<1
Methylene chloride				<5	<5	<5	<5
Nickel, total	<4.0	<4.0	<4.0	4.8	10.5	12.6	<4.0
Selenium, total	<4	<4	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4	<4	<4
Styrene				<1	<1	<1	<1
Tetrachloroethylene				<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2	<2	<2	<2
Toluene				<1	<1	<1	<1
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	<20	<20	<20
Vinyl acetate				<5	<5	<5	<5
Vinyl chloride				<1	<1	<1	<1
Xylenes, total				<2	<2	<2	<2
Zinc, total	<20	<20	<20	<20	<20	<20	<20

* - 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-11	04/07/2014		3.2000	
Antimony, total	ug/L	MW-11	10/23/2014	ND	2.0000	
Antimony, total	ug/L	MW-11	01/16/2015	ND	2.0000	
Antimony, total	ug/L	MW-11	04/02/2015	ND	2.0000	
Antimony, total	ug/L	MW-11	09/15/2015	ND	2.0000	
Antimony, total	ug/L	MW-11	10/26/2015	ND	2.0000	
Antimony, total	ug/L	MW-11	04/01/2016	ND	2.0000	
Antimony, total	ug/L	MW-11	10/19/2016	ND	2.0000	
Antimony, total	ug/L	MW-11	04/17/2017	ND	2.0000	
Antimony, total	ug/L	MW-11	10/11/2017	ND	2.0000	
Antimony, total	ug/L	MW-11	06/01/2018	ND	2.0000	
Antimony, total	ug/L	MW-11	10/03/2018	ND	2.0000	
Antimony, total	ug/L	MW-11	04/08/2019	ND	2.0000	
Antimony, total	ug/L	MW-11	10/11/2019	ND	2.0000	
Antimony, total	ug/L	MW-11	04/27/2020	ND	2.0000	
Antimony, total	ug/L	MW-11	10/09/2020		3.4000	
Antimony, total	ug/L	MW-11	04/09/2021	ND	2.0000	
Antimony, total	ug/L	MW-11	10/25/2021	ND	2.0000	
Antimony, total	ug/L	MW-11	04/11/2022	ND	2.0000	
Antimony, total	ug/L	MW-11	10/12/2022	ND	2.0000	
Antimony, total	ug/L	MW-11	04/06/2023	ND	2.0000	
Antimony, total	ug/L	MW-11	10/09/2023	ND	2.0000	
Antimony, total	ug/L	MW-11	04/04/2024	ND	2.0000	
Antimony, total	ug/L	MW-11	10/16/2024	ND	2.0000	
Arsenic, total	ug/L	MW-11	04/07/2014	ND	4.0000	
Arsenic, total	ug/L	MW-11	10/23/2014	ND	4.0000	
Arsenic, total	ug/L	MW-11	01/16/2015	ND	4.0000	
Arsenic, total	ug/L	MW-11	04/02/2015	ND	4.0000	
Arsenic, total	ug/L	MW-11	09/15/2015	ND	4.0000	
Arsenic, total	ug/L	MW-11	10/26/2015	ND	4.0000	
Arsenic, total	ug/L	MW-11	04/01/2016	ND	4.0000	
Arsenic, total	ug/L	MW-11	10/19/2016	ND	4.0000	
Arsenic, total	ug/L	MW-11	04/17/2017	ND	4.0000	
Arsenic, total	ug/L	MW-11	10/11/2017	ND	4.0000	
Arsenic, total	ug/L	MW-11	06/01/2018	ND	4.0000	
Arsenic, total	ug/L	MW-11	10/03/2018	ND	4.0000	
Arsenic, total	ug/L	MW-11	04/08/2019	ND	4.0000	
Arsenic, total	ug/L	MW-11	10/11/2019	ND	4.0000	
Arsenic, total	ug/L	MW-11	04/27/2020	ND	4.0000	
Arsenic, total	ug/L	MW-11	10/09/2020	ND	4.0000	
Arsenic, total	ug/L	MW-11	04/09/2021	ND	4.0000	
Arsenic, total	ug/L	MW-11	10/25/2021	ND	4.0000	
Arsenic, total	ug/L	MW-11	04/11/2022	ND	4.0000	
Arsenic, total	ug/L	MW-11	10/12/2022	ND	4.0000	
Arsenic, total	ug/L	MW-11	04/06/2023	ND	4.0000	
Arsenic, total	ug/L	MW-11	10/09/2023	ND	4.0000	
Arsenic, total	ug/L	MW-11	04/04/2024	ND	4.0000	
Arsenic, total	ug/L	MW-11	10/16/2024	ND	4.0000	
Barium, total	ug/L	MW-11	04/07/2014		360.0000	*
Barium, total	ug/L	MW-11	10/23/2014		47.5000	
Barium, total	ug/L	MW-11	01/16/2015		56.8000	
Barium, total	ug/L	MW-11	04/02/2015		58.4000	
Barium, total	ug/L	MW-11	09/15/2015		49.6000	
Barium, total	ug/L	MW-11	10/26/2015		74.5000	
Barium, total	ug/L	MW-11	04/01/2016		68.2000	
Barium, total	ug/L	MW-11	10/19/2016		68.5000	
Barium, total	ug/L	MW-11	04/17/2017		66.2000	
Barium, total	ug/L	MW-11	10/11/2017		63.8000	
Barium, total	ug/L	MW-11	06/01/2018		80.0000	
Barium, total	ug/L	MW-11	10/03/2018		89.3000	
Barium, total	ug/L	MW-11	04/08/2019		88.4000	
Barium, total	ug/L	MW-11	10/11/2019		132.0000	
Barium, total	ug/L	MW-11	04/27/2020		85.5000	
Barium, total	ug/L	MW-11	10/09/2020		205.0000	
Barium, total	ug/L	MW-11	04/09/2021		82.7000	
Barium, total	ug/L	MW-11	10/25/2021		53.4000	
Barium, total	ug/L	MW-11	04/11/2022		82.2000	
Barium, total	ug/L	MW-11	10/12/2022		69.8000	
Barium, total	ug/L	MW-11	04/06/2023		44.2000	
Barium, total	ug/L	MW-11	10/09/2023		103.0000	
Barium, total	ug/L	MW-11	04/04/2024		40.1000	
Barium, total	ug/L	MW-11	10/16/2024		67.0000	
Beryllium, total	ug/L	MW-11	04/07/2014	ND	4.0000	
Beryllium, total	ug/L	MW-11	10/23/2014	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	
Beryllium, total	ug/L	MW-11	01/16/2015	ND	4.0000		
Beryllium, total	ug/L	MW-11	04/02/2015	ND	4.0000		
Beryllium, total	ug/L	MW-11	09/15/2015	ND	4.0000		
Beryllium, total	ug/L	MW-11	10/26/2015	ND	4.0000		
Beryllium, total	ug/L	MW-11	04/01/2016	ND	4.0000		
Beryllium, total	ug/L	MW-11	10/19/2016	ND	4.0000		
Beryllium, total	ug/L	MW-11	04/17/2017	ND	4.0000		
Beryllium, total	ug/L	MW-11	10/11/2017	ND	4.0000		
Beryllium, total	ug/L	MW-11	06/01/2018	ND	4.0000		
Beryllium, total	ug/L	MW-11	10/03/2018	ND	4.0000		
Beryllium, total	ug/L	MW-11	04/08/2019	ND	4.0000		
Beryllium, total	ug/L	MW-11	10/11/2019	ND	4.0000		
Beryllium, total	ug/L	MW-11	04/27/2020	ND	4.0000		
Beryllium, total	ug/L	MW-11	10/09/2020	ND	4.0000		
Beryllium, total	ug/L	MW-11	04/09/2021	ND	4.0000		
Beryllium, total	ug/L	MW-11	10/25/2021	ND	4.0000		
Beryllium, total	ug/L	MW-11	04/11/2022	ND	4.0000		
Beryllium, total	ug/L	MW-11	10/12/2022	ND	4.0000		
Beryllium, total	ug/L	MW-11	04/06/2023	ND	4.0000		
Beryllium, total	ug/L	MW-11	10/09/2023	ND	4.0000		
Beryllium, total	ug/L	MW-11	04/04/2024	ND	4.0000		
Beryllium, total	ug/L	MW-11	10/16/2024	ND	4.0000		
Cadmium, total	ug/L	MW-11	04/07/2014	ND	0.8000		
Cadmium, total	ug/L	MW-11	10/23/2014	ND	0.8000		
Cadmium, total	ug/L	MW-11	01/16/2015	ND	0.8000		
Cadmium, total	ug/L	MW-11	04/02/2015	ND	0.8000		
Cadmium, total	ug/L	MW-11	09/15/2015	ND	0.8000		
Cadmium, total	ug/L	MW-11	10/26/2015	ND	0.8000		
Cadmium, total	ug/L	MW-11	04/01/2016	ND	0.8000		
Cadmium, total	ug/L	MW-11	10/19/2016	ND	0.8000		
Cadmium, total	ug/L	MW-11	04/17/2017	ND	0.8000		
Cadmium, total	ug/L	MW-11	10/11/2017	ND	0.8000		
Cadmium, total	ug/L	MW-11	06/01/2018	ND	2.0000	0.8000	**
Cadmium, total	ug/L	MW-11	10/03/2018		1.3000		
Cadmium, total	ug/L	MW-11	04/08/2019	ND	0.8000		
Cadmium, total	ug/L	MW-11	10/11/2019	ND	0.8000		
Cadmium, total	ug/L	MW-11	04/27/2020	ND	0.8000		
Cadmium, total	ug/L	MW-11	10/09/2020	ND	0.8000		
Cadmium, total	ug/L	MW-11	04/09/2021	ND	0.8000		
Cadmium, total	ug/L	MW-11	10/25/2021	ND	0.8000		
Cadmium, total	ug/L	MW-11	04/11/2022	ND	0.8000		
Cadmium, total	ug/L	MW-11	10/12/2022	ND	0.8000		
Cadmium, total	ug/L	MW-11	04/06/2023	ND	0.8000		
Cadmium, total	ug/L	MW-11	10/09/2023	ND	0.8000		
Cadmium, total	ug/L	MW-11	04/04/2024		1.4000		
Cadmium, total	ug/L	MW-11	10/16/2024	ND	0.8000		
Chromium, total	ug/L	MW-11	04/07/2014	ND	8.0000		
Chromium, total	ug/L	MW-11	10/23/2014	ND	8.0000		
Chromium, total	ug/L	MW-11	01/16/2015	ND	8.0000		
Chromium, total	ug/L	MW-11	04/02/2015	ND	8.0000		
Chromium, total	ug/L	MW-11	09/15/2015	ND	8.0000		
Chromium, total	ug/L	MW-11	10/26/2015	ND	8.0000		
Chromium, total	ug/L	MW-11	04/01/2016	ND	8.0000		
Chromium, total	ug/L	MW-11	10/19/2016	ND	8.0000		
Chromium, total	ug/L	MW-11	04/17/2017	ND	8.0000		
Chromium, total	ug/L	MW-11	10/11/2017	ND	8.0000		
Chromium, total	ug/L	MW-11	06/01/2018	ND	8.0000		
Chromium, total	ug/L	MW-11	10/03/2018	ND	8.0000		
Chromium, total	ug/L	MW-11	04/08/2019	ND	8.0000		
Chromium, total	ug/L	MW-11	10/11/2019	ND	8.0000		
Chromium, total	ug/L	MW-11	04/27/2020	ND	8.0000		
Chromium, total	ug/L	MW-11	10/09/2020	ND	8.0000		
Chromium, total	ug/L	MW-11	04/09/2021	ND	8.0000		
Chromium, total	ug/L	MW-11	10/25/2021	ND	8.0000		
Chromium, total	ug/L	MW-11	04/11/2022	ND	8.0000		
Chromium, total	ug/L	MW-11	10/12/2022	ND	8.0000		
Chromium, total	ug/L	MW-11	04/06/2023	ND	8.0000		
Chromium, total	ug/L	MW-11	10/09/2023	ND	8.0000		
Chromium, total	ug/L	MW-11	04/04/2024	ND	8.0000		
Chromium, total	ug/L	MW-11	10/16/2024	ND	8.0000		
Cobalt, total	ug/L	MW-11	04/07/2014		16.4000		*
Cobalt, total	ug/L	MW-11	10/23/2014	ND	0.8000	0.4000	**
Cobalt, total	ug/L	MW-11	01/16/2015	ND	0.8000	0.4000	**
Cobalt, total	ug/L	MW-11	04/02/2015	ND	0.8000	0.4000	**

* - Outlier for that well and constituent.
 ** - ND value replaced with median RL.
 *** - ND value replaced with manual RL.
 ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Cobalt, total	ug/L	MW-11	09/15/2015	ND	0.8000	0.4000	**
Cobalt, total	ug/L	MW-11	10/26/2015		0.8000		
Cobalt, total	ug/L	MW-11	04/01/2016		0.8000		
Cobalt, total	ug/L	MW-11	10/19/2016	ND	0.8000	0.4000	**
Cobalt, total	ug/L	MW-11	04/17/2017	ND	0.8000	0.4000	**
Cobalt, total	ug/L	MW-11	10/11/2017	ND	0.8000	0.4000	**
Cobalt, total	ug/L	MW-11	06/01/2018	ND	2.0000	0.4000	**
Cobalt, total	ug/L	MW-11	10/03/2018		1.0000		
Cobalt, total	ug/L	MW-11	04/08/2019	ND	0.8000	0.4000	**
Cobalt, total	ug/L	MW-11	10/11/2019		4.0000		
Cobalt, total	ug/L	MW-11	04/27/2020		0.5000		
Cobalt, total	ug/L	MW-11	10/09/2020		11.2000		*
Cobalt, total	ug/L	MW-11	04/09/2021	ND	0.4000		
Cobalt, total	ug/L	MW-11	10/25/2021		1.3000		
Cobalt, total	ug/L	MW-11	04/11/2022		1.9000		
Cobalt, total	ug/L	MW-11	10/12/2022		3.0000		
Cobalt, total	ug/L	MW-11	04/06/2023	ND	0.4000		
Cobalt, total	ug/L	MW-11	10/09/2023		3.0000		
Cobalt, total	ug/L	MW-11	04/04/2024	ND	0.4000		
Cobalt, total	ug/L	MW-11	10/16/2024		0.5000		
Copper, total	ug/L	MW-11	04/07/2014		4.2000		
Copper, total	ug/L	MW-11	10/23/2014	ND	4.0000		
Copper, total	ug/L	MW-11	01/16/2015	ND	4.0000		
Copper, total	ug/L	MW-11	04/02/2015	ND	4.0000		
Copper, total	ug/L	MW-11	09/15/2015	ND	4.0000		
Copper, total	ug/L	MW-11	10/26/2015	ND	4.0000		
Copper, total	ug/L	MW-11	04/01/2016		4.4000		
Copper, total	ug/L	MW-11	10/19/2016	ND	4.0000		
Copper, total	ug/L	MW-11	04/17/2017		8.4000		
Copper, total	ug/L	MW-11	10/11/2017	ND	4.0000		
Copper, total	ug/L	MW-11	06/01/2018	ND	4.0000		
Copper, total	ug/L	MW-11	10/03/2018	ND	4.0000		
Copper, total	ug/L	MW-11	04/08/2019	ND	4.0000		
Copper, total	ug/L	MW-11	10/11/2019	ND	4.0000		
Copper, total	ug/L	MW-11	04/27/2020	ND	4.0000		
Copper, total	ug/L	MW-11	10/09/2020	ND	4.0000		
Copper, total	ug/L	MW-11	04/09/2021	ND	4.0000		
Copper, total	ug/L	MW-11	10/25/2021	ND	4.0000		
Copper, total	ug/L	MW-11	04/11/2022	ND	4.0000		
Copper, total	ug/L	MW-11	10/12/2022	ND	4.0000		
Copper, total	ug/L	MW-11	04/06/2023	ND	4.0000		
Copper, total	ug/L	MW-11	10/09/2023	ND	4.0000		
Copper, total	ug/L	MW-11	04/04/2024	ND	4.0000		
Copper, total	ug/L	MW-11	10/16/2024	ND	4.0000		
Lead, total	ug/L	MW-11	04/07/2014	ND	4.0000		
Lead, total	ug/L	MW-11	10/23/2014	ND	4.0000		
Lead, total	ug/L	MW-11	01/16/2015	ND	4.0000		
Lead, total	ug/L	MW-11	04/02/2015	ND	4.0000		
Lead, total	ug/L	MW-11	09/15/2015	ND	4.0000		
Lead, total	ug/L	MW-11	10/26/2015	ND	4.0000		
Lead, total	ug/L	MW-11	04/01/2016	ND	4.0000		
Lead, total	ug/L	MW-11	10/19/2016	ND	4.0000		
Lead, total	ug/L	MW-11	04/17/2017	ND	4.0000		
Lead, total	ug/L	MW-11	10/11/2017	ND	4.0000		
Lead, total	ug/L	MW-11	06/01/2018	ND	4.0000		
Lead, total	ug/L	MW-11	10/03/2018	ND	4.0000		
Lead, total	ug/L	MW-11	04/08/2019	ND	4.0000		
Lead, total	ug/L	MW-11	10/11/2019	ND	4.0000		
Lead, total	ug/L	MW-11	04/27/2020	ND	4.0000		
Lead, total	ug/L	MW-11	10/09/2020	ND	4.0000		
Lead, total	ug/L	MW-11	04/09/2021	ND	4.0000		
Lead, total	ug/L	MW-11	10/25/2021	ND	4.0000		
Lead, total	ug/L	MW-11	04/11/2022	ND	4.0000		
Lead, total	ug/L	MW-11	10/12/2022	ND	4.0000		
Lead, total	ug/L	MW-11	04/06/2023	ND	4.0000		
Lead, total	ug/L	MW-11	10/09/2023	ND	4.0000		
Lead, total	ug/L	MW-11	04/04/2024	ND	4.0000		
Lead, total	ug/L	MW-11	10/16/2024	ND	4.0000		
Nickel, total	ug/L	MW-11	04/07/2014		98.9000		*
Nickel, total	ug/L	MW-11	10/23/2014		8.2000		
Nickel, total	ug/L	MW-11	01/16/2015		4.7000		
Nickel, total	ug/L	MW-11	04/02/2015		4.9000		
Nickel, total	ug/L	MW-11	09/15/2015		9.1000		
Nickel, total	ug/L	MW-11	10/26/2015		12.6000		

* - 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	
Nickel, total	ug/L	MW-11	04/01/2016		8.1000		
Nickel, total	ug/L	MW-11	10/19/2016		6.2000		
Nickel, total	ug/L	MW-11	04/17/2017		6.2000		
Nickel, total	ug/L	MW-11	10/11/2017	ND	4.0000		
Nickel, total	ug/L	MW-11	06/01/2018		12.1000		
Nickel, total	ug/L	MW-11	10/03/2018		11.2000		
Nickel, total	ug/L	MW-11	04/08/2019		5.2000		
Nickel, total	ug/L	MW-11	10/11/2019		36.2000		*
Nickel, total	ug/L	MW-11	04/27/2020		6.3000		
Nickel, total	ug/L	MW-11	10/09/2020		42.5000		*
Nickel, total	ug/L	MW-11	04/09/2021		8.8000		
Nickel, total	ug/L	MW-11	10/25/2021		10.5000		
Nickel, total	ug/L	MW-11	04/11/2022		15.6000		
Nickel, total	ug/L	MW-11	10/12/2022		7.4000		
Nickel, total	ug/L	MW-11	04/06/2023	ND	4.0000		
Nickel, total	ug/L	MW-11	10/09/2023		17.1000		
Nickel, total	ug/L	MW-11	04/04/2024	ND	4.0000		
Nickel, total	ug/L	MW-11	10/16/2024		5.2000		
Selenium, total	ug/L	MW-11	04/07/2014	ND	4.0000		
Selenium, total	ug/L	MW-11	10/23/2014	ND	4.0000		
Selenium, total	ug/L	MW-11	01/16/2015	ND	4.0000		
Selenium, total	ug/L	MW-11	04/02/2015	ND	4.0000		
Selenium, total	ug/L	MW-11	09/15/2015	ND	4.0000		
Selenium, total	ug/L	MW-11	10/26/2015	ND	4.0000		
Selenium, total	ug/L	MW-11	04/01/2016	ND	4.0000		
Selenium, total	ug/L	MW-11	10/19/2016	ND	4.0000		
Selenium, total	ug/L	MW-11	04/17/2017	ND	4.0000		
Selenium, total	ug/L	MW-11	10/11/2017	ND	4.0000		
Selenium, total	ug/L	MW-11	06/01/2018	ND	4.0000		
Selenium, total	ug/L	MW-11	10/03/2018	ND	4.0000		
Selenium, total	ug/L	MW-11	04/08/2019	ND	4.0000		
Selenium, total	ug/L	MW-11	10/11/2019	ND	4.0000		
Selenium, total	ug/L	MW-11	04/27/2020	ND	4.0000		
Selenium, total	ug/L	MW-11	10/09/2020	ND	4.0000		
Selenium, total	ug/L	MW-11	04/09/2021		4.0000		
Selenium, total	ug/L	MW-11	10/25/2021	ND	4.0000		
Selenium, total	ug/L	MW-11	04/11/2022	ND	4.0000		
Selenium, total	ug/L	MW-11	10/12/2022	ND	4.0000		
Selenium, total	ug/L	MW-11	04/06/2023	ND	4.0000		
Selenium, total	ug/L	MW-11	10/09/2023	ND	4.0000		
Selenium, total	ug/L	MW-11	04/04/2024	ND	4.0000		
Selenium, total	ug/L	MW-11	10/16/2024	ND	4.0000		
Silver, total	ug/L	MW-11	04/07/2014	ND	4.0000		
Silver, total	ug/L	MW-11	10/23/2014	ND	4.0000		
Silver, total	ug/L	MW-11	01/16/2015	ND	4.0000		
Silver, total	ug/L	MW-11	04/02/2015	ND	4.0000		
Silver, total	ug/L	MW-11	09/15/2015	ND	4.0000		
Silver, total	ug/L	MW-11	10/26/2015	ND	4.0000		
Silver, total	ug/L	MW-11	04/01/2016	ND	4.0000		
Silver, total	ug/L	MW-11	10/19/2016	ND	4.0000		
Silver, total	ug/L	MW-11	04/17/2017	ND	4.0000		
Silver, total	ug/L	MW-11	10/11/2017	ND	4.0000		
Silver, total	ug/L	MW-11	06/01/2018	ND	8.0000	4.0000	**
Silver, total	ug/L	MW-11	10/03/2018	ND	4.0000		
Silver, total	ug/L	MW-11	04/08/2019	ND	4.0000		
Silver, total	ug/L	MW-11	10/11/2019	ND	4.0000		
Silver, total	ug/L	MW-11	04/27/2020	ND	4.0000		
Silver, total	ug/L	MW-11	10/09/2020	ND	4.0000		
Silver, total	ug/L	MW-11	04/09/2021	ND	4.0000		
Silver, total	ug/L	MW-11	10/25/2021	ND	4.0000		
Silver, total	ug/L	MW-11	04/11/2022	ND	4.0000		
Silver, total	ug/L	MW-11	10/12/2022	ND	4.0000		
Silver, total	ug/L	MW-11	04/06/2023	ND	4.0000		
Silver, total	ug/L	MW-11	10/09/2023	ND	4.0000		
Silver, total	ug/L	MW-11	04/04/2024	ND	4.0000		
Silver, total	ug/L	MW-11	10/16/2024	ND	4.0000		
Thallium, total	ug/L	MW-11	04/07/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-11	10/23/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-11	01/16/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-11	04/02/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-11	09/15/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-11	10/26/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-11	04/01/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-11	10/19/2016	ND	4.0000	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-11	04/17/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-11	10/11/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-11	06/01/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-11	10/03/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-11	04/08/2019	ND	2.0000		
Thallium, total	ug/L	MW-11	10/11/2019	ND	2.0000		
Thallium, total	ug/L	MW-11	04/27/2020	ND	2.0000		
Thallium, total	ug/L	MW-11	10/09/2020	ND	2.0000		
Thallium, total	ug/L	MW-11	04/09/2021	ND	2.0000		
Thallium, total	ug/L	MW-11	10/25/2021	ND	2.0000		
Thallium, total	ug/L	MW-11	04/11/2022	ND	2.0000		
Thallium, total	ug/L	MW-11	10/12/2022	ND	2.0000		
Thallium, total	ug/L	MW-11	04/06/2023	ND	2.0000		
Thallium, total	ug/L	MW-11	10/09/2023	ND	2.0000		
Thallium, total	ug/L	MW-11	04/04/2024	ND	2.0000		
Thallium, total	ug/L	MW-11	10/16/2024	ND	2.0000		
Vanadium, total	ug/L	MW-11	04/07/2014	ND	20.0000		
Vanadium, total	ug/L	MW-11	10/23/2014	ND	20.0000		
Vanadium, total	ug/L	MW-11	01/16/2015	ND	20.0000		
Vanadium, total	ug/L	MW-11	04/02/2015	ND	20.0000		
Vanadium, total	ug/L	MW-11	09/15/2015	ND	20.0000		
Vanadium, total	ug/L	MW-11	10/26/2015	ND	20.0000		
Vanadium, total	ug/L	MW-11	04/01/2016	ND	20.0000		
Vanadium, total	ug/L	MW-11	10/19/2016	ND	20.0000		
Vanadium, total	ug/L	MW-11	04/17/2017	ND	20.0000		
Vanadium, total	ug/L	MW-11	10/11/2017	ND	20.0000		
Vanadium, total	ug/L	MW-11	06/01/2018	ND	20.0000		
Vanadium, total	ug/L	MW-11	10/03/2018	ND	20.0000		
Vanadium, total	ug/L	MW-11	04/08/2019	ND	20.0000		
Vanadium, total	ug/L	MW-11	10/11/2019	ND	20.0000		
Vanadium, total	ug/L	MW-11	04/27/2020	ND	20.0000		
Vanadium, total	ug/L	MW-11	10/09/2020	ND	20.0000		
Vanadium, total	ug/L	MW-11	04/09/2021	ND	20.0000		
Vanadium, total	ug/L	MW-11	10/25/2021	ND	20.0000		
Vanadium, total	ug/L	MW-11	04/11/2022	ND	20.0000		
Vanadium, total	ug/L	MW-11	10/12/2022	ND	20.0000		
Vanadium, total	ug/L	MW-11	04/06/2023	ND	20.0000		
Vanadium, total	ug/L	MW-11	10/09/2023	ND	20.0000		
Vanadium, total	ug/L	MW-11	04/04/2024	ND	20.0000		
Vanadium, total	ug/L	MW-11	10/16/2024	ND	20.0000		
Zinc, total	ug/L	MW-11	04/07/2014		45.3000		
Zinc, total	ug/L	MW-11	10/23/2014		8.3000		
Zinc, total	ug/L	MW-11	01/16/2015	ND	20.0000		
Zinc, total	ug/L	MW-11	04/02/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-11	09/15/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-11	10/26/2015		26.3000		
Zinc, total	ug/L	MW-11	04/01/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-11	10/19/2016		24.8000		
Zinc, total	ug/L	MW-11	04/17/2017		28.4000		
Zinc, total	ug/L	MW-11	10/11/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-11	06/01/2018	ND	20.0000		
Zinc, total	ug/L	MW-11	10/03/2018	ND	20.0000		
Zinc, total	ug/L	MW-11	04/08/2019	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-11	10/11/2019		30.5000		
Zinc, total	ug/L	MW-11	04/27/2020	ND	20.0000		
Zinc, total	ug/L	MW-11	10/09/2020		20.1000		
Zinc, total	ug/L	MW-11	04/09/2021	ND	20.0000		
Zinc, total	ug/L	MW-11	10/25/2021	ND	20.0000		
Zinc, total	ug/L	MW-11	04/11/2022	ND	20.0000		
Zinc, total	ug/L	MW-11	10/12/2022	ND	20.0000		
Zinc, total	ug/L	MW-11	04/06/2023	ND	20.0000		
Zinc, total	ug/L	MW-11	10/09/2023	ND	20.0000		
Zinc, total	ug/L	MW-11	04/04/2024	ND	20.0000		
Zinc, total	ug/L	MW-11	10/16/2024	ND	20.0000		
Antimony, total	ug/L	MW-12	04/07/2014	ND	2.0000		
Antimony, total	ug/L	MW-12	10/23/2014	ND	2.0000		
Antimony, total	ug/L	MW-12	01/16/2015	ND	2.0000		
Antimony, total	ug/L	MW-12	04/02/2015	ND	2.0000		
Antimony, total	ug/L	MW-12	09/15/2015	ND	2.0000		
Antimony, total	ug/L	MW-12	10/26/2015	ND	2.0000		
Antimony, total	ug/L	MW-12	04/01/2016	ND	2.0000		
Antimony, total	ug/L	MW-12	10/19/2016	ND	2.0000		
Antimony, total	ug/L	MW-12	04/17/2017	ND	2.0000		
Antimony, total	ug/L	MW-12	10/11/2017	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-12	06/01/2018	ND	2.0000		
Antimony, total	ug/L	MW-12	10/03/2018	ND	2.0000		
Antimony, total	ug/L	MW-12	04/08/2019	ND	2.0000		
Antimony, total	ug/L	MW-12	10/11/2019	ND	2.0000		
Antimony, total	ug/L	MW-12	04/27/2020	ND	2.0000		
Antimony, total	ug/L	MW-12	10/09/2020	ND	2.0000		
Antimony, total	ug/L	MW-12	04/09/2021	ND	2.0000		
Antimony, total	ug/L	MW-12	10/25/2021	ND	2.0000		
Antimony, total	ug/L	MW-12	04/11/2022	ND	2.0000		
Antimony, total	ug/L	MW-12	10/12/2022	ND	2.0000		
Antimony, total	ug/L	MW-12	04/06/2023	ND	2.0000		
Antimony, total	ug/L	MW-12	10/09/2023	ND	2.0000		
Antimony, total	ug/L	MW-12	04/04/2024	ND	2.0000		
Antimony, total	ug/L	MW-12	10/16/2024	ND	2.0000		
Arsenic, total	ug/L	MW-12	04/07/2014		21.7000		*
Arsenic, total	ug/L	MW-12	10/23/2014		4.1000		
Arsenic, total	ug/L	MW-12	01/16/2015	ND	4.0000		
Arsenic, total	ug/L	MW-12	04/02/2015	ND	4.0000		
Arsenic, total	ug/L	MW-12	09/15/2015		6.5000		
Arsenic, total	ug/L	MW-12	10/26/2015	ND	4.0000		
Arsenic, total	ug/L	MW-12	04/01/2016	ND	4.0000		
Arsenic, total	ug/L	MW-12	10/19/2016		89.9000		*
Arsenic, total	ug/L	MW-12	04/17/2017		137.0000		*
Arsenic, total	ug/L	MW-12	10/11/2017		24.3000		*
Arsenic, total	ug/L	MW-12	06/01/2018	ND	4.0000		
Arsenic, total	ug/L	MW-12	10/03/2018		5.7000		
Arsenic, total	ug/L	MW-12	04/08/2019	ND	4.0000		
Arsenic, total	ug/L	MW-12	10/11/2019		9.4000		
Arsenic, total	ug/L	MW-12	04/27/2020		4.9000		
Arsenic, total	ug/L	MW-12	10/09/2020		6.0000		
Arsenic, total	ug/L	MW-12	04/09/2021		4.1000		
Arsenic, total	ug/L	MW-12	10/25/2021		4.0000		
Arsenic, total	ug/L	MW-12	04/11/2022	ND	4.0000		
Arsenic, total	ug/L	MW-12	10/12/2022		6.1000		
Arsenic, total	ug/L	MW-12	04/06/2023		4.4000		
Arsenic, total	ug/L	MW-12	10/09/2023	ND	4.0000		
Arsenic, total	ug/L	MW-12	04/04/2024		4.8000		
Arsenic, total	ug/L	MW-12	10/16/2024	ND	4.0000		
Barium, total	ug/L	MW-12	04/07/2014		484.0000		
Barium, total	ug/L	MW-12	10/23/2014		244.0000		
Barium, total	ug/L	MW-12	01/16/2015		199.0000		
Barium, total	ug/L	MW-12	04/02/2015		248.0000		
Barium, total	ug/L	MW-12	09/15/2015		142.0000		
Barium, total	ug/L	MW-12	10/26/2015		269.0000		
Barium, total	ug/L	MW-12	04/01/2016		247.0000		
Barium, total	ug/L	MW-12	10/19/2016		1320.0000		*
Barium, total	ug/L	MW-12	04/17/2017		1390.0000		*
Barium, total	ug/L	MW-12	10/11/2017		189.0000		
Barium, total	ug/L	MW-12	06/01/2018		223.0000		
Barium, total	ug/L	MW-12	10/03/2018		173.0000		
Barium, total	ug/L	MW-12	04/08/2019		196.0000		
Barium, total	ug/L	MW-12	10/11/2019		186.0000		
Barium, total	ug/L	MW-12	04/27/2020		150.0000		
Barium, total	ug/L	MW-12	10/09/2020		258.0000		
Barium, total	ug/L	MW-12	04/09/2021		122.0000		
Barium, total	ug/L	MW-12	10/25/2021		153.0000		
Barium, total	ug/L	MW-12	04/11/2022		99.9000		
Barium, total	ug/L	MW-12	10/12/2022		129.0000		
Barium, total	ug/L	MW-12	04/06/2023		55.7000		
Barium, total	ug/L	MW-12	10/09/2023		66.4000		
Barium, total	ug/L	MW-12	04/04/2024		102.0000		
Barium, total	ug/L	MW-12	10/16/2024		139.0000		
Beryllium, total	ug/L	MW-12	04/07/2014	ND	4.0000		
Beryllium, total	ug/L	MW-12	10/23/2014	ND	4.0000		
Beryllium, total	ug/L	MW-12	01/16/2015	ND	4.0000		
Beryllium, total	ug/L	MW-12	04/02/2015	ND	4.0000		
Beryllium, total	ug/L	MW-12	09/15/2015	ND	4.0000		
Beryllium, total	ug/L	MW-12	10/26/2015	ND	4.0000		
Beryllium, total	ug/L	MW-12	04/01/2016	ND	4.0000		
Beryllium, total	ug/L	MW-12	10/19/2016	ND	4.0000		
Beryllium, total	ug/L	MW-12	04/17/2017	ND	4.0000		
Beryllium, total	ug/L	MW-12	10/11/2017	ND	4.0000		
Beryllium, total	ug/L	MW-12	06/01/2018	ND	4.0000		
Beryllium, total	ug/L	MW-12	10/03/2018	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	
Beryllium, total	ug/L	MW-12	04/08/2019	ND	4.0000		
Beryllium, total	ug/L	MW-12	10/11/2019	ND	4.0000		
Beryllium, total	ug/L	MW-12	04/27/2020	ND	4.0000		
Beryllium, total	ug/L	MW-12	10/09/2020	ND	4.0000		
Beryllium, total	ug/L	MW-12	04/09/2021	ND	4.0000		
Beryllium, total	ug/L	MW-12	10/25/2021	ND	4.0000		
Beryllium, total	ug/L	MW-12	04/11/2022	ND	4.0000		
Beryllium, total	ug/L	MW-12	10/12/2022	ND	4.0000		
Beryllium, total	ug/L	MW-12	04/06/2023	ND	4.0000		
Beryllium, total	ug/L	MW-12	10/09/2023	ND	4.0000		
Beryllium, total	ug/L	MW-12	04/04/2024	ND	4.0000		
Beryllium, total	ug/L	MW-12	10/16/2024	ND	4.0000		
Cadmium, total	ug/L	MW-12	04/07/2014		1.1000		
Cadmium, total	ug/L	MW-12	10/23/2014	ND	0.8000		
Cadmium, total	ug/L	MW-12	01/16/2015	ND	0.8000		
Cadmium, total	ug/L	MW-12	04/02/2015	ND	0.8000		
Cadmium, total	ug/L	MW-12	09/15/2015	ND	0.8000		
Cadmium, total	ug/L	MW-12	10/26/2015	ND	0.8000		
Cadmium, total	ug/L	MW-12	04/01/2016	ND	0.8000		
Cadmium, total	ug/L	MW-12	10/19/2016	ND	0.8000		
Cadmium, total	ug/L	MW-12	04/17/2017	ND	0.8000		
Cadmium, total	ug/L	MW-12	10/11/2017	ND	0.8000		
Cadmium, total	ug/L	MW-12	06/01/2018	ND	0.8000		
Cadmium, total	ug/L	MW-12	10/03/2018	ND	0.8000		
Cadmium, total	ug/L	MW-12	04/08/2019	ND	0.8000		
Cadmium, total	ug/L	MW-12	10/11/2019	ND	0.8000		
Cadmium, total	ug/L	MW-12	04/27/2020		1.2000		
Cadmium, total	ug/L	MW-12	10/09/2020		4.0000		*
Cadmium, total	ug/L	MW-12	04/09/2021	ND	0.8000		
Cadmium, total	ug/L	MW-12	10/25/2021	ND	0.8000		
Cadmium, total	ug/L	MW-12	04/11/2022	ND	0.8000		
Cadmium, total	ug/L	MW-12	10/12/2022	ND	0.8000		
Cadmium, total	ug/L	MW-12	04/06/2023	ND	0.8000		
Cadmium, total	ug/L	MW-12	10/09/2023	ND	0.8000		
Cadmium, total	ug/L	MW-12	04/04/2024	ND	0.8000		
Cadmium, total	ug/L	MW-12	10/16/2024	ND	0.8000		
Chromium, total	ug/L	MW-12	04/07/2014	ND	8.0000		
Chromium, total	ug/L	MW-12	10/23/2014	ND	8.0000		
Chromium, total	ug/L	MW-12	01/16/2015	ND	8.0000		
Chromium, total	ug/L	MW-12	04/02/2015	ND	8.0000		
Chromium, total	ug/L	MW-12	09/15/2015	ND	8.0000		
Chromium, total	ug/L	MW-12	10/26/2015	ND	8.0000		
Chromium, total	ug/L	MW-12	04/01/2016	ND	8.0000		
Chromium, total	ug/L	MW-12	10/19/2016	ND	8.0000		
Chromium, total	ug/L	MW-12	04/17/2017	ND	8.0000		
Chromium, total	ug/L	MW-12	10/11/2017	ND	8.0000		
Chromium, total	ug/L	MW-12	06/01/2018	ND	8.0000		
Chromium, total	ug/L	MW-12	10/03/2018	ND	8.0000		
Chromium, total	ug/L	MW-12	04/08/2019	ND	8.0000		
Chromium, total	ug/L	MW-12	10/11/2019	ND	8.0000		
Chromium, total	ug/L	MW-12	04/27/2020	ND	8.0000		
Chromium, total	ug/L	MW-12	10/09/2020	ND	8.0000		
Chromium, total	ug/L	MW-12	04/09/2021	ND	8.0000		
Chromium, total	ug/L	MW-12	10/25/2021	ND	8.0000		
Chromium, total	ug/L	MW-12	04/11/2022	ND	8.0000		
Chromium, total	ug/L	MW-12	10/12/2022	ND	8.0000		
Chromium, total	ug/L	MW-12	04/06/2023	ND	8.0000		
Chromium, total	ug/L	MW-12	10/09/2023	ND	8.0000		
Chromium, total	ug/L	MW-12	04/04/2024	ND	8.0000		
Chromium, total	ug/L	MW-12	10/16/2024	ND	8.0000		
Cobalt, total	ug/L	MW-12	04/07/2014	ND	4.0000		*
Cobalt, total	ug/L	MW-12	10/23/2014	ND	0.8000	0.4000	**
Cobalt, total	ug/L	MW-12	01/16/2015	ND	0.8000	0.4000	**
Cobalt, total	ug/L	MW-12	04/02/2015	ND	0.8000	0.4000	**
Cobalt, total	ug/L	MW-12	09/15/2015	ND	0.8000	0.4000	**
Cobalt, total	ug/L	MW-12	10/26/2015	ND	0.8000	0.4000	**
Cobalt, total	ug/L	MW-12	04/01/2016	ND	0.8000	0.4000	**
Cobalt, total	ug/L	MW-12	10/19/2016	ND	0.8000	0.4000	**
Cobalt, total	ug/L	MW-12	04/17/2017	ND	0.8000	0.4000	**
Cobalt, total	ug/L	MW-12	10/11/2017	ND	0.8000	0.4000	**
Cobalt, total	ug/L	MW-12	06/01/2018	ND	0.8000	0.4000	**
Cobalt, total	ug/L	MW-12	10/03/2018	ND	0.8000	0.4000	**
Cobalt, total	ug/L	MW-12	04/08/2019	ND	0.8000	0.4000	**
Cobalt, total	ug/L	MW-12	10/11/2019	ND	0.8000	0.4000	**

* - Outlier for that well and constituent.
 ** - ND value replaced with median RL.
 *** - ND value replaced with manual RL.
 ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted
Cobalt, total	ug/L	MW-12	04/27/2020	ND	0.4000	
Cobalt, total	ug/L	MW-12	10/09/2020		1.2000	
Cobalt, total	ug/L	MW-12	04/09/2021	ND	0.4000	
Cobalt, total	ug/L	MW-12	10/25/2021	ND	0.4000	
Cobalt, total	ug/L	MW-12	04/11/2022	ND	0.4000	
Cobalt, total	ug/L	MW-12	10/12/2022		2.6000	*
Cobalt, total	ug/L	MW-12	04/06/2023	ND	0.4000	
Cobalt, total	ug/L	MW-12	10/09/2023	ND	0.4000	
Cobalt, total	ug/L	MW-12	04/04/2024	ND	0.4000	
Cobalt, total	ug/L	MW-12	10/16/2024	ND	0.4000	
Copper, total	ug/L	MW-12	04/07/2014	ND	4.0000	
Copper, total	ug/L	MW-12	10/23/2014	ND	4.0000	
Copper, total	ug/L	MW-12	01/16/2015	ND	4.0000	
Copper, total	ug/L	MW-12	04/02/2015	ND	4.0000	
Copper, total	ug/L	MW-12	09/15/2015	ND	4.0000	
Copper, total	ug/L	MW-12	10/26/2015	ND	4.0000	
Copper, total	ug/L	MW-12	04/01/2016	ND	4.0000	
Copper, total	ug/L	MW-12	10/19/2016	ND	4.0000	
Copper, total	ug/L	MW-12	04/17/2017	ND	4.0000	
Copper, total	ug/L	MW-12	10/11/2017	ND	4.0000	
Copper, total	ug/L	MW-12	06/01/2018	ND	4.0000	
Copper, total	ug/L	MW-12	10/03/2018		6.2000	
Copper, total	ug/L	MW-12	04/08/2019	ND	4.0000	
Copper, total	ug/L	MW-12	10/11/2019	ND	4.0000	
Copper, total	ug/L	MW-12	04/27/2020	ND	4.0000	
Copper, total	ug/L	MW-12	10/09/2020		5.1000	
Copper, total	ug/L	MW-12	04/09/2021	ND	4.0000	
Copper, total	ug/L	MW-12	10/25/2021	ND	4.0000	
Copper, total	ug/L	MW-12	04/11/2022	ND	4.0000	
Copper, total	ug/L	MW-12	10/12/2022	ND	4.0000	
Copper, total	ug/L	MW-12	04/06/2023	ND	4.0000	
Copper, total	ug/L	MW-12	10/09/2023	ND	4.0000	
Copper, total	ug/L	MW-12	04/04/2024	ND	4.0000	
Copper, total	ug/L	MW-12	10/16/2024	ND	4.0000	
Lead, total	ug/L	MW-12	04/07/2014	ND	4.0000	
Lead, total	ug/L	MW-12	10/23/2014	ND	4.0000	
Lead, total	ug/L	MW-12	01/16/2015	ND	4.0000	
Lead, total	ug/L	MW-12	04/02/2015	ND	4.0000	
Lead, total	ug/L	MW-12	09/15/2015	ND	4.0000	
Lead, total	ug/L	MW-12	10/26/2015	ND	4.0000	
Lead, total	ug/L	MW-12	04/01/2016	ND	4.0000	
Lead, total	ug/L	MW-12	10/19/2016	ND	4.0000	
Lead, total	ug/L	MW-12	04/17/2017	ND	4.0000	
Lead, total	ug/L	MW-12	10/11/2017	ND	4.0000	
Lead, total	ug/L	MW-12	06/01/2018	ND	4.0000	
Lead, total	ug/L	MW-12	10/03/2018	ND	4.0000	
Lead, total	ug/L	MW-12	04/08/2019	ND	4.0000	
Lead, total	ug/L	MW-12	10/11/2019	ND	4.0000	
Lead, total	ug/L	MW-12	04/27/2020	ND	4.0000	
Lead, total	ug/L	MW-12	10/09/2020	ND	4.0000	
Lead, total	ug/L	MW-12	04/09/2021	ND	4.0000	
Lead, total	ug/L	MW-12	10/25/2021	ND	4.0000	
Lead, total	ug/L	MW-12	04/11/2022	ND	4.0000	
Lead, total	ug/L	MW-12	10/12/2022	ND	4.0000	
Lead, total	ug/L	MW-12	04/06/2023	ND	4.0000	
Lead, total	ug/L	MW-12	10/09/2023	ND	4.0000	
Lead, total	ug/L	MW-12	04/04/2024	ND	4.0000	
Lead, total	ug/L	MW-12	10/16/2024	ND	4.0000	
Nickel, total	ug/L	MW-12	04/07/2014		4.4000	
Nickel, total	ug/L	MW-12	10/23/2014	ND	4.0000	
Nickel, total	ug/L	MW-12	01/16/2015	ND	4.0000	
Nickel, total	ug/L	MW-12	04/02/2015	ND	4.0000	
Nickel, total	ug/L	MW-12	09/15/2015	ND	4.0000	
Nickel, total	ug/L	MW-12	10/26/2015	ND	4.0000	
Nickel, total	ug/L	MW-12	04/01/2016	ND	4.0000	
Nickel, total	ug/L	MW-12	10/19/2016	ND	4.0000	
Nickel, total	ug/L	MW-12	04/17/2017	ND	4.0000	
Nickel, total	ug/L	MW-12	10/11/2017	ND	4.0000	
Nickel, total	ug/L	MW-12	06/01/2018	ND	4.0000	
Nickel, total	ug/L	MW-12	10/03/2018	ND	4.0000	
Nickel, total	ug/L	MW-12	04/08/2019	ND	4.0000	
Nickel, total	ug/L	MW-12	10/11/2019	ND	4.0000	
Nickel, total	ug/L	MW-12	04/27/2020	ND	4.0000	
Nickel, total	ug/L	MW-12	10/09/2020	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-12	04/09/2021	ND	4.0000		
Nickel, total	ug/L	MW-12	10/25/2021	ND	4.0000		
Nickel, total	ug/L	MW-12	04/11/2022	ND	4.0000		
Nickel, total	ug/L	MW-12	10/12/2022	ND	4.0000		
Nickel, total	ug/L	MW-12	04/06/2023	ND	4.0000		
Nickel, total	ug/L	MW-12	10/09/2023	ND	4.0000		
Nickel, total	ug/L	MW-12	04/04/2024	ND	4.0000		
Nickel, total	ug/L	MW-12	10/16/2024	ND	4.0000		
Selenium, total	ug/L	MW-12	04/07/2014	ND	4.0000		
Selenium, total	ug/L	MW-12	10/23/2014	ND	4.0000		
Selenium, total	ug/L	MW-12	01/16/2015	ND	4.0000		
Selenium, total	ug/L	MW-12	04/02/2015	ND	4.0000		
Selenium, total	ug/L	MW-12	09/15/2015	ND	4.0000		
Selenium, total	ug/L	MW-12	10/26/2015	ND	4.0000		
Selenium, total	ug/L	MW-12	04/01/2016	ND	4.0000		
Selenium, total	ug/L	MW-12	10/19/2016	ND	4.0000		
Selenium, total	ug/L	MW-12	04/17/2017	ND	4.0000		
Selenium, total	ug/L	MW-12	10/11/2017	ND	4.0000		
Selenium, total	ug/L	MW-12	06/01/2018	ND	4.0000		
Selenium, total	ug/L	MW-12	10/03/2018	ND	4.0000		
Selenium, total	ug/L	MW-12	04/08/2019	ND	4.0000		
Selenium, total	ug/L	MW-12	10/11/2019	ND	4.0000		
Selenium, total	ug/L	MW-12	04/27/2020	ND	4.0000		
Selenium, total	ug/L	MW-12	10/09/2020	ND	4.0000		
Selenium, total	ug/L	MW-12	04/09/2021	ND	4.0000		
Selenium, total	ug/L	MW-12	10/25/2021	ND	4.0000		
Selenium, total	ug/L	MW-12	04/11/2022	ND	4.0000		
Selenium, total	ug/L	MW-12	10/12/2022	ND	4.0000		
Selenium, total	ug/L	MW-12	04/06/2023	ND	4.0000		
Selenium, total	ug/L	MW-12	10/09/2023	ND	4.0000		
Selenium, total	ug/L	MW-12	04/04/2024	ND	4.0000		
Selenium, total	ug/L	MW-12	10/16/2024	ND	4.0000		
Silver, total	ug/L	MW-12	04/07/2014	ND	4.0000		
Silver, total	ug/L	MW-12	10/23/2014	ND	4.0000		
Silver, total	ug/L	MW-12	01/16/2015	ND	4.0000		
Silver, total	ug/L	MW-12	04/02/2015	ND	4.0000		
Silver, total	ug/L	MW-12	09/15/2015	ND	4.0000		
Silver, total	ug/L	MW-12	10/26/2015	ND	4.0000		
Silver, total	ug/L	MW-12	04/01/2016	ND	4.0000		
Silver, total	ug/L	MW-12	10/19/2016	ND	4.0000		
Silver, total	ug/L	MW-12	04/17/2017	ND	4.0000		
Silver, total	ug/L	MW-12	10/11/2017	ND	4.0000		
Silver, total	ug/L	MW-12	06/01/2018	ND	8.0000	4.0000	**
Silver, total	ug/L	MW-12	10/03/2018	ND	4.0000		
Silver, total	ug/L	MW-12	04/08/2019	ND	4.0000		
Silver, total	ug/L	MW-12	10/11/2019	ND	4.0000		
Silver, total	ug/L	MW-12	04/27/2020	ND	4.0000		
Silver, total	ug/L	MW-12	10/09/2020	ND	4.0000		
Silver, total	ug/L	MW-12	04/09/2021	ND	4.0000		
Silver, total	ug/L	MW-12	10/25/2021	ND	4.0000		
Silver, total	ug/L	MW-12	04/11/2022	ND	4.0000		
Silver, total	ug/L	MW-12	10/12/2022	ND	4.0000		
Silver, total	ug/L	MW-12	04/06/2023	ND	4.0000		
Silver, total	ug/L	MW-12	10/09/2023	ND	4.0000		
Silver, total	ug/L	MW-12	04/04/2024	ND	4.0000		
Silver, total	ug/L	MW-12	10/16/2024	ND	4.0000		
Thallium, total	ug/L	MW-12	04/07/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-12	10/23/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-12	01/16/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-12	04/02/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-12	09/15/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-12	10/26/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-12	04/01/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-12	10/19/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-12	04/17/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-12	10/11/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-12	06/01/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-12	10/03/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-12	04/08/2019	ND	2.0000		
Thallium, total	ug/L	MW-12	10/11/2019	ND	2.0000		
Thallium, total	ug/L	MW-12	04/27/2020	ND	2.0000		
Thallium, total	ug/L	MW-12	10/09/2020	ND	2.0000		
Thallium, total	ug/L	MW-12	04/09/2021	ND	2.0000		
Thallium, total	ug/L	MW-12	10/25/2021	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-12	04/11/2022	ND	2.0000		
Thallium, total	ug/L	MW-12	10/12/2022	ND	2.0000		
Thallium, total	ug/L	MW-12	04/06/2023	ND	2.0000		
Thallium, total	ug/L	MW-12	10/09/2023	ND	2.0000		
Thallium, total	ug/L	MW-12	04/04/2024	ND	2.0000		
Thallium, total	ug/L	MW-12	10/16/2024	ND	2.0000		
Vanadium, total	ug/L	MW-12	04/07/2014	ND	20.0000		
Vanadium, total	ug/L	MW-12	10/23/2014	ND	20.0000		
Vanadium, total	ug/L	MW-12	01/16/2015	ND	20.0000		
Vanadium, total	ug/L	MW-12	04/02/2015	ND	20.0000		
Vanadium, total	ug/L	MW-12	09/15/2015	ND	20.0000		
Vanadium, total	ug/L	MW-12	10/26/2015	ND	20.0000		
Vanadium, total	ug/L	MW-12	04/01/2016	ND	20.0000		
Vanadium, total	ug/L	MW-12	10/19/2016	ND	20.0000		
Vanadium, total	ug/L	MW-12	04/17/2017	ND	20.0000		
Vanadium, total	ug/L	MW-12	10/11/2017	ND	20.0000		
Vanadium, total	ug/L	MW-12	06/01/2018	ND	20.0000		
Vanadium, total	ug/L	MW-12	10/03/2018	ND	20.0000		
Vanadium, total	ug/L	MW-12	04/08/2019	ND	20.0000		
Vanadium, total	ug/L	MW-12	10/11/2019	ND	20.0000		
Vanadium, total	ug/L	MW-12	04/27/2020	ND	20.0000		
Vanadium, total	ug/L	MW-12	10/09/2020	ND	20.0000		
Vanadium, total	ug/L	MW-12	04/09/2021	ND	20.0000		
Vanadium, total	ug/L	MW-12	10/25/2021	ND	20.0000		
Vanadium, total	ug/L	MW-12	04/11/2022	ND	20.0000		
Vanadium, total	ug/L	MW-12	10/12/2022	ND	20.0000		
Vanadium, total	ug/L	MW-12	04/06/2023	ND	20.0000		
Vanadium, total	ug/L	MW-12	10/09/2023	ND	20.0000		
Vanadium, total	ug/L	MW-12	04/04/2024	ND	20.0000		
Vanadium, total	ug/L	MW-12	10/16/2024	ND	20.0000		
Zinc, total	ug/L	MW-12	04/07/2014		16.3000		
Zinc, total	ug/L	MW-12	10/23/2014	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-12	01/16/2015	ND	20.0000		
Zinc, total	ug/L	MW-12	04/02/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-12	09/15/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-12	10/26/2015	ND	20.0000		
Zinc, total	ug/L	MW-12	04/01/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-12	10/19/2016		20.4000		
Zinc, total	ug/L	MW-12	04/17/2017		14.8000		
Zinc, total	ug/L	MW-12	10/11/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-12	06/01/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-12	10/03/2018		22.1000		
Zinc, total	ug/L	MW-12	04/08/2019	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-12	10/11/2019	ND	20.0000		
Zinc, total	ug/L	MW-12	04/27/2020	ND	20.0000		
Zinc, total	ug/L	MW-12	10/09/2020	ND	20.0000		
Zinc, total	ug/L	MW-12	04/09/2021	ND	20.0000		
Zinc, total	ug/L	MW-12	10/25/2021	ND	20.0000		
Zinc, total	ug/L	MW-12	04/11/2022	ND	20.0000		
Zinc, total	ug/L	MW-12	10/12/2022	ND	20.0000		
Zinc, total	ug/L	MW-12	04/06/2023	ND	20.0000		
Zinc, total	ug/L	MW-12	10/09/2023	ND	20.0000		
Zinc, total	ug/L	MW-12	04/04/2024	ND	20.0000		
Zinc, total	ug/L	MW-12	10/16/2024	ND	20.0000		
Antimony, total	ug/L	MW-13	06/27/2023	ND	2.0000		
Antimony, total	ug/L	MW-13	10/09/2023	ND	2.0000		
Antimony, total	ug/L	MW-13	04/04/2024	ND	2.0000		
Antimony, total	ug/L	MW-13	10/16/2024	ND	2.0000		
Arsenic, total	ug/L	MW-13	06/27/2023	ND	4.0000		
Arsenic, total	ug/L	MW-13	10/09/2023	ND	4.0000		
Arsenic, total	ug/L	MW-13	04/04/2024	ND	4.0000		
Arsenic, total	ug/L	MW-13	10/16/2024	ND	4.0000		
Barium, total	ug/L	MW-13	06/27/2023		25.7000		
Barium, total	ug/L	MW-13	10/09/2023		57.8000		
Barium, total	ug/L	MW-13	04/04/2024		32.8000		
Barium, total	ug/L	MW-13	10/16/2024		42.8000		
Beryllium, total	ug/L	MW-13	06/27/2023	ND	4.0000		
Beryllium, total	ug/L	MW-13	10/09/2023	ND	4.0000		
Beryllium, total	ug/L	MW-13	04/04/2024	ND	4.0000		
Beryllium, total	ug/L	MW-13	10/16/2024	ND	4.0000		
Cadmium, total	ug/L	MW-13	06/27/2023	ND	0.8000		
Cadmium, total	ug/L	MW-13	10/09/2023	ND	0.8000		
Cadmium, total	ug/L	MW-13	04/04/2024	ND	0.8000		
Cadmium, total	ug/L	MW-13	10/16/2024	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
Chromium, total	ug/L	MW-13	06/27/2023	ND	8.0000	
Chromium, total	ug/L	MW-13	10/09/2023	ND	8.0000	
Chromium, total	ug/L	MW-13	04/04/2024	ND	8.0000	
Chromium, total	ug/L	MW-13	10/16/2024	ND	8.0000	
Cobalt, total	ug/L	MW-13	06/27/2023		0.4000	
Cobalt, total	ug/L	MW-13	10/09/2023		1.3000	
Cobalt, total	ug/L	MW-13	04/04/2024		0.5000	
Cobalt, total	ug/L	MW-13	10/16/2024		0.6000	
Copper, total	ug/L	MW-13	06/27/2023	ND	4.0000	
Copper, total	ug/L	MW-13	10/09/2023	ND	4.0000	
Copper, total	ug/L	MW-13	04/04/2024	ND	4.0000	
Copper, total	ug/L	MW-13	10/16/2024	ND	4.0000	
Lead, total	ug/L	MW-13	06/27/2023	ND	4.0000	
Lead, total	ug/L	MW-13	10/09/2023	ND	4.0000	
Lead, total	ug/L	MW-13	04/04/2024	ND	4.0000	
Lead, total	ug/L	MW-13	10/16/2024	ND	4.0000	
Nickel, total	ug/L	MW-13	06/27/2023	ND	4.0000	
Nickel, total	ug/L	MW-13	10/09/2023		4.0000	
Nickel, total	ug/L	MW-13	04/04/2024	ND	4.0000	
Nickel, total	ug/L	MW-13	10/16/2024	ND	4.0000	
Selenium, total	ug/L	MW-13	06/27/2023	ND	4.0000	
Selenium, total	ug/L	MW-13	10/09/2023	ND	4.0000	
Selenium, total	ug/L	MW-13	04/04/2024	ND	4.0000	
Selenium, total	ug/L	MW-13	10/16/2024	ND	4.0000	
Silver, total	ug/L	MW-13	06/27/2023	ND	4.0000	
Silver, total	ug/L	MW-13	10/09/2023	ND	4.0000	
Silver, total	ug/L	MW-13	04/04/2024	ND	4.0000	
Silver, total	ug/L	MW-13	10/16/2024	ND	4.0000	
Thallium, total	ug/L	MW-13	06/27/2023	ND	2.0000	
Thallium, total	ug/L	MW-13	10/09/2023	ND	2.0000	
Thallium, total	ug/L	MW-13	04/04/2024	ND	2.0000	
Thallium, total	ug/L	MW-13	10/16/2024	ND	2.0000	
Vanadium, total	ug/L	MW-13	06/27/2023	ND	20.0000	
Vanadium, total	ug/L	MW-13	10/09/2023	ND	20.0000	
Vanadium, total	ug/L	MW-13	04/04/2024	ND	20.0000	
Vanadium, total	ug/L	MW-13	10/16/2024	ND	20.0000	
Zinc, total	ug/L	MW-13	06/27/2023	ND	20.0000	
Zinc, total	ug/L	MW-13	10/09/2023	ND	20.0000	
Zinc, total	ug/L	MW-13	04/04/2024	ND	20.0000	
Zinc, total	ug/L	MW-13	10/16/2024	ND	20.0000	
Antimony, total	ug/L	MW-17	04/07/2014	ND	2.0000	
Antimony, total	ug/L	MW-17	10/23/2014	ND	2.0000	
Antimony, total	ug/L	MW-17	01/16/2015	ND	2.0000	
Antimony, total	ug/L	MW-17	04/02/2015	ND	2.0000	
Antimony, total	ug/L	MW-17	09/15/2015	ND	2.0000	
Antimony, total	ug/L	MW-17	10/26/2015	ND	2.0000	
Antimony, total	ug/L	MW-17	04/01/2016	ND	2.0000	
Antimony, total	ug/L	MW-17	10/19/2016	ND	2.0000	
Antimony, total	ug/L	MW-17	04/17/2017	ND	2.0000	
Antimony, total	ug/L	MW-17	10/11/2017	ND	2.0000	
Antimony, total	ug/L	MW-17	06/01/2018	ND	2.0000	
Antimony, total	ug/L	MW-17	10/03/2018	ND	2.0000	
Antimony, total	ug/L	MW-17	04/08/2019	ND	2.0000	
Antimony, total	ug/L	MW-17	10/11/2019	ND	2.0000	
Antimony, total	ug/L	MW-17	04/27/2020	ND	2.0000	
Antimony, total	ug/L	MW-17	10/09/2020	ND	2.0000	
Antimony, total	ug/L	MW-17	04/09/2021	ND	2.0000	
Antimony, total	ug/L	MW-17	10/25/2021	ND	2.0000	
Antimony, total	ug/L	MW-17	04/11/2022	ND	2.0000	
Antimony, total	ug/L	MW-17	10/12/2022	ND	2.0000	
Antimony, total	ug/L	MW-17	04/06/2023	ND	2.0000	
Antimony, total	ug/L	MW-17	10/09/2023	ND	2.0000	
Antimony, total	ug/L	MW-17	04/04/2024	ND	2.0000	
Antimony, total	ug/L	MW-17	10/16/2024	ND	2.0000	
Arsenic, total	ug/L	MW-17	04/07/2014		30.9000	
Arsenic, total	ug/L	MW-17	10/23/2014		11.5000	
Arsenic, total	ug/L	MW-17	01/16/2015		17.0000	
Arsenic, total	ug/L	MW-17	04/02/2015		53.7000	*
Arsenic, total	ug/L	MW-17	09/15/2015		7.9000	
Arsenic, total	ug/L	MW-17	10/26/2015		7.7000	
Arsenic, total	ug/L	MW-17	04/01/2016		22.1000	
Arsenic, total	ug/L	MW-17	10/19/2016		4.9000	
Arsenic, total	ug/L	MW-17	04/17/2017		136.0000	*
Arsenic, total	ug/L	MW-17	10/11/2017		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	
Arsenic, total	ug/L	MW-17	06/01/2018		49.3000		
Arsenic, total	ug/L	MW-17	10/03/2018		12.1000		
Arsenic, total	ug/L	MW-17	04/08/2019		11.1000		
Arsenic, total	ug/L	MW-17	10/11/2019		12.9000		
Arsenic, total	ug/L	MW-17	04/27/2020		12.2000		
Arsenic, total	ug/L	MW-17	10/09/2020		6.9000		
Arsenic, total	ug/L	MW-17	04/09/2021		4.2000		
Arsenic, total	ug/L	MW-17	10/25/2021	ND	4.0000		
Arsenic, total	ug/L	MW-17	04/11/2022		15.5000		
Arsenic, total	ug/L	MW-17	10/12/2022		8.2000		
Arsenic, total	ug/L	MW-17	04/06/2023		12.7000		
Arsenic, total	ug/L	MW-17	10/09/2023		4.4000		
Arsenic, total	ug/L	MW-17	04/04/2024		30.3000		
Arsenic, total	ug/L	MW-17	10/16/2024		5.6000		
Barium, total	ug/L	MW-17	04/07/2014		374.0000		
Barium, total	ug/L	MW-17	10/23/2014		167.0000		
Barium, total	ug/L	MW-17	01/16/2015		293.0000		
Barium, total	ug/L	MW-17	04/02/2015		589.0000		
Barium, total	ug/L	MW-17	09/15/2015		148.0000		
Barium, total	ug/L	MW-17	10/26/2015		140.0000		
Barium, total	ug/L	MW-17	04/01/2016		475.0000		
Barium, total	ug/L	MW-17	10/19/2016		183.0000		
Barium, total	ug/L	MW-17	04/17/2017		1010.0000		*
Barium, total	ug/L	MW-17	10/11/2017		168.0000		
Barium, total	ug/L	MW-17	06/01/2018		373.0000		
Barium, total	ug/L	MW-17	10/03/2018		174.0000		
Barium, total	ug/L	MW-17	04/08/2019		217.0000		
Barium, total	ug/L	MW-17	10/11/2019		222.0000		
Barium, total	ug/L	MW-17	04/27/2020		338.0000		
Barium, total	ug/L	MW-17	10/09/2020		161.0000		
Barium, total	ug/L	MW-17	04/09/2021		235.0000		
Barium, total	ug/L	MW-17	10/25/2021		146.0000		
Barium, total	ug/L	MW-17	04/11/2022		421.0000		
Barium, total	ug/L	MW-17	10/12/2022		175.0000		
Barium, total	ug/L	MW-17	04/06/2023		263.0000		
Barium, total	ug/L	MW-17	10/09/2023		151.0000		
Barium, total	ug/L	MW-17	04/04/2024		358.0000		
Barium, total	ug/L	MW-17	10/16/2024		135.0000		
Beryllium, total	ug/L	MW-17	04/07/2014	ND	4.0000		
Beryllium, total	ug/L	MW-17	10/23/2014	ND	4.0000		
Beryllium, total	ug/L	MW-17	01/16/2015	ND	4.0000		
Beryllium, total	ug/L	MW-17	04/02/2015	ND	4.0000		
Beryllium, total	ug/L	MW-17	09/15/2015	ND	4.0000		
Beryllium, total	ug/L	MW-17	10/26/2015	ND	4.0000		
Beryllium, total	ug/L	MW-17	04/01/2016	ND	4.0000		
Beryllium, total	ug/L	MW-17	10/19/2016	ND	4.0000		
Beryllium, total	ug/L	MW-17	04/17/2017	ND	4.0000		
Beryllium, total	ug/L	MW-17	10/11/2017	ND	4.0000		
Beryllium, total	ug/L	MW-17	06/01/2018	ND	4.0000		
Beryllium, total	ug/L	MW-17	10/03/2018	ND	4.0000		
Beryllium, total	ug/L	MW-17	04/08/2019	ND	4.0000		
Beryllium, total	ug/L	MW-17	10/11/2019	ND	4.0000		
Beryllium, total	ug/L	MW-17	04/27/2020	ND	4.0000		
Beryllium, total	ug/L	MW-17	10/09/2020	ND	4.0000		
Beryllium, total	ug/L	MW-17	04/09/2021	ND	4.0000		
Beryllium, total	ug/L	MW-17	10/25/2021	ND	4.0000		
Beryllium, total	ug/L	MW-17	04/11/2022	ND	4.0000		
Beryllium, total	ug/L	MW-17	10/12/2022	ND	4.0000		
Beryllium, total	ug/L	MW-17	04/06/2023	ND	4.0000		
Beryllium, total	ug/L	MW-17	10/09/2023	ND	4.0000		
Beryllium, total	ug/L	MW-17	04/04/2024	ND	4.0000		
Beryllium, total	ug/L	MW-17	10/16/2024	ND	4.0000		
Cadmium, total	ug/L	MW-17	04/07/2014		1.0000		
Cadmium, total	ug/L	MW-17	10/23/2014	ND	0.8000		
Cadmium, total	ug/L	MW-17	01/16/2015	ND	0.8000		
Cadmium, total	ug/L	MW-17	04/02/2015	ND	0.8000		
Cadmium, total	ug/L	MW-17	09/15/2015	ND	0.8000		
Cadmium, total	ug/L	MW-17	10/26/2015	ND	0.8000		
Cadmium, total	ug/L	MW-17	04/01/2016	ND	0.8000		
Cadmium, total	ug/L	MW-17	10/19/2016	ND	0.8000		
Cadmium, total	ug/L	MW-17	04/17/2017	ND	0.8000		
Cadmium, total	ug/L	MW-17	10/11/2017	ND	0.8000		
Cadmium, total	ug/L	MW-17	06/01/2018	ND	0.8000		
Cadmium, total	ug/L	MW-17	10/03/2018		1.0000		

* - 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	
Cadmium, total	ug/L	MW-17	04/08/2019	ND	0.8000		
Cadmium, total	ug/L	MW-17	10/11/2019	ND	0.8000		
Cadmium, total	ug/L	MW-17	04/27/2020	ND	0.8000		
Cadmium, total	ug/L	MW-17	10/09/2020	ND	0.8000		
Cadmium, total	ug/L	MW-17	04/09/2021	ND	0.8000		
Cadmium, total	ug/L	MW-17	10/25/2021	ND	0.8000		
Cadmium, total	ug/L	MW-17	04/11/2022	ND	0.8000		
Cadmium, total	ug/L	MW-17	10/12/2022	ND	0.8000		
Cadmium, total	ug/L	MW-17	04/06/2023		1.7000		
Cadmium, total	ug/L	MW-17	10/09/2023	ND	0.8000		
Cadmium, total	ug/L	MW-17	04/04/2024	ND	0.8000		
Cadmium, total	ug/L	MW-17	10/16/2024	ND	0.8000		
Chromium, total	ug/L	MW-17	04/07/2014	ND	8.0000		
Chromium, total	ug/L	MW-17	10/23/2014	ND	8.0000		
Chromium, total	ug/L	MW-17	01/16/2015	ND	8.0000		
Chromium, total	ug/L	MW-17	04/02/2015	ND	8.0000		
Chromium, total	ug/L	MW-17	09/15/2015	ND	8.0000		
Chromium, total	ug/L	MW-17	10/26/2015	ND	8.0000		
Chromium, total	ug/L	MW-17	04/01/2016	ND	8.0000		
Chromium, total	ug/L	MW-17	10/19/2016	ND	8.0000		
Chromium, total	ug/L	MW-17	04/17/2017	ND	8.0000		
Chromium, total	ug/L	MW-17	10/11/2017	ND	8.0000		
Chromium, total	ug/L	MW-17	06/01/2018	ND	8.0000		
Chromium, total	ug/L	MW-17	10/03/2018	ND	8.0000		
Chromium, total	ug/L	MW-17	04/08/2019	ND	8.0000		
Chromium, total	ug/L	MW-17	10/11/2019	ND	8.0000		
Chromium, total	ug/L	MW-17	04/27/2020	ND	8.0000		
Chromium, total	ug/L	MW-17	10/09/2020	ND	8.0000		
Chromium, total	ug/L	MW-17	04/09/2021	ND	8.0000		
Chromium, total	ug/L	MW-17	10/25/2021	ND	8.0000		
Chromium, total	ug/L	MW-17	04/11/2022	ND	8.0000		
Chromium, total	ug/L	MW-17	10/12/2022	ND	8.0000		
Chromium, total	ug/L	MW-17	04/06/2023	ND	8.0000		
Chromium, total	ug/L	MW-17	10/09/2023	ND	8.0000		
Chromium, total	ug/L	MW-17	04/04/2024	ND	8.0000		
Chromium, total	ug/L	MW-17	10/16/2024	ND	8.0000		
Cobalt, total	ug/L	MW-17	04/07/2014	ND	4.0000		*
Cobalt, total	ug/L	MW-17	10/23/2014	ND	0.8000	0.4000	**
Cobalt, total	ug/L	MW-17	01/16/2015	ND	0.8000	0.4000	**
Cobalt, total	ug/L	MW-17	04/02/2015	ND	0.8000	0.4000	**
Cobalt, total	ug/L	MW-17	09/15/2015	ND	0.8000	0.4000	**
Cobalt, total	ug/L	MW-17	10/26/2015	ND	0.8000	0.4000	**
Cobalt, total	ug/L	MW-17	04/01/2016	ND	0.8000	0.4000	**
Cobalt, total	ug/L	MW-17	10/19/2016	ND	0.8000	0.4000	**
Cobalt, total	ug/L	MW-17	04/17/2017	ND	0.8000	0.4000	**
Cobalt, total	ug/L	MW-17	10/11/2017	ND	0.8000	0.4000	**
Cobalt, total	ug/L	MW-17	06/01/2018	ND	0.8000	0.4000	**
Cobalt, total	ug/L	MW-17	10/03/2018	ND	0.8000	0.4000	**
Cobalt, total	ug/L	MW-17	04/08/2019	ND	0.8000	0.4000	**
Cobalt, total	ug/L	MW-17	10/11/2019	ND	0.8000	0.4000	**
Cobalt, total	ug/L	MW-17	04/27/2020	ND	0.4000		
Cobalt, total	ug/L	MW-17	10/09/2020	ND	0.4000		
Cobalt, total	ug/L	MW-17	04/09/2021	ND	0.4000		
Cobalt, total	ug/L	MW-17	10/25/2021	ND	0.4000		
Cobalt, total	ug/L	MW-17	04/11/2022	ND	0.4000		
Cobalt, total	ug/L	MW-17	10/12/2022		2.2000		
Cobalt, total	ug/L	MW-17	04/06/2023	ND	0.4000		
Cobalt, total	ug/L	MW-17	10/09/2023	ND	0.4000		
Cobalt, total	ug/L	MW-17	04/04/2024	ND	0.4000		
Cobalt, total	ug/L	MW-17	10/16/2024	ND	0.4000		
Copper, total	ug/L	MW-17	04/07/2014		61.5000		*
Copper, total	ug/L	MW-17	10/23/2014	ND	4.0000		
Copper, total	ug/L	MW-17	01/16/2015	ND	4.0000		
Copper, total	ug/L	MW-17	04/02/2015	ND	4.0000		
Copper, total	ug/L	MW-17	09/15/2015	ND	4.0000		
Copper, total	ug/L	MW-17	10/26/2015	ND	4.0000		
Copper, total	ug/L	MW-17	04/01/2016	ND	4.0000		
Copper, total	ug/L	MW-17	10/19/2016	ND	4.0000		
Copper, total	ug/L	MW-17	04/17/2017	ND	4.0000		
Copper, total	ug/L	MW-17	10/11/2017	ND	4.0000		
Copper, total	ug/L	MW-17	06/01/2018	ND	4.0000		
Copper, total	ug/L	MW-17	10/03/2018		4.8000		
Copper, total	ug/L	MW-17	04/08/2019	ND	4.0000		
Copper, total	ug/L	MW-17	10/11/2019	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-17	04/27/2020	ND	4.0000	
Copper, total	ug/L	MW-17	10/09/2020	ND	4.0000	
Copper, total	ug/L	MW-17	04/09/2021	ND	4.0000	
Copper, total	ug/L	MW-17	10/25/2021	ND	4.0000	
Copper, total	ug/L	MW-17	04/11/2022	ND	4.0000	
Copper, total	ug/L	MW-17	10/12/2022	ND	4.0000	
Copper, total	ug/L	MW-17	04/06/2023	ND	4.0000	
Copper, total	ug/L	MW-17	10/09/2023	ND	4.0000	
Copper, total	ug/L	MW-17	04/04/2024	ND	4.0000	
Copper, total	ug/L	MW-17	10/16/2024	ND	4.0000	
Lead, total	ug/L	MW-17	04/07/2014	ND	4.0000	
Lead, total	ug/L	MW-17	10/23/2014	ND	4.0000	
Lead, total	ug/L	MW-17	01/16/2015	ND	4.0000	
Lead, total	ug/L	MW-17	04/02/2015	ND	4.0000	
Lead, total	ug/L	MW-17	09/15/2015	ND	4.0000	
Lead, total	ug/L	MW-17	10/26/2015	ND	4.0000	
Lead, total	ug/L	MW-17	04/01/2016	ND	4.0000	
Lead, total	ug/L	MW-17	10/19/2016	ND	4.0000	
Lead, total	ug/L	MW-17	04/17/2017	ND	4.0000	
Lead, total	ug/L	MW-17	10/11/2017	ND	4.0000	
Lead, total	ug/L	MW-17	06/01/2018	ND	4.0000	
Lead, total	ug/L	MW-17	10/03/2018	ND	4.0000	
Lead, total	ug/L	MW-17	04/08/2019	ND	4.0000	
Lead, total	ug/L	MW-17	10/11/2019	ND	4.0000	
Lead, total	ug/L	MW-17	04/27/2020	ND	4.0000	
Lead, total	ug/L	MW-17	10/09/2020	ND	4.0000	
Lead, total	ug/L	MW-17	04/09/2021	ND	4.0000	
Lead, total	ug/L	MW-17	10/25/2021	ND	4.0000	
Lead, total	ug/L	MW-17	04/11/2022	ND	4.0000	
Lead, total	ug/L	MW-17	10/12/2022	ND	4.0000	
Lead, total	ug/L	MW-17	04/06/2023	ND	4.0000	
Lead, total	ug/L	MW-17	10/09/2023	ND	4.0000	
Lead, total	ug/L	MW-17	04/04/2024	ND	4.0000	
Lead, total	ug/L	MW-17	10/16/2024	ND	4.0000	
Nickel, total	ug/L	MW-17	04/07/2014		7.8000	
Nickel, total	ug/L	MW-17	10/23/2014	ND	4.0000	
Nickel, total	ug/L	MW-17	01/16/2015		4.7000	
Nickel, total	ug/L	MW-17	04/02/2015		5.6000	
Nickel, total	ug/L	MW-17	09/15/2015	ND	4.0000	
Nickel, total	ug/L	MW-17	10/26/2015	ND	4.0000	
Nickel, total	ug/L	MW-17	04/01/2016	ND	4.0000	
Nickel, total	ug/L	MW-17	10/19/2016		5.1000	
Nickel, total	ug/L	MW-17	04/17/2017		6.0000	
Nickel, total	ug/L	MW-17	10/11/2017	ND	4.0000	
Nickel, total	ug/L	MW-17	06/01/2018		4.6000	
Nickel, total	ug/L	MW-17	10/03/2018		4.3000	
Nickel, total	ug/L	MW-17	04/08/2019		4.6000	
Nickel, total	ug/L	MW-17	10/11/2019	ND	4.0000	
Nickel, total	ug/L	MW-17	04/27/2020	ND	4.0000	
Nickel, total	ug/L	MW-17	10/09/2020	ND	4.0000	
Nickel, total	ug/L	MW-17	04/09/2021	ND	4.0000	
Nickel, total	ug/L	MW-17	10/25/2021		4.7000	
Nickel, total	ug/L	MW-17	04/11/2022		5.0000	
Nickel, total	ug/L	MW-17	10/12/2022	ND	4.0000	
Nickel, total	ug/L	MW-17	04/06/2023	ND	4.0000	
Nickel, total	ug/L	MW-17	10/09/2023	ND	4.0000	
Nickel, total	ug/L	MW-17	04/04/2024	ND	4.0000	
Nickel, total	ug/L	MW-17	10/16/2024	ND	4.0000	
Selenium, total	ug/L	MW-17	04/07/2014	ND	4.0000	
Selenium, total	ug/L	MW-17	10/23/2014	ND	4.0000	
Selenium, total	ug/L	MW-17	01/16/2015	ND	4.0000	
Selenium, total	ug/L	MW-17	04/02/2015	ND	4.0000	
Selenium, total	ug/L	MW-17	09/15/2015	ND	4.0000	
Selenium, total	ug/L	MW-17	10/26/2015	ND	4.0000	
Selenium, total	ug/L	MW-17	04/01/2016	ND	4.0000	
Selenium, total	ug/L	MW-17	10/19/2016	ND	4.0000	
Selenium, total	ug/L	MW-17	04/17/2017	ND	4.0000	
Selenium, total	ug/L	MW-17	10/11/2017	ND	4.0000	
Selenium, total	ug/L	MW-17	06/01/2018	ND	4.0000	
Selenium, total	ug/L	MW-17	10/03/2018	ND	4.0000	
Selenium, total	ug/L	MW-17	04/08/2019	ND	4.0000	
Selenium, total	ug/L	MW-17	10/11/2019	ND	4.0000	
Selenium, total	ug/L	MW-17	04/27/2020	ND	4.0000	
Selenium, total	ug/L	MW-17	10/09/2020	ND	4.0000	
Selenium, total	ug/L	MW-17	04/09/2021	ND	4.0000	
Selenium, total	ug/L	MW-17	10/25/2021		4.7000	
Selenium, total	ug/L	MW-17	04/11/2022		5.0000	
Selenium, total	ug/L	MW-17	10/12/2022	ND	4.0000	
Selenium, total	ug/L	MW-17	04/06/2023	ND	4.0000	
Selenium, total	ug/L	MW-17	10/09/2023	ND	4.0000	
Selenium, total	ug/L	MW-17	04/04/2024	ND	4.0000	
Selenium, total	ug/L	MW-17	10/16/2024	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-17	04/09/2021	ND	4.0000		
Selenium, total	ug/L	MW-17	10/25/2021	ND	4.0000		
Selenium, total	ug/L	MW-17	04/11/2022	ND	4.0000		
Selenium, total	ug/L	MW-17	10/12/2022	ND	4.0000		
Selenium, total	ug/L	MW-17	04/06/2023	ND	4.0000		
Selenium, total	ug/L	MW-17	10/09/2023	ND	4.0000		
Selenium, total	ug/L	MW-17	04/04/2024	ND	4.0000		
Selenium, total	ug/L	MW-17	10/16/2024	ND	4.0000		
Silver, total	ug/L	MW-17	04/07/2014	ND	4.0000		
Silver, total	ug/L	MW-17	10/23/2014	ND	4.0000		
Silver, total	ug/L	MW-17	01/16/2015	ND	4.0000		
Silver, total	ug/L	MW-17	04/02/2015	ND	4.0000		
Silver, total	ug/L	MW-17	09/15/2015	ND	4.0000		
Silver, total	ug/L	MW-17	10/26/2015	ND	4.0000		
Silver, total	ug/L	MW-17	04/01/2016	ND	4.0000		
Silver, total	ug/L	MW-17	10/19/2016	ND	4.0000		
Silver, total	ug/L	MW-17	04/17/2017	ND	4.0000		
Silver, total	ug/L	MW-17	10/11/2017	ND	4.0000		
Silver, total	ug/L	MW-17	06/01/2018	ND	8.0000	4.0000	**
Silver, total	ug/L	MW-17	10/03/2018	ND	4.0000		
Silver, total	ug/L	MW-17	04/08/2019	ND	4.0000		
Silver, total	ug/L	MW-17	10/11/2019	ND	4.0000		
Silver, total	ug/L	MW-17	04/27/2020	ND	4.0000		
Silver, total	ug/L	MW-17	10/09/2020	ND	4.0000		
Silver, total	ug/L	MW-17	04/09/2021	ND	4.0000		
Silver, total	ug/L	MW-17	10/25/2021	ND	4.0000		
Silver, total	ug/L	MW-17	04/11/2022	ND	4.0000		
Silver, total	ug/L	MW-17	10/12/2022	ND	4.0000		
Silver, total	ug/L	MW-17	04/06/2023	ND	4.0000		
Silver, total	ug/L	MW-17	10/09/2023	ND	4.0000		
Silver, total	ug/L	MW-17	04/04/2024	ND	4.0000		
Silver, total	ug/L	MW-17	10/16/2024	ND	4.0000		
Thallium, total	ug/L	MW-17	04/07/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-17	10/23/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-17	01/16/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-17	04/02/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-17	09/15/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-17	10/26/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-17	04/01/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-17	10/19/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-17	04/17/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-17	10/11/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-17	06/01/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-17	10/03/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-17	04/08/2019	ND	2.0000		
Thallium, total	ug/L	MW-17	10/11/2019	ND	2.0000		
Thallium, total	ug/L	MW-17	04/27/2020	ND	2.0000		
Thallium, total	ug/L	MW-17	10/09/2020	ND	2.0000		
Thallium, total	ug/L	MW-17	04/09/2021	ND	2.0000		
Thallium, total	ug/L	MW-17	10/25/2021	ND	2.0000		
Thallium, total	ug/L	MW-17	04/11/2022	ND	2.0000		
Thallium, total	ug/L	MW-17	10/12/2022	ND	2.0000		
Thallium, total	ug/L	MW-17	04/06/2023	ND	2.0000		
Thallium, total	ug/L	MW-17	10/09/2023	ND	2.0000		
Thallium, total	ug/L	MW-17	04/04/2024	ND	2.0000		
Thallium, total	ug/L	MW-17	10/16/2024	ND	2.0000		
Vanadium, total	ug/L	MW-17	04/07/2014	ND	20.0000		
Vanadium, total	ug/L	MW-17	10/23/2014	ND	20.0000		
Vanadium, total	ug/L	MW-17	01/16/2015	ND	20.0000		
Vanadium, total	ug/L	MW-17	04/02/2015	ND	20.0000		
Vanadium, total	ug/L	MW-17	09/15/2015	ND	20.0000		
Vanadium, total	ug/L	MW-17	10/26/2015	ND	20.0000		
Vanadium, total	ug/L	MW-17	04/01/2016	ND	20.0000		
Vanadium, total	ug/L	MW-17	10/19/2016	ND	20.0000		
Vanadium, total	ug/L	MW-17	04/17/2017	ND	20.0000		
Vanadium, total	ug/L	MW-17	10/11/2017	ND	20.0000		
Vanadium, total	ug/L	MW-17	06/01/2018	ND	20.0000		
Vanadium, total	ug/L	MW-17	10/03/2018	ND	20.0000		
Vanadium, total	ug/L	MW-17	04/08/2019	ND	20.0000		
Vanadium, total	ug/L	MW-17	10/11/2019	ND	20.0000		
Vanadium, total	ug/L	MW-17	04/27/2020	ND	20.0000		
Vanadium, total	ug/L	MW-17	10/09/2020	ND	20.0000		
Vanadium, total	ug/L	MW-17	04/09/2021	ND	20.0000		
Vanadium, total	ug/L	MW-17	10/25/2021	ND	20.0000		
Vanadium, total	ug/L	MW-17	04/11/2022	ND	20.0000		
Vanadium, total	ug/L	MW-17	10/12/2022	ND	20.0000		
Vanadium, total	ug/L	MW-17	04/06/2023	ND	20.0000		
Vanadium, total	ug/L	MW-17	10/09/2023	ND	20.0000		
Vanadium, total	ug/L	MW-17	04/04/2024	ND	20.0000		
Vanadium, total	ug/L	MW-17	10/16/2024	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-17	04/11/2022	ND	20.0000		
Vanadium, total	ug/L	MW-17	10/12/2022	ND	20.0000		
Vanadium, total	ug/L	MW-17	04/06/2023	ND	20.0000		
Vanadium, total	ug/L	MW-17	10/09/2023	ND	20.0000		
Vanadium, total	ug/L	MW-17	04/04/2024	ND	20.0000		
Vanadium, total	ug/L	MW-17	10/16/2024	ND	20.0000		
Zinc, total	ug/L	MW-17	04/07/2014	ND	20.0000		
Zinc, total	ug/L	MW-17	10/23/2014	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-17	01/16/2015	ND	20.0000		
Zinc, total	ug/L	MW-17	04/02/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-17	09/15/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-17	10/26/2015	ND	20.0000		
Zinc, total	ug/L	MW-17	04/01/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-17	10/19/2016		14.4000		
Zinc, total	ug/L	MW-17	04/17/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-17	10/11/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-17	06/01/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-17	10/03/2018		21.0000		
Zinc, total	ug/L	MW-17	04/08/2019	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-17	10/11/2019		32.2000		
Zinc, total	ug/L	MW-17	04/27/2020	ND	20.0000		
Zinc, total	ug/L	MW-17	10/09/2020	ND	20.0000		
Zinc, total	ug/L	MW-17	04/09/2021	ND	20.0000		
Zinc, total	ug/L	MW-17	10/25/2021	ND	20.0000		
Zinc, total	ug/L	MW-17	04/11/2022	ND	20.0000		
Zinc, total	ug/L	MW-17	10/12/2022	ND	20.0000		
Zinc, total	ug/L	MW-17	04/06/2023	ND	20.0000		
Zinc, total	ug/L	MW-17	10/09/2023	ND	20.0000		
Zinc, total	ug/L	MW-17	04/04/2024	ND	20.0000		
Zinc, total	ug/L	MW-17	10/16/2024	ND	20.0000		
Antimony, total	ug/L	MW-18	04/29/2020	ND	2.0000		
Antimony, total	ug/L	MW-18	04/06/2023	ND	2.0000		
Antimony, total	ug/L	MW-18	10/09/2023	ND	2.0000		
Antimony, total	ug/L	MW-18	04/04/2024	ND	2.0000		
Antimony, total	ug/L	MW-18	10/16/2024	ND	2.0000		
Arsenic, total	ug/L	MW-18	04/29/2020		4.3000		
Arsenic, total	ug/L	MW-18	04/06/2023		6.9000		
Arsenic, total	ug/L	MW-18	10/09/2023		4.5000		
Arsenic, total	ug/L	MW-18	04/04/2024		6.7000		
Arsenic, total	ug/L	MW-18	10/16/2024		6.0000		
Barium, total	ug/L	MW-18	04/29/2020		65.7000		
Barium, total	ug/L	MW-18	04/06/2023		48.1000		
Barium, total	ug/L	MW-18	10/09/2023		46.8000		
Barium, total	ug/L	MW-18	04/04/2024		43.8000		
Barium, total	ug/L	MW-18	10/16/2024		45.6000		
Beryllium, total	ug/L	MW-18	04/29/2020	ND	4.0000		
Beryllium, total	ug/L	MW-18	04/06/2023	ND	4.0000		
Beryllium, total	ug/L	MW-18	10/09/2023	ND	4.0000		
Beryllium, total	ug/L	MW-18	04/04/2024	ND	4.0000		
Beryllium, total	ug/L	MW-18	10/16/2024	ND	4.0000		
Cadmium, total	ug/L	MW-18	04/29/2020	ND	0.8000		
Cadmium, total	ug/L	MW-18	04/06/2023	ND	0.8000		
Cadmium, total	ug/L	MW-18	10/09/2023	ND	0.8000		
Cadmium, total	ug/L	MW-18	04/04/2024	ND	0.8000		
Cadmium, total	ug/L	MW-18	10/16/2024	ND	0.8000		
Chromium, total	ug/L	MW-18	04/29/2020	ND	8.0000		
Chromium, total	ug/L	MW-18	04/06/2023	ND	8.0000		
Chromium, total	ug/L	MW-18	10/09/2023	ND	8.0000		
Chromium, total	ug/L	MW-18	04/04/2024	ND	8.0000		
Chromium, total	ug/L	MW-18	10/16/2024	ND	8.0000		
Cobalt, total	ug/L	MW-18	04/29/2020		0.5000		
Cobalt, total	ug/L	MW-18	04/06/2023	ND	0.4000		
Cobalt, total	ug/L	MW-18	10/09/2023	ND	0.4000		
Cobalt, total	ug/L	MW-18	04/04/2024	ND	0.4000		
Cobalt, total	ug/L	MW-18	10/16/2024	ND	0.4000		
Copper, total	ug/L	MW-18	04/29/2020	ND	4.0000		
Copper, total	ug/L	MW-18	04/06/2023		23.9000		*
Copper, total	ug/L	MW-18	10/09/2023	ND	4.0000		
Copper, total	ug/L	MW-18	04/04/2024	ND	4.0000		
Copper, total	ug/L	MW-18	10/16/2024	ND	4.0000		
Lead, total	ug/L	MW-18	04/29/2020	ND	4.0000		
Lead, total	ug/L	MW-18	04/06/2023	ND	4.0000		
Lead, total	ug/L	MW-18	10/09/2023	ND	4.0000		
Lead, total	ug/L	MW-18	04/04/2024	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-18	10/16/2024	ND	4.0000	
Nickel, total	ug/L	MW-18	04/29/2020	ND	4.0000	
Nickel, total	ug/L	MW-18	04/06/2023	ND	4.0000	
Nickel, total	ug/L	MW-18	10/09/2023	ND	4.0000	
Nickel, total	ug/L	MW-18	04/04/2024	ND	4.0000	
Nickel, total	ug/L	MW-18	10/16/2024	ND	4.0000	
Selenium, total	ug/L	MW-18	04/29/2020	ND	4.0000	
Selenium, total	ug/L	MW-18	04/06/2023	ND	4.0000	
Selenium, total	ug/L	MW-18	10/09/2023	ND	4.0000	
Selenium, total	ug/L	MW-18	04/04/2024	ND	4.0000	
Selenium, total	ug/L	MW-18	10/16/2024	ND	4.0000	
Silver, total	ug/L	MW-18	04/29/2020	ND	4.0000	
Silver, total	ug/L	MW-18	04/06/2023	ND	4.0000	
Silver, total	ug/L	MW-18	10/09/2023	ND	4.0000	
Silver, total	ug/L	MW-18	04/04/2024	ND	4.0000	
Silver, total	ug/L	MW-18	10/16/2024	ND	4.0000	
Thallium, total	ug/L	MW-18	04/29/2020	ND	2.0000	
Thallium, total	ug/L	MW-18	04/06/2023	ND	2.0000	
Thallium, total	ug/L	MW-18	10/09/2023	ND	2.0000	
Thallium, total	ug/L	MW-18	04/04/2024	ND	2.0000	
Thallium, total	ug/L	MW-18	10/16/2024	ND	2.0000	
Vanadium, total	ug/L	MW-18	04/29/2020	ND	20.0000	
Vanadium, total	ug/L	MW-18	04/06/2023	ND	20.0000	
Vanadium, total	ug/L	MW-18	10/09/2023	ND	20.0000	
Vanadium, total	ug/L	MW-18	04/04/2024	ND	20.0000	
Vanadium, total	ug/L	MW-18	10/16/2024	ND	20.0000	
Zinc, total	ug/L	MW-18	04/29/2020	ND	20.0000	
Zinc, total	ug/L	MW-18	04/06/2023	ND	20.0000	
Zinc, total	ug/L	MW-18	10/09/2023	ND	20.0000	
Zinc, total	ug/L	MW-18	04/04/2024	ND	20.0000	
Zinc, total	ug/L	MW-18	10/16/2024	ND	20.0000	
Antimony, total	ug/L	MW-19	04/29/2020	ND	2.0000	
Antimony, total	ug/L	MW-19	04/06/2023	ND	2.0000	
Antimony, total	ug/L	MW-19	10/09/2023	ND	2.0000	
Antimony, total	ug/L	MW-19	04/04/2024	ND	2.0000	
Antimony, total	ug/L	MW-19	10/16/2024	ND	2.0000	
Arsenic, total	ug/L	MW-19	04/29/2020	ND	4.0000	
Arsenic, total	ug/L	MW-19	04/06/2023		4.1000	
Arsenic, total	ug/L	MW-19	10/09/2023		4.2000	
Arsenic, total	ug/L	MW-19	04/04/2024		4.8000	
Arsenic, total	ug/L	MW-19	10/16/2024		4.5000	
Barium, total	ug/L	MW-19	04/29/2020		184.0000	
Barium, total	ug/L	MW-19	04/06/2023		210.0000	
Barium, total	ug/L	MW-19	10/09/2023		220.0000	
Barium, total	ug/L	MW-19	04/04/2024		211.0000	
Barium, total	ug/L	MW-19	10/16/2024		207.0000	
Beryllium, total	ug/L	MW-19	04/29/2020	ND	4.0000	
Beryllium, total	ug/L	MW-19	04/06/2023	ND	4.0000	
Beryllium, total	ug/L	MW-19	10/09/2023	ND	4.0000	
Beryllium, total	ug/L	MW-19	04/04/2024	ND	4.0000	
Beryllium, total	ug/L	MW-19	10/16/2024	ND	4.0000	
Cadmium, total	ug/L	MW-19	04/29/2020	ND	0.8000	
Cadmium, total	ug/L	MW-19	04/06/2023	ND	0.8000	
Cadmium, total	ug/L	MW-19	10/09/2023	ND	0.8000	
Cadmium, total	ug/L	MW-19	04/04/2024	ND	0.8000	
Cadmium, total	ug/L	MW-19	10/16/2024	ND	0.8000	
Chromium, total	ug/L	MW-19	04/29/2020	ND	8.0000	
Chromium, total	ug/L	MW-19	04/06/2023	ND	8.0000	
Chromium, total	ug/L	MW-19	10/09/2023	ND	8.0000	
Chromium, total	ug/L	MW-19	04/04/2024	ND	8.0000	
Chromium, total	ug/L	MW-19	10/16/2024	ND	8.0000	
Cobalt, total	ug/L	MW-19	04/29/2020	ND	0.4000	
Cobalt, total	ug/L	MW-19	04/06/2023	ND	0.4000	
Cobalt, total	ug/L	MW-19	10/09/2023	ND	0.4000	
Cobalt, total	ug/L	MW-19	04/04/2024	ND	0.4000	
Cobalt, total	ug/L	MW-19	10/16/2024	ND	0.4000	
Copper, total	ug/L	MW-19	04/29/2020	ND	4.0000	
Copper, total	ug/L	MW-19	04/06/2023	ND	4.0000	
Copper, total	ug/L	MW-19	10/09/2023	ND	4.0000	
Copper, total	ug/L	MW-19	04/04/2024	ND	4.0000	
Copper, total	ug/L	MW-19	10/16/2024	ND	4.0000	
Lead, total	ug/L	MW-19	04/29/2020	ND	4.0000	
Lead, total	ug/L	MW-19	04/06/2023	ND	4.0000	
Lead, total	ug/L	MW-19	10/09/2023	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
Lead, total	ug/L	MW-19	04/04/2024	ND	4.0000	
Lead, total	ug/L	MW-19	10/16/2024	ND	4.0000	
Nickel, total	ug/L	MW-19	04/29/2020	ND	4.0000	
Nickel, total	ug/L	MW-19	04/06/2023	ND	4.0000	
Nickel, total	ug/L	MW-19	10/09/2023	ND	4.0000	
Nickel, total	ug/L	MW-19	04/04/2024	ND	4.0000	
Nickel, total	ug/L	MW-19	10/16/2024	ND	4.0000	
Selenium, total	ug/L	MW-19	04/29/2020	ND	4.0000	
Selenium, total	ug/L	MW-19	04/06/2023	ND	4.0000	
Selenium, total	ug/L	MW-19	10/09/2023	ND	4.0000	
Selenium, total	ug/L	MW-19	04/04/2024	ND	4.0000	
Selenium, total	ug/L	MW-19	10/16/2024	ND	4.0000	
Silver, total	ug/L	MW-19	04/29/2020	ND	4.0000	
Silver, total	ug/L	MW-19	04/06/2023	ND	4.0000	
Silver, total	ug/L	MW-19	10/09/2023	ND	4.0000	
Silver, total	ug/L	MW-19	04/04/2024	ND	4.0000	
Silver, total	ug/L	MW-19	10/16/2024	ND	4.0000	
Thallium, total	ug/L	MW-19	04/29/2020	ND	2.0000	
Thallium, total	ug/L	MW-19	04/06/2023	ND	2.0000	
Thallium, total	ug/L	MW-19	10/09/2023	ND	2.0000	
Thallium, total	ug/L	MW-19	04/04/2024	ND	2.0000	
Thallium, total	ug/L	MW-19	10/16/2024	ND	2.0000	
Vanadium, total	ug/L	MW-19	04/29/2020	ND	20.0000	
Vanadium, total	ug/L	MW-19	04/06/2023	ND	20.0000	
Vanadium, total	ug/L	MW-19	10/09/2023	ND	20.0000	
Vanadium, total	ug/L	MW-19	04/04/2024	ND	20.0000	
Vanadium, total	ug/L	MW-19	10/16/2024	ND	20.0000	
Zinc, total	ug/L	MW-19	04/29/2020	ND	20.0000	
Zinc, total	ug/L	MW-19	04/06/2023	ND	20.0000	
Zinc, total	ug/L	MW-19	10/09/2023	ND	20.0000	
Zinc, total	ug/L	MW-19	04/04/2024	ND	20.0000	
Zinc, total	ug/L	MW-19	10/16/2024	ND	20.0000	
Antimony, total	ug/L	MW-20	04/29/2020	ND	2.0000	
Antimony, total	ug/L	MW-20	04/06/2023	ND	2.0000	
Antimony, total	ug/L	MW-20	10/09/2023	ND	2.0000	
Antimony, total	ug/L	MW-20	04/04/2024	ND	2.0000	
Antimony, total	ug/L	MW-20	10/16/2024	ND	2.0000	
Arsenic, total	ug/L	MW-20	04/29/2020	ND	4.0000	
Arsenic, total	ug/L	MW-20	04/06/2023	ND	4.0000	
Arsenic, total	ug/L	MW-20	10/09/2023		6.0000	
Arsenic, total	ug/L	MW-20	04/04/2024		5.7000	
Arsenic, total	ug/L	MW-20	10/16/2024		6.4000	
Barium, total	ug/L	MW-20	04/29/2020		127.0000	
Barium, total	ug/L	MW-20	04/06/2023		123.0000	
Barium, total	ug/L	MW-20	10/09/2023		127.0000	
Barium, total	ug/L	MW-20	04/04/2024		127.0000	
Barium, total	ug/L	MW-20	10/16/2024		103.0000	
Beryllium, total	ug/L	MW-20	04/29/2020	ND	4.0000	
Beryllium, total	ug/L	MW-20	04/06/2023	ND	4.0000	
Beryllium, total	ug/L	MW-20	10/09/2023	ND	4.0000	
Beryllium, total	ug/L	MW-20	04/04/2024	ND	4.0000	
Beryllium, total	ug/L	MW-20	10/16/2024	ND	4.0000	
Cadmium, total	ug/L	MW-20	04/29/2020	ND	0.8000	
Cadmium, total	ug/L	MW-20	04/06/2023	ND	0.8000	
Cadmium, total	ug/L	MW-20	10/09/2023	ND	0.8000	
Cadmium, total	ug/L	MW-20	04/04/2024	ND	0.8000	
Cadmium, total	ug/L	MW-20	10/16/2024	ND	0.8000	
Chromium, total	ug/L	MW-20	04/29/2020	ND	8.0000	
Chromium, total	ug/L	MW-20	04/06/2023	ND	8.0000	
Chromium, total	ug/L	MW-20	10/09/2023	ND	8.0000	
Chromium, total	ug/L	MW-20	04/04/2024	ND	8.0000	
Chromium, total	ug/L	MW-20	10/16/2024	ND	8.0000	
Cobalt, total	ug/L	MW-20	04/29/2020	ND	0.4000	
Cobalt, total	ug/L	MW-20	04/06/2023	ND	0.4000	
Cobalt, total	ug/L	MW-20	10/09/2023	ND	0.4000	
Cobalt, total	ug/L	MW-20	04/04/2024		0.7000	
Cobalt, total	ug/L	MW-20	10/16/2024		0.4000	
Copper, total	ug/L	MW-20	04/29/2020	ND	4.0000	
Copper, total	ug/L	MW-20	04/06/2023	ND	4.0000	
Copper, total	ug/L	MW-20	10/09/2023	ND	4.0000	
Copper, total	ug/L	MW-20	04/04/2024	ND	4.0000	
Copper, total	ug/L	MW-20	10/16/2024	ND	4.0000	
Lead, total	ug/L	MW-20	04/29/2020	ND	4.0000	
Lead, total	ug/L	MW-20	04/06/2023	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
Lead, total	ug/L	MW-20	10/09/2023	ND	4.0000	
Lead, total	ug/L	MW-20	04/04/2024	ND	4.0000	
Lead, total	ug/L	MW-20	10/16/2024	ND	4.0000	
Nickel, total	ug/L	MW-20	04/29/2020	ND	4.0000	
Nickel, total	ug/L	MW-20	04/06/2023	ND	4.0000	
Nickel, total	ug/L	MW-20	10/09/2023	ND	4.0000	
Nickel, total	ug/L	MW-20	04/04/2024	ND	4.0000	
Nickel, total	ug/L	MW-20	10/16/2024	ND	4.0000	
Selenium, total	ug/L	MW-20	04/29/2020	ND	4.0000	
Selenium, total	ug/L	MW-20	04/06/2023	ND	4.0000	
Selenium, total	ug/L	MW-20	10/09/2023	ND	4.0000	
Selenium, total	ug/L	MW-20	04/04/2024	ND	4.0000	
Selenium, total	ug/L	MW-20	10/16/2024	ND	4.0000	
Silver, total	ug/L	MW-20	04/29/2020	ND	4.0000	
Silver, total	ug/L	MW-20	04/06/2023	ND	4.0000	
Silver, total	ug/L	MW-20	10/09/2023	ND	4.0000	
Silver, total	ug/L	MW-20	04/04/2024	ND	4.0000	
Silver, total	ug/L	MW-20	10/16/2024	ND	4.0000	
Thallium, total	ug/L	MW-20	04/29/2020	ND	2.0000	
Thallium, total	ug/L	MW-20	04/06/2023	ND	2.0000	
Thallium, total	ug/L	MW-20	10/09/2023	ND	2.0000	
Thallium, total	ug/L	MW-20	04/04/2024	ND	2.0000	
Thallium, total	ug/L	MW-20	10/16/2024	ND	2.0000	
Vanadium, total	ug/L	MW-20	04/29/2020	ND	20.0000	
Vanadium, total	ug/L	MW-20	04/06/2023	ND	20.0000	
Vanadium, total	ug/L	MW-20	10/09/2023	ND	20.0000	
Vanadium, total	ug/L	MW-20	04/04/2024	ND	20.0000	
Vanadium, total	ug/L	MW-20	10/16/2024	ND	20.0000	
Zinc, total	ug/L	MW-20	04/29/2020	ND	20.0000	
Zinc, total	ug/L	MW-20	04/06/2023	ND	20.0000	
Zinc, total	ug/L	MW-20	10/09/2023	ND	20.0000	
Zinc, total	ug/L	MW-20	04/04/2024	ND	20.0000	
Zinc, total	ug/L	MW-20	10/16/2024	ND	20.0000	
Antimony, total	ug/L	MW-21	04/29/2020	ND	2.0000	
Antimony, total	ug/L	MW-21	04/06/2023	ND	2.0000	
Antimony, total	ug/L	MW-21	10/09/2023	ND	2.0000	
Antimony, total	ug/L	MW-21	04/04/2024	ND	2.0000	
Antimony, total	ug/L	MW-21	10/16/2024	ND	2.0000	
Arsenic, total	ug/L	MW-21	04/29/2020	ND	4.0000	
Arsenic, total	ug/L	MW-21	04/06/2023	ND	4.0000	
Arsenic, total	ug/L	MW-21	10/09/2023	ND	4.0000	
Arsenic, total	ug/L	MW-21	04/04/2024	ND	4.0000	
Arsenic, total	ug/L	MW-21	10/16/2024	ND	4.0000	
Barium, total	ug/L	MW-21	04/29/2020		233.0000	
Barium, total	ug/L	MW-21	04/06/2023		192.0000	
Barium, total	ug/L	MW-21	10/09/2023		177.0000	
Barium, total	ug/L	MW-21	04/04/2024		207.0000	
Barium, total	ug/L	MW-21	10/16/2024		215.0000	
Beryllium, total	ug/L	MW-21	04/29/2020	ND	4.0000	
Beryllium, total	ug/L	MW-21	04/06/2023	ND	4.0000	
Beryllium, total	ug/L	MW-21	10/09/2023	ND	4.0000	
Beryllium, total	ug/L	MW-21	04/04/2024	ND	4.0000	
Beryllium, total	ug/L	MW-21	10/16/2024	ND	4.0000	
Cadmium, total	ug/L	MW-21	04/29/2020	ND	0.8000	
Cadmium, total	ug/L	MW-21	04/06/2023	ND	0.8000	
Cadmium, total	ug/L	MW-21	10/09/2023	ND	0.8000	
Cadmium, total	ug/L	MW-21	04/04/2024	ND	0.8000	
Cadmium, total	ug/L	MW-21	10/16/2024	ND	0.8000	
Chromium, total	ug/L	MW-21	04/29/2020	ND	8.0000	
Chromium, total	ug/L	MW-21	04/06/2023	ND	8.0000	
Chromium, total	ug/L	MW-21	10/09/2023	ND	8.0000	
Chromium, total	ug/L	MW-21	04/04/2024	ND	8.0000	
Chromium, total	ug/L	MW-21	10/16/2024	ND	8.0000	
Cobalt, total	ug/L	MW-21	04/29/2020	ND	0.4000	
Cobalt, total	ug/L	MW-21	04/06/2023	ND	0.4000	
Cobalt, total	ug/L	MW-21	10/09/2023	ND	0.4000	
Cobalt, total	ug/L	MW-21	04/04/2024	ND	0.4000	
Cobalt, total	ug/L	MW-21	10/16/2024	ND	0.4000	
Copper, total	ug/L	MW-21	04/29/2020	ND	4.0000	
Copper, total	ug/L	MW-21	04/06/2023	ND	4.0000	
Copper, total	ug/L	MW-21	10/09/2023	ND	4.0000	
Copper, total	ug/L	MW-21	04/04/2024	ND	4.0000	
Copper, total	ug/L	MW-21	10/16/2024	ND	4.0000	
Lead, total	ug/L	MW-21	04/29/2020	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-21	04/06/2023	ND	4.0000		
Lead, total	ug/L	MW-21	10/09/2023	ND	4.0000		
Lead, total	ug/L	MW-21	04/04/2024	ND	4.0000		
Lead, total	ug/L	MW-21	10/16/2024	ND	4.0000		
Nickel, total	ug/L	MW-21	04/29/2020	ND	4.0000		
Nickel, total	ug/L	MW-21	04/06/2023	ND	4.0000		
Nickel, total	ug/L	MW-21	10/09/2023	ND	4.0000		
Nickel, total	ug/L	MW-21	04/04/2024	ND	4.0000		
Nickel, total	ug/L	MW-21	10/16/2024	ND	4.0000		
Selenium, total	ug/L	MW-21	04/29/2020	ND	4.0000		
Selenium, total	ug/L	MW-21	04/06/2023	ND	4.0000		
Selenium, total	ug/L	MW-21	10/09/2023	ND	4.0000		
Selenium, total	ug/L	MW-21	04/04/2024	ND	4.0000		
Selenium, total	ug/L	MW-21	10/16/2024	ND	4.0000		
Silver, total	ug/L	MW-21	04/29/2020	ND	4.0000		
Silver, total	ug/L	MW-21	04/06/2023	ND	4.0000		
Silver, total	ug/L	MW-21	10/09/2023	ND	4.0000		
Silver, total	ug/L	MW-21	04/04/2024	ND	4.0000		
Silver, total	ug/L	MW-21	10/16/2024	ND	4.0000		
Thallium, total	ug/L	MW-21	04/29/2020	ND	2.0000		
Thallium, total	ug/L	MW-21	04/06/2023	ND	2.0000		
Thallium, total	ug/L	MW-21	10/09/2023	ND	2.0000		
Thallium, total	ug/L	MW-21	04/04/2024	ND	2.0000		
Thallium, total	ug/L	MW-21	10/16/2024	ND	2.0000		
Vanadium, total	ug/L	MW-21	04/29/2020	ND	20.0000		
Vanadium, total	ug/L	MW-21	04/06/2023	ND	20.0000		
Vanadium, total	ug/L	MW-21	10/09/2023	ND	20.0000		
Vanadium, total	ug/L	MW-21	04/04/2024	ND	20.0000		
Vanadium, total	ug/L	MW-21	10/16/2024	ND	20.0000		
Zinc, total	ug/L	MW-21	04/29/2020	ND	20.0000		
Zinc, total	ug/L	MW-21	04/06/2023	ND	20.0000		
Zinc, total	ug/L	MW-21	10/09/2023	ND	20.0000		
Zinc, total	ug/L	MW-21	04/04/2024	ND	20.0000		
Zinc, total	ug/L	MW-21	10/16/2024	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 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Antimony, total	ug/L	GU-1	10/16/2024	ND	2.0000		3.4000
Arsenic, total	ug/L	GU-1	10/16/2024	ND	4.0000		49.3000
Barium, total	ug/L	GU-1	10/16/2024		438.0000		661.2919
Beryllium, total	ug/L	GU-1	10/16/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	GU-1	10/16/2024	ND	0.8000		1.7000
Chromium, total	ug/L	GU-1	10/16/2024	ND	8.0000		8.0000
Cobalt, total	ug/L	GU-1	10/16/2024	ND	0.4000		4.0000
Copper, total	ug/L	GU-1	10/16/2024	ND	4.0000		8.4000
Lead, total	ug/L	GU-1	10/16/2024	ND	4.0000		4.0000
Nickel, total	ug/L	GU-1	10/16/2024		10.3000		17.1000
Selenium, total	ug/L	GU-1	10/16/2024	ND	4.0000		4.0000
Silver, total	ug/L	GU-1	10/16/2024	ND	4.0000		4.0000
Thallium, total	ug/L	GU-1	10/16/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	GU-1	10/16/2024	ND	20.0000		20.0000
Zinc, total	ug/L	GU-1	10/16/2024	ND	20.0000		45.3000
Antimony, total	ug/L	GU-2	10/16/2024	ND	2.0000		3.4000
Arsenic, total	ug/L	GU-2	10/16/2024		6.3000		49.3000
Barium, total	ug/L	GU-2	10/16/2024		250.0000		661.2919
Beryllium, total	ug/L	GU-2	10/16/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	GU-2	10/16/2024	ND	0.8000		1.7000
Chromium, total	ug/L	GU-2	10/16/2024	ND	8.0000		8.0000
Cobalt, total	ug/L	GU-2	10/16/2024		0.9000		4.0000
Copper, total	ug/L	GU-2	10/16/2024	ND	4.0000		8.4000
Lead, total	ug/L	GU-2	10/16/2024	ND	4.0000		4.0000
Nickel, total	ug/L	GU-2	10/16/2024		5.4000		17.1000
Selenium, total	ug/L	GU-2	10/16/2024	ND	4.0000		4.0000
Silver, total	ug/L	GU-2	10/16/2024	ND	4.0000		4.0000
Thallium, total	ug/L	GU-2	10/16/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	GU-2	10/16/2024	ND	20.0000		20.0000
Zinc, total	ug/L	GU-2	10/16/2024	ND	20.0000		45.3000
Antimony, total	ug/L	MW-10	10/16/2024	ND	2.0000		3.4000
Arsenic, total	ug/L	MW-10	10/16/2024	ND	4.0000		49.3000
Barium, total	ug/L	MW-10	10/16/2024		91.2000		661.2919
Beryllium, total	ug/L	MW-10	10/16/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-10	10/16/2024		4.0000	*	1.7000
Chromium, total	ug/L	MW-10	10/16/2024	ND	8.0000		8.0000
Cobalt, total	ug/L	MW-10	10/16/2024		1.0000		4.0000
Copper, total	ug/L	MW-10	10/16/2024		29.5000	***	8.4000
Lead, total	ug/L	MW-10	10/16/2024	ND	4.0000		4.0000
Nickel, total	ug/L	MW-10	10/16/2024		25.9000	*	17.1000
Selenium, total	ug/L	MW-10	10/16/2024	ND	4.0000		4.0000
Silver, total	ug/L	MW-10	10/16/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW-10	10/16/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-10	10/16/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-10	10/16/2024	ND	20.0000		45.3000
Antimony, total	ug/L	MW-14	10/16/2024	ND	2.0000		3.4000
Arsenic, total	ug/L	MW-14	10/16/2024		22.5000		49.3000
Barium, total	ug/L	MW-14	10/16/2024		1370.0000	*	661.2919
Beryllium, total	ug/L	MW-14	10/16/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-14	10/16/2024	ND	0.8000		1.7000
Chromium, total	ug/L	MW-14	10/16/2024	ND	8.0000		8.0000
Cobalt, total	ug/L	MW-14	10/16/2024		1.7000		4.0000
Copper, total	ug/L	MW-14	10/16/2024	ND	4.0000		8.4000
Lead, total	ug/L	MW-14	10/16/2024	ND	4.0000		4.0000
Nickel, total	ug/L	MW-14	10/16/2024		7.8000		17.1000
Selenium, total	ug/L	MW-14	10/16/2024	ND	4.0000		4.0000
Silver, total	ug/L	MW-14	10/16/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW-14	10/16/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-14	10/16/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-14	10/16/2024	ND	20.0000		45.3000
Antimony, total	ug/L	MW-15	10/16/2024	ND	2.0000		3.4000
Arsenic, total	ug/L	MW-15	10/16/2024		4.6000		49.3000
Barium, total	ug/L	MW-15	10/16/2024		388.0000		661.2919
Beryllium, total	ug/L	MW-15	10/16/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-15	10/16/2024	ND	0.8000		1.7000
Chromium, total	ug/L	MW-15	10/16/2024	ND	8.0000		8.0000
Cobalt, total	ug/L	MW-15	10/16/2024		0.6000		4.0000
Copper, total	ug/L	MW-15	10/16/2024	ND	4.0000		8.4000
Lead, total	ug/L	MW-15	10/16/2024	ND	4.0000		4.0000
Nickel, total	ug/L	MW-15	10/16/2024		28.9000	***	17.1000
Selenium, total	ug/L	MW-15	10/16/2024	ND	4.0000		4.0000
Silver, total	ug/L	MW-15	10/16/2024	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
Thallium, total	ug/L	MW-15	10/16/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-15	10/16/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-15	10/16/2024	ND	20.0000		45.3000
Antimony, total	ug/L	MW-16	10/16/2024	ND	2.0000		3.4000
Arsenic, total	ug/L	MW-16	10/16/2024		9.3000		49.3000
Barium, total	ug/L	MW-16	10/16/2024		869.0000	***	661.2919
Beryllium, total	ug/L	MW-16	10/16/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-16	10/16/2024	ND	0.8000		1.7000
Chromium, total	ug/L	MW-16	10/16/2024	ND	8.0000		8.0000
Cobalt, total	ug/L	MW-16	10/16/2024		1.5000		4.0000
Copper, total	ug/L	MW-16	10/16/2024	ND	4.0000		8.4000
Lead, total	ug/L	MW-16	10/16/2024	ND	4.0000		4.0000
Nickel, total	ug/L	MW-16	10/16/2024		31.3000	*	17.1000
Selenium, total	ug/L	MW-16	10/16/2024	ND	4.0000		4.0000
Silver, total	ug/L	MW-16	10/16/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW-16	10/16/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-16	10/16/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-16	10/16/2024	ND	20.0000		45.3000
Antimony, total	ug/L	MW-3AR	10/16/2024	ND	2.0000		3.4000
Arsenic, total	ug/L	MW-3AR	10/16/2024	ND	4.0000		49.3000
Barium, total	ug/L	MW-3AR	10/16/2024		154.0000		661.2919
Beryllium, total	ug/L	MW-3AR	10/16/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-3AR	10/16/2024		1.0000		1.7000
Chromium, total	ug/L	MW-3AR	10/16/2024	ND	8.0000		8.0000
Cobalt, total	ug/L	MW-3AR	10/16/2024		0.8000		4.0000
Copper, total	ug/L	MW-3AR	10/16/2024	ND	4.0000		8.4000
Lead, total	ug/L	MW-3AR	10/16/2024	ND	4.0000		4.0000
Nickel, total	ug/L	MW-3AR	10/16/2024		4.8000		17.1000
Selenium, total	ug/L	MW-3AR	10/16/2024	ND	4.0000		4.0000
Silver, total	ug/L	MW-3AR	10/16/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW-3AR	10/16/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-3AR	10/16/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-3AR	10/16/2024	ND	20.0000		45.3000
Antimony, total	ug/L	MW-7B	10/16/2024	ND	2.0000		3.4000
Arsenic, total	ug/L	MW-7B	10/16/2024	ND	4.0000		49.3000
Barium, total	ug/L	MW-7B	10/16/2024		678.0000	*	661.2919
Beryllium, total	ug/L	MW-7B	10/16/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-7B	10/16/2024	ND	0.8000		1.7000
Chromium, total	ug/L	MW-7B	10/16/2024	ND	8.0000		8.0000
Cobalt, total	ug/L	MW-7B	10/16/2024	ND	0.4000		4.0000
Copper, total	ug/L	MW-7B	10/16/2024	ND	4.0000		8.4000
Lead, total	ug/L	MW-7B	10/16/2024	ND	4.0000		4.0000
Nickel, total	ug/L	MW-7B	10/16/2024		10.5000		17.1000
Selenium, total	ug/L	MW-7B	10/16/2024	ND	4.0000		4.0000
Silver, total	ug/L	MW-7B	10/16/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW-7B	10/16/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-7B	10/16/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-7B	10/16/2024	ND	20.0000		45.3000
Antimony, total	ug/L	MW-8	10/16/2024	ND	2.0000		3.4000
Arsenic, total	ug/L	MW-8	10/16/2024		33.5000		49.3000
Barium, total	ug/L	MW-8	10/16/2024		516.0000		661.2919
Beryllium, total	ug/L	MW-8	10/16/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-8	10/16/2024	ND	0.8000		1.7000
Chromium, total	ug/L	MW-8	10/16/2024	ND	8.0000		8.0000
Cobalt, total	ug/L	MW-8	10/16/2024		0.4000		4.0000
Copper, total	ug/L	MW-8	10/16/2024	ND	4.0000		8.4000
Lead, total	ug/L	MW-8	10/16/2024	ND	4.0000	**	4.0000
Nickel, total	ug/L	MW-8	10/16/2024		12.6000		17.1000
Selenium, total	ug/L	MW-8	10/16/2024	ND	4.0000	**	4.0000
Silver, total	ug/L	MW-8	10/16/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW-8	10/16/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-8	10/16/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-8	10/16/2024	ND	20.0000		45.3000
Antimony, total	ug/L	MW-9	10/16/2024	ND	2.0000		3.4000
Arsenic, total	ug/L	MW-9	10/16/2024		4.1000		49.3000
Barium, total	ug/L	MW-9	10/16/2024		40.8000		661.2919
Beryllium, total	ug/L	MW-9	10/16/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-9	10/16/2024	ND	0.8000		1.7000
Chromium, total	ug/L	MW-9	10/16/2024	ND	8.0000		8.0000
Cobalt, total	ug/L	MW-9	10/16/2024	ND	0.4000		4.0000
Copper, total	ug/L	MW-9	10/16/2024	ND	4.0000		8.4000
Lead, total	ug/L	MW-9	10/16/2024	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-9	10/16/2024	ND	4.0000		17.1000
Selenium, total	ug/L	MW-9	10/16/2024	ND	4.0000		4.0000
Silver, total	ug/L	MW-9	10/16/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW-9	10/16/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-9	10/16/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-9	10/16/2024	ND	20.0000		45.3000

* - 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			Downgradient		
	Detect	N	Proportion	Detect	N	Proportion
Antimony, total	2	96	0.021	5	352	0.014
Arsenic, total	44	90	0.489	190	354	0.537
Barium, total	92	92	1.000	353	353	1.000
Beryllium, total	0	96	0.000	1	352	0.003
Cadmium, total	7	95	0.074	53	352	0.151
Chromium, total	0	96	0.000	18	353	0.051
Cobalt, total	19	91	0.209	150	353	0.425
Copper, total	6	94	0.064	113	356	0.317
Lead, total	0	96	0.000	53	353	0.150
Nickel, total	30	93	0.323	307	356	0.862
Selenium, total	1	96	0.010	28	355	0.079
Silver, total	0	96	0.000	0	352	0.000
Thallium, total	0	96	0.000	3	351	0.009
Vanadium, total	0	96	0.000	33	353	0.093
Zinc, total	14	96	0.146	166	354	0.469

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	2	96	0.021									nonpar
Arsenic, total	44	90	0.489	2.219	0.083					2.326	normal	nonpar
Barium, total	92	92	1.000	4.099	1.480					2.326	lognor	lognor
Beryllium, total	0	96	0.000									nonpar
Cadmium, total	7	95	0.074	0.495	0.495					2.326	normal	nonpar
Chromium, total	0	96	0.000									nonpar
Cobalt, total	19	91	0.209	1.859	0.438					2.326	normal	nonpar
Copper, total	6	94	0.064	1.398	1.202					2.326	normal	nonpar
Lead, total	0	96	0.000									nonpar
Nickel, total	30	93	0.323	2.627	1.236					2.326	lognor	nonpar
Selenium, total	1	96	0.010									nonpar
Silver, total	0	96	0.000									nonpar
Thallium, total	0	96	0.000									nonpar
Vanadium, total	0	96	0.000									nonpar
Zinc, total	14	96	0.146	0.797	0.459					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	2	96					3.4000	nonpar		0.99
Arsenic, total	ug/L	44	90					49.3000	nonpar		0.99
Barium, total	ug/L	92	92	4.8635	0.6849	0.0100	2.3809	661.2919	lognor		
Beryllium, total	ug/L	0	96					4.0000	nonpar	***	0.99
Cadmium, total	ug/L	7	95					1.7000	nonpar		0.99
Chromium, total	ug/L	0	96					8.0000	nonpar	***	0.99
Cobalt, total	ug/L	19	91					4.0000	nonpar		0.99
Copper, total	ug/L	6	94					8.4000	nonpar		0.99
Lead, total	ug/L	0	96					4.0000	nonpar	***	0.99
Nickel, total	ug/L	30	93					17.1000	nonpar		0.99
Selenium, total	ug/L	1	96					4.0000	nonpar	***	0.99
Silver, total	ug/L	0	96					4.0000	nonpar	***	0.99
Thallium, total	ug/L	0	96					2.0000	nonpar	***	0.99
Vanadium, total	ug/L	0	96					20.0000	nonpar	***	0.99
Zinc, total	ug/L	14	96					45.3000	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
Arsenic, total	ug/L	MW-12	04/07/2014	21.7000		04/07/2014-10/16/2024	22	0.5263
Arsenic, total	ug/L	MW-12	10/11/2017	24.3000		04/07/2014-10/16/2024	22	0.5263
Cadmium, total	ug/L	MW-12	10/09/2020	4.0000		04/07/2014-10/16/2024	24	0.4969
Cobalt, total	ug/L	MW-12	04/07/2014	4.0000	< 4.0000	04/07/2014-10/16/2024	24	0.5065
Cobalt, total	ug/L	MW-12	10/12/2022	2.6000		04/07/2014-10/16/2024	24	0.5065
Cobalt, total	ug/L	MW-17	04/07/2014	4.0000	< 4.0000	04/07/2014-10/16/2024	24	0.4969
Copper, total	ug/L	MW-18	04/06/2023	23.9000		04/29/2020-10/16/2024	5	0.7819

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
Cadmium, total	ug/L	MW-10	04/22/2008	ND	1.0000	1.7000
Cadmium, total	ug/L	MW-10	06/24/2008		2.3000 *	1.7000
Cadmium, total	ug/L	MW-10	08/01/2008		1.0000	1.7000
Cadmium, total	ug/L	MW-10	10/31/2008	ND	1.0000	1.7000
Cadmium, total	ug/L	MW-10	01/06/2009	ND	1.0000	1.7000
Cadmium, total	ug/L	MW-10	04/13/2009	ND	1.0000	1.7000
Cadmium, total	ug/L	MW-10	10/29/2009	ND	1.0000	1.7000
Cadmium, total	ug/L	MW-10	04/19/2010	ND	5.0000	1.7000
Cadmium, total	ug/L	MW-10	10/20/2010		2.8000 *	1.7000
Cadmium, total	ug/L	MW-10	04/20/2011	ND	0.8000	1.7000
Cadmium, total	ug/L	MW-10	10/13/2011		2.0000 *	1.7000
Cadmium, total	ug/L	MW-10	04/25/2012		1.1000	1.7000
Cadmium, total	ug/L	MW-10	04/15/2013		0.8000	1.7000
Cadmium, total	ug/L	MW-10	08/06/2013	ND	0.8000	1.7000
Cadmium, total	ug/L	MW-10	04/07/2014		0.8000	1.7000
Cadmium, total	ug/L	MW-10	10/23/2014	ND	0.8000	1.7000
Cadmium, total	ug/L	MW-10	04/02/2015	ND	0.8000	1.7000
Cadmium, total	ug/L	MW-10	10/26/2015	ND	0.8000	1.7000
Cadmium, total	ug/L	MW-10	04/01/2016	ND	0.8000	1.7000
Cadmium, total	ug/L	MW-10	10/19/2016	ND	0.8000	1.7000
Cadmium, total	ug/L	MW-10	04/17/2017	ND	0.8000	1.7000
Cadmium, total	ug/L	MW-10	10/11/2017	ND	0.8000	1.7000
Cadmium, total	ug/L	MW-10	06/01/2018	ND	0.8000	1.7000
Cadmium, total	ug/L	MW-10	10/03/2018		8.6000 *	1.7000
Cadmium, total	ug/L	MW-10	04/08/2019	ND	0.8000	1.7000
Cadmium, total	ug/L	MW-10	10/11/2019	ND	0.8000	1.7000
Cadmium, total	ug/L	MW-10	04/27/2020	ND	0.8000	1.7000
Cadmium, total	ug/L	MW-10	10/09/2020	ND	0.8000	1.7000
Cadmium, total	ug/L	MW-10	04/09/2021		1.7000	1.7000
Cadmium, total	ug/L	MW-10	10/25/2021	ND	0.8000	1.7000
Cadmium, total	ug/L	MW-10	04/11/2022	ND	0.8000	1.7000
Cadmium, total	ug/L	MW-10	10/12/2022	ND	0.8000	1.7000
Cadmium, total	ug/L	MW-10	04/06/2023	ND	0.8000	1.7000
Cadmium, total	ug/L	MW-10	10/09/2023	ND	0.8000	1.7000
Cadmium, total	ug/L	MW-10	04/04/2024	ND	0.8000	1.7000
Cadmium, total	ug/L	MW-10	10/16/2024		4.0000 *	1.7000
Copper, total	ug/L	MW-10	04/22/2008		15.0000 *	8.4000
Copper, total	ug/L	MW-10	06/24/2008		10.0000 *	8.4000
Copper, total	ug/L	MW-10	08/01/2008		10.0000 *	8.4000
Copper, total	ug/L	MW-10	10/31/2008		5.6000	8.4000
Copper, total	ug/L	MW-10	01/06/2009		5.4000	8.4000
Copper, total	ug/L	MW-10	04/13/2009		4.7000	8.4000
Copper, total	ug/L	MW-10	10/29/2009	ND	4.0000	8.4000
Copper, total	ug/L	MW-10	04/19/2010		92.9000 *	8.4000
Copper, total	ug/L	MW-10	10/20/2010		78.9000 *	8.4000
Copper, total	ug/L	MW-10	04/20/2011		10.1000 *	8.4000
Copper, total	ug/L	MW-10	10/13/2011		68.9000 *	8.4000
Copper, total	ug/L	MW-10	04/25/2012		15.1000 *	8.4000
Copper, total	ug/L	MW-10	04/15/2013		7.8000	8.4000
Copper, total	ug/L	MW-10	08/06/2013		16.9000 *	8.4000
Copper, total	ug/L	MW-10	04/07/2014		10.4000 *	8.4000
Copper, total	ug/L	MW-10	10/23/2014		10.9000 *	8.4000
Copper, total	ug/L	MW-10	04/02/2015	ND	4.0000	8.4000
Copper, total	ug/L	MW-10	10/26/2015		20.1000 *	8.4000
Copper, total	ug/L	MW-10	04/01/2016		9.3000 *	8.4000
Copper, total	ug/L	MW-10	10/19/2016		5.3000	8.4000
Copper, total	ug/L	MW-10	04/17/2017	ND	4.0000	8.4000
Copper, total	ug/L	MW-10	10/11/2017	ND	4.0000	8.4000
Copper, total	ug/L	MW-10	06/01/2018	ND	4.0000	8.4000
Copper, total	ug/L	MW-10	10/03/2018		4.6000	8.4000
Copper, total	ug/L	MW-10	04/08/2019		20.3000 *	8.4000
Copper, total	ug/L	MW-10	10/11/2019		8.6000 *	8.4000
Copper, total	ug/L	MW-10	04/27/2020	ND	4.0000	8.4000
Copper, total	ug/L	MW-10	10/09/2020	ND	4.0000	8.4000
Copper, total	ug/L	MW-10	04/09/2021		11.9000 *	8.4000
Copper, total	ug/L	MW-10	10/25/2021	ND	4.0000	8.4000
Copper, total	ug/L	MW-10	04/11/2022	ND	4.0000	8.4000
Copper, total	ug/L	MW-10	10/12/2022	ND	4.0000	8.4000
Copper, total	ug/L	MW-10	04/06/2023	ND	4.0000	8.4000
Copper, total	ug/L	MW-10	10/09/2023		18.2000 *	8.4000
Copper, total	ug/L	MW-10	04/04/2024		13.9000 *	8.4000

* - 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-10	10/16/2024		29.5000 *	8.4000
Nickel, total	ug/L	MW-10	04/22/2008		14.0000	17.1000
Nickel, total	ug/L	MW-10	06/24/2008		12.0000	17.1000
Nickel, total	ug/L	MW-10	08/01/2008		13.0000	17.1000
Nickel, total	ug/L	MW-10	10/31/2008		18.0000 *	17.1000
Nickel, total	ug/L	MW-10	01/06/2009		19.2000 *	17.1000
Nickel, total	ug/L	MW-10	04/13/2009		11.6000	17.1000
Nickel, total	ug/L	MW-10	10/29/2009		11.7000	17.1000
Nickel, total	ug/L	MW-10	04/19/2010		48.3000 *	17.1000
Nickel, total	ug/L	MW-10	10/20/2010		50.1000 *	17.1000
Nickel, total	ug/L	MW-10	04/20/2011		39.0000 *	17.1000
Nickel, total	ug/L	MW-10	10/13/2011		27.3000 *	17.1000
Nickel, total	ug/L	MW-10	04/25/2012		45.7000 *	17.1000
Nickel, total	ug/L	MW-10	04/15/2013		26.8000 *	17.1000
Nickel, total	ug/L	MW-10	08/06/2013		19.4000 *	17.1000
Nickel, total	ug/L	MW-10	04/07/2014		29.6000 *	17.1000
Nickel, total	ug/L	MW-10	10/23/2014		10.5000	17.1000
Nickel, total	ug/L	MW-10	04/02/2015		21.4000 *	17.1000
Nickel, total	ug/L	MW-10	10/26/2015	ND	4.0000	17.1000
Nickel, total	ug/L	MW-10	04/01/2016	ND	4.0000	17.1000
Nickel, total	ug/L	MW-10	10/19/2016		5.1000	17.1000
Nickel, total	ug/L	MW-10	04/17/2017		16.8000	17.1000
Nickel, total	ug/L	MW-10	10/11/2017	ND	4.0000	17.1000
Nickel, total	ug/L	MW-10	06/01/2018		12.7000	17.1000
Nickel, total	ug/L	MW-10	10/03/2018		4.8000	17.1000
Nickel, total	ug/L	MW-10	04/08/2019	ND	4.0000	17.1000
Nickel, total	ug/L	MW-10	10/11/2019		14.1000	17.1000
Nickel, total	ug/L	MW-10	04/27/2020		19.0000 *	17.1000
Nickel, total	ug/L	MW-10	10/09/2020		16.9000	17.1000
Nickel, total	ug/L	MW-10	04/09/2021		5.0000	17.1000
Nickel, total	ug/L	MW-10	10/25/2021	ND	4.0000	17.1000
Nickel, total	ug/L	MW-10	04/11/2022		11.1000	17.1000
Nickel, total	ug/L	MW-10	10/12/2022	ND	4.0000	17.1000
Nickel, total	ug/L	MW-10	04/06/2023	ND	4.0000	17.1000
Nickel, total	ug/L	MW-10	10/09/2023		5.4000	17.1000
Nickel, total	ug/L	MW-10	04/04/2024	ND	4.0000	17.1000
Nickel, total	ug/L	MW-10	10/16/2024		25.9000 *	17.1000
Barium, total	ug/L	MW-14	10/31/2008		2530.0000 *	661.2919
Barium, total	ug/L	MW-14	01/06/2009		2550.0000 *	661.2919
Barium, total	ug/L	MW-14	02/10/2009		2660.0000 *	661.2919
Barium, total	ug/L	MW-14	04/14/2009		2320.0000 *	661.2919
Barium, total	ug/L	MW-14	06/09/2009		2800.0000 *	661.2919
Barium, total	ug/L	MW-14	10/28/2009		2280.0000 *	661.2919
Barium, total	ug/L	MW-14	04/19/2010		2190.0000 *	661.2919
Barium, total	ug/L	MW-14	10/20/2010		3020.0000 *	661.2919
Barium, total	ug/L	MW-14	04/20/2011		2500.0000 *	661.2919
Barium, total	ug/L	MW-14	10/13/2011		2330.0000 *	661.2919
Barium, total	ug/L	MW-14	04/25/2012		2200.0000 *	661.2919
Barium, total	ug/L	MW-14	10/22/2012		2540.0000 *	661.2919
Barium, total	ug/L	MW-14	04/15/2013		1200.0000 *	661.2919
Barium, total	ug/L	MW-14	08/06/2013		2490.0000 *	661.2919
Barium, total	ug/L	MW-14	04/07/2014		2000.0000 *	661.2919
Barium, total	ug/L	MW-14	10/23/2014		1060.0000 *	661.2919
Barium, total	ug/L	MW-14	04/02/2015		508.0000	661.2919
Barium, total	ug/L	MW-14	10/26/2015		923.0000 *	661.2919
Barium, total	ug/L	MW-14	04/01/2016		1690.0000 *	661.2919
Barium, total	ug/L	MW-14	10/19/2016		1190.0000 *	661.2919
Barium, total	ug/L	MW-14	04/17/2017		1790.0000 *	661.2919
Barium, total	ug/L	MW-14	10/11/2017		1320.0000 *	661.2919
Barium, total	ug/L	MW-14	06/01/2018		1620.0000 *	661.2919
Barium, total	ug/L	MW-14	10/03/2018		1100.0000 *	661.2919
Barium, total	ug/L	MW-14	04/08/2019		1070.0000 *	661.2919
Barium, total	ug/L	MW-14	10/11/2019		1000.0000 *	661.2919
Barium, total	ug/L	MW-14	04/27/2020		1170.0000 *	661.2919
Barium, total	ug/L	MW-14	10/09/2020		1630.0000 *	661.2919
Barium, total	ug/L	MW-14	04/09/2021		592.0000	661.2919
Barium, total	ug/L	MW-14	10/25/2021		612.0000	661.2919
Barium, total	ug/L	MW-14	04/11/2022		1080.0000 *	661.2919
Barium, total	ug/L	MW-14	10/12/2022		1660.0000 *	661.2919
Barium, total	ug/L	MW-14	04/06/2023		411.0000	661.2919
Barium, total	ug/L	MW-14	10/09/2023		1430.0000 *	661.2919

* - 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-14	04/04/2024	53.7000	661.2919
Barium, total	ug/L	MW-14	10/16/2024	1370.0000 *	661.2919
Nickel, total	ug/L	MW-15	10/31/2008	62.8000 *	17.1000
Nickel, total	ug/L	MW-15	01/06/2009	68.0000 *	17.1000
Nickel, total	ug/L	MW-15	02/10/2009	57.5000 *	17.1000
Nickel, total	ug/L	MW-15	04/13/2009	73.0000 *	17.1000
Nickel, total	ug/L	MW-15	06/09/2009	77.8000 *	17.1000
Nickel, total	ug/L	MW-15	10/28/2009	65.7000 *	17.1000
Nickel, total	ug/L	MW-15	04/19/2010	76.8000 *	17.1000
Nickel, total	ug/L	MW-15	10/20/2010	87.4000 *	17.1000
Nickel, total	ug/L	MW-15	04/20/2011	60.4000 *	17.1000
Nickel, total	ug/L	MW-15	10/13/2011	73.1000 *	17.1000
Nickel, total	ug/L	MW-15	04/25/2012	85.6000 *	17.1000
Nickel, total	ug/L	MW-15	10/22/2012	39.3000 *	17.1000
Nickel, total	ug/L	MW-15	04/15/2013	53.7000 *	17.1000
Nickel, total	ug/L	MW-15	08/06/2013	52.0000 *	17.1000
Nickel, total	ug/L	MW-15	04/07/2014	30.3000 *	17.1000
Nickel, total	ug/L	MW-15	10/23/2014	51.9000 *	17.1000
Nickel, total	ug/L	MW-15	04/02/2015	48.0000 *	17.1000
Nickel, total	ug/L	MW-15	10/26/2015	51.7000 *	17.1000
Nickel, total	ug/L	MW-15	04/01/2016	18.8000 *	17.1000
Nickel, total	ug/L	MW-15	10/19/2016	24.7000 *	17.1000
Nickel, total	ug/L	MW-15	04/17/2017	20.2000 *	17.1000
Nickel, total	ug/L	MW-15	10/11/2017	16.5000 *	17.1000
Nickel, total	ug/L	MW-15	06/01/2018	32.2000 *	17.1000
Nickel, total	ug/L	MW-15	10/03/2018	34.8000 *	17.1000
Nickel, total	ug/L	MW-15	04/08/2019	14.3000 *	17.1000
Nickel, total	ug/L	MW-15	10/11/2019	18.8000 *	17.1000
Nickel, total	ug/L	MW-15	04/27/2020	15.1000 *	17.1000
Nickel, total	ug/L	MW-15	10/09/2020	29.7000 *	17.1000
Nickel, total	ug/L	MW-15	04/09/2021	17.7000 *	17.1000
Nickel, total	ug/L	MW-15	10/25/2021	16.2000 *	17.1000
Nickel, total	ug/L	MW-15	04/11/2022	13.7000 *	17.1000
Nickel, total	ug/L	MW-15	10/12/2022	34.2000 *	17.1000
Nickel, total	ug/L	MW-15	04/06/2023	14.4000 *	17.1000
Nickel, total	ug/L	MW-15	10/09/2023	47.6000 *	17.1000
Nickel, total	ug/L	MW-15	04/04/2024	17.6000 *	17.1000
Nickel, total	ug/L	MW-15	10/16/2024	28.9000 *	17.1000
Barium, total	ug/L	MW-16	10/31/2008	596.0000	661.2919
Barium, total	ug/L	MW-16	02/10/2009	616.0000	661.2919
Barium, total	ug/L	MW-16	04/13/2009	599.0000	661.2919
Barium, total	ug/L	MW-16	06/09/2009	838.0000 *	661.2919
Barium, total	ug/L	MW-16	10/28/2009	598.0000	661.2919
Barium, total	ug/L	MW-16	04/19/2010	742.0000 *	661.2919
Barium, total	ug/L	MW-16	10/20/2010	727.0000 *	661.2919
Barium, total	ug/L	MW-16	04/20/2011	567.0000	661.2919
Barium, total	ug/L	MW-16	10/13/2011	493.0000	661.2919
Barium, total	ug/L	MW-16	04/25/2012	504.0000	661.2919
Barium, total	ug/L	MW-16	10/22/2012	683.0000 *	661.2919
Barium, total	ug/L	MW-16	04/15/2013	485.0000	661.2919
Barium, total	ug/L	MW-16	08/06/2013	481.0000	661.2919
Barium, total	ug/L	MW-16	04/07/2014	519.0000	661.2919
Barium, total	ug/L	MW-16	10/23/2014	542.0000	661.2919
Barium, total	ug/L	MW-16	04/02/2015	534.0000	661.2919
Barium, total	ug/L	MW-16	10/26/2015	572.0000	661.2919
Barium, total	ug/L	MW-16	04/01/2016	602.0000	661.2919
Barium, total	ug/L	MW-16	10/19/2016	525.0000	661.2919
Barium, total	ug/L	MW-16	04/17/2017	414.0000	661.2919
Barium, total	ug/L	MW-16	10/11/2017	286.0000	661.2919
Barium, total	ug/L	MW-16	06/01/2018	528.0000	661.2919
Barium, total	ug/L	MW-16	10/03/2018	274.0000	661.2919
Barium, total	ug/L	MW-16	04/08/2019	241.0000	661.2919
Barium, total	ug/L	MW-16	10/11/2019	236.0000	661.2919
Barium, total	ug/L	MW-16	04/27/2020	420.0000	661.2919
Barium, total	ug/L	MW-16	10/09/2020	264.0000	661.2919
Barium, total	ug/L	MW-16	04/09/2021	526.0000	661.2919
Barium, total	ug/L	MW-16	10/25/2021	450.0000	661.2919
Barium, total	ug/L	MW-16	04/11/2022	557.0000	661.2919
Barium, total	ug/L	MW-16	10/12/2022	350.0000	661.2919
Barium, total	ug/L	MW-16	04/06/2023	548.0000	661.2919
Barium, total	ug/L	MW-16	10/09/2023	321.0000	661.2919

* - 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-16	04/04/2024	974.0000 *	661.2919
Barium, total	ug/L	MW-16	10/16/2024	869.0000 *	661.2919
Nickel, total	ug/L	MW-16	10/31/2008	23.2000 *	17.1000
Nickel, total	ug/L	MW-16	02/10/2009	24.8000 *	17.1000
Nickel, total	ug/L	MW-16	04/13/2009	28.1000 *	17.1000
Nickel, total	ug/L	MW-16	06/09/2009	35.5000 *	17.1000
Nickel, total	ug/L	MW-16	10/28/2009	23.1000 *	17.1000
Nickel, total	ug/L	MW-16	04/19/2010	50.0000 *	17.1000
Nickel, total	ug/L	MW-16	10/20/2010	46.2000 *	17.1000
Nickel, total	ug/L	MW-16	04/20/2011	16.8000	17.1000
Nickel, total	ug/L	MW-16	10/13/2011	22.5000 *	17.1000
Nickel, total	ug/L	MW-16	04/25/2012	23.5000 *	17.1000
Nickel, total	ug/L	MW-16	10/22/2012	22.5000 *	17.1000
Nickel, total	ug/L	MW-16	04/15/2013	17.7000 *	17.1000
Nickel, total	ug/L	MW-16	08/06/2013	15.9000	17.1000
Nickel, total	ug/L	MW-16	04/07/2014	21.4000 *	17.1000
Nickel, total	ug/L	MW-16	10/23/2014	15.4000	17.1000
Nickel, total	ug/L	MW-16	04/02/2015	16.1000	17.1000
Nickel, total	ug/L	MW-16	10/26/2015	15.6000	17.1000
Nickel, total	ug/L	MW-16	04/01/2016	16.0000	17.1000
Nickel, total	ug/L	MW-16	10/19/2016	11.2000	17.1000
Nickel, total	ug/L	MW-16	04/17/2017	12.8000	17.1000
Nickel, total	ug/L	MW-16	10/11/2017	9.0000	17.1000
Nickel, total	ug/L	MW-16	06/01/2018	11.3000	17.1000
Nickel, total	ug/L	MW-16	10/03/2018	8.0000	17.1000
Nickel, total	ug/L	MW-16	04/08/2019	5.6000	17.1000
Nickel, total	ug/L	MW-16	10/11/2019	7.2000	17.1000
Nickel, total	ug/L	MW-16	04/27/2020	12.1000	17.1000
Nickel, total	ug/L	MW-16	10/09/2020	8.7000	17.1000
Nickel, total	ug/L	MW-16	04/09/2021	14.1000	17.1000
Nickel, total	ug/L	MW-16	06/23/2021	12.2000	17.1000
Nickel, total	ug/L	MW-16	10/25/2021	14.4000	17.1000
Nickel, total	ug/L	MW-16	01/13/2022	14.8000	17.1000
Nickel, total	ug/L	MW-16	04/11/2022	12.1000	17.1000
Nickel, total	ug/L	MW-16	10/12/2022	11.2000	17.1000
Nickel, total	ug/L	MW-16	04/06/2023	14.4000	17.1000
Nickel, total	ug/L	MW-16	10/09/2023	11.5000	17.1000
Nickel, total	ug/L	MW-16	04/04/2024	14.5000	17.1000
Nickel, total	ug/L	MW-16	10/16/2024	31.3000 *	17.1000
Barium, total	ug/L	MW-7B	04/22/2008	932.0000 *	661.2919
Barium, total	ug/L	MW-7B	06/24/2008	878.0000 *	661.2919
Barium, total	ug/L	MW-7B	08/01/2008	568.0000	661.2919
Barium, total	ug/L	MW-7B	10/31/2008	699.0000 *	661.2919
Barium, total	ug/L	MW-7B	01/06/2009	803.0000 *	661.2919
Barium, total	ug/L	MW-7B	04/13/2009	989.0000 *	661.2919
Barium, total	ug/L	MW-7B	06/09/2009	928.0000 *	661.2919
Barium, total	ug/L	MW-7B	10/28/2009	968.0000 *	661.2919
Barium, total	ug/L	MW-7B	04/19/2010	998.0000 *	661.2919
Barium, total	ug/L	MW-7B	10/20/2010	1040.0000 *	661.2919
Barium, total	ug/L	MW-7B	04/20/2011	742.0000 *	661.2919
Barium, total	ug/L	MW-7B	10/13/2011	905.0000 *	661.2919
Barium, total	ug/L	MW-7B	04/25/2012	943.0000 *	661.2919
Barium, total	ug/L	MW-7B	10/22/2012	675.0000 *	661.2919
Barium, total	ug/L	MW-7B	04/15/2013	920.0000 *	661.2919
Barium, total	ug/L	MW-7B	08/06/2013	838.0000 *	661.2919
Barium, total	ug/L	MW-7B	04/07/2014	941.0000 *	661.2919
Barium, total	ug/L	MW-7B	10/23/2014	736.0000 *	661.2919
Barium, total	ug/L	MW-7B	04/02/2015	689.0000 *	661.2919
Barium, total	ug/L	MW-7B	10/26/2015	760.0000 *	661.2919
Barium, total	ug/L	MW-7B	04/01/2016	573.0000	661.2919
Barium, total	ug/L	MW-7B	10/19/2016	652.0000	661.2919
Barium, total	ug/L	MW-7B	04/17/2017	616.0000	661.2919
Barium, total	ug/L	MW-7B	10/11/2017	614.0000	661.2919
Barium, total	ug/L	MW-7B	06/01/2018	668.0000 *	661.2919
Barium, total	ug/L	MW-7B	10/03/2018	665.0000 *	661.2919
Barium, total	ug/L	MW-7B	04/08/2019	501.0000	661.2919
Barium, total	ug/L	MW-7B	10/11/2019	596.0000	661.2919
Barium, total	ug/L	MW-7B	04/27/2020	542.0000	661.2919
Barium, total	ug/L	MW-7B	10/09/2020	776.0000 *	661.2919
Barium, total	ug/L	MW-7B	04/09/2021	636.0000	661.2919
Barium, total	ug/L	MW-7B	10/25/2021	647.0000	661.2919

* - 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-7B	04/11/2022		602.0000	661.2919
Barium, total	ug/L	MW-7B	10/12/2022		744.0000 *	661.2919
Barium, total	ug/L	MW-7B	10/09/2023		684.0000 *	661.2919
Barium, total	ug/L	MW-7B	04/04/2024		643.0000	661.2919
Barium, total	ug/L	MW-7B	10/16/2024		678.0000 *	661.2919
Lead, total	ug/L	MW-8	04/22/2008	ND	5.0000	4.0000
Lead, total	ug/L	MW-8	06/24/2008	ND	5.0000	4.0000
Lead, total	ug/L	MW-8	08/01/2008	ND	5.0000	4.0000
Lead, total	ug/L	MW-8	10/31/2008	ND	4.0000	4.0000
Lead, total	ug/L	MW-8	01/06/2009	ND	4.0000	4.0000
Lead, total	ug/L	MW-8	04/13/2009	ND	4.0000	4.0000
Lead, total	ug/L	MW-8	06/09/2009	ND	4.0000	4.0000
Lead, total	ug/L	MW-8	10/28/2009	ND	4.0000	4.0000
Lead, total	ug/L	MW-8	04/19/2010	ND	20.0000	4.0000
Lead, total	ug/L	MW-8	10/20/2010		45.2000 *	4.0000
Lead, total	ug/L	MW-8	04/20/2011	ND	4.0000	4.0000
Lead, total	ug/L	MW-8	10/13/2011		11.1000 *	4.0000
Lead, total	ug/L	MW-8	04/25/2012		9.4000 *	4.0000
Lead, total	ug/L	MW-8	10/22/2012		5.5000 *	4.0000
Lead, total	ug/L	MW-8	04/15/2013		7.1000 *	4.0000
Lead, total	ug/L	MW-8	08/06/2013		6.9000 *	4.0000
Lead, total	ug/L	MW-8	04/07/2014		10.7000 *	4.0000
Lead, total	ug/L	MW-8	10/23/2014	ND	4.0000	4.0000
Lead, total	ug/L	MW-8	04/02/2015	ND	4.0000	4.0000
Lead, total	ug/L	MW-8	10/26/2015	ND	4.0000	4.0000
Lead, total	ug/L	MW-8	04/01/2016	ND	4.0000	4.0000
Lead, total	ug/L	MW-8	10/19/2016	ND	4.0000	4.0000
Lead, total	ug/L	MW-8	04/17/2017	ND	4.0000	4.0000
Lead, total	ug/L	MW-8	10/11/2017	ND	4.0000	4.0000
Lead, total	ug/L	MW-8	06/01/2018	ND	4.0000	4.0000
Lead, total	ug/L	MW-8	10/03/2018	ND	4.0000	4.0000
Lead, total	ug/L	MW-8	04/08/2019		6.4000 *	4.0000
Lead, total	ug/L	MW-8	10/11/2019	ND	4.0000	4.0000
Lead, total	ug/L	MW-8	04/27/2020	ND	4.0000	4.0000
Lead, total	ug/L	MW-8	10/09/2020	ND	4.0000	4.0000
Lead, total	ug/L	MW-8	04/09/2021	ND	4.0000	4.0000
Lead, total	ug/L	MW-8	10/25/2021	ND	4.0000	4.0000
Lead, total	ug/L	MW-8	04/11/2022		6.9000 *	4.0000
Lead, total	ug/L	MW-8	10/12/2022	ND	4.0000	4.0000
Lead, total	ug/L	MW-8	04/06/2023	ND	4.0000	4.0000
Lead, total	ug/L	MW-8	10/09/2023	ND	4.0000	4.0000
Lead, total	ug/L	MW-8	04/04/2024		5.8000 *	4.0000
Lead, total	ug/L	MW-8	10/16/2024	ND	4.0000	4.0000
Selenium, total	ug/L	MW-8	04/22/2008	ND	5.0000	4.0000
Selenium, total	ug/L	MW-8	06/24/2008	ND	5.0000	4.0000
Selenium, total	ug/L	MW-8	08/01/2008	ND	5.0000	4.0000
Selenium, total	ug/L	MW-8	10/31/2008	ND	4.0000	4.0000
Selenium, total	ug/L	MW-8	01/06/2009	ND	4.0000	4.0000
Selenium, total	ug/L	MW-8	04/13/2009	ND	4.0000	4.0000
Selenium, total	ug/L	MW-8	06/09/2009	ND	4.0000	4.0000
Selenium, total	ug/L	MW-8	10/28/2009	ND	4.0000	4.0000
Selenium, total	ug/L	MW-8	04/19/2010	ND	20.0000	4.0000
Selenium, total	ug/L	MW-8	10/20/2010	ND	4.0000	4.0000
Selenium, total	ug/L	MW-8	04/20/2011	ND	4.0000	4.0000
Selenium, total	ug/L	MW-8	10/13/2011		4.8000 *	4.0000
Selenium, total	ug/L	MW-8	04/25/2012	ND	4.0000	4.0000
Selenium, total	ug/L	MW-8	10/22/2012	ND	4.0000	4.0000
Selenium, total	ug/L	MW-8	04/15/2013	ND	4.0000	4.0000
Selenium, total	ug/L	MW-8	08/06/2013	ND	4.0000	4.0000
Selenium, total	ug/L	MW-8	04/07/2014	ND	4.0000	4.0000
Selenium, total	ug/L	MW-8	10/23/2014	ND	4.0000	4.0000
Selenium, total	ug/L	MW-8	04/02/2015	ND	4.0000	4.0000
Selenium, total	ug/L	MW-8	10/26/2015	ND	4.0000	4.0000
Selenium, total	ug/L	MW-8	04/01/2016	ND	4.0000	4.0000
Selenium, total	ug/L	MW-8	10/19/2016	ND	4.0000	4.0000
Selenium, total	ug/L	MW-8	04/17/2017	ND	4.0000	4.0000
Selenium, total	ug/L	MW-8	10/11/2017	ND	4.0000	4.0000
Selenium, total	ug/L	MW-8	06/01/2018	ND	4.0000	4.0000
Selenium, total	ug/L	MW-8	10/03/2018	ND	4.0000	4.0000
Selenium, total	ug/L	MW-8	04/08/2019	ND	4.0000	4.0000
Selenium, total	ug/L	MW-8	10/11/2019	ND	4.0000	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
Selenium, total	ug/L	MW-8	04/27/2020	ND	4.0000	4.0000
Selenium, total	ug/L	MW-8	10/09/2020	ND	4.0000	4.0000
Selenium, total	ug/L	MW-8	04/09/2021	ND	4.0000	4.0000
Selenium, total	ug/L	MW-8	10/25/2021	ND	4.0000	4.0000
Selenium, total	ug/L	MW-8	04/11/2022		7.8000 *	4.0000
Selenium, total	ug/L	MW-8	07/07/2022	ND	4.0000	4.0000
Selenium, total	ug/L	MW-8	10/12/2022	ND	4.0000	4.0000
Selenium, total	ug/L	MW-8	04/06/2023	ND	4.0000	4.0000
Selenium, total	ug/L	MW-8	10/09/2023	ND	4.0000	4.0000
Selenium, total	ug/L	MW-8	04/04/2024		4.2000 *	4.0000
Selenium, total	ug/L	MW-8	10/16/2024	ND	4.0000	4.0000

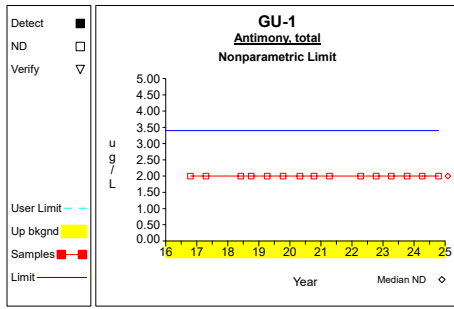
* - Significantly increased over background.

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

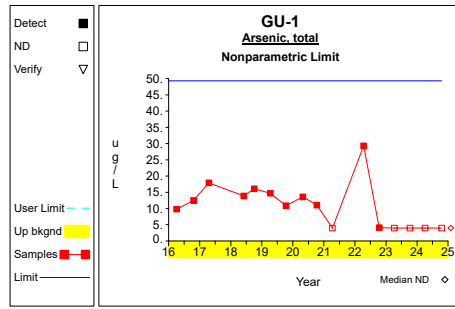
*** - Manual exclusion.

ND = Not Detected, Result = detection limit.

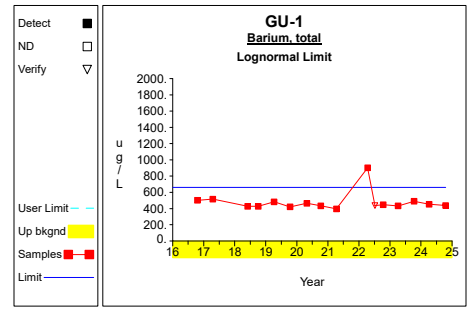
Up vs. Down Prediction Limits



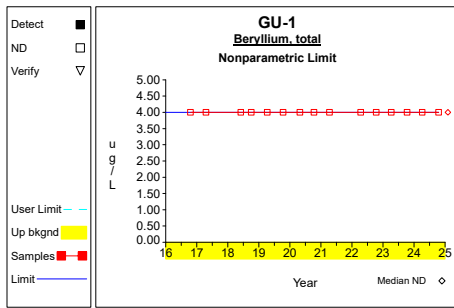
Graph 1



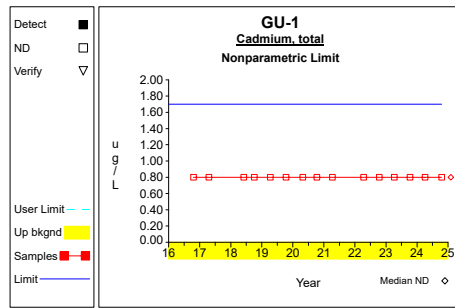
Graph 2



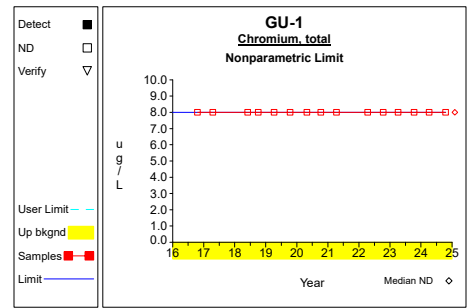
Graph 3



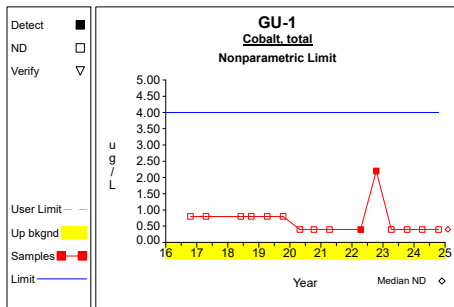
Graph 4



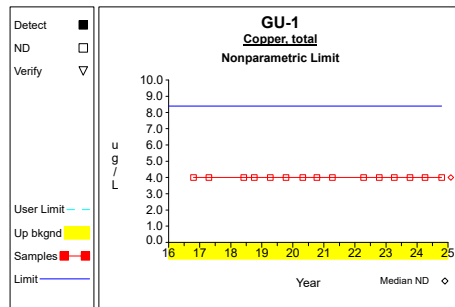
Graph 5



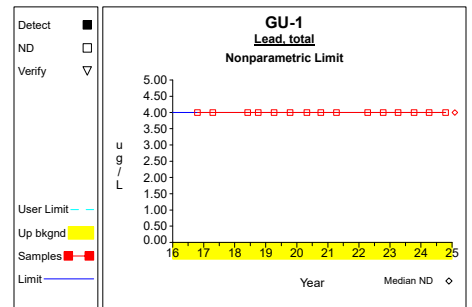
Graph 6



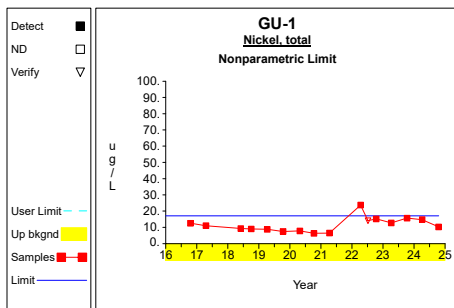
Graph 7



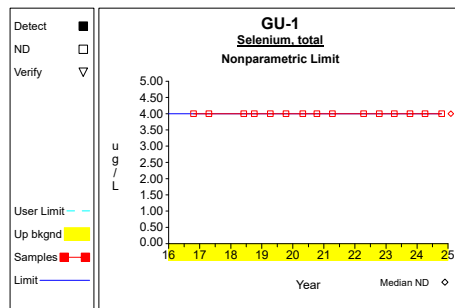
Graph 8



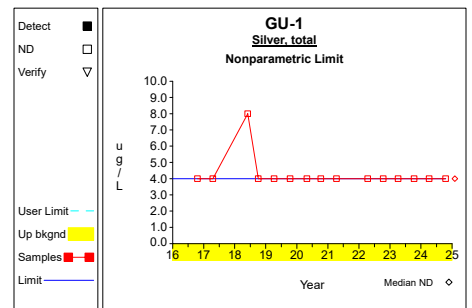
Graph 9



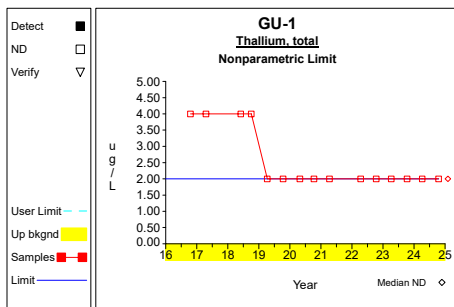
Graph 10



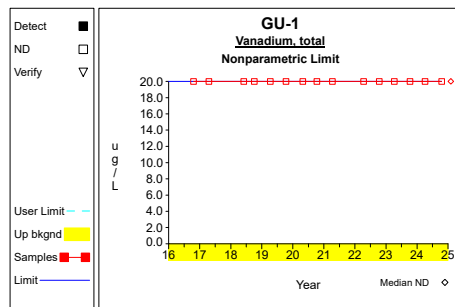
Graph 11



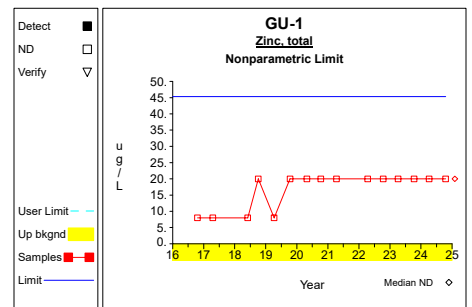
Graph 12



Graph 13

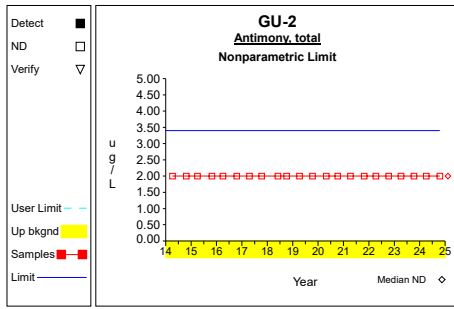


Graph 14

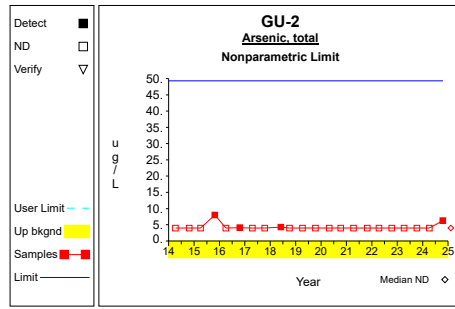


Graph 15

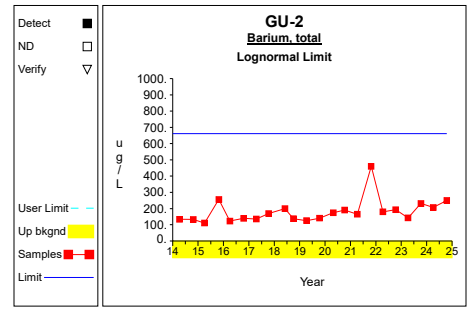
Up vs. Down Prediction Limits



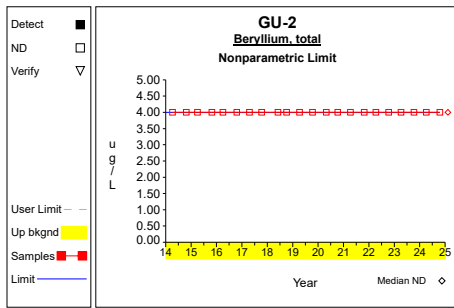
Graph 16



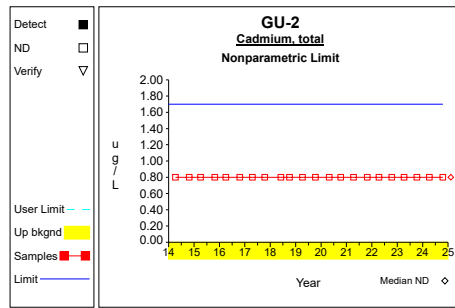
Graph 17



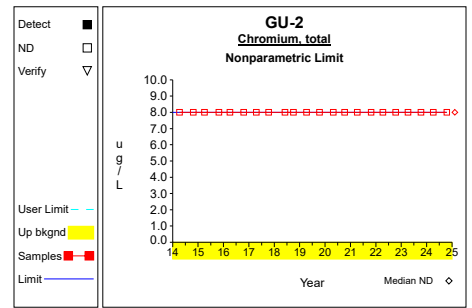
Graph 18



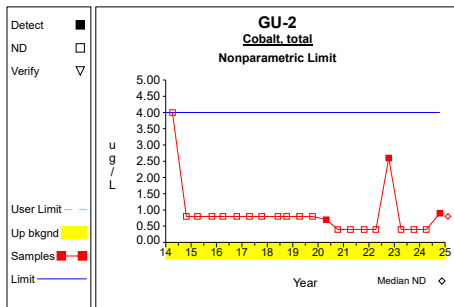
Graph 19



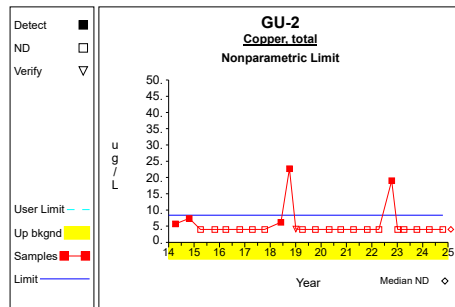
Graph 20



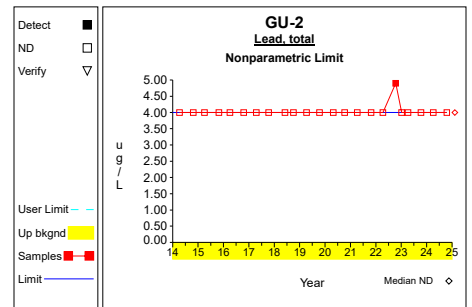
Graph 21



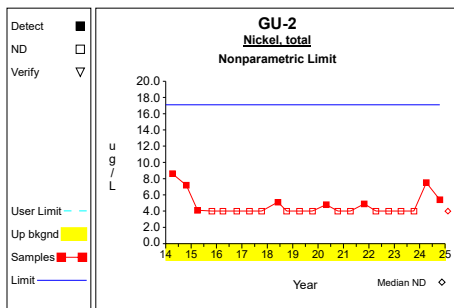
Graph 22



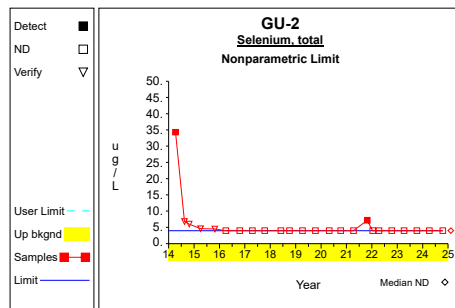
Graph 23



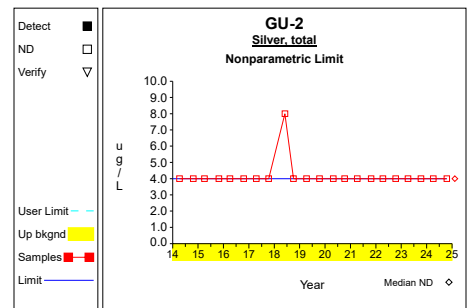
Graph 24



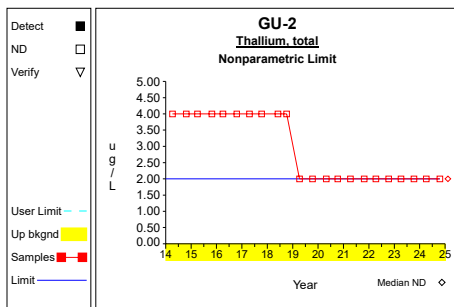
Graph 25



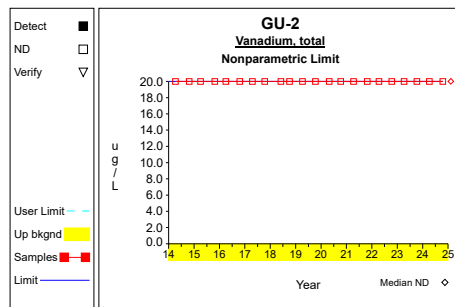
Graph 26



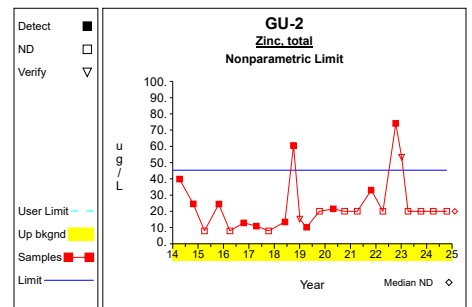
Graph 27



Graph 28

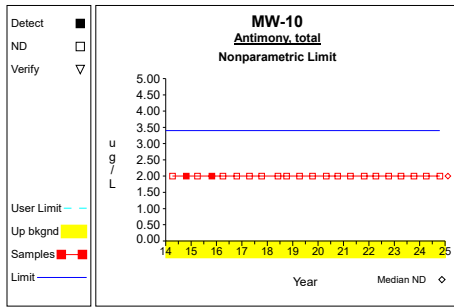


Graph 29

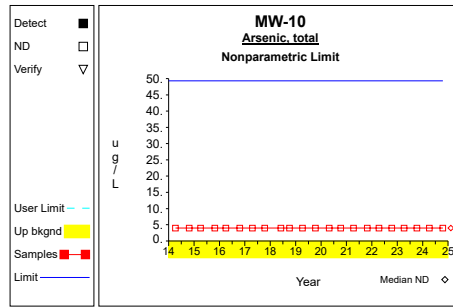


Graph 30

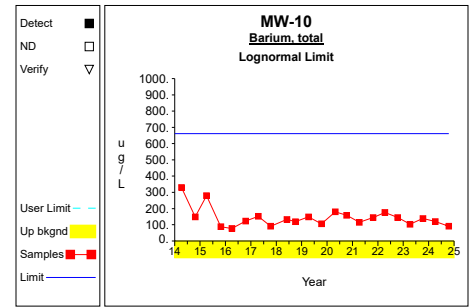
Up vs. Down Prediction Limits



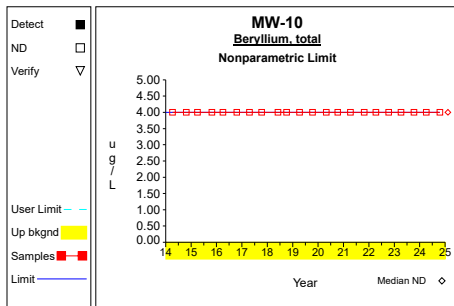
Graph 31



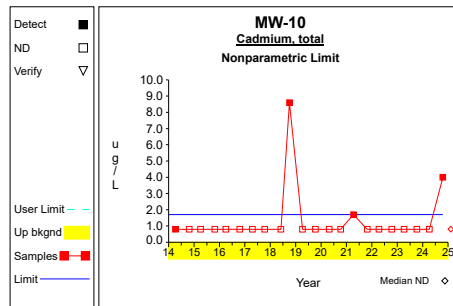
Graph 32



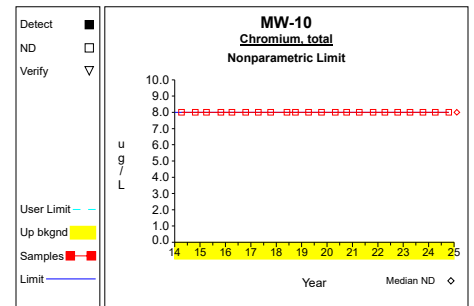
Graph 33



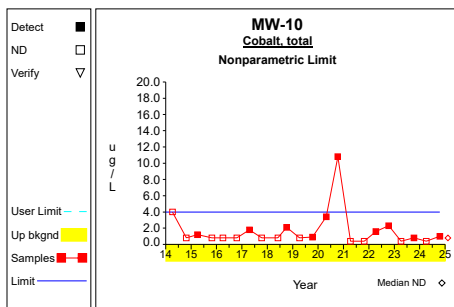
Graph 34



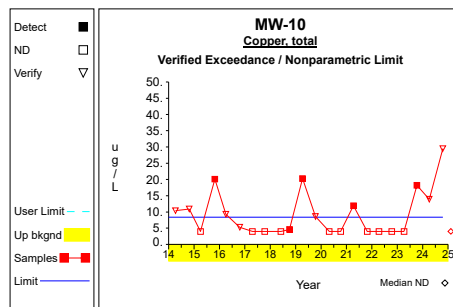
Graph 35



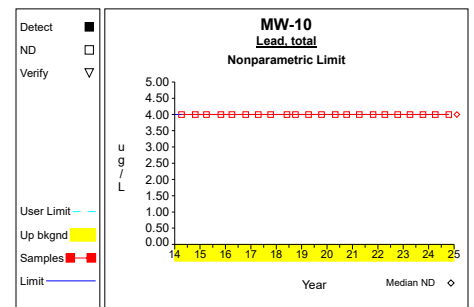
Graph 36



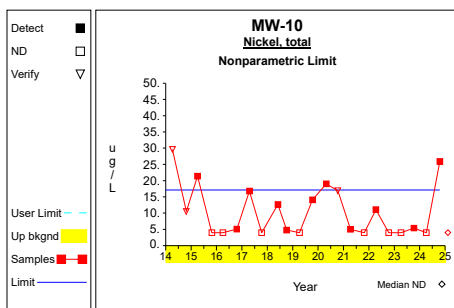
Graph 37



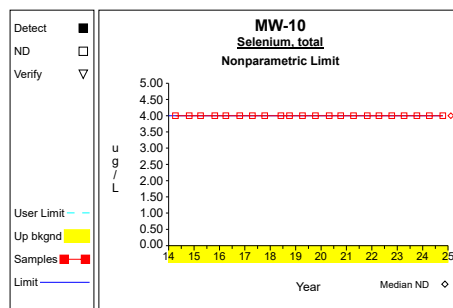
Graph 38



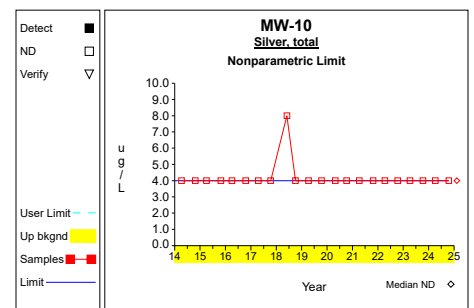
Graph 39



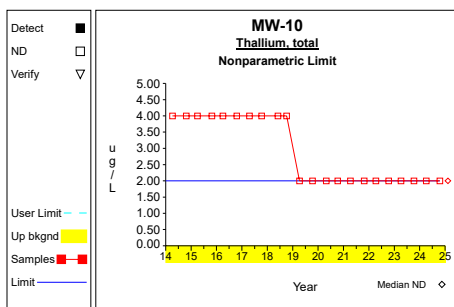
Graph 40



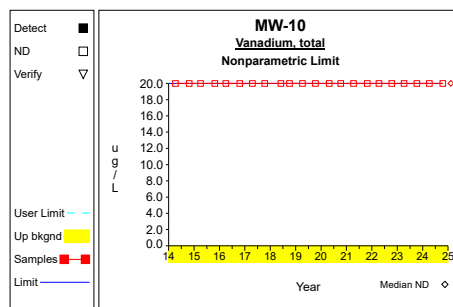
Graph 41



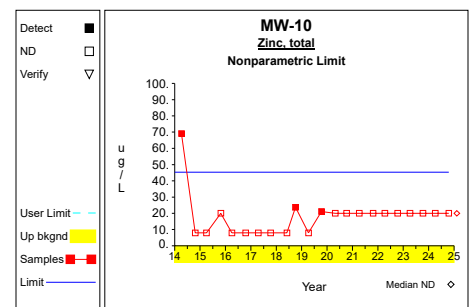
Graph 42



Graph 43

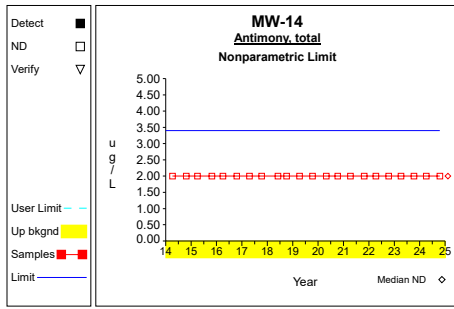


Graph 44

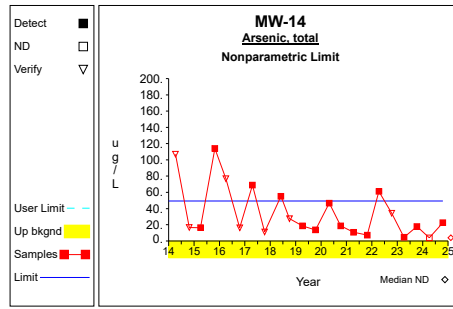


Graph 45

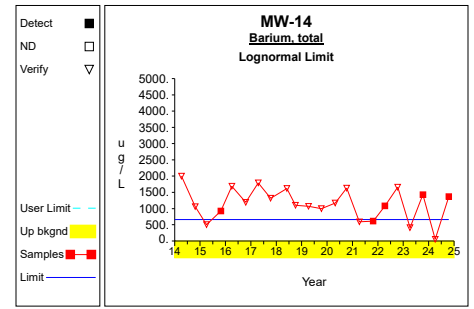
Up vs. Down Prediction Limits



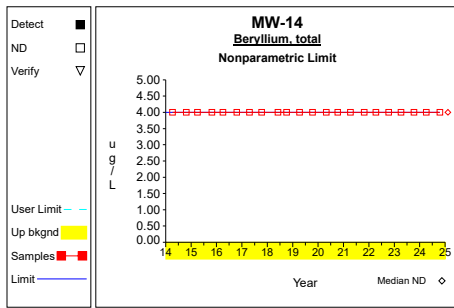
Graph 46



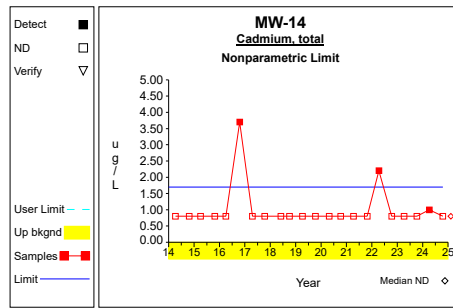
Graph 47



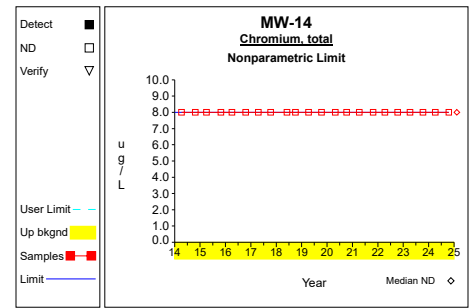
Graph 48



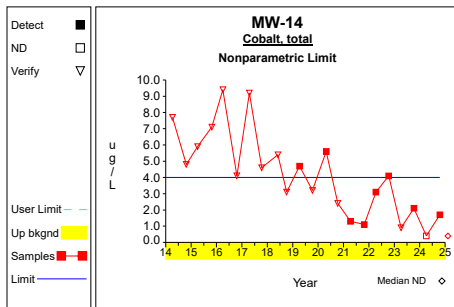
Graph 49



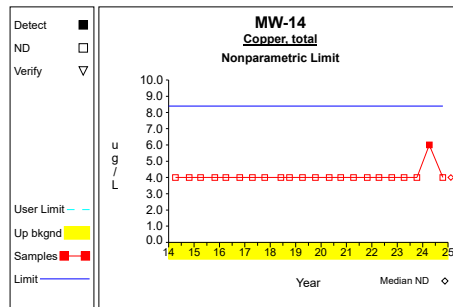
Graph 50



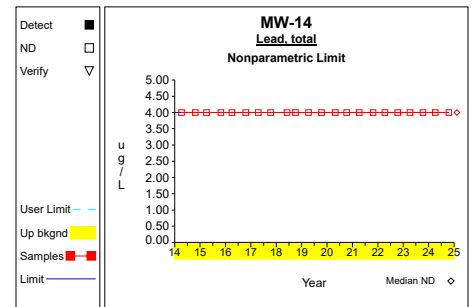
Graph 51



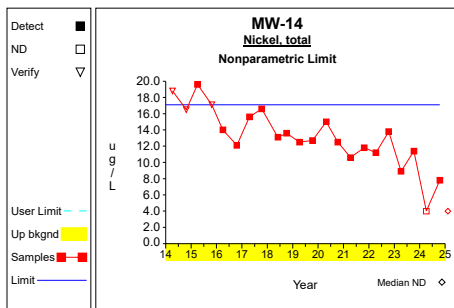
Graph 52



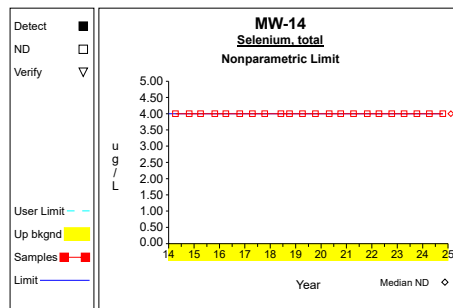
Graph 53



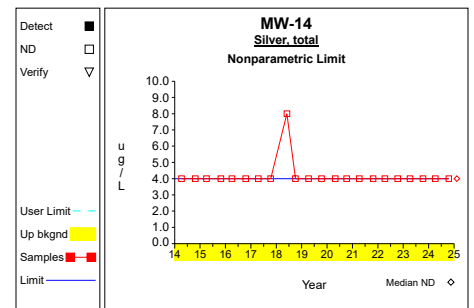
Graph 54



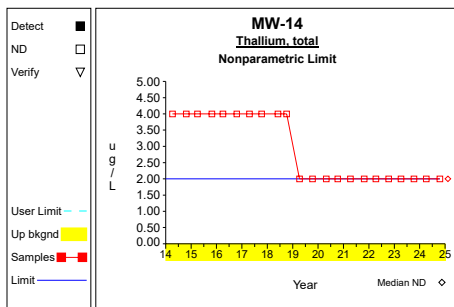
Graph 55



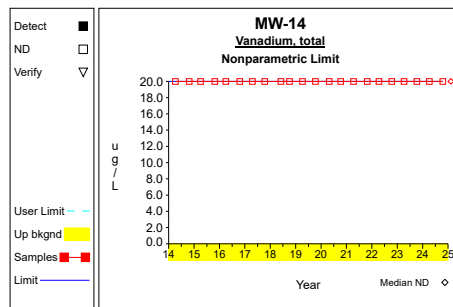
Graph 56



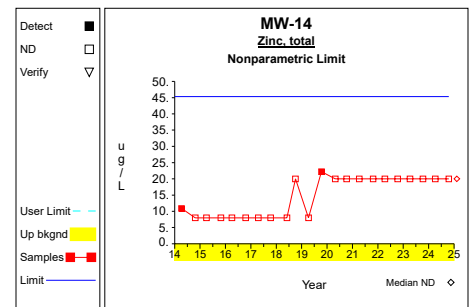
Graph 57



Graph 58

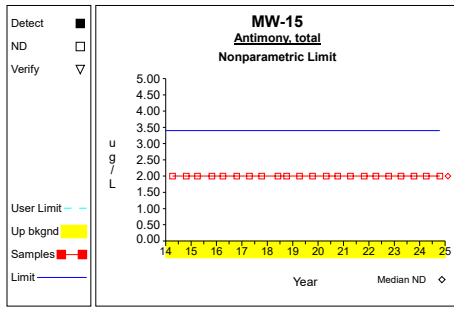


Graph 59

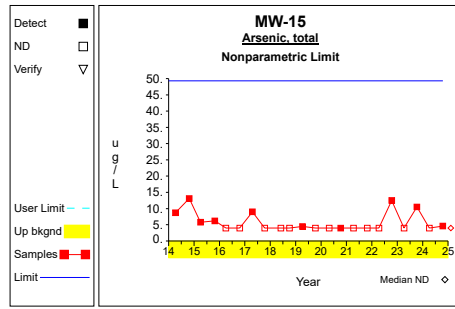


Graph 60

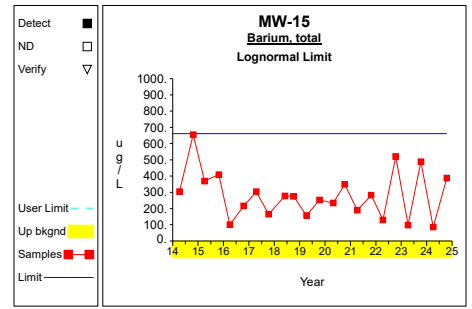
Up vs. Down Prediction Limits



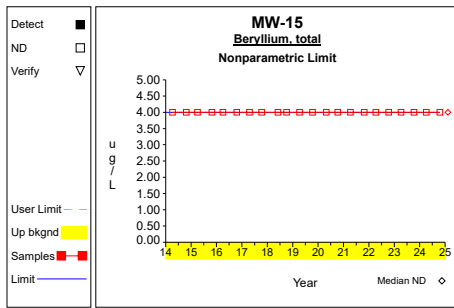
Graph 61



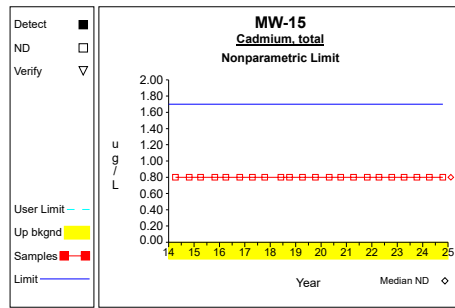
Graph 62



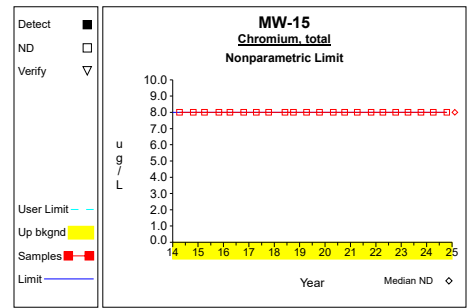
Graph 63



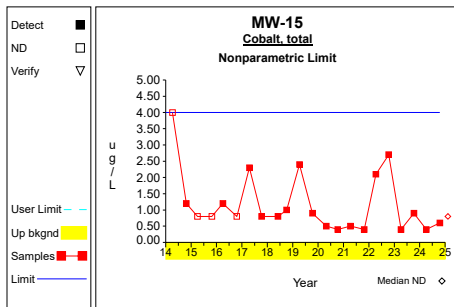
Graph 64



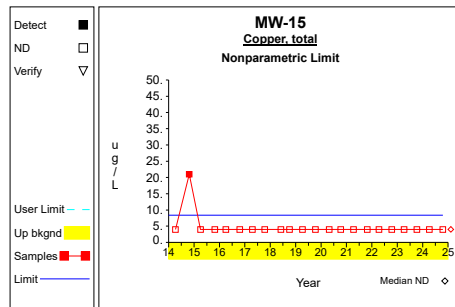
Graph 65



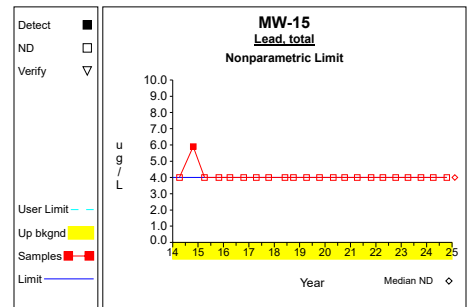
Graph 66



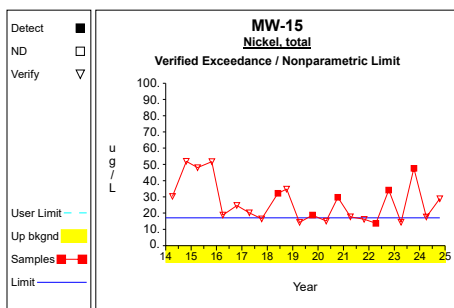
Graph 67



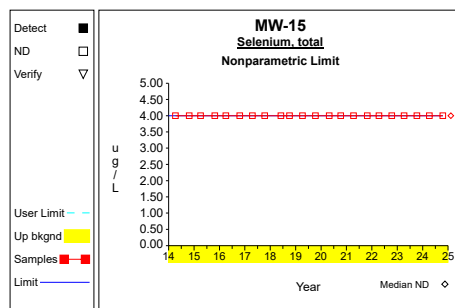
Graph 68



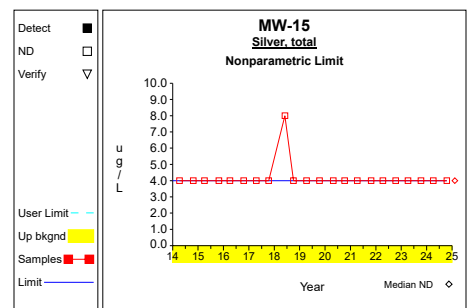
Graph 69



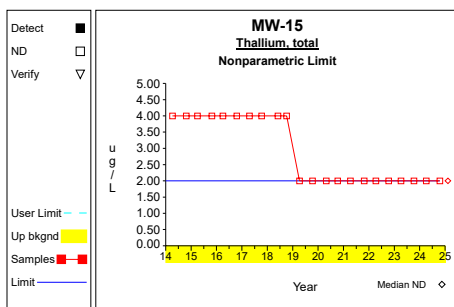
Graph 70



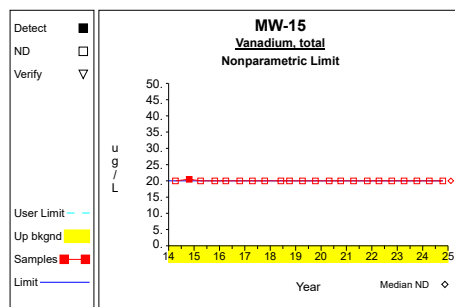
Graph 71



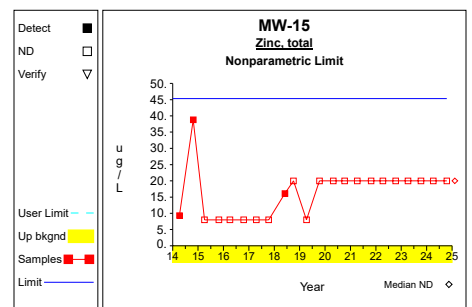
Graph 72



Graph 73

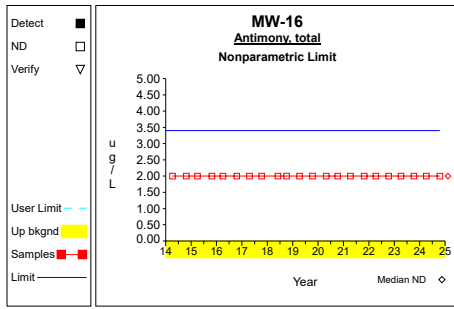


Graph 74

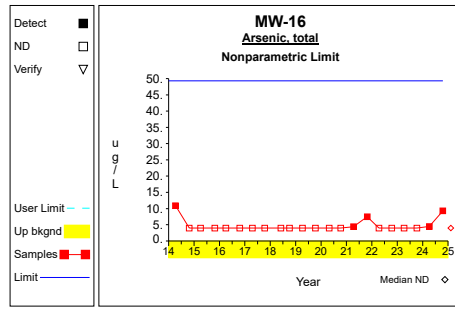


Graph 75

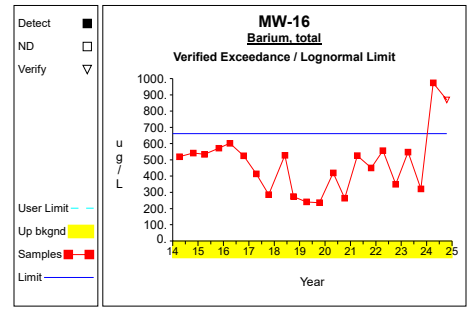
Up vs. Down Prediction Limits



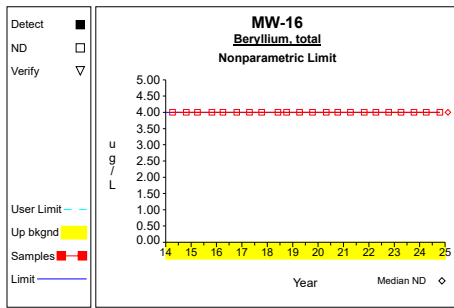
Graph 76



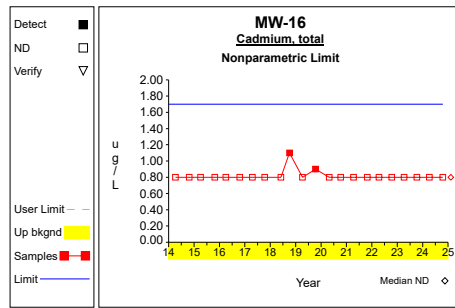
Graph 77



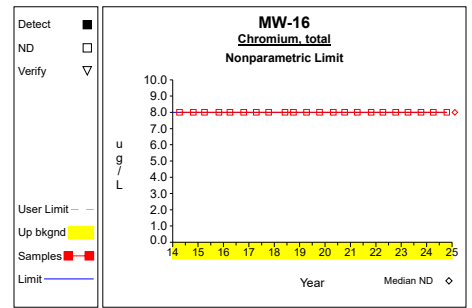
Graph 78



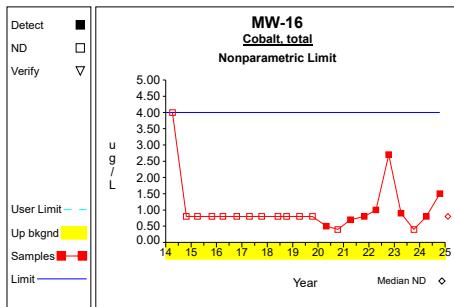
Graph 79



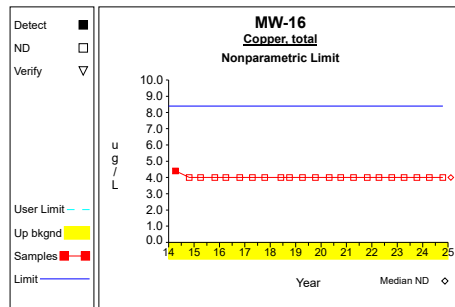
Graph 80



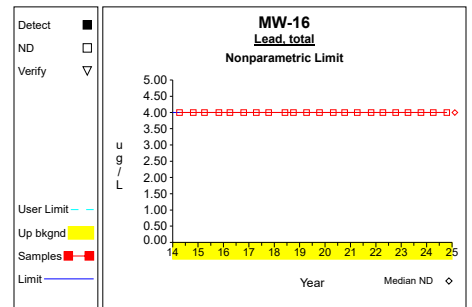
Graph 81



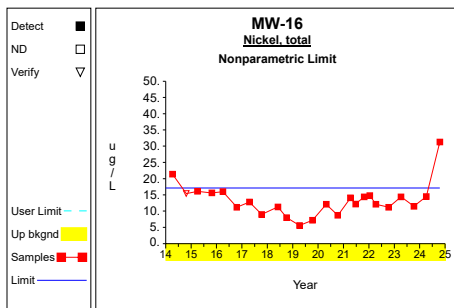
Graph 82



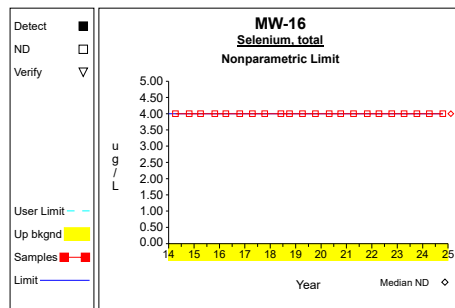
Graph 83



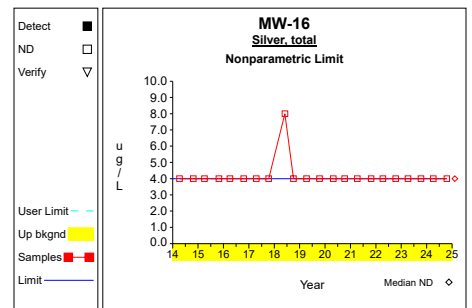
Graph 84



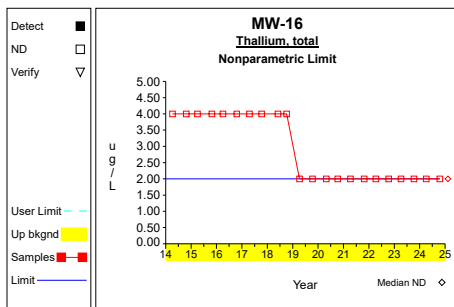
Graph 85



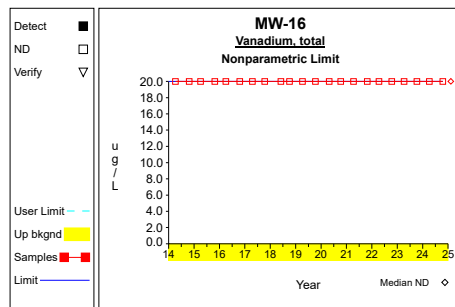
Graph 86



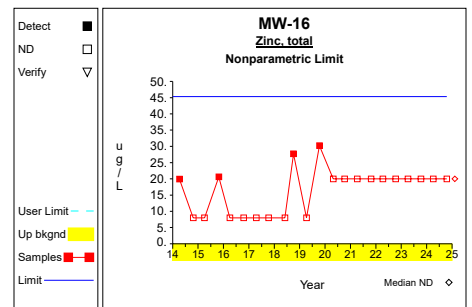
Graph 87



Graph 88

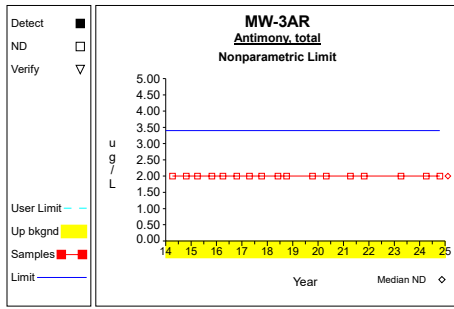


Graph 89

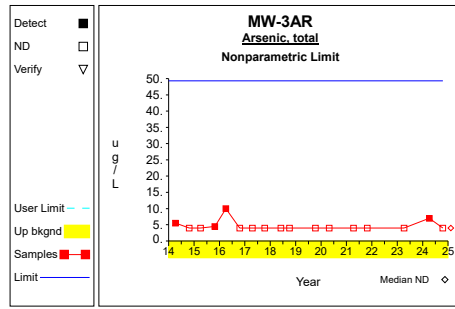


Graph 90

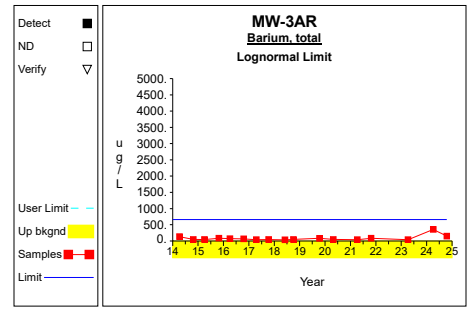
Up vs. Down Prediction Limits



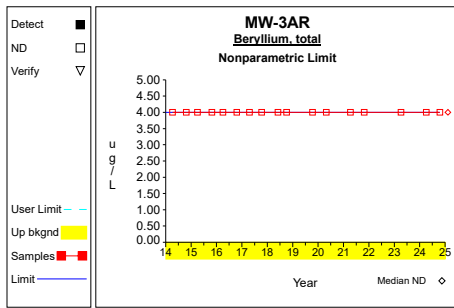
Graph 91



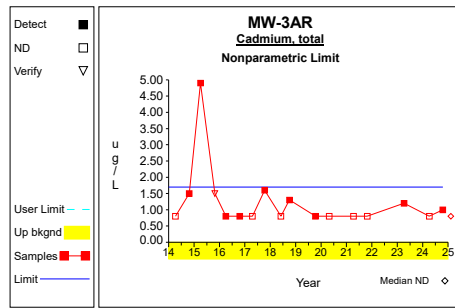
Graph 92



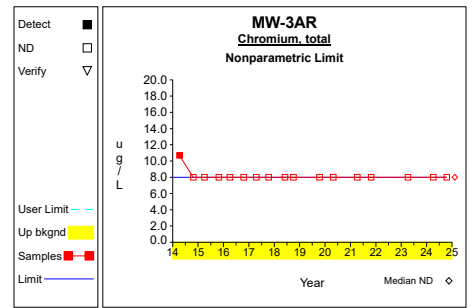
Graph 93



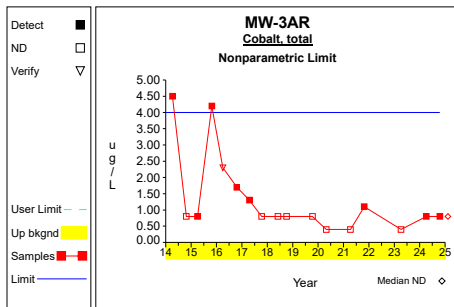
Graph 94



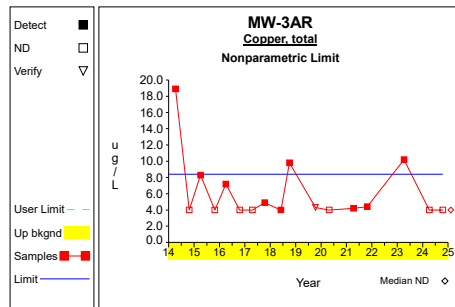
Graph 95



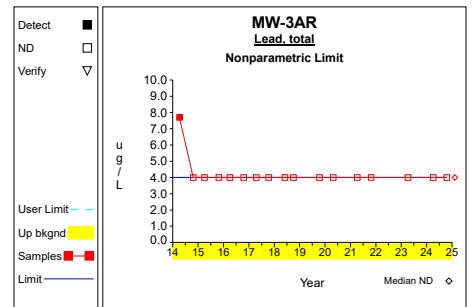
Graph 96



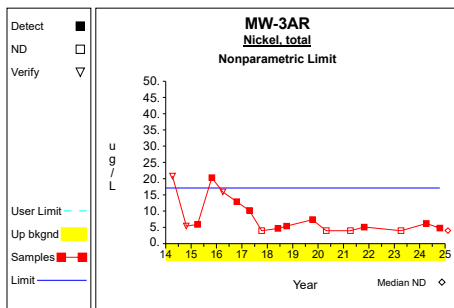
Graph 97



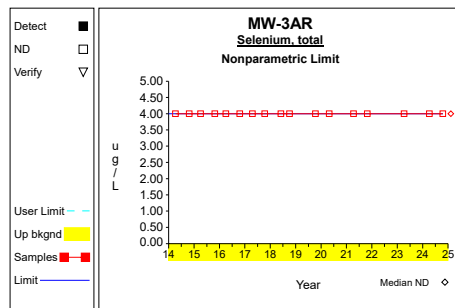
Graph 98



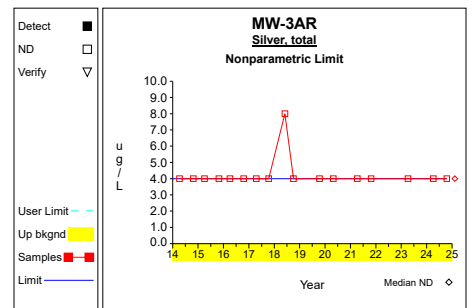
Graph 99



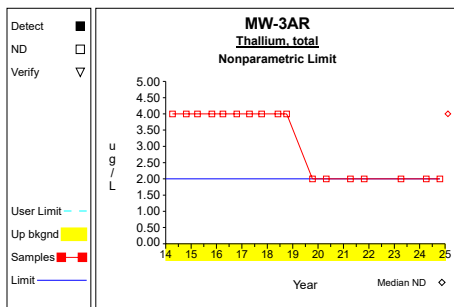
Graph 100



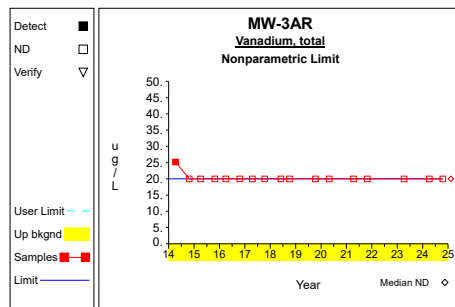
Graph 101



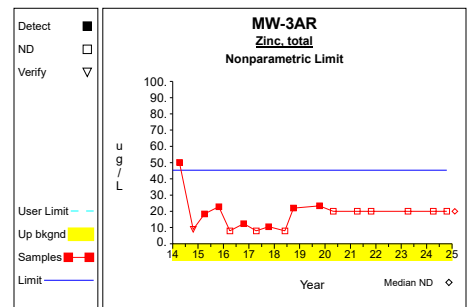
Graph 102



Graph 103

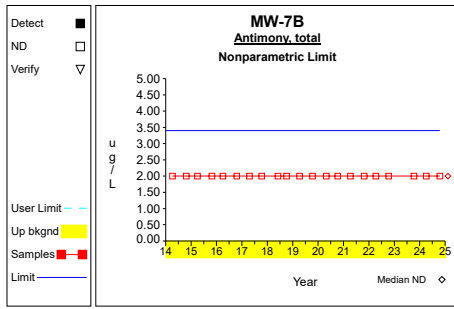


Graph 104

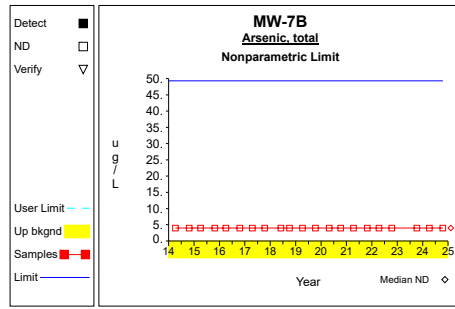


Graph 105

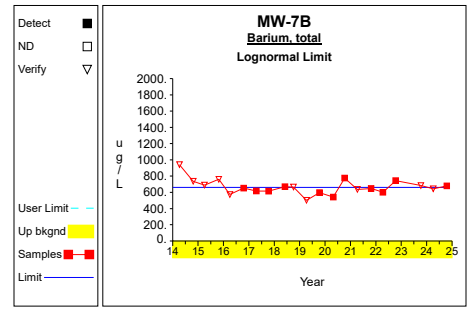
Up vs. Down Prediction Limits



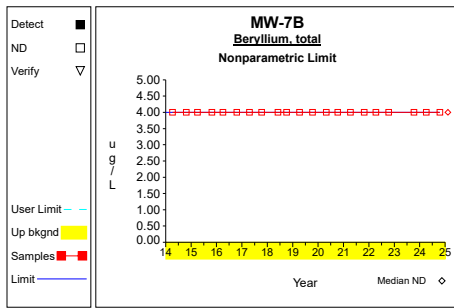
Graph 106



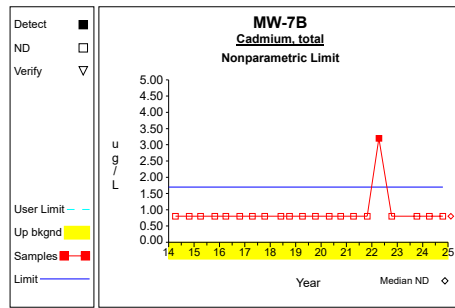
Graph 107



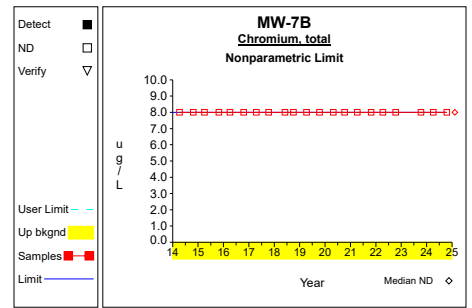
Graph 108



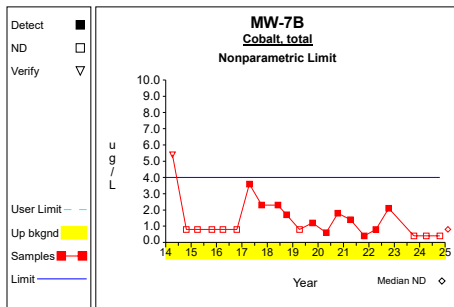
Graph 109



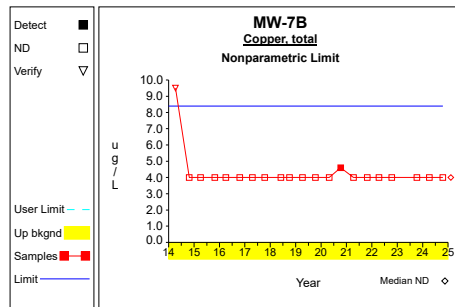
Graph 110



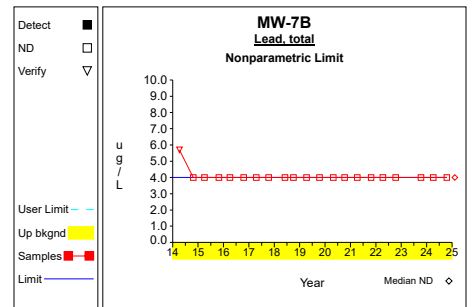
Graph 111



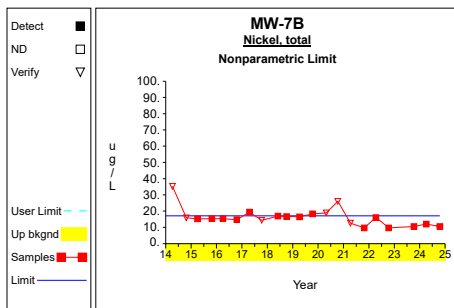
Graph 112



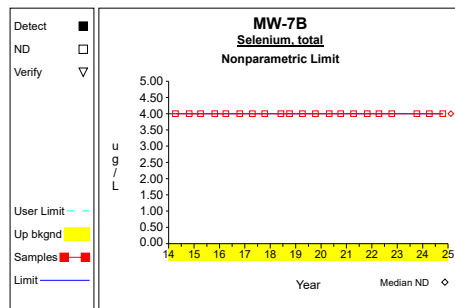
Graph 113



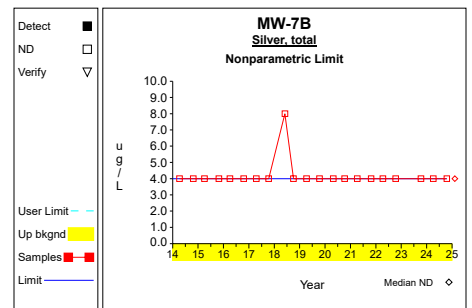
Graph 114



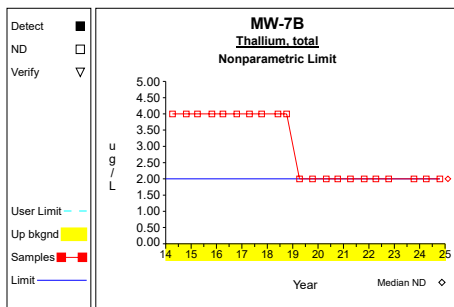
Graph 115



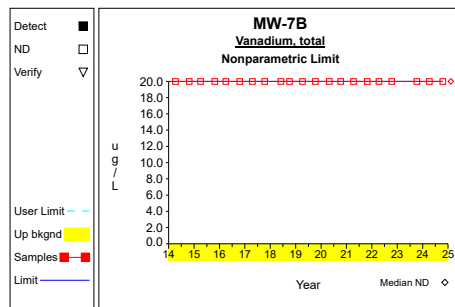
Graph 116



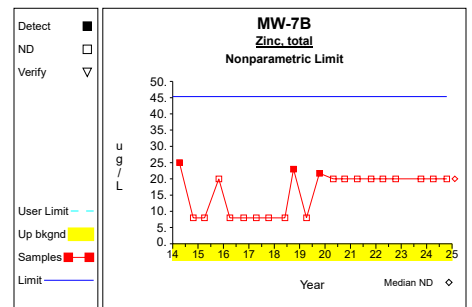
Graph 117



Graph 118

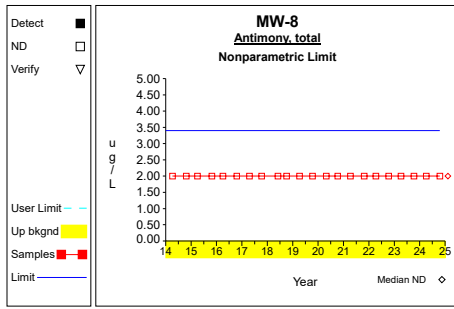


Graph 119

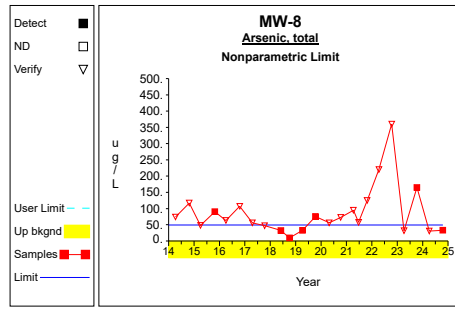


Graph 120

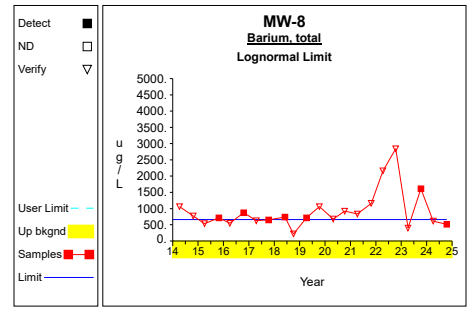
Up vs. Down Prediction Limits



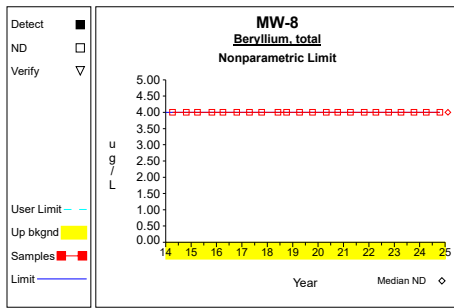
Graph 121



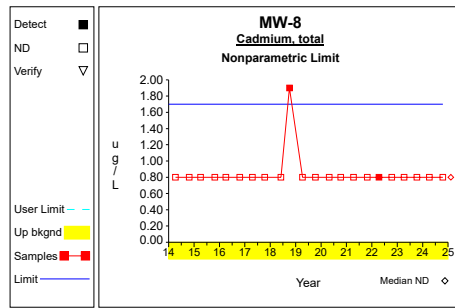
Graph 122



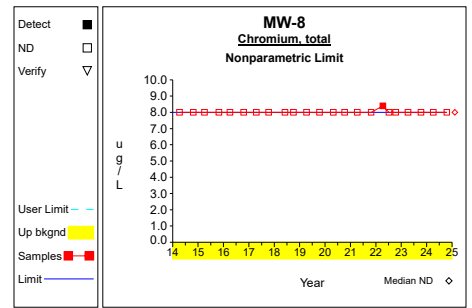
Graph 123



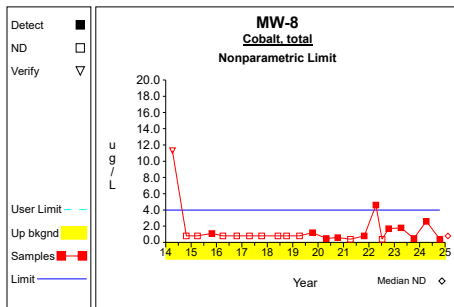
Graph 124



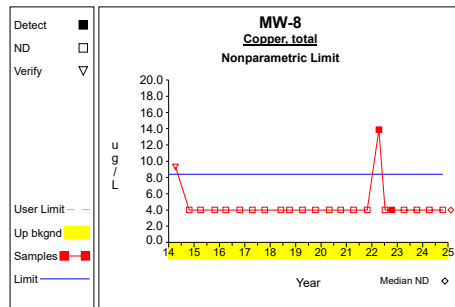
Graph 125



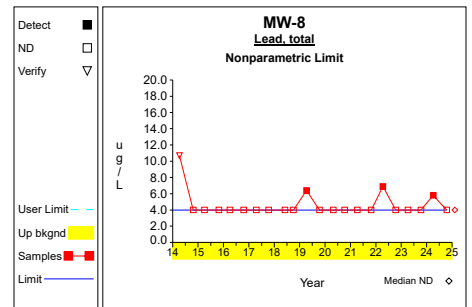
Graph 126



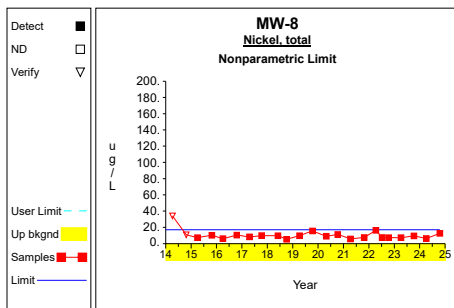
Graph 127



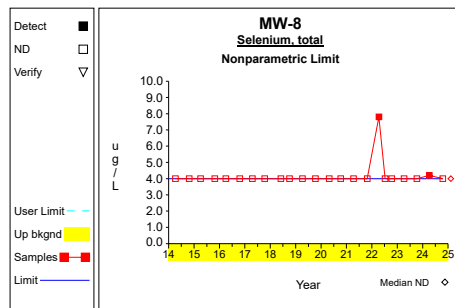
Graph 128



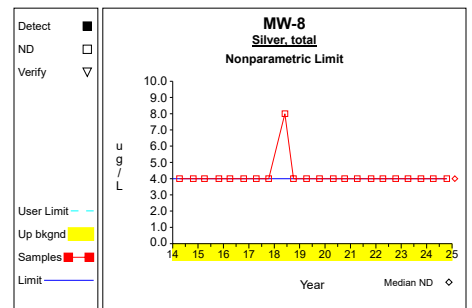
Graph 129



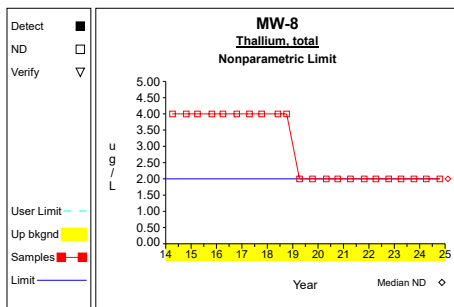
Graph 130



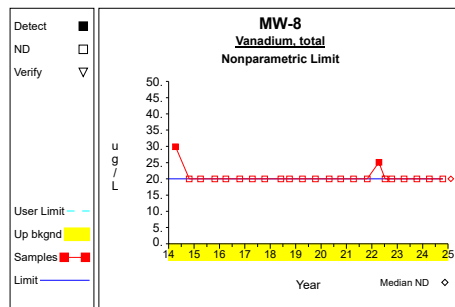
Graph 131



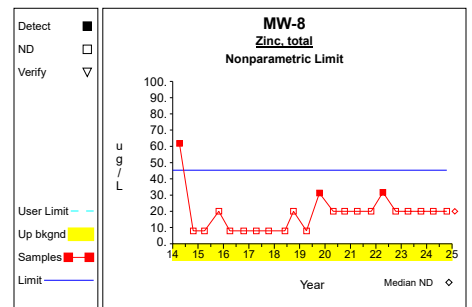
Graph 132



Graph 133

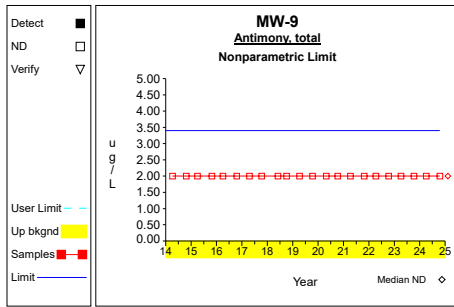


Graph 134

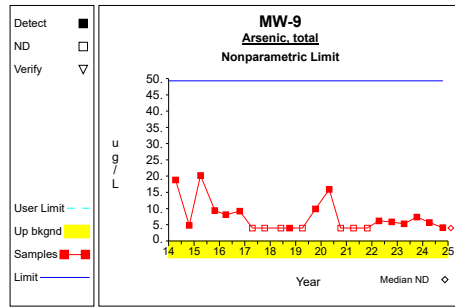


Graph 135

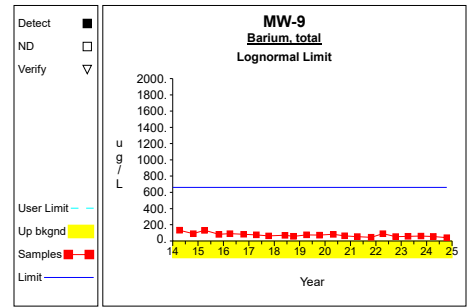
Up vs. Down Prediction Limits



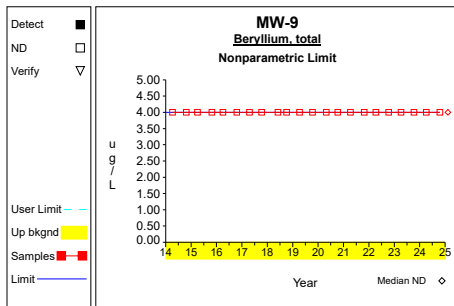
Graph 136



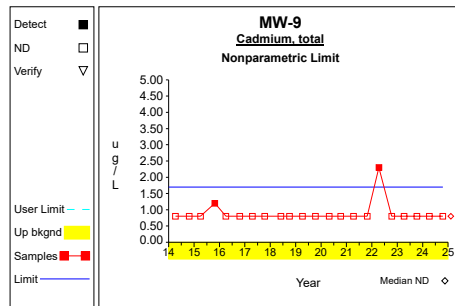
Graph 137



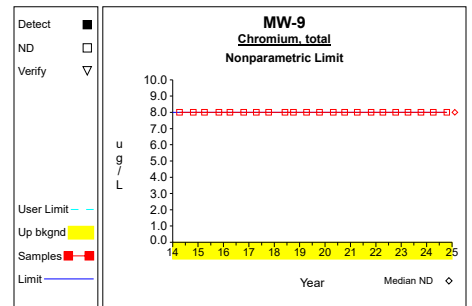
Graph 138



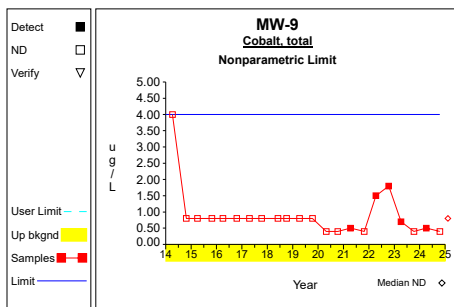
Graph 139



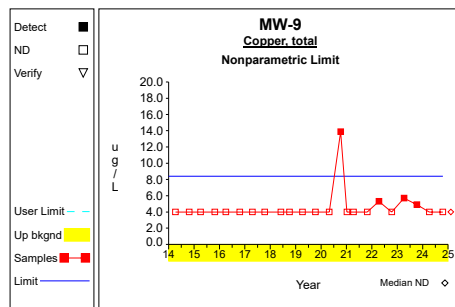
Graph 140



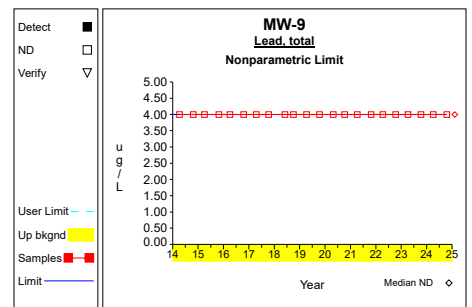
Graph 141



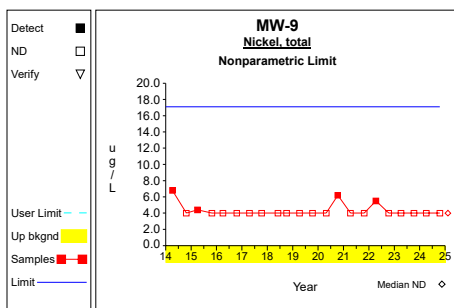
Graph 142



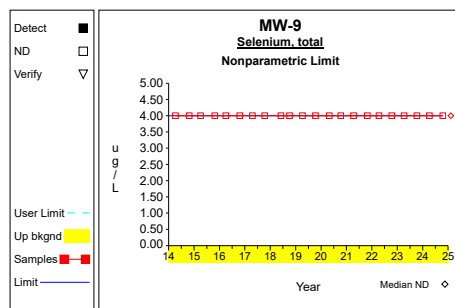
Graph 143



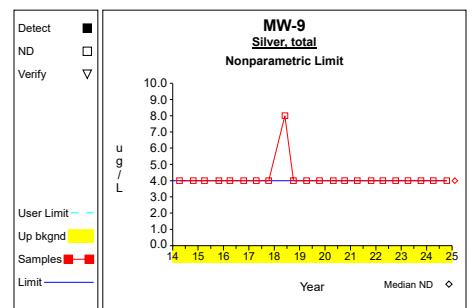
Graph 144



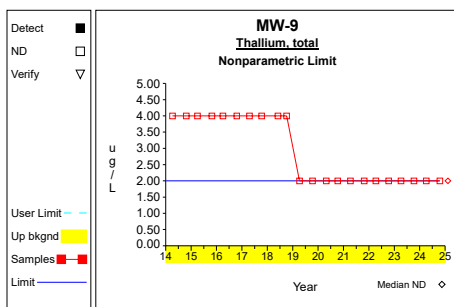
Graph 145



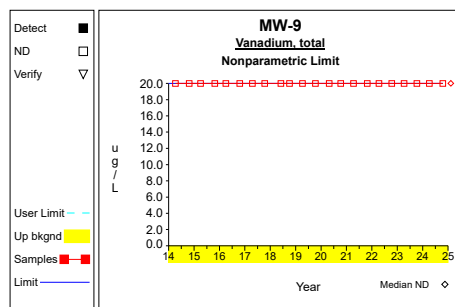
Graph 146



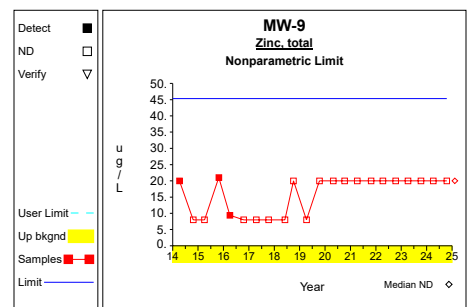
Graph 147



Graph 148

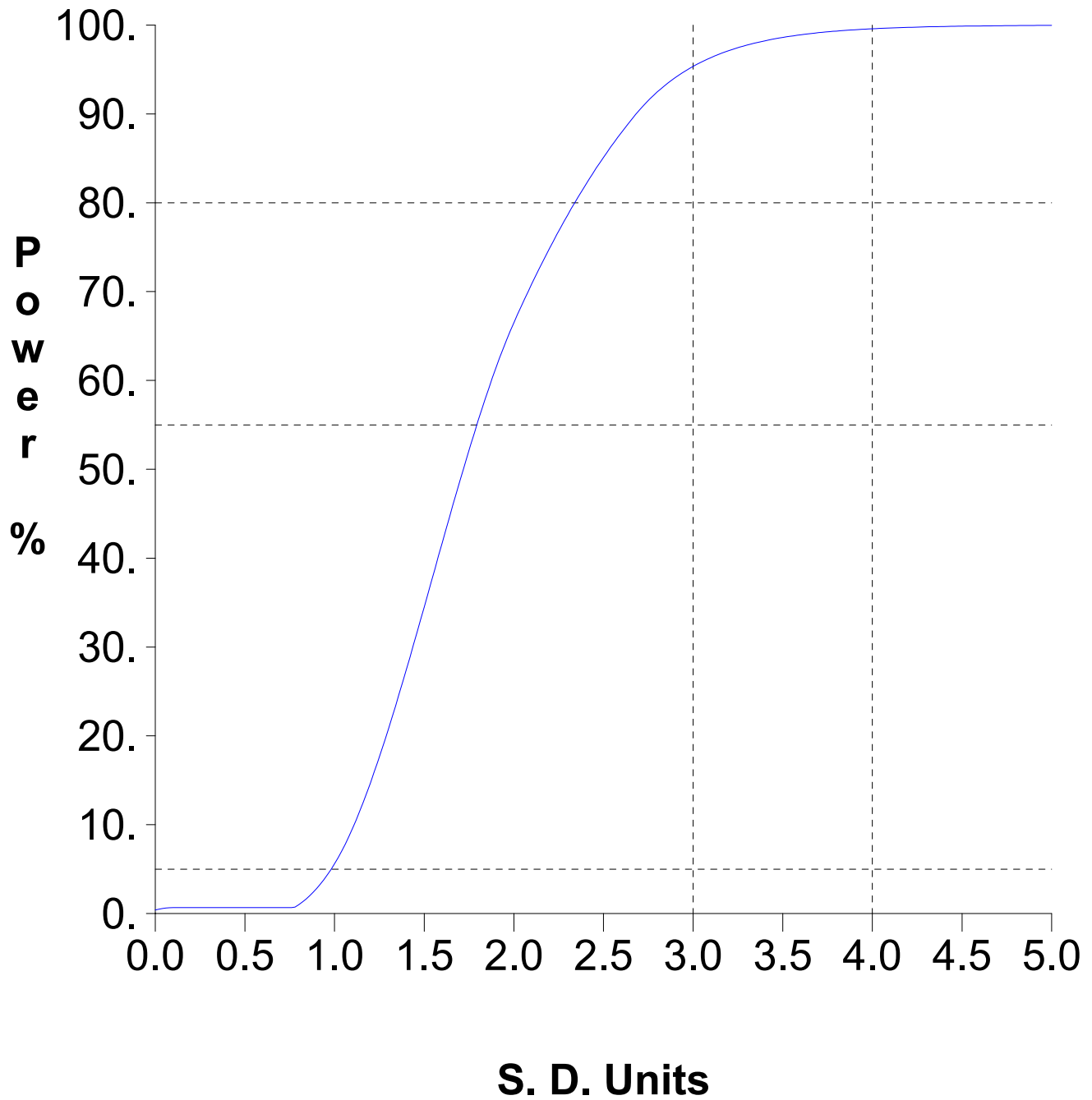


Graph 149



Graph 150

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



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

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	PL = max(X) = 3.4	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**Arsenic, total (ug/L)****Nonparametric Prediction Limit**

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	PL = max(X) = 49.3	Compute nonparametric prediction limit as largest background measurement.
2	Conf = 0.99	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$Y = \log_e(X)$	Transform to natural logarithmic scale.
2	$\bar{Y} = \text{sum}[Y] / N$ = 447.439 / 92 = 4.863	Compute mean on a natural log scale.
3	$S_Y = ((\text{sum}[Y^2] - \text{sum}[Y]^2/N) / (N-1))^{1/2}$ = ((2218.794 - 200201.474/92) / (92-1)) ^{1/2} = 0.685	Compute sd on a natural log scale.
4	alpha = min[(1-.95 ^{1/K}) ^{1/2} , .01] = min[(1-.95 ^{1/150}) ^{1/2} , .01] = 0.01	Adjusted per comparison false positive rate. Pass initial or 1 resample.
5	PL = exp[$\bar{Y} + tS_Y(1+1/N)^{1/2}$] = exp[4.863 + (2.368*0.685)(1+1/92) ^{1/2}] = 661.292	One-sided lognormal prediction limit (t is Student's t on N-1 degrees of freedom and 1-alpha confidence level).

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

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

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

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	PL = max(X) = 1.7	Compute nonparametric prediction limit as largest background measurement.
2	Conf = 0.99	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

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

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

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

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

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	PL = max(X) = 8.4	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**Lead, total (ug/L)****Nonparametric Prediction Limit**

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

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

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	PL = max(X) = 17.1	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**Selenium, total (ug/L)****Nonparametric Prediction Limit**

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

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

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

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

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	PL = median(X) = 2.0	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**Vanadium, total (ug/L)****Nonparametric Prediction Limit**

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

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

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	PL = max(X) = 45.3	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

Assessment Statistics for Trace Metal Exceedances

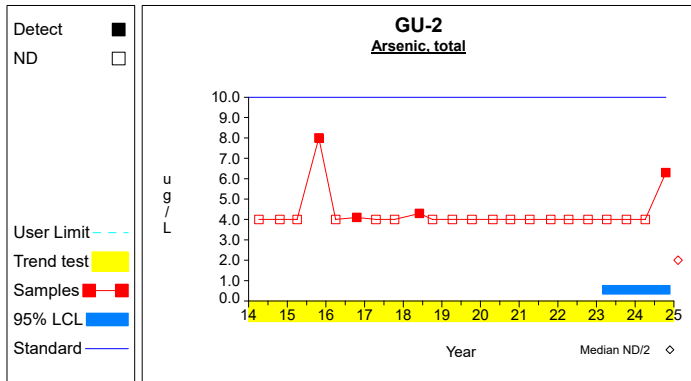
Table 1

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

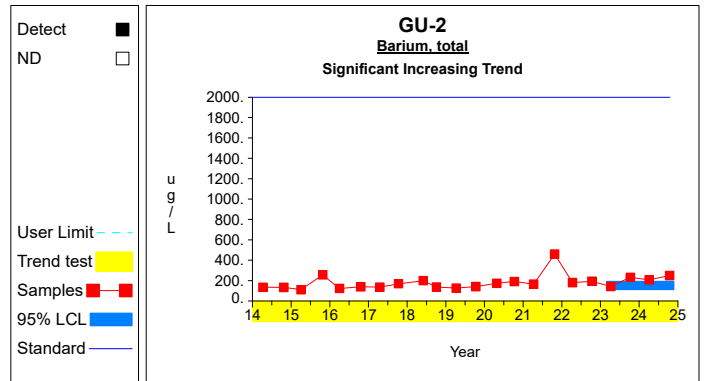
Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend	
Arsenic, total	ug/L	GU-2	4	3.075	2.150	1.176	0.546	5.604	10.000	inc	
Barium, total	ug/L	GU-2	4	207.750	47.247	1.176	152.174	263.326	2000.000		
Cadmium, total	ug/L	GU-2	4	0.400	0.000	1.176	0.400	0.400	5.000		
Cobalt, total	ug/L	GU-2	4	0.525	0.250	1.176	0.231	0.819	2.100		
Copper, total	ug/L	GU-2	4	2.000	0.000	1.176	2.000	2.000	1300.000		
Lead, total	ug/L	GU-2	4	2.000	0.000	1.176	2.000	2.000	15.000		
Nickel, total	ug/L	GU-2	4	4.225	2.708	1.176	1.039	7.411	100.000		
Selenium, total	ug/L	GU-2	4	2.000	0.000	1.176	2.000	2.000	50.000		
Arsenic, total	ug/L	MW-10	4	2.000	0.000	1.176	2.000	2.000	10.000		
Barium, total	ug/L	MW-10	4	113.550	20.656	1.176	89.252	137.848	2000.000		
Cadmium, total	ug/L	MW-10	4	1.300	1.800	1.176	0.000	3.417	5.000		
Cobalt, total	ug/L	MW-10	4	0.650	0.300	1.176	0.297	1.003	2.100		
Copper, total	ug/L	MW-10	4	15.900	11.365	1.176	2.532	29.268	1300.000		
Lead, total	ug/L	MW-10	4	2.000	0.000	1.176	2.000	2.000	15.000		
Nickel, total	ug/L	MW-10	4	8.825	11.496	1.176	0.000	22.347	100.000		
Selenium, total	ug/L	MW-10	4	2.000	0.000	1.176	2.000	2.000	50.000		
Arsenic, total	ug/L	MW-14	4	11.775	9.969	1.176	0.048	23.502	10.000	dec	
Barium, total	ug/L	MW-14	4	816.175	690.178	1.176	4.326	1628.024	2000.000		
Cadmium, total	ug/L	MW-14	4	0.550	0.300	1.176	0.197	0.903	5.000		
Cobalt, total	ug/L	MW-14	4	1.225	0.846	1.176	0.230	2.220	2.100		
Copper, total	ug/L	MW-14	4	3.000	2.000	1.176	0.647	5.353	1300.000		
Lead, total	ug/L	MW-14	4	2.000	0.000	1.176	2.000	2.000	15.000		
Nickel, total	ug/L	MW-14	4	7.525	3.979	1.176	2.844	12.206	100.000		
Selenium, total	ug/L	MW-14	4	2.000	0.000	1.176	2.000	2.000	50.000		
Arsenic, total	ug/L	MW-15	4	4.775	4.009	1.176	0.060	9.490	10.000		
Barium, total	ug/L	MW-15	4	265.350	204.207	1.176	25.144	505.556	2000.000		
Cadmium, total	ug/L	MW-15	4	0.400	0.000	1.176	0.400	0.400	5.000		
Cobalt, total	ug/L	MW-15	4	0.575	0.236	1.176	0.297	0.853	2.100		
Copper, total	ug/L	MW-15	4	2.000	0.000	1.176	2.000	2.000	1300.000		
Lead, total	ug/L	MW-15	4	2.000	0.000	1.176	2.000	2.000	15.000		
Nickel, total	ug/L	MW-15	4	27.125	15.000	1.176	9.480	44.770	100.000		
Selenium, total	ug/L	MW-15	4	2.000	0.000	1.176	2.000	2.000	50.000		
Arsenic, total	ug/L	MW-16	4	4.450	3.441	1.176	0.402	8.498	10.000		
Barium, total	ug/L	MW-16	4	678.000	299.135	1.176	326.130	1029.870	2000.000		
Cadmium, total	ug/L	MW-16	4	0.400	0.000	1.176	0.400	0.400	5.000		
Cobalt, total	ug/L	MW-16	4	0.900	0.455	1.176	0.365	1.435	2.100		
Copper, total	ug/L	MW-16	4	2.000	0.000	1.176	2.000	2.000	1300.000		
Lead, total	ug/L	MW-16	4	2.000	0.000	1.176	2.000	2.000	15.000		
Nickel, total	ug/L	MW-16	4	17.925	9.025	1.176	7.310	28.540	100.000		
Selenium, total	ug/L	MW-16	4	2.000	0.000	1.176	2.000	2.000	50.000		
Arsenic, total	ug/L	MW-7B	4	2.000	0.000	1.176	2.000	2.000	10.000		
Barium, total	ug/L	MW-7B	4	687.250	41.931	1.176	637.926	736.574	2000.000		
Cadmium, total	ug/L	MW-7B	4	0.400	0.000	1.176	0.400	0.400	5.000		
Cobalt, total	ug/L	MW-7B	4	0.825	0.850	1.176	0.000	1.825	2.100		
Copper, total	ug/L	MW-7B	4	2.000	0.000	1.176	2.000	2.000	1300.000		
Lead, total	ug/L	MW-7B	4	2.000	0.000	1.176	2.000	2.000	15.000		
Nickel, total	ug/L	MW-7B	4	10.700	1.007	1.176	9.516	11.884	100.000		
Selenium, total	ug/L	MW-7B	4	2.000	0.000	1.176	2.000	2.000	50.000		
Arsenic, total	ug/L	MW-8	4	65.275	66.492	1.176	0.000	143.489	10.000		
Barium, total	ug/L	MW-8	4	784.500	557.245	1.176	129.019	1439.981	2000.000		
Cadmium, total	ug/L	MW-8	4	0.400	0.000	1.176	0.400	0.400	5.000		
Cobalt, total	ug/L	MW-8	4	1.325	1.063	1.176	0.075	2.575	2.100		
Copper, total	ug/L	MW-8	4	2.000	0.000	1.176	2.000	2.000	1300.000		
Lead, total	ug/L	MW-8	4	2.950	1.900	1.176	0.715	5.185	15.000		
Nickel, total	ug/L	MW-8	4	8.950	2.798	1.176	5.658	12.242	100.000		
Selenium, total	ug/L	MW-8	4	2.550	1.100	1.176	1.256	3.844	50.000		
Arsenic, total	ug/L	MW-9	4	5.625	1.365	1.176	4.020	7.230	10.000		dec
Barium, total	ug/L	MW-9	4	54.050	9.189	1.176	43.241	64.859	2000.000		
Cadmium, total	ug/L	MW-9	4	0.400	0.000	1.176	0.400	0.400	5.000		
Cobalt, total	ug/L	MW-9	4	0.500	0.141	1.176	0.334	0.666	2.100		
Copper, total	ug/L	MW-9	4	3.650	1.933	1.176	1.376	5.924	1300.000		
Lead, total	ug/L	MW-9	4	2.000	0.000	1.176	2.000	2.000	15.000		
Nickel, total	ug/L	MW-9	4	2.000	0.000	1.176	2.000	2.000	100.000		
Selenium, total	ug/L	MW-9	4	2.000	0.000	1.176	2.000	2.000	50.000		

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

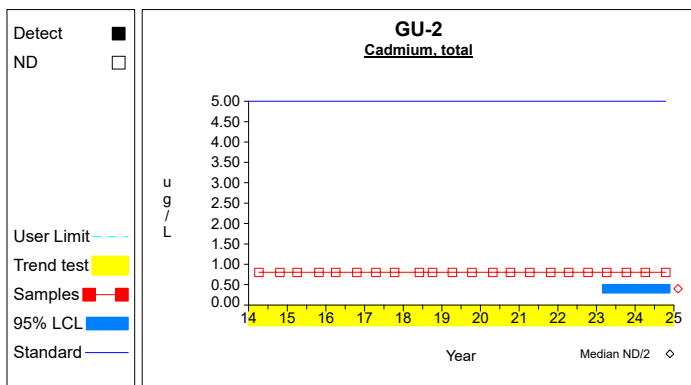
Confidence Limits (Assessment)



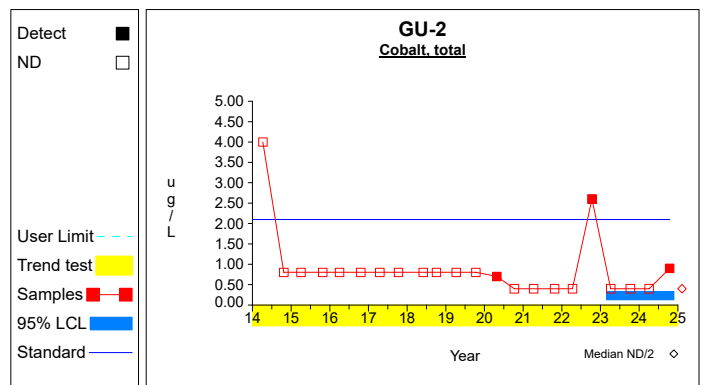
Graph 1



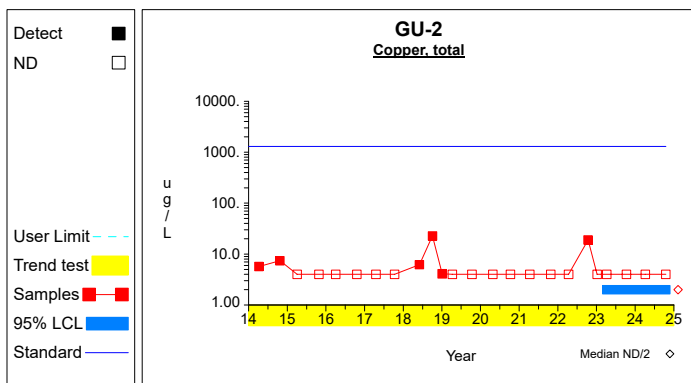
Graph 2



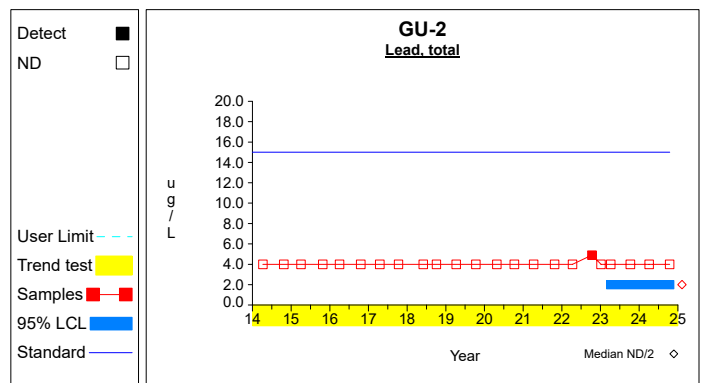
Graph 3



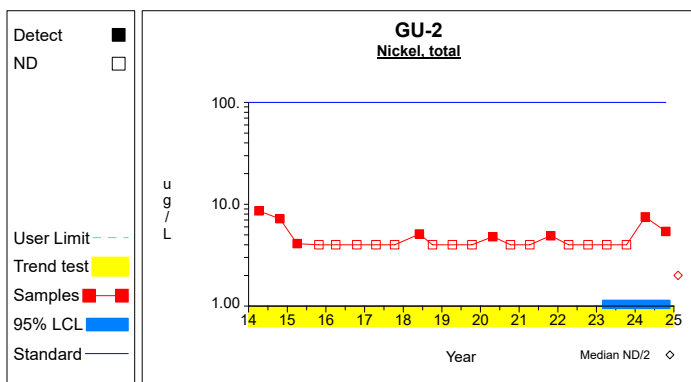
Graph 4



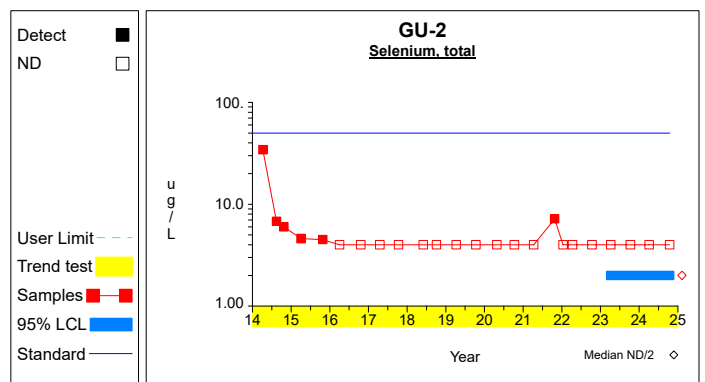
Graph 5



Graph 6

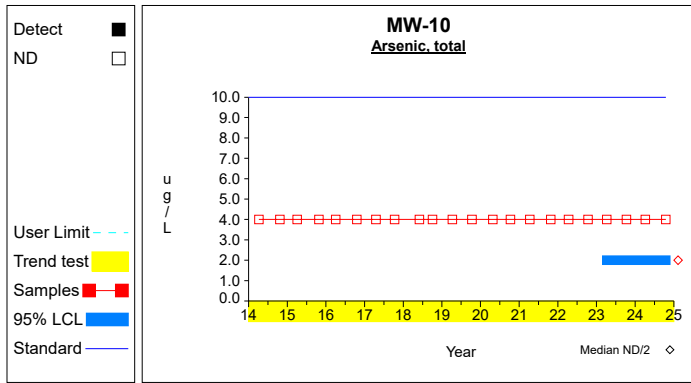


Graph 7

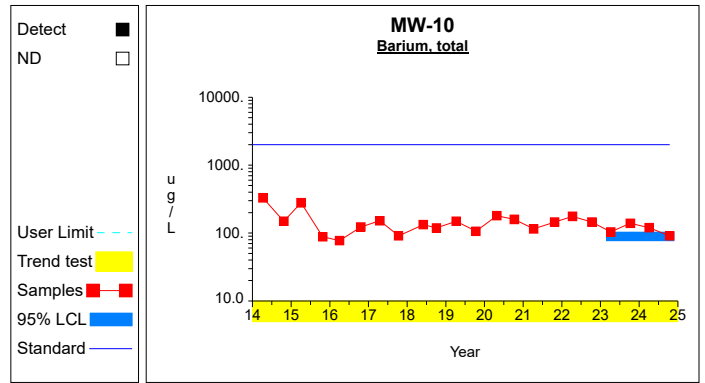


Graph 8

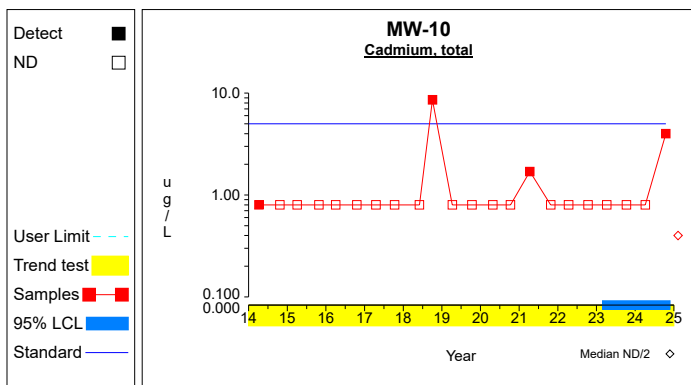
Confidence Limits (Assessment)



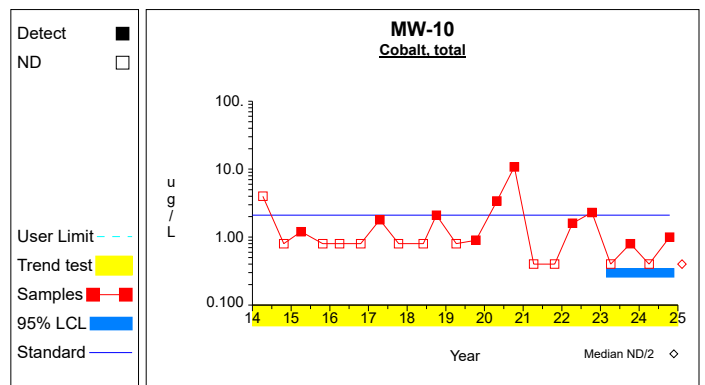
Graph 9



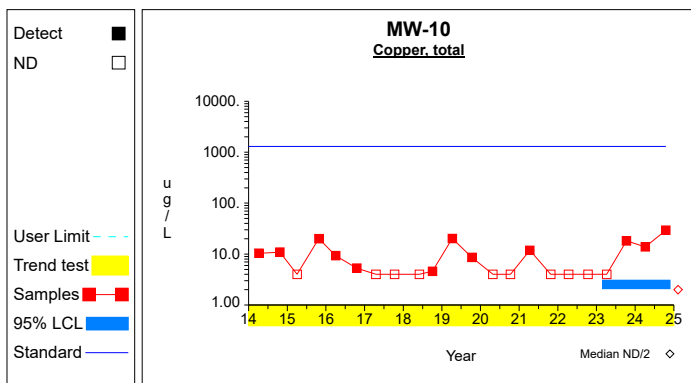
Graph 10



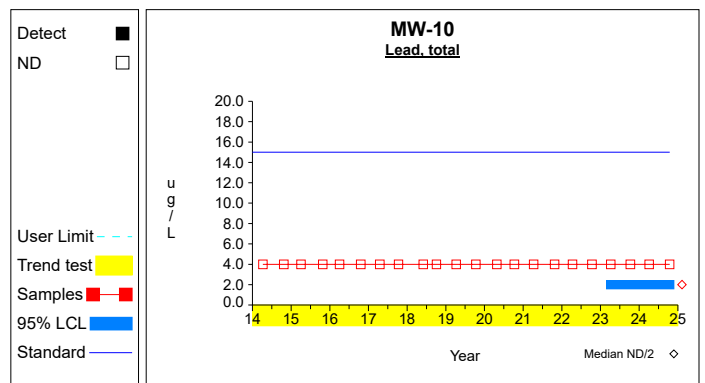
Graph 11



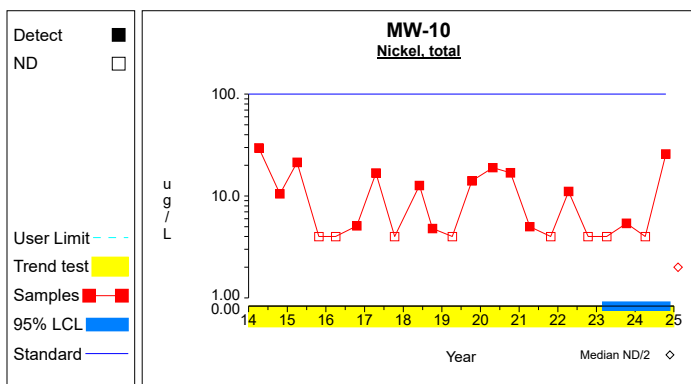
Graph 12



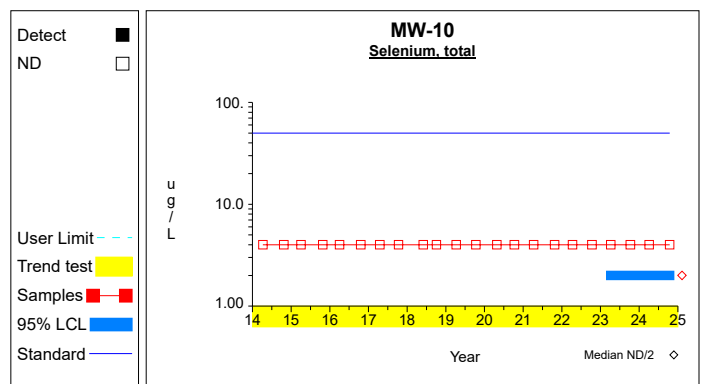
Graph 13



Graph 14

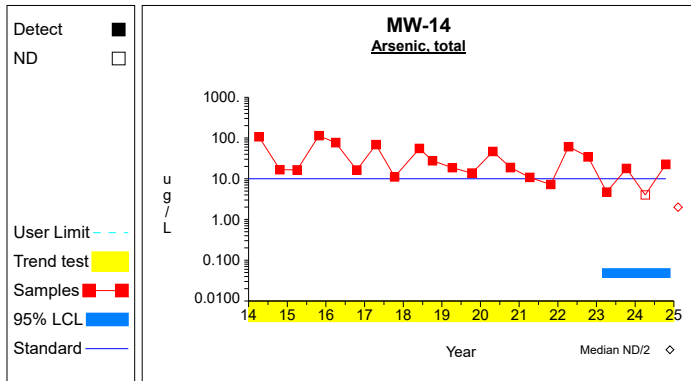


Graph 15

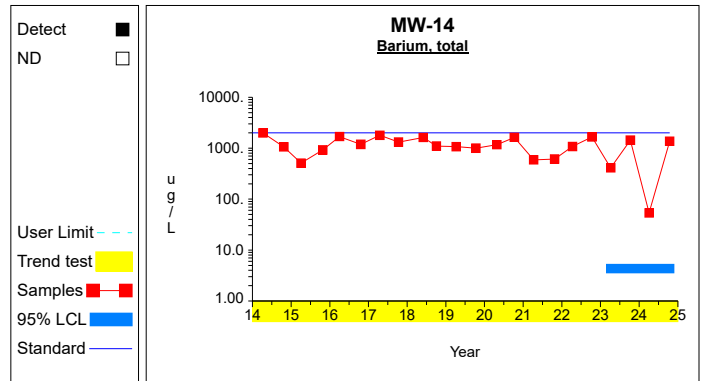


Graph 16

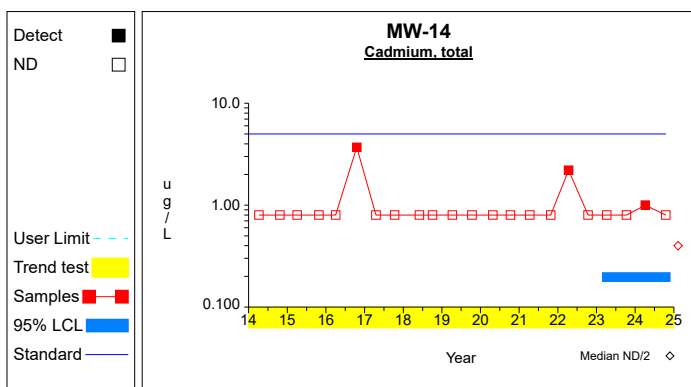
Confidence Limits (Assessment)



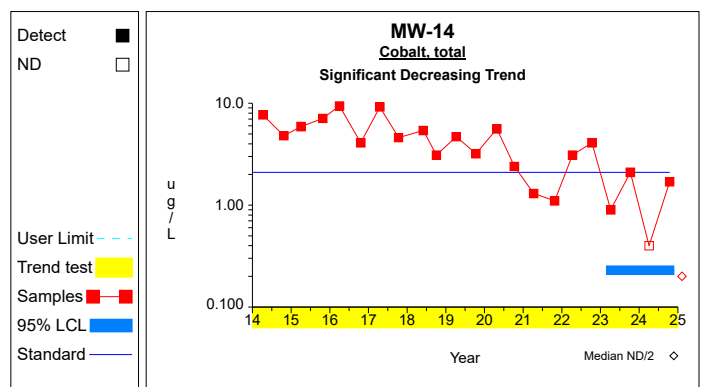
Graph 17



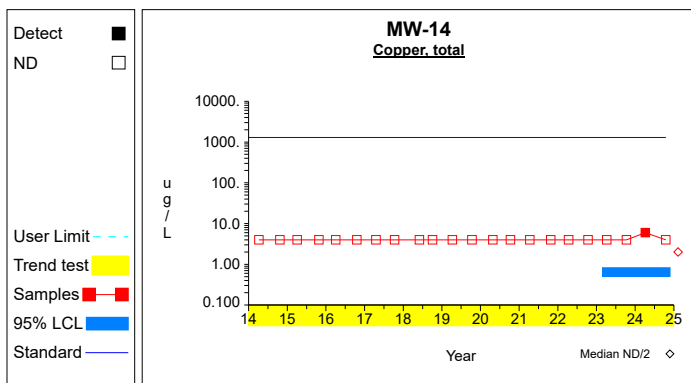
Graph 18



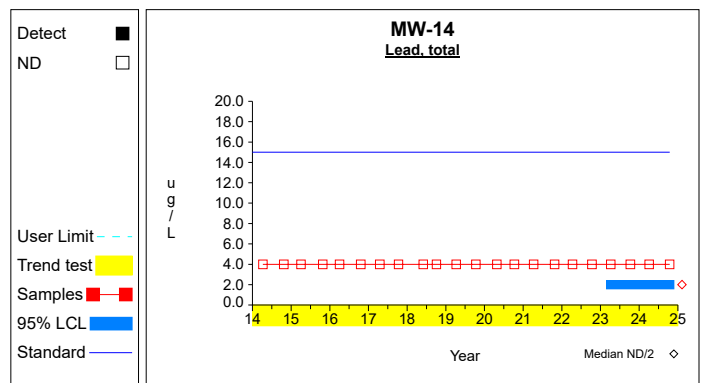
Graph 19



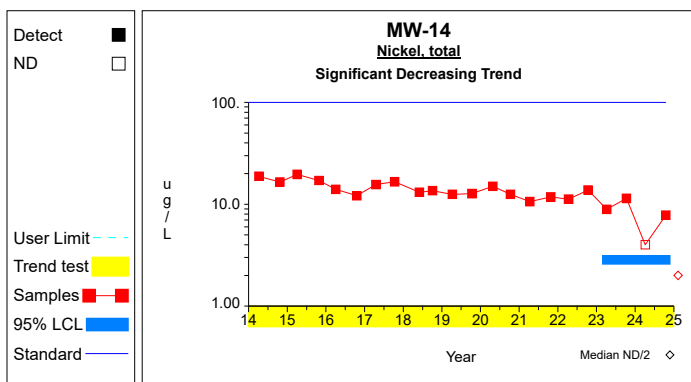
Graph 20



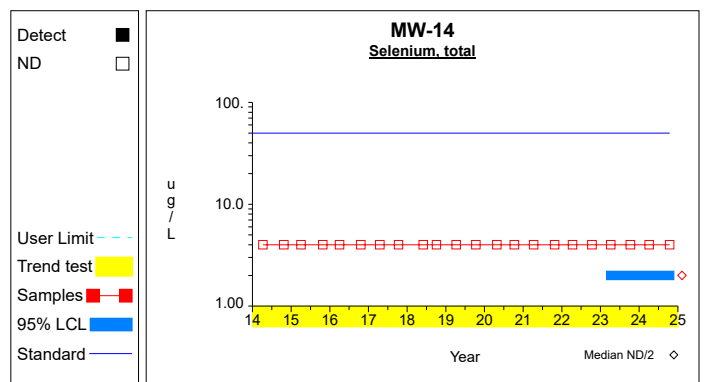
Graph 21



Graph 22

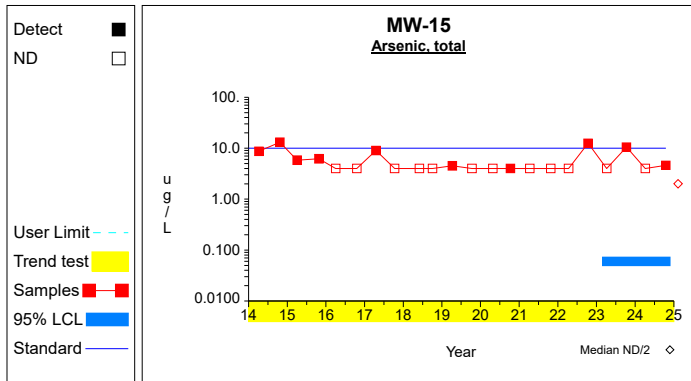


Graph 23

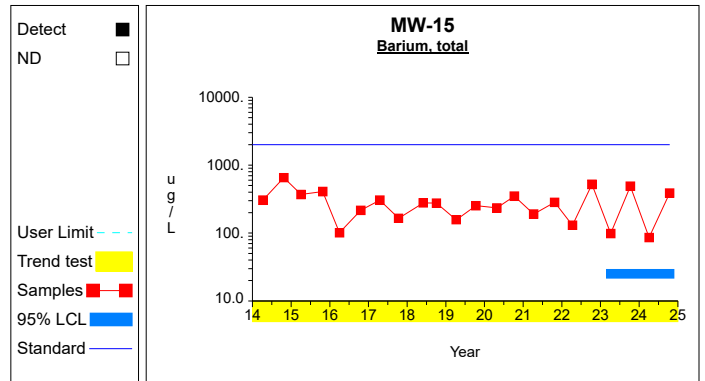


Graph 24

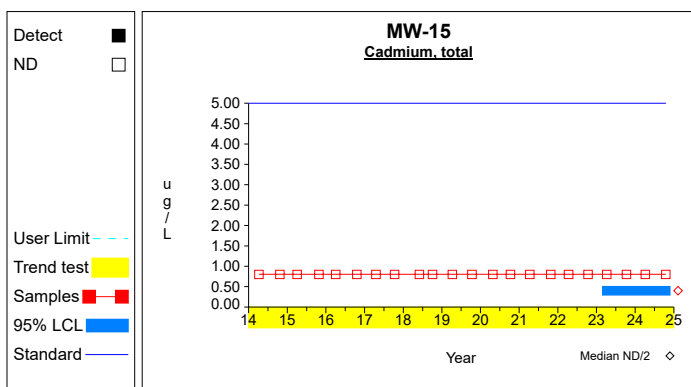
Confidence Limits (Assessment)



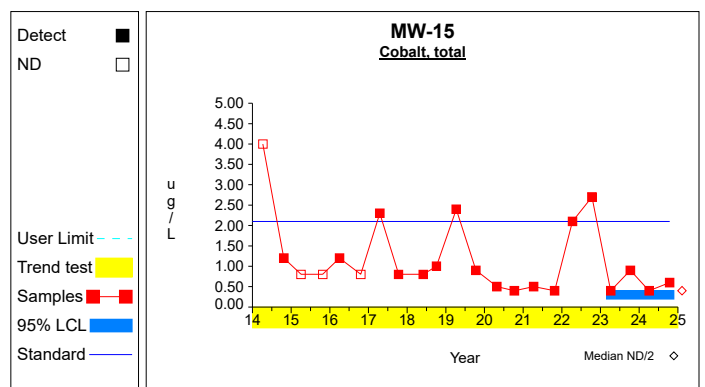
Graph 25



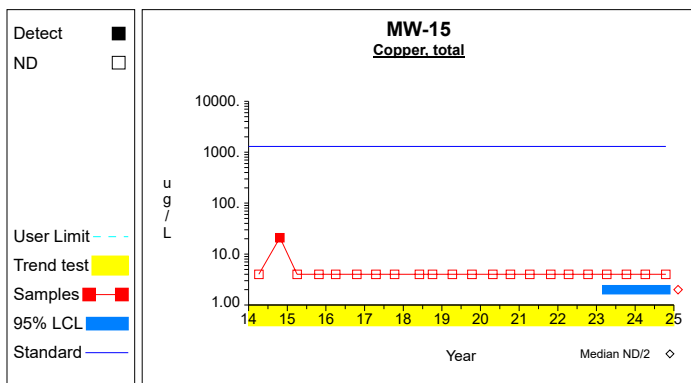
Graph 26



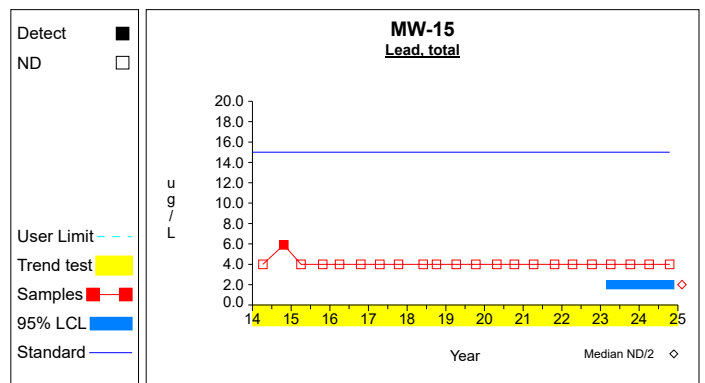
Graph 27



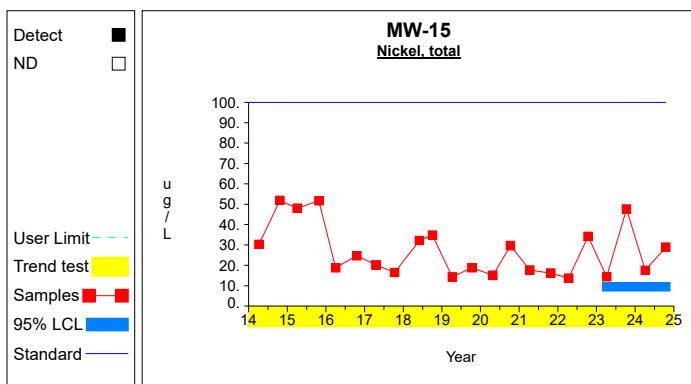
Graph 28



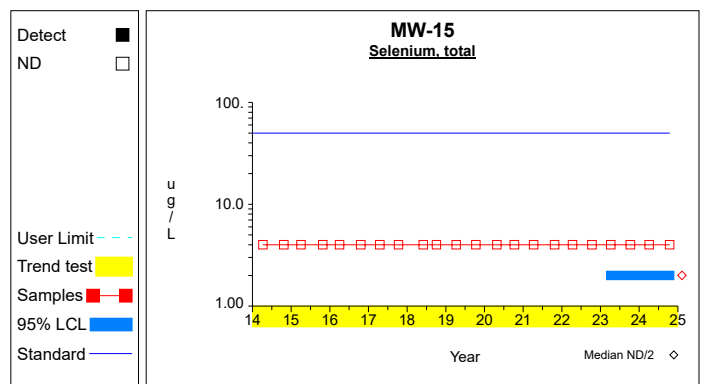
Graph 29



Graph 30

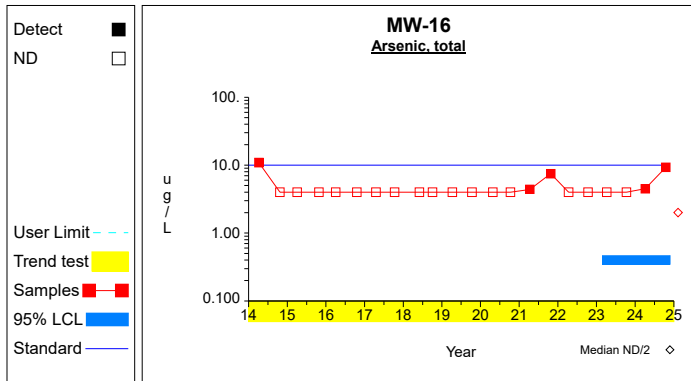


Graph 31

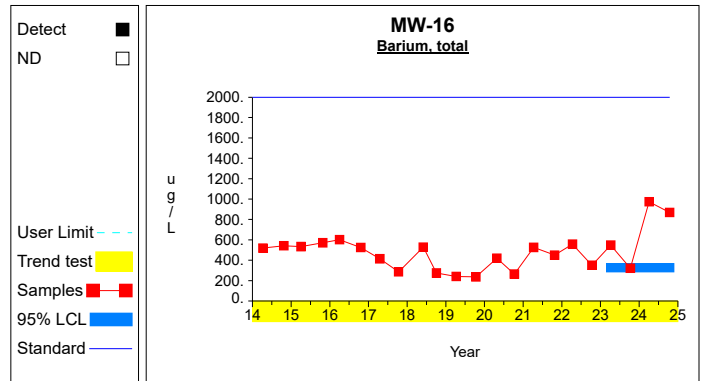


Graph 32

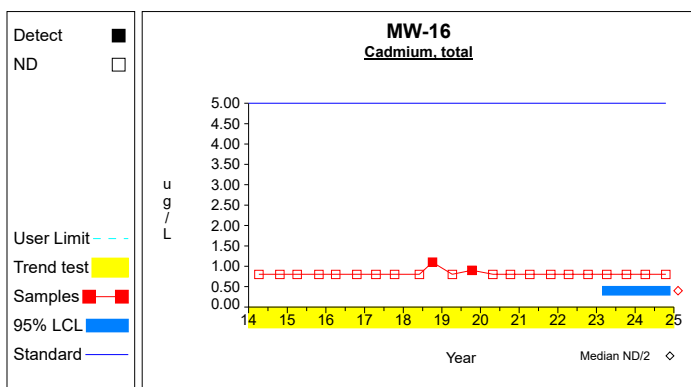
Confidence Limits (Assessment)



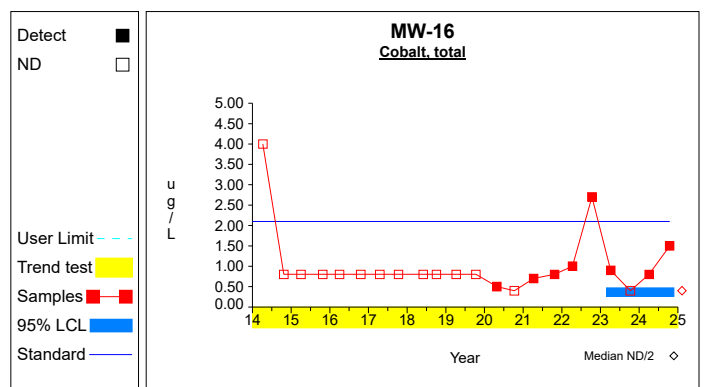
Graph 33



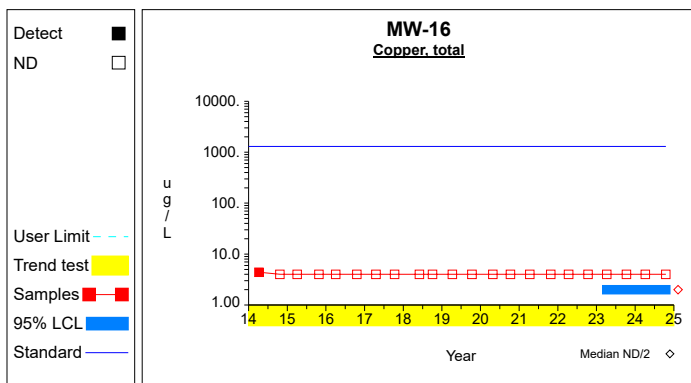
Graph 34



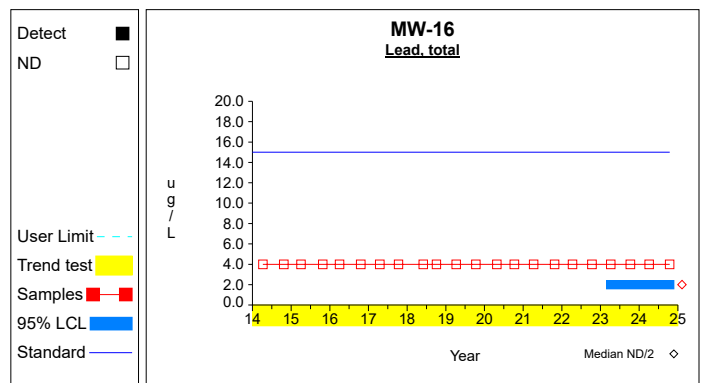
Graph 35



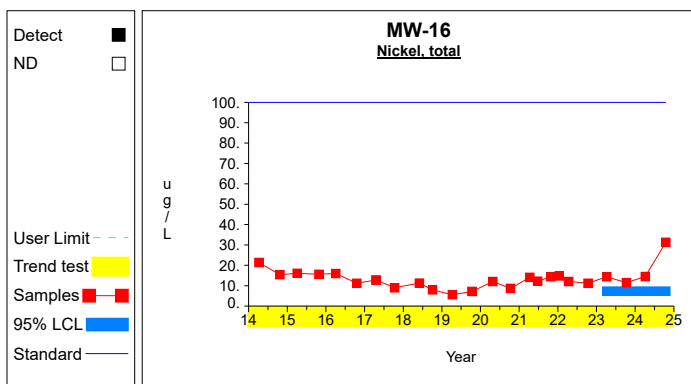
Graph 36



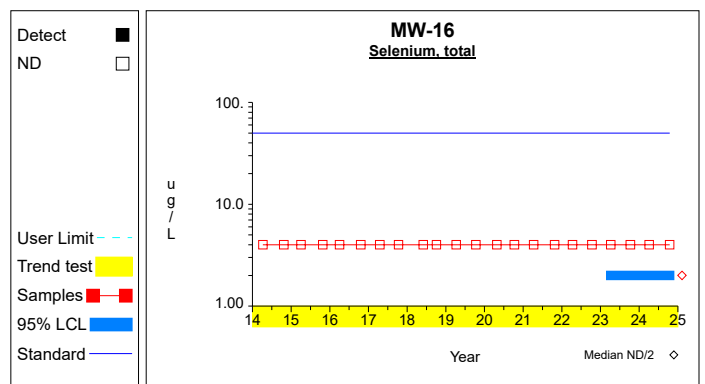
Graph 37



Graph 38

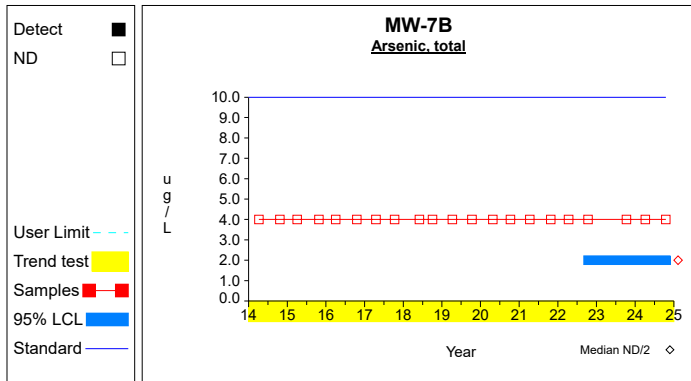


Graph 39

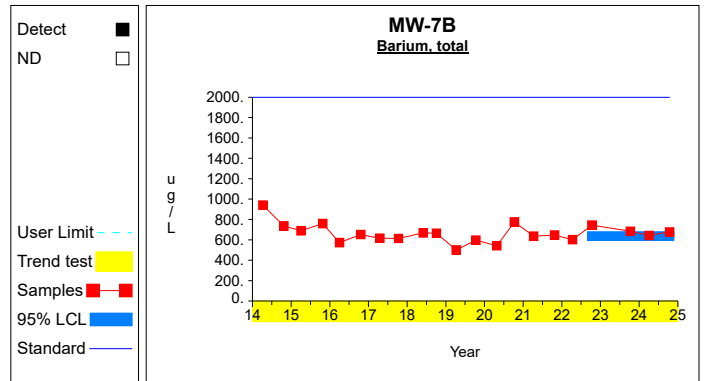


Graph 40

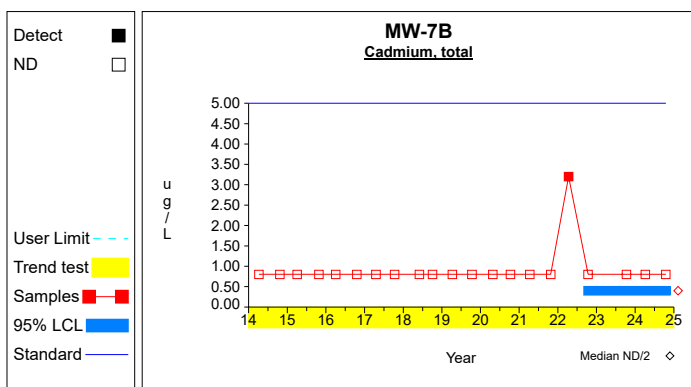
Confidence Limits (Assessment)



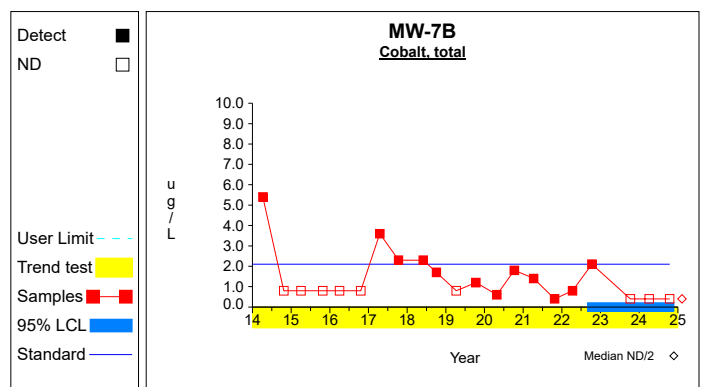
Graph 41



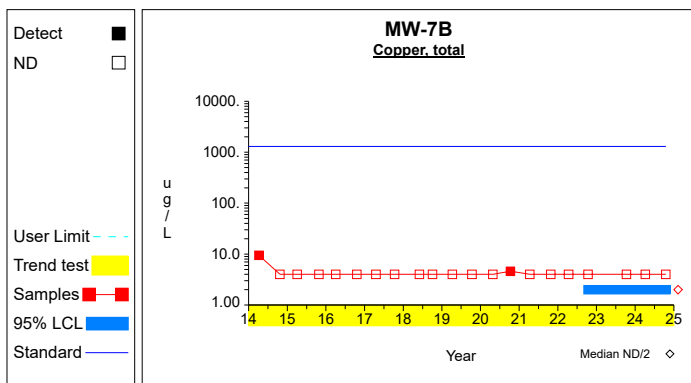
Graph 42



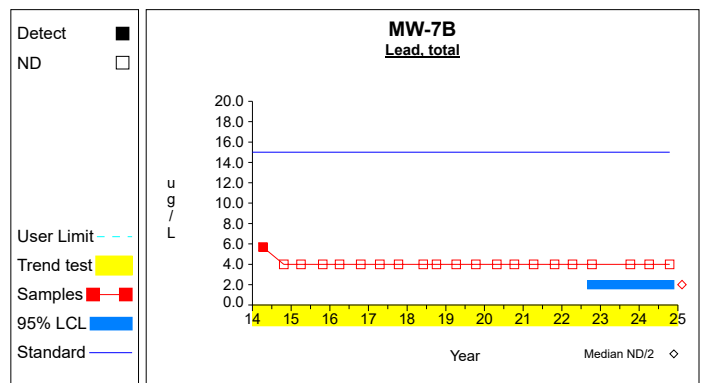
Graph 43



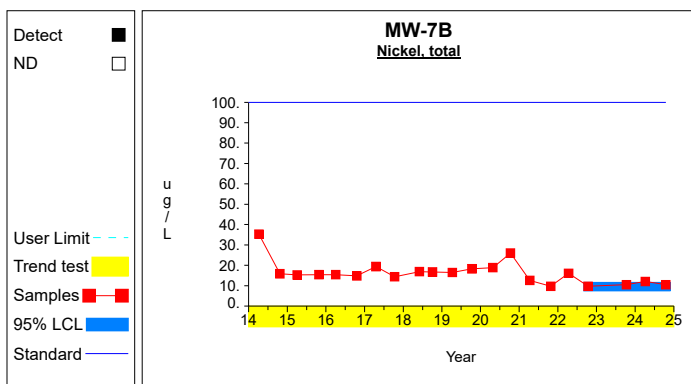
Graph 44



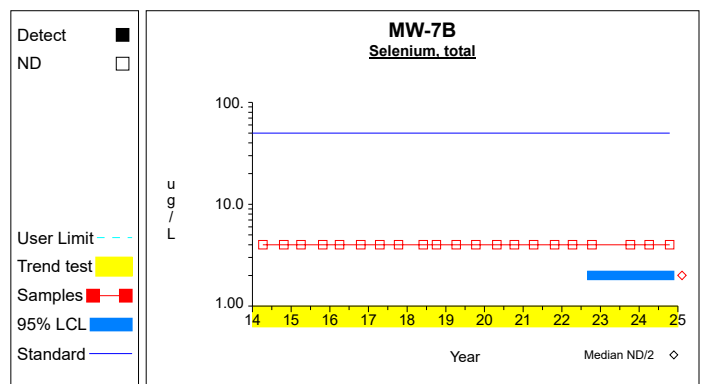
Graph 45



Graph 46

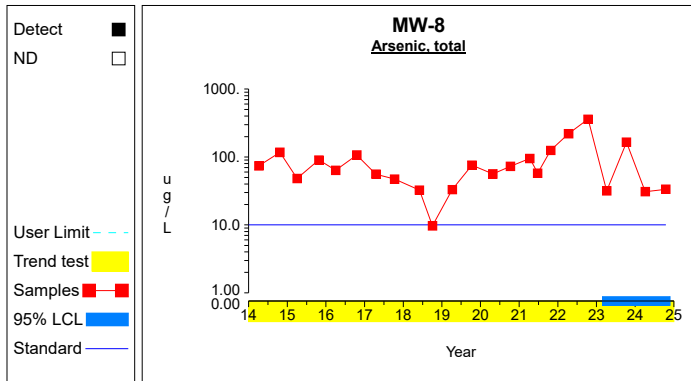


Graph 47

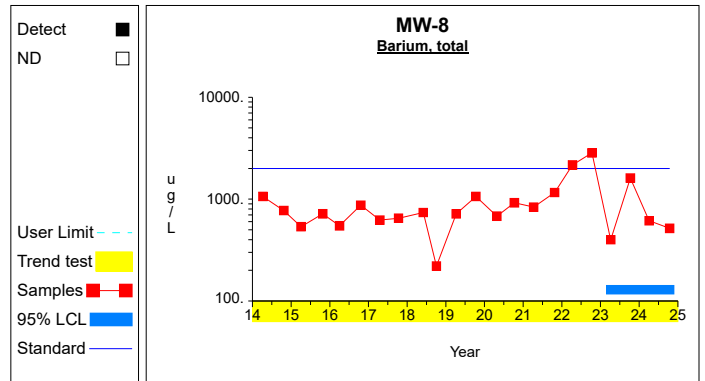


Graph 48

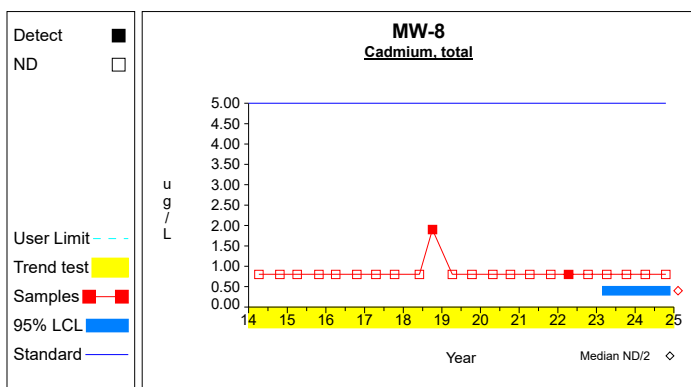
Confidence Limits (Assessment)



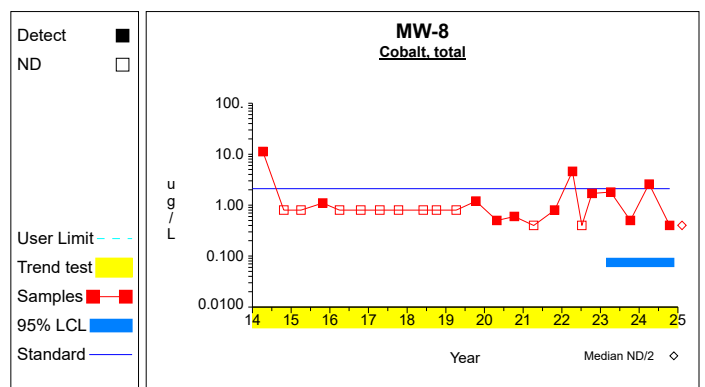
Graph 49



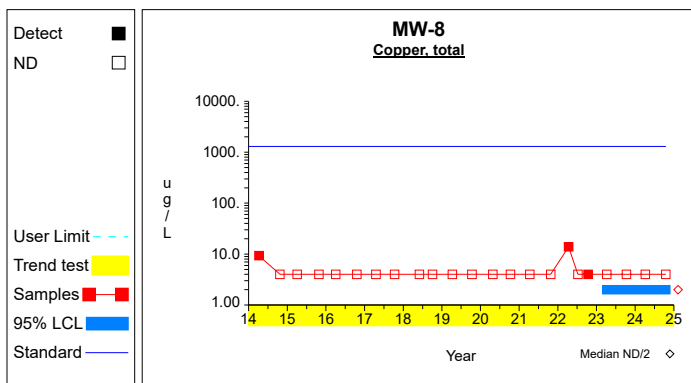
Graph 50



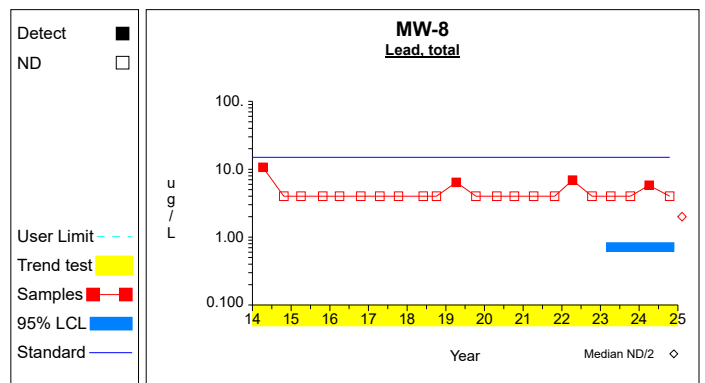
Graph 51



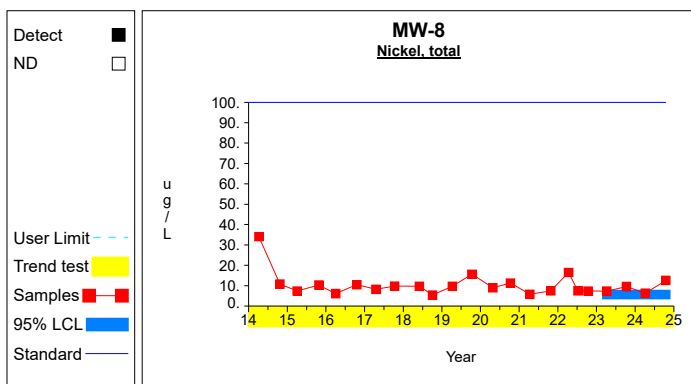
Graph 52



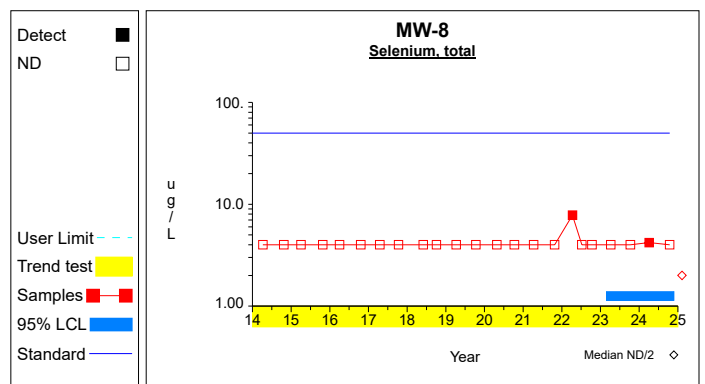
Graph 53



Graph 54

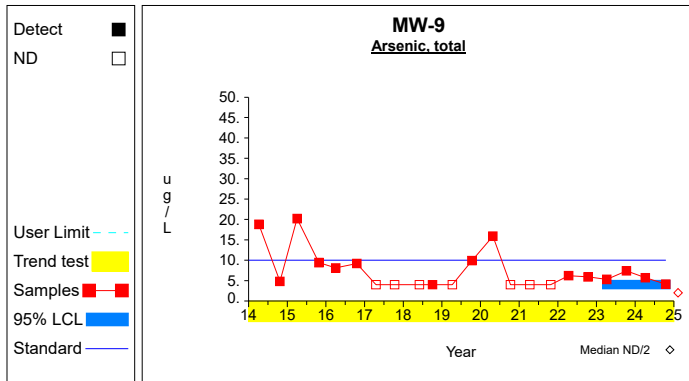


Graph 55

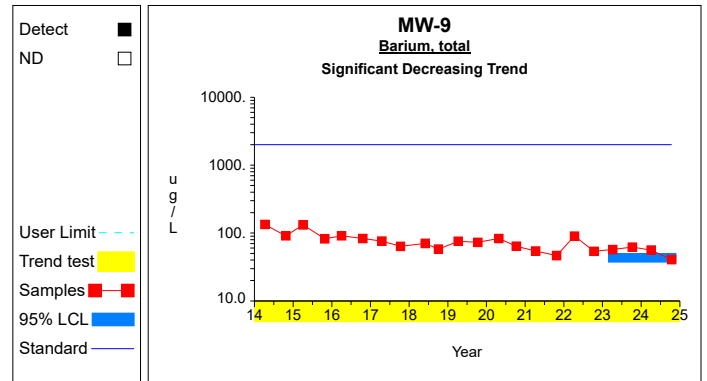


Graph 56

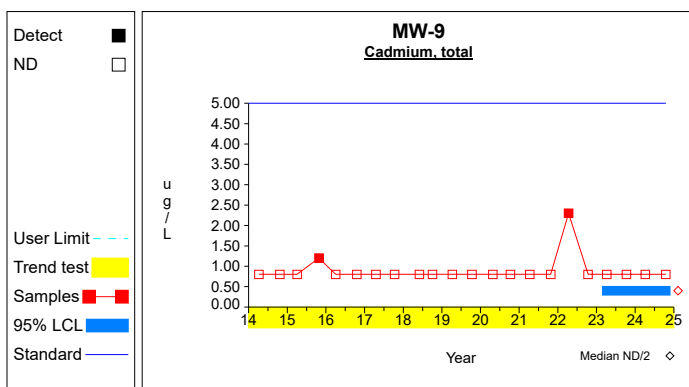
Confidence Limits (Assessment)



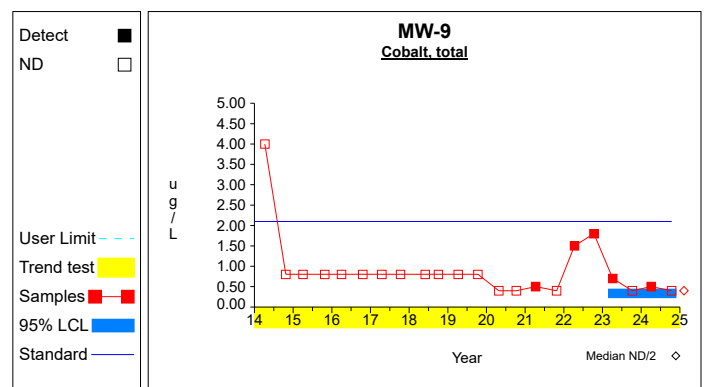
Graph 57



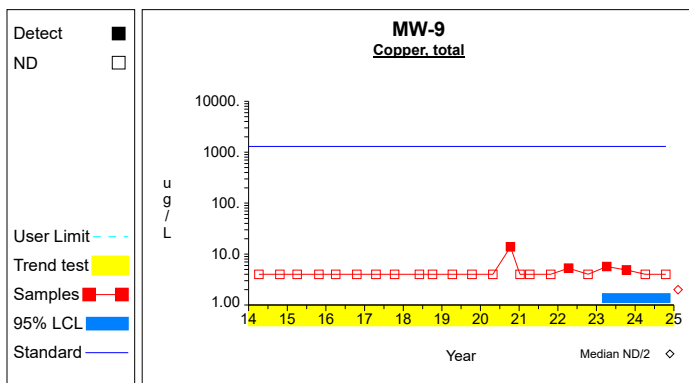
Graph 58



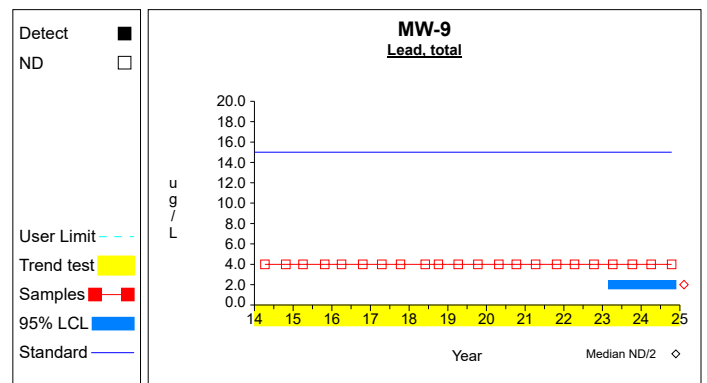
Graph 59



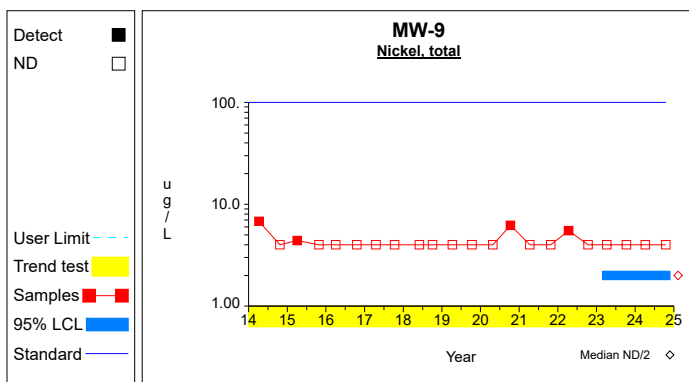
Graph 60



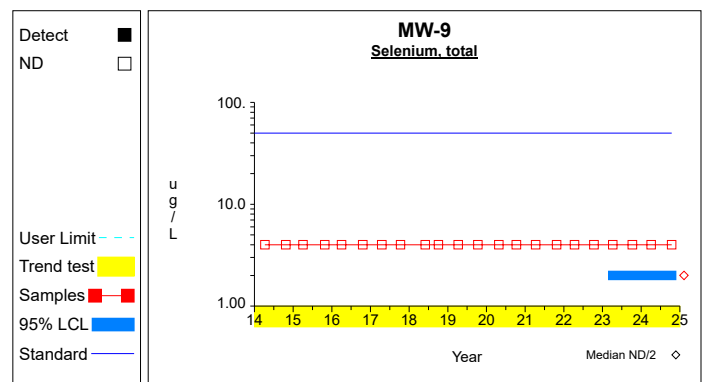
Graph 61



Graph 62



Graph 63



Graph 64

Attachment D

Summary of Historical VOC Detections

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
1,1-dichloroethane	GU-1	6/09/2009		1.2	1.0	ug/L
1,4-dichlorobenzene	GU-1	6/24/2008		1.5	1.0	ug/L
2-butanone (mek)	GU-1	6/24/2008		16.9	5.0	ug/L
4-nitroaniline	GU-1	6/09/2009		8	8	ug/L
Benzene	GU-1	4/22/2008		2.7	1.0	ug/L
Benzene	GU-1	6/24/2008		3.0	1.0	ug/L
Benzene	GU-1	4/14/2009		1.4	1.0	ug/L
Benzene	GU-1	10/28/2009		1.2	1.0	ug/L
Benzene	GU-1	8/05/2013		1.0	1.0	ug/L
Chloroethane	GU-1	4/22/2008		1.2	1.0	ug/L
Chloroethane	GU-1	6/24/2008		1.1	1.0	ug/L
Chloroethane	GU-1	8/01/2008		1.0	1.0	ug/L
Chloroethane	GU-1	10/30/2008		1.1	1.0	ug/L
Chloroethane	GU-1	4/14/2009		1.2	1.0	ug/L
Chloroethane	GU-1	6/09/2009		1.4	1.0	ug/L
Ethylbenzene	GU-1	6/24/2008		3.4	1.0	ug/L
Vinyl chloride	GU-1	4/22/2008		2.0	1.0	ug/L
Vinyl chloride	GU-1	6/24/2008		1.6	1.0	ug/L
Xylenes, total	GU-1	6/24/2008		4.9	2.0	ug/L
Acetone	GU-2	10/11/2017		18.7	10.0	ug/L
Bis(2-ethylhexyl) phthalate	GU-2	4/06/2023		7	6	ug/L
Bis(2-ethylhexyl) phthalate	GU-2	6/27/2023		7	6	ug/L
1,1-dichloroethane	GU-3	10/30/2008		6.4	1.0	ug/L
1,1-dichloroethane	GU-3	10/23/2014		3.1	1.0	ug/L
1,1-dichloroethane	GU-3	4/02/2015		1.7	1.0	ug/L
1,4-dichlorobenzene	GU-3	10/23/2014		1.4	1.0	ug/L
1,4-dichlorobenzene	GU-3	4/02/2015		1.4	1.0	ug/L
Benzene	GU-3	10/30/2008		1.2	1.0	ug/L
Bis(2-ethylhexyl) phthalate	GU-3	4/02/2015		51	8	ug/L
Chloroethane	GU-3	10/30/2008		4.3	1.0	ug/L
Chloroethane	GU-3	10/23/2014		2.8	1.0	ug/L
Chloroethane	GU-3	4/02/2015		9.5	1.0	ug/L
Cis-1,2-dichloroethylene	GU-3	10/30/2008		3.6	1.0	ug/L
Cis-1,2-dichloroethylene	GU-3	10/23/2014		2.0	1.0	ug/L
Trichloroethylene	GU-3	10/30/2008		1.6	1.0	ug/L
Vinyl chloride	GU-3	10/30/2008		3.7	1.0	ug/L
Vinyl chloride	GU-3	10/23/2014		1.1	1.0	ug/L
Chlorobenzene	LPZ-8	10/25/2021		8.2	5.0	ug/L
Acetone	MW-10	10/11/2017		16.7	10.0	ug/L
Bis(2-ethylhexyl) phthalate	MW-10	6/01/2018		7	6	ug/L
Toluene	MW-10	10/20/2010		15.8	1.0	ug/L
Trichloroethylene	MW-10	4/22/2008		2.8	1.0	ug/L
Acetone	MW-11	10/11/2017		17.9	10.0	ug/L
Acetone	MW-14	10/31/2008		10.8	10.0	ug/L
Acetone	MW-14	10/11/2017		16.9	10.0	ug/L
Benzene	MW-14	10/31/2008		2.6	1.0	ug/L
Benzene	MW-14	1/06/2009		1.8	1.0	ug/L
Benzene	MW-14	2/10/2009		2.0	1.0	ug/L
Benzene	MW-14	4/14/2009		2.2	1.0	ug/L
Benzene	MW-14	6/09/2009		2.8	1.0	ug/L
Benzene	MW-14	10/28/2009		1.7	1.0	ug/L
Benzene	MW-14	4/19/2010		1.9	1.0	ug/L
Benzene	MW-14	10/20/2010		1.7	1.0	ug/L
Benzene	MW-14	4/20/2011		1.4	1.0	ug/L
Benzene	MW-14	10/13/2011		2.0	1.0	ug/L
Benzene	MW-14	4/25/2012		2.0	1.0	ug/L
Benzene	MW-14	10/26/2015		1.3	1.0	ug/L
Benzene	MW-14	4/17/2017		1.2	1.0	ug/L
Benzene	MW-14	6/01/2018		1.6	1.0	ug/L
Benzene	MW-14	10/03/2018		1.0	1.0	ug/L
Benzene	MW-14	4/27/2020		1.0	1.0	ug/L
Benzene	MW-14	10/09/2020		1.9	1.0	ug/L
Benzene	MW-14	10/12/2022		1.9	1.0	ug/L
Carbon disulfide	MW-14	8/06/2013		1	1	ug/L
Chlorobenzene	MW-14	10/31/2008		1	1	ug/L
Chlorobenzene	MW-14	4/14/2009		1	1	ug/L
Chlorobenzene	MW-14	6/09/2009		1	1	ug/L
Chlorobenzene	MW-14	10/28/2009		1	1	ug/L
Chloroethane	MW-14	10/31/2008		1.3	1.0	ug/L
Chloroethane	MW-14	1/06/2009		1.2	1.0	ug/L
Chloroethane	MW-14	4/14/2009		1.2	1.0	ug/L
Chloroethane	MW-14	6/09/2009		1.4	1.0	ug/L
Ethylbenzene	MW-14	10/31/2008		1.7	1.0	ug/L
Ethylbenzene	MW-14	1/06/2009		1.8	1.0	ug/L
Ethylbenzene	MW-14	2/10/2009		1.8	1.0	ug/L
Ethylbenzene	MW-14	4/14/2009		12.6	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
Ethylbenzene	MW-14	6/09/2009		12.8	1.0	ug/L
Ethylbenzene	MW-14	10/28/2009		8.8	1.0	ug/L
Ethylbenzene	MW-14	4/19/2010		15.4	1.0	ug/L
Ethylbenzene	MW-14	10/20/2010		2.7	1.0	ug/L
Ethylbenzene	MW-14	4/20/2011		11.2	1.0	ug/L
Ethylbenzene	MW-14	10/13/2011		1.2	1.0	ug/L
Methacrylonitrile	MW-14	4/27/2020		1.2	1.0	ug/L
O,o,o-triethyl phosphorothioate	MW-14	6/09/2009		1.6	.4	ug/L
Vinyl chloride	MW-14	10/31/2008		1.6	1.0	ug/L
Vinyl chloride	MW-14	1/06/2009		1.3	1.0	ug/L
Vinyl chloride	MW-14	2/10/2009		1.6	1.0	ug/L
Vinyl chloride	MW-14	4/14/2009		1.3	1.0	ug/L
Vinyl chloride	MW-14	6/09/2009		1.4	1.0	ug/L
Xylenes, total	MW-14	4/14/2009		2.4	2.0	ug/L
Xylenes, total	MW-14	6/09/2009		2.9	2.0	ug/L
Xylenes, total	MW-14	4/19/2010		2.1	2.0	ug/L
Xylenes, total	MW-14	10/13/2011		2.3	2.0	ug/L
1,1-dichloroethane	MW-15	10/31/2008		2.3	1.0	ug/L
1,1-dichloroethane	MW-15	1/06/2009		1.8	1.0	ug/L
1,1-dichloroethane	MW-15	6/09/2009		1.5	1.0	ug/L
1,1-dichloroethane	MW-15	10/28/2009		1.0	1.0	ug/L
1,1-dichloroethane	MW-15	10/20/2010		3.3	1.0	ug/L
1,1-dichloroethane	MW-15	10/13/2011		3.5	1.0	ug/L
1,1-dichloroethane	MW-15	4/25/2012		1.0	1.0	ug/L
1,1-dichloroethane	MW-15	10/22/2012		1.7	1.0	ug/L
1,1-dichloroethane	MW-15	8/06/2013		1.1	1.0	ug/L
1,1-dichloroethane	MW-15	10/23/2014		1.6	1.0	ug/L
1,1-dichloroethane	MW-15	10/26/2015		1.4	1.0	ug/L
Benzene	MW-15	10/09/2023		1	1	ug/L
Bis(2-ethylhexyl) phthalate	MW-15	4/27/2020		11	6	ug/L
Chloroethane	MW-15	10/31/2008		2.0	1.0	ug/L
Chloroethane	MW-15	1/06/2009		1.4	1.0	ug/L
Chloroethane	MW-15	10/20/2010		1.8	1.0	ug/L
Chloroethane	MW-15	10/13/2011		2.6	1.0	ug/L
Chloroethane	MW-15	10/22/2012		1.7	1.0	ug/L
Chloroethane	MW-15	10/23/2014		1.6	1.0	ug/L
Chloroethane	MW-15	4/02/2015		9.1	1.0	ug/L
Chloroethane	MW-15	10/26/2015		1.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-15	10/31/2008		1.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-15	10/20/2010		2.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-15	10/13/2011		1.4	1.0	ug/L
Vinyl chloride	MW-15	10/20/2010		1.7	1.0	ug/L
Vinyl chloride	MW-15	10/13/2011		1.8	1.0	ug/L
Acetone	MW-16	10/11/2017		16.3	10.0	ug/L
Bis(2-ethylhexyl) phthalate	MW-16	4/11/2022		10	6	ug/L
Xylenes, total	MW-16	10/28/2009		2	2	ug/L
Acetone	MW-17	10/11/2017		20.1	10.0	ug/L
Acetone	MW-18	4/29/2020		14.2	10.0	ug/L
Acetone	MW-3AR	4/25/2012		33.8	10.0	ug/L
Acetone	MW-3AR	10/22/2012		28.0	10.0	ug/L
Acetone	MW-3AR	10/11/2017		19.2	10.0	ug/L
Bis(2-ethylhexyl) phthalate	MW-3AR	10/13/2011		10	8	ug/L
Bis(2-ethylhexyl) phthalate	MW-3AR	4/25/2012		10	8	ug/L
Dimethoate	MW-3AR	10/13/2011		.9	.4	ug/L
Famphour	MW-3AR	10/13/2011		.9	.4	ug/L
Bis(2-ethylhexyl) phthalate	MW-6B	4/08/2019		8	6	ug/L
Bis(2-ethylhexyl) phthalate	MW-6B	4/08/2019		29	6	ug/L
Bis(2-ethylhexyl) phthalate	MW-6B	4/27/2020		13	6	ug/L
1,1-dichloroethane	MW-7A	6/24/2008		3.7	1.0	ug/L
1,1-dichloroethane	MW-7A	8/01/2008		4.5	1.0	ug/L
1,1-dichloroethane	MW-7A	10/31/2008		5.5	1.0	ug/L
1,1-dichloroethane	MW-7A	1/06/2009		4.4	1.0	ug/L
1,1-dichloroethane	MW-7A	6/09/2009		4.9	1.0	ug/L
1,1-dichloroethane	MW-7A	4/19/2010		1.4	1.0	ug/L
1,1-dichloroethane	MW-7A	10/20/2010		3.2	1.0	ug/L
1,1-dichloroethane	MW-7A	4/07/2014		2.5	1.0	ug/L
1,1-dichloroethane	MW-7A	10/19/2016		2.2	1.0	ug/L
1,1-dichloroethane	MW-7A	10/11/2017		3.2	1.0	ug/L
1,1-dichloroethane	MW-7A	6/01/2018		2.2	1.0	ug/L
1,1-dichloroethane	MW-7A	10/03/2018		2.6	1.0	ug/L
1,1-dichloroethane	MW-7A	10/11/2019		1.1	1.0	ug/L
Acetone	MW-7A	10/11/2017		21.8	10.0	ug/L
Chloroethane	MW-7A	6/24/2008		1.1	1.0	ug/L
Chloroethane	MW-7A	8/01/2008		1.7	1.0	ug/L
Chloroethane	MW-7A	10/31/2008		2.1	1.0	ug/L
Chloroethane	MW-7A	1/06/2009		1.5	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
Chloroethane	MW-7A	6/09/2009		1.6	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7A	6/24/2008		3.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7A	8/01/2008		3.7	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7A	10/31/2008		5.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7A	1/06/2009		3.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7A	6/09/2009		3.7	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7A	10/20/2010		2.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7A	4/07/2014		2.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7A	10/19/2016		2.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7A	10/11/2017		3.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7A	6/01/2018		1.7	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7A	10/03/2018		2.5	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7A	10/11/2019		2.0	1.0	ug/L
Vinyl chloride	MW-7A	6/24/2008		2.4	1.0	ug/L
Vinyl chloride	MW-7A	8/01/2008		2.7	1.0	ug/L
Vinyl chloride	MW-7A	10/31/2008		3.8	1.0	ug/L
Vinyl chloride	MW-7A	1/06/2009		2.5	1.0	ug/L
Vinyl chloride	MW-7A	6/09/2009		2.6	1.0	ug/L
Vinyl chloride	MW-7A	10/20/2010		1.5	1.0	ug/L
Vinyl chloride	MW-7A	4/07/2014		1.1	1.0	ug/L
Vinyl chloride	MW-7A	10/11/2017		1.3	1.0	ug/L
Vinyl chloride	MW-7A	6/01/2018		1.1	1.0	ug/L
1,1-dichloroethane	MW-7B	4/22/2008		3.2	1.0	ug/L
1,1-dichloroethane	MW-7B	6/24/2008		3.2	1.0	ug/L
1,1-dichloroethane	MW-7B	8/01/2008		2.8	1.0	ug/L
1,1-dichloroethane	MW-7B	10/31/2008		5.3	1.0	ug/L
1,1-dichloroethane	MW-7B	1/06/2009		2.5	1.0	ug/L
1,1-dichloroethane	MW-7B	4/13/2009		3.1	1.0	ug/L
1,1-dichloroethane	MW-7B	6/09/2009		3.0	1.0	ug/L
1,1-dichloroethane	MW-7B	10/28/2009		2.7	1.0	ug/L
1,1-dichloroethane	MW-7B	4/19/2010		3.3	1.0	ug/L
1,1-dichloroethane	MW-7B	10/20/2010		2.4	1.0	ug/L
1,1-dichloroethane	MW-7B	10/13/2011		1.6	1.0	ug/L
1,1-dichloroethane	MW-7B	4/25/2012		2.7	1.0	ug/L
1,1-dichloroethane	MW-7B	10/22/2012		1.2	1.0	ug/L
1,1-dichloroethane	MW-7B	4/15/2013		2.1	1.0	ug/L
1,1-dichloroethane	MW-7B	8/06/2013		1.9	1.0	ug/L
1,1-dichloroethane	MW-7B	4/07/2014		1.4	1.0	ug/L
Chloroethane	MW-7B	10/31/2008		1.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7B	6/24/2008		1.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7B	10/31/2008		4.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7B	4/13/2009		1.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7B	6/09/2009		1.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7B	10/28/2009		1.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7B	4/19/2010		1.5	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7B	10/20/2010		1.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7B	4/25/2012		1.0	1.0	ug/L
Vinyl chloride	MW-7B	4/22/2008		2.5	1.0	ug/L
Vinyl chloride	MW-7B	6/24/2008		2.8	1.0	ug/L
Vinyl chloride	MW-7B	8/01/2008		2.3	1.0	ug/L
Vinyl chloride	MW-7B	10/31/2008		3.7	1.0	ug/L
Vinyl chloride	MW-7B	1/06/2009		1.8	1.0	ug/L
Vinyl chloride	MW-7B	4/13/2009		2.3	1.0	ug/L
Vinyl chloride	MW-7B	6/09/2009		2.3	1.0	ug/L
Vinyl chloride	MW-7B	10/28/2009		2.0	1.0	ug/L
Vinyl chloride	MW-7B	4/19/2010		2.5	1.0	ug/L
Vinyl chloride	MW-7B	10/20/2010		1.5	1.0	ug/L
Vinyl chloride	MW-7B	10/13/2011		1.2	1.0	ug/L
Vinyl chloride	MW-7B	4/25/2012		1.8	1.0	ug/L
Vinyl chloride	MW-7B	4/15/2013		1.5	1.0	ug/L
Vinyl chloride	MW-7B	8/06/2013		1.3	1.0	ug/L
Vinyl chloride	MW-7B	4/07/2014		1.2	1.0	ug/L
1,1-dichloroethane	MW-8	4/22/2008		1.6	1.0	ug/L
1,1-dichloroethane	MW-8	6/24/2008		2.3	1.0	ug/L
1,1-dichloroethane	MW-8	8/01/2008		3.0	1.0	ug/L
1,1-dichloroethane	MW-8	10/31/2008		1.3	1.0	ug/L
1,1-dichloroethane	MW-8	4/13/2009		1.2	1.0	ug/L
1,1-dichloroethane	MW-8	6/09/2009		1.9	1.0	ug/L
1,1-dichloroethane	MW-8	10/22/2012		1.0	1.0	ug/L
1,1-dichloroethane	MW-8	8/06/2013		1.4	1.0	ug/L
1,1-dichloroethane	MW-8	4/07/2014		1.3	1.0	ug/L
Chloroethane	MW-8	8/01/2008		1.9	1.0	ug/L
Chloroethane	MW-8	6/09/2009		1.0	1.0	ug/L
Chloroethane	MW-8	8/06/2013		1.0	1.0	ug/L
Chloroethane	MW-8	4/07/2014		1.3	1.0	ug/L
Chloroethane	MW-8	10/03/2018		1.0	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-8	6/24/2008		1.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-8	8/01/2008		2.3	1.0	ug/L
Cis-1,2-dichloroethylene	MW-8	10/31/2008		1.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW-8	6/09/2009		1.0	1.0	ug/L
Vinyl chloride	MW-8	8/01/2008		1.2	1.0	ug/L
Acetone	MW-9	10/11/2017		11.2	10.0	ug/L

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

Attachment E

Assessment Statistics for VOC Detections

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
Benzene	ug/L	MW-14	4	0.500	0.000	1.176	0.500	0.500	5.000	
Benzene	ug/L	MW-15	4	0.625	0.250	1.176	0.331	0.919	5.000	

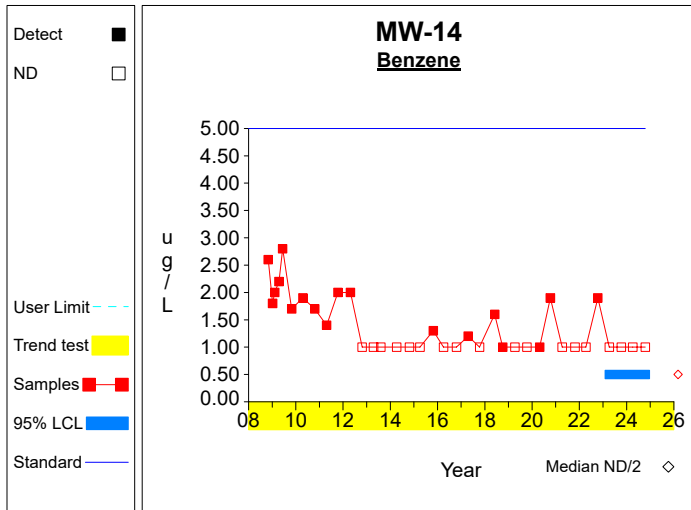
* - Insufficient Data

** - Significant Exceedance

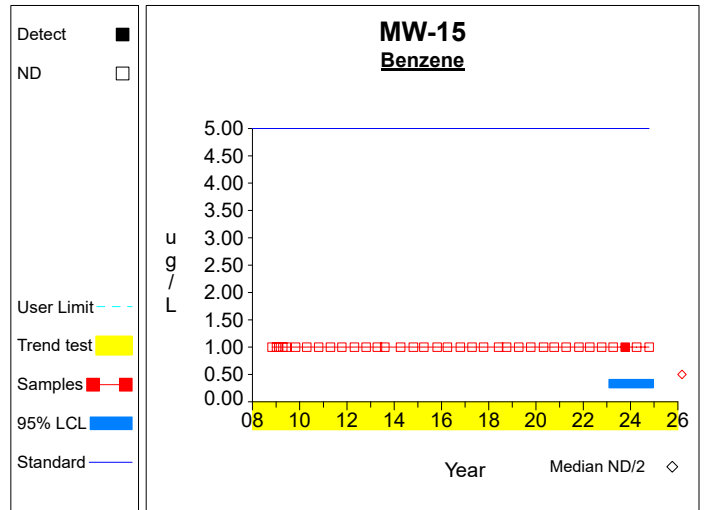
LCL = Lower Confidence Limit

UCL = Upper Confidence Limit

Confidence Limits (Assessment)



Graph 1



Graph 2

Worksheet 6 - Assessment Monitoring
Benzene (ug/L) at MW-14

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 2.0 / 4$ $= 0.5$	Compute the mean of the last 4 measurements.
2	$S = ((\text{sum}[X^2] - \text{sum}[X]^2/N) / (N-1))^{1/2}$ $= ((1.0 - 4.0/4) / (4-1))^{1/2}$ $= 0.0$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 0.5 - 2.353 * 0.0/4^{1/2}$ $= 0.5$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 0.5 + 2.353 * 0.0/4^{1/2}$ $= 0.5$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 36 * (36-1) / 2$ $= 630$	Number of sample pairs during trend detection period.
6	$S = -0.082$	Sen's estimator of trend.
7	$\text{var}(S) = 4683.667$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (630 \pm 2.576 * 4683.667^{1/2}) / 2$ $= [226.853, 403.147]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [-0.132, 0.0]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Benzene (ug/L) at MW-15

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 2.5 / 4$ $= 0.625$	Compute the mean of the last 4 measurements.
2	$S = ((\text{sum}[X^2] - \text{sum}[X]^2/N) / (N-1))^{1/2}$ $= ((1.75 - 6.25/4) / (4-1))^{1/2}$ $= 0.25$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 0.625 - 2.353 * 0.25/4^{1/2}$ $= 0.331$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 0.625 + 2.353 * 0.25/4^{1/2}$ $= 0.919$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 36 * (36-1) / 2$ $= 630$	Number of sample pairs during trend detection period.
6	$S = 0.0$	Sen's estimator of trend.
7	$\text{var}(S) = 431.667$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (630 \pm 2.576 * 431.667^{1/2}) / 2$ $= [288.24, 341.76]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [0.0, 0.0]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Appendix D.3 –
Field Turbidity Summary Table

Northern Plains Regional Landfill

Field Turbidity Over Time

No-Purge Sampling

	10/23/14	1/16/15	4/2/15	9/15/15	10/26/15	4/1/16	10/19/16	4/17/17	10/11/17	6/1/18	10/3/18	1/3/19
Well	NTU	NTU	NTU	NTU	NTU	NTU	NTU	NTU	NTU	NTU	NTU	NTU
3AR	0.92		8.74		22	40.11	13.9	1.98	9.45	18.58	27.40	
6B	0.62		1.54		4.93	0.29	1.78	0.54	0.49	1.04	1.97	8.94
7A	Dry		27.81		Dry	2.77	4.01	3.27	0.89	2.97	2.96	
7B	3.26		1.14		6.39	1.95	2.77	19.53	3.19	16.98	4.42	
8	21.21		7.63		2.65	8.60	40.8	16.23	2.51	25.58	15.10	
9	8.54		112.2		18.4	107.20	17.6	0.81	1.93	2.32	7.43	
10	0.38		0.22		2.19	0.56	2.34	6.87	8.22	1.77	1.93	
11	0.58	3.60	3.57	2.27	3.43	4.66	1.58	5.07	0.5	7.2	3.29	
12	8.59	2.30	2.63	9.46	1.4	0.96	241	334.50	72.62	6.15	18.40	
13												
14	10.44		167.9		9.16	23.76	41.5	34.15	21.08	265.2	6.71	
15	871.7		1.75		4.5	1.59	74.7	7.07	2.96	9.33	29.50	
16	10.83		4.85		42.1	12.10	87.8	7.91	41.14	78.7	4.29	
17	6.38	250.00	192.1	11.72	5.86	318.40	42.9	164.10	8.13	1.35	6.88	
GU#1						0.83	13.9	8.97	Dry	2.79	2.82	
GU#2	0.97		0.26		2.92	3.85	1.34	1.09	2.59	3.1	21.40	6.43
Max	871.70	250.00	192.10	11.72	42.10	318.40	241.00	334.50	72.62	265.20	29.50	8.94
Min	0.38	2.30	0.22	2.27	1.40	0.29	1.34	0.54	0.49	1.04	1.93	6.43
Median	6.38	3.60	4.21	9.46	4.93	3.85	13.90	7.07	3.08	6.15	6.71	7.69
Average	72.65	85.30	38.02	7.82	9.69	35.18	39.19	40.81	12.55	29.54	10.30	7.69

Northern
Field Turbic

No-Purge S

	4/8/19	10/11/19	4/27/20	10/9/20	1/8/21	4/9/21	6/23/21	10/25/21	1/13/22	4/11/22	7/6/22	10/12/22	4/6/23
Well	NTU	NTU	NTU	NTU	NTU	NTU	NTU	NTU	NTU	NTU	NTU	NTU	NTU
3AR		5.77	5.1			1.52		29.48					1.9
6B	1.61	0.7	1.15			1.69		2.29		4.88			3.52
7A	1.95	2.76	2.58			3.72		2.14		1.09			1.44
7B	2.03	5.05	11	8.59		1.79		2.02		5.84		1.69	2.11
8	11.34	1.94	7.07	16.20		520.8	16.9	522.1		8.71	37.49	421.5	438.5
9	4.83	16.6	49.8	4.67	10.9	2.83		3.9		135		3.91	8.26
10	6.06	1.14	1.01	1.95		2.98		1.85		1.38		1.19	1.29
11	1.49	12.8	0.86	14.75		6.17		4.38		3.15		5.23	1.73
12	4.14	14.7	3.83	2.70		1.77		3.12		2.09		1.37	6.81
13													
14	12.11	16.2	119	22.98		3.91		5.02		56.7		5.88	1.45
15	4.68	61.7	3.37	2.89		35.12		2.51		3.73		17.86	4.38
16	6.24	17.4	25.3	16.62		16.23	8.04	58.78	85.7	40.6		3.72	28.76
17	17.30	4.47	79.3	1.93		9.28		4.08		56.7		5.02	8.64
GU#1	0.55	2.00	6.01	3.20		1.96				10.6	3.27	1.43	1.77
GU#2	1.07	14.00	16.9	3.36		1.71		1.62	5.78	0.98		2.71	1.16
Max	17.30	61.70	119.00	22.98	10.90	520.80	16.90	522.10	85.70	135.00	37.49	421.50	438.50
Min	0.55	0.70	0.86	1.93	10.90	1.52	8.04	1.62	5.78	0.98	3.27	1.19	1.16
Median	4.41	5.77	6.01	4.02	10.90	2.98	12.47	3.51	45.74	5.36	20.38	3.82	2.11
Average	5.39	11.82	22.15	8.32	10.90	40.77	12.47	45.95	45.74	23.68	20.38	39.29	34.11

Northern
Field Turbic

No-Purge S

	6/27/23	10/9/23	4/4/24	10/16/24	Max	Min	Ave	Std Dev
Well	NTU	NTU	NTU	NTU				
3AR			3.00	6.01	40.11	0.92	12.24	11.93
6B			3.23		8.94	0.29	2.29	2.18
7A			2.77		27.81	0.89	4.21	6.59
7B		3.54	6.09	2.42	19.53	1.14	5.32	4.99
8		569.4	410.80	40.64	569.40	1.94	137.55	210.93
9		5.69	5.23	4.01	135.00	0.81	24.18	39.84
10		2.87	2.87	3.99	8.22	0.22	2.53	2.13
11		9.81	7.28	4.36	14.75	0.50	4.69	3.70
12		6.3	2.74	5.49	334.50	0.96	32.74	83.00
13	2.29	1.47	3.84	2.87	3.84	1.47	2.62	1.00
14		8.64	25.62	3.58	265.20	1.45	41.00	65.76
15		4.06	4.77	3.62	871.70	1.59	54.85	188.26
16		8.12	103.60	13.01	103.60	3.72	31.38	30.84
17		8.78	28.33	7.86	318.40	1.35	53.89	88.95
GU#1		5.76	3.14	4.57	13.90	0.55	4.33	3.69
GU#2	1.64	1.35	1.83	2.82	21.40	0.26	4.20	5.43
Max	2.29	569.40	410.80	40.64				
Min	1.64	1.35	1.83	2.42				
Median	1.97	5.76	4.31	4.19				
Average	1.97	48.91	38.45	7.52				

Appendix D.4 –
Running Summary of Prediction Limit Exceedances

Spring 2014		Fall 2014	
MW-7A	1,1-dichloroethane	MW-7A	None
	cis-1,1-dichloroethene		
	vinyl chloride		
MW-7B	Barium	MW-7B	None
	1,1-dichloroethane		
	vinyl chloride		
MW-8	Arsenic	MW-8	Arsenic
	Barium		
	1,1-dichloroethane		
	chloroethane		
MW-14	Arsenic	MW-14	Barium
	Barium		
MW-15	None	MW-15	1,1-dichloroethane
			chloroethane
GU-3	Not Sampled	GU-3	Arsenic
			1,1-dichloroethane
			1,4-dichlorobenzene
			chloroethane
			cis-1,1-dichloroethene
			vinyl chloride

Spring 2015		Fall 2015	
MW-3AR	Cadmium	MW-3AR	None
MW-7A	Nickel	MW-7A	None
MW-8	None	MW-8	Arsenic
MW-14	Nickel	MW-14	Arsenic
			Barium
			Benzene
MW-15	Chloroethane	MW-15	Nickel
			1,1-dichloroethane
			Chloroethane
GU-3	1,1-dichloroethane	GU-3	Connected to LCS
	1,4-dichlorobenzene		
	Bis(2-ethylhexyl)phthalate		
	Chloroethane		

Spring 2016		Fall 2016	
MW-3AR	None	MW-3AR	Cobalt

MW-7A	None	MW-7A	Nickel
			1,1-dichloroethane
			Cis-1,2-dichloroethene
MW-7B	None	MW-7B	Barium
			Nickel
MW-8	None	MW-8	Arsenic
			Barium
MW-10	None	MW-10	Copper
MW-14	Arsenic	MW-14	Barium
	Barium		Cadmium
			Cobalt
MW-15	None	MW-15	Nickel

Spring 2017		Fall 2017	
MW-3AR	Cobalt	MW-3AR	Cadmium
MW-7A	Cadmium	MW-7A	Nickel
	Cobalt		1,1-dichloroethane
	Nickel		Cis-1,2-dichloroethene
			Vinyl Chloride
MW-7B	Barium	MW-7B	Barium
	Cobalt		Cobalt
	Nickel		Nickel
MW-8	Arsenic	MW-8	Barium
	Barium		
MW-10	Cobalt	MW-10	None
	Nickel		
MW-14	Arsenic	MW-14	Barium
	Barium		Cobalt
	Cobalt		Nickel
	Nickel		
	Benzene		
MW-15	Cobalt	MW-15	Nickel
	Nickel		

Spring 2018		Fall 2018	
MW-3AR	none	MW-3AR	Copper
MW-6B	none	MW-6B	zinc
MW-7A	Nickel	MW-7A	Nickel

	1,1-dichloroethane		Zinc
	Cis-1,2-dichloroethene		1,1-dichloroethane
	Vinyl Chloride		Cis-1,2-dichloroethene
MW-7B	Barium	MW-7B	Barium
	Cobalt		Cobalt
	Nickel		Nickel
MW-8	Barium	MW-8	Cadmium
			Chloroethane
MW-10	Bis(2-ethylhexyl)phthalate	MW-10	Cadmium
			Cobalt
MW-14	Arsenic	MW-14	Barium
	Barium		Cobalt
	Cobalt		Benzene
	Benzene		
MW-15	Nickel	MW-15	Nickel

Spring 2019		Fall 2019	
MW-3AR	none	MW-3AR	none
MW-6B	bis(2-ethylhexyl)phthalate	MW-6B	none
MW-7A	Nickel	MW-7A	Nickel
			1,1-dichloroethane
			Cis-1,2-dichloroethene
MW-7B	Nickel	MW-7B	Nickel
MW-8	Lead	MW-8	Arsenic
			Barium
			Nickel
MW-10	Copper	MW-10	Copper
			Nickel
MW-14	Barium	MW-14	Barium
MW-15	Cobalt	MW-15	Nickel
	Nickel		

Spring 2020		Fall 2020	
MW-3AR	none	MW-3AR	Dry
MW-6B	bis(2-ethylhexyl)phthalate	MW-6B	Dry
MW-7A	Nickel	MW-7A	Dry
MW-7B	Nickel	MW-7B	Nickel
MW-8	Arsenic	MW-8	Arsenic Barium
MW-10	Nickel	MW-10	Cobalt Nickel
MW-14	Barium Cobalt Nickel Benzene Methylacrylonitrile	MW-14	Barium Benzene
MW-15	Nickel bis(2-ethylhexyl)phthalate	MW-15	Nickel

Spring 2021		Fall 2021	
MW-3AR	none	MW-3AR	none
MW-6B	none	MW-6B	none
MW-7A	Nickel	MW-7A	Nickel
MW-7B	none	MW-7B	none
MW-8	Arsenic Barium	MW-8	Arsenic Barium
MW-10	Copper	MW-10	none
MW-14	none	MW-14	none
MW-15	Nickel	MW-15	Nickel
MW-16	none	MW-16	Nickel
GU-2	none	GU-2	none

Spring 2022		Fall 2022	
MW-7A	Nickel	MW-7A	Dry
MW-7B	Nickel	MW-7B	Barium
MW-8	Arsenic	MW-8	Arsenic
	Barium		Barium
	Lead		
MW-10	None	MW-10	None
MW-14	Arsenic	MW-14	Barium
	Barium		Cobalt
MW-15	None	MW-15	Nickel
MW-16	Bis(2-ethylhexyl)phthalate	MW-16	None
GU-2	None	GU-2	Zinc

Spring 2023		Fall 2023	
MW-3AR	Copper	MW-3AR	Dry
MW-6B	Selenium	MW-6B	Dry
MW-7A	Nickel	MW-7A	Dry
MW-8	None	MW-8	Arsenic
			Barium
MW-10	None	MW-10	Copper
MW-14	None	MW-14	Barium
MW-15	None	MW-15	Nickel
			Benzene
GU-2	Bis(2-ethylhexyl)phthalate	GU-2	None

Spring 2024		Fall 2024	
MW-7B	None	MW-7B	Barium
MW-8	Lead	MW-8	None
	Selenium		
MW-10	None	MW-10	Cadmium
			Copper
			Nickel
MW-14	None	MW-14	Barium
MW-15	Nickel	MW-15	Nickel
MW-16	Barium	MW-16	Barium
			Nickel

Appendix E

Laboratory Reports for Reporting Period *With Chain of Custody*



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HD0545

Project Description

6021-

For:

Todd Whipple

HLW Engineering

PO Box 314

Story City, IA 50248

Heather Murphy

Customer Relationship Specialist

Monday, April 29, 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.

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Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HD0545

HLW Engineering

Project Name: 6021-

Todd Whipple
PO Box 314
Story City, IA 50248

Project / PO Number: N/A
Received: 04/05/2024
Reported: 04/29/2024

Sample Summary Report

<u>Sample Name</u>	<u>Laboratory ID</u>	<u>Client Matrix</u>	<u>Sample Type</u>	<u>Sample Begin</u>	<u>Sample Taken</u>	<u>Lab Received</u>
MW-11 (up)	1HD0545-01	Aqueous	GRAB		04/04/24 10:26	04/05/24 12:13
MW-12 (up)	1HD0545-02	Aqueous	GRAB		04/04/24 10:39	04/05/24 12:13
MW-17 (up)	1HD0545-03	Aqueous	GRAB		04/04/24 11:24	04/05/24 12:13
MW-3AR	1HD0545-04	Aqueous	GRAB		04/04/24 14:21	04/05/24 12:13
MW-6B	1HD0545-05	Aqueous	GRAB		04/04/24 14:47	04/05/24 12:13
MW-7A	1HD0545-06	Aqueous	GRAB		04/04/24 13:27	04/05/24 12:13
MW-7B	1HD0545-07	Aqueous	GRAB		04/04/24 13:11	04/05/24 12:13
MW-8	1HD0545-08	Aqueous	GRAB		04/04/24 12:25	04/05/24 12:13
MW-9	1HD0545-09	Aqueous	GRAB		04/04/24 11:49	04/05/24 12:13
MW-10	1HD0545-10	Aqueous	GRAB		04/04/24 09:03	04/05/24 12:13
MW-14	1HD0545-11	Aqueous	GRAB		04/04/24 14:00	04/05/24 12:13
MW-15	1HD0545-12	Aqueous	GRAB		04/04/24 12:53	04/05/24 12:13
MW-16	1HD0545-13	Aqueous	GRAB		04/04/24 12:10	04/05/24 12:13
GU-1	1HD0545-14	Aqueous	GRAB		04/04/24 11:57	04/05/24 12:13
GU-2	1HD0545-15	Aqueous	GRAB		04/04/24 14:34	04/05/24 12:13
Duplicate	1HD0545-16	Aqueous	GRAB		04/04/24 00:00	04/05/24 12:13
MW-13 (up)	1HD0545-17	Aqueous	GRAB		04/04/24 10:51	04/05/24 12:13
MW-18 (up)	1HD0545-18	Aqueous	GRAB		04/04/24 10:02	04/05/24 12:13
MW-19 (up)	1HD0545-19	Aqueous	GRAB		04/04/24 10:08	04/05/24 12:13
MW-20 (up)	1HD0545-20	Aqueous	GRAB		04/04/24 09:33	04/05/24 12:13
MW-21 (up)	1HD0545-21	Aqueous	GRAB		04/04/24 09:46	04/05/24 12:13



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HD0545

Analytical Testing Parameters

Client Sample ID:	MW-11 (up)	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/04/2024 10:26
Lab Sample ID:	1HD0545-01		

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		04/08/24 0000	04/08/24 1317	LJS
Vinyl Chloride	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1317	LJS
Bromomethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1317	LJS
Chloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1317	LJS
Trichlorofluoromethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1317	LJS
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1317	LJS
Acetone	<10.0	10.0	ug/L	1		04/08/24 0000	04/08/24 1317	LJS
Methyl Iodide	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1317	LJS
Carbon Disulfide	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1317	LJS
Methylene Chloride	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1317	LJS
Acrylonitrile	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1317	LJS
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1317	LJS
1,1-Dichloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1317	LJS
Vinyl Acetate	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1317	LJS
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1317	LJS
2-Butanone (MEK)	<10.0	10.0	ug/L	1		04/08/24 0000	04/08/24 1317	LJS
Bromochloromethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1317	LJS
Chloroform	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1317	LJS
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1317	LJS
Carbon Tetrachloride	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1317	LJS
Benzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1317	LJS
1,2-Dichloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1317	LJS
Trichloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1317	LJS
1,2-Dichloropropane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1317	LJS
Dibromomethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1317	LJS
Bromodichloromethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1317	LJS
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1317	LJS
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1317	LJS
Toluene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1317	LJS
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1317	LJS
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1317	LJS
Tetrachloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1317	LJS
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1317	LJS
Dibromochloromethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1317	LJS
1,2-Dibromoethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1317	LJS
Chlorobenzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1317	LJS
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1317	LJS
Ethylbenzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1317	LJS
Xylenes, total	<2.0	2.0	ug/L	1		04/08/24 0000	04/08/24 1317	LJS
Styrene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1317	LJS

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CERTIFICATE OF ANALYSIS

1HD0545

Client Sample ID:	MW-11 (up)	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/04/2024 10:26
Lab Sample ID:	1HD0545-01		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Bromoform	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1317	LJS
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1317	LJS
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1317	LJS
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1317	LJS
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1317	LJS
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1317	LJS
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1317	LJS
Surrogate: Dibromofluoromethane	86.2	Limit: 75-136	% Rec	1		04/08/24 0000	04/08/24 1317	LJS
Surrogate: Dibromofluoromethane	86.2	Limit: 80-126	% Rec	1		04/08/24 0000	04/08/24 1317	LJS
Surrogate: 1,2-Dichloroethane-d4	89.7	Limit: 61-142	% Rec	1		04/08/24 0000	04/08/24 1317	LJS
Surrogate: 1,2-Dichloroethane-d4	89.7	Limit: 63-138	% Rec	1		04/08/24 0000	04/08/24 1317	LJS
Surrogate: Toluene-d8	99.4	Limit: 82-121	% Rec	1		04/08/24 0000	04/08/24 1317	LJS
Surrogate: Toluene-d8	99.4	Limit: 87-116	% Rec	1		04/08/24 0000	04/08/24 1317	LJS
Surrogate: 4-Bromofluorobenzene	101	Limit: 80-116	% Rec	1		04/08/24 0000	04/08/24 1317	LJS
Surrogate: 4-Bromofluorobenzene	101	Limit: 85-111	% Rec	1		04/08/24 0000	04/08/24 1317	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		04/08/24 0845	04/09/24 0015	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		04/08/24 0845	04/09/24 0015	RVV
Barium, total	0.0401	0.0040	mg/L	4		04/08/24 0845	04/09/24 0015	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		04/08/24 0845	04/09/24 0015	RVV
Cadmium, total	0.0014	0.0008	mg/L	4		04/08/24 0845	04/09/24 0015	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		04/08/24 0845	04/09/24 0015	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		04/08/24 0845	04/09/24 0015	RVV
Copper, total	<0.0040	0.0040	mg/L	4		04/08/24 0845	04/09/24 0015	RVV
Lead, total	<0.0040	0.0040	mg/L	4		04/08/24 0845	04/09/24 0015	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		04/08/24 0845	04/09/24 0015	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		04/08/24 0845	04/09/24 0015	RVV
Silver, total	<0.0040	0.0040	mg/L	4		04/08/24 0845	04/09/24 0015	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		04/08/24 0845	04/09/24 0015	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		04/08/24 0845	04/09/24 0015	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		04/08/24 0845	04/09/24 0015	RVV



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HD0545

Client Sample ID:	MW-12 (up)	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/04/2024 10:39
Lab Sample ID:	1HD0545-02		

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		04/08/24 0000	04/08/24 1340	LJS
Vinyl Chloride	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1340	LJS
Bromomethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1340	LJS
Chloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1340	LJS
Trichlorofluoromethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1340	LJS
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1340	LJS
Acetone	<10.0	10.0	ug/L	1		04/08/24 0000	04/08/24 1340	LJS
Methyl Iodide	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1340	LJS
Carbon Disulfide	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1340	LJS
Methylene Chloride	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1340	LJS
Acrylonitrile	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1340	LJS
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1340	LJS
1,1-Dichloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1340	LJS
Vinyl Acetate	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1340	LJS
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1340	LJS
2-Butanone (MEK)	<10.0	10.0	ug/L	1		04/08/24 0000	04/08/24 1340	LJS
Bromochloromethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1340	LJS
Chloroform	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1340	LJS
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1340	LJS
Carbon Tetrachloride	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1340	LJS
Benzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1340	LJS
1,2-Dichloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1340	LJS
Trichloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1340	LJS
1,2-Dichloropropane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1340	LJS
Dibromomethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1340	LJS
Bromodichloromethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1340	LJS
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1340	LJS
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1340	LJS
Toluene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1340	LJS
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1340	LJS
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1340	LJS
Tetrachloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1340	LJS
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1340	LJS
Dibromochloromethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1340	LJS
1,2-Dibromoethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1340	LJS
Chlorobenzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1340	LJS
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1340	LJS
Ethylbenzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1340	LJS
Xylenes, total	<2.0	2.0	ug/L	1		04/08/24 0000	04/08/24 1340	LJS
Styrene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1340	LJS
Bromoform	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1340	LJS
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1340	LJS

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CERTIFICATE OF ANALYSIS

1HD0545

Client Sample ID:	MW-12 (up)	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/04/2024 10:39
Lab Sample ID:	1HD0545-02		

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		04/08/24 0000	04/08/24 1340	LJS
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1340	LJS
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1340	LJS
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1340	LJS
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1340	LJS
Surrogate: Dibromofluoromethane	85.4	Limit: 80-126	% Rec	1		04/08/24 0000	04/08/24 1340	LJS
Surrogate: Dibromofluoromethane	85.4	Limit: 75-136	% Rec	1		04/08/24 0000	04/08/24 1340	LJS
Surrogate: 1,2-Dichloroethane-d4	90.6	Limit: 63-138	% Rec	1		04/08/24 0000	04/08/24 1340	LJS
Surrogate: 1,2-Dichloroethane-d4	90.6	Limit: 61-142	% Rec	1		04/08/24 0000	04/08/24 1340	LJS
Surrogate: Toluene-d8	99.0	Limit: 87-116	% Rec	1		04/08/24 0000	04/08/24 1340	LJS
Surrogate: Toluene-d8	99.0	Limit: 82-121	% Rec	1		04/08/24 0000	04/08/24 1340	LJS
Surrogate: 4-Bromofluorobenzene	100	Limit: 80-116	% Rec	1		04/08/24 0000	04/08/24 1340	LJS
Surrogate: 4-Bromofluorobenzene	100	Limit: 85-111	% Rec	1		04/08/24 0000	04/08/24 1340	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		04/08/24 0855	04/09/24 0104	RVV
Arsenic, total	0.0048	0.0040	mg/L	4		04/08/24 0855	04/09/24 0104	RVV
Barium, total	0.102	0.0040	mg/L	4		04/08/24 0855	04/09/24 0104	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0104	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		04/08/24 0855	04/09/24 0104	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		04/08/24 0855	04/09/24 0104	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		04/08/24 0855	04/09/24 0104	RVV
Copper, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0104	RVV
Lead, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0104	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0104	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0104	RVV
Silver, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0104	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		04/08/24 0855	04/09/24 0104	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		04/08/24 0855	04/09/24 0104	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		04/08/24 0855	04/09/24 0104	RVV



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CERTIFICATE OF ANALYSIS

1HD0545

Client Sample ID:	MW-17 (up)	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/04/2024 11:24
Lab Sample ID:	1HD0545-03		

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		04/08/24 0000	04/08/24 1402	LJS
Vinyl Chloride	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1402	LJS
Bromomethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1402	LJS
Chloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1402	LJS
Trichlorofluoromethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1402	LJS
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1402	LJS
Acetone	<10.0	10.0	ug/L	1		04/08/24 0000	04/08/24 1402	LJS
Methyl Iodide	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1402	LJS
Carbon Disulfide	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1402	LJS
Methylene Chloride	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1402	LJS
Acrylonitrile	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1402	LJS
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1402	LJS
1,1-Dichloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1402	LJS
Vinyl Acetate	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1402	LJS
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1402	LJS
2-Butanone (MEK)	<10.0	10.0	ug/L	1		04/08/24 0000	04/08/24 1402	LJS
Bromochloromethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1402	LJS
Chloroform	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1402	LJS
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1402	LJS
Carbon Tetrachloride	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1402	LJS
Benzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1402	LJS
1,2-Dichloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1402	LJS
Trichloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1402	LJS
1,2-Dichloropropane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1402	LJS
Dibromomethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1402	LJS
Bromodichloromethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1402	LJS
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1402	LJS
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1402	LJS
Toluene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1402	LJS
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1402	LJS
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1402	LJS
Tetrachloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1402	LJS
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1402	LJS
Dibromochloromethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1402	LJS
1,2-Dibromoethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1402	LJS
Chlorobenzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1402	LJS
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1402	LJS
Ethylbenzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1402	LJS
Xylenes, total	<2.0	2.0	ug/L	1		04/08/24 0000	04/08/24 1402	LJS
Styrene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1402	LJS
Bromoform	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1402	LJS
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1402	LJS

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CERTIFICATE OF ANALYSIS

1HD0545

Client Sample ID:	MW-17 (up)	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/04/2024 11:24
Lab Sample ID:	1HD0545-03		

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		04/08/24 0000	04/08/24 1402	LJS
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1402	LJS
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1402	LJS
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1402	LJS
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1402	LJS
Surrogate: Dibromofluoromethane	85.9	Limit: 75-136	% Rec	1		04/08/24 0000	04/08/24 1402	LJS
Surrogate: Dibromofluoromethane	85.9	Limit: 80-126	% Rec	1		04/08/24 0000	04/08/24 1402	LJS
Surrogate: 1,2-Dichloroethane-d4	89.8	Limit: 61-142	% Rec	1		04/08/24 0000	04/08/24 1402	LJS
Surrogate: 1,2-Dichloroethane-d4	89.8	Limit: 63-138	% Rec	1		04/08/24 0000	04/08/24 1402	LJS
Surrogate: Toluene-d8	99.7	Limit: 82-121	% Rec	1		04/08/24 0000	04/08/24 1402	LJS
Surrogate: Toluene-d8	99.7	Limit: 87-116	% Rec	1		04/08/24 0000	04/08/24 1402	LJS
Surrogate: 4-Bromofluorobenzene	101	Limit: 80-116	% Rec	1		04/08/24 0000	04/08/24 1402	LJS
Surrogate: 4-Bromofluorobenzene	101	Limit: 85-111	% Rec	1		04/08/24 0000	04/08/24 1402	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		04/08/24 0855	04/09/24 0128	RVV
Arsenic, total	0.0303	0.0040	mg/L	4		04/08/24 0855	04/09/24 0128	RVV
Barium, total	0.358	0.0040	mg/L	4		04/08/24 0855	04/09/24 0128	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0128	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		04/08/24 0855	04/09/24 0128	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		04/08/24 0855	04/09/24 0128	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		04/08/24 0855	04/09/24 0128	RVV
Copper, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0128	RVV
Lead, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0128	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0128	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0128	RVV
Silver, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0128	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		04/08/24 0855	04/09/24 0128	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		04/08/24 0855	04/09/24 0128	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		04/08/24 0855	04/09/24 0128	RVV



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HD0545

Client Sample ID:	MW-3AR	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/04/2024 14:21
Lab Sample ID:	1HD0545-04		

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		04/08/24 0000	04/08/24 1425	LJS
Vinyl Chloride	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1425	LJS
Bromomethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1425	LJS
Chloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1425	LJS
Trichlorofluoromethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1425	LJS
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1425	LJS
Acetone	<10.0	10.0	ug/L	1		04/08/24 0000	04/08/24 1425	LJS
Methyl Iodide	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1425	LJS
Carbon Disulfide	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1425	LJS
Methylene Chloride	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1425	LJS
Acrylonitrile	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1425	LJS
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1425	LJS
1,1-Dichloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1425	LJS
Vinyl Acetate	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1425	LJS
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1425	LJS
2-Butanone (MEK)	<10.0	10.0	ug/L	1		04/08/24 0000	04/08/24 1425	LJS
Bromochloromethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1425	LJS
Chloroform	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1425	LJS
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1425	LJS
Carbon Tetrachloride	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1425	LJS
Benzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1425	LJS
1,2-Dichloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1425	LJS
Trichloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1425	LJS
1,2-Dichloropropane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1425	LJS
Dibromomethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1425	LJS
Bromodichloromethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1425	LJS
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1425	LJS
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1425	LJS
Toluene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1425	LJS
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1425	LJS
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1425	LJS
Tetrachloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1425	LJS
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1425	LJS
Dibromochloromethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1425	LJS
1,2-Dibromoethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1425	LJS
Chlorobenzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1425	LJS
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1425	LJS
Ethylbenzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1425	LJS
Xylenes, total	<2.0	2.0	ug/L	1		04/08/24 0000	04/08/24 1425	LJS
Styrene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1425	LJS
Bromoform	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1425	LJS
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1425	LJS

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CERTIFICATE OF ANALYSIS

1HD0545

Client Sample ID:	MW-3AR	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/04/2024 14:21
Lab Sample ID:	1HD0545-04		

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		04/08/24 0000	04/08/24 1425	LJS
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1425	LJS
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1425	LJS
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1425	LJS
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1425	LJS
Surrogate: Dibromofluoromethane	85.9	Limit: 80-126	% Rec	1		04/08/24 0000	04/08/24 1425	LJS
Surrogate: Dibromofluoromethane	85.9	Limit: 75-136	% Rec	1		04/08/24 0000	04/08/24 1425	LJS
Surrogate: 1,2-Dichloroethane-d4	88.8	Limit: 61-142	% Rec	1		04/08/24 0000	04/08/24 1425	LJS
Surrogate: 1,2-Dichloroethane-d4	88.8	Limit: 63-138	% Rec	1		04/08/24 0000	04/08/24 1425	LJS
Surrogate: Toluene-d8	98.4	Limit: 87-116	% Rec	1		04/08/24 0000	04/08/24 1425	LJS
Surrogate: Toluene-d8	98.4	Limit: 82-121	% Rec	1		04/08/24 0000	04/08/24 1425	LJS
Surrogate: 4-Bromofluorobenzene	101	Limit: 80-116	% Rec	1		04/08/24 0000	04/08/24 1425	LJS
Surrogate: 4-Bromofluorobenzene	101	Limit: 85-111	% Rec	1		04/08/24 0000	04/08/24 1425	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		04/08/24 0855	04/09/24 0147	RVV
Arsenic, total	0.0070	0.0040	mg/L	4		04/08/24 0855	04/09/24 0147	RVV
Barium, total	0.357	0.0040	mg/L	4		04/08/24 0855	04/09/24 0147	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0147	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		04/08/24 0855	04/09/24 0147	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		04/08/24 0855	04/09/24 0147	RVV
Cobalt, total	0.0008	0.0004	mg/L	4		04/08/24 0855	04/09/24 0147	RVV
Copper, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0147	RVV
Lead, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0147	RVV
Nickel, total	0.0062	0.0040	mg/L	4		04/08/24 0855	04/09/24 0147	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0147	RVV
Silver, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0147	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		04/08/24 0855	04/09/24 0147	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		04/08/24 0855	04/09/24 0147	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		04/08/24 0855	04/09/24 0147	RVV

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CERTIFICATE OF ANALYSIS

1HD0545

Client Sample ID:	MW-6B	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/04/2024 14:47
Lab Sample ID:	1HD0545-05		

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		04/08/24 0000	04/08/24 1448	LJS
Vinyl Chloride	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1448	LJS
Bromomethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1448	LJS
Chloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1448	LJS
Trichlorofluoromethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1448	LJS
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1448	LJS
Acetone	<10.0	10.0	ug/L	1		04/08/24 0000	04/08/24 1448	LJS
Methyl Iodide	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1448	LJS
Carbon Disulfide	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1448	LJS
Methylene Chloride	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1448	LJS
Acrylonitrile	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1448	LJS
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1448	LJS
1,1-Dichloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1448	LJS
Vinyl Acetate	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1448	LJS
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1448	LJS
2-Butanone (MEK)	<10.0	10.0	ug/L	1		04/08/24 0000	04/08/24 1448	LJS
Bromochloromethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1448	LJS
Chloroform	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1448	LJS
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1448	LJS
Carbon Tetrachloride	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1448	LJS
Benzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1448	LJS
1,2-Dichloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1448	LJS
Trichloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1448	LJS
1,2-Dichloropropane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1448	LJS
Dibromomethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1448	LJS
Bromodichloromethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1448	LJS
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1448	LJS
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1448	LJS
Toluene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1448	LJS
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1448	LJS
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1448	LJS
Tetrachloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1448	LJS
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1448	LJS
Dibromochloromethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1448	LJS
1,2-Dibromoethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1448	LJS
Chlorobenzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1448	LJS
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1448	LJS
Ethylbenzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1448	LJS
Xylenes, total	<2.0	2.0	ug/L	1		04/08/24 0000	04/08/24 1448	LJS
Styrene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1448	LJS
Bromoform	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1448	LJS
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1448	LJS

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CERTIFICATE OF ANALYSIS

1HD0545

Client Sample ID:	MW-6B	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/04/2024 14:47
Lab Sample ID:	1HD0545-05		

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		04/08/24 0000	04/08/24 1448	LJS
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1448	LJS
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1448	LJS
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1448	LJS
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1448	LJS
Surrogate: Dibromofluoromethane	86.0	Limit: 75-136	% Rec	1		04/08/24 0000	04/08/24 1448	LJS
Surrogate: Dibromofluoromethane	86.0	Limit: 80-126	% Rec	1		04/08/24 0000	04/08/24 1448	LJS
Surrogate: 1,2-Dichloroethane-d4	90.2	Limit: 61-142	% Rec	1		04/08/24 0000	04/08/24 1448	LJS
Surrogate: 1,2-Dichloroethane-d4	90.2	Limit: 63-138	% Rec	1		04/08/24 0000	04/08/24 1448	LJS
Surrogate: Toluene-d8	99.5	Limit: 82-121	% Rec	1		04/08/24 0000	04/08/24 1448	LJS
Surrogate: Toluene-d8	99.5	Limit: 87-116	% Rec	1		04/08/24 0000	04/08/24 1448	LJS
Surrogate: 4-Bromofluorobenzene	101	Limit: 85-111	% Rec	1		04/08/24 0000	04/08/24 1448	LJS
Surrogate: 4-Bromofluorobenzene	101	Limit: 80-116	% Rec	1		04/08/24 0000	04/08/24 1448	LJS

Determination of Base/Neutral Extractable Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
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EPA 3520C/EPA 8270C

Bis(2-Ethylhexyl) Phthalate	<6	6	ug/L	1		04/09/24 1055	04/17/24 1857	EPP
Surrogate: Nitrobenzene-d5	87.3	Limit: 29-130	% Rec	1		04/09/24 1055	04/17/24 1857	EPP
Surrogate: 2-Fluorobiphenyl	70.4	Limit: 23-113	% Rec	1		04/09/24 1055	04/17/24 1857	EPP
Surrogate: Terphenyl-d14	69.5	Limit: 27-141	% Rec	1		04/09/24 1055	04/17/24 1857	EPP

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
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EPA 3005A/EPA 6020A

Antimony, total	<0.0020	0.0020	mg/L	4		04/08/24 0855	04/09/24 0153	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0153	RVV
Barium, total	0.0658	0.0040	mg/L	4		04/08/24 0855	04/09/24 0153	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0153	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		04/08/24 0855	04/09/24 0153	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		04/08/24 0855	04/09/24 0153	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		04/08/24 0855	04/09/24 0153	RVV
Copper, total	0.0048	0.0040	mg/L	4		04/08/24 0855	04/09/24 0153	RVV
Lead, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0153	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0153	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0153	RVV
Silver, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0153	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		04/08/24 0855	04/09/24 0153	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		04/08/24 0855	04/09/24 0153	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		04/08/24 0855	04/09/24 0153	RVV

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CERTIFICATE OF ANALYSIS

1HD0545

Client Sample ID:	MW-7A	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/04/2024 13:27
Lab Sample ID:	1HD0545-06		

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		04/08/24 0000	04/08/24 1511	LJS
Vinyl Chloride	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1511	LJS
Bromomethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1511	LJS
Chloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1511	LJS
Trichlorofluoromethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1511	LJS
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1511	LJS
Acetone	<10.0	10.0	ug/L	1		04/08/24 0000	04/08/24 1511	LJS
Methyl Iodide	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1511	LJS
Carbon Disulfide	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1511	LJS
Methylene Chloride	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1511	LJS
Acrylonitrile	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1511	LJS
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1511	LJS
1,1-Dichloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1511	LJS
Vinyl Acetate	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1511	LJS
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1511	LJS
2-Butanone (MEK)	<10.0	10.0	ug/L	1		04/08/24 0000	04/08/24 1511	LJS
Bromochloromethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1511	LJS
Chloroform	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1511	LJS
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1511	LJS
Carbon Tetrachloride	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1511	LJS
Benzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1511	LJS
1,2-Dichloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1511	LJS
Trichloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1511	LJS
1,2-Dichloropropane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1511	LJS
Dibromomethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1511	LJS
Bromodichloromethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1511	LJS
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1511	LJS
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1511	LJS
Toluene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1511	LJS
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1511	LJS
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1511	LJS
Tetrachloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1511	LJS
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1511	LJS
Dibromochloromethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1511	LJS
1,2-Dibromoethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1511	LJS
Chlorobenzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1511	LJS
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1511	LJS
Ethylbenzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1511	LJS
Xylenes, total	<2.0	2.0	ug/L	1		04/08/24 0000	04/08/24 1511	LJS
Styrene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1511	LJS
Bromoform	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1511	LJS
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1511	LJS

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CERTIFICATE OF ANALYSIS

1HD0545

Client Sample ID:	MW-7A	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/04/2024 13:27
Lab Sample ID:	1HD0545-06		

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		04/08/24 0000	04/08/24 1511	LJS
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1511	LJS
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1511	LJS
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1511	LJS
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1511	LJS
Surrogate: Dibromofluoromethane	87.1	Limit: 75-136	% Rec	1		04/08/24 0000	04/08/24 1511	LJS
Surrogate: Dibromofluoromethane	87.1	Limit: 80-126	% Rec	1		04/08/24 0000	04/08/24 1511	LJS
Surrogate: 1,2-Dichloroethane-d4	91.4	Limit: 63-138	% Rec	1		04/08/24 0000	04/08/24 1511	LJS
Surrogate: 1,2-Dichloroethane-d4	91.4	Limit: 61-142	% Rec	1		04/08/24 0000	04/08/24 1511	LJS
Surrogate: Toluene-d8	99.5	Limit: 87-116	% Rec	1		04/08/24 0000	04/08/24 1511	LJS
Surrogate: Toluene-d8	99.5	Limit: 82-121	% Rec	1		04/08/24 0000	04/08/24 1511	LJS
Surrogate: 4-Bromofluorobenzene	101	Limit: 85-111	% Rec	1		04/08/24 0000	04/08/24 1511	LJS
Surrogate: 4-Bromofluorobenzene	101	Limit: 80-116	% Rec	1		04/08/24 0000	04/08/24 1511	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		04/08/24 0855	04/09/24 0159	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0159	RVV
Barium, total	0.0743	0.0040	mg/L	4		04/08/24 0855	04/09/24 0159	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0159	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		04/08/24 0855	04/09/24 0159	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		04/08/24 0855	04/09/24 0159	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		04/08/24 0855	04/09/24 0159	RVV
Copper, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0159	RVV
Lead, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0159	RVV
Nickel, total	0.0126	0.0040	mg/L	4		04/08/24 0855	04/09/24 0159	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0159	RVV
Silver, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0159	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		04/08/24 0855	04/09/24 0159	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		04/08/24 0855	04/09/24 0159	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		04/08/24 0855	04/09/24 0159	RVV

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CERTIFICATE OF ANALYSIS

1HD0545

Client Sample ID:	MW-7B	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/04/2024 13:11
Lab Sample ID:	1HD0545-07		

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		04/08/24 0000	04/08/24 1534	LJS
Vinyl Chloride	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1534	LJS
Bromomethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1534	LJS
Chloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1534	LJS
Trichlorofluoromethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1534	LJS
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1534	LJS
Acetone	<10.0	10.0	ug/L	1		04/08/24 0000	04/08/24 1534	LJS
Methyl Iodide	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1534	LJS
Carbon Disulfide	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1534	LJS
Methylene Chloride	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1534	LJS
Acrylonitrile	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1534	LJS
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1534	LJS
1,1-Dichloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1534	LJS
Vinyl Acetate	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1534	LJS
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1534	LJS
2-Butanone (MEK)	<10.0	10.0	ug/L	1		04/08/24 0000	04/08/24 1534	LJS
Bromochloromethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1534	LJS
Chloroform	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1534	LJS
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1534	LJS
Carbon Tetrachloride	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1534	LJS
Benzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1534	LJS
1,2-Dichloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1534	LJS
Trichloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1534	LJS
1,2-Dichloropropane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1534	LJS
Dibromomethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1534	LJS
Bromodichloromethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1534	LJS
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1534	LJS
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1534	LJS
Toluene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1534	LJS
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1534	LJS
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1534	LJS
Tetrachloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1534	LJS
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1534	LJS
Dibromochloromethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1534	LJS
1,2-Dibromoethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1534	LJS
Chlorobenzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1534	LJS
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1534	LJS
Ethylbenzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1534	LJS
Xylenes, total	<2.0	2.0	ug/L	1		04/08/24 0000	04/08/24 1534	LJS
Styrene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1534	LJS
Bromoform	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1534	LJS
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1534	LJS

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CERTIFICATE OF ANALYSIS

1HD0545

Client Sample ID: MW-7B	Collected By: Whipple, Todd
Sample Matrix: Aqueous	Collection Date: 04/04/2024 13:11
Lab Sample ID: 1HD0545-07	

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		04/08/24 0000	04/08/24 1534	LJS
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1534	LJS
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1534	LJS
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1534	LJS
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1534	LJS
Surrogate: Dibromofluoromethane	85.1	Limit: 80-126	% Rec	1		04/08/24 0000	04/08/24 1534	LJS
Surrogate: Dibromofluoromethane	85.1	Limit: 75-136	% Rec	1		04/08/24 0000	04/08/24 1534	LJS
Surrogate: 1,2-Dichloroethane-d4	91.4	Limit: 63-138	% Rec	1		04/08/24 0000	04/08/24 1534	LJS
Surrogate: 1,2-Dichloroethane-d4	91.4	Limit: 61-142	% Rec	1		04/08/24 0000	04/08/24 1534	LJS
Surrogate: Toluene-d8	100	Limit: 87-116	% Rec	1		04/08/24 0000	04/08/24 1534	LJS
Surrogate: Toluene-d8	100	Limit: 82-121	% Rec	1		04/08/24 0000	04/08/24 1534	LJS
Surrogate: 4-Bromofluorobenzene	102	Limit: 85-111	% Rec	1		04/08/24 0000	04/08/24 1534	LJS
Surrogate: 4-Bromofluorobenzene	102	Limit: 80-116	% Rec	1		04/08/24 0000	04/08/24 1534	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		04/08/24 0855	04/09/24 0205	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0205	RVV
Barium, total	0.643	0.0040	mg/L	4		04/08/24 0855	04/09/24 0205	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0205	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		04/08/24 0855	04/09/24 0205	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		04/08/24 0855	04/09/24 0205	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		04/08/24 0855	04/09/24 0205	RVV
Copper, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0205	RVV
Lead, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0205	RVV
Nickel, total	0.0121	0.0040	mg/L	4		04/08/24 0855	04/09/24 0205	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0205	RVV
Silver, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0205	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		04/08/24 0855	04/09/24 0205	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		04/08/24 0855	04/09/24 0205	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		04/08/24 0855	04/09/24 0205	RVV



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CERTIFICATE OF ANALYSIS

1HD0545

Client Sample ID:	MW-8	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/04/2024 12:25
Lab Sample ID:	1HD0545-08		

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		04/08/24 0000	04/08/24 1557	LJS
Vinyl Chloride	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1557	LJS
Bromomethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1557	LJS
Chloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1557	LJS
Trichlorofluoromethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1557	LJS
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1557	LJS
Acetone	<10.0	10.0	ug/L	1		04/08/24 0000	04/08/24 1557	LJS
Methyl Iodide	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1557	LJS
Carbon Disulfide	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1557	LJS
Methylene Chloride	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1557	LJS
Acrylonitrile	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1557	LJS
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1557	LJS
1,1-Dichloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1557	LJS
Vinyl Acetate	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1557	LJS
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1557	LJS
2-Butanone (MEK)	<10.0	10.0	ug/L	1		04/08/24 0000	04/08/24 1557	LJS
Bromochloromethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1557	LJS
Chloroform	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1557	LJS
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1557	LJS
Carbon Tetrachloride	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1557	LJS
Benzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1557	LJS
1,2-Dichloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1557	LJS
Trichloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1557	LJS
1,2-Dichloropropane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1557	LJS
Dibromomethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1557	LJS
Bromodichloromethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1557	LJS
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1557	LJS
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1557	LJS
Toluene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1557	LJS
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1557	LJS
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1557	LJS
Tetrachloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1557	LJS
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1557	LJS
Dibromochloromethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1557	LJS
1,2-Dibromoethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1557	LJS
Chlorobenzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1557	LJS
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1557	LJS
Ethylbenzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1557	LJS
Xylenes, total	<2.0	2.0	ug/L	1		04/08/24 0000	04/08/24 1557	LJS
Styrene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1557	LJS
Bromoform	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1557	LJS
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1557	LJS

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CERTIFICATE OF ANALYSIS

1HD0545

Client Sample ID:	MW-8	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/04/2024 12:25
Lab Sample ID:	1HD0545-08		

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		04/08/24 0000	04/08/24 1557	LJS
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1557	LJS
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1557	LJS
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1557	LJS
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1557	LJS
Surrogate: Dibromofluoromethane	86.0	Limit: 80-126	% Rec	1		04/08/24 0000	04/08/24 1557	LJS
Surrogate: Dibromofluoromethane	86.0	Limit: 75-136	% Rec	1		04/08/24 0000	04/08/24 1557	LJS
Surrogate: 1,2-Dichloroethane-d4	91.6	Limit: 61-142	% Rec	1		04/08/24 0000	04/08/24 1557	LJS
Surrogate: 1,2-Dichloroethane-d4	91.6	Limit: 63-138	% Rec	1		04/08/24 0000	04/08/24 1557	LJS
Surrogate: Toluene-d8	99.6	Limit: 82-121	% Rec	1		04/08/24 0000	04/08/24 1557	LJS
Surrogate: Toluene-d8	99.6	Limit: 87-116	% Rec	1		04/08/24 0000	04/08/24 1557	LJS
Surrogate: 4-Bromofluorobenzene	99.8	Limit: 80-116	% Rec	1		04/08/24 0000	04/08/24 1557	LJS
Surrogate: 4-Bromofluorobenzene	99.8	Limit: 85-111	% Rec	1		04/08/24 0000	04/08/24 1557	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		04/08/24 0855	04/09/24 0211	RVV
Arsenic, total	0.0309	0.0040	mg/L	4		04/08/24 0855	04/09/24 0211	RVV
Barium, total	0.613	0.0040	mg/L	4		04/08/24 0855	04/09/24 0211	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0211	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		04/08/24 0855	04/09/24 0211	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		04/08/24 0855	04/09/24 0211	RVV
Cobalt, total	0.0026	0.0004	mg/L	4		04/08/24 0855	04/09/24 0211	RVV
Copper, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0211	RVV
Lead, total	0.0058	0.0040	mg/L	4		04/08/24 0855	04/09/24 0211	RVV
Nickel, total	0.0063	0.0040	mg/L	4		04/08/24 0855	04/09/24 0211	RVV
Selenium, total	0.0042	0.0040	mg/L	4		04/08/24 0855	04/09/24 0211	RVV
Silver, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0211	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		04/08/24 0855	04/09/24 0211	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		04/08/24 0855	04/09/24 0211	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		04/08/24 0855	04/09/24 0211	RVV

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CERTIFICATE OF ANALYSIS

1HD0545

Client Sample ID:	MW-9	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/04/2024 11:49
Lab Sample ID:	1HD0545-09		

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		04/08/24 0000	04/08/24 1619	LJS
Vinyl Chloride	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1619	LJS
Bromomethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1619	LJS
Chloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1619	LJS
Trichlorofluoromethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1619	LJS
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1619	LJS
Acetone	<10.0	10.0	ug/L	1		04/08/24 0000	04/08/24 1619	LJS
Methyl Iodide	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1619	LJS
Carbon Disulfide	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1619	LJS
Methylene Chloride	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1619	LJS
Acrylonitrile	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1619	LJS
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1619	LJS
1,1-Dichloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1619	LJS
Vinyl Acetate	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1619	LJS
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1619	LJS
2-Butanone (MEK)	<10.0	10.0	ug/L	1		04/08/24 0000	04/08/24 1619	LJS
Bromochloromethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1619	LJS
Chloroform	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1619	LJS
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1619	LJS
Carbon Tetrachloride	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1619	LJS
Benzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1619	LJS
1,2-Dichloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1619	LJS
Trichloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1619	LJS
1,2-Dichloropropane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1619	LJS
Dibromomethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1619	LJS
Bromodichloromethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1619	LJS
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1619	LJS
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1619	LJS
Toluene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1619	LJS
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1619	LJS
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1619	LJS
Tetrachloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1619	LJS
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1619	LJS
Dibromochloromethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1619	LJS
1,2-Dibromoethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1619	LJS
Chlorobenzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1619	LJS
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1619	LJS
Ethylbenzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1619	LJS
Xylenes, total	<2.0	2.0	ug/L	1		04/08/24 0000	04/08/24 1619	LJS
Styrene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1619	LJS
Bromoform	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1619	LJS
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1619	LJS

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CERTIFICATE OF ANALYSIS

1HD0545

Client Sample ID:	MW-9	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/04/2024 11:49
Lab Sample ID:	1HD0545-09		

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		04/08/24 0000	04/08/24 1619	LJS
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1619	LJS
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1619	LJS
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1619	LJS
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1619	LJS
Surrogate: Dibromofluoromethane	85.9	Limit: 75-136	% Rec	1		04/08/24 0000	04/08/24 1619	LJS
Surrogate: Dibromofluoromethane	85.9	Limit: 80-126	% Rec	1		04/08/24 0000	04/08/24 1619	LJS
Surrogate: 1,2-Dichloroethane-d4	91.3	Limit: 63-138	% Rec	1		04/08/24 0000	04/08/24 1619	LJS
Surrogate: 1,2-Dichloroethane-d4	91.3	Limit: 61-142	% Rec	1		04/08/24 0000	04/08/24 1619	LJS
Surrogate: Toluene-d8	100	Limit: 87-116	% Rec	1		04/08/24 0000	04/08/24 1619	LJS
Surrogate: Toluene-d8	100	Limit: 82-121	% Rec	1		04/08/24 0000	04/08/24 1619	LJS
Surrogate: 4-Bromofluorobenzene	102	Limit: 85-111	% Rec	1		04/08/24 0000	04/08/24 1619	LJS
Surrogate: 4-Bromofluorobenzene	102	Limit: 80-116	% Rec	1		04/08/24 0000	04/08/24 1619	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		04/08/24 0855	04/09/24 0217	RVV
Arsenic, total	0.0057	0.0040	mg/L	4		04/08/24 0855	04/09/24 0217	RVV
Barium, total	0.0562	0.0040	mg/L	4		04/08/24 0855	04/09/24 0217	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0217	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		04/08/24 0855	04/09/24 0217	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		04/08/24 0855	04/09/24 0217	RVV
Cobalt, total	0.0005	0.0004	mg/L	4		04/08/24 0855	04/09/24 0217	RVV
Copper, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0217	RVV
Lead, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0217	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0217	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0217	RVV
Silver, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0217	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		04/08/24 0855	04/09/24 0217	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		04/08/24 0855	04/09/24 0217	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		04/08/24 0855	04/09/24 0217	RVV

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CERTIFICATE OF ANALYSIS

1HD0545

Client Sample ID:	MW-10	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/04/2024 9:03
Lab Sample ID:	1HD0545-10		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Dichlorodifluoromethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1642	LJS
Chloromethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1642	LJS
Vinyl Chloride	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1642	LJS
Bromomethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1642	LJS
Chloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1642	LJS
Trichlorofluoromethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1642	LJS
Acrolein	<10.0	10.0	ug/L	1		04/08/24 0000	04/08/24 1642	LJS
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1642	LJS
Acetone	<10.0	10.0	ug/L	1		04/08/24 0000	04/08/24 1642	LJS
Methyl Iodide	<2.0	2.0	ug/L	1		04/08/24 0000	04/08/24 1642	LJS
Carbon Disulfide	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1642	LJS
Acetonitrile	<10.0	10.0	ug/L	1		04/08/24 0000	04/08/24 1642	LJS
Methylene Chloride	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1642	LJS
Acrylonitrile	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1642	LJS
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1642	LJS
1,1-Dichloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1642	LJS
Vinyl Acetate	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1642	LJS
2,2-Dichloropropane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1642	LJS
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1642	LJS
2-Butanone (MEK)	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1642	LJS
Bromochloromethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1642	LJS
Chloroform	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1642	LJS
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1642	LJS
1,1-Dichloropropene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1642	LJS
Carbon Tetrachloride	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1642	LJS
Benzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1642	LJS
1,2-Dichloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1642	LJS
Trichloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1642	LJS
1,2-Dichloropropane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1642	LJS
Dibromomethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1642	LJS
Bromodichloromethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1642	LJS
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1642	LJS
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1642	LJS
Toluene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1642	LJS
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1642	LJS
Ethyl Methacrylate	<10.0	10.0	ug/L	1		04/08/24 0000	04/08/24 1642	LJS
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1642	LJS
Tetrachloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1642	LJS
1,3-Dichloropropane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1642	LJS
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1642	LJS
Dibromochloromethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1642	LJS
1,2-Dibromoethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1642	LJS

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CERTIFICATE OF ANALYSIS

1HD0545

Client Sample ID:	MW-10	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/04/2024 9:03
Lab Sample ID:	1HD0545-10		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Chlorobenzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1642	LJS
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1642	LJS
Ethylbenzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1642	LJS
Xylenes, total	<2.0	2.0	ug/L	1		04/08/24 0000	04/08/24 1642	LJS
Styrene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1642	LJS
Bromoform	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1642	LJS
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1642	LJS
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1642	LJS
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1642	LJS
1,3-Dichlorobenzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1642	LJS
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1642	LJS
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1642	LJS
1,2-Dibromo-3-chloropropane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1642	LJS
1,2,4-Trichlorobenzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1642	LJS
Allyl chloride	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1642	LJS
Chloroprene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1642	LJS
Methacrylonitrile	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1642	LJS
Methyl Methacrylate	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1642	LJS
Propionitrile	<10.0	10.0	ug/L	1		04/08/24 0000	04/08/24 1642	LJS
Surrogate: Dibromofluoromethane	86.4	Limit: 80-126	% Rec	1		04/08/24 0000	04/08/24 1642	LJS
Surrogate: Dibromofluoromethane	86.4	Limit: 80-126	% Rec	1		04/08/24 0000	04/08/24 1642	LJS
Surrogate: 1,2-Dichloroethane-d4	91.3	Limit: 63-138	% Rec	1		04/08/24 0000	04/08/24 1642	LJS
Surrogate: 1,2-Dichloroethane-d4	91.3	Limit: 63-138	% Rec	1		04/08/24 0000	04/08/24 1642	LJS
Surrogate: 1,2-Dichloroethane-d4	91.3	Limit: 63-138	% Rec	1		04/08/24 0000	04/08/24 1642	LJS
Surrogate: Toluene-d8	99.6	Limit: 87-116	% Rec	1		04/08/24 0000	04/08/24 1642	LJS
Surrogate: Toluene-d8	99.6	Limit: 87-116	% Rec	1		04/08/24 0000	04/08/24 1642	LJS
Surrogate: Toluene-d8	99.6	Limit: 87-116	% Rec	1		04/08/24 0000	04/08/24 1642	LJS
Surrogate: 4-Bromofluorobenzene	100	Limit: 85-111	% Rec	1		04/08/24 0000	04/08/24 1642	LJS
Surrogate: 4-Bromofluorobenzene	100	Limit: 85-111	% Rec	1		04/08/24 0000	04/08/24 1642	LJS
Surrogate: 4-Bromofluorobenzene	100	Limit: 85-111	% Rec	1		04/08/24 0000	04/08/24 1642	LJS

Determination of General Solvents	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 8015C								
Isobutanol	<1.0	1.0	mg/L	1		04/15/24 0830	04/15/24 1934	PDS

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3520C/EPA 8270C								
N-Nitrosodimethylamine	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
Methyl Methanesulfonate	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
N-Nitrosodiethylamine	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
N-Nitrosomethylethylamine	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
Ethyl Methanesulfonate	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
Phenol	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP



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CERTIFICATE OF ANALYSIS

1HD0545

Client Sample ID:	MW-10	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/04/2024 9:03
Lab Sample ID:	1HD0545-10		

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Bis(2-Chloroethyl) Ether	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
2-Chlorophenol	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
Benzyl Alcohol	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
2-Methylphenol (o-Cresol)	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
Bis[2-Chloroisopropyl]ether	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
n-Nitroso-di-n-propylamine	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
N-Nitrosopyrrolidine	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
Acetophenone	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
o-Toluidine	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
(3 & 4)-Methylphenol	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
Hexachloroethane	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
Nitrobenzene	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
N-Nitrosopiperidine	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
Isophorone	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
2-Nitrophenol	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
2,4-Dimethylphenol	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
Bis (2-Chloroethoxy) Methane	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
2,4-Dichlorophenol	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
Naphthalene	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
4-Chloroaniline	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
2,6-Dichlorophenol	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
Hexachloropropene	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
Hexachlorobutadiene	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
N-Nitrosodi-n-butylamine	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
1,4-Phenylenediamine	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
4-Chloro-3-methylphenol	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
2-Methylnaphthalene	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
Isosafrole	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
1,2,4,5-Tetrachlorobenzene	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
Hexachlorocyclopentadiene	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
2,4,6-Trichlorophenol	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
2,4,5-Trichlorophenol	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
Safrole	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
2-Chloronaphthalene	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
2-Nitroaniline	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
1,4-Naphthoquinone	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
Dimethylphthalate	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
1,3-Dinitrobenzene	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
1,2-Dinitrobenzene	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
2,6-Dinitrotoluene	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
Acenaphthylene	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
3-Nitroaniline	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
Acenaphthene	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP

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CERTIFICATE OF ANALYSIS

1HD0545

Client Sample ID:	MW-10	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/04/2024 9:03
Lab Sample ID:	1HD0545-10		

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
2,4-Dinitrophenol	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
4-Nitrophenol	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
Dibenzofuran	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
2,4-Dinitrotoluene	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
2,3,4,6-Tetrachlorophenol	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
Pentachlorobenzene	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
1-Naphthylamine	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
2-Naphthylamine	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
Diethyl Phthalate	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
Fluorene	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
4-Chlorophenyl Phenyl Ether	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
4-Nitroaniline	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
5-Nitro-o-toluidine	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
4,6-Dinitro-2-methylphenol	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
N-Nitrosodiphenylamine	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
Diphenylamine	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
Azobenzene	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
Diallate	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
1,3,5-Trinitrobenzene	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
Phenacetin	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
4-Bromophenyl Phenyl Ether	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
4-Aminobiphenyl	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
Pentachlorophenol	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
Pronamide	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
Pentachloronitrobenzene (PCNB)	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
Phenanthrene	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
Anthracene	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
Di-n-butyl Phthalate	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
Methapyrilene	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
Fluoranthene	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
Isodrin	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
Chlorobenzilate	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
Pyrene	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
p-(Dimethylamino)azobenzene	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
3,3-Dimethylbenzidine	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
Butyl Benzyl Phthalate	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
Benzo(a)anthracene	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
Chrysene	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
Bis(2-Ethylhexyl) Phthalate	<6	6	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
Kepone	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
3,3'-Dichlorobenzidine	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
2-Acetylamino fluorene	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
Di-n-octyl Phthalate	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP

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CERTIFICATE OF ANALYSIS

1HD0545

Client Sample ID:	MW-10	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/04/2024 9:03
Lab Sample ID:	1HD0545-10		

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Benzo(b)Fluoranthene	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
7,12-Dimethylbenz [a] anthracene	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
Benzo(k)Fluoranthene	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
Benzo(a)Pyrene	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
3-Methylcholanthrene	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
Dibenzo(a,h)anthracene	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
Indeno(1,2,3-cd)Pyrene	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
Benzo(g,h,i)perylene	<8	8	ug/L	1		04/08/24 1024	04/17/24 2011	EPP
Surrogate: 2-Fluorophenol	32.9	Limit: 24-136	% Rec	1		04/08/24 1024	04/17/24 2011	EPP
Surrogate: Phenol-d6	32.8	Limit: 15-140	% Rec	1		04/08/24 1024	04/17/24 2011	EPP
Surrogate: Nitrobenzene-d5	76.9	Limit: 29-130	% Rec	1		04/08/24 1024	04/17/24 2011	EPP
Surrogate: 2-Fluorobiphenyl	65.0	Limit: 23-113	% Rec	1		04/08/24 1024	04/17/24 2011	EPP
Surrogate: 2,4,6-Tribromophenol	29.0	Limit: 15-139	% Rec	1		04/08/24 1024	04/17/24 2011	EPP
Surrogate: Terphenyl-dl4	48.9	Limit: 27-141	% Rec	1		04/08/24 1024	04/17/24 2011	EPP

Determination of Organophosphorus Insecticides	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3510C/EPA 8141								
O,O,O-Triethyl phosphorothioate	<0.4	0.4	ug/L	1		04/08/24 1609	04/19/24 0458	EPP
Thionazin	<0.4	0.4	ug/L	1		04/08/24 1609	04/19/24 0458	EPP
Phorate	<0.4	0.4	ug/L	1		04/08/24 1609	04/19/24 0458	EPP
Dimethoate	<0.4	0.4	ug/L	1		04/08/24 1609	04/19/24 0458	EPP
Disulfoton	<0.4	0.4	ug/L	1		04/08/24 1609	04/19/24 0458	EPP
Methyl Parathion	<0.4	0.4	ug/L	1		04/08/24 1609	04/19/24 0458	EPP
Parathion	<0.4	0.4	ug/L	1		04/08/24 1609	04/19/24 0458	EPP
Famphur	<0.4	0.4	ug/L	1		04/08/24 1609	04/19/24 0458	EPP
Surrogate: 2-Nitro-m-xylene	64.9	Limit: 38-122	% Rec	1		04/08/24 1609	04/19/24 0458	EPP

Determination of Chlorinated Phenoxy Herbicides	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 8151A								
2,4-D	<2.0	2.0	ug/L	1		04/08/24 1316	04/17/24 1019	EPP
2,4,5-TP (Silvex)	<0.5	0.5	ug/L	1		04/08/24 1316	04/17/24 1019	EPP
2,4,5-T	<0.5	0.5	ug/L	1		04/08/24 1316	04/17/24 1019	EPP
Dinoseb	<0.5	0.5	ug/L	1		04/08/24 1316	04/17/24 1019	EPP
Surrogate: 2,5-Dichlorobenzoic Acid	91.1	Limit: 31-116	% Rec	1		04/08/24 1316	04/17/24 1019	EPP

Determination of Organochlorine Insecticides & Metabolites	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3510C/EPA 8081								
Alpha-BHC	<0.05	0.05	ug/L	1		04/08/24 1608	04/17/24 1859	EPP
Gamma-BHC [Lindane]	<0.05	0.05	ug/L	1		04/08/24 1608	04/17/24 1859	EPP
Beta-BHC	<0.05	0.05	ug/L	1		04/08/24 1608	04/17/24 1859	EPP
Heptachlor	<0.05	0.05	ug/L	1		04/08/24 1608	04/17/24 1859	EPP



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CERTIFICATE OF ANALYSIS

1HD0545

Client Sample ID: MW-10	Collected By: Whipple, Todd
Sample Matrix: Aqueous	Collection Date: 04/04/2024 9:03
Lab Sample ID: 1HD0545-10	

Determination of Organochlorine Insecticides & Metabolites	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Delta-BHC	<0.05	0.05	ug/L	1		04/08/24 1608	04/17/24 1859	EPP
Aldrin	<0.05	0.05	ug/L	1		04/08/24 1608	04/17/24 1859	EPP
Heptachlor Epoxide	<0.05	0.05	ug/L	1		04/08/24 1608	04/17/24 1859	EPP
Endosulfan I	<0.05	0.05	ug/L	1		04/08/24 1608	04/17/24 1859	EPP
4,4`-DDE	<0.05	0.05	ug/L	1		04/08/24 1608	04/17/24 1859	EPP
Dieldrin	<0.05	0.05	ug/L	1		04/08/24 1608	04/17/24 1859	EPP
Endrin	<0.05	0.05	ug/L	1		04/08/24 1608	04/17/24 1859	EPP
4,4`-DDD	<0.05	0.05	ug/L	1		04/08/24 1608	04/17/24 1859	EPP
Endosulfan II	<0.05	0.05	ug/L	1		04/08/24 1608	04/17/24 1859	EPP
4,4`-DDT	<0.05	0.05	ug/L	1		04/08/24 1608	04/17/24 1859	EPP
Endrin Aldehyde	<0.05	0.05	ug/L	1		04/08/24 1608	04/17/24 1859	EPP
Endosulfan Sulfate	<0.05	0.05	ug/L	1		04/08/24 1608	04/17/24 1859	EPP
Methoxychlor	<0.05	0.05	ug/L	1		04/08/24 1608	04/17/24 1859	EPP
Chlordane	<0.10	0.10	ug/L	1		04/08/24 1608	04/17/24 1859	EPP
Toxaphene	<0.20	0.20	ug/L	1		04/08/24 1608	04/17/24 1859	EPP
Hexachlorobenzene	<0.05	0.05	ug/L	1		04/08/24 1608	04/17/24 1859	EPP
Surrogate: Tetrachloro-m-xylene	84.2	Limit: 10-121	% Rec	1		04/08/24 1608	04/17/24 1859	EPP

Determination of Polychlorinated Biphenyls (PCB)	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3510C/EPA 8082								
Arochlor 1016	<0.20	0.20	ug/L	1		04/08/24 1609	04/17/24 1859	EPP
Arochlor 1221	<0.20	0.20	ug/L	1		04/08/24 1609	04/17/24 1859	EPP
Arochlor 1232	<0.20	0.20	ug/L	1		04/08/24 1609	04/17/24 1859	EPP
Arochlor 1242	<0.20	0.20	ug/L	1		04/08/24 1609	04/17/24 1859	EPP
Arochlor 1248	<0.20	0.20	ug/L	1		04/08/24 1609	04/17/24 1859	EPP
Arochlor 1254	<0.20	0.20	ug/L	1		04/08/24 1609	04/17/24 1859	EPP
Arochlor 1260	<0.20	0.20	ug/L	1		04/08/24 1609	04/17/24 1859	EPP
Surrogate: Tetrachloro-m-xylene	90.6	Limit: 38-121	% Rec	1		04/08/24 1609	04/17/24 1859	EPP
Surrogate: Decachlorobiphenyl	69.4	Limit: 25-119	% Rec	1		04/08/24 1609	04/17/24 1859	EPP

Determination of Conventional Chemistry Parameters	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 376.2								
Sulfide, total	<0.30	0.30	mg/L	1		04/08/24 0827	04/08/24 1627	CHP
EPA 9010B								
Cyanide, total	<0.005	0.005	mg/L	1		04/08/24 0825	04/08/24 1545	CHP

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		04/08/24 0855	04/09/24 0224	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0224	RVV
Barium, total	0.120	0.0040	mg/L	4		04/08/24 0855	04/09/24 0224	RVV



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CERTIFICATE OF ANALYSIS

1HD0545

Client Sample ID:	MW-10	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/04/2024 9:03
Lab Sample ID:	1HD0545-10		

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Beryllium, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0224	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		04/08/24 0855	04/09/24 0224	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		04/08/24 0855	04/09/24 0224	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		04/08/24 0855	04/09/24 0224	RVV
Copper, total	0.0139	0.0040	mg/L	4		04/08/24 0855	04/09/24 0224	RVV
Lead, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0224	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0224	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0224	RVV
Silver, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0224	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		04/08/24 0855	04/09/24 0224	RVV
Tin, total	<0.0200	0.0200	mg/L	4		04/08/24 0855	04/09/24 0224	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		04/08/24 0855	04/09/24 0224	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		04/08/24 0855	04/09/24 0224	RVV
EPA 7470A								
Mercury, total	<0.00050	0.00050	mg/L	1		04/09/24 1533	04/10/24 1637	JAR



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CERTIFICATE OF ANALYSIS

1HD0545

Client Sample ID:	MW-14	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/04/2024 14:00
Lab Sample ID:	1HD0545-11		

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		04/08/24 0000	04/08/24 1705	LJS
Vinyl Chloride	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1705	LJS
Bromomethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1705	LJS
Chloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1705	LJS
Trichlorofluoromethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1705	LJS
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1705	LJS
Acetone	<10.0	10.0	ug/L	1		04/08/24 0000	04/08/24 1705	LJS
Methyl Iodide	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1705	LJS
Carbon Disulfide	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1705	LJS
Methylene Chloride	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1705	LJS
Acrylonitrile	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1705	LJS
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1705	LJS
1,1-Dichloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1705	LJS
Vinyl Acetate	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1705	LJS
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1705	LJS
2-Butanone (MEK)	<10.0	10.0	ug/L	1		04/08/24 0000	04/08/24 1705	LJS
Bromochloromethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1705	LJS
Chloroform	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1705	LJS
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1705	LJS
Carbon Tetrachloride	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1705	LJS
Benzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1705	LJS
1,2-Dichloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1705	LJS
Trichloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1705	LJS
1,2-Dichloropropane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1705	LJS
Dibromomethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1705	LJS
Bromodichloromethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1705	LJS
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1705	LJS
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1705	LJS
Toluene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1705	LJS
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1705	LJS
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1705	LJS
Tetrachloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1705	LJS
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1705	LJS
Dibromochloromethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1705	LJS
1,2-Dibromoethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1705	LJS
Chlorobenzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1705	LJS
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1705	LJS
Ethylbenzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1705	LJS
Xylenes, total	<2.0	2.0	ug/L	1		04/08/24 0000	04/08/24 1705	LJS
Styrene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1705	LJS
Bromoform	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1705	LJS
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1705	LJS

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CERTIFICATE OF ANALYSIS

1HD0545

Client Sample ID:	MW-14	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/04/2024 14:00
Lab Sample ID:	1HD0545-11		

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		04/08/24 0000	04/08/24 1705	LJS
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1705	LJS
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1705	LJS
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1705	LJS
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1705	LJS
Surrogate: Dibromofluoromethane	86.3	Limit: 75-136	% Rec	1		04/08/24 0000	04/08/24 1705	LJS
Surrogate: Dibromofluoromethane	86.3	Limit: 80-126	% Rec	1		04/08/24 0000	04/08/24 1705	LJS
Surrogate: 1,2-Dichloroethane-d4	91.7	Limit: 63-138	% Rec	1		04/08/24 0000	04/08/24 1705	LJS
Surrogate: 1,2-Dichloroethane-d4	91.7	Limit: 61-142	% Rec	1		04/08/24 0000	04/08/24 1705	LJS
Surrogate: Toluene-d8	99.8	Limit: 87-116	% Rec	1		04/08/24 0000	04/08/24 1705	LJS
Surrogate: Toluene-d8	99.8	Limit: 82-121	% Rec	1		04/08/24 0000	04/08/24 1705	LJS
Surrogate: 4-Bromofluorobenzene	101	Limit: 85-111	% Rec	1		04/08/24 0000	04/08/24 1705	LJS
Surrogate: 4-Bromofluorobenzene	101	Limit: 80-116	% Rec	1		04/08/24 0000	04/08/24 1705	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		04/08/24 0855	04/09/24 0230	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0230	RVV
Barium, total	0.0537	0.0040	mg/L	4		04/08/24 0855	04/09/24 0230	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0230	RVV
Cadmium, total	0.0010	0.0008	mg/L	4		04/08/24 0855	04/09/24 0230	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		04/08/24 0855	04/09/24 0230	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		04/08/24 0855	04/09/24 0230	RVV
Copper, total	0.0060	0.0040	mg/L	4		04/08/24 0855	04/09/24 0230	RVV
Lead, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0230	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0230	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0230	RVV
Silver, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0230	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		04/08/24 0855	04/09/24 0230	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		04/08/24 0855	04/09/24 0230	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		04/08/24 0855	04/09/24 0230	RVV



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CERTIFICATE OF ANALYSIS

1HD0545

Client Sample ID:	MW-15	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/04/2024 12:53
Lab Sample ID:	1HD0545-12		

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		04/08/24 0000	04/08/24 1728	LJS
Vinyl Chloride	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1728	LJS
Bromomethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1728	LJS
Chloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1728	LJS
Trichlorofluoromethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1728	LJS
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1728	LJS
Acetone	<10.0	10.0	ug/L	1		04/08/24 0000	04/08/24 1728	LJS
Methyl Iodide	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1728	LJS
Carbon Disulfide	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1728	LJS
Methylene Chloride	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1728	LJS
Acrylonitrile	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1728	LJS
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1728	LJS
1,1-Dichloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1728	LJS
Vinyl Acetate	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1728	LJS
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1728	LJS
2-Butanone (MEK)	<10.0	10.0	ug/L	1		04/08/24 0000	04/08/24 1728	LJS
Bromochloromethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1728	LJS
Chloroform	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1728	LJS
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1728	LJS
Carbon Tetrachloride	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1728	LJS
Benzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1728	LJS
1,2-Dichloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1728	LJS
Trichloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1728	LJS
1,2-Dichloropropane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1728	LJS
Dibromomethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1728	LJS
Bromodichloromethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1728	LJS
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1728	LJS
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1728	LJS
Toluene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1728	LJS
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1728	LJS
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1728	LJS
Tetrachloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1728	LJS
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1728	LJS
Dibromochloromethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1728	LJS
1,2-Dibromoethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1728	LJS
Chlorobenzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1728	LJS
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1728	LJS
Ethylbenzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1728	LJS
Xylenes, total	<2.0	2.0	ug/L	1		04/08/24 0000	04/08/24 1728	LJS
Styrene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1728	LJS
Bromoform	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1728	LJS
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1728	LJS

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CERTIFICATE OF ANALYSIS

1HD0545

Client Sample ID:	MW-15	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/04/2024 12:53
Lab Sample ID:	1HD0545-12		

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		04/08/24 0000	04/08/24 1728	LJS
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1728	LJS
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1728	LJS
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1728	LJS
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1728	LJS
Surrogate: Dibromofluoromethane	86.7	Limit: 75-136	% Rec	1		04/08/24 0000	04/08/24 1728	LJS
Surrogate: Dibromofluoromethane	86.7	Limit: 80-126	% Rec	1		04/08/24 0000	04/08/24 1728	LJS
Surrogate: 1,2-Dichloroethane-d4	90.5	Limit: 63-138	% Rec	1		04/08/24 0000	04/08/24 1728	LJS
Surrogate: 1,2-Dichloroethane-d4	90.5	Limit: 61-142	% Rec	1		04/08/24 0000	04/08/24 1728	LJS
Surrogate: Toluene-d8	99.4	Limit: 82-121	% Rec	1		04/08/24 0000	04/08/24 1728	LJS
Surrogate: Toluene-d8	99.4	Limit: 87-116	% Rec	1		04/08/24 0000	04/08/24 1728	LJS
Surrogate: 4-Bromofluorobenzene	101	Limit: 85-111	% Rec	1		04/08/24 0000	04/08/24 1728	LJS
Surrogate: 4-Bromofluorobenzene	101	Limit: 80-116	% Rec	1		04/08/24 0000	04/08/24 1728	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		04/08/24 0855	04/09/24 0236	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0236	RVV
Barium, total	0.0860	0.0040	mg/L	4		04/08/24 0855	04/09/24 0236	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0236	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		04/08/24 0855	04/09/24 0236	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		04/08/24 0855	04/09/24 0236	RVV
Cobalt, total	0.0004	0.0004	mg/L	4		04/08/24 0855	04/09/24 0236	RVV
Copper, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0236	RVV
Lead, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0236	RVV
Nickel, total	0.0176	0.0040	mg/L	4		04/08/24 0855	04/09/24 0236	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0236	RVV
Silver, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0236	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		04/08/24 0855	04/09/24 0236	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		04/08/24 0855	04/09/24 0236	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		04/08/24 0855	04/09/24 0236	RVV

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CERTIFICATE OF ANALYSIS

1HD0545

Client Sample ID:	MW-16	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/04/2024 12:10
Lab Sample ID:	1HD0545-13		

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		04/08/24 0000	04/08/24 1751	LJS
Vinyl Chloride	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1751	LJS
Bromomethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1751	LJS
Chloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1751	LJS
Trichlorofluoromethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1751	LJS
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1751	LJS
Acetone	<10.0	10.0	ug/L	1		04/08/24 0000	04/08/24 1751	LJS
Methyl Iodide	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1751	LJS
Carbon Disulfide	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1751	LJS
Methylene Chloride	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1751	LJS
Acrylonitrile	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1751	LJS
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1751	LJS
1,1-Dichloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1751	LJS
Vinyl Acetate	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1751	LJS
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1751	LJS
2-Butanone (MEK)	<10.0	10.0	ug/L	1		04/08/24 0000	04/08/24 1751	LJS
Bromochloromethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1751	LJS
Chloroform	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1751	LJS
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1751	LJS
Carbon Tetrachloride	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1751	LJS
Benzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1751	LJS
1,2-Dichloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1751	LJS
Trichloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1751	LJS
1,2-Dichloropropane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1751	LJS
Dibromomethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1751	LJS
Bromodichloromethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1751	LJS
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1751	LJS
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1751	LJS
Toluene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1751	LJS
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1751	LJS
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1751	LJS
Tetrachloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1751	LJS
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1751	LJS
Dibromochloromethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1751	LJS
1,2-Dibromoethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1751	LJS
Chlorobenzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1751	LJS
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1751	LJS
Ethylbenzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1751	LJS
Xylenes, total	<2.0	2.0	ug/L	1		04/08/24 0000	04/08/24 1751	LJS
Styrene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1751	LJS
Bromoform	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1751	LJS
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1751	LJS

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CERTIFICATE OF ANALYSIS

1HD0545

Client Sample ID:	MW-16	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/04/2024 12:10
Lab Sample ID:	1HD0545-13		

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		04/08/24 0000	04/08/24 1751	LJS
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1751	LJS
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1751	LJS
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1751	LJS
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1751	LJS
Surrogate: Dibromofluoromethane	86.6	Limit: 80-126	% Rec	1		04/08/24 0000	04/08/24 1751	LJS
Surrogate: Dibromofluoromethane	86.6	Limit: 75-136	% Rec	1		04/08/24 0000	04/08/24 1751	LJS
Surrogate: 1,2-Dichloroethane-d4	90.0	Limit: 63-138	% Rec	1		04/08/24 0000	04/08/24 1751	LJS
Surrogate: 1,2-Dichloroethane-d4	90.0	Limit: 61-142	% Rec	1		04/08/24 0000	04/08/24 1751	LJS
Surrogate: Toluene-d8	99.5	Limit: 87-116	% Rec	1		04/08/24 0000	04/08/24 1751	LJS
Surrogate: Toluene-d8	99.5	Limit: 82-121	% Rec	1		04/08/24 0000	04/08/24 1751	LJS
Surrogate: 4-Bromofluorobenzene	101	Limit: 85-111	% Rec	1		04/08/24 0000	04/08/24 1751	LJS
Surrogate: 4-Bromofluorobenzene	101	Limit: 80-116	% Rec	1		04/08/24 0000	04/08/24 1751	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		04/08/24 0855	04/09/24 0242	RVV
Arsenic, total	0.0045	0.0040	mg/L	4		04/08/24 0855	04/09/24 0242	RVV
Barium, total	0.974	0.0040	mg/L	4		04/08/24 0855	04/09/24 0242	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0242	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		04/08/24 0855	04/09/24 0242	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		04/08/24 0855	04/09/24 0242	RVV
Cobalt, total	0.0008	0.0004	mg/L	4		04/08/24 0855	04/09/24 0242	RVV
Copper, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0242	RVV
Lead, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0242	RVV
Nickel, total	0.0145	0.0040	mg/L	4		04/08/24 0855	04/09/24 0242	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0242	RVV
Silver, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0242	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		04/08/24 0855	04/09/24 0242	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		04/08/24 0855	04/09/24 0242	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		04/08/24 0855	04/09/24 0242	RVV

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CERTIFICATE OF ANALYSIS

1HD0545

Client Sample ID:	GU-1	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/04/2024 11:57
Lab Sample ID:	1HD0545-14		

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		04/08/24 0000	04/08/24 1814	LJS
Vinyl Chloride	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1814	LJS
Bromomethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1814	LJS
Chloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1814	LJS
Trichlorofluoromethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1814	LJS
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1814	LJS
Acetone	<10.0	10.0	ug/L	1		04/08/24 0000	04/08/24 1814	LJS
Methyl Iodide	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1814	LJS
Carbon Disulfide	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1814	LJS
Methylene Chloride	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1814	LJS
Acrylonitrile	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1814	LJS
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1814	LJS
1,1-Dichloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1814	LJS
Vinyl Acetate	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1814	LJS
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1814	LJS
2-Butanone (MEK)	<10.0	10.0	ug/L	1		04/08/24 0000	04/08/24 1814	LJS
Bromochloromethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1814	LJS
Chloroform	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1814	LJS
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1814	LJS
Carbon Tetrachloride	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1814	LJS
Benzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1814	LJS
1,2-Dichloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1814	LJS
Trichloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1814	LJS
1,2-Dichloropropane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1814	LJS
Dibromomethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1814	LJS
Bromodichloromethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1814	LJS
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1814	LJS
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1814	LJS
Toluene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1814	LJS
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1814	LJS
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1814	LJS
Tetrachloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1814	LJS
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1814	LJS
Dibromochloromethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1814	LJS
1,2-Dibromoethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1814	LJS
Chlorobenzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1814	LJS
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1814	LJS
Ethylbenzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1814	LJS
Xylenes, total	<2.0	2.0	ug/L	1		04/08/24 0000	04/08/24 1814	LJS
Styrene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1814	LJS
Bromoform	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1814	LJS
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1814	LJS

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CERTIFICATE OF ANALYSIS

1HD0545

Client Sample ID:	GU-1	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/04/2024 11:57
Lab Sample ID:	1HD0545-14		

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		04/08/24 0000	04/08/24 1814	LJS
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1814	LJS
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1814	LJS
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1814	LJS
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1814	LJS
Surrogate: Dibromofluoromethane	86.9	Limit: 80-126	% Rec	1		04/08/24 0000	04/08/24 1814	LJS
Surrogate: Dibromofluoromethane	86.9	Limit: 75-136	% Rec	1		04/08/24 0000	04/08/24 1814	LJS
Surrogate: 1,2-Dichloroethane-d4	92.2	Limit: 63-138	% Rec	1		04/08/24 0000	04/08/24 1814	LJS
Surrogate: 1,2-Dichloroethane-d4	92.2	Limit: 61-142	% Rec	1		04/08/24 0000	04/08/24 1814	LJS
Surrogate: Toluene-d8	101	Limit: 87-116	% Rec	1		04/08/24 0000	04/08/24 1814	LJS
Surrogate: Toluene-d8	101	Limit: 82-121	% Rec	1		04/08/24 0000	04/08/24 1814	LJS
Surrogate: 4-Bromofluorobenzene	101	Limit: 85-111	% Rec	1		04/08/24 0000	04/08/24 1814	LJS
Surrogate: 4-Bromofluorobenzene	101	Limit: 80-116	% Rec	1		04/08/24 0000	04/08/24 1814	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		04/08/24 0855	04/09/24 0300	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0300	RVV
Barium, total	0.454	0.0040	mg/L	4		04/08/24 0855	04/09/24 0300	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0300	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		04/08/24 0855	04/09/24 0300	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		04/08/24 0855	04/09/24 0300	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		04/08/24 0855	04/09/24 0300	RVV
Copper, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0300	RVV
Lead, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0300	RVV
Nickel, total	0.0148	0.0040	mg/L	4		04/08/24 0855	04/09/24 0300	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0300	RVV
Silver, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0300	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		04/08/24 0855	04/09/24 0300	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		04/08/24 0855	04/09/24 0300	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		04/08/24 0855	04/09/24 0300	RVV

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CERTIFICATE OF ANALYSIS

1HD0545

Client Sample ID:	GU-2	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/04/2024 14:34
Lab Sample ID:	1HD0545-15		

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		04/08/24 0000	04/08/24 1837	LJS
Vinyl Chloride	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1837	LJS
Bromomethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1837	LJS
Chloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1837	LJS
Trichlorofluoromethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1837	LJS
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1837	LJS
Acetone	<10.0	10.0	ug/L	1		04/08/24 0000	04/08/24 1837	LJS
Methyl Iodide	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1837	LJS
Carbon Disulfide	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1837	LJS
Methylene Chloride	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1837	LJS
Acrylonitrile	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1837	LJS
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1837	LJS
1,1-Dichloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1837	LJS
Vinyl Acetate	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1837	LJS
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1837	LJS
2-Butanone (MEK)	<10.0	10.0	ug/L	1		04/08/24 0000	04/08/24 1837	LJS
Bromochloromethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1837	LJS
Chloroform	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1837	LJS
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1837	LJS
Carbon Tetrachloride	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1837	LJS
Benzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1837	LJS
1,2-Dichloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1837	LJS
Trichloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1837	LJS
1,2-Dichloropropane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1837	LJS
Dibromomethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1837	LJS
Bromodichloromethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1837	LJS
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1837	LJS
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1837	LJS
Toluene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1837	LJS
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1837	LJS
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1837	LJS
Tetrachloroethylene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1837	LJS
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1837	LJS
Dibromochloromethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1837	LJS
1,2-Dibromoethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1837	LJS
Chlorobenzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1837	LJS
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1837	LJS
Ethylbenzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1837	LJS
Xylenes, total	<2.0	2.0	ug/L	1		04/08/24 0000	04/08/24 1837	LJS
Styrene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1837	LJS
Bromoform	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1837	LJS
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1837	LJS

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CERTIFICATE OF ANALYSIS

1HD0545

Client Sample ID:	GU-2	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/04/2024 14:34
Lab Sample ID:	1HD0545-15		

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		04/08/24 0000	04/08/24 1837	LJS
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1837	LJS
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1837	LJS
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1837	LJS
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		04/08/24 0000	04/08/24 1837	LJS
Surrogate: Dibromofluoromethane	86.7	Limit: 75-136	% Rec	1		04/08/24 0000	04/08/24 1837	LJS
Surrogate: Dibromofluoromethane	86.7	Limit: 80-126	% Rec	1		04/08/24 0000	04/08/24 1837	LJS
Surrogate: 1,2-Dichloroethane-d4	92.6	Limit: 63-138	% Rec	1		04/08/24 0000	04/08/24 1837	LJS
Surrogate: 1,2-Dichloroethane-d4	92.6	Limit: 61-142	% Rec	1		04/08/24 0000	04/08/24 1837	LJS
Surrogate: Toluene-d8	100	Limit: 82-121	% Rec	1		04/08/24 0000	04/08/24 1837	LJS
Surrogate: Toluene-d8	100	Limit: 87-116	% Rec	1		04/08/24 0000	04/08/24 1837	LJS
Surrogate: 4-Bromofluorobenzene	101	Limit: 85-111	% Rec	1		04/08/24 0000	04/08/24 1837	LJS
Surrogate: 4-Bromofluorobenzene	101	Limit: 80-116	% Rec	1		04/08/24 0000	04/08/24 1837	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		04/08/24 0855	04/09/24 0307	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0307	RVV
Barium, total	0.207	0.0040	mg/L	4		04/08/24 0855	04/09/24 0307	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0307	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		04/08/24 0855	04/09/24 0307	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		04/08/24 0855	04/09/24 0307	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		04/08/24 0855	04/09/24 0307	RVV
Copper, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0307	RVV
Lead, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0307	RVV
Nickel, total	0.0075	0.0040	mg/L	4		04/08/24 0855	04/09/24 0307	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0307	RVV
Silver, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0307	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		04/08/24 0855	04/09/24 0307	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		04/08/24 0855	04/09/24 0307	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		04/08/24 0855	04/09/24 0307	RVV

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CERTIFICATE OF ANALYSIS

1HD0545

Client Sample ID:	Duplicate	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/04/2024
Lab Sample ID:	1HD0545-16		

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		04/08/24 0855	04/09/24 0313	RVV
Arsenic, total	0.0054	0.0040	mg/L	4		04/08/24 0855	04/09/24 0313	RVV
Barium, total	0.124	0.0040	mg/L	4		04/08/24 0855	04/09/24 0313	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0313	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		04/08/24 0855	04/09/24 0313	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		04/08/24 0855	04/09/24 0313	RVV
Cobalt, total	0.0008	0.0004	mg/L	4		04/08/24 0855	04/09/24 0313	RVV
Copper, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0313	RVV
Lead, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0313	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0313	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0313	RVV
Silver, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0313	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		04/08/24 0855	04/09/24 0313	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		04/08/24 0855	04/09/24 0313	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		04/08/24 0855	04/09/24 0313	RVV

Client Sample ID:	MW-13 (up)	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/04/2024 10:51
Lab Sample ID:	1HD0545-17		

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		04/08/24 0855	04/09/24 0319	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0319	RVV
Barium, total	0.0328	0.0040	mg/L	4		04/08/24 0855	04/09/24 0319	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0319	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		04/08/24 0855	04/09/24 0319	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		04/08/24 0855	04/09/24 0319	RVV
Cobalt, total	0.0005	0.0004	mg/L	4		04/08/24 0855	04/09/24 0319	RVV
Copper, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0319	RVV
Lead, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0319	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0319	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0319	RVV
Silver, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0319	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		04/08/24 0855	04/09/24 0319	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		04/08/24 0855	04/09/24 0319	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		04/08/24 0855	04/09/24 0319	RVV



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CERTIFICATE OF ANALYSIS

1HD0545

Client Sample ID:	MW-18 (up)	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/04/2024 10:02
Lab Sample ID:	1HD0545-18		

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		04/08/24 0855	04/09/24 0325	RVV
Arsenic, total	0.0067	0.0040	mg/L	4		04/08/24 0855	04/09/24 0325	RVV
Barium, total	0.0438	0.0040	mg/L	4		04/08/24 0855	04/09/24 0325	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0325	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		04/08/24 0855	04/09/24 0325	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		04/08/24 0855	04/09/24 0325	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		04/08/24 0855	04/09/24 0325	RVV
Copper, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0325	RVV
Lead, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0325	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0325	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0325	RVV
Silver, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0325	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		04/08/24 0855	04/09/24 0325	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		04/08/24 0855	04/09/24 0325	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		04/08/24 0855	04/09/24 0325	RVV

Client Sample ID:	MW-19 (up)	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/04/2024 10:08
Lab Sample ID:	1HD0545-19		

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		04/08/24 0855	04/09/24 0331	RVV
Arsenic, total	0.0048	0.0040	mg/L	4		04/08/24 0855	04/09/24 0331	RVV
Barium, total	0.211	0.0040	mg/L	4		04/08/24 0855	04/09/24 0331	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0331	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		04/08/24 0855	04/09/24 0331	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		04/08/24 0855	04/09/24 0331	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		04/08/24 0855	04/09/24 0331	RVV
Copper, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0331	RVV
Lead, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0331	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0331	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0331	RVV
Silver, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0331	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		04/08/24 0855	04/09/24 0331	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		04/08/24 0855	04/09/24 0331	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		04/08/24 0855	04/09/24 0331	RVV



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CERTIFICATE OF ANALYSIS

1HD0545

Client Sample ID:	MW-20 (up)	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/04/2024 9:33
Lab Sample ID:	1HD0545-20		

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		04/08/24 0855	04/09/24 0337	RVV
Arsenic, total	0.0057	0.0040	mg/L	4		04/08/24 0855	04/09/24 0337	RVV
Barium, total	0.127	0.0040	mg/L	4		04/08/24 0855	04/09/24 0337	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0337	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		04/08/24 0855	04/09/24 0337	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		04/08/24 0855	04/09/24 0337	RVV
Cobalt, total	0.0007	0.0004	mg/L	4		04/08/24 0855	04/09/24 0337	RVV
Copper, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0337	RVV
Lead, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0337	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0337	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0337	RVV
Silver, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0337	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		04/08/24 0855	04/09/24 0337	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		04/08/24 0855	04/09/24 0337	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		04/08/24 0855	04/09/24 0337	RVV

Client Sample ID:	MW-21 (up)	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/04/2024 9:46
Lab Sample ID:	1HD0545-21		

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		04/08/24 0855	04/09/24 0344	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0344	RVV
Barium, total	0.207	0.0040	mg/L	4		04/08/24 0855	04/09/24 0344	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0344	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		04/08/24 0855	04/09/24 0344	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		04/08/24 0855	04/09/24 0344	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		04/08/24 0855	04/09/24 0344	RVV
Copper, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0344	RVV
Lead, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0344	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0344	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0344	RVV
Silver, total	<0.0040	0.0040	mg/L	4		04/08/24 0855	04/09/24 0344	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		04/08/24 0855	04/09/24 0344	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		04/08/24 0855	04/09/24 0344	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		04/08/24 0855	04/09/24 0344	RVV



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CERTIFICATE OF ANALYSIS

1HD0545

Batch Log Summary

Method	Batch	Laboratory ID	Client / Source ID
EPA 9010B	1HD0415	1HD0415-MSD1	1HD0315-11
		1HD0415-MS1	1HD0315-11
		1HD0415-BS1	
		1HD0415-BLK1	
		1HD0545-10	MW-10
Method	Batch	Laboratory ID	Client / Source ID
EPA 376.2	1HD0417	1HD0417-BLK1	
		1HD0545-10	MW-10
		1HD0417-MSD1	1HD0315-11
		1HD0417-MS1	1HD0315-11
		1HD0417-BS1	
Method	Batch	Laboratory ID	Client / Source ID
EPA 6020A	1HD0422	1HD0422-BLK1	
		1HD0422-BS1	
		1HD0545-01	MW-11 (up)
		1HD0422-MS1	1HD0545-01
		1HD0422-MSD1	1HD0545-01
		1HD0422-PS1	1HD0545-01
Method	Batch	Laboratory ID	Client / Source ID
EPA 6020A	1HD0425	1HD0425-BLK1	
		1HD0425-BS1	
		1HD0545-02	MW-12 (up)
		1HD0425-MS1	1HD0545-02
		1HD0425-MSD1	1HD0545-02
		1HD0425-PS1	1HD0545-02
		1HD0545-03	MW-17 (up)
		1HD0545-04	MW-3AR
		1HD0545-05	MW-6B
		1HD0545-06	MW-7A
		1HD0545-07	MW-7B
		1HD0545-08	MW-8
		1HD0545-09	MW-9
		1HD0545-10	MW-10
1HD0545-11	MW-14		
1HD0545-12	MW-15		
1HD0545-13	MW-16		
1HD0545-14	GU-1		



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CERTIFICATE OF ANALYSIS

1HD0545

EPA 6020A	1HD0425	1HD0545-15	GU-2
		1HD0545-16	Duplicate
		1HD0545-17	MW-13 (up)
		1HD0545-18	MW-18 (up)
		1HD0545-19	MW-19 (up)
		1HD0545-20	MW-20 (up)
		1HD0545-21	MW-21 (up)

Method	Batch	Laboratory ID	Client / Source ID
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EPA 8270C	1HD0444	1HD0444-BLK1	
		1HD0444-BS1	
		1HD0444-BSD1	
		1HD0545-10	MW-10

Method	Batch	Laboratory ID	Client / Source ID
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EPA 8151A	1HD0468	1HD0468-BLK1	
		1HD0545-10	MW-10
		1HD0468-BS1	
		1HD0468-BSD1	

Method	Batch	Laboratory ID	Client / Source ID
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EPA 8081	1HD0488	1HD0488-BLK1	
		1HD0488-BS1	
		1HD0488-BSD1	
		1HD0545-10	MW-10

Method	Batch	Laboratory ID	Client / Source ID
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EPA 8082	1HD0489	1HD0489-BLK1	
		1HD0489-BS1	
		1HD0489-BSD1	
		1HD0545-10	MW-10

Method	Batch	Laboratory ID	Client / Source ID
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EPA 8141	1HD0490	1HD0490-BLK1	
		1HD0545-10	MW-10
		1HD0490-BS1	
		1HD0490-BSD1	

Method	Batch	Laboratory ID	Client / Source ID
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EPA 8260B	1HD0497	1HD0497-BS1	
		1HD0497-BSD1	
		1HD0497-BLK1	
		1HD0545-01	MW-11 (up)
		1HD0545-02	MW-12 (up)
		1HD0545-03	MW-17 (up)



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CERTIFICATE OF ANALYSIS

1HD0545

EPA 8260B	1HD0497	1HD0545-04	MW-3AR
		1HD0545-05	MW-6B
		1HD0545-06	MW-7A
		1HD0545-07	MW-7B
		1HD0545-08	MW-8
		1HD0545-09	MW-9
		1HD0545-10	MW-10
		1HD0545-11	MW-14
		1HD0545-12	MW-15
		1HD0545-13	MW-16
		1HD0545-14	GU-1
		1HD0545-15	GU-2
		1HD0497-MS1	1HD0545-01
		1HD0497-MSD1	1HD0545-01

Method	Batch	Laboratory ID	Client / Source ID
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EPA 8270C	1HD0535	1HD0535-BLK1	
		1HD0535-BS1	
		1HD0535-BSD1	
		1HD0545-05	MW-6B

Method	Batch	Laboratory ID	Client / Source ID
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EPA 7470A	1HD0568	1HD0568-BLK1	
		1HD0568-BS1	
		1HD0568-MS1	1HD0160-03
		1HD0568-MSD1	1HD0160-03
		1HD0545-10	MW-10

Method	Batch	Laboratory ID	Client / Source ID
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EPA 8015C	1HD0875	1HD0875-BS1	
		1HD0875-BLK1	
		1HD0545-10	MW-10
		1HD0875-MS1	1HD0193-01
		1HD0875-MSD1	1HD0193-01

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 1HD0497 - EPA 5030B - EPA 8260B										
Blank (1HD0497-BLK1)				Prepared: 04/08/24 00:00 Analyzed: 04/08/24 10:51						
Dichlorodifluoromethane	<1.0	1.0	ug/L							
Chloromethane	<1.0	1.0	ug/L							
Chloromethane	<1.0	1.0	ug/L							



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HD0545

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD0497 - EPA 5030B - EPA 8260B										
Blank (1HD0497-BLK1)										
				Prepared: 04/08/24 00:00 Analyzed: 04/08/24 10:51						
Vinyl Chloride	<1.0	1.0	ug/L							
Vinyl Chloride	<1.0	1.0	ug/L							
Bromomethane	<1.0	1.0	ug/L							
Bromomethane	<1.0	1.0	ug/L							
Chloroethane	<1.0	1.0	ug/L							
Chloroethane	<1.0	1.0	ug/L							
Trichlorofluoromethane	<1.0	1.0	ug/L							
Trichlorofluoromethane	<1.0	1.0	ug/L							
Acrolein	<10.0	10.0	ug/L							
1,1-Dichloroethylene	<1.0	1.0	ug/L							
1,1-Dichloroethylene	<1.0	1.0	ug/L							
Acetone	<10.0	10.0	ug/L							
Acetone	<10.0	10.0	ug/L							
Methyl Iodide	<2.0	2.0	ug/L							
Methyl Iodide	<1.0	1.0	ug/L							
Carbon Disulfide	<1.0	1.0	ug/L							
Carbon Disulfide	<1.0	1.0	ug/L							
Acetonitrile	<10.0	10.0	ug/L							
Methylene Chloride	<5.0	5.0	ug/L							
Methylene Chloride	<5.0	5.0	ug/L							
Acrylonitrile	<5.0	5.0	ug/L							
Acrylonitrile	<5.0	5.0	ug/L							
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L							
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L							
1,1-Dichloroethane	<1.0	1.0	ug/L							
1,1-Dichloroethane	<1.0	1.0	ug/L							
Vinyl Acetate	<5.0	5.0	ug/L							
Vinyl Acetate	<5.0	5.0	ug/L							
2,2-Dichloropropane	<1.0	1.0	ug/L							
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L							
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L							
2-Butanone (MEK)	<5.0	5.0	ug/L							
2-Butanone (MEK)	<10.0	10.0	ug/L							
Bromochloromethane	<1.0	1.0	ug/L							
Bromochloromethane	<1.0	1.0	ug/L							
Chloroform	<1.0	1.0	ug/L							
Chloroform	<1.0	1.0	ug/L							
1,1,1-Trichloroethane	<1.0	1.0	ug/L							
1,1,1-Trichloroethane	<1.0	1.0	ug/L							
1,1-Dichloropropene	<1.0	1.0	ug/L							
Carbon Tetrachloride	<1.0	1.0	ug/L							
Carbon Tetrachloride	<1.0	1.0	ug/L							
Benzene	<1.0	1.0	ug/L							

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CERTIFICATE OF ANALYSIS

1HD0545

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD0497 - EPA 5030B - EPA 8260B										
Blank (1HD0497-BLK1)										
Prepared: 04/08/24 00:00 Analyzed: 04/08/24 10:51										
Benzene	<1.0	1.0	ug/L							
1,2-Dichloroethane	<1.0	1.0	ug/L							
1,2-Dichloroethane	<1.0	1.0	ug/L							
Trichloroethylene	<1.0	1.0	ug/L							
Trichloroethylene	<1.0	1.0	ug/L							
1,2-Dichloropropane	<1.0	1.0	ug/L							
1,2-Dichloropropane	<1.0	1.0	ug/L							
Dibromomethane	<1.0	1.0	ug/L							
Dibromomethane	<1.0	1.0	ug/L							
Bromodichloromethane	<1.0	1.0	ug/L							
Bromodichloromethane	<1.0	1.0	ug/L							
cis-1,3-Dichloropropene	<1.0	1.0	ug/L							
cis-1,3-Dichloropropene	<1.0	1.0	ug/L							
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L							
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L							
Toluene	<1.0	1.0	ug/L							
Toluene	<1.0	1.0	ug/L							
trans-1,3-Dichloropropene	<1.0	1.0	ug/L							
trans-1,3-Dichloropropene	<1.0	1.0	ug/L							
Ethyl Methacrylate	<10.0	10.0	ug/L							
1,1,2-Trichloroethane	<1.0	1.0	ug/L							
1,1,2-Trichloroethane	<1.0	1.0	ug/L							
Tetrachloroethylene	<1.0	1.0	ug/L							
Tetrachloroethylene	<1.0	1.0	ug/L							
1,3-Dichloropropane	<1.0	1.0	ug/L							
2-Hexanone (MBK)	<5.0	5.0	ug/L							
2-Hexanone (MBK)	<5.0	5.0	ug/L							
Dibromochloromethane	<1.0	1.0	ug/L							
Dibromochloromethane	<1.0	1.0	ug/L							
1,2-Dibromoethane	<1.0	1.0	ug/L							
1,2-Dibromoethane	<1.0	1.0	ug/L							
Chlorobenzene	<1.0	1.0	ug/L							
Chlorobenzene	<1.0	1.0	ug/L							
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L							
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L							
Ethylbenzene	<1.0	1.0	ug/L							
Ethylbenzene	<1.0	1.0	ug/L							
Xylenes, total	<2.0	2.0	ug/L							
Xylenes, total	<2.0	2.0	ug/L							
Styrene	<1.0	1.0	ug/L							
Styrene	<1.0	1.0	ug/L							
Bromoform	<1.0	1.0	ug/L							
Bromoform	<1.0	1.0	ug/L							

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CERTIFICATE OF ANALYSIS

1HD0545

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD0497 - EPA 5030B - EPA 8260B										
Blank (1HD0497-BLK1)										
Prepared: 04/08/24 00:00 Analyzed: 04/08/24 10:51										
1,2,3-Trichloropropane	<1.0	1.0	ug/L							
1,2,3-Trichloropropane	<1.0	1.0	ug/L							
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L							
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L							
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L							
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L							
1,3-Dichlorobenzene	<1.0	1.0	ug/L							
1,4-Dichlorobenzene	<1.0	1.0	ug/L							
1,4-Dichlorobenzene	<1.0	1.0	ug/L							
1,2-Dichlorobenzene	<1.0	1.0	ug/L							
1,2-Dichlorobenzene	<1.0	1.0	ug/L							
1,2-Dibromo-3-chloropropane	<1.0	1.0	ug/L							
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L							
1,2,4-Trichlorobenzene	<1.0	1.0	ug/L							
Allyl chloride	<1.0	1.0	ug/L							
Chloroprene	<1.0	1.0	ug/L							
Methacrylonitrile	<1.0	1.0	ug/L							
Methyl Methacrylate	<1.0	1.0	ug/L							
Propionitrile	<10.0	10.0	ug/L							
Surrogate: Dibromofluoromethane	46.0		ug/L	50.2		91.8	80-126			
Surrogate: Dibromofluoromethane	46.0		ug/L	50.2		91.8	80-126			
Surrogate: Dibromofluoromethane	46.0		ug/L	50.2		91.8	80-126			
Surrogate: Dibromofluoromethane	46.0		ug/L	50.2		91.8	75-136			
Surrogate: 1,2-Dichloroethane-d4	47.0		ug/L	50.1		93.8	63-138			
Surrogate: 1,2-Dichloroethane-d4	47.0		ug/L	50.1		93.8	63-138			
Surrogate: 1,2-Dichloroethane-d4	47.0		ug/L	50.1		93.8	63-138			
Surrogate: 1,2-Dichloroethane-d4	47.0		ug/L	50.1		93.8	63-138			
Surrogate: 1,2-Dichloroethane-d4	47.0		ug/L	50.1		93.8	61-142			
Surrogate: Toluene-d8	49.7		ug/L	50.4		98.7	87-116			
Surrogate: Toluene-d8	49.7		ug/L	50.4		98.7	87-116			
Surrogate: Toluene-d8	49.7		ug/L	50.4		98.7	87-116			
Surrogate: Toluene-d8	49.7		ug/L	50.4		98.7	87-116			
Surrogate: Toluene-d8	49.7		ug/L	50.4		98.7	82-121			
Surrogate: 4-Bromofluorobenzene	49.4		ug/L	50.1		98.5	85-111			
Surrogate: 4-Bromofluorobenzene	49.4		ug/L	50.1		98.5	85-111			
Surrogate: 4-Bromofluorobenzene	49.4		ug/L	50.1		98.5	85-111			
Surrogate: 4-Bromofluorobenzene	49.4		ug/L	50.1		98.5	85-111			
Surrogate: 4-Bromofluorobenzene	49.4		ug/L	50.1		98.5	80-116			
LCS (1HD0497-BS1)										
Prepared: 04/08/24 00:00 Analyzed: 04/08/24 09:42										
Dichlorodifluoromethane	32.34	1.0	ug/L	31.6		102	44-139			
Chloromethane	34.69	1.0	ug/L	30.6		113	56-152			
Chloromethane	34.69	1.0	ug/L	30.6		113	63-155			
Vinyl Chloride	29.37	1.0	ug/L	30.2		97.2	62-151			
Vinyl Chloride	29.37	1.0	ug/L	30.2		97.2	70-154			

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CERTIFICATE OF ANALYSIS

1HD0545

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD0497 - EPA 5030B - EPA 8260B										
LCS (1HD0497-BS1)										
				Prepared: 04/08/24 00:00 Analyzed: 04/08/24 09:42						
Bromomethane	32.46	1.0	ug/L	28.8		113	61-162			
Bromomethane	32.46	1.0	ug/L	28.8		113	52-176			
Chloroethane	32.74	1.0	ug/L	31.6		103	69-138			
Chloroethane	32.74	1.0	ug/L	31.6		103	72-148			
Trichlorofluoromethane	28.33	1.0	ug/L	32.6		86.9	70-143			
Trichlorofluoromethane	28.33	1.0	ug/L	32.6		86.9	70-152			
Acrolein	58.94	10.0	ug/L	100		58.8	27-144			
1,1-Dichloroethylene	51.00	1.0	ug/L	50.0		102	76-140			
1,1-Dichloroethylene	51.00	1.0	ug/L	50.0		102	70-148			
Acetone	86.40	10.0	ug/L	102		84.7	51-156			
Acetone	86.40	10.0	ug/L	102		84.7	43-172			
Methyl Iodide	97.09	2.0	ug/L	99.7		97.4	81-166			
Methyl Iodide	97.09	1.0	ug/L	99.7		97.4	69-170			
Carbon Disulfide	89.29	1.0	ug/L	101		88.4	76-147			
Carbon Disulfide	89.29	1.0	ug/L	101		88.4	72-162			
Acetonitrile	114.9	10.0	ug/L	101		114	46-156			
Methylene Chloride	47.24	5.0	ug/L	50.0		94.5	67-139			
Methylene Chloride	47.24	5.0	ug/L	50.0		94.5	68-142			
Acrylonitrile	96.18	5.0	ug/L	100		95.8	67-144			
Acrylonitrile	96.18	5.0	ug/L	100		95.8	67-144			
trans-1,2-Dichloroethylene	48.53	1.0	ug/L	50.0		97.1	72-135			
trans-1,2-Dichloroethylene	48.53	1.0	ug/L	50.0		97.1	66-148			
1,1-Dichloroethane	47.18	1.0	ug/L	50.0		94.4	72-129			
1,1-Dichloroethane	47.18	1.0	ug/L	50.0		94.4	66-143			
Vinyl Acetate	109.5	5.0	ug/L	102		107	24-144			
Vinyl Acetate	109.5	5.0	ug/L	102		107	43-153			
2,2-Dichloropropane	41.99	1.0	ug/L	50.0		84.0	64-131			
cis-1,2-Dichloroethylene	50.22	1.0	ug/L	49.5		102	81-137			
cis-1,2-Dichloroethylene	50.22	1.0	ug/L	49.5		102	71-149			
2-Butanone (MEK)	85.94	5.0	ug/L	103		83.2	47-149			
2-Butanone (MEK)	85.94	10.0	ug/L	103		83.2	52-159			
Bromochloromethane	50.47	1.0	ug/L	50.0		101	75-138			
Bromochloromethane	50.47	1.0	ug/L	50.0		101	69-143			
Chloroform	47.05	1.0	ug/L	50.0		94.1	78-131			
Chloroform	47.05	1.0	ug/L	50.0		94.1	69-144			
1,1,1-Trichloroethane	38.71	1.0	ug/L	50.0		77.5	67-121			
1,1,1-Trichloroethane	38.71	1.0	ug/L	50.0		77.5	62-129			
1,1-Dichloropropene	46.50	1.0	ug/L	50.0		93.0	80-131			
Carbon Tetrachloride	42.93	1.0	ug/L	50.0		85.9	71-131			
Carbon Tetrachloride	42.93	1.0	ug/L	50.0		85.9	63-141			
Benzene	50.82	1.0	ug/L	50.0		102	77-130			
Benzene	50.82	1.0	ug/L	50.0		102	71-134			
1,2-Dichloroethane	47.89	1.0	ug/L	50.0		95.8	76-126			

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CERTIFICATE OF ANALYSIS

1HD0545

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD0497 - EPA 5030B - EPA 8260B										
LCS (1HD0497-BS1)										
Prepared: 04/08/24 00:00 Analyzed: 04/08/24 09:42										
1,2-Dichloroethane	47.89	1.0	ug/L	50.0		95.8	72-132			
Trichloroethylene	48.66	1.0	ug/L	50.0		97.3	80-124			
Trichloroethylene	48.66	1.0	ug/L	50.0		97.3	71-135			
1,2-Dichloropropane	51.46	1.0	ug/L	50.0		103	81-125			
1,2-Dichloropropane	51.46	1.0	ug/L	50.0		103	69-136			
Dibromomethane	52.41	1.0	ug/L	50.0		105	84-134			
Dibromomethane	52.41	1.0	ug/L	50.0		105	73-147			
Bromodichloromethane	45.31	1.0	ug/L	50.0		90.6	78-121			
Bromodichloromethane	45.31	1.0	ug/L	50.0		90.6	68-129			
cis-1,3-Dichloropropene	47.94	1.0	ug/L	50.3		95.3	78-120			
cis-1,3-Dichloropropene	47.94	1.0	ug/L	50.3		95.3	65-134			
4-Methyl-2-pentanone (MIBK)	100.5	5.0	ug/L	101		99.1	67-143			
4-Methyl-2-pentanone (MIBK)	100.5	5.0	ug/L	101		99.1	58-147			
Toluene	49.37	1.0	ug/L	50.0		98.7	77-130			
Toluene	49.37	1.0	ug/L	50.0		98.7	72-133			
trans-1,3-Dichloropropene	46.27	1.0	ug/L	50.4		91.8	77-123			
trans-1,3-Dichloropropene	46.27	1.0	ug/L	50.4		91.8	67-130			
Ethyl Methacrylate	99.41	10.0	ug/L	101		98.8	52-148			
1,1,2-Trichloroethane	49.67	1.0	ug/L	50.0		99.3	78-124			
1,1,2-Trichloroethane	49.67	1.0	ug/L	50.0		99.3	69-135			
Tetrachloroethylene	46.83	1.0	ug/L	50.0		93.7	73-124			
Tetrachloroethylene	46.83	1.0	ug/L	50.0		93.7	69-130			
1,3-Dichloropropane	54.04	1.0	ug/L	50.0		108	78-131			
2-Hexanone (MBK)	97.03	5.0	ug/L	103		93.9	57-145			
2-Hexanone (MBK)	97.03	5.0	ug/L	103		93.9	55-144			
Dibromochloromethane	48.39	1.0	ug/L	49.5		97.8	78-126			
Dibromochloromethane	48.39	1.0	ug/L	49.5		97.8	73-127			
1,2-Dibromoethane	49.19	1.0	ug/L	50.0		98.4	69-126			
1,2-Dibromoethane	49.19	1.0	ug/L	50.0		98.4	67-132			
Chlorobenzene	49.74	1.0	ug/L	50.0		99.5	76-120			
Chlorobenzene	49.74	1.0	ug/L	50.0		99.5	72-123			
1,1,1,2-Tetrachloroethane	48.46	1.0	ug/L	50.0		96.9	81-122			
1,1,1,2-Tetrachloroethane	48.46	1.0	ug/L	50.0		96.9	73-127			
Ethylbenzene	47.61	1.0	ug/L	50.0		95.2	74-121			
Ethylbenzene	47.61	1.0	ug/L	50.0		95.2	71-127			
Xylenes, total	141.7	2.0	ug/L	150		94.5	75-122			
Xylenes, total	141.7	2.0	ug/L	150		94.5	74-127			
Styrene	47.25	1.0	ug/L	50.0		94.5	76-119			
Styrene	47.25	1.0	ug/L	50.0		94.5	66-126			
Bromoform	46.60	1.0	ug/L	50.0		93.2	74-127			
Bromoform	46.60	1.0	ug/L	50.0		93.2	68-130			
1,2,3-Trichloropropane	50.61	1.0	ug/L	50.0		101	73-125			
1,2,3-Trichloropropane	50.61	1.0	ug/L	50.0		101	63-136			

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CERTIFICATE OF ANALYSIS

1HD0545

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD0497 - EPA 5030B - EPA 8260B										
LCS (1HD0497-BS1)										
				Prepared: 04/08/24 00:00 Analyzed: 04/08/24 09:42						
trans-1,4-Dichloro-2-butene	85.86	5.0	ug/L	104		82.6	55-135			
trans-1,4-Dichloro-2-butene	85.86	5.0	ug/L	104		82.6	54-134			
1,1,2,2-Tetrachloroethane	49.08	1.0	ug/L	49.8		98.5	58-133			
1,1,2,2-Tetrachloroethane	49.08	1.0	ug/L	49.8		98.5	61-131			
1,3-Dichlorobenzene	46.66	1.0	ug/L	50.0		93.3	70-125			
1,4-Dichlorobenzene	47.60	1.0	ug/L	50.0		95.2	69-128			
1,4-Dichlorobenzene	47.60	1.0	ug/L	50.0		95.2	70-129			
1,2-Dichlorobenzene	46.66	1.0	ug/L	50.0		93.3	70-125			
1,2-Dichlorobenzene	46.66	1.0	ug/L	50.0		93.3	69-126			
1,2-Dibromo-3-chloropropane	46.57	1.0	ug/L	50.0		93.1	54-147			
1,2-Dibromo-3-chloropropane	46.57	5.0	ug/L	50.0		93.1	50-143			
1,2,4-Trichlorobenzene	48.47	1.0	ug/L	50.0		96.9	55-149			
Allyl chloride	27.41	1.0	ug/L	35.7		76.7	76-134			
Chloroprene	48.38	1.0	ug/L	50.0		96.8	74-141			
Methacrylonitrile	56.52	1.0	ug/L	64.3		88.0	73-143			
Methyl Methacrylate	54.55	1.0	ug/L	57.3		95.2	72-123			
Propionitrile	83.08	10.0	ug/L	50.0		166	50-151			QS-02
<i>Surrogate: Dibromofluoromethane</i>	45.9		ug/L	50.2		91.4	80-126			
<i>Surrogate: Dibromofluoromethane</i>	45.9		ug/L	50.2		91.4	80-126			
<i>Surrogate: Dibromofluoromethane</i>	45.9		ug/L	50.2		91.4	80-126			
<i>Surrogate: Dibromofluoromethane</i>	45.9		ug/L	50.2		91.4	75-136			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	45.3		ug/L	50.1		90.5	63-138			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	45.3		ug/L	50.1		90.5	63-138			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	45.3		ug/L	50.1		90.5	63-138			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	45.3		ug/L	50.1		90.5	63-138			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	45.3		ug/L	50.1		90.5	61-142			
<i>Surrogate: Toluene-d8</i>	50.3		ug/L	50.4		99.9	87-116			
<i>Surrogate: Toluene-d8</i>	50.3		ug/L	50.4		99.9	87-116			
<i>Surrogate: Toluene-d8</i>	50.3		ug/L	50.4		99.9	87-116			
<i>Surrogate: Toluene-d8</i>	50.3		ug/L	50.4		99.9	87-116			
<i>Surrogate: Toluene-d8</i>	50.3		ug/L	50.4		99.9	87-116			
<i>Surrogate: Toluene-d8</i>	50.3		ug/L	50.4		99.9	82-121			
<i>Surrogate: 4-Bromofluorobenzene</i>	50.1		ug/L	50.1		100	85-111			
<i>Surrogate: 4-Bromofluorobenzene</i>	50.1		ug/L	50.1		100	85-111			
<i>Surrogate: 4-Bromofluorobenzene</i>	50.1		ug/L	50.1		100	85-111			
<i>Surrogate: 4-Bromofluorobenzene</i>	50.1		ug/L	50.1		100	85-111			
<i>Surrogate: 4-Bromofluorobenzene</i>	50.1		ug/L	50.1		100	80-116			
LCS Dup (1HD0497-BS1)										
				Prepared: 04/08/24 00:00 Analyzed: 04/08/24 10:05						
Dichlorodifluoromethane	31.14	1.0	ug/L	31.6		98.6	44-139	3.78	30	
Chloromethane	33.11	1.0	ug/L	30.6		108	56-152	4.66	30	
Chloromethane	33.11	1.0	ug/L	30.6		108	63-155	4.66	24	
Vinyl Chloride	28.07	1.0	ug/L	30.2		92.9	62-151	4.53	28	
Vinyl Chloride	28.07	1.0	ug/L	30.2		92.9	70-154	4.53	25	
Bromomethane	31.27	1.0	ug/L	28.8		109	61-162	3.73	28	
Bromomethane	31.27	1.0	ug/L	28.8		109	52-176	3.73	27	



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CERTIFICATE OF ANALYSIS

1HD0545

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD0497 - EPA 5030B - EPA 8260B										
LCS Dup (1HD0497-BSD1)										
Prepared: 04/08/24 00:00 Analyzed: 04/08/24 10:05										
Chloroethane	31.37	1.0	ug/L	31.6		99.2	69-138	4.27	29	
Chloroethane	31.37	1.0	ug/L	31.6		99.2	72-148	4.27	25	
Trichlorofluoromethane	27.22	1.0	ug/L	32.6		83.5	70-143	4.00	27	
Trichlorofluoromethane	27.22	1.0	ug/L	32.6		83.5	70-152	4.00	26	
Acrolein	55.99	10.0	ug/L	100		55.9	27-144	5.13	30	
1,1-Dichloroethylene	49.23	1.0	ug/L	50.0		98.5	76-140	3.53	30	
1,1-Dichloroethylene	49.23	1.0	ug/L	50.0		98.5	70-148	3.53	24	
Acetone	92.13	10.0	ug/L	102		90.3	51-156	6.42	30	
Acetone	92.13	10.0	ug/L	102		90.3	43-172	6.42	30	
Methyl Iodide	94.30	2.0	ug/L	99.7		94.6	81-166	2.92	29	
Methyl Iodide	94.30	1.0	ug/L	99.7		94.6	69-170	2.92	30	
Carbon Disulfide	85.38	1.0	ug/L	101		84.5	76-147	4.48	27	
Carbon Disulfide	85.38	1.0	ug/L	101		84.5	72-162	4.48	24	
Acetonitrile	94.54	10.0	ug/L	101		94.0	46-156	19.5	30	
Methylene Chloride	45.38	5.0	ug/L	50.0		90.8	67-139	4.02	26	
Methylene Chloride	45.38	5.0	ug/L	50.0		90.8	68-142	4.02	21	
Acrylonitrile	93.66	5.0	ug/L	100		93.3	67-144	2.65	24	
Acrylonitrile	93.66	5.0	ug/L	100		93.3	67-144	2.65	24	
trans-1,2-Dichloroethylene	46.73	1.0	ug/L	50.0		93.5	72-135	3.78	28	
trans-1,2-Dichloroethylene	46.73	1.0	ug/L	50.0		93.5	66-148	3.78	27	
1,1-Dichloroethane	45.21	1.0	ug/L	50.0		90.4	72-129	4.26	26	
1,1-Dichloroethane	45.21	1.0	ug/L	50.0		90.4	66-143	4.26	24	
Vinyl Acetate	96.81	5.0	ug/L	102		95.0	24-144	12.3	30	
Vinyl Acetate	96.81	5.0	ug/L	102		95.0	43-153	12.3	30	
2,2-Dichloropropane	39.74	1.0	ug/L	50.0		79.5	64-131	5.51	26	
cis-1,2-Dichloroethylene	55.79	1.0	ug/L	49.5		113	81-137	10.5	27	
cis-1,2-Dichloroethylene	55.79	1.0	ug/L	49.5		113	71-149	10.5	26	
2-Butanone (MEK)	90.02	5.0	ug/L	103		87.1	47-149	4.64	30	
2-Butanone (MEK)	90.02	10.0	ug/L	103		87.1	52-159	4.64	27	
Bromochloromethane	48.87	1.0	ug/L	50.0		97.7	75-138	3.22	24	
Bromochloromethane	48.87	1.0	ug/L	50.0		97.7	69-143	3.22	23	
Chloroform	45.27	1.0	ug/L	50.0		90.5	78-131	3.86	27	
Chloroform	45.27	1.0	ug/L	50.0		90.5	69-144	3.86	23	
1,1,1-Trichloroethane	37.61	1.0	ug/L	50.0		75.3	67-121	2.88	28	
1,1,1-Trichloroethane	37.61	1.0	ug/L	50.0		75.3	62-129	2.88	24	
1,1-Dichloropropene	44.67	1.0	ug/L	50.0		89.3	80-131	4.01	30	
Carbon Tetrachloride	40.79	1.0	ug/L	50.0		81.6	71-131	5.11	28	
Carbon Tetrachloride	40.79	1.0	ug/L	50.0		81.6	63-141	5.11	25	
Benzene	48.36	1.0	ug/L	50.0		96.7	77-130	4.96	25	
Benzene	48.36	1.0	ug/L	50.0		96.7	71-134	4.96	24	
1,2-Dichloroethane	46.10	1.0	ug/L	50.0		92.2	76-126	3.81	24	
1,2-Dichloroethane	46.10	1.0	ug/L	50.0		92.2	72-132	3.81	24	
Trichloroethylene	46.58	1.0	ug/L	50.0		93.2	80-124	4.37	27	

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CERTIFICATE OF ANALYSIS

1HD0545

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD0497 - EPA 5030B - EPA 8260B										
LCS Dup (1HD0497-BSD1)										
				Prepared: 04/08/24 00:00 Analyzed: 04/08/24 10:05						
Trichloroethylene	46.58	1.0	ug/L	50.0		93.2	71-135	4.37	24	
1,2-Dichloropropane	49.16	1.0	ug/L	50.0		98.3	81-125	4.57	25	
1,2-Dichloropropane	49.16	1.0	ug/L	50.0		98.3	69-136	4.57	24	
Dibromomethane	50.58	1.0	ug/L	50.0		101	84-134	3.55	23	
Dibromomethane	50.58	1.0	ug/L	50.0		101	73-147	3.55	25	
Bromodichloromethane	43.29	1.0	ug/L	50.0		86.6	78-121	4.56	25	
Bromodichloromethane	43.29	1.0	ug/L	50.0		86.6	68-129	4.56	22	
cis-1,3-Dichloropropene	45.55	1.0	ug/L	50.3		90.5	78-120	5.11	26	
cis-1,3-Dichloropropene	45.55	1.0	ug/L	50.3		90.5	65-134	5.11	23	
4-Methyl-2-pentanone (MIBK)	97.43	5.0	ug/L	101		96.1	67-143	3.12	26	
4-Methyl-2-pentanone (MIBK)	97.43	5.0	ug/L	101		96.1	58-147	3.12	27	
Toluene	46.79	1.0	ug/L	50.0		93.6	77-130	5.37	27	
Toluene	46.79	1.0	ug/L	50.0		93.6	72-133	5.37	24	
trans-1,3-Dichloropropene	43.96	1.0	ug/L	50.4		87.2	77-123	5.12	28	
trans-1,3-Dichloropropene	43.96	1.0	ug/L	50.4		87.2	67-130	5.12	24	
Ethyl Methacrylate	95.90	10.0	ug/L	101		95.3	52-148	3.59	30	
1,1,2-Trichloroethane	47.74	1.0	ug/L	50.0		95.5	78-124	3.96	24	
1,1,2-Trichloroethane	47.74	1.0	ug/L	50.0		95.5	69-135	3.96	23	
Tetrachloroethylene	45.03	1.0	ug/L	50.0		90.1	73-124	3.92	26	
Tetrachloroethylene	45.03	1.0	ug/L	50.0		90.1	69-130	3.92	25	
1,3-Dichloropropane	52.61	1.0	ug/L	50.0		105	78-131	2.68	24	
2-Hexanone (MBK)	98.29	5.0	ug/L	103		95.2	57-145	1.29	30	
2-Hexanone (MBK)	98.29	5.0	ug/L	103		95.2	55-144	1.29	25	
Dibromochloromethane	46.51	1.0	ug/L	49.5		94.0	78-126	3.96	23	
Dibromochloromethane	46.51	1.0	ug/L	49.5		94.0	73-127	3.96	22	
1,2-Dibromoethane	48.17	1.0	ug/L	50.0		96.3	69-126	2.10	22	
1,2-Dibromoethane	48.17	1.0	ug/L	50.0		96.3	67-132	2.10	24	
Chlorobenzene	47.82	1.0	ug/L	50.0		95.6	76-120	3.94	25	
Chlorobenzene	47.82	1.0	ug/L	50.0		95.6	72-123	3.94	23	
1,1,1,2-Tetrachloroethane	46.77	1.0	ug/L	50.0		93.5	81-122	3.55	23	
1,1,1,2-Tetrachloroethane	46.77	1.0	ug/L	50.0		93.5	73-127	3.55	24	
Ethylbenzene	45.84	1.0	ug/L	50.0		91.7	74-121	3.79	27	
Ethylbenzene	45.84	1.0	ug/L	50.0		91.7	71-127	3.79	26	
Xylenes, total	136.4	2.0	ug/L	150		90.9	75-122	3.81	26	
Xylenes, total	136.4	2.0	ug/L	150		90.9	74-127	3.81	25	
Styrene	45.67	1.0	ug/L	50.0		91.3	76-119	3.40	26	
Styrene	45.67	1.0	ug/L	50.0		91.3	66-126	3.40	23	
Bromoform	45.87	1.0	ug/L	50.0		91.7	74-127	1.58	22	
Bromoform	45.87	1.0	ug/L	50.0		91.7	68-130	1.58	23	
1,2,3-Trichloropropane	49.88	1.0	ug/L	50.0		99.8	73-125	1.45	20	
1,2,3-Trichloropropane	49.88	1.0	ug/L	50.0		99.8	63-136	1.45	24	
trans-1,4-Dichloro-2-butene	84.42	5.0	ug/L	104		81.3	55-135	1.69	26	
trans-1,4-Dichloro-2-butene	84.42	5.0	ug/L	104		81.3	54-134	1.69	27	

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CERTIFICATE OF ANALYSIS

1HD0545

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD0497 - EPA 5030B - EPA 8260B										
LCS Dup (1HD0497-BSD1)										
				Prepared: 04/08/24 00:00 Analyzed: 04/08/24 10:05						
1,1,2,2-Tetrachloroethane	48.32	1.0	ug/L	49.8		96.9	58-133	1.56	28	
1,1,2,2-Tetrachloroethane	48.32	1.0	ug/L	49.8		96.9	61-131	1.56	29	
1,3-Dichlorobenzene	45.12	1.0	ug/L	50.0		90.2	70-125	3.36	27	
1,4-Dichlorobenzene	46.36	1.0	ug/L	50.0		92.7	69-128	2.64	29	
1,4-Dichlorobenzene	46.36	1.0	ug/L	50.0		92.7	70-129	2.64	24	
1,2-Dichlorobenzene	45.58	1.0	ug/L	50.0		91.2	70-125	2.34	25	
1,2-Dichlorobenzene	45.58	1.0	ug/L	50.0		91.2	69-126	2.34	26	
1,2-Dibromo-3-chloropropane	46.88	1.0	ug/L	50.0		93.8	54-147	0.663	29	
1,2-Dibromo-3-chloropropane	46.88	5.0	ug/L	50.0		93.8	50-143	0.663	30	
1,2,4-Trichlorobenzene	46.51	1.0	ug/L	50.0		93.0	55-149	4.13	30	
Allyl chloride	27.10	1.0	ug/L	35.7		75.8	76-134	1.14	30	QS-01
Chloroprene	46.43	1.0	ug/L	50.0		92.9	74-141	4.11	30	
Methacrylonitrile	56.61	1.0	ug/L	64.3		88.1	73-143	0.159	30	
Methyl Methacrylate	53.25	1.0	ug/L	57.3		92.9	72-123	2.41	30	
Propionitrile	79.47	10.0	ug/L	50.0		159	50-151	4.44	30	QS-02
<i>Surrogate: Dibromofluoromethane</i>	45.4		ug/L	50.2		90.5	80-126			
<i>Surrogate: Dibromofluoromethane</i>	45.4		ug/L	50.2		90.5	80-126			
<i>Surrogate: Dibromofluoromethane</i>	45.4		ug/L	50.2		90.5	80-126			
<i>Surrogate: Dibromofluoromethane</i>	45.4		ug/L	50.2		90.5	75-136			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	45.3		ug/L	50.1		90.5	63-138			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	45.3		ug/L	50.1		90.5	63-138			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	45.3		ug/L	50.1		90.5	63-138			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	45.3		ug/L	50.1		90.5	63-138			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	45.3		ug/L	50.1		90.5	61-142			
<i>Surrogate: Toluene-d8</i>	49.5		ug/L	50.4		98.2	87-116			
<i>Surrogate: Toluene-d8</i>	49.5		ug/L	50.4		98.2	87-116			
<i>Surrogate: Toluene-d8</i>	49.5		ug/L	50.4		98.2	87-116			
<i>Surrogate: Toluene-d8</i>	49.5		ug/L	50.4		98.2	87-116			
<i>Surrogate: Toluene-d8</i>	49.5		ug/L	50.4		98.2	87-116			
<i>Surrogate: Toluene-d8</i>	49.5		ug/L	50.4		98.2	82-121			
<i>Surrogate: 4-Bromofluorobenzene</i>	50.6		ug/L	50.1		101	85-111			
<i>Surrogate: 4-Bromofluorobenzene</i>	50.6		ug/L	50.1		101	85-111			
<i>Surrogate: 4-Bromofluorobenzene</i>	50.6		ug/L	50.1		101	85-111			
<i>Surrogate: 4-Bromofluorobenzene</i>	50.6		ug/L	50.1		101	85-111			
<i>Surrogate: 4-Bromofluorobenzene</i>	50.6		ug/L	50.1		101	80-116			
Matrix Spike (1HD0497-MS1)										
				Prepared: 04/08/24 00:00 Analyzed: 04/08/24 20:31						
Dichlorodifluoromethane	274.3	10.0	ug/L	316	ND	86.8	47-137			
Chloromethane	308.3	10.0	ug/L	306	ND	101	49-154			
Chloromethane	308.3	10.0	ug/L	306	ND	101	61-152			
Vinyl Chloride	260.6	10.0	ug/L	302	ND	86.2	61-152			
Vinyl Chloride	260.6	10.0	ug/L	302	ND	86.2	66-149			
Bromomethane	277.1	10.0	ug/L	288	ND	96.2	47-168			
Bromomethane	277.1	10.0	ug/L	288	ND	96.2	43-171			
Chloroethane	292.5	10.0	ug/L	316	ND	92.5	61-148			
Chloroethane	292.5	10.0	ug/L	316	ND	92.5	69-148			

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CERTIFICATE OF ANALYSIS

1HD0545

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD0497 - EPA 5030B - EPA 8260B										
Matrix Spike (1HD0497-MS1)	Source: 1HD0545-01			Prepared: 04/08/24 00:00 Analyzed: 04/08/24 20:31						
Trichlorofluoromethane	246.6	10.0	ug/L	326	ND	75.6	73-147			
Trichlorofluoromethane	246.6	10.0	ug/L	326	ND	75.6	62-163			
Acrolein	487.3	100	ug/L	1000	ND	48.6	20-164			
1,1-Dichloroethylene	454.8	10.0	ug/L	500	ND	91.0	68-153			
1,1-Dichloroethylene	454.8	10.0	ug/L	500	ND	91.0	70-148			
Acetone	846.3	100	ug/L	1020	ND	83.0	45-175			
Acetone	846.3	100	ug/L	1020	ND	83.0	45-173			
Methyl Iodide	874.3	20.0	ug/L	997	ND	87.7	79-167			
Methyl Iodide	874.3	10.0	ug/L	997	ND	87.7	62-167			
Carbon Disulfide	777.7	10.0	ug/L	1010	ND	77.0	72-156			
Carbon Disulfide	777.7	10.0	ug/L	1010	ND	77.0	71-163			
Acetonitrile	961.5	100	ug/L	1010	ND	95.6	38-166			
Methylene Chloride	423.4	50.0	ug/L	500	ND	84.7	64-143			
Methylene Chloride	423.4	50.0	ug/L	500	ND	84.7	69-140			
Acrylonitrile	837.0	50.0	ug/L	1000	ND	83.4	58-151			
Acrylonitrile	837.0	50.0	ug/L	1000	ND	83.4	58-151			
trans-1,2-Dichloroethylene	427.5	10.0	ug/L	500	ND	85.5	65-145			
trans-1,2-Dichloroethylene	427.5	10.0	ug/L	500	ND	85.5	69-144			
1,1-Dichloroethane	418.0	10.0	ug/L	500	ND	83.6	68-136			
1,1-Dichloroethane	418.0	10.0	ug/L	500	ND	83.6	70-138			
Vinyl Acetate	960.3	50.0	ug/L	1020	ND	94.2	58-143			
Vinyl Acetate	960.3	50.0	ug/L	1020	ND	94.2	58-142			
2,2-Dichloropropane	303.7	10.0	ug/L	500	ND	60.7	50-118			
cis-1,2-Dichloroethylene	498.2	10.0	ug/L	495	ND	101	67-153			
cis-1,2-Dichloroethylene	498.2	10.0	ug/L	495	ND	101	68-151			
2-Butanone (MEK)	800.1	50.0	ug/L	1030	ND	77.5	52-159			
2-Butanone (MEK)	800.1	100	ug/L	1030	ND	77.5	50-160			
Bromochloromethane	451.0	10.0	ug/L	500	ND	90.2	61-151			
Bromochloromethane	451.0	10.0	ug/L	500	ND	90.2	65-143			
Chloroform	416.8	10.0	ug/L	500	ND	83.4	77-132			
Chloroform	416.8	10.0	ug/L	500	ND	83.4	71-143			
1,1,1-Trichloroethane	346.8	10.0	ug/L	500	ND	69.4	71-118			QM-05
1,1,1-Trichloroethane	346.8	10.0	ug/L	500	ND	69.4	63-133			
1,1-Dichloropropene	414.4	10.0	ug/L	500	ND	82.9	82-128			
Carbon Tetrachloride	373.5	10.0	ug/L	500	ND	74.7	71-133			
Carbon Tetrachloride	373.5	10.0	ug/L	500	ND	74.7	63-142			
Benzene	480.3	10.0	ug/L	500	ND	96.1	81-125			
Benzene	480.3	10.0	ug/L	500	ND	96.1	69-133			
1,2-Dichloroethane	449.6	10.0	ug/L	500	ND	89.9	75-125			
1,2-Dichloroethane	449.6	10.0	ug/L	500	ND	89.9	63-138			
Trichloroethylene	452.9	10.0	ug/L	500	ND	90.6	83-120			
Trichloroethylene	452.9	10.0	ug/L	500	ND	90.6	71-133			
1,2-Dichloropropane	483.7	10.0	ug/L	500	ND	96.7	80-124			

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CERTIFICATE OF ANALYSIS

1HD0545

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD0497 - EPA 5030B - EPA 8260B										
Matrix Spike (1HD0497-MS1)	Source: 1HD0545-01			Prepared: 04/08/24 00:00 Analyzed: 04/08/24 20:31						
1,2-Dichloropropane	483.7	10.0	ug/L	500	ND	96.7	69-132			
Dibromomethane	497.1	10.0	ug/L	500	ND	99.4	84-131			
Dibromomethane	497.1	10.0	ug/L	500	ND	99.4	70-147			
Bromodichloromethane	421.6	10.0	ug/L	500	ND	84.3	79-118			
Bromodichloromethane	421.6	10.0	ug/L	500	ND	84.3	67-130			
cis-1,3-Dichloropropene	431.9	10.0	ug/L	503	ND	85.8	75-116			
cis-1,3-Dichloropropene	431.9	10.0	ug/L	503	ND	85.8	61-126			
4-Methyl-2-pentanone (MIBK)	929.3	50.0	ug/L	1010	ND	91.6	65-149			
4-Methyl-2-pentanone (MIBK)	929.3	50.0	ug/L	1010	ND	91.6	55-147			
Toluene	466.4	10.0	ug/L	500	ND	93.3	82-123			
Toluene	466.4	10.0	ug/L	500	ND	93.3	71-133			
trans-1,3-Dichloropropene	407.3	10.0	ug/L	504	ND	80.8	75-117			
trans-1,3-Dichloropropene	407.3	10.0	ug/L	504	ND	80.8	63-124			
Ethyl Methacrylate	927.4	100	ug/L	1010	ND	92.2	73-135			
1,1,2-Trichloroethane	470.1	10.0	ug/L	500	ND	94.0	77-122			
1,1,2-Trichloroethane	470.1	10.0	ug/L	500	ND	94.0	69-133			
Tetrachloroethylene	480.5	10.0	ug/L	500	ND	96.1	74-120			
Tetrachloroethylene	480.5	10.0	ug/L	500	ND	96.1	70-124			
1,3-Dichloropropane	551.4	10.0	ug/L	500	ND	110	80-127			
2-Hexanone (MBK)	1002	50.0	ug/L	1030	ND	97.0	57-150			
2-Hexanone (MBK)	1002	50.0	ug/L	1030	ND	97.0	53-141			
Dibromochloromethane	482.3	10.0	ug/L	495	ND	97.4	80-120			
Dibromochloromethane	482.3	10.0	ug/L	495	ND	97.4	74-122			
1,2-Dibromoethane	505.9	10.0	ug/L	500	ND	101	67-125			
1,2-Dibromoethane	505.9	10.0	ug/L	500	ND	101	66-127			
Chlorobenzene	508.3	10.0	ug/L	500	ND	102	81-113			
Chlorobenzene	508.3	10.0	ug/L	500	ND	102	76-116			
1,1,1,2-Tetrachloroethane	490.2	10.0	ug/L	500	ND	98.0	80-119			
1,1,1,2-Tetrachloroethane	490.2	10.0	ug/L	500	ND	98.0	77-121			
Ethylbenzene	490.1	10.0	ug/L	500	ND	98.0	78-114			
Ethylbenzene	490.1	10.0	ug/L	500	ND	98.0	73-124			
Xylenes, total	1455	20.0	ug/L	1500	ND	97.0	77-116			
Xylenes, total	1455	20.0	ug/L	1500	ND	97.0	75-123			
Styrene	481.9	10.0	ug/L	500	ND	96.4	78-114			
Styrene	481.9	10.0	ug/L	500	ND	96.4	70-120			
Bromoform	465.7	10.0	ug/L	500	ND	93.1	69-125			
Bromoform	465.7	10.0	ug/L	500	ND	93.1	70-124			
1,2,3-Trichloropropane	513.5	10.0	ug/L	500	ND	103	72-125			
1,2,3-Trichloropropane	513.5	10.0	ug/L	500	ND	103	62-135			
trans-1,4-Dichloro-2-butene	820.5	50.0	ug/L	1040	ND	79.0	48-131			
trans-1,4-Dichloro-2-butene	820.5	50.0	ug/L	1040	ND	79.0	50-120			
1,1,2,2-Tetrachloroethane	515.1	10.0	ug/L	498	ND	103	51-138			
1,1,2,2-Tetrachloroethane	515.1	10.0	ug/L	498	ND	103	63-126			

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CERTIFICATE OF ANALYSIS

1HD0545

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD0497 - EPA 5030B - EPA 8260B										
Matrix Spike (1HD0497-MS1)	Source: 1HD0545-01			Prepared: 04/08/24 00:00 Analyzed: 04/08/24 20:31						
1,3-Dichlorobenzene	485.8	10.0	ug/L	500	ND	97.2	70-122			
1,4-Dichlorobenzene	495.1	10.0	ug/L	500	ND	99.0	70-124			
1,4-Dichlorobenzene	495.1	10.0	ug/L	500	ND	99.0	72-119			
1,2-Dichlorobenzene	489.2	10.0	ug/L	500	ND	97.8	68-123			
1,2-Dichlorobenzene	489.2	10.0	ug/L	500	ND	97.8	71-117			
1,2-Dibromo-3-chloropropane	465.4	10.0	ug/L	500	ND	93.1	46-149			
1,2-Dibromo-3-chloropropane	465.4	50.0	ug/L	500	ND	93.1	49-134			
1,2,4-Trichlorobenzene	493.3	10.0	ug/L	500	ND	98.7	60-137			
Allyl chloride	229.3	10.0	ug/L	357	ND	64.2	60-140			
Chloroprene	432.5	10.0	ug/L	500	ND	86.5	60-140			
Methacrylonitrile	491.0	10.0	ug/L	643	ND	76.4	60-140			
Methyl Methacrylate	493.6	10.0	ug/L	573	ND	86.1	60-140			
Propionitrile	707.8	100	ug/L	500	ND	142	60-140			QS-02
<i>Surrogate: Dibromofluoromethane</i>	432		ug/L	502		86.0	80-126			
<i>Surrogate: Dibromofluoromethane</i>	432		ug/L	502		86.0	80-126			
<i>Surrogate: Dibromofluoromethane</i>	432		ug/L	502		86.0	80-126			
<i>Surrogate: Dibromofluoromethane</i>	432		ug/L	502		86.0	75-136			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	443		ug/L	501		88.4	63-138			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	443		ug/L	501		88.4	63-138			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	443		ug/L	501		88.4	63-138			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	443		ug/L	501		88.4	63-138			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	443		ug/L	501		88.4	61-142			
<i>Surrogate: Toluene-d8</i>	509		ug/L	504		101	87-116			
<i>Surrogate: Toluene-d8</i>	509		ug/L	504		101	87-116			
<i>Surrogate: Toluene-d8</i>	509		ug/L	504		101	87-116			
<i>Surrogate: Toluene-d8</i>	509		ug/L	504		101	87-116			
<i>Surrogate: Toluene-d8</i>	509		ug/L	504		101	82-121			
<i>Surrogate: 4-Bromofluorobenzene</i>	521		ug/L	501		104	85-111			
<i>Surrogate: 4-Bromofluorobenzene</i>	521		ug/L	501		104	85-111			
<i>Surrogate: 4-Bromofluorobenzene</i>	521		ug/L	501		104	85-111			
<i>Surrogate: 4-Bromofluorobenzene</i>	521		ug/L	501		104	85-111			
<i>Surrogate: 4-Bromofluorobenzene</i>	521		ug/L	501		104	80-116			
Matrix Spike Dup (1HD0497-MSD1)	Source: 1HD0545-01			Prepared: 04/08/24 00:00 Analyzed: 04/08/24 20:54						
Dichlorodifluoromethane	269.2	10.0	ug/L	316	ND	85.2	47-137	1.88	20	
Chloromethane	303.1	10.0	ug/L	306	ND	98.9	49-154	1.70	25	
Chloromethane	303.1	10.0	ug/L	306	ND	98.9	61-152	1.70	26	
Vinyl Chloride	253.3	10.0	ug/L	302	ND	83.8	61-152	2.84	24	
Vinyl Chloride	253.3	10.0	ug/L	302	ND	83.8	66-149	2.84	23	
Bromomethane	259.1	10.0	ug/L	288	ND	90.0	47-168	6.71	30	
Bromomethane	259.1	10.0	ug/L	288	ND	90.0	43-171	6.71	29	
Chloroethane	281.5	10.0	ug/L	316	ND	89.0	61-148	3.83	29	
Chloroethane	281.5	10.0	ug/L	316	ND	89.0	69-148	3.83	25	
Trichlorofluoromethane	238.6	10.0	ug/L	326	ND	73.2	73-147	3.30	24	
Trichlorofluoromethane	238.6	10.0	ug/L	326	ND	73.2	62-163	3.30	25	

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CERTIFICATE OF ANALYSIS

1HD0545

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD0497 - EPA 5030B - EPA 8260B										
Matrix Spike Dup (1HD0497-MSD1)	Source: 1HD0545-01			Prepared: 04/08/24 00:00 Analyzed: 04/08/24 20:54						
Acrolein	488.0	100	ug/L	1000	ND	48.7	20-164	0.144	24	
1,1-Dichloroethylene	436.2	10.0	ug/L	500	ND	87.2	68-153	4.18	21	
1,1-Dichloroethylene	436.2	10.0	ug/L	500	ND	87.2	70-148	4.18	22	
Acetone	809.5	100	ug/L	1020	ND	79.4	45-175	4.44	23	
Acetone	809.5	100	ug/L	1020	ND	79.4	45-173	4.44	30	
Methyl Iodide	835.6	20.0	ug/L	997	ND	83.8	79-167	4.53	14	
Methyl Iodide	835.6	10.0	ug/L	997	ND	83.8	62-167	4.53	24	
Carbon Disulfide	743.4	10.0	ug/L	1010	ND	73.6	72-156	4.51	19	
Carbon Disulfide	743.4	10.0	ug/L	1010	ND	73.6	71-163	4.51	22	
Acetonitrile	1042	100	ug/L	1010	ND	104	38-166	7.99	20	
Methylene Chloride	413.0	50.0	ug/L	500	ND	82.6	64-143	2.49	19	
Methylene Chloride	413.0	50.0	ug/L	500	ND	82.6	69-140	2.49	19	
Acrylonitrile	818.6	50.0	ug/L	1000	ND	81.6	58-151	2.22	15	
Acrylonitrile	818.6	50.0	ug/L	1000	ND	81.6	58-151	2.22	15	
trans-1,2-Dichloroethylene	413.4	10.0	ug/L	500	ND	82.7	65-145	3.35	18	
trans-1,2-Dichloroethylene	413.4	10.0	ug/L	500	ND	82.7	69-144	3.35	22	
1,1-Dichloroethane	400.9	10.0	ug/L	500	ND	80.2	68-136	4.18	17	
1,1-Dichloroethane	400.9	10.0	ug/L	500	ND	80.2	70-138	4.18	20	
Vinyl Acetate	885.8	50.0	ug/L	1020	ND	86.9	58-143	8.07	14	
Vinyl Acetate	885.8	50.0	ug/L	1020	ND	86.9	58-142	8.07	24	
2,2-Dichloropropane	287.5	10.0	ug/L	500	ND	57.5	50-118	5.48	17	
cis-1,2-Dichloroethylene	415.5	10.0	ug/L	495	ND	84.0	67-153	18.1	22	
cis-1,2-Dichloroethylene	415.5	10.0	ug/L	495	ND	84.0	68-151	18.1	22	
2-Butanone (MEK)	830.4	50.0	ug/L	1030	ND	80.4	52-159	3.72	28	
2-Butanone (MEK)	830.4	100	ug/L	1030	ND	80.4	50-160	3.72	23	
Bromochloromethane	442.0	10.0	ug/L	500	ND	88.4	61-151	2.02	27	
Bromochloromethane	442.0	10.0	ug/L	500	ND	88.4	65-143	2.02	22	
Chloroform	402.1	10.0	ug/L	500	ND	80.4	77-132	3.59	17	
Chloroform	402.1	10.0	ug/L	500	ND	80.4	71-143	3.59	21	
1,1,1-Trichloroethane	331.8	10.0	ug/L	500	ND	66.4	71-118	4.42	15	QM-05
1,1,1-Trichloroethane	331.8	10.0	ug/L	500	ND	66.4	63-133	4.42	23	
1,1-Dichloropropene	395.1	10.0	ug/L	500	ND	79.0	82-128	4.77	16	QM-05
Carbon Tetrachloride	358.6	10.0	ug/L	500	ND	71.7	71-133	4.07	14	
Carbon Tetrachloride	358.6	10.0	ug/L	500	ND	71.7	63-142	4.07	22	
Benzene	462.0	10.0	ug/L	500	ND	92.4	81-125	3.88	12	
Benzene	462.0	10.0	ug/L	500	ND	92.4	69-133	3.88	18	
1,2-Dichloroethane	448.6	10.0	ug/L	500	ND	89.7	75-125	0.223	13	
1,2-Dichloroethane	448.6	10.0	ug/L	500	ND	89.7	63-138	0.223	20	
Trichloroethylene	435.3	10.0	ug/L	500	ND	87.1	83-120	3.96	11	
Trichloroethylene	435.3	10.0	ug/L	500	ND	87.1	71-133	3.96	23	
1,2-Dichloropropane	469.5	10.0	ug/L	500	ND	93.9	80-124	2.98	11	
1,2-Dichloropropane	469.5	10.0	ug/L	500	ND	93.9	69-132	2.98	20	
Dibromomethane	493.2	10.0	ug/L	500	ND	98.6	84-131	0.788	13	

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CERTIFICATE OF ANALYSIS

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Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD0497 - EPA 5030B - EPA 8260B										
Matrix Spike Dup (1HD0497-MSD1)	Source: 1HD0545-01			Prepared: 04/08/24 00:00 Analyzed: 04/08/24 20:54						
Dibromomethane	493.2	10.0	ug/L	500	ND	98.6	70-147	0.788	22	
Bromodichloromethane	414.5	10.0	ug/L	500	ND	82.9	79-118	1.70	11	
Bromodichloromethane	414.5	10.0	ug/L	500	ND	82.9	67-130	1.70	21	
cis-1,3-Dichloropropene	421.4	10.0	ug/L	503	ND	83.7	75-116	2.46	11	
cis-1,3-Dichloropropene	421.4	10.0	ug/L	503	ND	83.7	61-126	2.46	21	
4-Methyl-2-pentanone (MIBK)	923.2	50.0	ug/L	1010	ND	91.0	65-149	0.659	14	
4-Methyl-2-pentanone (MIBK)	923.2	50.0	ug/L	1010	ND	91.0	55-147	0.659	23	
Toluene	445.4	10.0	ug/L	500	ND	89.1	82-123	4.61	12	
Toluene	445.4	10.0	ug/L	500	ND	89.1	71-133	4.61	19	
trans-1,3-Dichloropropene	404.5	10.0	ug/L	504	ND	80.2	75-117	0.690	11	
trans-1,3-Dichloropropene	404.5	10.0	ug/L	504	ND	80.2	63-124	0.690	21	
Ethyl Methacrylate	920.5	100	ug/L	1010	ND	91.5	73-135	0.747	10	
1,1,2-Trichloroethane	462.9	10.0	ug/L	500	ND	92.6	77-122	1.54	11	
1,1,2-Trichloroethane	462.9	10.0	ug/L	500	ND	92.6	69-133	1.54	19	
Tetrachloroethylene	458.9	10.0	ug/L	500	ND	91.8	74-120	4.60	17	
Tetrachloroethylene	458.9	10.0	ug/L	500	ND	91.8	70-124	4.60	24	
1,3-Dichloropropane	547.8	10.0	ug/L	500	ND	110	80-127	0.655	13	
2-Hexanone (MBK)	1007	50.0	ug/L	1030	ND	97.5	57-150	0.548	17	
2-Hexanone (MBK)	1007	50.0	ug/L	1030	ND	97.5	53-141	0.548	24	
Dibromochloromethane	480.8	10.0	ug/L	495	ND	97.1	80-120	0.311	12	
Dibromochloromethane	480.8	10.0	ug/L	495	ND	97.1	74-122	0.311	21	
1,2-Dibromoethane	495.5	10.0	ug/L	500	ND	99.1	67-125	2.08	12	
1,2-Dibromoethane	495.5	10.0	ug/L	500	ND	99.1	66-127	2.08	23	
Chlorobenzene	489.7	10.0	ug/L	500	ND	97.9	81-113	3.73	14	
Chlorobenzene	489.7	10.0	ug/L	500	ND	97.9	76-116	3.73	21	
1,1,1,2-Tetrachloroethane	479.1	10.0	ug/L	500	ND	95.8	80-119	2.29	15	
1,1,1,2-Tetrachloroethane	479.1	10.0	ug/L	500	ND	95.8	77-121	2.29	25	
Ethylbenzene	468.3	10.0	ug/L	500	ND	93.7	78-114	4.55	14	
Ethylbenzene	468.3	10.0	ug/L	500	ND	93.7	73-124	4.55	20	
Xylenes, total	1387	20.0	ug/L	1500	ND	92.5	77-116	4.78	13	
Xylenes, total	1387	20.0	ug/L	1500	ND	92.5	75-123	4.78	20	
Styrene	468.7	10.0	ug/L	500	ND	93.7	78-114	2.78	12	
Styrene	468.7	10.0	ug/L	500	ND	93.7	70-120	2.78	23	
Bromoform	456.3	10.0	ug/L	500	ND	91.3	69-125	2.04	14	
Bromoform	456.3	10.0	ug/L	500	ND	91.3	70-124	2.04	22	
1,2,3-Trichloropropane	507.9	10.0	ug/L	500	ND	102	72-125	1.10	18	
1,2,3-Trichloropropane	507.9	10.0	ug/L	500	ND	102	62-135	1.10	28	
trans-1,4-Dichloro-2-butene	796.1	50.0	ug/L	1040	ND	76.6	48-131	3.02	17	
trans-1,4-Dichloro-2-butene	796.1	50.0	ug/L	1040	ND	76.6	50-120	3.02	26	
1,1,2,2-Tetrachloroethane	510.9	10.0	ug/L	498	ND	102	51-138	0.819	30	
1,1,2,2-Tetrachloroethane	510.9	10.0	ug/L	498	ND	102	63-126	0.819	24	
1,3-Dichlorobenzene	469.5	10.0	ug/L	500	ND	93.9	70-122	3.41	30	
1,4-Dichlorobenzene	481.5	10.0	ug/L	500	ND	96.3	70-124	2.79	28	

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1HD0545

Table with columns: Determination of Volatile Organic Compounds, Result, RL, Units, Spike Level, Source Result, %REC, Limits, RPD, RPD Limit, Notes. Includes Batch 1HD0497 - EPA 5030B - EPA 8260B and Matrix Spike Dup (1HD0497-MSD1) data.

Table listing surrogate compounds and their results: Surrogate: Dibromofluoromethane (442), Surrogate: 1,2-Dichloroethane-d4 (448), Surrogate: Toluene-d8 (515), Surrogate: 4-Bromofluorobenzene (525).

Table with columns: Determination of General Solvents, Result, RL, Units, Spike Level, Source Result, %REC, Limits, RPD, RPD Limit, Notes. Includes Batch 1HD0875 - Semi-Vol GC - EPA 8015C and Matrix Spike Dup (1HD0875-MSD1) data.



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CERTIFICATE OF ANALYSIS

1HD0545

Determination of Base/Neutral Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1HD0535 - 3520C BNA Cont Liq - EPA 8270C

Blank (1HD0535-BLK1)										
Prepared: 04/09/24 10:55 Analyzed: 04/17/24 14:27										
Bis(2-Ethylhexyl) Phthalate	<6	6	ug/L							
Surrogate: Nitrobenzene-d5	29.6		ug/L	30.0		98.4	29-130			
Surrogate: 2-Fluorobiphenyl	22.9		ug/L	28.8		79.4	23-113			
Surrogate: Terphenyl-d14	25.6		ug/L	28.8		89.0	27-141			

LCS (1HD0535-BS1)										
Prepared: 04/09/24 10:55 Analyzed: 04/17/24 14:52										
Bis(2-Ethylhexyl) Phthalate	35.9	6	ug/L	25.0		144	33-184			
Surrogate: Nitrobenzene-d5	28.0		ug/L	30.0		93.2	38-115			
Surrogate: 2-Fluorobiphenyl	27.2		ug/L	28.8		94.5	33-110			
Surrogate: Terphenyl-d14	27.6		ug/L	28.8		95.6	30-142			

LCS Dup (1HD0535-BSD1)										
Prepared: 04/09/24 10:55 Analyzed: 04/17/24 15:16										
Bis(2-Ethylhexyl) Phthalate	26.8	6	ug/L	25.0		107	33-184	28.9	30	
Surrogate: Nitrobenzene-d5	24.9		ug/L	30.0		83.0	38-115			
Surrogate: 2-Fluorobiphenyl	24.0		ug/L	28.8		83.3	33-110			
Surrogate: Terphenyl-d14	23.2		ug/L	28.8		80.4	30-142			

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1HD0444 - 3520C BNA Cont Liq - EPA 8270C

Blank (1HD0444-BLK1)										
Prepared: 04/08/24 10:24 Analyzed: 04/17/24 15:41										
N-Nitrosodimethylamine	<8	8	ug/L							
Methyl Methanesulfonate	<8	8	ug/L							
N-Nitrosodiethylamine	<8	8	ug/L							
N-Nitrosomethylethylamine	<8	8	ug/L							
Ethyl Methanesulfonate	<8	8	ug/L							
Phenol	<8	8	ug/L							
Bis(2-Chloroethyl) Ether	<8	8	ug/L							
2-Chlorophenol	<8	8	ug/L							
Benzyl Alcohol	<8	8	ug/L							
2-Methylphenol (o-Cresol)	<8	8	ug/L							
Bis[2-Chloroisopropyl]ether	<8	8	ug/L							
n-Nitroso-di-n-propylamine	<8	8	ug/L							
N-Nitrosopyrrolidine	<8	8	ug/L							
Acetophenone	<8	8	ug/L							
o-Toluidine	<8	8	ug/L							
(3 & 4)-Methylphenol	<8	8	ug/L							
Hexachloroethane	<8	8	ug/L							
Nitrobenzene	<8	8	ug/L							
N-Nitrosopiperidine	<8	8	ug/L							



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1HD0545

Determination of	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Base/Neutral/Acid Extractable Compounds										
Batch 1HD0444 - 3520C BNA Cont Liq - EPA 8270C										
Blank (1HD0444-BLK1)				Prepared: 04/08/24 10:24 Analyzed: 04/17/24 15:41						
Isophorone	<8	8	ug/L							
2-Nitrophenol	<8	8	ug/L							
2,4-Dimethylphenol	<8	8	ug/L							
Bis (2-Chloroethoxy) Methane	<8	8	ug/L							
2,4-Dichlorophenol	<8	8	ug/L							
Naphthalene	<8	8	ug/L							
4-Chloroaniline	<8	8	ug/L							
2,6-Dichlorophenol	<8	8	ug/L							
Hexachloropropene	<8	8	ug/L							
Hexachlorobutadiene	<8	8	ug/L							
N-Nitrosodi-n-butylamine	<8	8	ug/L							
1,4-Phenylenediamine	<8	8	ug/L							
4-Chloro-3-methylphenol	<8	8	ug/L							
2-Methylnaphthalene	<8	8	ug/L							
Isosafrole	<8	8	ug/L							
1,2,4,5-Tetrachlorobenzene	<8	8	ug/L							
Hexachlorocyclopentadiene	<8	8	ug/L							
2,4,6-Trichlorophenol	<8	8	ug/L							
2,4,5-Trichlorophenol	<8	8	ug/L							
Safrole	<8	8	ug/L							
2-Chloronaphthalene	<8	8	ug/L							
2-Nitroaniline	<8	8	ug/L							
1,4-Naphthoquinone	<8	8	ug/L							
Dimethylphthalate	<8	8	ug/L							
1,3-Dinitrobenzene	<8	8	ug/L							
1,2-Dinitrobenzene	<8	8	ug/L							
2,6-Dinitrotoluene	<8	8	ug/L							
Acenaphthylene	<8	8	ug/L							
3-Nitroaniline	<8	8	ug/L							
Acenaphthene	<8	8	ug/L							
2,4-Dinitrophenol	<8	8	ug/L							
4-Nitrophenol	<8	8	ug/L							
Dibenzofuran	<8	8	ug/L							
2,4-Dinitrotoluene	<8	8	ug/L							
2,3,4,6-Tetrachlorophenol	<8	8	ug/L							
Pentachlorobenzene	<8	8	ug/L							
1-Naphthylamine	<8	8	ug/L							
2-Naphthylamine	<8	8	ug/L							
Diethyl Phthalate	<8	8	ug/L							
Fluorene	<8	8	ug/L							
4-Chlorophenyl Phenyl Ether	<8	8	ug/L							
4-Nitroaniline	<8	8	ug/L							

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CERTIFICATE OF ANALYSIS

1HD0545

Determination of	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Base/Neutral/Acid Extractable Compounds										
Batch 1HD0444 - 3520C BNA Cont Liq - EPA 8270C										
Blank (1HD0444-BLK1)				Prepared: 04/08/24 10:24 Analyzed: 04/17/24 15:41						
5-Nitro-o-toluidine	<8	8	ug/L							
4,6-Dinitro-2-methylphenol	<8	8	ug/L							
N-Nitrosodiphenylamine	<8	8	ug/L							
Diphenylamine	<8	8	ug/L							
Azobenzene	<8	8	ug/L							
Diallate	<8	8	ug/L							
1,3,5-Trinitrobenzene	<8	8	ug/L							
Phenacetin	<8	8	ug/L							
4-Bromophenyl Phenyl Ether	<8	8	ug/L							
4-Aminobiphenyl	<8	8	ug/L							
Pentachlorophenol	<8	8	ug/L							
Pronamide	<8	8	ug/L							
Pentachloronitrobenzene (PCNB)	<8	8	ug/L							
Phenanthrene	<8	8	ug/L							
Anthracene	<8	8	ug/L							
Di-n-butyl Phthalate	<8	8	ug/L							
Methapyrilene	<8	8	ug/L							
Fluoranthene	<8	8	ug/L							
Isodrin	<8	8	ug/L							
Chlorobenzilate	<8	8	ug/L							
Pyrene	<8	8	ug/L							
p-(Dimethylamino)azobenzene	<8	8	ug/L							
3,3-Dimethylbenzidine	<8	8	ug/L							
Butyl Benzyl Phthalate	<8	8	ug/L							
Benzo(a)anthracene	<8	8	ug/L							
Chrysene	<8	8	ug/L							
Bis(2-Ethylhexyl) Phthalate	6.1	6	ug/L							QB-02
Kepon	<8	8	ug/L							
3,3'-Dichlorobenzidine	<8	8	ug/L							
2-Acetylaminofluorene	<8	8	ug/L							
Di-n-octyl Phthalate	<8	8	ug/L							
Benzo(b)Fluoranthene	<8	8	ug/L							
7,12-Dimethylbenz [a] anthracene	<8	8	ug/L							
Benzo(k)Fluoranthene	<8	8	ug/L							
Benzo(a)Pyrene	<8	8	ug/L							
3-Methylcholanthrene	<8	8	ug/L							
Dibenzo(a,h)anthracene	<8	8	ug/L							
Indeno(1,2,3-cd)Pyrene	<8	8	ug/L							
Benzo(g,h,i)perylene	<8	8	ug/L							

Surrogate: 2-Fluorophenol	23.4	ug/L	29.6	79.2	24-136
Surrogate: Phenol-d6	23.8	ug/L	30.5	78.1	15-140
Surrogate: Nitrobenzene-d5	28.6	ug/L	30.0	95.1	29-130

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CERTIFICATE OF ANALYSIS

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Determination of	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Base/Neutral/Acid Extractable Compounds										
Batch 1HD0444 - 3520C BNA Cont Liq - EPA 8270C										
Blank (1HD0444-BLK1)										
				Prepared: 04/08/24 10:24 Analyzed: 04/17/24 15:41						
Surrogate: 2-Fluorobiphenyl	22.2		ug/L	28.8		77.0	23-113			
Surrogate: 2,4,6-Tribromophenol	24.4		ug/L	29.7		82.2	15-139			
Surrogate: Terphenyl-d14	27.8		ug/L	28.8		96.3	27-141			
LCS (1HD0444-BS1)										
				Prepared: 04/08/24 10:24 Analyzed: 04/17/24 16:05						
N-Nitrosodimethylamine	20.8	8	ug/L	21.4		97.5	36-138			
Methyl Methanesulfonate	42.5	8	ug/L	50.0		85.0	22-114			
N-Nitrosodiethylamine	37.4	8	ug/L	50.0		74.9	52-114			
N-Nitrosomethylethylamine	55.0	8	ug/L	50.0		110	36-120			
Ethyl Methanesulfonate	36.5	8	ug/L	50.0		72.9	46-110			
Phenol	19.2	8	ug/L	21.4		89.9	50-112			
Bis(2-Chloroethyl) Ether	22.1	8	ug/L	21.4		103	39-151			
2-Chlorophenol	18.2	8	ug/L	21.4		85.1	56-116			
Benzyl Alcohol	24.6	8	ug/L	21.4		115	13-158			
2-Methylphenol (o-Cresol)	19.4	8	ug/L	21.4		90.7	53-131			
Bis[2-Chloroisopropyl]ether	18.5	8	ug/L	21.4		86.6	50-121			
n-Nitroso-di-n-propylamine	22.9	8	ug/L	21.4		107	50-138			
N-Nitrosopyrrolidine	40.3	8	ug/L	50.0		80.7	31-118			
Acetophenone	45.9	8	ug/L	50.0		91.7	45-104			
o-Toluidine	20.0	8	ug/L	50.0		40.0	10-163			
(3 & 4)-Methylphenol	22.6	8	ug/L	21.4		106	30-164			
Hexachloroethane	10.2	8	ug/L	21.4		47.6	10-110			
Nitrobenzene	25.0	8	ug/L	21.4		117	47-134			
N-Nitrosopiperidine	40.5	8	ug/L	50.0		81.0	51-122			
Isophorone	23.9	8	ug/L	21.4		112	54-128			
2-Nitrophenol	21.8	8	ug/L	21.4		102	54-117			
2,4-Dimethylphenol	25.8	8	ug/L	21.4		121	52-118			QS-02
Bis (2-Chloroethoxy) Methane	12.3	8	ug/L	21.4		57.5	13-132			
2,4-Dichlorophenol	20.6	8	ug/L	21.4		96.0	58-114			
Naphthalene	14.6	8	ug/L	21.4		68.4	37-116			
2,6-Dichlorophenol	42.2	8	ug/L	50.0		84.3	52-129			
Hexachloropropene	17.9	8	ug/L	50.0		35.8	14-110			
Hexachlorobutadiene	<8	8	ug/L	21.4		32.2	14-110			
N-Nitrosodi-n-butylamine	44.9	8	ug/L	50.0		89.8	40-135			
4-Chloro-3-methylphenol	26.9	8	ug/L	21.4		126	57-136			
2-Methylnaphthalene	15.6	8	ug/L	21.4		72.8	44-111			
Isosafrole	36.2	8	ug/L	50.0		72.5	49-107			
1,2,4,5-Tetrachlorobenzene	23.1	8	ug/L	50.0		46.2	42-110			
2,4,6-Trichlorophenol	21.8	8	ug/L	21.4		102	55-120			
2,4,5-Trichlorophenol	22.2	8	ug/L	21.4		104	55-121			
Safrole	28.7	8	ug/L	50.0		57.4	40-118			
2-Chloronaphthalene	20.8	8	ug/L	21.4		97.4	47-127			

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CERTIFICATE OF ANALYSIS

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Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD0444 - 3520C BNA Cont Liq - EPA 8270C									
LCS (1HD0444-BS1)				Prepared: 04/08/24 10:24 Analyzed: 04/17/24 16:05					
2-Nitroaniline	21.9	8	ug/L	21.4		102 36-143			
1,4-Naphthoquinone	40.7	8	ug/L	50.0		81.4 43-152			
Dimethylphthalate	22.4	8	ug/L	21.4		105 59-128			
1,3-Dinitrobenzene	20.7	8	ug/L	21.4		96.9 63-125			
1,2-Dinitrobenzene	21.1	8	ug/L	21.4		98.6 63-123			
2,6-Dinitrotoluene	21.6	8	ug/L	21.4		101 60-127			
Acenaphthylene	16.4	8	ug/L	21.4		76.6 49-113			
Acenaphthene	19.4	8	ug/L	21.4		90.6 50-119			
2,4-Dinitrophenol	16.3	8	ug/L	21.4		76.1 27-157			
4-Nitrophenol	30.4	8	ug/L	21.4		142 49-154			
Dibenzofuran	19.1	8	ug/L	21.4		89.1 56-121			
2,4-Dinitrotoluene	22.3	8	ug/L	21.4		104 53-138			
2,3,4,6-Tetrachlorophenol	19.0	8	ug/L	21.4		88.6 47-132			
Pentachlorobenzene	38.9	8	ug/L	50.0		77.7 41-125			
Diethyl Phthalate	25.5	8	ug/L	21.4		119 53-138			
Fluorene	20.0	8	ug/L	21.4		93.4 54-125			
4-Chlorophenyl Phenyl Ether	19.1	8	ug/L	21.4		89.1 51-122			
4-Nitroaniline	10.4	8	ug/L	21.4		48.5 10-136			
5-Nitro-o-toluidine	9.0	8	ug/L	50.0		17.9 10-145			
4,6-Dinitro-2-methylphenol	20.7	8	ug/L	21.4		96.7 49-137			
Diphenylamine	15.3	8	ug/L	21.4		71.7 35-151			
Azobenzene	16.5	8	ug/L	21.4		77.3 16-156			
Diallate	51.3	8	ug/L	50.0		103 54-132			
1,3,5-Trinitrobenzene	44.5	8	ug/L	50.0		89.0 57-173			
Phenacetin	41.6	8	ug/L	50.0		83.2 55-121			
4-Bromophenyl Phenyl Ether	19.5	8	ug/L	21.4		91.0 53-122			
Pentachlorophenol	13.4	8	ug/L	21.4		62.4 18-152			
Pronamide	41.0	8	ug/L	50.0		82.0 42-122			
Pentachloronitrobenzene (PCNB)	59.8	8	ug/L	50.0		120 50-128			
Phenanthrene	20.6	8	ug/L	21.4		96.3 59-131			
Anthracene	18.9	8	ug/L	21.4		88.4 59-127			
Di-n-butyl Phthalate	25.3	8	ug/L	21.4		118 64-148			
Fluoranthene	21.6	8	ug/L	21.4		101 62-132			
Isodrin	42.2	8	ug/L	50.0		84.5 46-130			
Chlorobenzilate	45.8	8	ug/L	50.0		91.6 48-150			
Pyrene	20.5	8	ug/L	21.4		95.8 58-135			
p-(Dimethylamino)azobenzene	8.3	8	ug/L	50.0		16.6 28-146			QS-03
Butyl Benzyl Phthalate	24.4	8	ug/L	21.4		114 52-150			
Benzo(a)anthracene	19.8	8	ug/L	21.4		92.7 58-131			
Chrysene	20.4	8	ug/L	21.4		95.5 59-131			
Bis(2-Ethylhexyl) Phthalate	40.0	6	ug/L	21.4		187 33-184			QS-02
Kepone	80.2	8	ug/L	50.0		160 10-134			QS-02

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CERTIFICATE OF ANALYSIS

1HD0545

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD0444 - 3520C BNA Cont Liq - EPA 8270C										
LCS (1HD0444-BS1)				Prepared: 04/08/24 10:24 Analyzed: 04/17/24 16:05						
2-Acetylaminofluorene	51.9	8	ug/L	50.0		104	47-166			
Di-n-octyl Phthalate	28.3	8	ug/L	21.4		132	48-162			
Benzo(b)Fluoranthene	21.6	8	ug/L	21.4		101	50-146			
7,12-Dimethylbenz [a] anthracene	32.4	8	ug/L	50.0		64.7	22-155			
Benzo(k)Fluoranthene	21.5	8	ug/L	21.4		101	54-144			
Benzo(a)Pyrene	20.1	8	ug/L	21.4		93.8	39-148			
3-Methylcholanthrene	26.0	8	ug/L	50.0		51.9	34-118			
Dibenzo(a,h)anthracene	20.8	8	ug/L	21.4		97.5	46-153			
Indeno(1,2,3-cd)Pyrene	20.8	8	ug/L	21.4		97.2	48-152			
Benzo(g,h,i)perylene	20.2	8	ug/L	21.4		94.6	47-161			
<i>Surrogate: 2-Fluorophenol</i>	20.2		ug/L	29.6		68.3	24-136			
<i>Surrogate: Phenol-d6</i>	21.6		ug/L	30.5		70.9	15-140			
<i>Surrogate: Nitrobenzene-d5</i>	30.6		ug/L	30.0		102	38-115			
<i>Surrogate: 2-Fluorobiphenyl</i>	24.3		ug/L	28.8		84.4	33-110			
<i>Surrogate: 2,4,6-Tribromophenol</i>	25.7		ug/L	29.7		86.6	15-139			
<i>Surrogate: Terphenyl-d14</i>	26.3		ug/L	28.8		91.3	30-142			
LCS Dup (1HD0444-BSD1)				Prepared: 04/08/24 10:24 Analyzed: 04/17/24 16:30						
N-Nitrosodimethylamine	19.6	8	ug/L	21.4		91.6	36-138	6.23	30	
Methyl Methanesulfonate	41.1	8	ug/L	50.0		82.1	22-114	3.47	23	
N-Nitrosodiethylamine	35.8	8	ug/L	50.0		71.5	52-114	4.62	18	
N-Nitrosomethylethylamine	52.1	8	ug/L	50.0		104	36-120	5.41	22	
Ethyl Methanesulfonate	33.6	8	ug/L	50.0		67.3	46-110	8.02	24	
Phenol	19.2	8	ug/L	21.4		89.5	50-112	0.469	28	
Bis(2-Chloroethyl) Ether	21.0	8	ug/L	21.4		98.0	39-151	5.48	30	
2-Chlorophenol	17.8	8	ug/L	21.4		83.0	56-116	2.50	22	
Benzyl Alcohol	22.6	8	ug/L	21.4		105	13-158	8.77	30	
2-Methylphenol (o-Cresol)	18.1	8	ug/L	21.4		84.8	53-131	6.76	25	
Bis[2-Chloroisopropyl]ether	17.1	8	ug/L	21.4		80.1	50-121	7.79	25	
n-Nitroso-di-n-propylamine	20.0	8	ug/L	21.4		93.5	50-138	13.5	30	
N-Nitrosopyrrolidine	35.5	8	ug/L	50.0		71.1	31-118	12.7	30	
Acetophenone	41.4	8	ug/L	50.0		82.8	45-104	10.3	30	
o-Toluidine	17.7	8	ug/L	50.0		35.4	10-163	12.0	30	
(3 & 4)-Methylphenol	20.0	8	ug/L	21.4		93.6	30-164	12.1	30	
Hexachloroethane	10.7	8	ug/L	21.4		50.2	10-110	5.16	37	
Nitrobenzene	22.0	8	ug/L	21.4		103	47-134	13.0	28	
N-Nitrosopiperidine	33.4	8	ug/L	50.0		66.8	51-122	19.2	30	
Isophorone	19.6	8	ug/L	21.4		91.6	54-128	19.9	22	
2-Nitrophenol	19.0	8	ug/L	21.4		89.0	54-117	13.2	21	
2,4-Dimethylphenol	22.0	8	ug/L	21.4		103	52-118	16.0	23	
Bis (2-Chloroethoxy) Methane	15.9	8	ug/L	21.4		74.1	13-132	25.3	30	
2,4-Dichlorophenol	18.9	8	ug/L	21.4		88.3	58-114	8.37	20	
Naphthalene	14.1	8	ug/L	21.4		65.9	37-116	3.83	17	

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CERTIFICATE OF ANALYSIS

1HD0545

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD0444 - 3520C BNA Cont Liq - EPA 8270C										
LCS Dup (1HD0444-BSD1)				Prepared: 04/08/24 10:24 Analyzed: 04/17/24 16:30						
2,6-Dichlorophenol	38.8	8	ug/L	50.0		77.7	52-129	8.22	16	
Hexachloropropene	15.2	8	ug/L	50.0		30.5	14-110	16.1	29	
Hexachlorobutadiene	<8	8	ug/L	21.4		36.5	14-110	12.5	29	
N-Nitrosodi-n-butylamine	36.1	8	ug/L	50.0		72.3	40-135	21.6	23	
4-Chloro-3-methylphenol	26.0	8	ug/L	21.4		122	57-136	3.06	18	
2-Methylnaphthalene	14.9	8	ug/L	21.4		69.8	44-111	4.20	20	
Isosafrole	34.6	8	ug/L	50.0		69.2	49-107	4.60	12	
1,2,4,5-Tetrachlorobenzene	22.2	8	ug/L	50.0		44.4	42-110	3.97	30	
2,4,6-Trichlorophenol	21.0	8	ug/L	21.4		97.9	55-120	3.79	15	
2,4,5-Trichlorophenol	22.8	8	ug/L	21.4		107	55-121	2.94	16	
Safrole	32.4	8	ug/L	50.0		64.8	40-118	12.1	30	
2-Chloronaphthalene	20.0	8	ug/L	21.4		93.5	47-127	4.11	17	
2-Nitroaniline	22.2	8	ug/L	21.4		104	36-143	1.41	30	
1,4-Naphthoquinone	60.2	8	ug/L	50.0		120	43-152	38.6	30	QR-02
Dimethylphthalate	22.6	8	ug/L	21.4		106	59-128	0.666	15	
1,3-Dinitrobenzene	22.9	8	ug/L	21.4		107	63-125	10.1	14	
1,2-Dinitrobenzene	23.8	8	ug/L	21.4		111	63-123	12.1	18	
2,6-Dinitrotoluene	21.8	8	ug/L	21.4		102	60-127	0.737	13	
Acenaphthylene	17.4	8	ug/L	21.4		81.5	49-113	6.21	23	
Acenaphthene	18.9	8	ug/L	21.4		88.3	50-119	2.51	16	
2,4-Dinitrophenol	17.3	8	ug/L	21.4		80.7	27-157	5.90	23	
4-Nitrophenol	31.8	8	ug/L	21.4		149	49-154	4.47	28	
Dibenzofuran	18.9	8	ug/L	21.4		88.5	56-121	0.684	18	
2,4-Dinitrotoluene	23.0	8	ug/L	21.4		107	53-138	3.05	18	
2,3,4,6-Tetrachlorophenol	20.2	8	ug/L	21.4		94.6	47-132	6.58	29	
Pentachlorobenzene	37.8	8	ug/L	50.0		75.6	41-125	2.79	22	
Diethyl Phthalate	26.4	8	ug/L	21.4		123	53-138	3.66	18	
Fluorene	20.0	8	ug/L	21.4		93.7	54-125	0.300	14	
4-Chlorophenyl Phenyl Ether	19.0	8	ug/L	21.4		88.9	51-122	0.210	15	
4-Nitroaniline	11.2	8	ug/L	21.4		52.4	10-136	7.87	30	
5-Nitro-o-toluidine	10.7	8	ug/L	50.0		21.4	10-145	17.4	30	
4,6-Dinitro-2-methylphenol	23.8	8	ug/L	21.4		111	49-137	14.2	16	
Diphenylamine	17.6	8	ug/L	21.4		82.3	35-151	13.8	30	
Azobenzene	20.8	8	ug/L	21.4		97.2	16-156	22.8	30	
Diallate	58.7	8	ug/L	50.0		117	54-132	13.4	25	
1,3,5-Trinitrobenzene	51.3	8	ug/L	50.0		103	57-173	14.2	30	
Phenacetin	49.4	8	ug/L	50.0		98.9	55-121	17.2	30	
4-Bromophenyl Phenyl Ether	20.7	8	ug/L	21.4		96.7	53-122	6.18	16	
Pentachlorophenol	14.3	8	ug/L	21.4		66.7	18-152	6.66	30	
Pronamide	51.4	8	ug/L	50.0		103	42-122	22.4	30	
Pentachloronitrobenzene (PCNB)	66.0	8	ug/L	50.0		132	50-128	9.86	18	QS-02
Phenanthrene	22.4	8	ug/L	21.4		105	59-131	8.41	16	

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CERTIFICATE OF ANALYSIS

1HD0545

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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Batch 1HD0444 - 3520C BNA Cont Liq - EPA 8270C

LCS Dup (1HD0444-BSD1)

Prepared: 04/08/24 10:24 Analyzed: 04/17/24 16:30

Anthracene	21.4	8	ug/L	21.4		99.9	59-127	12.2	16	
Di-n-butyl Phthalate	28.8	8	ug/L	21.4		135	64-148	12.9	30	
Fluoranthene	25.3	8	ug/L	21.4		118	62-132	15.7	16	
Isodrin	50.5	8	ug/L	50.0		101	46-130	17.8	29	
Chlorobenzilate	50.7	8	ug/L	50.0		101	48-150	10.1	30	
Pyrene	23.8	8	ug/L	21.4		111	58-135	15.1	18	
p-(Dimethylamino)azobenzene	37.7	8	ug/L	50.0		75.4	28-146	128	30	QR-02
Butyl Benzyl Phthalate	28.4	8	ug/L	21.4		133	52-150	15.4	30	
Benzo(a)anthracene	22.6	8	ug/L	21.4		106	58-131	13.1	30	
Chrysene	23.2	8	ug/L	21.4		109	59-131	12.9	30	
Bis(2-Ethylhexyl) Phthalate	48.1	6	ug/L	21.4		225	33-184	18.2	30	QS-02
Kepone	85.6	8	ug/L	50.0		171	10-134	6.42	30	QS-02
2-Acetylaminofluorene	55.3	8	ug/L	50.0		111	47-166	6.44	30	
Di-n-octyl Phthalate	30.7	8	ug/L	21.4		144	48-162	8.27	30	
Benzo(b)Fluoranthene	24.2	8	ug/L	21.4		113	50-146	11.3	30	
7,12-Dimethylbenz [a] anthracene	42.4	8	ug/L	50.0		84.7	22-155	26.8	30	
Benzo(k)Fluoranthene	24.0	8	ug/L	21.4		112	54-144	10.6	30	
Benzo(a)Pyrene	22.7	8	ug/L	21.4		106	39-148	12.3	30	
3-Methylcholanthrene	32.7	8	ug/L	50.0		65.3	34-118	22.9	30	
Dibenzo(a,h)anthracene	23.9	8	ug/L	21.4		112	46-153	13.6	30	
Indeno(1,2,3-cd)Pyrene	23.8	8	ug/L	21.4		111	48-152	13.7	30	
Benzo(g,h,i)perylene	22.2	8	ug/L	21.4		104	47-161	9.05	30	

Surrogate: 2-Fluorophenol	20.5		ug/L	29.6		69.1	24-136			
Surrogate: Phenol-d6	21.6		ug/L	30.5		70.8	15-140			
Surrogate: Nitrobenzene-d5	25.4		ug/L	30.0		84.4	38-115			
Surrogate: 2-Fluorobiphenyl	21.4		ug/L	28.8		74.2	33-110			
Surrogate: 2,4,6-Tribromophenol	26.5		ug/L	29.7		89.1	15-139			
Surrogate: Terphenyl-d14	28.6		ug/L	28.8		99.1	30-142			

Determination of Organophosphorus Insecticides	Result	RL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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Batch 1HD0490 - 3510C NP/OC Sep Fnl - EPA 8141

Blank (1HD0490-BLK1)

Prepared: 04/08/24 16:09 Analyzed: 04/19/24 02:04

O,O,O-Triethyl phosphorothioate	<0.4	0.4	ug/L							
Thionazin	<0.4	0.4	ug/L							
Phorate	<0.4	0.4	ug/L							
Dimethoate	<0.4	0.4	ug/L							
Disulfoton	<0.4	0.4	ug/L							
Methyl Parathion	<0.4	0.4	ug/L							
Parathion	<0.4	0.4	ug/L							

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Determination of	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Organophosphorus Insecticides										
Batch 1HD0490 - 3510C NP/OC Sep Fnl - EPA 8141										

Blank (1HD0490-BLK1)				Prepared: 04/08/24 16:09 Analyzed: 04/19/24 02:04						
Famphur	<0.4	0.4	ug/L							
<i>Surrogate: 2-Nitro-m-xylene</i>	ND		ug/L	8.34			38-122			A-01

LCS (1HD0490-BS1)				Prepared: 04/08/24 16:09 Analyzed: 04/19/24 05:55						
O,O,O-Triethyl phosphorothioate	3.33	0.4	ug/L	4.02		82.8	42-115			
Thionazin	3.34	0.4	ug/L	4.03		82.7	28-118			
Phorate	3.32	0.4	ug/L	4.03		82.4	18-159			
Dimethoate	4.13	0.4	ug/L	4.03		103	43-155			
Disulfoton	3.18	0.4	ug/L	4.03		78.9	37-126			
Methyl Parathion	3.67	0.4	ug/L	4.04		90.8	28-145			
Parathion	3.20	0.4	ug/L	4.00		80.1	52-121			
Famphur	3.56	0.4	ug/L	4.02		88.7	44-144			

<i>Surrogate: 2-Nitro-m-xylene</i>	6.62		ug/L	8.34		79.3	38-122			
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LCS Dup (1HD0490-BSD1)				Prepared: 04/08/24 16:09 Analyzed: 04/19/24 06:53						
O,O,O-Triethyl phosphorothioate	3.20	0.4	ug/L	4.02		79.4	42-115	4.14	30	
Thionazin	3.38	0.4	ug/L	4.03		83.8	28-118	1.34	30	
Phorate	3.25	0.4	ug/L	4.03		80.6	18-159	2.28	30	
Dimethoate	4.10	0.4	ug/L	4.03		102	43-155	0.729	22	
Disulfoton	3.08	0.4	ug/L	4.03		76.3	37-126	3.36	30	
Methyl Parathion	3.34	0.4	ug/L	4.04		82.7	28-145	9.42	28	
Parathion	3.00	0.4	ug/L	4.00		75.0	52-121	6.61	26	
Famphur	3.53	0.4	ug/L	4.02		87.8	44-144	0.987	28	

<i>Surrogate: 2-Nitro-m-xylene</i>	6.04		ug/L	8.34		72.5	38-122			
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Determination of Chlorinated Phenoxy Herbicides	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1HD0468 - EPA 8151A - EPA 8151A

Blank (1HD0468-BLK1)				Prepared: 04/08/24 13:16 Analyzed: 04/17/24 08:40						
2,4-D	<2.0	2.0	ug/L							
2,4,5-TP (Silvex)	<0.5	0.5	ug/L							
2,4,5-T	<0.5	0.5	ug/L							
Dinoseb	<0.5	0.5	ug/L							

<i>Surrogate: 2,5-Dichlorobenzoic Acid</i>	1.58		ug/L	2.02		78.0	31-116			
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LCS (1HD0468-BS1)				Prepared: 04/08/24 13:16 Analyzed: 04/17/24 10:51						
2,4-D	<2.0	2.0	ug/L	2.30		46.5	16-161			
2,4,5-TP (Silvex)	0.56	0.5	ug/L	1.15		48.3	35-141			
2,4,5-T	0.57	0.5	ug/L	1.15		49.6	54-149			QS-03
Dinoseb	0.53	0.5	ug/L	2.30		23.0	10-133			



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Determination of Chlorinated Phenoxy Herbicides	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1HD0468 - EPA 8151A - EPA 8151A

LCS (1HD0468-BS1) Prepared: 04/08/24 13:16 Analyzed: 04/17/24 10:51

Surrogate: 2,5-Dichlorobenzoic Acid 1.90 ug/L 2.02 94.1 31-116

LCS Dup (1HD0468-BS1) Prepared: 04/08/24 13:16 Analyzed: 04/17/24 11:24

2,4-D	<2.0	2.0	ug/L	2.30		45.7	16-161	1.89	30	
2,4,5-TP (Silvex)	0.54	0.5	ug/L	1.15		46.5	35-141	3.67	30	
2,4,5-T	0.58	0.5	ug/L	1.15		50.9	54-149	2.60	30	QS-03
Dinoseb	0.54	0.5	ug/L	2.30		23.5	10-133	1.87	30	

Surrogate: 2,5-Dichlorobenzoic Acid 1.80 ug/L 2.02 89.4 31-116

Determination of Organochlorine Insecticides & Metabolites	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1HD0488 - 3510C NP/OC Sep Fnl - EPA 8081

Blank (1HD0488-BLK1) Prepared: 04/08/24 16:08 Analyzed: 04/17/24 15:49

Alpha-BHC	<0.05	0.05	ug/L							
Gamma-BHC [Lindane]	<0.05	0.05	ug/L							
Beta-BHC	<0.05	0.05	ug/L							
Heptachlor	<0.05	0.05	ug/L							
Delta-BHC	<0.05	0.05	ug/L							
Aldrin	<0.05	0.05	ug/L							
Heptachlor Epoxide	<0.05	0.05	ug/L							
Endosulfan I	<0.05	0.05	ug/L							
4,4'-DDE	<0.05	0.05	ug/L							
Dieldrin	<0.05	0.05	ug/L							
Endrin	<0.05	0.05	ug/L							
4,4'-DDD	<0.05	0.05	ug/L							
Endosulfan II	<0.05	0.05	ug/L							
4,4'-DDT	<0.05	0.05	ug/L							
Endrin Aldehyde	<0.05	0.05	ug/L							
Endosulfan Sulfate	<0.05	0.05	ug/L							
Methoxychlor	<0.05	0.05	ug/L							
Chlordane	<0.10	0.10	ug/L							
Toxaphene	<0.20	0.20	ug/L							
Hexachlorobenzene	<0.05	0.05	ug/L							

Surrogate: Tetrachloro-m-xylene 0.508 ug/L 0.600 84.7 10-121

LCS (1HD0488-BS1) Prepared: 04/08/24 16:08 Analyzed: 04/17/24 16:04

Alpha-BHC	0.244	0.05	ug/L	0.250		97.6	33-123			
Gamma-BHC [Lindane]	0.241	0.05	ug/L	0.250		96.6	34-120			
Beta-BHC	0.237	0.05	ug/L	0.250		94.9	33-125			
Heptachlor	0.242	0.05	ug/L	0.250		97.0	32-117			



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Determination of Organochlorine Insecticides & Metabolites	Result	RL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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Batch 1HD0488 - 3510C NP/OC Sep Fnl - EPA 8081

LCS (1HD0488-BS1)			Prepared: 04/08/24 16:08 Analyzed: 04/17/24 16:04						
Delta-BHC	0.279	0.05	ug/L	0.250	111	24-140			
Aldrin	0.197	0.05	ug/L	0.250	78.8	29-122			
Heptachlor Epoxide	0.237	0.05	ug/L	0.250	94.8	37-137			
Endosulfan I	0.249	0.05	ug/L	0.250	99.7	27-141			
4,4'-DDE	0.226	0.05	ug/L	0.250	90.5	38-147			
Dieldrin	0.227	0.05	ug/L	0.250	91.0	32-137			
Endrin	0.339	0.05	ug/L	0.250	136	25-142			
4,4'-DDD	0.238	0.05	ug/L	0.250	95.1	43-146			
Endosulfan II	0.245	0.05	ug/L	0.250	98.2	36-140			
4,4'-DDT	0.303	0.05	ug/L	0.250	121	39-140			
Endrin Aldehyde	0.232	0.05	ug/L	0.250	92.8	17-150			
Endosulfan Sulfate	0.257	0.05	ug/L	0.250	103	41-135			
Methoxychlor	0.340	0.05	ug/L	0.250	136	40-148			

Surrogate: Tetrachloro-m-xylene 0.462 ug/L 0.600 77.0 10-121

LCS Dup (1HD0488-BS1)			Prepared: 04/08/24 16:08 Analyzed: 04/17/24 16:18						
Alpha-BHC	0.245	0.05	ug/L	0.250	98.2	33-123	0.589	30	
Gamma-BHC [Lindane]	0.241	0.05	ug/L	0.250	96.2	34-120	0.353	30	
Beta-BHC	0.236	0.05	ug/L	0.250	94.3	33-125	0.596	30	
Heptachlor	0.250	0.05	ug/L	0.250	100	32-117	3.05	30	
Delta-BHC	0.275	0.05	ug/L	0.250	110	24-140	1.25	30	
Aldrin	0.211	0.05	ug/L	0.250	84.6	29-122	7.05	30	
Heptachlor Epoxide	0.240	0.05	ug/L	0.250	95.9	37-137	1.16	30	
Endosulfan I	0.251	0.05	ug/L	0.250	100	27-141	0.630	30	
4,4'-DDE	0.233	0.05	ug/L	0.250	93.3	38-147	3.04	30	
Dieldrin	0.231	0.05	ug/L	0.250	92.5	32-137	1.70	30	
Endrin	0.341	0.05	ug/L	0.250	137	25-142	0.520	30	
4,4'-DDD	0.239	0.05	ug/L	0.250	95.8	43-146	0.763	30	
Endosulfan II	0.246	0.05	ug/L	0.250	98.5	36-140	0.317	30	
4,4'-DDT	0.302	0.05	ug/L	0.250	121	39-140	0.300	30	
Endrin Aldehyde	0.231	0.05	ug/L	0.250	92.5	17-150	0.363	30	
Endosulfan Sulfate	0.256	0.05	ug/L	0.250	102	41-135	0.349	30	
Methoxychlor	0.340	0.05	ug/L	0.250	136	40-148	0.0854	30	

Surrogate: Tetrachloro-m-xylene 0.499 ug/L 0.600 83.2 10-121

Determination of Polychlorinated Biphenyls (PCB)	Result	RL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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Batch 1HD0489 - 3510C NP/OC Sep Fnl - EPA 8082

Blank (1HD0489-BLK1)			Prepared: 04/08/24 16:09 Analyzed: 04/17/24 15:49						
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Determination of	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1HD0489 - 3510C NP/OC Sep Fnl - EPA 8082

Blank (1HD0489-BLK1) Prepared: 04/08/24 16:09 Analyzed: 04/17/24 15:49										
Arochlor 1016	<0.20	0.20	ug/L							
Arochlor 1221	<0.20	0.20	ug/L							
Arochlor 1232	<0.20	0.20	ug/L							
Arochlor 1242	<0.20	0.20	ug/L							
Arochlor 1248	<0.20	0.20	ug/L							
Arochlor 1254	<0.20	0.20	ug/L							
Arochlor 1260	<0.20	0.20	ug/L							

Surrogate: Tetrachloro-m-xylene 0.547 ug/L 0.600 91.2 38-121
 Surrogate: Decachlorobiphenyl 0.420 ug/L 0.600 70.0 25-119

LCS (1HD0489-BS1) Prepared: 04/08/24 16:09 Analyzed: 04/17/24 16:33										
Arochlor 1016	1.892	0.20	ug/L	2.60		72.8	25-126			
Arochlor 1260	2.406	0.20	ug/L	2.60		92.5	29-142			

Surrogate: Tetrachloro-m-xylene 0.501 ug/L 0.600 83.5 38-121
 Surrogate: Decachlorobiphenyl ND ug/L 0.600 25-119 S-GC

LCS Dup (1HD0489-BSD1) Prepared: 04/08/24 16:09 Analyzed: 04/17/24 16:48										
Arochlor 1016	2.023	0.20	ug/L	2.60		77.8	25-126	6.68	30	
Arochlor 1260	2.460	0.20	ug/L	2.60		94.6	29-142	2.22	30	

Surrogate: Tetrachloro-m-xylene 0.522 ug/L 0.600 87.0 38-121
 Surrogate: Decachlorobiphenyl 0.116 ug/L 0.600 19.3 25-119 S-GC

Determination of	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1HD0415 - Wet Chem Preparation - EPA 9010B

Blank (1HD0415-BLK1) Prepared: 04/08/24 08:25 Analyzed: 04/08/24 15:45										
Cyanide, total	<0.005	0.005	mg/L							

LCS (1HD0415-BS1) Prepared: 04/08/24 08:25 Analyzed: 04/08/24 15:45										
Cyanide, total	0.0324	0.005	mg/L	0.0300		108	66-136			

Matrix Spike (1HD0415-MS1) Source: 1HD0315-11 Prepared: 04/08/24 08:25 Analyzed: 04/08/24 15:45										
Cyanide, total	0.0312	0.005	mg/L	0.0300	ND	104	59-153			

Matrix Spike Dup (1HD0415-MSD1) Source: 1HD0315-11 Prepared: 04/08/24 08:25 Analyzed: 04/08/24 15:45										
Cyanide, total	0.0322	0.005	mg/L	0.0300	ND	107	59-153	3.20	30	

Batch 1HD0417 - Wet Chem Preparation - EPA 376.2

Blank (1HD0417-BLK1) Prepared: 04/08/24 08:27 Analyzed: 04/08/24 16:27										
Sulfide, total	<0.10	0.10	mg/L							

LCS (1HD0417-BS1) Prepared: 04/08/24 08:27 Analyzed: 04/08/24 16:27										
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Determination of Conventional Chemistry Parameters	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1HD0417 - Wet Chem Preparation - EPA 376.2

LCS (1HD0417-BS1) Prepared: 04/08/24 08:27 Analyzed: 04/08/24 16:27										
Sulfide, total	0.175	0.10	mg/L	0.31		55.6	59-110			QS-01
Matrix Spike (1HD0417-MS1) Source: 1HD0315-11 Prepared: 04/08/24 08:27 Analyzed: 04/08/24 16:27										
Sulfide, total	0.580	0.30	mg/L	0.94	ND	61.4	50-150			
Matrix Spike Dup (1HD0417-MSD1) Source: 1HD0315-11 Prepared: 04/08/24 08:27 Analyzed: 04/08/24 16:27										
Sulfide, total	0.473	0.30	mg/L	0.94	ND	50.0	50-150	20.4	30	

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1HD0422 - EPA 3005A Total Recoverable Metals - EPA 6020A

Blank (1HD0422-BLK1) Prepared: 04/08/24 08:45 Analyzed: 04/08/24 23:31										
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							QB-12
Zinc, total	<0.0200	0.0200	mg/L							

LCS (1HD0422-BS1) Prepared: 04/08/24 08:45 Analyzed: 04/08/24 23:38										
Antimony, total	0.0976	0.0020	mg/L	0.100		97.6	80-120			
Arsenic, total	0.0975	0.0040	mg/L	0.100		97.5	80-120			
Barium, total	0.106	0.0040	mg/L	0.100		106	80-120			
Beryllium, total	0.103	0.0040	mg/L	0.100		103	80-120			
Cadmium, total	0.0969	0.0008	mg/L	0.100		96.9	80-120			
Chromium, total	0.0961	0.0080	mg/L	0.100		96.1	80-120			
Cobalt, total	0.0986	0.0004	mg/L	0.100		98.6	80-120			
Copper, total	0.0955	0.0040	mg/L	0.100		95.5	80-120			
Lead, total	0.0991	0.0040	mg/L	0.100		99.1	80-120			
Nickel, total	0.0967	0.0040	mg/L	0.100		96.7	80-120			
Selenium, total	0.0963	0.0040	mg/L	0.100		96.3	80-120			
Silver, total	0.102	0.0040	mg/L	0.100		102	80-120			
Thallium, total	0.0985	0.0020	mg/L	0.100		98.5	80-120			
Vanadium, total	0.109	0.0200	mg/L	0.100		109	80-120			
Zinc, total	0.0958	0.0200	mg/L	0.100		95.8	80-120			



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Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD0422 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Matrix Spike (1HD0422-MS1) Source: 1HD0545-01 Prepared: 04/08/24 08:45 Analyzed: 04/09/24 00:33										
Antimony, total	0.0978	0.0020	mg/L	0.100	ND	97.8	75-125			
Arsenic, total	0.0990	0.0040	mg/L	0.100	0.0023	96.7	75-125			
Barium, total	0.150	0.0040	mg/L	0.100	0.0401	109	75-125			
Beryllium, total	0.0950	0.0040	mg/L	0.100	ND	95.0	75-125			
Cadmium, total	0.0948	0.0008	mg/L	0.100	0.0014	93.4	75-125			
Chromium, total	0.0953	0.0080	mg/L	0.100	0.0009	94.4	75-125			
Cobalt, total	0.0993	0.0004	mg/L	0.100	0.0003	99.0	75-125			
Copper, total	0.0949	0.0040	mg/L	0.100	0.0020	92.8	75-125			
Lead, total	0.0972	0.0040	mg/L	0.100	ND	97.2	75-125			
Nickel, total	0.0994	0.0040	mg/L	0.100	0.0037	95.6	75-125			
Selenium, total	0.0954	0.0040	mg/L	0.100	ND	95.4	75-125			
Silver, total	0.100	0.0040	mg/L	0.100	ND	100	75-125			
Thallium, total	0.0982	0.0020	mg/L	0.100	ND	98.2	75-125			
Vanadium, total	0.103	0.0200	mg/L	0.100	ND	103	75-125			
Zinc, total	0.0998	0.0200	mg/L	0.100	ND	99.8	75-125			
Matrix Spike Dup (1HD0422-MSD1) Source: 1HD0545-01 Prepared: 04/08/24 08:45 Analyzed: 04/09/24 00:39										
Antimony, total	0.0990	0.0020	mg/L	0.100	ND	99.0	75-125	1.24	20	
Arsenic, total	0.0991	0.0040	mg/L	0.100	0.0023	96.8	75-125	0.0533	20	
Barium, total	0.150	0.0040	mg/L	0.100	0.0401	110	75-125	0.106	20	
Beryllium, total	0.0964	0.0040	mg/L	0.100	ND	96.4	75-125	1.51	20	
Cadmium, total	0.0976	0.0008	mg/L	0.100	0.0014	96.2	75-125	2.91	20	
Chromium, total	0.0955	0.0080	mg/L	0.100	0.0009	94.6	75-125	0.208	20	
Cobalt, total	0.0989	0.0004	mg/L	0.100	0.0003	98.6	75-125	0.377	20	
Copper, total	0.0945	0.0040	mg/L	0.100	0.0020	92.5	75-125	0.387	20	
Lead, total	0.0979	0.0040	mg/L	0.100	ND	97.9	75-125	0.716	20	
Nickel, total	0.0993	0.0040	mg/L	0.100	0.0037	95.5	75-125	0.0902	20	
Selenium, total	0.0945	0.0040	mg/L	0.100	ND	94.5	75-125	0.989	20	
Silver, total	0.101	0.0040	mg/L	0.100	ND	101	75-125	0.473	20	
Thallium, total	0.0984	0.0020	mg/L	0.100	ND	98.4	75-125	0.202	20	
Vanadium, total	0.104	0.0200	mg/L	0.100	ND	104	75-125	0.544	20	
Zinc, total	0.100	0.0200	mg/L	0.100	ND	100	75-125	0.654	20	
Post Spike (1HD0422-PS1) Source: 1HD0545-01 Prepared: 04/08/24 08:45 Analyzed: 04/09/24 00:45										
Antimony, total	0.0762		mg/L	0.0800	0.0003	95.0	80-120			
Arsenic, total	0.0777		mg/L	0.0800	0.0023	94.3	80-120			
Barium, total	0.120		mg/L	0.0800	0.0393	101	80-120			
Beryllium, total	0.0736		mg/L	0.0800	-0.00003	92.0	80-120			
Cadmium, total	0.0749		mg/L	0.0800	0.0014	91.9	80-120			
Chromium, total	0.0742		mg/L	0.0800	0.0008	91.7	80-120			
Cobalt, total	0.0767		mg/L	0.0800	0.0003	95.5	80-120			
Copper, total	0.0739		mg/L	0.0800	0.0020	89.9	80-120			
Lead, total	0.0753		mg/L	0.0800	0.0002	93.9	80-120			
Nickel, total	0.0786		mg/L	0.0800	0.0037	93.6	80-120			
Selenium, total	0.0718		mg/L	0.0800	0.0005	89.1	80-120			



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HD0545

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD0422 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Post Spike (1HD0422-PS1) Source: 1HD0545-01 Prepared: 04/08/24 08:45 Analyzed: 04/09/24 00:45										
Silver, total	0.0784		mg/L	0.0800	0.0004	97.5	80-120			
Thallium, total	0.0764		mg/L	0.0800	-0.0001	95.5	80-120			
Vanadium, total	0.0842		mg/L	0.0800	0.0101	92.6	80-120			
Zinc, total	0.0779		mg/L	0.0800	0.0094	85.6	80-120			
Batch 1HD0425 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Blank (1HD0425-BLK1) Prepared: 04/08/24 08:55 Analyzed: 04/09/24 00:51										
Antimony, total	<0.0020	0.0020	mg/L							
Arsenic, total	<0.0040	0.0040	mg/L							
Barium, total	<0.0040	0.0040	mg/L							
Beryllium, total	<0.0040	0.0040	mg/L							
Cadmium, total	<0.0008	0.0008	mg/L							
Chromium, total	<0.0080	0.0080	mg/L							
Cobalt, total	<0.0004	0.0004	mg/L							
Copper, total	<0.0040	0.0040	mg/L							
Lead, total	<0.0040	0.0040	mg/L							
Nickel, total	<0.0040	0.0040	mg/L							
Selenium, total	<0.0040	0.0040	mg/L							
Silver, total	<0.0040	0.0040	mg/L							
Thallium, total	<0.0020	0.0020	mg/L							
Tin, total	<0.0200	0.0200	mg/L							
Vanadium, total	<0.0200	0.0200	mg/L							QB-12
Zinc, total	<0.0200	0.0200	mg/L							
LCS (1HD0425-BS1) Prepared: 04/08/24 08:55 Analyzed: 04/09/24 00:58										
Antimony, total	0.0968	0.0020	mg/L	0.100		96.8	80-120			
Arsenic, total	0.0983	0.0040	mg/L	0.100		98.3	80-120			
Barium, total	0.106	0.0040	mg/L	0.100		106	80-120			
Beryllium, total	0.101	0.0040	mg/L	0.100		101	80-120			
Cadmium, total	0.0955	0.0008	mg/L	0.100		95.5	80-120			
Chromium, total	0.0959	0.0080	mg/L	0.100		95.9	80-120			
Cobalt, total	0.0998	0.0004	mg/L	0.100		99.8	80-120			
Copper, total	0.0978	0.0040	mg/L	0.100		97.8	80-120			
Lead, total	0.0974	0.0040	mg/L	0.100		97.4	80-120			
Nickel, total	0.100	0.0040	mg/L	0.100		100	80-120			
Selenium, total	0.0957	0.0040	mg/L	0.100		95.7	80-120			
Silver, total	0.101	0.0040	mg/L	0.100		101	80-120			
Thallium, total	0.0971	0.0020	mg/L	0.100		97.1	80-120			
Tin, total	0.0975	0.0200	mg/L	0.100		97.5	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 (1HD0425-MS1) Source: 1HD0545-02 Prepared: 04/08/24 08:55 Analyzed: 04/09/24 01:10										
Antimony, total	0.0972	0.0020	mg/L	0.100	ND	97.2	75-125			
Arsenic, total	0.100	0.0040	mg/L	0.100	0.0048	95.3	75-125			

Microbac Laboratories, Inc., Newton

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Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HD0545

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD0425 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Matrix Spike (1HD0425-MS1) Source: 1HD0545-02 Prepared: 04/08/24 08:55 Analyzed: 04/09/24 01:10										
Barium, total	0.211	0.0040	mg/L	0.100	0.102	108	75-125			
Beryllium, total	0.0970	0.0040	mg/L	0.100	ND	97.0	75-125			
Cadmium, total	0.0913	0.0008	mg/L	0.100	ND	91.3	75-125			
Chromium, total	0.0931	0.0080	mg/L	0.100	ND	93.1	75-125			
Cobalt, total	0.0971	0.0004	mg/L	0.100	ND	97.1	75-125			
Copper, total	0.0927	0.0040	mg/L	0.100	ND	92.7	75-125			
Lead, total	0.0947	0.0040	mg/L	0.100	ND	94.7	75-125			
Nickel, total	0.0960	0.0040	mg/L	0.100	ND	96.0	75-125			
Selenium, total	0.0977	0.0040	mg/L	0.100	0.0027	95.0	75-125			
Silver, total	0.0981	0.0040	mg/L	0.100	ND	98.1	75-125			
Thallium, total	0.0956	0.0020	mg/L	0.100	0.0002	95.6	75-125			
Tin, total	0.0987	0.0200	mg/L	0.100	ND	98.7	75-125			
Vanadium, total	0.104	0.0200	mg/L	0.100	ND	104	75-125			
Zinc, total	0.0904	0.0200	mg/L	0.100	ND	90.4	75-125			
Matrix Spike Dup (1HD0425-MSD1) Source: 1HD0545-02 Prepared: 04/08/24 08:55 Analyzed: 04/09/24 01:16										
Antimony, total	0.0939	0.0020	mg/L	0.100	ND	93.9	75-125	3.44	20	
Arsenic, total	0.0988	0.0040	mg/L	0.100	0.0048	94.0	75-125	1.31	20	
Barium, total	0.205	0.0040	mg/L	0.100	0.102	103	75-125	2.43	20	
Beryllium, total	0.0966	0.0040	mg/L	0.100	ND	96.6	75-125	0.459	20	
Cadmium, total	0.0914	0.0008	mg/L	0.100	ND	91.4	75-125	0.0254	20	
Chromium, total	0.0920	0.0080	mg/L	0.100	ND	92.0	75-125	1.18	20	
Cobalt, total	0.0954	0.0004	mg/L	0.100	ND	95.4	75-125	1.79	20	
Copper, total	0.0914	0.0040	mg/L	0.100	ND	91.4	75-125	1.44	20	
Lead, total	0.0944	0.0040	mg/L	0.100	ND	94.4	75-125	0.245	20	
Nickel, total	0.0950	0.0040	mg/L	0.100	ND	95.0	75-125	1.04	20	
Selenium, total	0.0924	0.0040	mg/L	0.100	0.0027	89.7	75-125	5.61	20	
Silver, total	0.0976	0.0040	mg/L	0.100	ND	97.6	75-125	0.504	20	
Thallium, total	0.0949	0.0020	mg/L	0.100	0.0002	94.9	75-125	0.806	20	
Tin, total	0.0948	0.0200	mg/L	0.100	ND	94.8	75-125	4.04	20	
Vanadium, total	0.103	0.0200	mg/L	0.100	ND	103	75-125	1.16	20	
Zinc, total	0.0904	0.0200	mg/L	0.100	ND	90.4	75-125	0.0102	20	
Post Spike (1HD0425-PS1) Source: 1HD0545-02 Prepared: 04/08/24 08:55 Analyzed: 04/09/24 01:22										
Antimony, total	0.0794		mg/L	0.0800	0.0001	99.1	80-120			
Arsenic, total	0.0823		mg/L	0.0800	0.0047	97.0	80-120			
Barium, total	0.183		mg/L	0.0800	0.100	104	80-120			
Beryllium, total	0.0788		mg/L	0.0800	-0.00003	98.5	80-120			
Cadmium, total	0.0751		mg/L	0.0800	-0.000002	93.9	80-120			
Chromium, total	0.0760		mg/L	0.0800	0.0004	94.5	80-120			
Cobalt, total	0.0789		mg/L	0.0800	0.00004	98.5	80-120			
Copper, total	0.0747		mg/L	0.0800	0.0006	92.7	80-120			
Lead, total	0.0775		mg/L	0.0800	0.000006	96.8	80-120			
Nickel, total	0.0773		mg/L	0.0800	0.0008	95.6	80-120			
Selenium, total	0.0755		mg/L	0.0800	0.0026	91.1	80-120			



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HD0545

Table with columns: Determination of Total Metals, Result, RL, Units, Spike Level, Source Result, %REC Limits, RPD, RPD Limit, Notes. Row: Batch 1HD0425 - EPA 3005A Total Recoverable Metals - EPA 6020A. Post Spike (1HD0425-PS1) Source: 1HD0545-02. Prepared: 04/08/24 08:55 Analyzed: 04/09/24 01:22. Silver, total: 0.0815 mg/L, 0.0800 spike level, 0.0006 result, 101% REC, 80-120 limits.

Table with columns: Determination of Total Metals, Result, RL, Units, Spike Level, Source Result, %REC Limits, RPD, RPD Limit, Notes. Row: Batch 1HD0568 - EPA 7470A Hg Water - EPA 7470A. Blank (1HD0568-BLK1) Source: 1HD0568-02. Prepared: 04/09/24 15:33 Analyzed: 04/10/24 16:03. Mercury, total: <0.00050 mg/L, 0.00050 RL. LCS (1HD0568-BS1) Source: 1HD0568-03. Prepared: 04/09/24 15:33 Analyzed: 04/10/24 16:05. Mercury, total: 0.00256 mg/L, 0.00050 RL, 0.00250 spike level, 102% REC, 80-120 limits. Matrix Spike (1HD0568-MS1) Source: 1HD0160-03. Prepared: 04/09/24 15:33 Analyzed: 04/10/24 16:09. Mercury, total: 0.00263 mg/L, 0.00050 RL, 0.00250 spike level, ND result, 105% REC, 75-125 limits. Matrix Spike Dup (1HD0568-MSD1) Source: 1HD0160-03. Prepared: 04/09/24 15:33 Analyzed: 04/10/24 16:12. Mercury, total: 0.00249 mg/L, 0.00050 RL, 0.00250 spike level, ND result, 99.5% REC, 75-125 limits, 5.64 RPD, 20 RPD Limit.

Definitions

- A-01: Surrogate not added to batch blank.
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.
QB-12: The analyte was found in the blank at a concentration greater than one-half the reporting limit. However, the concentration of the analyte in the blank was less than the reporting limit so the data was accepted.
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.
QR-02: The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
QS-01: The blank spike recovery and/or blank spike duplicate recovery were outside the established acceptance limits. Batch was accepted based on acceptable MS/MSD/RPD results.
QS-02: The spike recovery for this QC sample exceeded established acceptance limits. However, all samples were below the reporting and/or regulatory limit so the data is acceptable.
QS-03: The blank spike recovery was below established acceptance limits.
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: 0.0°C

Cooler Inspection Checklist

Table with 4 columns: Item, Yes/No, Item, Yes/No. Row 1: Custody Seals, No, Containers Intact, Yes. Row 2: COC/Labels Agree, Yes, Preservation Confirmed, No. Row 3: Received On Ice, Yes, (blank), (blank).



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HD0545

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:

A rectangular box containing a handwritten signature in black ink that reads "Heather Murphy".

Heather Murphy
Customer Relationship Specialist
heather.murphy@microbac.com
04/29/24 09:38



SITE INFORMATION

Sampler: TODD WHIPPLE

Project: Northern Plains SLF-New Regs
6021-

REPORT TO

Todd Whipple
HLW Engineering
PO Box 314
Story City, IA 50248

INVOICE TO

Accounts Payable
Northern Plains Regional Landfill
3032 420th Ave, PO Box 117
Grettinger, IA 51342

SPECIAL INSTRUCTIONS

None

Turn Around Time
 Standard RUSH, need by ___/___/___

LAB USE ONLY

Work Order: IHD OSAS

Temperature: 0.0/0.0

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-11 (up)	Water	GRAB	<u>4/4/24</u>	<u>10:26</u>	<u>7</u>	Indfil-app1-voc-group	Indfil-app1-metals-6020	<u>01</u>
-001	MW-12 (up)	Water	GRAB	<u>4/4/24</u>	<u>10:39</u>	<u>7</u>	Indfil-app1-voc-group	Indfil-app1-metals-6020	<u>02</u>
-001	MW-17 (up)	Water	GRAB	<u>4/4/24</u>	<u>11:24</u>	<u>7</u>	Indfil-app1-voc-group	Indfil-app1-metals-6020	<u>03</u>
-001	MW-3AR	Water	GRAB	<u>4/4/24</u>	<u>14:21</u>	<u>7</u>	Indfil-app1-voc-group	Indfil-app1-metals-6020	<u>04</u>
-001	MW-6B	Water	GRAB	<u>4/4/24</u>	<u>14:47</u>	<u>8</u>	8270-110 Indfil-app1-metals-6020	Indfil-app1-voc-group	<u>05</u>
-001	MW-7A	Water	GRAB	<u>4/4/24</u>	<u>13:27</u>	<u>7</u>	Indfil-app1-voc-group	Indfil-app1-metals-6020	<u>06</u>
-001	MW-7B	Water	GRAB	<u>4/4/24</u>	<u>13:11</u>	<u>7</u>	Indfil-app1-voc-group	Indfil-app1-metals-6020	<u>07</u>

Relinquished By: [Signature] Date/Time: 4/5/24

Relinquished By: [Signature] Date/Time: 4-5-24 12:13

Received By: _____ Date/Time: _____

Received for Lab By: _____ Date/Time: _____

Remarks:



SITE INFORMATION

Sampler: Todd Whipple

Project: Northern Plains SLF-New Reqs
6021-

REPORT TO

Todd Whipple
HLW Engineering
PO Box 314
Story City, IA 50248

INVOICE TO

Accounts Payable
Northern Plains Regional Landfill
3032 420th Ave, PO Box 117
Grettinger, IA 51342

SPECIAL INSTRUCTIONS

None

Turn Around Time

Standard RUSH, need by ___/___/___

LAB USE ONLY

Work Order: 11HDO54S
Temperature: 0.0/0.0
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	GU-2	Water	GRAB	<u>4/4/24</u>	<u>14:34</u>	<u>7</u>	<u>Landfill App 1 VOC Group + Landfill App 1 metals 6020</u> Indfil-app-1-voc-6020 Indfil-app-1-voc-6020	<u>15</u>
-001	Duplicate	Water	GRAB	<u>4/4/24</u>	<u>✓</u>	<u>1</u>	Indfil-app-1-voc-6020 Indfil-app-1-metals-6020	<u>16</u>
-001	MW-13 (up)	Water	GRAB	<u>4/4/24</u>	<u>10:51</u>	<u>1</u>	Indfil-app-1-metals-6020	<u>17</u>
-001	MW-18 (up)	Water	GRAB	<u>4/4/24</u>	<u>10:02</u>	<u>1</u>	Indfil-app-1-metals-6020	<u>18</u>
-001	MW-19 (up)	Water	GRAB	<u>4/4/24</u>	<u>10:08</u>	<u>1</u>	Indfil-app-1-metals-6020	<u>19</u>
-001	MW-20 (up)	Water	GRAB	<u>4/4/24</u>	<u>9:33</u>	<u>1</u>	Indfil-app-1-metals-6020	<u>20</u>
-001	MW-21 (up)	Water	GRAB	<u>4/4/24</u>	<u>9:46</u>	<u>1</u>	Indfil-app-1-metals-6020	<u>21</u>

Relinquished By: Todd Whipple Date/Time: 4/5/24

Relinquished By: D. Whipple Date/Time: 4-5-24 12:13

Received By: _____ Date/Time: _____

Received for Lab By: _____ Date/Time: _____

Remarks:



1 H D 0 5 4 5

HLW Engineering
PM: Heather Murphy

SITE INFORMATION

Sampler: TODD WHIPPLE

Project: Northern Plains SLF-New Regs
6021-

REPORT TO

Todd Whipple
HLW Engineering
PO Box 314
Story City, IA 50248

INVOICE TO

Accounts Payable
Northern Plains Regional Landfill
3032 420th Ave. PO Box 117
Gracettinger, IA 51342

SPECIAL INSTRUCTIONS

None

Turn Around Time
 Standard RUSH, need by ___/___/___

LAB USE ONLY

Work Order 1HDO54S

Temperature 0.0/0.0

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-8	Water	GRAB	<u>4/4/24</u>	<u>12:25</u>	<u>7</u>	lndfill-app1-voc-group lndfill-app1-metals-6020	<u>08</u>
-001	MW-9	Water	GRAB	<u>4/4/24</u>	<u>11:49</u>	<u>7</u>	lndfill-app1-voc-group lndfill-app1-metals-6020	<u>09</u>
-001	MW-10	Water	GRAB	<u>4/4/24</u>	<u>9:03</u>	<u>17</u>	lndfill-app2-inorg-6020 lndfill-app2-org	<u>10</u>
-001	MW-14	Water	GRAB	<u>4/4/24</u>	<u>14:00</u>	<u>7</u>	lndfill-app1-voc-group lndfill-app1-metals-6020	<u>11</u>
-001	MW-15	Water	GRAB	<u>4/4/24</u>	<u>12:53</u>	<u>7</u>	lndfill-app1-voc-group lndfill-app1-metals-6020	<u>12</u>
-001	MW-16	Water	GRAB	<u>4/4/24</u>	<u>12:10</u>	<u>7</u>	lndfill-app1-voc-group lndfill-app1-metals-6020	<u>13</u>
-001	GU-1	Water	GRAB	<u>4/4/24</u>	<u>11:57</u>	<u>7</u>	lndfill-app1-voc-group lndfill-app1-metals-6020	<u>14</u>

Relinquished By Todd Whipple Date/Time 4/5/24

Relinquished By _____ Date/Time _____

Received for Lab By Todd Whipple Date/Time 4-5-24 12:13

Received By _____ Date/Time _____

Remarks:



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HJ1549

Project Description

6021-

For:

Todd Whipple

HLW Engineering

204 West Broad St

Story City, IA 50248

Heather Murphy

Customer Relationship Specialist

Friday, November 1, 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

1HJ1549

HLW Engineering

Project Name: 6021-

Todd Whipple
204 West Broad St
Story City, IA 50248

Project / PO Number: N/A
Received: 10/18/2024
Reported: 11/01/2024

Sample Summary Report

<u>Sample Name</u>	<u>Laboratory ID</u>	<u>Client Matrix</u>	<u>Sample Type</u>	<u>Sample Begin</u>	<u>Sample Taken</u>	<u>Lab Received</u>
MW-11 (up)	1HJ1549-01	Aqueous	GRAB		10/16/24 11:26	10/18/24 10:40
MW-12 (up)	1HJ1549-02	Aqueous	GRAB		10/16/24 11:34	10/18/24 10:40
MW-17 (up)	1HJ1549-03	Aqueous	GRAB		10/16/24 12:25	10/18/24 10:40
MW-3AR	1HJ1549-04	Aqueous	GRAB		10/16/24 14:20	10/18/24 10:40
MW-7B	1HJ1549-05	Aqueous	GRAB		10/16/24 13:42	10/18/24 10:40
MW-8	1HJ1549-06	Aqueous	GRAB		10/16/24 13:08	10/18/24 10:40
MW-9	1HJ1549-07	Aqueous	GRAB		10/16/24 12:38	10/18/24 10:40
MW-10	1HJ1549-08	Aqueous	GRAB		10/16/24 10:11	10/18/24 10:40
MW-14	1HJ1549-09	Aqueous	GRAB		10/16/24 14:05	10/18/24 10:40
MW-15	1HJ1549-10	Aqueous	GRAB		10/16/24 13:32	10/18/24 10:40
MW-16	1HJ1549-11	Aqueous	GRAB		10/16/24 12:55	10/18/24 10:40
GU-1	1HJ1549-12	Aqueous	GRAB		10/16/24 12:09	10/18/24 10:40
GU-2	1HJ1549-13	Aqueous	GRAB		10/16/24 14:31	10/18/24 10:40
Duplicate	1HJ1549-14	Aqueous	GRAB		10/16/24 00:00	10/18/24 10:40
MW-13 (up)	1HJ1549-15	Aqueous	GRAB		10/16/24 11:41	10/18/24 10:40
MW-18 (up)	1HJ1549-16	Aqueous	GRAB		10/16/24 10:45	10/18/24 10:40
MW-19 (up)	1HJ1549-17	Aqueous	GRAB		10/16/24 10:53	10/18/24 10:40
MW-20 (up)	1HJ1549-18	Aqueous	GRAB		10/16/24 10:29	10/18/24 10:40
MW-21 (up)	1HJ1549-19	Aqueous	GRAB		10/16/24 10:34	10/18/24 10:40



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HJ1549

Analytical Testing Parameters

Client Sample ID:	MW-11 (up)	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	10/16/2024 11:26
Lab Sample ID:	1HJ1549-01		

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		10/22/24 0000	10/23/24 0309	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0309	CSM
Bromomethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0309	CSM
Chloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0309	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0309	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0309	CSM
Acetone	<10.0	10.0	ug/L	1		10/22/24 0000	10/23/24 0309	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0309	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		10/29/24 0000	10/29/24 1839	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0309	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0309	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0309	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0309	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0309	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0309	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/22/24 0000	10/23/24 0309	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0309	CSM
Chloroform	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0309	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0309	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0309	CSM
Benzene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0309	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0309	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0309	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0309	CSM
Dibromomethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0309	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0309	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0309	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0309	CSM
Toluene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0309	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0309	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0309	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0309	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0309	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0309	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0309	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0309	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0309	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0309	CSM
Xylenes, total	<2.0	2.0	ug/L	1		10/22/24 0000	10/23/24 0309	CSM
Styrene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0309	CSM



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HJ1549

Client Sample ID:	MW-11 (up)	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	10/16/2024 11:26
Lab Sample ID:	1HJ1549-01		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Bromoform	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0309	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0309	CSM
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0309	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0309	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0309	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0309	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0309	CSM
Surrogate: Dibromofluoromethane	96.5	Limit: 57-134	% Rec	1		10/22/24 0000	10/23/24 0309	CSM
Surrogate: Dibromofluoromethane	100	Limit: 75-136	% Rec	1		10/29/24 0000	10/29/24 1839	CSM
Surrogate: Dibromofluoromethane	96.5	Limit: 75-136	% Rec	1		10/22/24 0000	10/23/24 0309	CSM
Surrogate: 1,2-Dichloroethane-d4	103	Limit: 53-140	% Rec	1		10/22/24 0000	10/23/24 0309	CSM
Surrogate: 1,2-Dichloroethane-d4	103	Limit: 61-142	% Rec	1		10/22/24 0000	10/23/24 0309	CSM
Surrogate: 1,2-Dichloroethane-d4	107	Limit: 61-142	% Rec	1		10/29/24 0000	10/29/24 1839	CSM
Surrogate: Toluene-d8	94.4	Limit: 86-114	% Rec	1		10/22/24 0000	10/23/24 0309	CSM
Surrogate: Toluene-d8	95.2	Limit: 82-121	% Rec	1		10/29/24 0000	10/29/24 1839	CSM
Surrogate: Toluene-d8	94.4	Limit: 82-121	% Rec	1		10/22/24 0000	10/23/24 0309	CSM
Surrogate: 4-Bromofluorobenzene	98.8	Limit: 80-116	% Rec	1		10/22/24 0000	10/23/24 0309	CSM
Surrogate: 4-Bromofluorobenzene	98.8	Limit: 78-121	% Rec	1		10/22/24 0000	10/23/24 0309	CSM
Surrogate: 4-Bromofluorobenzene	101	Limit: 80-116	% Rec	1		10/29/24 0000	10/29/24 1839	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		10/22/24 1605	10/24/24 1208	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/24/24 1208	RVV
Barium, total	0.0670	0.0040	mg/L	4		10/22/24 1605	10/24/24 1208	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/24/24 1208	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/22/24 1605	10/24/24 1208	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/22/24 1605	10/24/24 1208	RVV
Cobalt, total	0.0005	0.0004	mg/L	4		10/22/24 1605	10/24/24 1208	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/24/24 1208	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/24/24 1208	RVV
Nickel, total	0.0052	0.0040	mg/L	4		10/22/24 1605	10/24/24 1208	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/24/24 1208	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/24/24 1208	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/22/24 1605	10/24/24 1208	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/22/24 1605	10/24/24 1208	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/22/24 1605	10/24/24 1208	RVV



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HJ1549

Client Sample ID:	MW-12 (up)	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	10/16/2024 11:34
Lab Sample ID:	1HJ1549-02		

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		10/22/24 0000	10/23/24 0332	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0332	CSM
Bromomethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0332	CSM
Chloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0332	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0332	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0332	CSM
Acetone	<10.0	10.0	ug/L	1		10/22/24 0000	10/23/24 0332	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0332	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		10/29/24 0000	10/29/24 1902	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0332	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0332	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0332	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0332	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0332	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0332	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/22/24 0000	10/23/24 0332	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0332	CSM
Chloroform	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0332	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0332	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0332	CSM
Benzene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0332	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0332	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0332	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0332	CSM
Dibromomethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0332	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0332	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0332	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0332	CSM
Toluene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0332	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0332	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0332	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0332	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0332	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0332	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0332	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0332	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0332	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0332	CSM
Xylenes, total	<2.0	2.0	ug/L	1		10/22/24 0000	10/23/24 0332	CSM
Styrene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0332	CSM
Bromoform	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0332	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0332	CSM

Microbac Laboratories, Inc., Newton

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Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HJ1549

Client Sample ID:	MW-12 (up)	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	10/16/2024 11:34
Lab Sample ID:	1HJ1549-02		

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		10/22/24 0000	10/23/24 0332	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0332	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0332	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0332	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0332	CSM
Surrogate: Dibromofluoromethane	96.2	Limit: 75-136	% Rec	1		10/22/24 0000	10/23/24 0332	CSM
Surrogate: Dibromofluoromethane	102	Limit: 75-136	% Rec	1		10/29/24 0000	10/29/24 1902	CSM
Surrogate: Dibromofluoromethane	96.2	Limit: 57-134	% Rec	1		10/22/24 0000	10/23/24 0332	CSM
Surrogate: 1,2-Dichloroethane-d4	107	Limit: 61-142	% Rec	1		10/29/24 0000	10/29/24 1902	CSM
Surrogate: 1,2-Dichloroethane-d4	104	Limit: 61-142	% Rec	1		10/22/24 0000	10/23/24 0332	CSM
Surrogate: 1,2-Dichloroethane-d4	104	Limit: 53-140	% Rec	1		10/22/24 0000	10/23/24 0332	CSM
Surrogate: Toluene-d8	94.7	Limit: 82-121	% Rec	1		10/29/24 0000	10/29/24 1902	CSM
Surrogate: Toluene-d8	95.5	Limit: 86-114	% Rec	1		10/22/24 0000	10/23/24 0332	CSM
Surrogate: Toluene-d8	95.5	Limit: 82-121	% Rec	1		10/22/24 0000	10/23/24 0332	CSM
Surrogate: 4-Bromofluorobenzene	99.6	Limit: 80-116	% Rec	1		10/29/24 0000	10/29/24 1902	CSM
Surrogate: 4-Bromofluorobenzene	98.8	Limit: 80-116	% Rec	1		10/22/24 0000	10/23/24 0332	CSM
Surrogate: 4-Bromofluorobenzene	98.8	Limit: 78-121	% Rec	1		10/22/24 0000	10/23/24 0332	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		10/22/24 1605	10/23/24 2158	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2158	RVV
Barium, total	0.139	0.0040	mg/L	4		10/22/24 1605	10/23/24 2158	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2158	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/22/24 1605	10/23/24 2158	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/22/24 1605	10/23/24 2158	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		10/22/24 1605	10/23/24 2158	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2158	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2158	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2158	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2158	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2158	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/22/24 1605	10/23/24 2158	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/22/24 1605	10/23/24 2158	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/22/24 1605	10/23/24 2158	RVV



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CERTIFICATE OF ANALYSIS

1HJ1549

Client Sample ID:	MW-17 (up)	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	10/16/2024 12:25
Lab Sample ID:	1HJ1549-03		

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		10/22/24 0000	10/23/24 0355	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0355	CSM
Bromomethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0355	CSM
Chloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0355	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0355	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0355	CSM
Acetone	<10.0	10.0	ug/L	1		10/22/24 0000	10/23/24 0355	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0355	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		10/29/24 0000	10/29/24 1925	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0355	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0355	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0355	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0355	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0355	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0355	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/22/24 0000	10/23/24 0355	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0355	CSM
Chloroform	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0355	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0355	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0355	CSM
Benzene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0355	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0355	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0355	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0355	CSM
Dibromomethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0355	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0355	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0355	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0355	CSM
Toluene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0355	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0355	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0355	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0355	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0355	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0355	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0355	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0355	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0355	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0355	CSM
Xylenes, total	<2.0	2.0	ug/L	1		10/22/24 0000	10/23/24 0355	CSM
Styrene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0355	CSM
Bromoform	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0355	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0355	CSM

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CERTIFICATE OF ANALYSIS

1HJ1549

Client Sample ID:	MW-17 (up)	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	10/16/2024 12:25
Lab Sample ID:	1HJ1549-03		

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		10/22/24 0000	10/23/24 0355	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0355	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0355	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0355	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0355	CSM
Surrogate: Dibromofluoromethane	101	Limit: 75-136	% Rec	1		10/29/24 0000	10/29/24 1925	CSM
Surrogate: Dibromofluoromethane	97.1	Limit: 75-136	% Rec	1		10/22/24 0000	10/23/24 0355	CSM
Surrogate: Dibromofluoromethane	97.1	Limit: 57-134	% Rec	1		10/22/24 0000	10/23/24 0355	CSM
Surrogate: 1,2-Dichloroethane-d4	105	Limit: 61-142	% Rec	1		10/22/24 0000	10/23/24 0355	CSM
Surrogate: 1,2-Dichloroethane-d4	109	Limit: 61-142	% Rec	1		10/29/24 0000	10/29/24 1925	CSM
Surrogate: 1,2-Dichloroethane-d4	105	Limit: 53-140	% Rec	1		10/22/24 0000	10/23/24 0355	CSM
Surrogate: Toluene-d8	95.8	Limit: 82-121	% Rec	1		10/22/24 0000	10/23/24 0355	CSM
Surrogate: Toluene-d8	95.2	Limit: 82-121	% Rec	1		10/29/24 0000	10/29/24 1925	CSM
Surrogate: Toluene-d8	95.8	Limit: 86-114	% Rec	1		10/22/24 0000	10/23/24 0355	CSM
Surrogate: 4-Bromofluorobenzene	100	Limit: 80-116	% Rec	1		10/29/24 0000	10/29/24 1925	CSM
Surrogate: 4-Bromofluorobenzene	98.5	Limit: 78-121	% Rec	1		10/22/24 0000	10/23/24 0355	CSM
Surrogate: 4-Bromofluorobenzene	98.5	Limit: 80-116	% Rec	1		10/22/24 0000	10/23/24 0355	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		10/22/24 1605	10/23/24 2205	RVV
Arsenic, total	0.0056	0.0040	mg/L	4		10/22/24 1605	10/23/24 2205	RVV
Barium, total	0.135	0.0040	mg/L	4		10/22/24 1605	10/23/24 2205	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2205	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/22/24 1605	10/23/24 2205	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/22/24 1605	10/23/24 2205	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		10/22/24 1605	10/23/24 2205	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2205	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2205	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2205	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2205	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2205	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/22/24 1605	10/23/24 2205	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/22/24 1605	10/23/24 2205	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/22/24 1605	10/23/24 2205	RVV



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CERTIFICATE OF ANALYSIS

1HJ1549

Client Sample ID:	MW-3AR	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	10/16/2024 14:20
Lab Sample ID:	1HJ1549-04		

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		10/22/24 0000	10/23/24 0417	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0417	CSM
Bromomethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0417	CSM
Chloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0417	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0417	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0417	CSM
Acetone	<10.0	10.0	ug/L	1		10/22/24 0000	10/23/24 0417	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0417	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		10/29/24 0000	10/29/24 1947	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0417	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0417	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0417	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0417	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0417	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0417	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/22/24 0000	10/23/24 0417	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0417	CSM
Chloroform	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0417	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0417	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0417	CSM
Benzene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0417	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0417	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0417	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0417	CSM
Dibromomethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0417	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0417	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0417	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0417	CSM
Toluene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0417	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0417	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0417	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0417	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0417	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0417	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0417	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0417	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0417	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0417	CSM
Xylenes, total	<2.0	2.0	ug/L	1		10/22/24 0000	10/23/24 0417	CSM
Styrene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0417	CSM
Bromoform	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0417	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0417	CSM

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CERTIFICATE OF ANALYSIS

1HJ1549

Client Sample ID:	MW-3AR	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	10/16/2024 14:20
Lab Sample ID:	1HJ1549-04		

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		10/22/24 0000	10/23/24 0417	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0417	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0417	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0417	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0417	CSM
Surrogate: Dibromofluoromethane	96.3	Limit: 75-136	% Rec	1		10/22/24 0000	10/23/24 0417	CSM
Surrogate: Dibromofluoromethane	96.3	Limit: 57-134	% Rec	1		10/22/24 0000	10/23/24 0417	CSM
Surrogate: Dibromofluoromethane	100	Limit: 75-136	% Rec	1		10/29/24 0000	10/29/24 1947	CSM
Surrogate: 1,2-Dichloroethane-d4	103	Limit: 53-140	% Rec	1		10/22/24 0000	10/23/24 0417	CSM
Surrogate: 1,2-Dichloroethane-d4	103	Limit: 61-142	% Rec	1		10/22/24 0000	10/23/24 0417	CSM
Surrogate: 1,2-Dichloroethane-d4	106	Limit: 61-142	% Rec	1		10/29/24 0000	10/29/24 1947	CSM
Surrogate: Toluene-d8	96.3	Limit: 82-121	% Rec	1		10/22/24 0000	10/23/24 0417	CSM
Surrogate: Toluene-d8	96.3	Limit: 86-114	% Rec	1		10/22/24 0000	10/23/24 0417	CSM
Surrogate: Toluene-d8	95.6	Limit: 82-121	% Rec	1		10/29/24 0000	10/29/24 1947	CSM
Surrogate: 4-Bromofluorobenzene	98.8	Limit: 80-116	% Rec	1		10/22/24 0000	10/23/24 0417	CSM
Surrogate: 4-Bromofluorobenzene	98.8	Limit: 78-121	% Rec	1		10/22/24 0000	10/23/24 0417	CSM
Surrogate: 4-Bromofluorobenzene	99.5	Limit: 80-116	% Rec	1		10/29/24 0000	10/29/24 1947	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		10/22/24 1605	10/23/24 2211	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2211	RVV
Barium, total	0.154	0.0040	mg/L	4		10/22/24 1605	10/23/24 2211	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2211	RVV
Cadmium, total	0.0010	0.0008	mg/L	4		10/22/24 1605	10/23/24 2211	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/22/24 1605	10/23/24 2211	RVV
Cobalt, total	0.0008	0.0004	mg/L	4		10/22/24 1605	10/23/24 2211	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2211	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2211	RVV
Nickel, total	0.0048	0.0040	mg/L	4		10/22/24 1605	10/23/24 2211	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2211	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2211	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/22/24 1605	10/23/24 2211	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/22/24 1605	10/23/24 2211	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/22/24 1605	10/23/24 2211	RVV



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CERTIFICATE OF ANALYSIS

1HJ1549

Client Sample ID:	MW-7B	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	10/16/2024 13:42
Lab Sample ID:	1HJ1549-05		

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		10/22/24 0000	10/23/24 0440	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0440	CSM
Bromomethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0440	CSM
Chloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0440	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0440	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0440	CSM
Acetone	<10.0	10.0	ug/L	1		10/22/24 0000	10/23/24 0440	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0440	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		10/29/24 0000	10/29/24 2010	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0440	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0440	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0440	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0440	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0440	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0440	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/22/24 0000	10/23/24 0440	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0440	CSM
Chloroform	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0440	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0440	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0440	CSM
Benzene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0440	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0440	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0440	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0440	CSM
Dibromomethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0440	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0440	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0440	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0440	CSM
Toluene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0440	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0440	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0440	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0440	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0440	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0440	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0440	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0440	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0440	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0440	CSM
Xylenes, total	<2.0	2.0	ug/L	1		10/22/24 0000	10/23/24 0440	CSM
Styrene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0440	CSM
Bromoform	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0440	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0440	CSM

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CERTIFICATE OF ANALYSIS

1HJ1549

Client Sample ID:	MW-7B	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	10/16/2024 13:42
Lab Sample ID:	1HJ1549-05		

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		10/22/24 0000	10/23/24 0440	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0440	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0440	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0440	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0440	CSM
Surrogate: Dibromofluoromethane	96.7	Limit: 75-136	% Rec	1		10/22/24 0000	10/23/24 0440	CSM
Surrogate: Dibromofluoromethane	100	Limit: 75-136	% Rec	1		10/29/24 0000	10/29/24 2010	CSM
Surrogate: Dibromofluoromethane	96.7	Limit: 57-134	% Rec	1		10/22/24 0000	10/23/24 0440	CSM
Surrogate: 1,2-Dichloroethane-d4	104	Limit: 61-142	% Rec	1		10/22/24 0000	10/23/24 0440	CSM
Surrogate: 1,2-Dichloroethane-d4	105	Limit: 61-142	% Rec	1		10/29/24 0000	10/29/24 2010	CSM
Surrogate: 1,2-Dichloroethane-d4	104	Limit: 53-140	% Rec	1		10/22/24 0000	10/23/24 0440	CSM
Surrogate: Toluene-d8	95.1	Limit: 82-121	% Rec	1		10/22/24 0000	10/23/24 0440	CSM
Surrogate: Toluene-d8	95.1	Limit: 86-114	% Rec	1		10/22/24 0000	10/23/24 0440	CSM
Surrogate: Toluene-d8	94.8	Limit: 82-121	% Rec	1		10/29/24 0000	10/29/24 2010	CSM
Surrogate: 4-Bromofluorobenzene	98.7	Limit: 80-116	% Rec	1		10/29/24 0000	10/29/24 2010	CSM
Surrogate: 4-Bromofluorobenzene	98.0	Limit: 80-116	% Rec	1		10/22/24 0000	10/23/24 0440	CSM
Surrogate: 4-Bromofluorobenzene	98.0	Limit: 78-121	% Rec	1		10/22/24 0000	10/23/24 0440	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		10/22/24 1605	10/23/24 2229	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2229	RVV
Barium, total	0.678	0.0040	mg/L	4		10/22/24 1605	10/23/24 2229	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2229	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/22/24 1605	10/23/24 2229	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/22/24 1605	10/23/24 2229	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		10/22/24 1605	10/23/24 2229	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2229	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2229	RVV
Nickel, total	0.0105	0.0040	mg/L	4		10/22/24 1605	10/23/24 2229	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2229	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2229	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/22/24 1605	10/23/24 2229	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/22/24 1605	10/23/24 2229	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/22/24 1605	10/23/24 2229	RVV



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CERTIFICATE OF ANALYSIS

1HJ1549

Client Sample ID:	MW-8	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	10/16/2024 13:08
Lab Sample ID:	1HJ1549-06		

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		10/22/24 0000	10/23/24 0502	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0502	CSM
Bromomethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0502	CSM
Chloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0502	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0502	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0502	CSM
Acetone	<10.0	10.0	ug/L	1		10/22/24 0000	10/23/24 0502	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0502	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		10/29/24 0000	10/29/24 2033	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0502	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0502	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0502	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0502	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0502	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0502	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/22/24 0000	10/23/24 0502	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0502	CSM
Chloroform	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0502	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0502	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0502	CSM
Benzene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0502	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0502	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0502	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0502	CSM
Dibromomethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0502	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0502	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0502	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0502	CSM
Toluene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0502	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0502	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0502	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0502	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0502	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0502	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0502	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0502	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0502	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0502	CSM
Xylenes, total	<2.0	2.0	ug/L	1		10/22/24 0000	10/23/24 0502	CSM
Styrene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0502	CSM
Bromoform	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0502	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0502	CSM

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CERTIFICATE OF ANALYSIS

1HJ1549

Client Sample ID: MW-8	Collected By: Whipple, Todd
Sample Matrix: Aqueous	Collection Date: 10/16/2024 13:08
Lab Sample ID: 1HJ1549-06	

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		10/22/24 0000	10/23/24 0502	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0502	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0502	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0502	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0502	CSM
Surrogate: Dibromofluoromethane	95.4	Limit: 75-136	% Rec	1		10/22/24 0000	10/23/24 0502	CSM
Surrogate: Dibromofluoromethane	99.5	Limit: 75-136	% Rec	1		10/29/24 0000	10/29/24 2033	CSM
Surrogate: Dibromofluoromethane	95.4	Limit: 57-134	% Rec	1		10/22/24 0000	10/23/24 0502	CSM
Surrogate: 1,2-Dichloroethane-d4	105	Limit: 61-142	% Rec	1		10/29/24 0000	10/29/24 2033	CSM
Surrogate: 1,2-Dichloroethane-d4	103	Limit: 61-142	% Rec	1		10/22/24 0000	10/23/24 0502	CSM
Surrogate: 1,2-Dichloroethane-d4	103	Limit: 53-140	% Rec	1		10/22/24 0000	10/23/24 0502	CSM
Surrogate: Toluene-d8	95.5	Limit: 82-121	% Rec	1		10/29/24 0000	10/29/24 2033	CSM
Surrogate: Toluene-d8	95.7	Limit: 82-121	% Rec	1		10/22/24 0000	10/23/24 0502	CSM
Surrogate: Toluene-d8	95.7	Limit: 86-114	% Rec	1		10/22/24 0000	10/23/24 0502	CSM
Surrogate: 4-Bromofluorobenzene	99.7	Limit: 80-116	% Rec	1		10/29/24 0000	10/29/24 2033	CSM
Surrogate: 4-Bromofluorobenzene	97.1	Limit: 80-116	% Rec	1		10/22/24 0000	10/23/24 0502	CSM
Surrogate: 4-Bromofluorobenzene	97.1	Limit: 78-121	% Rec	1		10/22/24 0000	10/23/24 0502	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		10/22/24 1605	10/23/24 2235	RVV
Arsenic, total	0.0335	0.0040	mg/L	4		10/22/24 1605	10/23/24 2235	RVV
Barium, total	0.516	0.0040	mg/L	4		10/22/24 1605	10/23/24 2235	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2235	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/22/24 1605	10/23/24 2235	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/22/24 1605	10/23/24 2235	RVV
Cobalt, total	0.0004	0.0004	mg/L	4		10/22/24 1605	10/23/24 2235	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2235	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2235	RVV
Nickel, total	0.0126	0.0040	mg/L	4		10/22/24 1605	10/23/24 2235	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2235	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2235	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/22/24 1605	10/23/24 2235	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/22/24 1605	10/23/24 2235	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/22/24 1605	10/23/24 2235	RVV



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CERTIFICATE OF ANALYSIS

1HJ1549

Client Sample ID:	MW-9	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	10/16/2024 12:38
Lab Sample ID:	1HJ1549-07		

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		10/22/24 0000	10/23/24 0525	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0525	CSM
Bromomethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0525	CSM
Chloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0525	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0525	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0525	CSM
Acetone	<10.0	10.0	ug/L	1		10/22/24 0000	10/23/24 0525	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0525	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		10/29/24 0000	10/29/24 2314	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0525	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0525	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0525	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0525	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0525	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0525	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/22/24 0000	10/23/24 0525	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0525	CSM
Chloroform	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0525	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0525	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0525	CSM
Benzene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0525	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0525	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0525	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0525	CSM
Dibromomethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0525	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0525	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0525	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0525	CSM
Toluene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0525	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0525	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0525	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0525	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0525	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0525	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0525	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0525	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0525	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0525	CSM
Xylenes, total	<2.0	2.0	ug/L	1		10/22/24 0000	10/23/24 0525	CSM
Styrene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0525	CSM
Bromoform	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0525	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0525	CSM

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CERTIFICATE OF ANALYSIS

1HJ1549

Client Sample ID: MW-9	Collected By: Whipple, Todd
Sample Matrix: Aqueous	Collection Date: 10/16/2024 12:38
Lab Sample ID: 1HJ1549-07	

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		10/22/24 0000	10/23/24 0525	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0525	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0525	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0525	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0525	CSM
Surrogate: Dibromofluoromethane	96.5	Limit: 75-136	% Rec	1		10/29/24 0000	10/29/24 2314	CSM
Surrogate: Dibromofluoromethane	96.9	Limit: 57-134	% Rec	1		10/22/24 0000	10/23/24 0525	CSM
Surrogate: Dibromofluoromethane	96.9	Limit: 75-136	% Rec	1		10/22/24 0000	10/23/24 0525	CSM
Surrogate: 1,2-Dichloroethane-d4	104	Limit: 61-142	% Rec	1		10/29/24 0000	10/29/24 2314	CSM
Surrogate: 1,2-Dichloroethane-d4	104	Limit: 53-140	% Rec	1		10/22/24 0000	10/23/24 0525	CSM
Surrogate: 1,2-Dichloroethane-d4	104	Limit: 61-142	% Rec	1		10/22/24 0000	10/23/24 0525	CSM
Surrogate: Toluene-d8	95.6	Limit: 82-121	% Rec	1		10/22/24 0000	10/23/24 0525	CSM
Surrogate: Toluene-d8	95.6	Limit: 86-114	% Rec	1		10/22/24 0000	10/23/24 0525	CSM
Surrogate: Toluene-d8	95.2	Limit: 82-121	% Rec	1		10/29/24 0000	10/29/24 2314	CSM
Surrogate: 4-Bromofluorobenzene	100	Limit: 80-116	% Rec	1		10/29/24 0000	10/29/24 2314	CSM
Surrogate: 4-Bromofluorobenzene	99.7	Limit: 78-121	% Rec	1		10/22/24 0000	10/23/24 0525	CSM
Surrogate: 4-Bromofluorobenzene	99.7	Limit: 80-116	% Rec	1		10/22/24 0000	10/23/24 0525	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		10/22/24 1605	10/23/24 2241	RVV
Arsenic, total	0.0041	0.0040	mg/L	4		10/22/24 1605	10/23/24 2241	RVV
Barium, total	0.0408	0.0040	mg/L	4		10/22/24 1605	10/23/24 2241	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2241	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/22/24 1605	10/23/24 2241	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/22/24 1605	10/23/24 2241	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		10/22/24 1605	10/23/24 2241	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2241	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2241	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2241	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2241	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2241	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/22/24 1605	10/23/24 2241	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/22/24 1605	10/23/24 2241	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/22/24 1605	10/23/24 2241	RVV



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CERTIFICATE OF ANALYSIS

1HJ1549

Client Sample ID:	MW-10	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	10/16/2024 10:11
Lab Sample ID:	1HJ1549-08		

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		10/22/24 0000	10/23/24 0548	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0548	CSM
Bromomethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0548	CSM
Chloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0548	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0548	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0548	CSM
Acetone	<10.0	10.0	ug/L	1		10/22/24 0000	10/23/24 0548	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0548	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		10/29/24 0000	10/29/24 2337	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0548	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0548	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0548	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0548	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0548	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0548	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/22/24 0000	10/23/24 0548	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0548	CSM
Chloroform	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0548	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0548	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0548	CSM
Benzene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0548	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0548	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0548	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0548	CSM
Dibromomethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0548	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0548	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0548	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0548	CSM
Toluene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0548	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0548	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0548	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0548	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0548	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0548	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0548	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0548	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0548	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0548	CSM
Xylenes, total	<2.0	2.0	ug/L	1		10/22/24 0000	10/23/24 0548	CSM
Styrene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0548	CSM
Bromoform	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0548	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0548	CSM

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CERTIFICATE OF ANALYSIS

1HJ1549

Client Sample ID: MW-10	Collected By: Whipple, Todd
Sample Matrix: Aqueous	Collection Date: 10/16/2024 10:11
Lab Sample ID: 1HJ1549-08	

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		10/22/24 0000	10/23/24 0548	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0548	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0548	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0548	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0548	CSM
Surrogate: Dibromofluoromethane	96.8	Limit: 57-134	% Rec	1		10/22/24 0000	10/23/24 0548	CSM
Surrogate: Dibromofluoromethane	97.9	Limit: 75-136	% Rec	1		10/29/24 0000	10/29/24 2337	CSM
Surrogate: Dibromofluoromethane	96.8	Limit: 75-136	% Rec	1		10/22/24 0000	10/23/24 0548	CSM
Surrogate: 1,2-Dichloroethane-d4	104	Limit: 61-142	% Rec	1		10/22/24 0000	10/23/24 0548	CSM
Surrogate: 1,2-Dichloroethane-d4	104	Limit: 61-142	% Rec	1		10/29/24 0000	10/29/24 2337	CSM
Surrogate: 1,2-Dichloroethane-d4	104	Limit: 53-140	% Rec	1		10/22/24 0000	10/23/24 0548	CSM
Surrogate: Toluene-d8	95.5	Limit: 82-121	% Rec	1		10/29/24 0000	10/29/24 2337	CSM
Surrogate: Toluene-d8	93.9	Limit: 86-114	% Rec	1		10/22/24 0000	10/23/24 0548	CSM
Surrogate: Toluene-d8	93.9	Limit: 82-121	% Rec	1		10/22/24 0000	10/23/24 0548	CSM
Surrogate: 4-Bromofluorobenzene	98.5	Limit: 80-116	% Rec	1		10/22/24 0000	10/23/24 0548	CSM
Surrogate: 4-Bromofluorobenzene	99.9	Limit: 80-116	% Rec	1		10/29/24 0000	10/29/24 2337	CSM
Surrogate: 4-Bromofluorobenzene	98.5	Limit: 78-121	% Rec	1		10/22/24 0000	10/23/24 0548	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		10/22/24 1605	10/23/24 2247	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2247	RVV
Barium, total	0.0912	0.0040	mg/L	4		10/22/24 1605	10/23/24 2247	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2247	RVV
Cadmium, total	0.0040	0.0008	mg/L	4		10/22/24 1605	10/23/24 2247	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/22/24 1605	10/23/24 2247	RVV
Cobalt, total	0.0010	0.0004	mg/L	4		10/22/24 1605	10/23/24 2247	RVV
Copper, total	0.0295	0.0040	mg/L	4		10/22/24 1605	10/23/24 2247	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2247	RVV
Nickel, total	0.0259	0.0040	mg/L	4		10/22/24 1605	10/23/24 2247	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2247	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2247	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/22/24 1605	10/23/24 2247	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/22/24 1605	10/23/24 2247	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/22/24 1605	10/23/24 2247	RVV

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CERTIFICATE OF ANALYSIS

1HJ1549

Client Sample ID:	MW-14	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	10/16/2024 14:05
Lab Sample ID:	1HJ1549-09		

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		10/22/24 0000	10/23/24 0611	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0611	CSM
Bromomethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0611	CSM
Chloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0611	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0611	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0611	CSM
Acetone	<10.0	10.0	ug/L	1		10/22/24 0000	10/23/24 0611	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0611	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		10/29/24 0000	10/30/24 0000	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0611	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0611	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0611	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0611	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0611	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0611	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/22/24 0000	10/23/24 0611	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0611	CSM
Chloroform	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0611	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0611	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0611	CSM
Benzene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0611	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0611	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0611	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0611	CSM
Dibromomethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0611	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0611	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0611	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0611	CSM
Toluene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0611	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0611	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0611	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0611	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0611	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0611	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0611	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0611	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0611	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0611	CSM
Xylenes, total	<2.0	2.0	ug/L	1		10/22/24 0000	10/23/24 0611	CSM
Styrene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0611	CSM
Bromoform	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0611	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0611	CSM

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CERTIFICATE OF ANALYSIS

1HJ1549

Client Sample ID: MW-14	Collected By: Whipple, Todd
Sample Matrix: Aqueous	Collection Date: 10/16/2024 14:05
Lab Sample ID: 1HJ1549-09	

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		10/22/24 0000	10/23/24 0611	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0611	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0611	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0611	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0611	CSM
Surrogate: Dibromofluoromethane	95.9	Limit: 57-134	% Rec	1		10/22/24 0000	10/23/24 0611	CSM
Surrogate: Dibromofluoromethane	95.9	Limit: 75-136	% Rec	1		10/22/24 0000	10/23/24 0611	CSM
Surrogate: Dibromofluoromethane	96.2	Limit: 75-136	% Rec	1		10/29/24 0000	10/30/24 0000	CSM
Surrogate: 1,2-Dichloroethane-d4	103	Limit: 53-140	% Rec	1		10/22/24 0000	10/23/24 0611	CSM
Surrogate: 1,2-Dichloroethane-d4	102	Limit: 61-142	% Rec	1		10/29/24 0000	10/30/24 0000	CSM
Surrogate: 1,2-Dichloroethane-d4	103	Limit: 61-142	% Rec	1		10/22/24 0000	10/23/24 0611	CSM
Surrogate: Toluene-d8	95.7	Limit: 86-114	% Rec	1		10/22/24 0000	10/23/24 0611	CSM
Surrogate: Toluene-d8	95.7	Limit: 82-121	% Rec	1		10/22/24 0000	10/23/24 0611	CSM
Surrogate: Toluene-d8	94.0	Limit: 82-121	% Rec	1		10/29/24 0000	10/30/24 0000	CSM
Surrogate: 4-Bromofluorobenzene	98.8	Limit: 78-121	% Rec	1		10/22/24 0000	10/23/24 0611	CSM
Surrogate: 4-Bromofluorobenzene	100	Limit: 80-116	% Rec	1		10/29/24 0000	10/30/24 0000	CSM
Surrogate: 4-Bromofluorobenzene	98.8	Limit: 80-116	% Rec	1		10/22/24 0000	10/23/24 0611	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		10/22/24 1605	10/23/24 2253	RVV
Arsenic, total	0.0225	0.0040	mg/L	4		10/22/24 1605	10/23/24 2253	RVV
Barium, total	1.37	0.0040	mg/L	4		10/22/24 1605	10/23/24 2253	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2253	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/22/24 1605	10/23/24 2253	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/22/24 1605	10/23/24 2253	RVV
Cobalt, total	0.0017	0.0004	mg/L	4		10/22/24 1605	10/23/24 2253	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2253	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2253	RVV
Nickel, total	0.0078	0.0040	mg/L	4		10/22/24 1605	10/23/24 2253	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2253	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2253	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/22/24 1605	10/23/24 2253	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/22/24 1605	10/23/24 2253	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/22/24 1605	10/23/24 2253	RVV



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CERTIFICATE OF ANALYSIS

1HJ1549

Client Sample ID:	MW-15	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	10/16/2024 13:32
Lab Sample ID:	1HJ1549-10		

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		10/22/24 0000	10/23/24 0633	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0633	CSM
Bromomethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0633	CSM
Chloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0633	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0633	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0633	CSM
Acetone	<10.0	10.0	ug/L	1		10/22/24 0000	10/23/24 0633	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0633	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		10/29/24 0000	10/30/24 0023	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0633	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0633	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0633	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0633	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0633	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0633	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/22/24 0000	10/23/24 0633	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0633	CSM
Chloroform	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0633	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0633	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0633	CSM
Benzene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0633	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0633	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0633	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0633	CSM
Dibromomethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0633	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0633	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0633	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0633	CSM
Toluene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0633	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0633	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0633	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0633	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0633	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0633	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0633	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0633	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0633	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0633	CSM
Xylenes, total	<2.0	2.0	ug/L	1		10/22/24 0000	10/23/24 0633	CSM
Styrene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0633	CSM
Bromoform	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0633	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0633	CSM

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CERTIFICATE OF ANALYSIS

1HJ1549

Client Sample ID:	MW-15	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	10/16/2024 13:32
Lab Sample ID:	1HJ1549-10		

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		10/22/24 0000	10/23/24 0633	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0633	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0633	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0633	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0633	CSM
Surrogate: Dibromofluoromethane	96.9	Limit: 57-134	% Rec	1		10/22/24 0000	10/23/24 0633	CSM
Surrogate: Dibromofluoromethane	98.1	Limit: 75-136	% Rec	1		10/29/24 0000	10/30/24 0023	CSM
Surrogate: Dibromofluoromethane	96.9	Limit: 75-136	% Rec	1		10/22/24 0000	10/23/24 0633	CSM
Surrogate: 1,2-Dichloroethane-d4	104	Limit: 53-140	% Rec	1		10/22/24 0000	10/23/24 0633	CSM
Surrogate: 1,2-Dichloroethane-d4	104	Limit: 61-142	% Rec	1		10/29/24 0000	10/30/24 0023	CSM
Surrogate: 1,2-Dichloroethane-d4	104	Limit: 61-142	% Rec	1		10/22/24 0000	10/23/24 0633	CSM
Surrogate: Toluene-d8	95.5	Limit: 82-121	% Rec	1		10/29/24 0000	10/30/24 0023	CSM
Surrogate: Toluene-d8	95.4	Limit: 86-114	% Rec	1		10/22/24 0000	10/23/24 0633	CSM
Surrogate: Toluene-d8	95.4	Limit: 82-121	% Rec	1		10/22/24 0000	10/23/24 0633	CSM
Surrogate: 4-Bromofluorobenzene	98.6	Limit: 78-121	% Rec	1		10/22/24 0000	10/23/24 0633	CSM
Surrogate: 4-Bromofluorobenzene	99.7	Limit: 80-116	% Rec	1		10/29/24 0000	10/30/24 0023	CSM
Surrogate: 4-Bromofluorobenzene	98.6	Limit: 80-116	% Rec	1		10/22/24 0000	10/23/24 0633	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		10/22/24 1605	10/23/24 2300	RVV
Arsenic, total	0.0046	0.0040	mg/L	4		10/22/24 1605	10/23/24 2300	RVV
Barium, total	0.388	0.0040	mg/L	4		10/22/24 1605	10/23/24 2300	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2300	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/22/24 1605	10/23/24 2300	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/22/24 1605	10/23/24 2300	RVV
Cobalt, total	0.0006	0.0004	mg/L	4		10/22/24 1605	10/23/24 2300	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2300	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2300	RVV
Nickel, total	0.0289	0.0040	mg/L	4		10/22/24 1605	10/23/24 2300	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2300	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2300	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/22/24 1605	10/23/24 2300	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/22/24 1605	10/23/24 2300	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/22/24 1605	10/23/24 2300	RVV

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CERTIFICATE OF ANALYSIS

1HJ1549

Client Sample ID:	MW-16	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	10/16/2024 12:55
Lab Sample ID:	1HJ1549-11		

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		10/22/24 0000	10/23/24 0656	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0656	CSM
Bromomethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0656	CSM
Chloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0656	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0656	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0656	CSM
Acetone	<10.0	10.0	ug/L	1		10/22/24 0000	10/23/24 0656	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0656	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		10/29/24 0000	10/30/24 0046	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0656	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0656	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0656	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0656	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0656	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0656	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/22/24 0000	10/23/24 0656	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0656	CSM
Chloroform	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0656	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0656	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0656	CSM
Benzene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0656	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0656	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0656	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0656	CSM
Dibromomethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0656	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0656	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0656	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0656	CSM
Toluene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0656	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0656	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0656	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0656	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0656	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0656	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0656	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0656	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0656	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0656	CSM
Xylenes, total	<2.0	2.0	ug/L	1		10/22/24 0000	10/23/24 0656	CSM
Styrene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0656	CSM
Bromoform	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0656	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0656	CSM

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CERTIFICATE OF ANALYSIS

1HJ1549

Client Sample ID: MW-16	Collected By: Whipple, Todd
Sample Matrix: Aqueous	Collection Date: 10/16/2024 12:55
Lab Sample ID: 1HJ1549-11	

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		10/22/24 0000	10/23/24 0656	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0656	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0656	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0656	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0656	CSM
Surrogate: Dibromofluoromethane	96.7	Limit: 57-134	% Rec	1		10/22/24 0000	10/23/24 0656	CSM
Surrogate: Dibromofluoromethane	97.4	Limit: 75-136	% Rec	1		10/29/24 0000	10/30/24 0046	CSM
Surrogate: Dibromofluoromethane	96.7	Limit: 75-136	% Rec	1		10/22/24 0000	10/23/24 0656	CSM
Surrogate: 1,2-Dichloroethane-d4	104	Limit: 61-142	% Rec	1		10/29/24 0000	10/30/24 0046	CSM
Surrogate: 1,2-Dichloroethane-d4	105	Limit: 53-140	% Rec	1		10/22/24 0000	10/23/24 0656	CSM
Surrogate: 1,2-Dichloroethane-d4	105	Limit: 61-142	% Rec	1		10/22/24 0000	10/23/24 0656	CSM
Surrogate: Toluene-d8	95.4	Limit: 82-121	% Rec	1		10/22/24 0000	10/23/24 0656	CSM
Surrogate: Toluene-d8	95.4	Limit: 86-114	% Rec	1		10/22/24 0000	10/23/24 0656	CSM
Surrogate: Toluene-d8	93.6	Limit: 82-121	% Rec	1		10/29/24 0000	10/30/24 0046	CSM
Surrogate: 4-Bromofluorobenzene	100	Limit: 80-116	% Rec	1		10/29/24 0000	10/30/24 0046	CSM
Surrogate: 4-Bromofluorobenzene	98.5	Limit: 78-121	% Rec	1		10/22/24 0000	10/23/24 0656	CSM
Surrogate: 4-Bromofluorobenzene	98.5	Limit: 80-116	% Rec	1		10/22/24 0000	10/23/24 0656	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		10/22/24 1605	10/23/24 2306	RVV
Arsenic, total	0.0093	0.0040	mg/L	4		10/22/24 1605	10/23/24 2306	RVV
Barium, total	0.869	0.0040	mg/L	4		10/22/24 1605	10/23/24 2306	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2306	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/22/24 1605	10/23/24 2306	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/22/24 1605	10/23/24 2306	RVV
Cobalt, total	0.0015	0.0004	mg/L	4		10/22/24 1605	10/23/24 2306	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2306	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2306	RVV
Nickel, total	0.0313	0.0040	mg/L	4		10/22/24 1605	10/23/24 2306	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2306	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2306	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/22/24 1605	10/23/24 2306	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/22/24 1605	10/23/24 2306	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/22/24 1605	10/23/24 2306	RVV



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CERTIFICATE OF ANALYSIS

1HJ1549

Client Sample ID:	GU-1	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	10/16/2024 12:09
Lab Sample ID:	1HJ1549-12		

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		10/22/24 0000	10/23/24 0718	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0718	CSM
Bromomethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0718	CSM
Chloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0718	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0718	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0718	CSM
Acetone	<10.0	10.0	ug/L	1		10/22/24 0000	10/23/24 0718	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0718	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		10/29/24 0000	10/30/24 0109	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0718	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0718	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0718	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0718	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0718	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0718	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/22/24 0000	10/23/24 0718	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0718	CSM
Chloroform	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0718	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0718	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0718	CSM
Benzene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0718	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0718	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0718	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0718	CSM
Dibromomethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0718	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0718	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0718	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0718	CSM
Toluene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0718	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0718	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0718	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0718	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0718	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0718	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0718	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0718	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0718	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0718	CSM
Xylenes, total	<2.0	2.0	ug/L	1		10/22/24 0000	10/23/24 0718	CSM
Styrene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0718	CSM
Bromoform	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0718	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0718	CSM



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HJ1549

Client Sample ID:	GU-1	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	10/16/2024 12:09
Lab Sample ID:	1HJ1549-12		

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		10/22/24 0000	10/23/24 0718	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0718	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0718	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/22/24 0000	10/23/24 0718	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/22/24 0000	10/23/24 0718	CSM
Surrogate: Dibromofluoromethane	96.3	Limit: 57-134	% Rec	1		10/22/24 0000	10/23/24 0718	CSM
Surrogate: Dibromofluoromethane	96.3	Limit: 75-136	% Rec	1		10/22/24 0000	10/23/24 0718	CSM
Surrogate: Dibromofluoromethane	98.5	Limit: 75-136	% Rec	1		10/29/24 0000	10/30/24 0109	CSM
Surrogate: 1,2-Dichloroethane-d4	104	Limit: 53-140	% Rec	1		10/22/24 0000	10/23/24 0718	CSM
Surrogate: 1,2-Dichloroethane-d4	104	Limit: 61-142	% Rec	1		10/22/24 0000	10/23/24 0718	CSM
Surrogate: 1,2-Dichloroethane-d4	104	Limit: 61-142	% Rec	1		10/29/24 0000	10/30/24 0109	CSM
Surrogate: Toluene-d8	94.9	Limit: 82-121	% Rec	1		10/29/24 0000	10/30/24 0109	CSM
Surrogate: Toluene-d8	94.7	Limit: 86-114	% Rec	1		10/22/24 0000	10/23/24 0718	CSM
Surrogate: Toluene-d8	94.7	Limit: 82-121	% Rec	1		10/22/24 0000	10/23/24 0718	CSM
Surrogate: 4-Bromofluorobenzene	97.4	Limit: 78-121	% Rec	1		10/22/24 0000	10/23/24 0718	CSM
Surrogate: 4-Bromofluorobenzene	97.4	Limit: 80-116	% Rec	1		10/22/24 0000	10/23/24 0718	CSM
Surrogate: 4-Bromofluorobenzene	101	Limit: 80-116	% Rec	1		10/29/24 0000	10/30/24 0109	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		10/22/24 1605	10/23/24 2312	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2312	RVV
Barium, total	0.438	0.0040	mg/L	4		10/22/24 1605	10/23/24 2312	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2312	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/22/24 1605	10/23/24 2312	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/22/24 1605	10/23/24 2312	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		10/22/24 1605	10/23/24 2312	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2312	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2312	RVV
Nickel, total	0.0103	0.0040	mg/L	4		10/22/24 1605	10/23/24 2312	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2312	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2312	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/22/24 1605	10/23/24 2312	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/22/24 1605	10/23/24 2312	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/22/24 1605	10/23/24 2312	RVV



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HJ1549

Client Sample ID:	GU-2	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	10/16/2024 14:31
Lab Sample ID:	1HJ1549-13		

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		10/23/24 0000	10/23/24 1858	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		10/23/24 0000	10/23/24 1858	CSM
Bromomethane	<1.0	1.0	ug/L	1		10/23/24 0000	10/23/24 1858	CSM
Chloroethane	<1.0	1.0	ug/L	1		10/23/24 0000	10/23/24 1858	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/23/24 0000	10/23/24 1858	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/23/24 0000	10/23/24 1858	CSM
Acetone	<10.0	10.0	ug/L	1		10/23/24 0000	10/23/24 1858	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		10/23/24 0000	10/23/24 1858	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		10/23/24 0000	10/23/24 1858	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		10/23/24 0000	10/23/24 1858	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		10/23/24 0000	10/23/24 1858	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/23/24 0000	10/23/24 1858	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/23/24 0000	10/23/24 1858	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		10/23/24 0000	10/23/24 1858	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/23/24 0000	10/23/24 1858	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/23/24 0000	10/23/24 1858	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		10/23/24 0000	10/23/24 1858	CSM
Chloroform	<1.0	1.0	ug/L	1		10/23/24 0000	10/23/24 1858	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/23/24 0000	10/23/24 1858	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/23/24 0000	10/23/24 1858	CSM
Benzene	<1.0	1.0	ug/L	1		10/23/24 0000	10/23/24 1858	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/23/24 0000	10/23/24 1858	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		10/23/24 0000	10/23/24 1858	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/23/24 0000	10/23/24 1858	CSM
Dibromomethane	<1.0	1.0	ug/L	1		10/23/24 0000	10/23/24 1858	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		10/23/24 0000	10/23/24 1858	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/23/24 0000	10/23/24 1858	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/23/24 0000	10/23/24 1858	CSM
Toluene	<1.0	1.0	ug/L	1		10/23/24 0000	10/23/24 1858	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/23/24 0000	10/23/24 1858	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/23/24 0000	10/23/24 1858	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/23/24 0000	10/23/24 1858	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/23/24 0000	10/23/24 1858	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		10/23/24 0000	10/23/24 1858	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/23/24 0000	10/23/24 1858	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		10/23/24 0000	10/23/24 1858	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/23/24 0000	10/23/24 1858	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		10/23/24 0000	10/23/24 1858	CSM
Xylenes, total	<2.0	2.0	ug/L	1		10/23/24 0000	10/23/24 1858	CSM
Styrene	<1.0	1.0	ug/L	1		10/23/24 0000	10/23/24 1858	CSM
Bromoform	<1.0	1.0	ug/L	1		10/23/24 0000	10/23/24 1858	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/23/24 0000	10/23/24 1858	CSM



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HJ1549

Client Sample ID:	GU-2	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	10/16/2024 14:31
Lab Sample ID:	1HJ1549-13		

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		10/23/24 0000	10/23/24 1858	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/23/24 0000	10/23/24 1858	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/23/24 0000	10/23/24 1858	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/23/24 0000	10/23/24 1858	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/23/24 0000	10/23/24 1858	CSM
Surrogate: Dibromofluoromethane	96.6	Limit: 75-136	% Rec	1		10/23/24 0000	10/23/24 1858	CSM
Surrogate: Dibromofluoromethane	96.6	Limit: 57-134	% Rec	1		10/23/24 0000	10/23/24 1858	CSM
Surrogate: 1,2-Dichloroethane-d4	104	Limit: 61-142	% Rec	1		10/23/24 0000	10/23/24 1858	CSM
Surrogate: 1,2-Dichloroethane-d4	104	Limit: 53-140	% Rec	1		10/23/24 0000	10/23/24 1858	CSM
Surrogate: Toluene-d8	94.5	Limit: 82-121	% Rec	1		10/23/24 0000	10/23/24 1858	CSM
Surrogate: Toluene-d8	94.5	Limit: 86-114	% Rec	1		10/23/24 0000	10/23/24 1858	CSM
Surrogate: 4-Bromofluorobenzene	99.4	Limit: 80-116	% Rec	1		10/23/24 0000	10/23/24 1858	CSM
Surrogate: 4-Bromofluorobenzene	99.4	Limit: 78-121	% Rec	1		10/23/24 0000	10/23/24 1858	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		10/22/24 1605	10/23/24 2318	RVV
Arsenic, total	0.0063	0.0040	mg/L	4		10/22/24 1605	10/23/24 2318	RVV
Barium, total	0.250	0.0040	mg/L	4		10/22/24 1605	10/23/24 2318	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2318	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/22/24 1605	10/23/24 2318	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/22/24 1605	10/23/24 2318	RVV
Cobalt, total	0.0009	0.0004	mg/L	4		10/22/24 1605	10/23/24 2318	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2318	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2318	RVV
Nickel, total	0.0054	0.0040	mg/L	4		10/22/24 1605	10/23/24 2318	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2318	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2318	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/22/24 1605	10/23/24 2318	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/22/24 1605	10/23/24 2318	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/22/24 1605	10/23/24 2318	RVV

Microbac Laboratories, Inc., Newton

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CERTIFICATE OF ANALYSIS

1HJ1549

Client Sample ID:	Duplicate	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	10/16/2024
Lab Sample ID:	1HJ1549-14		

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		10/22/24 1605	10/23/24 2324	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2324	RVV
Barium, total	0.0441	0.0040	mg/L	4		10/22/24 1605	10/23/24 2324	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2324	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/22/24 1605	10/23/24 2324	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/22/24 1605	10/23/24 2324	RVV
Cobalt, total	0.0006	0.0004	mg/L	4		10/22/24 1605	10/23/24 2324	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2324	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2324	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2324	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2324	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2324	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/22/24 1605	10/23/24 2324	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/22/24 1605	10/23/24 2324	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/22/24 1605	10/23/24 2324	RVV

Client Sample ID:	MW-13 (up)	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	10/16/2024 11:41
Lab Sample ID:	1HJ1549-15		

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		10/22/24 1605	10/23/24 2342	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2342	RVV
Barium, total	0.0428	0.0040	mg/L	4		10/22/24 1605	10/23/24 2342	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2342	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/22/24 1605	10/23/24 2342	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/22/24 1605	10/23/24 2342	RVV
Cobalt, total	0.0006	0.0004	mg/L	4		10/22/24 1605	10/23/24 2342	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2342	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2342	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2342	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2342	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2342	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/22/24 1605	10/23/24 2342	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/22/24 1605	10/23/24 2342	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/22/24 1605	10/23/24 2342	RVV



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CERTIFICATE OF ANALYSIS

1HJ1549

Client Sample ID:	MW-18 (up)	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	10/16/2024 10:45
Lab Sample ID:	1HJ1549-16		

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		10/22/24 1605	10/23/24 2349	RVV
Arsenic, total	0.0060	0.0040	mg/L	4		10/22/24 1605	10/23/24 2349	RVV
Barium, total	0.0456	0.0040	mg/L	4		10/22/24 1605	10/23/24 2349	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2349	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/22/24 1605	10/23/24 2349	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/22/24 1605	10/23/24 2349	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		10/22/24 1605	10/23/24 2349	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2349	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2349	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2349	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2349	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2349	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/22/24 1605	10/23/24 2349	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/22/24 1605	10/23/24 2349	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/22/24 1605	10/23/24 2349	RVV

Client Sample ID:	MW-19 (up)	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	10/16/2024 10:53
Lab Sample ID:	1HJ1549-17		

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		10/22/24 1605	10/23/24 2355	RVV
Arsenic, total	0.0045	0.0040	mg/L	4		10/22/24 1605	10/23/24 2355	RVV
Barium, total	0.207	0.0040	mg/L	4		10/22/24 1605	10/23/24 2355	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2355	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/22/24 1605	10/23/24 2355	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/22/24 1605	10/23/24 2355	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		10/22/24 1605	10/23/24 2355	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2355	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2355	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2355	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2355	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/23/24 2355	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/22/24 1605	10/23/24 2355	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/22/24 1605	10/23/24 2355	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/22/24 1605	10/23/24 2355	RVV



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CERTIFICATE OF ANALYSIS

1HJ1549

Client Sample ID:	MW-20 (up)	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	10/16/2024 10:29
Lab Sample ID:	1HJ1549-18		

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		10/22/24 1605	10/24/24 0001	RVV
Arsenic, total	0.0064	0.0040	mg/L	4		10/22/24 1605	10/24/24 0001	RVV
Barium, total	0.103	0.0040	mg/L	4		10/22/24 1605	10/24/24 0001	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/24/24 0001	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/22/24 1605	10/24/24 0001	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/22/24 1605	10/24/24 0001	RVV
Cobalt, total	0.0004	0.0004	mg/L	4		10/22/24 1605	10/24/24 0001	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/24/24 0001	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/24/24 0001	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/24/24 0001	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/24/24 0001	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/24/24 0001	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/22/24 1605	10/24/24 0001	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/22/24 1605	10/24/24 0001	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/22/24 1605	10/24/24 0001	RVV

Client Sample ID:	MW-21 (up)	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	10/16/2024 10:34
Lab Sample ID:	1HJ1549-19		

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		10/22/24 1605	10/24/24 0007	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/24/24 0007	RVV
Barium, total	0.215	0.0040	mg/L	4		10/22/24 1605	10/24/24 0007	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/24/24 0007	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/22/24 1605	10/24/24 0007	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/22/24 1605	10/24/24 0007	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		10/22/24 1605	10/24/24 0007	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/24/24 0007	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/24/24 0007	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/24/24 0007	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/24/24 0007	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/22/24 1605	10/24/24 0007	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/22/24 1605	10/24/24 0007	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/22/24 1605	10/24/24 0007	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/22/24 1605	10/24/24 0007	RVV



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CERTIFICATE OF ANALYSIS

1HJ1549

Batch Log Summary

Method	Batch	Laboratory ID	Client / Source ID
EPA 6020A	1HJ1343	1HJ1343-BLK1	
		1HJ1343-BS1	
		1HJ1343-MS1	1HJ1549-01
		1HJ1343-MSD1	1HJ1549-01
		1HJ1343-PS1	1HJ1549-01
		1HJ1549-02	MW-12 (up)
		1HJ1549-03	MW-17 (up)
		1HJ1549-04	MW-3AR
		1HJ1549-05	MW-7B
		1HJ1549-06	MW-8
		1HJ1549-07	MW-9
		1HJ1549-08	MW-10
		1HJ1549-09	MW-14
		1HJ1549-10	MW-15
		1HJ1549-11	MW-16
		1HJ1549-12	GU-1
		1HJ1549-13	GU-2
		1HJ1549-14	Duplicate
		1HJ1549-15	MW-13 (up)
		1HJ1549-16	MW-18 (up)
1HJ1549-17	MW-19 (up)		
1HJ1549-18	MW-20 (up)		
1HJ1549-19	MW-21 (up)		
1HJ1549-01	MW-11 (up)		

Method	Batch	Laboratory ID	Client / Source ID
EPA 8260B	1HJ1355	1HJ1355-BS1	
		1HJ1355-BSD1	
		1HJ1355-BLK1	
		1HJ1355-MS1	1HJ1617-04
		1HJ1355-MSD1	1HJ1617-04
		1HJ1355-BS2	
		1HJ1355-BSD2	
		1HJ1355-BLK2	
		1HJ1549-01	MW-11 (up)
		1HJ1549-02	MW-12 (up)
		1HJ1549-03	MW-17 (up)
		1HJ1549-04	MW-3AR
		1HJ1549-04	MW-3AR
		1HJ1549-05	MW-7B



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CERTIFICATE OF ANALYSIS

1HJ1549

EPA 8260B	1HJ1355	1HJ1549-06	MW-8
		1HJ1549-07	MW-9
		1HJ1549-08	MW-10
		1HJ1549-09	MW-14
		1HJ1549-10	MW-15
		1HJ1549-11	MW-16
		1HJ1549-12	GU-1
		1HJ1355-MS2	1HJ1633-01
		1HJ1355-MSD2	1HJ1633-01

Method	Batch	Laboratory ID	Client / Source ID
EPA 8260B	1HJ1517	1HJ1517-BS1	
		1HJ1517-BSD1	
		1HJ1517-BLK1	
		1HJ1549-13	GU-2
		1HJ1517-MS1	1HJ1633-03
		1HJ1517-MSD1	1HJ1633-03

Method	Batch	Laboratory ID	Client / Source ID
EPA 8260B	1HJ1776	1HJ1776-BS1	
		1HJ1776-BSD1	
		1HJ1776-BLK1	
		1HJ1549-01RE1	MW-11 (up)
		1HJ1549-02RE1	MW-12 (up)
		1HJ1549-03RE1	MW-17 (up)
		1HJ1549-04RE1	MW-3AR
		1HJ1549-05RE1	MW-7B
		1HJ1549-06RE1	MW-8
		1HJ1776-BS2	
		1HJ1776-BSD2	
		1HJ1776-BLK2	
		1HJ1549-07RE1	MW-9
		1HJ1549-08RE1	MW-10
		1HJ1549-09RE1	MW-14
		1HJ1549-10RE1	MW-15
		1HJ1549-11RE1	MW-16
		1HJ1549-12RE1	GU-1
		1HJ1776-MS1	1HJ1549-02RE1
		1HJ1776-MSD1	1HJ1549-02RE1
		1HJ1776-MS2	1HJ1617-12RE1
		1HJ1776-MSD2	1HJ1617-12RE1

Batch Quality Control Summary: Microbac Laboratories, Inc., Newton



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CERTIFICATE OF ANALYSIS

1HJ1549

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1355 - EPA 5030B - EPA 8260B										
Blank (1HJ1355-BLK1)										
				Prepared: 10/22/24 00:00 Analyzed: 10/22/24 11:05						
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							
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							

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CERTIFICATE OF ANALYSIS

1HJ1549

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1355 - EPA 5030B - EPA 8260B										
Blank (1HJ1355-BLK1)										
				Prepared: 10/22/24 00:00 Analyzed: 10/22/24 11:05						
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							
<i>Surrogate: Dibromofluoromethane</i>	49.7		ug/L	50.2		99.0	75-136			
<i>Surrogate: Dibromofluoromethane</i>	49.7		ug/L	50.2		99.0	57-134			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	53.4		ug/L	50.4		106	61-142			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	53.4		ug/L	50.4		106	53-140			
<i>Surrogate: Toluene-d8</i>	47.5		ug/L	50.5		94.2	82-121			
<i>Surrogate: Toluene-d8</i>	47.5		ug/L	50.5		94.2	86-114			
<i>Surrogate: 4-Bromofluorobenzene</i>	49.8		ug/L	50.2		99.2	80-116			
<i>Surrogate: 4-Bromofluorobenzene</i>	49.8		ug/L	50.2		99.2	78-121			
Blank (1HJ1355-BLK2)										
				Prepared: 10/22/24 00:00 Analyzed: 10/23/24 00:08						
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							
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							

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CERTIFICATE OF ANALYSIS

1HJ1549

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1355 - EPA 5030B - EPA 8260B										
Blank (1HJ1355-BLK2)										
				Prepared: 10/22/24 00:00 Analyzed: 10/23/24 00:08						
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							
<i>Surrogate: Dibromofluoromethane</i>	47.7		ug/L	50.2		95.0	75-136			
<i>Surrogate: Dibromofluoromethane</i>	47.7		ug/L	50.2		95.0	57-134			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	51.7		ug/L	50.4		103	61-142			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	51.7		ug/L	50.4		103	53-140			
<i>Surrogate: Toluene-d8</i>	47.4		ug/L	50.5		93.8	82-121			
<i>Surrogate: Toluene-d8</i>	47.4		ug/L	50.5		93.8	86-114			
<i>Surrogate: 4-Bromofluorobenzene</i>	49.6		ug/L	50.2		98.8	80-116			
<i>Surrogate: 4-Bromofluorobenzene</i>	49.6		ug/L	50.2		98.8	78-121			
LCS (1HJ1355-BS1)										
				Prepared: 10/22/24 00:00 Analyzed: 10/22/24 09:57						
Chloromethane	33.57	1.0	ug/L	30.3		111	63-155			
Vinyl Chloride	31.86	1.0	ug/L	30.2		105	70-154			
Bromomethane	37.63	1.0	ug/L	30.1		125	52-176			
Chloroethane	28.28	1.0	ug/L	30.3		93.3	72-148			
Trichlorofluoromethane	26.16	1.0	ug/L	30.3		86.3	70-152			
1,1-Dichloroethylene	51.06	1.0	ug/L	50.1		102	70-148			
Acetone	114.7	10.0	ug/L	100		115	43-172			
Methyl Iodide	109.1	1.0	ug/L	100		109	69-170			
Carbon Disulfide	76.66	1.0	ug/L	100		76.7	72-162			
Methylene Chloride	52.22	5.0	ug/L	50.1		104	68-142			
Acrylonitrile	90.68	5.0	ug/L	50.2		181	56-135			
trans-1,2-Dichloroethylene	52.85	1.0	ug/L	50.1		106	66-148			
1,1-Dichloroethane	52.98	1.0	ug/L	50.1		106	66-143			
Vinyl Acetate	104.3	5.0	ug/L	156		67.0	43-153			
cis-1,2-Dichloroethylene	52.78	1.0	ug/L	50.4		105	71-149			
2-Butanone (MEK)	109.4	10.0	ug/L	100		109	52-159			
Bromochloromethane	53.71	1.0	ug/L	50.4		107	69-143			

Q2



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CERTIFICATE OF ANALYSIS

1HJ1549

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1HJ1355 - EPA 5030B - EPA 8260B

LCS (1HJ1355-BS1)

Prepared: 10/22/24 00:00 Analyzed: 10/22/24 09:57

Chloroform	52.28	1.0	ug/L	50.1		104	69-144			
1,1,1-Trichloroethane	51.21	1.0	ug/L	50.1		102	62-129			
Carbon Tetrachloride	52.02	1.0	ug/L	50.1		104	63-141			
Benzene	52.98	1.0	ug/L	50.4		105	71-134			
1,2-Dichloroethane	57.23	1.0	ug/L	50.1		114	72-132			
Trichloroethylene	51.21	1.0	ug/L	50.1		102	71-135			
1,2-Dichloropropane	52.16	1.0	ug/L	50.1		104	69-136			
Dibromomethane	54.27	1.0	ug/L	50.4		108	73-147			
Bromodichloromethane	52.75	1.0	ug/L	50.1		105	68-129			
cis-1,3-Dichloropropene	50.66	1.0	ug/L	50.1		101	65-134			
4-Methyl-2-pentanone (MIBK)	111.6	5.0	ug/L	100		112	58-147			
Toluene	51.15	1.0	ug/L	50.5		101	72-133			
trans-1,3-Dichloropropene	51.90	1.0	ug/L	50.1		104	67-130			
1,1,2-Trichloroethane	51.52	1.0	ug/L	50.1		103	69-135			
Tetrachloroethylene	52.63	1.0	ug/L	50.1		105	69-130			
2-Hexanone (MBK)	109.3	5.0	ug/L	100		109	55-144			
Dibromochloromethane	53.17	1.0	ug/L	50.1		106	73-127			
1,2-Dibromoethane	53.07	1.0	ug/L	50.2		106	67-132			
Chlorobenzene	52.05	1.0	ug/L	50.1		104	72-123			
1,1,1,2-Tetrachloroethane	54.73	1.0	ug/L	50.3		109	73-127			
Ethylbenzene	54.58	1.0	ug/L	50.2		109	71-127			
Xylenes, total	160.4	2.0	ug/L	151		106	74-127			
Styrene	54.79	1.0	ug/L	50.4		109	66-126			
Bromoform	51.81	1.0	ug/L	50.1		103	68-130			
1,2,3-Trichloropropane	51.78	1.0	ug/L	50.3		103	63-136			
trans-1,4-Dichloro-2-butene	102.6	5.0	ug/L	100		103	54-134			
1,1,2,2-Tetrachloroethane	53.02	1.0	ug/L	50.1		106	61-131			
1,4-Dichlorobenzene	50.94	1.0	ug/L	50.1		102	70-129			
1,2-Dichlorobenzene	52.10	1.0	ug/L	50.1		104	69-126			
1,2-Dibromo-3-chloropropane	44.67	5.0	ug/L	50.1		89.1	50-143			

Surrogate: Dibromofluoromethane	49.9		ug/L	50.2		99.4	75-136			
Surrogate: Dibromofluoromethane	49.9		ug/L	50.2		99.4	57-134			
Surrogate: 1,2-Dichloroethane-d4	52.1		ug/L	50.4		103	61-142			
Surrogate: 1,2-Dichloroethane-d4	52.1		ug/L	50.4		103	53-140			
Surrogate: Toluene-d8	49.8		ug/L	50.5		98.8	82-121			
Surrogate: Toluene-d8	49.8		ug/L	50.5		98.8	86-114			
Surrogate: 4-Bromofluorobenzene	49.4		ug/L	50.2		98.4	80-116			
Surrogate: 4-Bromofluorobenzene	49.4		ug/L	50.2		98.4	78-121			

LCS (1HJ1355-BS2)

Prepared: 10/22/24 00:00 Analyzed: 10/22/24 23:01

Chloromethane	29.08	1.0	ug/L	30.3		95.9	63-155			
Vinyl Chloride	27.21	1.0	ug/L	30.2		90.0	70-154			
Bromomethane	31.91	1.0	ug/L	30.1		106	52-176			
Chloroethane	24.50	1.0	ug/L	30.3		80.8	72-148			

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CERTIFICATE OF ANALYSIS

1HJ1549

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1355 - EPA 5030B - EPA 8260B										
LCS (1HJ1355-BS2)										
				Prepared: 10/22/24 00:00 Analyzed: 10/22/24 23:01						
Trichlorofluoromethane	22.69	1.0	ug/L	30.3		74.9	70-152			
1,1-Dichloroethylene	44.10	1.0	ug/L	50.1		88.0	70-148			
Acetone	116.6	10.0	ug/L	100		117	43-172			
Methyl Iodide	94.09	1.0	ug/L	100		94.1	69-170			
Methylene Chloride	45.89	5.0	ug/L	50.1		91.6	68-142			
Acrylonitrile	85.78	5.0	ug/L	50.2		171	56-135			Q2
trans-1,2-Dichloroethylene	47.04	1.0	ug/L	50.1		93.9	66-148			
1,1-Dichloroethane	47.44	1.0	ug/L	50.1		94.7	66-143			
Vinyl Acetate	94.40	5.0	ug/L	156		60.6	43-153			
cis-1,2-Dichloroethylene	47.40	1.0	ug/L	50.4		94.1	71-149			
2-Butanone (MEK)	104.5	10.0	ug/L	100		104	52-159			
Bromochloromethane	48.94	1.0	ug/L	50.4		97.1	69-143			
Chloroform	47.13	1.0	ug/L	50.1		94.1	69-144			
1,1,1-Trichloroethane	45.49	1.0	ug/L	50.1		90.8	62-129			
Carbon Tetrachloride	45.94	1.0	ug/L	50.1		91.7	63-141			
Benzene	50.43	1.0	ug/L	50.4		100	71-134			
1,2-Dichloroethane	55.60	1.0	ug/L	50.1		111	72-132			
Trichloroethylene	48.69	1.0	ug/L	50.1		97.2	71-135			
1,2-Dichloropropane	50.84	1.0	ug/L	50.1		101	69-136			
Dibromomethane	52.43	1.0	ug/L	50.4		104	73-147			
Bromodichloromethane	50.34	1.0	ug/L	50.1		101	68-129			
cis-1,3-Dichloropropene	48.04	1.0	ug/L	50.1		95.9	65-134			
4-Methyl-2-pentanone (MIBK)	114.6	5.0	ug/L	100		115	58-147			
Toluene	48.88	1.0	ug/L	50.5		96.8	72-133			
trans-1,3-Dichloropropene	49.81	1.0	ug/L	50.1		99.5	67-130			
1,1,2-Trichloroethane	49.95	1.0	ug/L	50.1		99.7	69-135			
Tetrachloroethylene	49.35	1.0	ug/L	50.1		98.5	69-130			
2-Hexanone (MBK)	113.9	5.0	ug/L	100		114	55-144			
Dibromochloromethane	51.11	1.0	ug/L	50.1		102	73-127			
1,2-Dibromoethane	52.32	1.0	ug/L	50.2		104	67-132			
Chlorobenzene	49.79	1.0	ug/L	50.1		99.4	72-123			
1,1,1,2-Tetrachloroethane	52.40	1.0	ug/L	50.3		104	73-127			
Ethylbenzene	52.33	1.0	ug/L	50.2		104	71-127			
Xylenes, total	152.5	2.0	ug/L	151		101	74-127			
Styrene	52.43	1.0	ug/L	50.4		104	66-126			
Bromoform	50.61	1.0	ug/L	50.1		101	68-130			
1,2,3-Trichloropropane	52.68	1.0	ug/L	50.3		105	63-136			
trans-1,4-Dichloro-2-butene	100.9	5.0	ug/L	100		101	54-134			
1,1,2,2-Tetrachloroethane	53.13	1.0	ug/L	50.1		106	61-131			
1,4-Dichlorobenzene	48.61	1.0	ug/L	50.1		97.0	70-129			
1,2-Dichlorobenzene	49.77	1.0	ug/L	50.1		99.4	69-126			
1,2-Dibromo-3-chloropropane	46.69	5.0	ug/L	50.1		93.1	50-143			



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HJ1549

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1355 - EPA 5030B - EPA 8260B										
LCS (1HJ1355-BS2)										
Prepared: 10/22/24 00:00 Analyzed: 10/22/24 23:01										
Surrogate: Dibromofluoromethane	47.2		ug/L	50.2		94.0	75-136			
Surrogate: Dibromofluoromethane	47.2		ug/L	50.2		94.0	57-134			
Surrogate: 1,2-Dichloroethane-d4	49.5		ug/L	50.4		98.3	61-142			
Surrogate: 1,2-Dichloroethane-d4	49.5		ug/L	50.4		98.3	53-140			
Surrogate: Toluene-d8	49.8		ug/L	50.5		98.7	82-121			
Surrogate: Toluene-d8	49.8		ug/L	50.5		98.7	86-114			
Surrogate: 4-Bromofluorobenzene	50.1		ug/L	50.2		99.9	80-116			
Surrogate: 4-Bromofluorobenzene	50.1		ug/L	50.2		99.9	78-121			
LCS Dup (1HJ1355-BSD1)										
Prepared: 10/22/24 00:00 Analyzed: 10/22/24 10:20										
Chloromethane	31.48	1.0	ug/L	30.3		104	63-155	6.43	24	
Vinyl Chloride	29.84	1.0	ug/L	30.2		98.6	70-154	6.55	25	
Bromomethane	34.68	1.0	ug/L	30.1		115	52-176	8.16	27	
Chloroethane	26.57	1.0	ug/L	30.3		87.6	72-148	6.24	25	
Trichlorofluoromethane	24.32	1.0	ug/L	30.3		80.2	70-152	7.29	26	
1,1-Dichloroethylene	47.51	1.0	ug/L	50.1		94.8	70-148	7.20	24	
Acetone	111.6	10.0	ug/L	100		112	43-172	2.69	30	
Methyl Iodide	104.9	1.0	ug/L	100		105	69-170	3.95	30	
Carbon Disulfide	71.74	1.0	ug/L	100		71.7	72-162	6.63	24	S
Methylene Chloride	49.68	5.0	ug/L	50.1		99.2	68-142	4.99	21	
Acrylonitrile	88.06	5.0	ug/L	50.2		175	56-135	2.93	16	Q2
trans-1,2-Dichloroethylene	49.89	1.0	ug/L	50.1		99.6	66-148	5.76	27	
1,1-Dichloroethane	50.16	1.0	ug/L	50.1		100	66-143	5.47	24	
Vinyl Acetate	101.0	5.0	ug/L	156		64.9	43-153	3.16	30	
cis-1,2-Dichloroethylene	50.08	1.0	ug/L	50.4		99.5	71-149	5.25	26	
2-Butanone (MEK)	102.7	10.0	ug/L	100		103	52-159	6.31	27	
Bromochloromethane	51.18	1.0	ug/L	50.4		102	69-143	4.82	23	
Chloroform	49.86	1.0	ug/L	50.1		99.6	69-144	4.74	23	
1,1,1-Trichloroethane	48.43	1.0	ug/L	50.1		96.6	62-129	5.58	24	
Carbon Tetrachloride	49.02	1.0	ug/L	50.1		97.9	63-141	5.94	25	
Benzene	50.72	1.0	ug/L	50.4		101	71-134	4.36	24	
1,2-Dichloroethane	55.65	1.0	ug/L	50.1		111	72-132	2.80	24	
Trichloroethylene	49.14	1.0	ug/L	50.1		98.1	71-135	4.13	24	
1,2-Dichloropropane	50.25	1.0	ug/L	50.1		100	69-136	3.73	24	
Dibromomethane	52.42	1.0	ug/L	50.4		104	73-147	3.47	25	
Bromodichloromethane	50.53	1.0	ug/L	50.1		101	68-129	4.30	22	
cis-1,3-Dichloropropene	49.03	1.0	ug/L	50.1		97.9	65-134	3.27	23	
4-Methyl-2-pentanone (MIBK)	109.9	5.0	ug/L	100		110	58-147	1.48	27	
Toluene	48.80	1.0	ug/L	50.5		96.7	72-133	4.70	24	
trans-1,3-Dichloropropene	50.55	1.0	ug/L	50.1		101	67-130	2.64	24	
1,1,2-Trichloroethane	50.13	1.0	ug/L	50.1		100	69-135	2.73	23	
Tetrachloroethylene	49.92	1.0	ug/L	50.1		99.6	69-130	5.29	25	
2-Hexanone (MBK)	106.0	5.0	ug/L	100		106	55-144	3.02	25	
Dibromochloromethane	50.87	1.0	ug/L	50.1		102	73-127	4.42	22	

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CERTIFICATE OF ANALYSIS

1HJ1549

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1355 - EPA 5030B - EPA 8260B										
LCS Dup (1HJ1355-BSD1)				Prepared: 10/22/24 00:00 Analyzed: 10/22/24 10:20						
1,2-Dibromoethane	51.52	1.0	ug/L	50.2		103	67-132	2.96	24	
Chlorobenzene	49.91	1.0	ug/L	50.1		99.7	72-123	4.20	23	
1,1,1,2-Tetrachloroethane	52.38	1.0	ug/L	50.3		104	73-127	4.39	24	
Ethylbenzene	52.00	1.0	ug/L	50.2		104	71-127	4.84	26	
Xylenes, total	153.2	2.0	ug/L	151		101	74-127	4.59	25	
Styrene	52.46	1.0	ug/L	50.4		104	66-126	4.34	23	
Bromoform	50.15	1.0	ug/L	50.1		100	68-130	3.26	23	
1,2,3-Trichloropropane	50.73	1.0	ug/L	50.3		101	63-136	2.05	24	
trans-1,4-Dichloro-2-butene	99.63	5.0	ug/L	100		99.6	54-134	2.95	27	
1,1,1,2-Tetrachloroethane	51.28	1.0	ug/L	50.1		102	61-131	3.34	29	
1,4-Dichlorobenzene	49.53	1.0	ug/L	50.1		98.8	70-129	2.81	24	
1,2-Dichlorobenzene	50.64	1.0	ug/L	50.1		101	69-126	2.84	26	
1,2-Dibromo-3-chloropropane	45.00	5.0	ug/L	50.1		89.8	50-143	0.736	30	
<i>Surrogate: Dibromofluoromethane</i>	<i>50.2</i>		<i>ug/L</i>	<i>50.2</i>		<i>100</i>	<i>75-136</i>			
<i>Surrogate: Dibromofluoromethane</i>	<i>50.2</i>		<i>ug/L</i>	<i>50.2</i>		<i>100</i>	<i>57-134</i>			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>52.2</i>		<i>ug/L</i>	<i>50.4</i>		<i>104</i>	<i>61-142</i>			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>52.2</i>		<i>ug/L</i>	<i>50.4</i>		<i>104</i>	<i>53-140</i>			
<i>Surrogate: Toluene-d8</i>	<i>50.0</i>		<i>ug/L</i>	<i>50.5</i>		<i>99.0</i>	<i>82-121</i>			
<i>Surrogate: Toluene-d8</i>	<i>50.0</i>		<i>ug/L</i>	<i>50.5</i>		<i>99.0</i>	<i>86-114</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>49.9</i>		<i>ug/L</i>	<i>50.2</i>		<i>99.4</i>	<i>80-116</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>49.9</i>		<i>ug/L</i>	<i>50.2</i>		<i>99.4</i>	<i>78-121</i>			
LCS Dup (1HJ1355-BSD2)				Prepared: 10/22/24 00:00 Analyzed: 10/22/24 23:23						
Chloromethane	30.71	1.0	ug/L	30.3		101	63-155	5.45	24	
Vinyl Chloride	28.82	1.0	ug/L	30.2		95.3	70-154	5.75	25	
Bromomethane	32.93	1.0	ug/L	30.1		109	52-176	3.15	27	
Chloroethane	26.09	1.0	ug/L	30.3		86.1	72-148	6.29	25	
Trichlorofluoromethane	24.13	1.0	ug/L	30.3		79.6	70-152	6.15	26	
1,1-Dichloroethylene	46.79	1.0	ug/L	50.1		93.3	70-148	5.92	24	
Acetone	114.9	10.0	ug/L	100		115	43-172	1.43	30	
Methyl Iodide	99.97	1.0	ug/L	100		100	69-170	6.06	30	
Methylene Chloride	47.98	5.0	ug/L	50.1		95.8	68-142	4.45	21	
Acrylonitrile	85.67	5.0	ug/L	50.2		171	56-135	0.128	16	Q2
trans-1,2-Dichloroethylene	49.63	1.0	ug/L	50.1		99.1	66-148	5.36	27	
1,1-Dichloroethane	49.54	1.0	ug/L	50.1		98.9	66-143	4.33	24	
Vinyl Acetate	96.42	5.0	ug/L	156		61.9	43-153	2.12	30	
cis-1,2-Dichloroethylene	49.70	1.0	ug/L	50.4		98.7	71-149	4.74	26	
2-Butanone (MEK)	102.5	10.0	ug/L	100		103	52-159	1.90	27	
Bromochloromethane	50.70	1.0	ug/L	50.4		101	69-143	3.53	23	
Chloroform	49.23	1.0	ug/L	50.1		98.3	69-144	4.36	23	
1,1,1-Trichloroethane	47.79	1.0	ug/L	50.1		95.4	62-129	4.93	24	
Carbon Tetrachloride	48.48	1.0	ug/L	50.1		96.8	63-141	5.38	25	
Benzene	53.03	1.0	ug/L	50.4		105	71-134	5.03	24	
1,2-Dichloroethane	58.60	1.0	ug/L	50.1		117	72-132	5.25	24	

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CERTIFICATE OF ANALYSIS

1HJ1549

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1355 - EPA 5030B - EPA 8260B										
LCS Dup (1HJ1355-BSD2)				Prepared: 10/22/24 00:00 Analyzed: 10/22/24 23:23						
Trichloroethylene	50.92	1.0	ug/L	50.1		102	71-135	4.48	24	
1,2-Dichloropropane	52.85	1.0	ug/L	50.1		106	69-136	3.88	24	
Dibromomethane	53.93	1.0	ug/L	50.4		107	73-147	2.82	25	
Bromodichloromethane	52.53	1.0	ug/L	50.1		105	68-129	4.26	22	
cis-1,3-Dichloropropene	49.95	1.0	ug/L	50.1		99.7	65-134	3.90	23	
4-Methyl-2-pentanone (MIBK)	113.3	5.0	ug/L	100		113	58-147	1.14	27	
Toluene	51.29	1.0	ug/L	50.5		102	72-133	4.81	24	
trans-1,3-Dichloropropene	51.27	1.0	ug/L	50.1		102	67-130	2.89	24	
1,1,2-Trichloroethane	51.40	1.0	ug/L	50.1		103	69-135	2.86	23	
Tetrachloroethylene	51.29	1.0	ug/L	50.1		102	69-130	3.86	25	
2-Hexanone (MBK)	108.9	5.0	ug/L	100		109	55-144	4.52	25	
Dibromochloromethane	52.05	1.0	ug/L	50.1		104	73-127	1.82	22	
1,2-Dibromoethane	52.70	1.0	ug/L	50.2		105	67-132	0.724	24	
Chlorobenzene	51.95	1.0	ug/L	50.1		104	72-123	4.25	23	
1,1,1,2-Tetrachloroethane	53.49	1.0	ug/L	50.3		106	73-127	2.06	24	
Ethylbenzene	54.56	1.0	ug/L	50.2		109	71-127	4.17	26	
Xylenes, total	158.8	2.0	ug/L	151		105	74-127	4.02	25	
Styrene	54.10	1.0	ug/L	50.4		107	66-126	3.14	23	
Bromoform	50.66	1.0	ug/L	50.1		101	68-130	0.0987	23	
1,2,3-Trichloropropane	52.37	1.0	ug/L	50.3		104	63-136	0.590	24	
trans-1,4-Dichloro-2-butene	100.2	5.0	ug/L	100		100	54-134	0.676	27	
1,1,2,2-Tetrachloroethane	53.17	1.0	ug/L	50.1		106	61-131	0.0753	29	
1,4-Dichlorobenzene	50.24	1.0	ug/L	50.1		100	70-129	3.30	24	
1,2-Dichlorobenzene	51.54	1.0	ug/L	50.1		103	69-126	3.49	26	
1,2-Dibromo-3-chloropropane	45.39	5.0	ug/L	50.1		90.5	50-143	2.82	30	
<i>Surrogate: Dibromofluoromethane</i>	47.1		ug/L	50.2		93.7	75-136			
<i>Surrogate: Dibromofluoromethane</i>	47.1		ug/L	50.2		93.7	57-134			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	49.9		ug/L	50.4		99.0	61-142			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	49.9		ug/L	50.4		99.0	53-140			
<i>Surrogate: Toluene-d8</i>	50.3		ug/L	50.5		99.6	82-121			
<i>Surrogate: Toluene-d8</i>	50.3		ug/L	50.5		99.6	86-114			
<i>Surrogate: 4-Bromofluorobenzene</i>	50.0		ug/L	50.2		99.7	80-116			
<i>Surrogate: 4-Bromofluorobenzene</i>	50.0		ug/L	50.2		99.7	78-121			
Matrix Spike (1HJ1355-MS1)				Source: 1HJ1617-04 Prepared: 10/22/24 00:00 Analyzed: 10/22/24 21:30						
Chloromethane	324.6	10.0	ug/L	303	ND	107	61-152			
Vinyl Chloride	301.7	10.0	ug/L	302	ND	99.7	66-149			
Bromomethane	309.7	10.0	ug/L	301	ND	103	43-171			
Chloroethane	258.7	10.0	ug/L	303	ND	85.3	69-148			
Trichlorofluoromethane	247.4	10.0	ug/L	303	ND	81.6	62-163			
1,1-Dichloroethylene	462.5	10.0	ug/L	501	ND	92.3	70-148			
Acetone	1159	100	ug/L	1000	ND	116	45-173			
Methyl Iodide	924.2	10.0	ug/L	1000	ND	92.4	62-167			
Carbon Disulfide	695.9	10.0	ug/L	1000	ND	69.6	71-163			M2

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CERTIFICATE OF ANALYSIS

1HJ1549

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1355 - EPA 5030B - EPA 8260B										
Matrix Spike (1HJ1355-MS1)	Source: 1HJ1617-04			Prepared: 10/22/24 00:00 Analyzed: 10/22/24 21:30						
Methylene Chloride	462.2	50.0	ug/L	501	ND	92.2	69-140			
Acrylonitrile	851.1	50.0	ug/L	502	ND	170	38-147			M1
trans-1,2-Dichloroethylene	480.0	10.0	ug/L	501	ND	95.8	69-144			
1,1-Dichloroethane	471.5	10.0	ug/L	501	ND	94.1	70-138			
Vinyl Acetate	942.3	50.0	ug/L	1560	ND	60.5	58-142			
cis-1,2-Dichloroethylene	473.8	10.0	ug/L	504	ND	94.1	68-151			
2-Butanone (MEK)	1008	100	ug/L	1000	ND	101	50-160			
Bromochloromethane	480.3	10.0	ug/L	504	ND	95.3	65-143			
Chloroform	465.8	10.0	ug/L	501	ND	93.0	71-143			
1,1,1-Trichloroethane	461.2	10.0	ug/L	501	ND	92.0	63-133			
Carbon Tetrachloride	467.1	10.0	ug/L	501	ND	93.3	63-142			
Benzene	500.9	10.0	ug/L	504	ND	99.3	69-133			
1,2-Dichloroethane	545.7	10.0	ug/L	501	ND	109	63-138			
Trichloroethylene	481.7	10.0	ug/L	501	ND	96.2	71-133			
1,2-Dichloropropane	493.0	10.0	ug/L	501	ND	98.4	69-132			
Dibromomethane	513.5	10.0	ug/L	504	ND	102	70-147			
Bromodichloromethane	495.7	10.0	ug/L	501	ND	99.0	67-130			
cis-1,3-Dichloropropene	467.2	10.0	ug/L	501	ND	93.3	61-126			
4-Methyl-2-pentanone (MIBK)	1094	50.0	ug/L	1000	ND	109	55-147			
Toluene	477.2	10.0	ug/L	505	ND	94.5	71-133			
trans-1,3-Dichloropropene	479.1	10.0	ug/L	501	ND	95.7	63-124			
1,1,2-Trichloroethane	496.8	10.0	ug/L	501	ND	99.2	69-133			
Tetrachloroethylene	496.4	10.0	ug/L	501	ND	99.1	70-124			
2-Hexanone (MBK)	1076	50.0	ug/L	1000	ND	108	53-141			
Dibromochloromethane	493.7	10.0	ug/L	501	ND	98.6	74-122			
1,2-Dibromoethane	506.1	10.0	ug/L	502	ND	101	66-127			
Chlorobenzene	488.0	10.0	ug/L	501	ND	97.4	76-116			
1,1,1,2-Tetrachloroethane	510.3	10.0	ug/L	503	ND	101	77-121			
Ethylbenzene	515.0	10.0	ug/L	502	ND	103	73-124			
Xylenes, total	1500	20.0	ug/L	1510	ND	99.3	75-123			
Styrene	512.2	10.0	ug/L	504	ND	102	70-120			
Bromoform	486.4	10.0	ug/L	501	ND	97.1	70-124			
1,2,3-Trichloropropane	505.2	10.0	ug/L	503	ND	100	62-135			
trans-1,4-Dichloro-2-butene	980.9	50.0	ug/L	1000	ND	98.1	50-120			
1,1,2,2-Tetrachloroethane	503.5	10.0	ug/L	501	ND	100	63-126			
1,4-Dichlorobenzene	468.5	10.0	ug/L	501	ND	93.5	72-119			
1,2-Dichlorobenzene	484.2	10.0	ug/L	501	ND	96.7	71-117			
1,2-Dibromo-3-chloropropane	431.1	50.0	ug/L	501	ND	86.0	49-134			

Surrogate: Dibromofluoromethane	469		ug/L	502		93.3	75-136			
Surrogate: Dibromofluoromethane	469		ug/L	502		93.3	57-134			
Surrogate: 1,2-Dichloroethane-d4	492		ug/L	504		97.7	61-142			
Surrogate: 1,2-Dichloroethane-d4	492		ug/L	504		97.7	53-140			
Surrogate: Toluene-d8	498		ug/L	505		98.7	82-121			



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HJ1549

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1355 - EPA 5030B - EPA 8260B										
Matrix Spike (1HJ1355-MS1)	Source: 1HJ1617-04			Prepared: 10/22/24 00:00 Analyzed: 10/22/24 21:30						
Surrogate: Toluene-d8	498		ug/L	505		98.7	86-114			
Surrogate: 4-Bromofluorobenzene	500		ug/L	502		99.7	80-116			
Surrogate: 4-Bromofluorobenzene	500		ug/L	502		99.7	78-121			
Matrix Spike (1HJ1355-MS2)	Source: 1HJ1633-01			Prepared: 10/22/24 00:00 Analyzed: 10/23/24 08:04						
Chloromethane	343.5	10.0	ug/L	303	ND	113	61-152			
Vinyl Chloride	324.7	10.0	ug/L	302	ND	107	66-149			
Bromomethane	302.5	10.0	ug/L	301	ND	100	43-171			
Chloroethane	276.1	10.0	ug/L	303	ND	91.1	69-148			
Trichlorofluoromethane	265.2	10.0	ug/L	303	ND	87.5	62-163			
1,1-Dichloroethylene	497.4	10.0	ug/L	501	ND	99.2	70-148			
Acetone	1254	100	ug/L	1000	ND	125	45-173			
Methyl Iodide	884.6	10.0	ug/L	1000	ND	88.5	62-167			
Methylene Chloride	483.5	50.0	ug/L	501	ND	96.5	69-140			
Acrylonitrile	917.8	50.0	ug/L	502	ND	183	38-147			M1
trans-1,2-Dichloroethylene	512.1	10.0	ug/L	501	ND	102	69-144			
1,1-Dichloroethane	500.1	10.0	ug/L	501	ND	99.8	70-138			
Vinyl Acetate	947.6	50.0	ug/L	1560	ND	60.8	58-142			
cis-1,2-Dichloroethylene	478.9	10.0	ug/L	504	ND	95.1	68-151			
2-Butanone (MEK)	1062	100	ug/L	1000	ND	106	50-160			
Bromochloromethane	501.9	10.0	ug/L	504	ND	99.6	65-143			
Chloroform	488.7	10.0	ug/L	501	ND	97.6	71-143			
1,1,1-Trichloroethane	483.0	10.0	ug/L	501	ND	96.4	63-133			
Carbon Tetrachloride	495.1	10.0	ug/L	501	ND	98.8	63-142			
Benzene	533.9	10.0	ug/L	504	ND	106	69-133			
1,2-Dichloroethane	568.6	10.0	ug/L	501	ND	114	63-138			
Trichloroethylene	509.8	10.0	ug/L	501	ND	102	71-133			
1,2-Dichloropropane	518.2	10.0	ug/L	501	ND	103	69-132			
Dibromomethane	531.1	10.0	ug/L	504	ND	105	70-147			
Bromodichloromethane	518.8	10.0	ug/L	501	ND	104	67-130			
cis-1,3-Dichloropropene	467.6	10.0	ug/L	501	ND	93.4	61-126			
4-Methyl-2-pentanone (MIBK)	1175	50.0	ug/L	1000	ND	118	55-147			
Toluene	508.7	10.0	ug/L	505	ND	101	71-133			
trans-1,3-Dichloropropene	478.6	10.0	ug/L	501	ND	95.6	63-124			
1,1,2-Trichloroethane	509.2	10.0	ug/L	501	ND	102	69-133			
Tetrachloroethylene	516.7	10.0	ug/L	501	ND	103	70-124			
2-Hexanone (MBK)	1149	50.0	ug/L	1000	ND	115	53-141			
Dibromochloromethane	514.5	10.0	ug/L	501	ND	103	74-122			
1,2-Dibromoethane	524.5	10.0	ug/L	502	ND	104	66-127			
Chlorobenzene	511.2	10.0	ug/L	501	ND	102	76-116			
1,1,1,2-Tetrachloroethane	528.1	10.0	ug/L	503	ND	105	77-121			
Ethylbenzene	543.3	10.0	ug/L	502	ND	108	73-124			
Xylenes, total	1584	20.0	ug/L	1510	ND	105	75-123			



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HJ1549

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1355 - EPA 5030B - EPA 8260B										
Matrix Spike (1HJ1355-MS2)	Source: 1HJ1633-01			Prepared: 10/22/24 00:00 Analyzed: 10/23/24 08:04						
Styrene	537.3	10.0	ug/L	504	ND	107	70-120			
Bromoform	502.3	10.0	ug/L	501	ND	100	70-124			
1,2,3-Trichloropropane	542.0	10.0	ug/L	503	ND	108	62-135			
trans-1,4-Dichloro-2-butene	961.2	50.0	ug/L	1000	ND	96.1	50-120			
1,1,2,2-Tetrachloroethane	540.0	10.0	ug/L	501	ND	108	63-126			
1,4-Dichlorobenzene	491.4	10.0	ug/L	501	ND	98.0	72-119			
1,2-Dichlorobenzene	507.4	10.0	ug/L	501	ND	101	71-117			
1,2-Dibromo-3-chloropropane	467.9	50.0	ug/L	501	ND	93.3	49-134			
<i>Surrogate: Dibromofluoromethane</i>	468		ug/L	502		93.3	75-136			
<i>Surrogate: Dibromofluoromethane</i>	468		ug/L	502		93.3	57-134			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	499		ug/L	504		99.1	61-142			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	499		ug/L	504		99.1	53-140			
<i>Surrogate: Toluene-d8</i>	502		ug/L	505		99.4	82-121			
<i>Surrogate: Toluene-d8</i>	502		ug/L	505		99.4	86-114			
<i>Surrogate: 4-Bromofluorobenzene</i>	500		ug/L	502		99.6	80-116			
<i>Surrogate: 4-Bromofluorobenzene</i>	500		ug/L	502		99.6	78-121			
Matrix Spike Dup (1HJ1355-MSD1)	Source: 1HJ1617-04			Prepared: 10/22/24 00:00 Analyzed: 10/22/24 21:53						
Chloromethane	324.4	10.0	ug/L	303	ND	107	61-152	0.0616	26	
Vinyl Chloride	309.5	10.0	ug/L	302	ND	102	66-149	2.55	23	
Bromomethane	331.1	10.0	ug/L	301	ND	110	43-171	6.68	29	
Chloroethane	264.9	10.0	ug/L	303	ND	87.4	69-148	2.37	25	
Trichlorofluoromethane	253.9	10.0	ug/L	303	ND	83.8	62-163	2.59	25	
1,1-Dichloroethylene	477.1	10.0	ug/L	501	ND	95.2	70-148	3.11	22	
Acetone	1142	100	ug/L	1000	ND	114	45-173	1.46	30	
Methyl Iodide	988.7	10.0	ug/L	1000	ND	98.9	62-167	6.74	24	
Carbon Disulfide	710.0	10.0	ug/L	1000	ND	71.0	71-163	2.01	22	
Methylene Chloride	462.7	50.0	ug/L	501	ND	92.3	69-140	0.108	19	
Acrylonitrile	857.2	50.0	ug/L	502	ND	171	38-147	0.714	30	M1
trans-1,2-Dichloroethylene	489.0	10.0	ug/L	501	ND	97.6	69-144	1.86	22	
1,1-Dichloroethane	483.6	10.0	ug/L	501	ND	96.5	70-138	2.53	20	
Vinyl Acetate	954.5	50.0	ug/L	1560	ND	61.3	58-142	1.29	24	
cis-1,2-Dichloroethylene	487.0	10.0	ug/L	504	ND	96.7	68-151	2.75	22	
2-Butanone (MEK)	1020	100	ug/L	1000	ND	102	50-160	1.24	23	
Bromochloromethane	486.8	10.0	ug/L	504	ND	96.6	65-143	1.34	22	
Chloroform	476.3	10.0	ug/L	501	ND	95.1	71-143	2.23	21	
1,1,1-Trichloroethane	477.9	10.0	ug/L	501	ND	95.4	63-133	3.56	23	
Carbon Tetrachloride	489.4	10.0	ug/L	501	ND	97.7	63-142	4.66	22	
Benzene	516.3	10.0	ug/L	504	ND	102	69-133	3.03	18	
1,2-Dichloroethane	545.3	10.0	ug/L	501	ND	109	63-138	0.0733	20	
Trichloroethylene	497.0	10.0	ug/L	501	ND	99.2	71-133	3.13	23	
1,2-Dichloropropane	501.2	10.0	ug/L	501	ND	100	69-132	1.65	20	
Dibromomethane	514.0	10.0	ug/L	504	ND	102	70-147	0.0973	22	
Bromodichloromethane	501.3	10.0	ug/L	501	ND	100	67-130	1.12	21	



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HJ1549

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1355 - EPA 5030B - EPA 8260B										
Matrix Spike Dup (1HJ1355-MSD1)	Source: 1HJ1617-04			Prepared: 10/22/24 00:00 Analyzed: 10/22/24 21:53						
cis-1,3-Dichloropropene	477.0	10.0	ug/L	501	ND	95.2	61-126	2.08	21	
4-Methyl-2-pentanone (MIBK)	1107	50.0	ug/L	1000	ND	111	55-147	1.15	23	
Toluene	494.7	10.0	ug/L	505	ND	98.0	71-133	3.60	19	
trans-1,3-Dichloropropene	486.4	10.0	ug/L	501	ND	97.1	63-124	1.51	21	
1,1,2-Trichloroethane	491.7	10.0	ug/L	501	ND	98.2	69-133	1.03	19	
Tetrachloroethylene	507.2	10.0	ug/L	501	ND	101	70-124	2.15	24	
2-Hexanone (MBK)	1078	50.0	ug/L	1000	ND	108	53-141	0.204	24	
Dibromochloromethane	495.2	10.0	ug/L	501	ND	98.9	74-122	0.303	21	
1,2-Dibromoethane	505.5	10.0	ug/L	502	ND	101	66-127	0.119	23	
Chlorobenzene	496.0	10.0	ug/L	501	ND	99.0	76-116	1.63	21	
1,1,1,2-Tetrachloroethane	516.0	10.0	ug/L	503	ND	102	77-121	1.11	25	
Ethylbenzene	531.7	10.0	ug/L	502	ND	106	73-124	3.19	20	
Xylenes, total	1540	20.0	ug/L	1510	ND	102	75-123	2.64	20	
Styrene	518.9	10.0	ug/L	504	ND	103	70-120	1.30	23	
Bromoform	487.0	10.0	ug/L	501	ND	97.2	70-124	0.123	22	
1,2,3-Trichloropropane	505.8	10.0	ug/L	503	ND	100	62-135	0.119	28	
trans-1,4-Dichloro-2-butene	978.5	50.0	ug/L	1000	ND	97.8	50-120	0.245	26	
1,1,2,2-Tetrachloroethane	515.7	10.0	ug/L	501	ND	103	63-126	2.39	24	
1,4-Dichlorobenzene	483.9	10.0	ug/L	501	ND	96.5	72-119	3.23	24	
1,2-Dichlorobenzene	495.3	10.0	ug/L	501	ND	98.9	71-117	2.27	24	
1,2-Dibromo-3-chloropropane	440.1	50.0	ug/L	501	ND	87.8	49-134	2.07	28	
<i>Surrogate: Dibromofluoromethane</i>	472		ug/L	502		94.0	57-134			
<i>Surrogate: Dibromofluoromethane</i>	472		ug/L	502		94.0	75-136			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	500		ug/L	504		99.4	53-140			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	500		ug/L	504		99.4	61-142			
<i>Surrogate: Toluene-d8</i>	501		ug/L	505		99.3	86-114			
<i>Surrogate: Toluene-d8</i>	501		ug/L	505		99.3	82-121			
<i>Surrogate: 4-Bromofluorobenzene</i>	496		ug/L	502		98.9	78-121			
<i>Surrogate: 4-Bromofluorobenzene</i>	496		ug/L	502		98.9	80-116			
Matrix Spike Dup (1HJ1355-MSD2)	Source: 1HJ1633-01			Prepared: 10/22/24 00:00 Analyzed: 10/23/24 08:26						
Chloromethane	327.6	10.0	ug/L	303	ND	108	61-152	4.74	26	
Vinyl Chloride	307.4	10.0	ug/L	302	ND	102	66-149	5.47	23	
Bromomethane	317.8	10.0	ug/L	301	ND	106	43-171	4.93	29	
Chloroethane	268.4	10.0	ug/L	303	ND	88.5	69-148	2.83	25	
Trichlorofluoromethane	251.4	10.0	ug/L	303	ND	83.0	62-163	5.34	25	
1,1-Dichloroethylene	477.4	10.0	ug/L	501	ND	95.2	70-148	4.10	22	
Acetone	1207	100	ug/L	1000	ND	121	45-173	3.84	30	
Methyl Iodide	967.6	10.0	ug/L	1000	ND	96.8	62-167	8.96	24	
Methylene Chloride	472.5	50.0	ug/L	501	ND	94.3	69-140	2.30	19	
Acrylonitrile	880.4	50.0	ug/L	502	ND	175	38-147	4.16	30	M1
trans-1,2-Dichloroethylene	492.2	10.0	ug/L	501	ND	98.3	69-144	3.96	22	
1,1-Dichloroethane	493.4	10.0	ug/L	501	ND	98.5	70-138	1.35	20	
Vinyl Acetate	946.7	50.0	ug/L	1560	ND	60.8	58-142	0.0950	24	



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HJ1549

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1355 - EPA 5030B - EPA 8260B										
Matrix Spike Dup (1HJ1355-MSD2)	Source: 1HJ1633-01			Prepared: 10/22/24 00:00 Analyzed: 10/23/24 08:26						
cis-1,2-Dichloroethylene	475.5	10.0	ug/L	504	ND	94.4	68-151	0.712	22	
2-Butanone (MEK)	1046	100	ug/L	1000	ND	105	50-160	1.51	23	
Bromochloromethane	502.8	10.0	ug/L	504	ND	99.8	65-143	0.179	22	
Chloroform	484.2	10.0	ug/L	501	ND	96.7	71-143	0.925	21	
1,1,1-Trichloroethane	477.8	10.0	ug/L	501	ND	95.3	63-133	1.08	23	
Carbon Tetrachloride	486.6	10.0	ug/L	501	ND	97.1	63-142	1.73	22	
Benzene	525.0	10.0	ug/L	504	ND	104	69-133	1.68	18	
1,2-Dichloroethane	571.8	10.0	ug/L	501	ND	114	63-138	0.561	20	
Trichloroethylene	506.5	10.0	ug/L	501	ND	101	71-133	0.649	23	
1,2-Dichloropropane	519.4	10.0	ug/L	501	ND	104	69-132	0.231	20	
Dibromomethane	538.6	10.0	ug/L	504	ND	107	70-147	1.40	22	
Bromodichloromethane	518.9	10.0	ug/L	501	ND	104	67-130	0.0193	21	
cis-1,3-Dichloropropene	473.7	10.0	ug/L	501	ND	94.6	61-126	1.30	21	
4-Methyl-2-pentanone (MIBK)	1165	50.0	ug/L	1000	ND	117	55-147	0.854	23	
Toluene	503.6	10.0	ug/L	505	ND	99.8	71-133	1.01	19	
trans-1,3-Dichloropropene	488.9	10.0	ug/L	501	ND	97.6	63-124	2.13	21	
1,1,2-Trichloroethane	513.7	10.0	ug/L	501	ND	103	69-133	0.880	19	
Tetrachloroethylene	509.7	10.0	ug/L	501	ND	102	70-124	1.36	24	
2-Hexanone (MBK)	1132	50.0	ug/L	1000	ND	113	53-141	1.53	24	
Dibromochloromethane	516.0	10.0	ug/L	501	ND	103	74-122	0.291	21	
1,2-Dibromoethane	523.5	10.0	ug/L	502	ND	104	66-127	0.191	23	
Chlorobenzene	510.9	10.0	ug/L	501	ND	102	76-116	0.0587	21	
1,1,1,2-Tetrachloroethane	525.7	10.0	ug/L	503	ND	104	77-121	0.455	25	
Ethylbenzene	540.3	10.0	ug/L	502	ND	108	73-124	0.554	20	
Xylenes, total	1583	20.0	ug/L	1510	ND	105	75-123	0.0316	20	
Styrene	540.7	10.0	ug/L	504	ND	107	70-120	0.631	23	
Bromoform	506.4	10.0	ug/L	501	ND	101	70-124	0.813	22	
1,2,3-Trichloropropane	535.8	10.0	ug/L	503	ND	106	62-135	1.15	28	
trans-1,4-Dichloro-2-butene	955.3	50.0	ug/L	1000	ND	95.5	50-120	0.616	26	
1,1,2,2-Tetrachloroethane	542.7	10.0	ug/L	501	ND	108	63-126	0.499	24	
1,4-Dichlorobenzene	489.8	10.0	ug/L	501	ND	97.7	72-119	0.326	24	
1,2-Dichlorobenzene	505.3	10.0	ug/L	501	ND	101	71-117	0.415	24	
1,2-Dibromo-3-chloropropane	462.9	50.0	ug/L	501	ND	92.3	49-134	1.07	28	
Surrogate: Dibromofluoromethane	467		ug/L	502		93.1	57-134			
Surrogate: Dibromofluoromethane	467		ug/L	502		93.1	75-136			
Surrogate: 1,2-Dichloroethane-d4	500		ug/L	504		99.2	53-140			
Surrogate: 1,2-Dichloroethane-d4	500		ug/L	504		99.2	61-142			
Surrogate: Toluene-d8	498		ug/L	505		98.7	86-114			
Surrogate: Toluene-d8	498		ug/L	505		98.7	82-121			
Surrogate: 4-Bromofluorobenzene	504		ug/L	502		100	78-121			
Surrogate: 4-Bromofluorobenzene	504		ug/L	502		100	80-116			

Batch 1HJ1517 - EPA 5030B - EPA 8260B



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HJ1549

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1517 - EPA 5030B - EPA 8260B										
Blank (1HJ1517-BLK1) Prepared: 10/23/24 00:00 Analyzed: 10/23/24 15:48										
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							
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							

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CERTIFICATE OF ANALYSIS

1HJ1549

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1517 - EPA 5030B - EPA 8260B										
Blank (1HJ1517-BLK1)				Prepared: 10/23/24 00:00 Analyzed: 10/23/24 15:48						
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							
<i>Surrogate: Dibromofluoromethane</i>	47.5		ug/L	50.2		94.6	57-134			
<i>Surrogate: Dibromofluoromethane</i>	47.5		ug/L	50.2		94.6	75-136			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	50.8		ug/L	50.4		101	53-140			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	50.8		ug/L	50.4		101	61-142			
<i>Surrogate: Toluene-d8</i>	47.8		ug/L	50.5		94.7	86-114			
<i>Surrogate: Toluene-d8</i>	47.8		ug/L	50.5		94.7	82-121			
<i>Surrogate: 4-Bromofluorobenzene</i>	49.9		ug/L	50.2		99.4	78-121			
<i>Surrogate: 4-Bromofluorobenzene</i>	49.9		ug/L	50.2		99.4	80-116			
LCS (1HJ1517-BS1)				Prepared: 10/23/24 00:00 Analyzed: 10/23/24 14:41						
Chloromethane	35.40	1.0	ug/L	30.3		117	63-155			
Vinyl Chloride	35.61	1.0	ug/L	30.2		118	70-154			
Bromomethane	38.05	1.0	ug/L	30.1		126	52-176			
Chloroethane	28.14	1.0	ug/L	30.3		92.8	72-148			
Trichlorofluoromethane	27.24	1.0	ug/L	30.3		89.9	70-152			
1,1-Dichloroethylene	46.21	1.0	ug/L	50.1		92.2	70-148			
Acetone	89.83	10.0	ug/L	100		89.8	43-172			
Methyl Iodide	87.27	1.0	ug/L	100		87.3	69-170			
Carbon Disulfide	83.54	1.0	ug/L	100		83.5	72-162			
Methylene Chloride	44.70	5.0	ug/L	50.1		89.2	68-142			
Acrylonitrile	36.52	5.0	ug/L	50.2		72.7	56-135			
trans-1,2-Dichloroethylene	47.38	1.0	ug/L	50.1		94.6	66-148			
1,1-Dichloroethane	46.66	1.0	ug/L	50.1		93.1	66-143			
Vinyl Acetate	134.3	5.0	ug/L	156		86.2	43-153			
cis-1,2-Dichloroethylene	47.08	1.0	ug/L	50.4		93.5	71-149			
2-Butanone (MEK)	76.94	10.0	ug/L	100		76.9	52-159			
Bromochloromethane	46.35	1.0	ug/L	50.4		92.0	69-143			
Chloroform	45.57	1.0	ug/L	50.1		91.0	69-144			
1,1,1-Trichloroethane	45.87	1.0	ug/L	50.1		91.5	62-129			
Carbon Tetrachloride	46.22	1.0	ug/L	50.1		92.3	63-141			
Benzene	49.62	1.0	ug/L	50.4		98.4	71-134			
1,2-Dichloroethane	50.74	1.0	ug/L	50.1		101	72-132			
Trichloroethylene	48.04	1.0	ug/L	50.1		95.9	71-135			
1,2-Dichloropropane	48.22	1.0	ug/L	50.1		96.3	69-136			
Dibromomethane	45.88	1.0	ug/L	50.4		91.1	73-147			
Bromodichloromethane	47.45	1.0	ug/L	50.1		94.7	68-129			
cis-1,3-Dichloropropene	46.32	1.0	ug/L	50.1		92.5	65-134			
4-Methyl-2-pentanone (MIBK)	88.52	5.0	ug/L	100		88.5	58-147			
Toluene	47.79	1.0	ug/L	50.5		94.7	72-133			
trans-1,3-Dichloropropene	45.61	1.0	ug/L	50.1		91.1	67-130			



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HJ1549

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1517 - EPA 5030B - EPA 8260B										
LCS (1HJ1517-BS1)				Prepared: 10/23/24 00:00 Analyzed: 10/23/24 14:41						
1,1,2-Trichloroethane	45.10	1.0	ug/L	50.1		90.0	69-135			
Tetrachloroethylene	49.26	1.0	ug/L	50.1		98.3	69-130			
2-Hexanone (MBK)	86.67	5.0	ug/L	100		86.7	55-144			
Dibromochloromethane	47.51	1.0	ug/L	50.1		94.9	73-127			
1,2-Dibromoethane	46.14	1.0	ug/L	50.2		91.9	67-132			
Chlorobenzene	48.53	1.0	ug/L	50.1		96.9	72-123			
1,1,1,2-Tetrachloroethane	49.21	1.0	ug/L	50.3		97.7	73-127			
Ethylbenzene	51.30	1.0	ug/L	50.2		102	71-127			
Xylenes, total	148.1	2.0	ug/L	151		98.0	74-127			
Styrene	50.16	1.0	ug/L	50.4		99.6	66-126			
Bromoform	45.02	1.0	ug/L	50.1		89.8	68-130			
1,2,3-Trichloropropane	44.34	1.0	ug/L	50.3		88.1	63-136			
trans-1,4-Dichloro-2-butene	93.16	5.0	ug/L	100		93.2	54-134			
1,1,2,2-Tetrachloroethane	43.80	1.0	ug/L	50.1		87.4	61-131			
1,4-Dichlorobenzene	47.15	1.0	ug/L	50.1		94.1	70-129			
1,2-Dichlorobenzene	46.26	1.0	ug/L	50.1		92.3	69-126			
1,2-Dibromo-3-chloropropane	35.99	5.0	ug/L	50.1		71.8	50-143			
<i>Surrogate: Dibromofluoromethane</i>	46.5		ug/L	50.2		92.7	57-134			
<i>Surrogate: Dibromofluoromethane</i>	46.5		ug/L	50.2		92.7	75-136			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	48.2		ug/L	50.4		95.7	53-140			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	48.2		ug/L	50.4		95.7	61-142			
<i>Surrogate: Toluene-d8</i>	49.3		ug/L	50.5		97.7	86-114			
<i>Surrogate: Toluene-d8</i>	49.3		ug/L	50.5		97.7	82-121			
<i>Surrogate: 4-Bromofluorobenzene</i>	50.1		ug/L	50.2		99.9	78-121			
<i>Surrogate: 4-Bromofluorobenzene</i>	50.1		ug/L	50.2		99.9	80-116			
LCS Dup (1HJ1517-BSD1)				Prepared: 10/23/24 00:00 Analyzed: 10/23/24 15:03						
Chloromethane	34.61	1.0	ug/L	30.3		114	63-155	2.26	24	
Vinyl Chloride	34.44	1.0	ug/L	30.2		114	70-154	3.34	25	
Bromomethane	37.51	1.0	ug/L	30.1		125	52-176	1.43	27	
Chloroethane	27.84	1.0	ug/L	30.3		91.8	72-148	1.07	25	
Trichlorofluoromethane	26.64	1.0	ug/L	30.3		87.9	70-152	2.23	26	
1,1-Dichloroethylene	45.54	1.0	ug/L	50.1		90.9	70-148	1.46	24	
Acetone	108.4	10.0	ug/L	100		108	43-172	18.8	30	
Methyl Iodide	86.62	1.0	ug/L	100		86.6	69-170	0.748	30	
Carbon Disulfide	82.34	1.0	ug/L	100		82.3	72-162	1.45	24	
Methylene Chloride	45.42	5.0	ug/L	50.1		90.6	68-142	1.60	21	
Acrylonitrile	42.39	5.0	ug/L	50.2		84.4	56-135	14.9	16	
trans-1,2-Dichloroethylene	47.64	1.0	ug/L	50.1		95.1	66-148	0.547	27	
1,1-Dichloroethane	47.82	1.0	ug/L	50.1		95.4	66-143	2.46	24	
Vinyl Acetate	147.8	5.0	ug/L	156		94.9	43-153	9.59	30	
cis-1,2-Dichloroethylene	48.41	1.0	ug/L	50.4		96.1	71-149	2.79	26	
2-Butanone (MEK)	98.33	10.0	ug/L	100		98.3	52-159	24.4	27	
Bromochloromethane	48.44	1.0	ug/L	50.4		96.1	69-143	4.41	23	



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HJ1549

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1517 - EPA 5030B - EPA 8260B										
LCS Dup (1HJ1517-BSD1)										
				Prepared: 10/23/24 00:00 Analyzed: 10/23/24 15:03						
Chloroform	47.10	1.0	ug/L	50.1		94.0	69-144	3.30	23	
1,1,1-Trichloroethane	46.78	1.0	ug/L	50.1		93.3	62-129	1.96	24	
Carbon Tetrachloride	47.34	1.0	ug/L	50.1		94.5	63-141	2.39	25	
Benzene	51.27	1.0	ug/L	50.4		102	71-134	3.27	24	
1,2-Dichloroethane	53.94	1.0	ug/L	50.1		108	72-132	6.11	24	
Trichloroethylene	49.62	1.0	ug/L	50.1		99.1	71-135	3.24	24	
1,2-Dichloropropane	50.64	1.0	ug/L	50.1		101	69-136	4.90	24	
Dibromomethane	50.19	1.0	ug/L	50.4		99.6	73-147	8.97	25	
Bromodichloromethane	50.12	1.0	ug/L	50.1		100	68-129	5.47	22	
cis-1,3-Dichloropropene	49.34	1.0	ug/L	50.1		98.5	65-134	6.31	23	
4-Methyl-2-pentanone (MIBK)	112.2	5.0	ug/L	100		112	58-147	23.6	27	
Toluene	50.31	1.0	ug/L	50.5		99.7	72-133	5.14	24	
trans-1,3-Dichloropropene	49.33	1.0	ug/L	50.1		98.5	67-130	7.84	24	
1,1,2-Trichloroethane	49.31	1.0	ug/L	50.1		98.4	69-135	8.92	23	
Tetrachloroethylene	51.13	1.0	ug/L	50.1		102	69-130	3.73	25	
2-Hexanone (MBK)	113.5	5.0	ug/L	100		113	55-144	26.8	25	R1
Dibromochloromethane	50.88	1.0	ug/L	50.1		102	73-127	6.85	22	
1,2-Dibromoethane	51.43	1.0	ug/L	50.2		102	67-132	10.8	24	
Chlorobenzene	50.73	1.0	ug/L	50.1		101	72-123	4.43	23	
1,1,1,2-Tetrachloroethane	51.92	1.0	ug/L	50.3		103	73-127	5.36	24	
Ethylbenzene	53.34	1.0	ug/L	50.2		106	71-127	3.90	26	
Xylenes, total	155.5	2.0	ug/L	151		103	74-127	4.88	25	
Styrene	52.91	1.0	ug/L	50.4		105	66-126	5.34	23	
Bromoform	50.65	1.0	ug/L	50.1		101	68-130	11.8	23	
1,2,3-Trichloropropane	52.86	1.0	ug/L	50.3		105	63-136	17.5	24	
trans-1,4-Dichloro-2-butene	113.7	5.0	ug/L	100		114	54-134	19.8	27	
1,1,2,2-Tetrachloroethane	52.77	1.0	ug/L	50.1		105	61-131	18.6	29	
1,4-Dichlorobenzene	49.79	1.0	ug/L	50.1		99.3	70-129	5.45	24	
1,2-Dichlorobenzene	49.59	1.0	ug/L	50.1		99.0	69-126	6.95	26	
1,2-Dibromo-3-chloropropane	47.36	5.0	ug/L	50.1		94.5	50-143	27.3	30	

Surrogate: Dibromofluoromethane	45.8		ug/L	50.2		91.2	57-134			
Surrogate: Dibromofluoromethane	45.8		ug/L	50.2		91.2	75-136			
Surrogate: 1,2-Dichloroethane-d4	48.7		ug/L	50.4		96.8	53-140			
Surrogate: 1,2-Dichloroethane-d4	48.7		ug/L	50.4		96.8	61-142			
Surrogate: Toluene-d8	49.7		ug/L	50.5		98.5	86-114			
Surrogate: Toluene-d8	49.7		ug/L	50.5		98.5	82-121			
Surrogate: 4-Bromofluorobenzene	50.1		ug/L	50.2		99.9	78-121			
Surrogate: 4-Bromofluorobenzene	50.1		ug/L	50.2		99.9	80-116			

Matrix Spike (1HJ1517-MS1)	Source: 1HJ1633-03	Prepared: 10/23/24 00:00 Analyzed: 10/23/24 21:36								
Chloromethane	344.0	10.0	ug/L	300	ND	115	61-152			
Vinyl Chloride	317.5	10.0	ug/L	300	ND	106	66-149			
Bromomethane	337.7	10.0	ug/L	300	ND	113	43-171			
Chloroethane	276.1	10.0	ug/L	300	ND	92.0	69-148			

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CERTIFICATE OF ANALYSIS

1HJ1549

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1517 - EPA 5030B - EPA 8260B										
Matrix Spike (1HJ1517-MS1)	Source: 1HJ1633-03			Prepared: 10/23/24 00:00 Analyzed: 10/23/24 21:36						
Trichlorofluoromethane	254.2	10.0	ug/L	300	ND	84.7	62-163			
1,1-Dichloroethylene	480.2	10.0	ug/L	500	ND	96.0	70-148			
Acetone	1140	100	ug/L	1010	ND	113	45-173			
Methyl Iodide	898.9	10.0	ug/L	1020	ND	88.2	62-167			
Carbon Disulfide	712.2	10.0	ug/L	1030	ND	69.3	71-163			M2
Methylene Chloride	470.9	50.0	ug/L	500	ND	94.2	69-140			
Acrylonitrile	867.3	50.0	ug/L	1000	ND	86.4	38-147			
trans-1,2-Dichloroethylene	494.0	10.0	ug/L	500	ND	98.8	69-144			
1,1-Dichloroethane	486.4	10.0	ug/L	500	ND	97.3	70-138			
Vinyl Acetate	948.7	50.0	ug/L	1000	ND	94.9	58-142			
cis-1,2-Dichloroethylene	482.5	10.0	ug/L	500	ND	96.5	68-151			
2-Butanone (MEK)	1028	100	ug/L	1020	ND	101	50-160			
Bromochloromethane	490.8	10.0	ug/L	500	ND	98.2	65-143			
Chloroform	474.4	10.0	ug/L	500	ND	94.9	71-143			
1,1,1-Trichloroethane	464.3	10.0	ug/L	500	ND	92.9	63-133			
Carbon Tetrachloride	472.0	10.0	ug/L	500	ND	94.4	63-142			
Benzene	514.0	10.0	ug/L	500	ND	103	69-133			
1,2-Dichloroethane	544.0	10.0	ug/L	500	ND	109	63-138			
Trichloroethylene	487.6	10.0	ug/L	500	ND	97.5	71-133			
1,2-Dichloropropane	500.1	10.0	ug/L	500	ND	100	69-132			
Dibromomethane	509.7	10.0	ug/L	500	ND	102	70-147			
Bromodichloromethane	494.3	10.0	ug/L	500	ND	98.9	67-130			
cis-1,3-Dichloropropene	469.6	10.0	ug/L	500	ND	93.9	61-126			
4-Methyl-2-pentanone (MIBK)	1106	50.0	ug/L	1000	ND	110	55-147			
Toluene	489.8	10.0	ug/L	500	ND	98.0	71-133			
trans-1,3-Dichloropropene	479.2	10.0	ug/L	500	ND	95.8	63-124			
1,1,2-Trichloroethane	491.8	10.0	ug/L	500	ND	98.4	69-133			
Tetrachloroethylene	491.3	10.0	ug/L	500	ND	98.3	70-124			
2-Hexanone (MBK)	1073	50.0	ug/L	993	ND	108	53-141			
Dibromochloromethane	492.7	10.0	ug/L	500	ND	98.5	74-122			
1,2-Dibromoethane	499.1	10.0	ug/L	500	ND	99.8	66-127			
Chlorobenzene	490.1	10.0	ug/L	500	ND	98.0	76-116			
1,1,1,2-Tetrachloroethane	507.5	10.0	ug/L	500	ND	102	77-121			
Ethylbenzene	521.5	10.0	ug/L	500	ND	104	73-124			
Xylenes, total	1514	20.0	ug/L	1500	ND	101	75-123			
Styrene	514.9	10.0	ug/L	500	ND	103	70-120			
Bromoform	483.1	10.0	ug/L	500	ND	96.6	70-124			
1,2,3-Trichloropropane	502.4	10.0	ug/L	500	ND	100	62-135			
trans-1,4-Dichloro-2-butene	974.4	50.0	ug/L	1030	ND	94.8	50-120			
1,1,2,2-Tetrachloroethane	514.4	10.0	ug/L	500	ND	103	63-126			
1,4-Dichlorobenzene	469.4	10.0	ug/L	500	ND	93.9	72-119			
1,2-Dichlorobenzene	482.1	10.0	ug/L	500	ND	96.4	71-117			
1,2-Dibromo-3-chloropropane	435.3	50.0	ug/L	500	ND	87.1	49-134			

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CERTIFICATE OF ANALYSIS

1HJ1549

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1517 - EPA 5030B - EPA 8260B										
Matrix Spike (1HJ1517-MS1)	Source: 1HJ1633-03			Prepared: 10/23/24 00:00 Analyzed: 10/23/24 21:36						
Surrogate: Dibromofluoromethane	474		ug/L	502		94.4	57-134			
Surrogate: Dibromofluoromethane	474		ug/L	502		94.4	75-136			
Surrogate: 1,2-Dichloroethane-d4	502		ug/L	504		99.6	53-140			
Surrogate: 1,2-Dichloroethane-d4	502		ug/L	504		99.6	61-142			
Surrogate: Toluene-d8	504		ug/L	505		99.9	86-114			
Surrogate: Toluene-d8	504		ug/L	505		99.9	82-121			
Surrogate: 4-Bromofluorobenzene	500		ug/L	502		99.6	78-121			
Surrogate: 4-Bromofluorobenzene	500		ug/L	502		99.6	80-116			
Matrix Spike Dup (1HJ1517-MSD1)	Source: 1HJ1633-03			Prepared: 10/23/24 00:00 Analyzed: 10/23/24 21:59						
Chloromethane	305.0	10.0	ug/L	300	ND	102	61-152	12.0	26	
Vinyl Chloride	285.2	10.0	ug/L	300	ND	95.1	66-149	10.7	23	
Bromomethane	307.4	10.0	ug/L	300	ND	102	43-171	9.39	29	
Chloroethane	249.6	10.0	ug/L	300	ND	83.2	69-148	10.1	25	
Trichlorofluoromethane	230.1	10.0	ug/L	300	ND	76.7	62-163	9.95	25	
1,1-Dichloroethylene	438.0	10.0	ug/L	500	ND	87.6	70-148	9.19	22	
Acetone	1089	100	ug/L	1010	ND	108	45-173	4.50	30	
Methyl Iodide	902.1	10.0	ug/L	1020	ND	88.6	62-167	0.355	24	
Carbon Disulfide	650.5	10.0	ug/L	1030	ND	63.3	71-163	9.06	22	M2
Methylene Chloride	440.1	50.0	ug/L	500	ND	88.0	69-140	6.76	19	
Acrylonitrile	843.4	50.0	ug/L	1000	ND	84.0	38-147	2.79	30	
trans-1,2-Dichloroethylene	458.1	10.0	ug/L	500	ND	91.6	69-144	7.54	22	
1,1-Dichloroethane	458.2	10.0	ug/L	500	ND	91.6	70-138	5.97	20	
Vinyl Acetate	916.2	50.0	ug/L	1000	ND	91.6	58-142	3.49	24	
cis-1,2-Dichloroethylene	452.1	10.0	ug/L	500	ND	90.4	68-151	6.51	22	
2-Butanone (MEK)	1034	100	ug/L	1020	ND	102	50-160	0.534	23	
Bromochloromethane	470.0	10.0	ug/L	500	ND	94.0	65-143	4.33	22	
Chloroform	449.6	10.0	ug/L	500	ND	89.9	71-143	5.37	21	
1,1,1-Trichloroethane	440.7	10.0	ug/L	500	ND	88.1	63-133	5.22	23	
Carbon Tetrachloride	447.2	10.0	ug/L	500	ND	89.4	63-142	5.40	22	
Benzene	484.4	10.0	ug/L	500	ND	96.9	69-133	5.93	18	
1,2-Dichloroethane	525.1	10.0	ug/L	500	ND	105	63-138	3.54	20	
Trichloroethylene	460.6	10.0	ug/L	500	ND	92.1	71-133	5.70	23	
1,2-Dichloropropane	481.0	10.0	ug/L	500	ND	96.2	69-132	3.89	20	
Dibromomethane	493.2	10.0	ug/L	500	ND	98.6	70-147	3.29	22	
Bromodichloromethane	477.7	10.0	ug/L	500	ND	95.5	67-130	3.42	21	
cis-1,3-Dichloropropene	449.9	10.0	ug/L	500	ND	90.0	61-126	4.28	21	
4-Methyl-2-pentanone (MIBK)	1090	50.0	ug/L	1000	ND	109	55-147	1.40	23	
Toluene	461.6	10.0	ug/L	500	ND	92.3	71-133	5.93	19	
trans-1,3-Dichloropropene	460.2	10.0	ug/L	500	ND	92.0	63-124	4.05	21	
1,1,2-Trichloroethane	473.4	10.0	ug/L	500	ND	94.7	69-133	3.81	19	
Tetrachloroethylene	461.4	10.0	ug/L	500	ND	92.3	70-124	6.28	24	
2-Hexanone (MBK)	1057	50.0	ug/L	993	ND	106	53-141	1.51	24	
Dibromochloromethane	472.5	10.0	ug/L	500	ND	94.5	74-122	4.19	21	

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1HJ1549

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1517 - EPA 5030B - EPA 8260B										
Matrix Spike Dup (1HJ1517-MSD1)	Source: 1HJ1633-03			Prepared: 10/23/24 00:00 Analyzed: 10/23/24 21:59						
1,2-Dibromoethane	482.7	10.0	ug/L	500	ND	96.5	66-127	3.34	23	
Chlorobenzene	463.3	10.0	ug/L	500	ND	92.7	76-116	5.62	21	
1,1,1,2-Tetrachloroethane	480.7	10.0	ug/L	500	ND	96.1	77-121	5.42	25	
Ethylbenzene	490.7	10.0	ug/L	500	ND	98.1	73-124	6.09	20	
Xylenes, total	1432	20.0	ug/L	1500	ND	95.5	75-123	5.57	20	
Styrene	492.7	10.0	ug/L	500	ND	98.5	70-120	4.41	23	
Bromoform	465.7	10.0	ug/L	500	ND	93.1	70-124	3.67	22	
1,2,3-Trichloropropane	493.1	10.0	ug/L	500	ND	98.6	62-135	1.87	28	
trans-1,4-Dichloro-2-butene	952.3	50.0	ug/L	1030	ND	92.6	50-120	2.29	26	
1,1,1,2-Tetrachloroethane	505.3	10.0	ug/L	500	ND	101	63-126	1.78	24	
1,4-Dichlorobenzene	455.5	10.0	ug/L	500	ND	91.1	72-119	3.01	24	
1,2-Dichlorobenzene	464.7	10.0	ug/L	500	ND	92.9	71-117	3.68	24	
1,2-Dibromo-3-chloropropane	437.6	50.0	ug/L	500	ND	87.5	49-134	0.527	28	
<i>Surrogate: Dibromofluoromethane</i>	472		ug/L	502		94.1	57-134			
<i>Surrogate: Dibromofluoromethane</i>	472		ug/L	502		94.1	75-136			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	500		ug/L	504		99.3	53-140			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	500		ug/L	504		99.3	61-142			
<i>Surrogate: Toluene-d8</i>	504		ug/L	505		99.9	86-114			
<i>Surrogate: Toluene-d8</i>	504		ug/L	505		99.9	82-121			
<i>Surrogate: 4-Bromofluorobenzene</i>	500		ug/L	502		99.7	78-121			
<i>Surrogate: 4-Bromofluorobenzene</i>	500		ug/L	502		99.7	80-116			
Batch 1HJ1776 - EPA 5030B - EPA 8260B										
Blank (1HJ1776-BLK1)	Prepared: 10/29/24 00:00 Analyzed: 10/29/24 11:40									
Carbon Disulfide	<1.0	1.0	ug/L							
<i>Surrogate: Dibromofluoromethane</i>	51.4		ug/L	50.2		102	75-136			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	53.5		ug/L	50.4		106	61-142			
<i>Surrogate: Toluene-d8</i>	47.7		ug/L	50.5		94.6	82-121			
<i>Surrogate: 4-Bromofluorobenzene</i>	50.7		ug/L	50.2		101	80-116			
Blank (1HJ1776-BLK2)	Prepared: 10/29/24 00:00 Analyzed: 10/29/24 22:51									
Carbon Disulfide	<1.0	1.0	ug/L							
<i>Surrogate: Dibromofluoromethane</i>	49.0		ug/L	50.2		97.7	75-136			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	52.6		ug/L	50.4		104	61-142			
<i>Surrogate: Toluene-d8</i>	48.1		ug/L	50.5		95.4	82-121			
<i>Surrogate: 4-Bromofluorobenzene</i>	50.2		ug/L	50.2		100	80-116			
LCS (1HJ1776-BS1)	Prepared: 10/29/24 00:00 Analyzed: 10/29/24 10:31									
Carbon Disulfide	93.38	1.0	ug/L	100		93.4	72-162			
<i>Surrogate: Dibromofluoromethane</i>	50.8		ug/L	50.2		101	75-136			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	50.9		ug/L	50.4		101	61-142			
<i>Surrogate: Toluene-d8</i>	49.4		ug/L	50.5		97.8	82-121			
<i>Surrogate: 4-Bromofluorobenzene</i>	49.5		ug/L	50.2		98.6	80-116			

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CERTIFICATE OF ANALYSIS

1HJ1549

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1776 - EPA 5030B - EPA 8260B										
LCS (1HJ1776-BS2) Prepared: 10/29/24 00:00 Analyzed: 10/29/24 21:42										
Carbon Disulfide	89.88	1.0	ug/L	100		89.9	72-162			
Surrogate: Dibromofluoromethane	48.6		ug/L	50.2		96.8	75-136			
Surrogate: 1,2-Dichloroethane-d4	50.5		ug/L	50.4		100	61-142			
Surrogate: Toluene-d8	50.2		ug/L	50.5		99.4	82-121			
Surrogate: 4-Bromofluorobenzene	49.9		ug/L	50.2		99.5	80-116			
LCS Dup (1HJ1776-BSD1) Prepared: 10/29/24 00:00 Analyzed: 10/29/24 10:54										
Carbon Disulfide	87.66	1.0	ug/L	100		87.7	72-162	6.32	24	
Surrogate: Dibromofluoromethane	50.4		ug/L	50.2		100	75-136			
Surrogate: 1,2-Dichloroethane-d4	52.0		ug/L	50.4		103	61-142			
Surrogate: Toluene-d8	49.4		ug/L	50.5		97.9	82-121			
Surrogate: 4-Bromofluorobenzene	50.4		ug/L	50.2		100	80-116			
LCS Dup (1HJ1776-BSD2) Prepared: 10/29/24 00:00 Analyzed: 10/29/24 22:05										
Carbon Disulfide	82.70	1.0	ug/L	100		82.7	72-162	8.32	24	
Surrogate: Dibromofluoromethane	47.4		ug/L	50.2		94.4	75-136			
Surrogate: 1,2-Dichloroethane-d4	50.8		ug/L	50.4		101	61-142			
Surrogate: Toluene-d8	50.5		ug/L	50.5		100	82-121			
Surrogate: 4-Bromofluorobenzene	50.3		ug/L	50.2		100	80-116			
Matrix Spike (1HJ1776-MS1) Source: 1HJ1549-02RE1 Prepared: 10/29/24 00:00 Analyzed: 10/30/24 06:53										
Carbon Disulfide	879.6	10.0	ug/L	1000	ND	88.0	71-163			
Surrogate: Dibromofluoromethane	474		ug/L	502		94.3	75-136			
Surrogate: 1,2-Dichloroethane-d4	499		ug/L	504		99.2	61-142			
Surrogate: Toluene-d8	505		ug/L	505		100	82-121			
Surrogate: 4-Bromofluorobenzene	499		ug/L	502		99.4	80-116			
Matrix Spike (1HJ1776-MS2) Source: 1HJ1617-12RE1 Prepared: 10/29/24 00:00 Analyzed: 10/30/24 07:38										
Carbon Disulfide	831.9	10.0	ug/L	1000	ND	83.2	71-163			
Surrogate: Dibromofluoromethane	470		ug/L	502		93.7	75-136			
Surrogate: 1,2-Dichloroethane-d4	491		ug/L	504		97.5	61-142			
Surrogate: Toluene-d8	503		ug/L	505		99.6	82-121			
Surrogate: 4-Bromofluorobenzene	507		ug/L	502		101	80-116			
Matrix Spike Dup (1HJ1776-MSD1) Source: 1HJ1549-02RE1 Prepared: 10/29/24 00:00 Analyzed: 10/30/24 07:16										
Carbon Disulfide	814.3	10.0	ug/L	1000	ND	81.4	71-163	7.71	22	
Surrogate: Dibromofluoromethane	468		ug/L	502		93.2	75-136			
Surrogate: 1,2-Dichloroethane-d4	494		ug/L	504		98.1	61-142			
Surrogate: Toluene-d8	503		ug/L	505		99.6	82-121			
Surrogate: 4-Bromofluorobenzene	506		ug/L	502		101	80-116			
Matrix Spike Dup (1HJ1776-MSD2) Source: 1HJ1617-12RE1 Prepared: 10/29/24 00:00 Analyzed: 10/30/24 08:01										
Carbon Disulfide	810.8	10.0	ug/L	1000	ND	81.1	71-163	2.57	22	
Surrogate: Dibromofluoromethane	474		ug/L	502		94.3	75-136			
Surrogate: 1,2-Dichloroethane-d4	498		ug/L	504		98.9	61-142			



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CERTIFICATE OF ANALYSIS

1HJ1549

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1HJ1776 - EPA 5030B - EPA 8260B

Matrix Spike Dup (1HJ1776-MSD2) Source: 1HJ1617-12RE1 Prepared: 10/29/24 00:00 Analyzed: 10/30/24 08:01

Surrogate: Toluene-d8	501		ug/L	505		99.2	82-121			
Surrogate: 4-Bromofluorobenzene	512		ug/L	502		102	80-116			

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1HJ1343 - EPA 3005A Total Recoverable Metals - EPA 6020A

Blank (1HJ1343-BLK1) Prepared: 10/22/24 16:05 Analyzed: 10/23/24 21:15

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 (1HJ1343-BS1) Prepared: 10/22/24 16:05 Analyzed: 10/23/24 21:22

Antimony, total	0.0927	0.0020	mg/L	0.100		92.7	80-120			
Arsenic, total	0.0946	0.0040	mg/L	0.100		94.6	80-120			
Barium, total	0.103	0.0040	mg/L	0.100		103	80-120			
Beryllium, total	0.0995	0.0040	mg/L	0.100		99.5	80-120			
Cadmium, total	0.0939	0.0008	mg/L	0.100		93.9	80-120			
Chromium, total	0.0964	0.0080	mg/L	0.100		96.4	80-120			
Cobalt, total	0.0981	0.0004	mg/L	0.100		98.1	80-120			
Copper, total	0.0958	0.0040	mg/L	0.100		95.8	80-120			
Lead, total	0.0972	0.0040	mg/L	0.100		97.2	80-120			
Nickel, total	0.0977	0.0040	mg/L	0.100		97.7	80-120			
Selenium, total	0.0894	0.0040	mg/L	0.100		89.4	80-120			
Silver, total	0.0968	0.0040	mg/L	0.100		96.8	80-120			
Thallium, total	0.0955	0.0020	mg/L	0.100		95.5	80-120			
Vanadium, total	0.0992	0.0200	mg/L	0.100		99.2	80-120			
Zinc, total	0.0910	0.0200	mg/L	0.100		91.0	80-120			

Matrix Spike (1HJ1343-MS1) Source: 1HJ1549-01 Prepared: 10/22/24 16:05 Analyzed: 10/23/24 21:40

Antimony, total	0.0932	0.0020	mg/L	0.100	0.0005	93.2	75-125			
Arsenic, total	0.0966	0.0040	mg/L	0.100	0.0022	94.4	75-125			



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HJ1549

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1343 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Matrix Spike (1HJ1343-MS1) Source: 1HJ1549-01 Prepared: 10/22/24 16:05 Analyzed: 10/23/24 21:40										
Barium, total	0.166	0.0040	mg/L	0.100	0.0670	99.3	75-125			
Beryllium, total	0.0921	0.0040	mg/L	0.100	ND	92.1	75-125			
Cadmium, total	0.0916	0.0008	mg/L	0.100	0.0007	91.0	75-125			
Chromium, total	0.0935	0.0080	mg/L	0.100	0.0007	92.8	75-125			
Cobalt, total	0.0957	0.0004	mg/L	0.100	0.0005	95.2	75-125			
Copper, total	0.0904	0.0040	mg/L	0.100	0.0020	88.4	75-125			
Lead, total	0.0920	0.0040	mg/L	0.100	ND	92.0	75-125			
Nickel, total	0.0980	0.0040	mg/L	0.100	0.0052	92.8	75-125			
Selenium, total	0.0912	0.0040	mg/L	0.100	ND	91.2	75-125			
Silver, total	0.0944	0.0040	mg/L	0.100	ND	94.4	75-125			
Thallium, total	0.0922	0.0020	mg/L	0.100	ND	92.2	75-125			
Vanadium, total	0.0993	0.0200	mg/L	0.100	ND	99.3	75-125			
Zinc, total	0.0947	0.0200	mg/L	0.100	ND	94.7	75-125			
Matrix Spike Dup (1HJ1343-MSD1) Source: 1HJ1549-01 Prepared: 10/22/24 16:05 Analyzed: 10/23/24 21:46										
Antimony, total	0.0915	0.0020	mg/L	0.100	0.0005	91.5	75-125	1.92	20	
Arsenic, total	0.0947	0.0040	mg/L	0.100	0.0022	92.5	75-125	1.98	20	
Barium, total	0.166	0.0040	mg/L	0.100	0.0670	98.6	75-125	0.402	20	
Beryllium, total	0.0909	0.0040	mg/L	0.100	ND	90.9	75-125	1.29	20	
Cadmium, total	0.0901	0.0008	mg/L	0.100	0.0007	89.4	75-125	1.70	20	
Chromium, total	0.0934	0.0080	mg/L	0.100	0.0007	92.7	75-125	0.101	20	
Cobalt, total	0.0966	0.0004	mg/L	0.100	0.0005	96.1	75-125	0.972	20	
Copper, total	0.0921	0.0040	mg/L	0.100	0.0020	90.1	75-125	1.86	20	
Lead, total	0.0920	0.0040	mg/L	0.100	ND	92.0	75-125	0.0444	20	
Nickel, total	0.0972	0.0040	mg/L	0.100	0.0052	92.0	75-125	0.796	20	
Selenium, total	0.0894	0.0040	mg/L	0.100	ND	89.4	75-125	2.01	20	
Silver, total	0.0938	0.0040	mg/L	0.100	ND	93.8	75-125	0.613	20	
Thallium, total	0.0925	0.0020	mg/L	0.100	ND	92.5	75-125	0.334	20	
Vanadium, total	0.0995	0.0200	mg/L	0.100	ND	99.5	75-125	0.216	20	
Zinc, total	0.0917	0.0200	mg/L	0.100	ND	91.7	75-125	3.20	20	
Post Spike (1HJ1343-PS1) Source: 1HJ1549-01 Prepared: 10/22/24 16:05 Analyzed: 10/23/24 21:52										
Antimony, total	0.0796		mg/L	0.0800	0.0004	99.0	80-120			
Arsenic, total	0.0822		mg/L	0.0800	0.0021	100	80-120			
Barium, total	0.151		mg/L	0.0800	0.0656	107	80-120			
Beryllium, total	0.0768		mg/L	0.0800	-0.00002	96.0	80-120			
Cadmium, total	0.0782		mg/L	0.0800	0.0007	97.0	80-120			
Chromium, total	0.0799		mg/L	0.0800	0.0007	99.0	80-120			
Cobalt, total	0.0844		mg/L	0.0800	0.0005	105	80-120			
Copper, total	0.0787		mg/L	0.0800	0.0020	95.9	80-120			
Lead, total	0.0798		mg/L	0.0800	0.0002	99.5	80-120			
Nickel, total	0.0850		mg/L	0.0800	0.0051	99.9	80-120			
Selenium, total	0.0766		mg/L	0.0800	0.0015	94.0	80-120			
Silver, total	0.0809		mg/L	0.0800	-0.0002	101	80-120			
Thallium, total	0.0809		mg/L	0.0800	-0.000006	101	80-120			



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HJ1549

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1343 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Post Spike (1HJ1343-PS1)										
			Source: 1HJ1549-01		Prepared: 10/22/24 16:05 Analyzed: 10/23/24 21:52					
Vanadium, total	0.0864		mg/L	0.0800	0.0059	101	80-120			
Zinc, total	0.0812		mg/L	0.0800	0.0092	90.0	80-120			

Definitions

- M1:** Matrix spike recovery is above acceptance limits.
- M2:** Matrix spike recovery is below acceptance limits.
- Q2:** LCS recovery is above acceptance limits.
- R1:** Duplicate RPD is outside acceptance criteria.
- RL:** Reporting Limit
- RPD:** Relative Percent Difference
- S:** Spike recovery outside of acceptance limits.

Cooler Receipt Log

Cooler ID: Default Cooler Temp: 0.3°C

Cooler Inspection Checklist

Custody Seals	No	Containers Intact	Yes
COC/Labels Agree	Yes	Preservation Confirmed	No
Received On Ice	Yes		

Report Comments

The data and information on this, and other accompanying documents, represents only the sample(s) analyzed. This report is incomplete unless all pages indicated in the footnote are present and an authorized signature is included. The services were provided under and subject to Microbac's standard terms and conditions which can be located and reviewed at <<https://www.microbac.com/standard-terms-conditions>>.

Reviewed and Approved By:

Heather Murphy
Customer Relationship Specialist
heather.murphy@microbac.com
11/01/24 14:32

CHAIN OF CUSTODY RECORD



600 East 17th Street South
 Newton, IA 50208
 641-792-8451



1 H J 1 5 4 9

HLW Engineering
 PM: Heather Murphy

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 dated: 10/3/2024 2:35:13P
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SITE INFORMATION

Sampler: Todd Whipple

Project: Northern Plains SLF-New Regs
6021-

REPORT TO

Todd Whipple
 HLW Engineering
 204 West Broad St
 Story City, IA 50248

ACCOUNTS PAYABLE

Accounts Payable
 Northern Plains Regional Landfill
 3032 420th Ave, PO Box 117
 Graettinger, IA 51342

SPECIAL INSTRUCTIONS

None

Turn Around Time
 Standard RUSH, need by ___/___/___

LAB USE ONLY

Work Order 1HJ1549

Temperature 0-3

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-11 (up)	Aqueous	GRAB	10/16/24	11:24	7	Indfill-app1-voc-group Indfill-app1-metals-6020	01
-001	MW-12 (up)	Aqueous	GRAB	10/16/24	11:34	7	Indfill-app1-voc-group Indfill-app1-metals-6020	02
-001	MW-17 (up)	Aqueous	GRAB	10/16/24	12:25	7	Indfill-app1-voc-group Indfill-app1-metals-6020	03
-001	MW-3AR	Aqueous	GRAB	10/16/24	14:20	7	Indfill-app1-voc-group Indfill-app1-metals-6020	04
-001	MW-6B DRY	Aqueous	GRAB	10/16/24	—	0	Indfill-app1-voc-group Indfill-app1-metals-6020	—
-001	MW-7A DRY	Aqueous	GRAB	10/16/24	—	0	Indfill-app1-voc-group Indfill-app1-metals-6020	—
-001	MW-7B	Aqueous	GRAB	10/16/24	13:42	7	Indfill-app1-voc-group Indfill-app1-metals-6020	05

Relinquished By [Signature] Date/Time 10/18/24

Relinquished By _____ Date/Time _____

Received for Lab By [Signature] Date/Time 10:40

Remarks:

Received By _____ Date/Time _____

CHAIN OF CUSTODY RECORD



600 East 17th Street So.
 Newton, IA 50208
 641-792-8451



1 H J 1 5 4 9

HLW Engineering
 PM: Heather Murphy

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 www.keystonelabs.com

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SITE INFORMATION

Sampler: TODD WHIPPLE
 Project: Northern Plains SLF-Now Regs
 6021-

REPORT TO

Todd Whipple
 HLW Engineering
 204 West Broad St
 Story City, IA 50248

Accounts Payable
 Northern Plains Regional Landfill
 3032 420th Ave, PO Box 117
 Graettinger, IA 51342

SPECIAL INSTRUCTIONS

None

Turn Around Time

Standard RUSH, need by ___/___/___

LAB USE ONLY

Work Order 1HJ1549
 Temperature 83
 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
-00	NW-8	Aqueous	GRAB	10/16/24	13:08	7	Indfil1-app1-voc-group Indfil1-app1-metals-6020	06
-00	NW-9	Aqueous	GRAB	10/16/24	12:38	7	Indfil1-app1-voc-group Indfil1-app1-metals-6020	07
-00	NW-10	Aqueous	GRAB	10/16/24	10:11	7	Indfil1-app1-voc-group Indfil1-app1-metals-6020	08
-00	NW-14	Aqueous	GRAB	10/16/24	14:05	7	Indfil1-app1-voc-group Indfil1-app1-metals-6020	09
-00	NW-15	Aqueous	GRAB	10/16/24	13:32	7	Indfil1-app1-voc-group Indfil1-app1-metals-6020	10
-00	NW-16	Aqueous	GRAB	10/16/24	12:55	7	Indfil1-app1-voc-group Indfil1-app1-metals-6020	11
-00	GU-1	Aqueous	GRAB	10/16/24	12:09	7	Indfil1-app1-voc-group Indfil1-app1-metals-6020	12

[Signature] 10/18/24
 Relinquished By Date/Time

Relinquished By Date/Time

Received By Date/Time

[Signature] 10/18/24 10:40
 Received for Lab By Date/Time

Remarks:



CHAIN OF CUSTODY RECORD

600 East 17th Street Sou
Newton, IA 50208
641-792-8451



1 H J 1 5 4 9

HLW Engineering
PM: Heather Murphy

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SITE INFORMATION

Sampler: TODD WHIPPLE
Project: Northern Plains SLF-New Regs
6021-

REPORT TO

Todd Whipple
HLW Engineering
204 West Broad St
Story City, IA 50248

Accounts Payable
Northern Plains Regional Landfill
3032 420th Ave, PO Box 117
Grattinger, IA 51342

SPECIAL INSTRUCTIONS

None

Turn Around Time

Standard RUSH, need by ___/___/___

LAB USE ONLY

Work Order 1HJ1549
Temperature 8.3
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	GU-2	Aqueous	GRAB	10/16/24	14:31	7	Indfll-app1-voc-group Indfll-app1-metals-6020	13
-001	Duplicate	Aqueous	GRAB	10/16/24	✓	1	Indfll-app1-voc-group Indfll-app1-metals-6020	14
-001	MW-13 (up)	Aqueous	GRAB	10/16/24	11:41	1	Indfll-app1-metals-6020	15
-001	MW-18 (up)	Aqueous	GRAB	10/16/24	10:45	1	Indfll-app1-metals-6020	16
-001	MW-19 (up)	Aqueous	GRAB	10/16/24	10:53	1	Indfll-app1-metals-6020	17
-001	MW-20 (up)	Aqueous	GRAB	10/16/24	10:29	1	Indfll-app1-metals-6020	18
-001	MW-21 (up)	Aqueous	GRAB	10/16/24	10:34	1	Indfll-app1-metals-6020	19

[Signature] 10/18/24
Relinquished By Date/Time

Relinquished By Date/Time

Received By Date/Time

[Signature] 10/18/24 10:40
Received for Lab By Date/Time

Remarks:

Appendix F

Summary of SSI and Comparison of 95% LCL to GWPS

Date	Well	Compound	Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	95% UCL (ug/L)	GWPS (ug/L)
4/7/14	GU-2	zinc	39.9	45.3	---	---	2,000
10/23/14	GU-2	zinc	24.6	45.3	---	---	2,000
4/2/15	GU-2	zinc	<8.0	45.3	---	---	2,000
10/26/15	GU-2	zinc	24.5	45.3	10.491	36.009	2,000
4/1/16	GU-2	zinc	<8.0	45.3	4.000	24.550	2,000
10/19/16	GU-2	zinc	12.9	45.3	2.933	19.767	2,000
4/17/17	GU-2	zinc	10.9	45.3	5.699	20.451	2,000
10/11/17	GU-2	zinc	<8.0	45.3	3.937	11.963	2,000
06/01/18	GU-2	zinc	13.5	45.3	6.549	14.101	2,000
10/3/18	GU-2	zinc	60.6	45.3	0.000	44.662	2,000
1/3/19	GU-2	zinc	15.2	45.3	1.385	45.265	2,000
4/8/19	GU-2	zinc	10.2	45.3	4.171	45.579	2,000
10/11/19	GU-2	zinc	<20	45.3	2.767	45.233	2,000
4/27/20	GU-2	zinc	21.5	45.3	9.537	18.913	2,000
10/9/20	GU-2	zinc	<20	45.3	7.974	17.876	2,000
4/9/21	GU-2	zinc	<20	45.3	7.896	17.855	2,000
10/25/21	GU-2	zinc	33.1	45.3	9.077	28.223	2,000
4/11/22	GU-2	zinc	<20	45.3	5.772	25.778	2,000
10/12/22	GU-2	zinc	74.1	45.3	5.621	57.979	2,000
1/6/23	GU-2	zinc	53.3	45.3	18.857	66.393	2,000
4/6/23	GU-2	zinc	<20	45.3	9.011	64.689	2,000
10/9/23	GU-2	zinc	<20	45.3	9.011	64.689	2,000
4/4/24	GU-2	zinc	<20	45.3	2.076	39.574	2,000
10/16/24	GU-2	zinc	<20	45.3	10.000	10.000	2,000
4/6/23	GU-2	Bis(2ethylhexyl)phthalate	7.0	6.0	---	---	6.0
6/27/23	GU-2	Bis(2ethylhexyl)phthalate	7.0	6.0	---	---	6.0
10/9/23	GU-2	Bis(2ethylhexyl)phthalate	<6.0	6.0	---	---	6.0
4/4/24	GU-2	Bis(2ethylhexyl)phthalate	NT	6.0	---	---	6.0
10/16/24	GU-2	Bis(2ethylhexyl)phthalate	NT	6.0	---	---	6.0

Date	Well	Compound	Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	95% UCL (ug/L)	GWPS (ug/L)
4/1/16	MW-3AR	cadmium	0.8	1.3	0.003	4.347	5.0
10/19/16	MW-3AR	cadmium	0.8	1.3	0.000	4.307	5.0
4/17/17	MW-3AR	cadmium	<0.8	1.3	0.337	1.413	5.0
10/11/17	MW-3AR	cadmium	1.6	1.3	0.308	1.492	5.0
06/01/18	MW-3AR	cadmium	<0.8	1.3	0.13	1.465	5.0
10/3/18	MW-3AR	cadmium	1.3	1.3	0.198	1.652	5.0
4/8/19	MW-3AR	cadmium	---	1.3	0.198	1.652	5.0
10/11/19	MW-3AR	cadmium	0.8	1.3	0.400	1.650	5.0
4/27/20	MW-3AR	cadmium	<0.8	1.3	0.355	1.095	5.0
10/9/20	MW-3AR	cadmium	dry	4.0	0.355	1.095	5.0
4/9/21	MW-3AR	cadmium	<0.8	4.0	0.355	1.095	5.0
10/25/21	MW-3AR	cadmium	<0.8	4.0	0.006	0.634	5.0
4/11/22	MW-3AR	cadmium	dry	4.0	0.006	0.634	5.0
10/12/22	MW-3AR	cadmium	dry	4.0	0.006	0.634	5.0
4/6/23	MW-3AR	cadmium	1.2	4.0	0.000	0.894	5.0
10/9/23	MW-3AR	cadmium	dry	4.0	0.000	0.894	5.0
4/4/24	MW-3AR	cadmium	<0.8	1.7	0.254	0.946	5.0
10/16/24	MW-3AR	cadmium	1.0	1.7	0.393	1.107	5.0
4/1/16	MW-3AR	cobalt	2.3	1.0	0.669	3.981	4.0*
10/19/16	MW-3AR	cobalt	1.7	1.0	0.558	3.942	4.0*
4/17/17	MW-3AR	cobalt	1.3	1.0	0.864	3.886	4.0*
10/11/17	MW-3AR	cobalt	<0.8	1.0	1.322	2.328	4.0*
06/01/18	MW-3AR	cobalt	<0.8	1.0	1.360	2.140	4.0*
10/3/18	MW-3AR	cobalt	<0.8	1.0	1.413	2.237	4.0*
4/8/19	MW-3AR	cobalt	---	4.0	1.413	2.237	4.0*
10/11/19	MW-3AR	cobalt	<0.8	4.0	2.000	2.000	4.0*
4/27/20	MW-3AR	cobalt	<0.4	4.0	0.263	0.437	4.0*
10/9/20	MW-3AR	cobalt	dry	4.0	0.263	0.437	4.0*
4/9/21	MW-3AR	cobalt	<0.4	4.0	0.200	0.200	4.0*
10/25/21	MW-3AR	cobalt	1.1	4.0	0.105	0.885	4.0*
4/11/22	MW-3AR	cobalt	dry	4.0	0.105	0.885	4.0*
10/12/22	MW-3AR	cobalt	dry	4.0	0.105	0.885	4.0*
4/6/23	MW-3AR	cobalt	<0.4	4.0	0.163	0.987	4.0*
10/9/23	MW-3AR	cobalt	dry	4.0	0.163	0.987	4.0*
4/4/24	MW-3AR	cobalt	0.8	4.0	0.185	0.965	4.0*
10/16/24	MW-3AR	cobalt	0.8	4.0	0.398	1.052	4.0*
4/1/16	MW-3AR	copper	7.2	8.4	0.934	8.816	1,300
10/19/16	MW-3AR	copper	<4.0	8.4	0.934	8.816	1,300
4/17/17	MW-3AR	copper	<4.0	8.4	0.242	6.358	1,300
10/11/17	MW-3AR	copper	4.9	8.4	1.061	6.989	1,300
06/01/18	MW-3AR	copper	4.0	8.4	1.506	4.944	1,300
10/3/18	MW-3AR	copper	9.8	8.4	1.278	9.072	1,300
4/8/19	MW-3AR	copper	---	8.4	1.278	9.072	1,300
10/11/19	MW-3AR	copper	4.3	8.4	2.544	8.956	1,300
4/27/20	MW-3AR	copper	4.0	8.4	3.054	7.996	1,300
10/9/20	MW-3AR	copper	dry	8.4	3.054	7.996	1,300
4/9/21	MW-3AR	copper	4.2	8.4	3.054	7.996	1,300
10/25/21	MW-3AR	copper	4.4	8.4	4.077	4.373	1,300
4/11/22	MW-3AR	copper	dry	8.4	4.077	4.373	1,300

10/12/22	MW-3AR	copper	dry	8.4	4.077	4.373	1,300
4/6/23	MW-3AR	copper	10.2	8.4	1.076	9.324	1,300
10/12/22	MW-3AR	copper	dry	8.4	1.076	9.324	1,300
4/4/24	MW-3AR	copper	<4.0	8.4	2.687	4.613	1,300
10/16/24	MW-3AR	copper	<4.0	8.4	1.998	4.302	1,300

Date	Well	Compound	Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	95% UCL (ug/L)	GWPS (ug/L)
10/26/15	MW-6B	selenium	<4	4.0	---	---	50.0
4/1/16	MW-6B	selenium	<4	4.0	---	---	50.0
10/19/16	MW-6B	selenium	<4	4.0	---	---	50.0
4/17/17	MW-6B	selenium	<4	4.0	2.0	2.0	50.0
10/11/17	MW-6B	selenium	<4	4.0	2.0	2.0	50.0
06/01/18	MW-6B	selenium	<4	4.0	2.0	2.0	50.0
10/3/18	MW-6B	selenium	<4	4.0	2.0	2.0	50.0
4/8/19	MW-6B	selenium	<4	4.0	2.0	2.0	50.0
10/11/19	MW-6B	selenium	<4	4.0	2.0	2.0	50.0
4/27/20	MW-6B	selenium	<4	4.0	2.0	2.0	50.0
10/9/20	MW-6B	selenium	dry	4.0	2.0	2.0	50.0
4/9/21	MW-6B	selenium	7.4	4.0	2.0	2.0	50.0
10/25/21	MW-6B	selenium	<4	4.0	2.0	2.0	50.0
4/11/22	MW-6B	selenium	<4	4.0	2.0	2.0	50.0
10/12/22	MW-6B	selenium	dry	4.0	2.0	2.0	50.0
4/6/23	MW-6B	selenium	6.1	4.0	1.089	7.661	50.0
10/9/23	MW-6B	selenium	dry	4.0	1.089	7.661	50.0
4/4/24	MW-6B	selenium	<4	4.0	1.250	6.794	50.0
10/16/24	MW-6B	selenium	dry	4.0	1.250	6.794	50.0
4/1/16	MW-6B	zinc	<8.0	45.3	4.0	4.0	2,000
10/19/16	MW-6B	zinc	<8.0	45.3	4.0	4.0	2,000
4/17/17	MW-6B	zinc	<8.0	45.3	4.0	4.0	2,000
10/11/17	MW-6B	zinc	<8.0	45.3	4.0	4.0	2,000
06/01/18	MW-6B	zinc	<8.0	45.3	4.0	4.0	2,000
10/3/18	MW-6B	zinc	47.7	45.3	0.000	40.627	2,000
1/3/19	MW-6B	zinc	122.0	45.3	0.000	40.627	2,000
4/8/19	MW-6B	zinc	<8.0	45.3	0.000	109.907	2,000
10/11/19	MW-6B	zinc	<20.0	45.3	0.000	109.907	2,000
4/27/20	MW-6B	zinc	<20.0	45.3	0.000	85.924	2,000
10/9/20	MW-6B	zinc	dry	45.3	0.000	85.924	2,000
4/9/21	MW-6B	zinc	<20.0	45.3	10.0	10.0	2,000
10/25/21	MW-6B	zinc	<20.0	45.3	10.0	10.0	2,000
4/11/22	MW-6B	zinc	<20.0	45.3	10.0	10.0	2,000
10/12/22	MW-6B	zinc	dry	45.3	10.0	10.0	2,000
4/6/23	MW-6B	zinc	<20.0	45.3	10.0	10.0	2,000
10/9/23	MW-6B	zinc	dry	45.3	10.0	10.0	2,000
4/4/24	MW-6B	zinc	<20.0	45.3	10.0	10.0	2,000
10/16/24	MW-6B	zinc	dry	45.3	10.0	10.0	2,000
4/1/16	MW-6B	Bis(2ethylhexyl)phthalate	---	6.0	---	---	6.0
10/19/16	MW-6B	Bis(2ethylhexyl)phthalate	---	6.0	---	---	6.0
4/17/17	MW-6B	Bis(2ethylhexyl)phthalate	---	6.0	---	---	6.0
10/11/17	MW-6B	Bis(2ethylhexyl)phthalate	---	6.0	---	---	6.0
06/01/18	MW-6B	Bis(2ethylhexyl)phthalate	---	6.0	---	---	6.0
10/3/18	MW-6B	Bis(2ethylhexyl)phthalate	---	6.0	---	---	6.0
4/8/19	MW-6B	Bis(2ethylhexyl)phthalate	29.0	6.0	---	---	6.0
10/11/19	MW-6B	Bis(2ethylhexyl)phthalate	<6.0	6.0	---	---	6.0
4/27/20	MW-6B	Bis(2ethylhexyl)phthalate	13.0	6.0	---	---	6.0
10/9/20	MW-6B	Bis(2ethylhexyl)phthalate	dry	6.0	---	---	6.0
4/9/21	MW-6B	Bis(2ethylhexyl)phthalate	<6.0	6.0	1.3699	22.6302	6.0
10/25/21	MW-6B	Bis(2ethylhexyl)phthalate	<6.0	6.0	0.000	11.381	6.0
4/11/22	MW-6B	Bis(2ethylhexyl)phthalate	<6.0	6.0	0.000	11.381	6.0
10/12/22	MW-6B	Bis(2ethylhexyl)phthalate	dry	6.0	0.000	11.381	6.0

4/6/23	MW-6B	Bis(2ethylhexyl)phthalate	<6.0	6.0	3.000	3.000	6.0
10/12/22	MW-6B	Bis(2ethylhexyl)phthalate	dry	6.0	3.000	3.000	6.0
4/4/24	MW-6B	Bis(2ethylhexyl)phthalate	<6.0	6.0	3.000	3.000	6.0
10/16/24	MW-6B	Bis(2ethylhexyl)phthalate	dry	6.0	3.000	3.000	6.0

Date	Well	Compound	Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	95% UCL (ug/L)	GWPS (ug/L)
4/1/16	MW-7A	cobalt	0.8	1.0	0.997	2.503	4.0*
10/19/16	MW-7A	cobalt	<0.8	1.0	0.997	20503	4.0*
4/17/17	MW-7A	cobalt	1.2	1.0	0.773	2.327	4.0*
10/11/17	MW-7A	cobalt	0.8	1.0	0.535	1.865	4.0*
06/01/18	MW-7A	cobalt	<0.8	1.0	0.794	2.206	4.0*
10/3/18	MW-7A	cobalt	<0.8	1.0	0.794	2.206	4.0*
4/8/19	MW-7A	cobalt	0.9	4.0	0.643	2.207	4.0*
10/11/19	MW-7A	cobalt	1.6	4.0	1.015	2.235	4.0*
4/27/20	MW-7A	cobalt	0.7	4.0	0.458	1.342	4.0*
10/9/20	MW-7A	cobalt	dry	4.0	0.458	1.342	4.0*
4/9/21	MW-7A	cobalt	1.1	4.0	0.621	1.529	4.0*
10/25/21	MW-7A	cobalt	0.9	4.0	0.621	1.529	4.0*
4/11/22	MW-7A	cobalt	0.9	4.0	0.708	1.092	4.0*
10/12/22	MW-7A	cobalt	dry	4.0	0.708	1.092	4.0*
4/6/23	MW-7A	cobalt	1.6	4.0	0.736	1.514	4.0*
10/9/23	MW-7A	cobalt	dry	4.0	0.736	1.514	4.0*
4/4/24	MW-7A	cobalt	<0.4	4.0	0.405	1.395	4.0*
10/16/24	MW-7A	cobalt	dry	4.0	0.405	1.395	4.0*
4/1/16	MW-7A	cadmium	<0.8	1.3	0.399	0.751	5.0
10/19/16	MW-7A	cadmium	1.1	1.3	0.387	1.063	5.0
4/17/17	MW-7A	cadmium	1.5	1.3	0.324	1.476	5.0
10/11/17	MW-7A	cadmium	<0.8	1.3	0.324	1.476	5.0
06/01/18	MW-7A	cadmium	<0.8	1.3	0.324	1.476	5.0
10/3/18	MW-7A	cadmium	0.9	1.3	0.294	1.406	5.0
4/8/19	MW-7A	cadmium	<0.8	1.3	0.231	0.819	5.0
10/11/19	MW-7A	cadmium	0.9	1.3	0.310	0.990	5.0
4/27/20	MW-7A	cadmium	<0.8	1.3	0.400	0.900	5.0
10/9/20	MW-7A	cadmium	dry	4.0	0.400	0.900	5.0
4/9/21	MW-7A	cadmium	<0.8	4.0	0.231	0.819	5.0
10/25/21	MW-7A	cadmium	<0.8	4.0	0.231	0.819	5.0
4/11/22	MW-7A	cadmium	<0.8	4.0	0.400	0.400	5.0
10/12/22	MW-7A	cadmium	dry	4.0	0.400	0.400	5.0
4/6/23	MW-7A	cadmium	<0.8	4.0	0.400	0.400	5.0
10/9/23	MW-7A	cadmium	dry	4.0	0.400	0.400	5.0
4/4/24	MW-7A	cadmium	<0.8	1.7	0.400	0.400	5.0
10/16/24	MW-7A	cadmium	dry	1.7	0.400	0.400	5.0
4/1/16	MW-7A	nickel	43.4	13.605	16.233	51.717	100.
10/19/16	MW-7A	nickel	42.5	13.605	36.677	46.423	100.
4/17/17	MW-7A	nickel	62.4	13.605	37.142	59.408	100.
10/11/17	MW-7A	nickel	37.9	13.605	33.802	59.298	100.
06/01/18	MW-7A	nickel	32.3	13.605	28.367	59.183	100.
10/3/18	MW-7A	nickel	40.2	13.605	27.646	58.754	100.
4/8/19	MW-7A	nickel	34.9	13.250	32.266	40.384	100.
10/11/19	MW-7A	nickel	40.9	13.00	32.181	41.969	100.
4/27/20	MW-7A	nickel	26.3	12.6	27.739	41.411	100.
10/9/20	MW-7A	nickel	dry	12.6	27.739	41.411	100.
4/9/21	MW-7A	nickel	46.3	12.6	27.014	47.186	100.
10/25/21	MW-7A	nickel	25.8	12.6	22.625	47.025	100.
4/11/22	MW-7A	nickel	54.8	15.6	21.166	55.434	100.
10/12/22	MW-7A	nickel	dry	15.6	21.166	55.434	100.
4/6/23	MW-7A	nickel	27.8	15.6	22.009	55.341	100.
10/9/23	MW-7A	nickel	dry	17.1	22.009	55.341	100.
4/4/24	MW-7A	nickel	12.6	17.1	15.027	45.573	100.

10/16/24	MW-7A	nickel	dry	17.1	15.027	45.573	100.
4/1/16	MW-7A	zinc	<8.0	45.3	0.000	29.019	2,000
10/19/16	MW-7A	zinc	<8.0	45.3	0.000	27.887	2,000
4/17/17	MW-7A	zinc	11.4	45.3	1.498	10.202	2,000
10/11/17	MW-7A	zinc	9.2	45.3	2.743	11.557	2,000
06/01/18	MW-7A	zinc	<8.0	45.3	2.743	11.557	2,000
10/3/18	MW-7A	zinc	65.0	45.3	0.000	56.005	2,000
4/8/19	MW-7A	zinc	<8.0	45.3	0.000	55.526	2,000
10/11/19	MW-7A	zinc	<20.0	45.3	0.000	55.127	2,000
4/27/20	MW-7A	zinc	<20.0	45.3	0.000	47.053	2,000
10/9/20	MW-7A	zinc	dry	45.3	0.000	47.053	2,000
4/9/21	MW-7A	zinc	<20.0	45.3	10.000	10.000	2,000
10/25/21	MW-7A	zinc	<20.0	45.3	10.000	10.000	2,000
4/11/22	MW-7A	zinc	<20.0	45.3	10.000	10.000	2,000
10/12/22	MW-7A	zinc	dry	45.3	10.000	10.000	2,000
4/6/23	MW-7A	zinc	<20.0	45.3	10.000	10.000	2,000
10/9/23	MW-7A	zinc	dry	45.3	10.000	10.000	2,000
4/4/24	MW-7A	zinc	<20.0	45.3	10.000	10.000	2,000
10/16/24	MW-7A	zinc	dry	45.3	10.000	10.000	2,000
4/1/16	MW-7A	1,1-dichloroethane	<1.0	1.0	0.000	2.176	140.
10/19/16	MW-7A	1,1-dichloroethane	2.2	1.0	0.000	1.925	140.
4/17/17	MW-7A	1,1-dichloroethane	<1.0	1.0	0.000	1.925	140.
10/11/17	MW-7A	1,1-dichloroethane	3.2	1.0	0.031	3.169	140.
06/01/18	MW-7A	1,1-dichloroethane	2.2	1.0	0.707	3.343	140.
10/3/18	MW-7A	1,1-dichloroethane	2.6	1.0	0.762	3.488	140.
4/8/19	MW-7A	1,1-dichloroethane	<1.0	1.0	0.762	3.488	140
10/11/19	MW-7A	1,1-dichloroethane	1.1	1.0	0.460	2.740	140
4/27/20	MW-7A	1,1-dichloroethane	<1.0	1.0	0.317	2.033	140
10/9/20	MW-7A	1,1-dichloroethane	dry	1.0	0.317	2.033	140
4/9/21	MW-7A	1,1-dichloroethane	<1.0	1.0	0.297	1.003	140
10/25/21	MW-7A	1,1-dichloroethane	<1.0	1.0	0.297	1.003	140
4/11/22	MW-7A	1,1-dichloroethane	<1.0	1.0	0.500	0.500	140
10/12/22	MW-7A	1,1-dichloroethane	dry	1.0	0.500	0.500	140
4/6/23	MW-7A	1,1-dichloroethane	<1.0	1.0	0.500	0.500	140
10/9/23	MW-7A	1,1-dichloroethane	dry	1.0	0.500	0.500	140
4/4/24	MW-7A	1,1-dichloroethane	<1.0	1.0	0.500	0.500	140
10/16/24	MW-7A	1,1-dichloroethane	dry	1.0	0.500	0.500	140
4/1/16	MW-7A	Cis-1,2-DCE	<1.0	1.0	0.000	1.757	70.
10/19/16	MW-7A	Cis-1,2-DCE	2.0	1.0	0.000	1.757	70.
4/17/17	MW-7A	Cis-1,2-DCE	<1.0	1.0	0.000	1.757	70.
10/11/17	MW-7A	Cis-1,2-DCE	3.4	1.0	0.000	3.238	70.
06/01/18	MW-7A	Cis-1,2-DCE	1.7	1.0	0.498	3.302	70.
10/3/18	MW-7A	Cis-1,2-DCE	2.5	1.0	0.577	3.473	70.
4/8/19	MW-7A	Cis-1,2-DCE	<1.0	1.0	0.577	3.473	70.
10/11/19	MW-7A	Cis-1,2-DCE	2.0	1.0	0.675	2.675	70.
4/27/20	MW-7A	Cis-1,2-DCE	<1.0	1.0	0.482	2.268	70.
10/9/20	MW-7A	Cis-1,2-DCE	dry	1.0	0.482	2.268	70.
4/9/21	MW-7A	Cis-1,2-DCE	<1.0	1.0	0.000	1.757	70.
10/25/21	MW-7A	Cis-1,2-DCE	<1.0	1.0	0.000	1.757	70.
4/11/22	MW-7A	Cis-1,2-DCE	<1.0	1.0	0.500	0.500	70.
10/12/22	MW-7A	Cis-1,2-DCE	dry	1.0	0.500	0.500	70.
4/6/23	MW-7A	Cis-1,2-DCE	<1.0	1.0	0.500	0.500	70.
10/9/23	MW-7A	Cis-1,2-DCE	dry	1.0	0.500	0.500	70.
4/4/24	MW-7A	Cis-1,2-DCE	<1.0	1.0	0.500	0.500	70.
10/16/24	MW-7A	Cis-1,2-DCE	dry	1.0	0.500	0.500	70.

4/1/16	MW-7A	Vinyl Chloride	<1.0	1.0	0.297	1.003	2.0
10/19/16	MW-7A	Vinyl Chloride	<1.0	1.0	0.500	0.500	2.0
4/17/17	MW-7A	Vinyl Chloride	<1.0	1.0	0.500	0.500	2.0
10/11/17	MW-7A	Vinyl Chloride	1.3	1.0	0.229	1.171	2.0
06/01/18	MW-7A	Vinyl Chloride	1.1	1.0	0.365	1.335	2.0
10/3/18	MW-7A	Vinyl Chloride	<1.0	1.0	0.365	1.335	2.0
4/8/19	MW-7A	Vinyl Chloride	<1.0	1.0	0.365	1.335	2.0
10/11/19	MW-7A	Vinyl Chloride	<1.0	1.0	0.297	1.003	2.0
4/27/20	MW-7A	Vinyl Chloride	<1.0	1.0	0.500	0.500	2.0
10/9/20	MW-7A	Vinyl Chloride	dry	1.0	0.500	0.500	2.0
4/9/21	MW-7A	Vinyl Chloride	<1.0	1.0	0.500	0.500	2.0
10/25/21	MW-7A	Vinyl Chloride	<1.0	1.0	0.500	0.500	2.0
4/11/22	MW-7A	Vinyl Chloride	<1.0	1.0	0.500	0.500	2.0
10/12/22	MW-7A	Vinyl Chloride	dry	1.0	0.500	0.500	2.0
4/6/23	MW-7A	Vinyl Chloride	<1.0	1.0	0.500	0.500	2.0
10/9/23	MW-7A	Vinyl Chloride	dry	1.0	0.500	0.500	2.0
4/4/24	MW-7A	Vinyl Chloride	<1.0	1.0	0.500	0.500	2.0
10/16/24	MW-7A	Vinyl Chloride	dry	1.0	0.500	0.500	2.0

* A Site-Specific GWPS for this compound is warranted when the prediction limit is above the State-Wide GWPS. The Site-Specific GWPS is established for the purpose of this report.

Date	Well	Compound	Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	95% UCL (ug/L)	GWPS (ug/L)
4/1/16	MW-7B	barium	573.0	541.2513	591.778	787.222	2,000.
10/19/16	MW-7B	barium	652.0	541.2513	576.918	760.082	2,000.
4/17/17	MW-7B	barium	616.0	541.2513	556.174	744.326	2,000.
10/11/17	MW-7B	barium	614.0	541.2513	575.763	651.737	2,000.
06/01/18	MW-7B	barium	668.0	541.2513	605.973	669.07	2,000.
10/3/18	MW-7B	barium	665.0	541.2513	605.732	675.768	2,000.
4/8/19	MW-7B	barium	501.0	869.9216	520.204	703.796	2,000.
10/11/19	MW-7B	barium	596.0	819.6279	515.276	699.724	2,000.
4/27/20	MW-7B	barium	542.0	801.7770	574.555	637.445	2,000.
10/9/20	MW-7B	barium	776.0	777.1527	461.131	746.369	2,000.
4/9/21	MW-7B	barium	636.0	745.1464	519.818	755.182	2,000.
10/25/21	MW-7B	barium	647.0	721.8947	537.129	763.371	2,000.
4/11/22	MW-7B	barium	602.0	728.2730	575.526	754.974	2,000.
10/12/22	MW-7B	barium	744.0	700.6661	585.587	728.913	2,000.
4/6/23	MW-7B	barium	NT	713.4888	585.587	728.913	2,000.
10/9/23	MW-7B	barium	684.0	686.9601	598.598	739.902	2,000.
4/4/24	MW-7B	barium	643.0	685.3309	596.981	739.519	2,000.
10/16/24	MW-7B	barium	678.0	661.2919	637.926	736.574	2,000.
4/1/16	MW-7B	cobalt	<0.8	1.0	2.0	2.0	4.0*
10/19/16	MW-7B	cobalt	<0.8	1.0	2.0	2.0	4.0*
4/17/17	MW-7B	cobalt	3.6	1.0	1.459	3.341	4.0*
10/11/17	MW-7B	cobalt	2.3	1.0	1.577	3.373	4.0*
06/01/18	MW-7B	cobalt	2.3	1.0	1.710	3.390	4.0*
10/3/18	MW-7B	cobalt	1.7	1.0	1.532	3.418	4.0*
4/8/19	MW-7B	cobalt	<0.8	4.0	1.737	2.413	4.0*
10/11/19	MW-7B	cobalt	1.2	4.0	1.248	2.352	4.0*
4/27/20	MW-7B	cobalt	0.6	4.0	0.463	1.487	4.0*
10/9/20	MW-7B	cobalt	1.8	4.0	0.656	2.144	4.0*
4/9/21	MW-7B	cobalt	1.4	4.0	0.662	1.838	4.0*
10/25/21	MW-7B	cobalt	0.4	4.0	0.273	1.827	4.0*
4/11/22	MW-7B	cobalt	0.8	4.0	0.369	1.831	4.0*
10/12/22	MW-7B	cobalt	2.1	4.0	0.303	2.047	4.0*
4/6/23	MW-7B	cobalt	NT	4.0	0.303	2.047	4.0*
10/9/23	MW-7B	cobalt	<0.4	4.0	0.321	2.329	4.0*
4/4/24	MW-7B	cobalt	<0.4	4.0	0.000	1.873	4.0*
10/16/24	MW-7B	cobalt	<0.4	4.0	0.000	1.825	4.0*
4/1/16	MW-7B	nickel	15.4	13.0651	15.181	15.819	100.
10/19/16	MW-7B	nickel	14.8	13.0651	14.887	15.563	100.
4/17/17	MW-7B	nickel	19.4	13.0651	13.757	18.743	100.
10/11/17	MW-7B	nickel	14.4	13.0651	13.290	18.710	100.
06/01/18	MW-7B	nickel	16.9	13.0651	13.675	19.075	100.
10/3/18	MW-7B	nickel	16.7	13.0651	14.446	19.254	100.
4/8/19	MW-7B	nickel	16.5	13.250	14.759	17.491	100.
10/11/19	MW-7B	nickel	18.3	13.00	16.140	18.060	100.
4/27/20	MW-7B	nickel	18.9	12.60	16.575	18.625	100.
10/9/20	MW-7B	nickel	26.0	12.60	15.012	24.838	100.
4/9/21	MW-7B	nickel	12.6	12.60	12.491	25.409	100.
10/25/21	MW-7B	nickel	9.7	12.60	8.288	25.312	100.
4/11/22	MW-7B	nickel	16.1	15.60	7.749	24.451	100.
10/12/22	MW-7B	nickel	9.7	15.60	8.448	15.602	100.
4/6/23	MW-7B	nickel	NT	15.60	8.448	15.602	100.

10/9/23	MW-7B	nickel	10.5	17.10	7.866	15.134	100.
4/4/24	MW-7B	nickel	12.1	17.10	8.751	15.449	100.
10/16/24	MW-7B	nickel	10.5	17.10	9.516	11.884	100.
4/1/16	MW-7B	1,1-dichloroethane	<1.0	1.0	0.5	0.5	140.
10/19/16	MW-7B	1,1-dichloroethane	<1.0	1.0	0.5	0.5	140.
4/17/17	MW-7B	1,1-dichloroethane	<1.0	1.0	0.5	0.5	140.
10/11/17	MW-7B	1,1-dichloroethane	<1.0	1.0	0.5	0.5	140.
06/01/18	MW-7B	1,1-dichloroethane	<1.0	1.0	0.5	0.5	140.
10/3/18	MW-7B	1,1-dichloroethane	<1.0	1.0	0.5	0.5	140.
4/8/19	MW-7B	1,1-dichloroethane	<1.0	1.0	0.5	0.5	140.
10/11/19	MW-7B	1,1-dichloroethane	<1.0	1.0	0.5	0.5	140.
4/27/20	MW-7B	1,1-dichloroethane	<1.0	1.0	0.5	0.5	140.
10/9/20	MW-7B	1,1-dichloroethane	<1.0	1.0	0.5	0.5	140.
4/9/21	MW-7B	1,1-dichloroethane	<1.0	1.0	0.5	0.5	140.
10/25/21	MW-7B	1,1-dichloroethane	<1.0	1.0	0.5	0.5	140.
4/11/22	MW-7B	1,1-dichloroethane	<1.0	1.0	0.5	0.5	140.
10/12/22	MW-7B	1,1-dichloroethane	<1.0	1.0	0.5	0.5	140.
4/6/23	MW-7B	1,1-dichloroethane	<1.0	1.0	0.5	0.5	140.
10/9/23	MW-7B	1,1-dichloroethane	<1.0	1.0	0.5	0.5	140.
4/4/24	MW-7B	1,1-dichloroethane	<1.0	1.0	0.5	0.5	140.
10/16/24	MW-7B	1,1-dichloroethane	<1.0	1.0	0.5	0.5	140.
4/1/16	MW-7B	Vinyl Chloride	<1.0	1.0	0.5	0.5	2.0
10/19/16	MW-7B	Vinyl Chloride	<1.0	1.0	0.5	0.5	2.0
4/17/17	MW-7B	Vinyl Chloride	<1.0	1.0	0.5	0.5	2.0
10/11/17	MW-7B	Vinyl Chloride	<1.0	1.0	0.5	0.5	2.0
06/01/18	MW-7B	Vinyl Chloride	<1.0	1.0	0.5	0.5	2.0
10/3/18	MW-7B	Vinyl Chloride	<1.0	1.0	0.5	0.5	2.0
4/8/19	MW-7B	Vinyl Chloride	<1.0	1.0	0.5	0.5	2.0
10/11/19	MW-7B	Vinyl Chloride	<1.0	1.0	0.5	0.5	2.0
4/27/20	MW-7B	Vinyl Chloride	<1.0	1.0	0.5	0.5	2.0
10/9/20	MW-7B	Vinyl Chloride	<1.0	1.0	0.5	0.5	2.0
4/9/21	MW-7B	Vinyl Chloride	<1.0	1.0	0.5	0.5	2.0
10/25/21	MW-7B	Vinyl Chloride	<1.0	1.0	0.5	0.5	2.0
4/11/22	MW-7B	Vinyl Chloride	<1.0	1.0	0.5	0.5	2.0
10/12/22	MW-7B	Vinyl Chloride	<1.0	1.0	0.5	0.5	2.0
4/6/23	MW-7B	Vinyl Chloride	<1.0	1.0	0.5	0.5	2.0
10/9/23	MW-7B	Vinyl Chloride	<1.0	1.0	0.5	0.5	2.0
4/4/24	MW-7B	Vinyl Chloride	<1.0	1.0	0.5	0.5	2.0
10/16/24	MW-7B	Vinyl Chloride	<1.0	1.0	0.5	0.5	2.0

* A Site-Specific GWPS for this compound is warranted when the prediction limit is above the State-Wide GWPS. The Site-Specific GWPS is established for the purpose of this report.

Date	Well	Compound	Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	95% UCL (ug/L)	GWPS (ug/L)
4/1/16	MW-8	arsenic	63.5	53.7	44.148	115.402	53.7*
10/19/16	MW-8	arsenic	107.0	53.7	46.283	108.267	53.7*
4/17/17	MW-8	arsenic	55.9	53.7	51.294	107.056	53.7*
10/11/17	MW-8	arsenic	47.2	53.7	37.133	99.667	53.7*
06/01/18	MW-8	arsenic	32.5	53.7	22.569	98.731	53.7*
10/3/18	MW-8	arsenic	9.7	53.7	12.556	60.094	53.7*
4/8/19	MW-8	arsenic	33.1	53.7	12.374	48.876	53.7*
10/11/19	MW-8	arsenic	75.7	53.7	5.349	70.151	53.7*
4/27/20	MW-8	arsenic	56.2	49.3	10.069	77.281	53.7*
10/9/20	MW-8	arsenic	72.9	49.3	36.446	82.504	53.7*
4/9/21	MW-8	arsenic	95.1	49.3	56.224	93.726	53.7*
6/23/21	MW-8	arsenic	57.7	49.3	54.829	86.121	53.7*
10/25/21	MW-8	arsenic	125.0	49.3	53.279	122.071	53.7*
4/11/22	MW-8	arsenic	220.0	49.3	42.821	206.079	53.7*
10/12/22	MW-8	arsenic	360.0	49.3	36.516	344.834	53.7*
4/6/23	MW-8	arsenic	31.7	49.3	19.287	349.063	53.7*
10/9/23	MW-8	arsenic	165.0	49.3	34.306	354.044	53.7*
4/4/24	MW-8	arsenic	30.9	49.3	0.000	329.719	53.7*
10/16/24	MW-8	arsenic	33.5	49.3	0.000	143.489	53.7*
4/1/16	MW-8	barium	547.0	541.2513	502.530	783.470	2,000.
10/19/16	MW-8	barium	871.0	541.2513	480.928	854.572	2,000.
4/17/17	MW-8	barium	623.0	541.2513	525.343	853.657	2,000.
10/11/17	MW-8	barium	649.0	541.2513	508.725	836.275	2,000.
06/01/18	MW-8	barium	738.0	541.2513	588.606	851.894	2,000.
10/3/18	MW-8	barium	220.0	541.2513	286.571	828.429	2,000.
4/8/19	MW-8	barium	716.0	869.9216	294.370	867.130	2,000.
10/11/19	MW-8	barium	1060.0	819.6279	275.676	1091.324	2,000.
4/27/20	MW-8	barium	680.0	801.7770	263.330	1074.670	2,000.
10/9/20	MW-8	barium	920.0	777.1527	633.895	1054.105	2,000.
4/9/21	MW-8	barium	833.0	745.1464	685.994	1060.506	2,000.
10/25/21	MW-8	barium	1,160.0	721.8947	662.134	1134.366	2,000.
4/11/22	MW-8	barium	2,160.0	728.2730	550.278	1986.222	2,000.
10/12/22	MW-8	barium	2,840.0	700.6661	664.792	2831.708	2,000.
4/6/23	MW-8	barium	399.0	713.488	372.688	2906.812	2,000.
10/9/23	MW-8	barium	1,610.0	686.9601	537.198	2967.302	2,000.
4/4/24	MW-8	barium	613.0	685.3309	537.124	2677.876	2,000.
10/16/24	MW-8	barium	516.0	661.2919	129.019	1439.981	2,000.
4/1/16	MW-8	cadmium	<0.8	1.3	0.400	0.400	5.0
10/19/16	MW-8	cadmium	<0.8	1.3	0.400	0.400	5.0
4/17/17	MW-8	cadmium	<0.8	1.3	0.400	0.400	5.0
10/11/17	MW-8	cadmium	<0.8	1.3	0.400	0.400	5.0
06/01/18	MW-8	cadmium	<0.8	1.3	0.400	0.400	5.0
10/3/18	MW-8	cadmium	1.9	1.3	0.000	1.657	5.0
4/8/19	MW-8	cadmium	<0.8	1.3	0.000	1.657	5.0
10/11/19	MW-8	cadmium	<0.8	1.3	0.000	1.657	5.0
4/27/20	MW-8	cadmium	<0.8	1.3	0.000	1.657	5.0
10/9/20	MW-8	cadmium	<0.8	4.0	0.400	0.400	5.0
4/9/21	MW-8	cadmium	<0.8	4.0	0.400	0.400	5.0
10/25/21	MW-8	cadmium	<0.8	4.0	0.400	0.400	5.0
4/11/22	MW-8	cadmium	0.8	4.0	0.327	0.673	5.0
10/12/22	MW-8	cadmium	<0.8	4.0	0.327	0.673	5.0
4/6/23	MW-8	cadmium	<0.8	4.0	0.327	0.673	5.0
10/9/23	MW-8	cadmium	<0.8	4.0	0.327	0.673	5.0

4/4/24	MW-8	cadmium	<0.8	1.7	0.400	0.400	5.0
10/16/24	MW-8	cadmium	<0.8	1.7	0.400	0.400	5.0
4/1/16	MW-8	lead	<4.0	4.0	2.0	2.0	15.0
10/19/16	MW-8	lead	<4.0	4.0	2.0	2.0	15.0
4/17/17	MW-8	lead	<4.0	4.0	2.0	2.0	15.0
10/11/17	MW-8	lead	<4.0	4.0	2.0	2.0	15.0
06/01/18	MW-8	lead	<4.0	4.0	2.0	2.0	15.0
10/3/18	MW-8	lead	<4.0	4.0	2.0	2.0	15.0
4/8/19	MW-8	lead	6.4	4.0	0.512	5.688	15.0
10/11/19	MW-8	lead	<4.0	4.0	0.512	5.688	15.0
4/27/20	MW-8	lead	<4.0	4.0	0.512	5.688	15.0
10/9/20	MW-8	lead	<4.0	4.0	0.512	5.688	15.0
4/9/21	MW-8	lead	<4.0	4.0	2.000	2.000	15.0
10/25/21	MW-8	lead	<4.0	4.0	2.000	2.000	15.0
4/11/22	MW-8	lead	6.9	4.0	1.103	5.347	15.0
10/12/22	MW-8	lead	<4.0	4.0	1.103	5.347	15.0
4/6/23	MW-8	lead	<4.0	4.0	1.103	5.347	15.0
10/9/23	MW-8	lead	<4.0	4.0	1.103	5.347	15.0
4/4/24	MW-8	lead	5.8	4.0	0.715	5.185	15.0
10/16/24	MW-8	lead	<4.0	4.0	0.715	5.185	15.0
4/1/16	MW-8	selenium	<4.0	4.0	2.000	2.000	50.0
10/19/16	MW-8	selenium	<4.0	4.0	2.000	2.000	50.0
4/17/17	MW-8	selenium	<4.0	4.0	2.000	2.000	50.0
10/11/17	MW-8	selenium	<4.0	4.0	2.000	2.000	50.0
06/01/18	MW-8	selenium	<4.0	4.0	2.000	2.000	50.0
10/3/18	MW-8	selenium	<4.0	4.0	2.000	2.000	50.0
4/8/19	MW-8	selenium	<4.0	4.0	2.000	2.000	50.0
10/11/19	MW-8	selenium	<4.0	4.0	2.000	2.000	50.0
4/27/20	MW-8	selenium	<4.0	4.0	2.000	2.000	50.0
10/9/20	MW-8	selenium	<4.0	4.0	2.000	2.000	50.0
4/9/21	MW-8	selenium	<4.0	4.0	2.000	2.000	50.0
10/25/21	MW-8	selenium	<4.0	4.0	2.000	2.000	50.0
4/11/22	MW-8	selenium	7.8	4.0	0.039	6.681	50.0
10/12/22	MW-8	selenium	<4.0	4.0	0.039	6.681	50.0
4/6/23	MW-8	selenium	<4.0	4.0	0.039	6.681	50.0
10/9/23	MW-8	selenium	<4.0	4.0	0.039	6.681	50.0
4/4/24	MW-8	selenium	4.2	4.0	1.256	3.844	50.0
10/16/24	MW-8	selenium	<4.0	4.0	1.256	3.844	50.0

* A Site-Specific GWPS for this compound is warranted when the prediction limit is above the State-Wide GWPS. The Site-Specific GWPS is established for the purpose of this report.

Date	Well	Compound	Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	95% UCL (ug/L)	GWPS (ug/L)
4/1/16	MW-10	cadmium	<0.8	1.3	0.400	0.400	5.0
10/19/16	MW-10	cadmium	<0.8	1.3	0.400	0.400	5.0
4/17/17	MW-10	cadmium	<0.8	1.3	0.400	0.400	5.0
10/11/17	MW-10	cadmium	<0.8	1.3	0.400	0.400	5.0
06/01/18	MW-10	cadmium	<0.8	1.3	0.400	0.400	5.0
10/3/18	MW-10	cadmium	8.6	1.3	0.000	7.273	5.0
4/8/19	MW-10	cadmium	<0.8	1.3	0.000	7.273	5.0
10/11/19	MW-10	cadmium	<0.8	1.3	0.000	7.273	5.0
4/27/20	MW-10	cadmium	<0.8	1.3	0.000	7.273	5.0
10/9/20	MW-10	cadmium	<0.8	4.0	0.400	0.400	5.0
4/9/21	MW-10	cadmium	1.7	4.0	0.162	1.288	5.0
10/25/21	MW-10	cadmium	<0.8	4.0	0.162	1.288	5.0
4/11/22	MW-10	cadmium	<0.8	4.0	0.162	1.288	5.0
10/12/22	MW-10	cadmium	<0.8	4.0	0.162	1.288	5.0
4/6/23	MW-10	cadmium	<0.8	4.0	0.400	0.400	5.0
10/9/23	MW-10	cadmium	<0.8	4.0	0.400	0.400	5.0
4/4/24	MW-10	cadmium	<0.8	1.7	0.400	0.400	5.0
10/16/24	MW-10	cadmium	4.0	1.7	0.000	3.417	5.0
4/1/16	MW-10	cobalt	<0.8	1.0	1.329	2.271	4.0*
10/19/16	MW-10	cobalt	<0.8	1.0	1.329	2.271	4.0*
4/17/17	MW-10	cobalt	1.8	1.0	1.832	2.068	4.0*
10/11/17	MW-10	cobalt	<0.8	1.0	1.832	2.068	4.0*
06/01/18	MW-10	cobalt	<0.8	1.0	1.832	2.068	4.0*
10/3/18	MW-10	cobalt	2.1	1.0	1.827	2.123	4.0*
4/8/19	MW-10	cobalt	<0.8	4.0	1.966	2.084	4.0*
10/11/19	MW-10	cobalt	0.9	4.0	1.081	2.419	4.0*
4/27/20	MW-10	cobalt	3.4	4.0	0.897	3.303	4.0*
10/9/20	MW-10	cobalt	10.8	4.0	0.000	9.531	4.0*
4/9/21	MW-10	cobalt	<0.4	4.0	0.000	9.531	4.0*
10/25/21	MW-10	cobalt	<0.4	4.0	0.000	9.512	4.0*
4/11/22	MW-10	cobalt	1.6	4.0	0.000	9.359	4.0*
10/12/22	MW-10	cobalt	2.3	4.0	1.637	2.313	4.0*
4/6/23	MW-10	cobalt	<0.4	4.0	1.637	2.313	4.0*
10/9/23	MW-10	cobalt	0.8	4.0	0.910	2.440	4.0*
4/4/24	MW-10	cobalt	<0.4	4.0	0.000	2.037	4.0*
10/16/24	MW-10	cobalt	1.0	4.0	0.297	1.003	4.0*
4/1/16	MW-10	copper	9.3	8.4	1.825	19.325	1,300.
10/19/16	MW-10	copper	5.3	8.4	0.000	18.434	1,300.
4/17/17	MW-10	copper	<4.0	8.4	0.000	18.434	1,300.
10/11/17	MW-10	copper	<4.0	8.4	0.570	8.730	1,300.
06/01/18	MW-10	copper	<4.0	8.4	0.884	4.766	1,300.
10/3/18	MW-10	copper	4.6	8.4	1.121	4.179	1,300.
4/8/19	MW-10	copper	20.3	8.4	0.000	17.579	1,300.
10/11/19	MW-10	copper	8.6	8.4	0.000	18.386	1,300.
4/27/20	MW-10	copper	<4.0	8.4	0.000	18.386	1,300.
10/9/20	MW-10	copper	<4.0	8.4	0.000	18.377	1,300.
4/9/21	MW-10	copper	11.9	8.4	0.302	11.948	1,300.
10/25/21	MW-10	copper	<4.0	8.4	0.000	10.298	1,300.
4/11/22	MW-10	copper	<4.0	8.4	0.000	10.298	1,300.
10/12/22	MW-10	copper	<4.0	8.4	0.000	10.298	1,300.
4/6/23	MW-10	copper	<4.0	8.4	2.000	2.000	1,300.
10/9/23	MW-10	copper	18.2	8.4	0.000	15.578	1,300.
4/4/24	MW-10	copper	13.9	23.9	0.000	18.788	1,300.

10/16/24	MW-10	copper	29.5	8.4	2.532	29.268	1,300.
4/1/16	MW-10	nickel	<4.0	13.0651	0.000	19.799	100.
10/19/16	MW-10	nickel	5.1	13.0651	0.000	18.563	100.
4/17/17	MW-10	nickel	16.8	13.0651	0.000	14.752	100.
10/11/17	MW-10	nickel	<4.0	13.0651	0.000	14.752	100.
06/01/18	MW-10	nickel	12.7	13.0651	1.153	17.147	100.
10/3/18	MW-10	nickel	4.8	13.0651	1.007	17.143	100.
4/8/19	MW-10	nickel	<4.0	13.250	0.000	11.325	100.
10/11/19	MW-10	nickel	14.1	13.00	1.444	15.356	100.
4/27/20	MW-10	nickel	19.0	12.60	0.642	19.308	100.
10/9/20	MW-10	nickel	16.9	12.60	4.057	21.943	100.
4/9/21	MW-10	nickel	5.0	12.60	6.493	21.007	100.
10/25/21	MW-10	nickel	<4.0	12.60	0.755	20.695	100.
4/11/22	MW-10	nickel	11.1	15.60	0.960	16.540	100.
10/12/22	MW-10	nickel	<4.0	15.60	0.000	10.071	100.
4/6/23	MW-10	nickel	<4.0	15.60	0.000	9.627	100.
10/9/23	MW-10	nickel	5.4	17.10	0.074	10.176	100.
4/4/24	MW-10	nickel	<4.0	17.10	0.850	4.850	100.
10/16/24	MW-10	nickel	25.9	17.10	0.000	22.347	100.
4/1/16	MW-10	Bis(2ethylhexyl)phthalate	---	6.0	---	---	6.0
10/19/16	MW-10	Bis(2ethylhexyl)phthalate	---	6.0	---	---	6.0
4/17/17	MW-10	Bis(2ethylhexyl)phthalate	<6.0	6.0	---	---	6.0
10/11/17	MW-10	Bis(2ethylhexyl)phthalate	---	6.0	---	---	6.0
06/01/18	MW-10	Bis(2ethylhexyl)phthalate	7.0	6.0	---	---	6.0
10/3/18	MW-10	Bis(2ethylhexyl)phthalate	---	6.0	---	---	6.0
4/8/19	MW-10	Bis(2ethylhexyl)phthalate	<6.0	6.0	---	---	6.0
10/11/19	MW-10	Bis(2ethylhexyl)phthalate	<6.0	6.0	1.647	6.353	6.0
4/27/20	MW-10	Bis(2ethylhexyl)phthalate	<6.0	6.0	1.647	6.353	6.0
10/9/20	MW-10	Bis(2ethylhexyl)phthalate	<6.0	6.0	3.000	3.000	6.0
4/9/21	MW-10	Bis(2ethylhexyl)phthalate	---	6.0	3.000	3.000	6.0
10/25/21	MW-10	Bis(2ethylhexyl)phthalate	---	6.0	3.000	3.000	6.0
4/11/22	MW-10	Bis(2ethylhexyl)phthalate	---	6.0	3.000	3.000	6.0
10/12/22	MW-10	Bis(2ethylhexyl)phthalate	---	6.0	3.000	3.000	6.0
4/6/23	MW-10	Bis(2ethylhexyl)phthalate	---	6.0	3.000	3.000	6.0
10/9/23	MW-10	Bis(2ethylhexyl)phthalate	---	6.0	3.000	3.000	6.0
4/4/24	MW-10	Bis(2ethylhexyl)phthalate	<6.0	6.0	3.000	3.000	6.0
10/16/24	MW-10	Bis(2ethylhexyl)phthalate	---	6.0	3.000	3.000	6.0

* A Site-Specific GWPS for this compound is warranted when the prediction limit is above the State-Wide GWPS. The Site-Specific GWPS is established for the purpose of this report.

Date	Well	Compound	Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	95% UCL (ug/L)	GWPS (ug/L)
4/1/16	MW-14	arsenic	76.8	53.7	0.000	112.454	53.7*
10/19/16	MW-14	arsenic	16.3	53.7	0.000	112.454	53.7*
4/17/17	MW-14	arsenic	68.9	53.7	21.640	116.360	53.7*
10/11/17	MW-14	arsenic	11.1	53.7	2.848	83.702	53.7*
06/01/18	MW-14	arsenic	55.2	53.7	4.293	71.457	53.7*
10/3/18	MW-14	arsenic	27.6	53.7	9.927	71.473	53.7*
4/8/19	MW-14	arsenic	18.6	53.7	5.459	50.791	53.7*
10/11/19	MW-14	arsenic	13.7	53.7	6.795	50.575	53.7*
4/27/20	MW-14	arsenic	46.6	49.3	9.560	43.690	53.7*
10/9/20	MW-14	arsenic	18.8	49.3	6.816	42.034	53.7*
4/9/21	MW-14	arsenic	10.8	49.3	3.161	41.789	53.7*
10/25/21	MW-14	arsenic	7.2	49.3	0.000	41.833	53.7*
4/11/22	MW-14	arsenic	61.2	49.3	0.000	53.839	53.7*
10/12/22	MW-14	arsenic	34.3	49.3	0.000	57.742	53.7*
4/6/23	MW-14	arsenic	4.7	49.3	0.000	58.062	53.7*
10/9/23	MW-14	arsenic	17.9	49.3	0.892	58.158	53.7*
4/4/24	MW-14	arsenic	<4.0	49.3	0.000	32.115	53.7*
10/16/24	MW-14	arsenic	22.5	49.3	0.048	23.502	53.7*
4/1/16	MW-14	barium	1690.0	541.2513	469.188	1621.312	2,000.
10/19/16	MW-14	barium	1190.0	541.2513	495.116	1660.384	2,000.
4/17/17	MW-14	barium	1790.0	541.2513	914.293	1882.207	2,000.
10/11/17	MW-14	barium	1320.0	541.2513	1158.836	1836.164	2,000.
06/01/18	MW-14	barium	1620.0	541.2513	1157.574	1802.426	2,000.
10/3/18	MW-14	barium	1100.0	541.2513	1095.787	1819.213	2,000.
4/8/19	MW-14	barium	1070.0	869.9216	978.625	1576.375	2,000.
10/11/19	MW-14	barium	1000.0	819.6279	862.533	1532.467	2,000.
4/27/20	MW-14	barium	1170.0	801.7770	1002.102	1167.898	2,000.
10/9/20	MW-14	barium	1630.0	777.1527	883.775	1551.225	2,000.
4/9/21	MW-14	barium	592.0	745.1464	592.585	1603.415	2,000.
10/25/21	MW-14	barium	612.0	721.8947	415.684	1586.316	2,000.
4/11/22	MW-14	barium	1080.0	728.2730	402.856	1554.144	2,000.
10/12/22	MW-14	barium	1660.0	700.6661	394.640	1577.360	2,000.
4/6/23	MW-14	barium	411.0	713.4888	287.434	1594.066	2,000.
10/9/23	MW-14	barium	1430.0	686.9601	504.764	1785.736	2,000.
4/4/24	MW-14	barium	53.7	685.3309	0.000	1803.192	2,000.
10/16/24	MW-14	barium	1370.0	661.2919	4.326	1628.024	2,000.
4/1/16	MW-14	cadmium	<0.8	1.3	0.400	0.400	5.0
10/19/16	MW-14	cadmium	3.7	1.3	0.000	3.166	5.0
4/17/17	MW-14	cadmium	<0.8	1.3	0.000	3.166	5.0
10/11/17	MW-14	cadmium	<0.8	1.3	0.000	3.166	5.0
06/01/18	MW-14	cadmium	<0.8	1.3	0.000	3.166	5.0
10/3/18	MW-14	cadmium	<0.8	1.3	0.400	0.400	5.0
4/8/19	MW-14	cadmium	<0.8	1.3	0.400	0.400	5.0
10/11/19	MW-14	cadmium	<0.8	1.3	0.400	0.400	5.0
4/27/20	MW-14	cadmium	<0.8	1.3	0.400	0.400	5.0
10/9/20	MW-14	cadmium	<0.8	4.0	0.400	0.400	5.0
4/9/21	MW-14	cadmium	<0.8	4.0	0.400	0.400	5.0
10/25/21	MW-14	cadmium	<0.8	4.0	0.400	0.400	5.0
4/11/22	MW-14	cadmium	2.2	4.0	0.071	1.629	5.0
10/12/22	MW-14	cadmium	<0.8	4.0	0.071	1.629	5.0
4/6/23	MW-14	cadmium	<0.8	4.0	0.071	1.629	5.0

10/9/23	MW-14	cadmium	<0.8	4.0	0.071	1.629	5.0
4/4/24	MW-14	cadmium	1.0	1.7	0.071	1.629	5.0
10/16/24	MW-14	cadmium	<0.8	1.7	0.197	0.903	5.0
4/1/16	MW-14	cobalt	9.4	1.0	4.481	9.119	4.0*
10/19/16	MW-14	cobalt	4.1	1.0	4.010	9.240	4.0*
4/17/17	MW-14	cobalt	9.2	1.0	4.552	10.348	4.0*
10/11/17	MW-14	cobalt	4.6	1.0	3.453	10.197	4.0*
06/01/18	MW-14	cobalt	5.4	1.0	3.104	8.546	4.0*
10/3/18	MW-14	cobalt	3.1	1.0	2.519	8.631	4.0*
4/8/19	MW-14	cobalt	4.7	4.0	3.312	5.588	4.0*
10/11/19	MW-14	cobalt	3.2	4.0	2.766	5.434	4.0*
4/27/20	MW-14	cobalt	5.6	4.0	2.724	5.576	4.0*
10/9/20	MW-14	cobalt	2.4	4.0	2.278	5.672	4.0*
4/9/21	MW-14	cobalt	1.3	4.0	0.979	5.271	4.0*
10/25/21	MW-14	cobalt	1.1	4.0	0.153	5.047	4.0*
4/11/22	MW-14	cobalt	3.1	4.0	0.866	3.084	4.0*
10/12/22	MW-14	cobalt	4.1	4.0	0.698	4.102	4.0*
4/6/23	MW-14	cobalt	0.9	4.0	0.468	4.132	4.0*
10/9/23	MW-14	cobalt	2.1	4.0	0.939	4.161	4.0*
4/4/24	MW-14	cobalt	<0.4	4.0	0.000	3.834	4.0*
10/16/24	MW-14	cobalt	1.7	4.0	0.230	2.220	4.0*
4/1/16	MW-14	nickel	14.0	13.0651	14.095	19.505	100.
10/19/16	MW-14	nickel	12.1	13.0651	11.798	19.602	100.
4/17/17	MW-14	nickel	15.6	13.0651	12.175	17.225	100.
10/11/17	MW-14	nickel	16.6	13.0651	12.261	16.889	100.
06/01/18	MW-14	nickel	13.1	13.0651	11.878	16.822	100.
10/3/18	MW-14	nickel	13.6	13.0651	12.782	16.668	100.
4/8/19	MW-14	nickel	12.5	13.250	11.806	16.094	100.
10/11/19	MW-14	nickel	12.7	13.00	12.404	13.546	100.
4/27/20	MW-14	nickel	15.0	12.60	12.111	14.789	100.
10/9/20	MW-14	nickel	12.5	12.60	11.740	14.610	100.
4/9/21	MW-14	nickel	10.6	12.60	10.581	14.819	100.
10/25/21	MW-14	nickel	11.8	12.60	10.290	14.660	100.
4/11/22	MW-14	nickel	11.2	15.60	10.568	12.482	100.
10/12/22	MW-14	nickel	13.8	15.60	10.216	13.484	100.
4/6/23	MW-14	nickel	8.9	15.60	9.052	13.798	100.
10/9/23	MW-14	nickel	11.4	17.10	8.970	13.680	100.
4/4/24	MW-14	nickel	<4.0	17.10	3.034	15.016	100.
10/16/24	MW-14	nickel	7.8	17.10	2.844	12.206	100.
4/1/16	MW-14	benzene	<1.0	1.0	0.229	1.171	5.0
10/19/16	MW-14	benzene	<1.0	1.0	0.229	1.171	5.0
4/17/17	MW-14	benzene	1.2	1.0	0.363	1.387	5.0
10/11/17	MW-14	benzene	<1.0	1.0	0.263	1.087	5.0
06/01/18	MW-14	benzene	1.6	1.0	0.309	1.591	5.0
10/3/18	MW-14	benzene	1.0	1.0	0.537	1.613	5.0
4/8/19	MW-14	benzene	<1.0	1.0	0.285	1.515	5.0
10/11/19	MW-14	benzene	<1.0	1.0	0.285	1.515	5.0
4/27/20	MW-14	benzene	1.0	1.0	0.410	1.090	5.0
10/9/20	MW-14	benzene	1.9	1.0	0.198	1.752	5.0
4/9/21	MW-14	benzene	<1.0	1.0	0.198	1.752	5.0
10/25/21	MW-14	benzene	<1.0	1.0	0.198	1.752	5.0
4/11/22	MW-14	benzene	<1.0	1.0	0.244	1.456	5.0
10/12/22	MW-14	benzene	1.9	1.0	0.244	1.456	5.0
4/6/23	MW-14	benzene	<1.0	1.0	0.244	1.456	5.0
10/9/23	MW-14	benzene	<1.0	1.0	0.244	1.456	5.0

4/4/24	MW-14	benzene	<1.0	1.0	0.244	1.456	5.0
10/16/24	MW-14	benzene	<1.0	1.0	0.500	0.500	5.0

* A Site-Specific GWPS for this compound is warranted when the prediction limit is above the State-Wide GWPS. The Site-Specific GWPS is established for the purpose of this report.

Date	Well	Compound	Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	95% UCL (ug/L)	GWPS (ug/L)
4/1/16	MW-15	cobalt	1.2	1.0	1.057	2.143	4.0*
10/19/16	MW-15	cobalt	<0.8	1.0	1.329	2.271	4.0*
4/17/17	MW-15	cobalt	2.3	1.0	1.320	2.430	4.0*
10/11/17	MW-15	cobalt	0.8	1.0	0.758	2.392	4.0*
06/01/18	MW-15	cobalt	0.8	1.0	0.547	2.403	4.0*
10/3/18	MW-15	cobalt	1.0	1.0	0.375	2.075	4.0*
4/8/19	MW-15	cobalt	2.4	4.0	0.341	2.159	4.0*
10/11/19	MW-15	cobalt	0.9	4.0	0.388	2.162	4.0*
4/27/20	MW-15	cobalt	0.5	4.0	0.225	2.175	4.0*
10/9/20	MW-15	cobalt	0.4	4.0	0.000	2.139	4.0*
4/9/21	MW-15	cobalt	0.5	4.0	0.314	0.836	4.0*
10/25/21	MW-15	cobalt	0.4	4.0	0.382	0.518	4.0*
4/11/22	MW-15	cobalt	2.1	4.0	0.000	1.832	4.0*
10/12/22	MW-15	cobalt	2.7	4.0	0.069	2.781	4.0*
4/6/23	MW-15	cobalt	0.4	4.0	0.012	2.788	4.0*
10/9/23	MW-15	cobalt	0.9	4.0	0.279	2.771	4.0*
4/4/24	MW-15	cobalt	0.4	4.0	0.000	2.385	4.0*
10/16/24	MW-15	cobalt	0.6	4.0	0.297	0.853	4.0*
4/1/16	MW-15	nickel	18.8	13.0651	23.817	61.383	100.
10/19/16	MW-15	nickel	24.7	13.0651	16.426	55.174	100.
4/17/17	MW-15	nickel	20.2	13.0651	10.688	47.012	100.
10/11/17	MW-15	nickel	16.5	13.0651	15.986	24.114	100.
06/01/18	MW-15	nickel	32.2	13.0651	15.452	31.348	100.
10/3/18	MW-15	nickel	34.8	13.0651	15.409	36.441	100.
4/8/19	MW-15	nickel	14.3	13.250	12.049	36.851	100
10/11/19	MW-15	nickel	18.8	13.00	13.246	36.804	100
4/27/20	MW-15	nickel	15.1	12.60	9.493	32.007	100
10/9/20	MW-15	nickel	29.7	12.60	11.132	27.818	100
4/9/21	MW-15	nickel	17.7	12.60	12.750	27.900	100
10/25/21	MW-15	nickel	16.2	12.60	11.714	27.636	100
4/11/22	MW-15	nickel	13.7	15.60	10.961	27.689	100
10/12/22	MW-15	nickel	34.2	15.60	9.494	31.406	100
4/6/23	MW-15	nickel	14.4	15.60	8.128	31.122	100
10/9/23	MW-15	nickel	47.6	17.10	8.135	46.815	100
4/4/24	MW-15	nickel	17.6	17.10	10.292	46.608	100
10/16/24	MW-15	nickel	28.9	17.10	9.480	44.770	100

* A Site-Specific GWPS for this compound is warranted when the prediction limit is above the State-Wide GWPS. The Site-Specific GWPS is established for the purpose of this report.

Date	Well	Compound	Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	95% UCL (ug/L)	GWPS (ug/L)
4/1/16	MW-16	barium	602.0	541.2513	---	---	2000.0
10/19/16	MW-16	barium	525.0	541.2513	---	---	2000.0
4/17/17	MW-16	barium	414.0	541.2513	---	---	2000.0
10/11/17	MW-16	barium	286.0	541.2513	---	---	2000.0
06/01/18	MW-16	barium	528.0	541.2513	---	---	2000.0
10/3/18	MW-16	barium	274.0	541.2513	---	---	2000.0
4/8/19	MW-16	barium	241.0	869.9216	---	---	2000.0
10/11/19	MW-16	barium	236.0	819.6279	---	---	2000.0
4/27/20	MW-16	barium	420.0	801.7770	---	---	2000.0
10/9/20	MW-16	barium	264.0	777.1527	---	---	2000.0
4/9/21	MW-16	barium	526.0	745.1464	---	---	2000.0
10/25/21	MW-16	barium	450.0	721.8947	---	---	2000.0
4/11/22	MW-16	barium	557.0	728.2730	---	---	2000.0
10/12/22	MW-16	barium	350.0	700.6661	---	---	2000.0
4/6/23	MW-16	barium	548.0	713.4888	---	---	2000.0
10/9/23	MW-16	barium	321.0	686.9601	---	---	2000.0
4/4/24	MW-16	barium	974.0	685.3309	193.923	902.577	2000.0
10/16/24	MW-16	barium	869.0	661.2919	326.130	1029.870	2000.0
4/1/16	MW-16	nickel	16.0	13.0651	---	---	100.
10/19/16	MW-16	nickel	11.2	13.0651	---	---	100.
4/17/17	MW-16	nickel	12.8	13.0651	---	---	100.
10/11/17	MW-16	nickel	9.0	13.0651	9.669	14.801	100.
06/01/18	MW-16	nickel	11.3	13.0651	9.720	12.430	100.
10/3/18	MW-16	nickel	8.0	13.0651	8.389	12.161	100.
4/8/19	MW-16	nickel	5.6	13.250	6.429	10.521	100.
10/11/19	MW-16	nickel	7.2	13.00	5.946	10.104	100.
4/27/20	MW-16	nickel	12.1	12.60	5.827	10.623	100.
10/9/20	MW-16	nickel	8.7	12.60	5.999	10.801	100.
4/9/21	MW-16	nickel	14.1	12.60	6.827	14.233	100.
6/23/2021	MW-16	nickel	12.2	12.60	9.829	13.721	100.
10/25/21	MW-16	nickel	14.4	12.60	9.267	15.433	100.
01/13/2022	MW-16	nickel	14.8	12.60	12.877	14.873	100.
4/11/22	MW-16	nickel	12.1	15.60	11.699	15.051	100.
10/12/22	MW-16	nickel	11.2	15.60	11.066	15.184	100.
4/6/23	MW-16	nickel	14.4	15.60	11.066	15.184	100.
10/9/23	MW-16	nickel	11.5	17.10	10.595	14.005	100.
4/4/24	MW-16	nickel	14.5	17.10	10.789	15.011	100.
10/16/24	MW-16	nickel	31.3	17.10	7.310	28.540	100.

Appendix G

Site Remedial Action System Evaluation

Evaluation of the 1999 SRAMP & the 2023 Corrective Measures

Closed Landfill

In October, 1999 a toe drain system was installed along the south and east sides of the original landfill as the Site Remedial Action and Mitigation Plan (SRAMP). Record drawings for the system are on file with IDNR (Doc # 12969-12974). A map of the toe drain system is attached in Appendix G.1.

A corrective action consisting of source control (landfill gas vents and site grading) coupled with natural attenuation was completed on the south side of the Original Landfill in November, 2023.

MW-7B

VOC impacts beyond the leachate toe drain system were detected in MW-7B. Assessment of Corrective Measures (ACM) was submitted February 28, 2012 related to MW-7B. The historic vinyl chloride SSL at MW-7B (December, 2010) has not been reported since December, 2010.

Both the 95% LCL and 95% UCL values for vinyl chloride at MW-7B are below the MCL of 2.0 ug/L and have remained below since 2010. The delineation of the plume in the vicinity of MW-7B was approved as complete in the IDNR Letter dated November 4, 2014 (Doc # 81707).

MW-8

Impacts by elevated inorganic compounds (arsenic) beyond the leachate toe drain system are reported at MW-8. The 95% LCL for arsenic at MW-8 exceeded the site-specific GWPS (53.7 ug/L) in 2021 and was recorded as an SSL.

The limit of the impact beyond MW-8 was previously determined. A Final Field Characterization/Delineation of Plume Report was submitted January 17, 2014 (Doc# 79350) and was approved November 4, 2014 (Doc# 81707). The ACM Report for MW-8 was submitted February 25, 2022 (Doc # 102431) and was approved by IDNR in the Revised Permit dated May 16, 2022 (Doc 103233). Selection of the Remedy was made in April, 2023 with notice filed with IDNR April 21, 2023 (Doc #106432). The corrective measures were completed in November, 2023 and consist of vents in the landfill cap and regrading of the site along the south side of the original landfill.

MW-8 is located immediately downgradient of the 2023 corrective action and is utilized as the Attenuation Zone Point of Compliance Point. The arsenic results reported for April 4, 2024 and October 16, 2024 (Appendix F) have decreased relative to the previous reported concentrations. Likewise the 95% LCL/95% UCL have also decreased relative to 2023. Data collected at MW-8 in 2025 will need to be evaluated to determine if the downward trends persist.

MW-14

Impacts by elevated inorganic compounds (cobalt) beyond the leachate toe drain system are historically reported at MW-14. The 95% LCL for *cobalt* at MW-14 exceeded the site-specific GWPS (4.0 ug/L) in 2016 and 2017 and was recorded as an SSL.

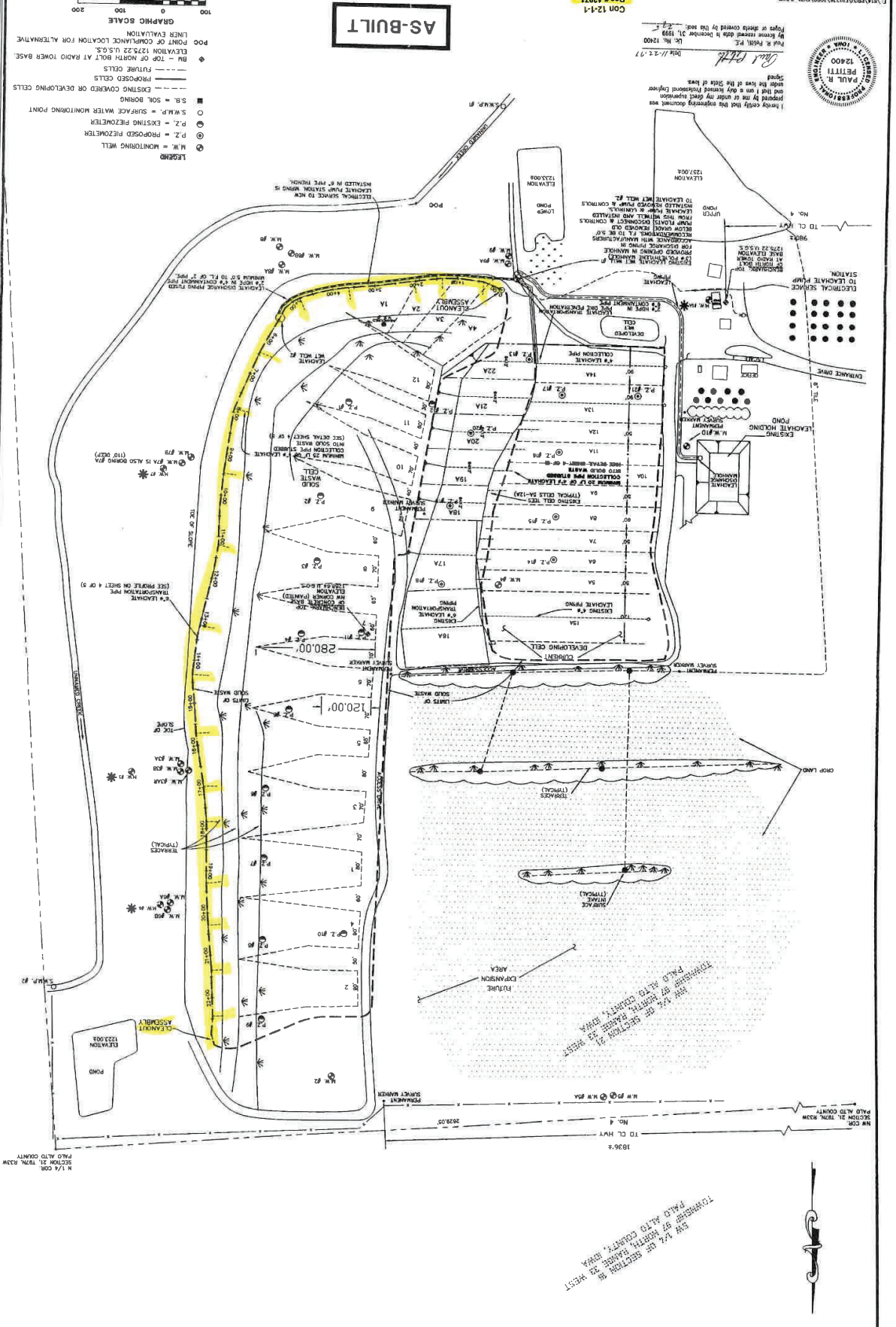
The limit of the impact beyond MW-14 was previously determined. A Final Field Characterization/Delineation of Plume Report was submitted January 17, 2014 (Doc# 79350) and was approved November 4, 2014 (Doc# 81707). MW-14A was installed as a step-out well to define the limits of impact east of MW-14. The water testing at MW-14A on March 30, 2012 indicated that cobalt was undetected and reported as below the method detection limit of 4 ug/L (Appendix F.2). The current site-specific GWPS for cobalt is 4.0 ug/L. MW-14A was properly abandoned on August 9, 2013 (Appendix F.3).

MW-14 is located immediately downgradient of the leachate toe drain and within 50 feet of the toe drain system. MW-14 is utilized as the Attenuation Zone Point of Compliance Point.

The Confidence Interval of Corrective Action Monitoring Well MW-14 is utilized to determine the success of the toe drain system. The Corrective Action Monitoring Evaluation based on the 95% UCL Value for the most recent data is summarized in the MW-14 Table in Appendix F.

There is an apparent downward trend in the Confidence Interval (both 95% LCL and 95% UCL) at MW-14. In both April 2024 and October 2024 the 95% UCL for *cobalt* decreased to a value below the GWPS. The remedy is considered complete when the 95% UCL for *cobalt* has remained below the GWPS for three (3) consecutive years. MW-14 needs to be retained in the Corrective Action Monitoring system through at least 2026.

Appendix G.1 –
Site Remedial Action/Leachate Collection Toe Drain System Map



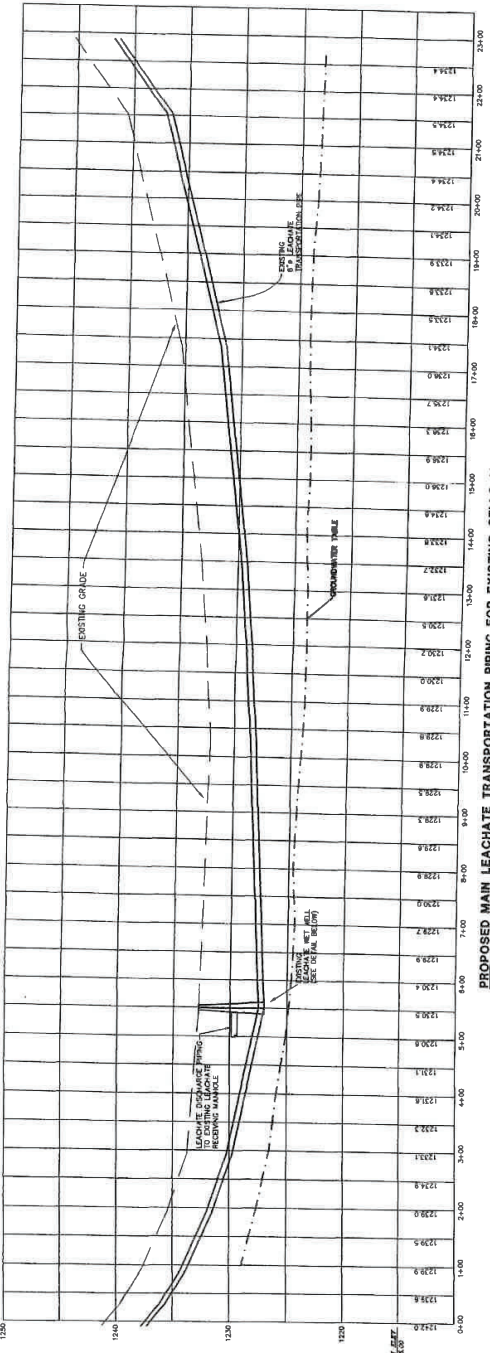
I hereby certify that the engineering documents prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Iowa.
 Date: 12-28-88
 Paul R. Pettit

This project was covered by the seal of:
 Paul R. Pettit, P.E.
 License No. 12800
 At the time of the seal, I was
 the duly Licensed Professional Engineer
 responsible for the design of this project.
 Date: 12-28-88

12/28/88
 J.W.

THIS PLAN IS SUBJECT TO THE
 TERMS AND CONDITIONS OF THE
 AGREEMENT BETWEEN THE
 CLIENT AND THE ENGINEER,
 PALO ALTO COUNTY, IOWA

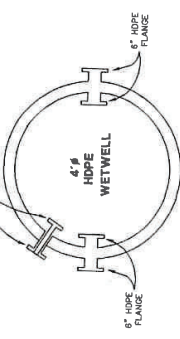
REVISIONS	DATE	BY
1. RINGS, SLAB PIPING	3-17-88	J.L.W.
2. RINGS, DETAILS	7-2-88	J.L.W.
3. AS-BUILT	11-15-88	J.L.W.



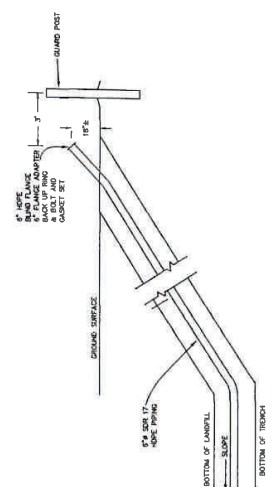
PROPOSED MAIN LEACHATE TRANSPORTATION PIPING FOR EXISTING CELLS 1A-4A AND 1-12

AS-BUILT

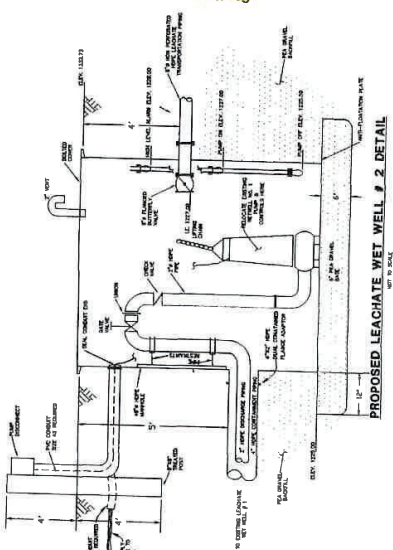
ALL WET WELLS SHALL BE CONCRETE. ALL WELLS SHALL BE 4' DIA. WITH 4" HOLES. ALL WELLS SHALL BE 4' DIA. WITH 4" HOLES. ALL WELLS SHALL BE 4' DIA. WITH 4" HOLES.



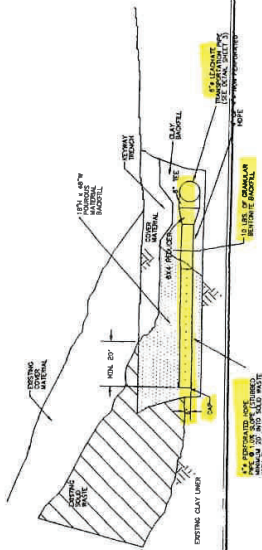
PROPOSED WET WELL #2 PLAN



RISER PIPE AND CLEAN OUT DETAIL
 (TYPICAL AT EVERY CELL)
 NOT TO SCALE



PROPOSED LEACHATE WET WELL # 2 DETAIL



EXISTING DEVELOPED CELLS (1A-4A, 1-12 AND 5A-12A) LEACHATE COLLECTION DETAIL

I hereby certify that this engineering document was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer.

Paul E. Harte
 Date 11-15-88
 My license number 6618, expires 12/31/90
 Signs or seals covered by this seal.



11/17/88

Appendix G.2 –
Keystone Labs Report 3/30/2012

HLW Engineering
PO Box 314
Story City, IA 50248

April 16, 2012
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Work Order: 1D20026

Analyte	Result	MRL	Batch	Method	Analyst	Analyzed	Qualifier
1D20026-03	7C			Matrix: Water		Collected: 03/29/12 14:15	
trans-1,4-Dichloro-2-butene	<5.0 ug/L	5.0	1VD0209	EPA 8260B	TVK	04/06/12 5:08	
1,1,2,2-Tetrachloroethane	<1.0 ug/L	1.0	1VD0209	EPA 8260B	TVK	04/06/12 5:08	
1,4-Dichlorobenzene	<1.0 ug/L	1.0	1VD0209	EPA 8260B	TVK	04/06/12 5:08	
1,2-Dichlorobenzene	<1.0 ug/L	1.0	1VD0209	EPA 8260B	TVK	04/06/12 5:08	
1,2-Dibromo-3-chloropropane	<1.0 ug/L	1.0	1VD0209	EPA 8260B	TVK	04/06/12 5:08	
Surrogate: Dibromofluoromethane	107 %			74-132	TVK	04/06/12 5:08	
Surrogate: 1,2-Dichloroethane-d4	98.9 %			74-133	TVK	04/06/12 5:08	
Surrogate: Toluene-d8	103 %			85-115	TVK	04/06/12 5:08	
Surrogate: 4-Bromofluorobenzene	98.7 %			77-122	TVK	04/06/12 5:08	
Silver, total	<0.0040 mg/L	0.0040	1VD0259	EPA 6020A	RVV	04/13/12 22:56	
Arsenic, total	<0.0040 mg/L	0.0040	1VD0259	EPA 6020A	RVV	04/13/12 22:56	
Barium, total	0.590 mg/L	0.0040	1VD0259	EPA 6020A	RVV	04/13/12 22:56	
Beryllium, total	<0.0040 mg/L	0.0040	1VD0259	EPA 6020A	RVV	04/13/12 22:56	
Cadmium, total	<0.0008 mg/L	0.0008	1VD0259	EPA 6020A	RVV	04/13/12 22:56	
Cobalt, total	<0.0040 mg/L	0.0040	1VD0259	EPA 6020A	RVV	04/13/12 22:56	
Chromium, total	<0.0080 mg/L	0.0080	1VD0259	EPA 6020A	RVV	04/13/12 22:56	
Copper, total	<0.0040 mg/L	0.0040	1VD0259	EPA 6020A	RVV	04/13/12 22:56	
Nickel, total	0.0461 mg/L	0.0040	1VD0259	EPA 6020A	RVV	04/13/12 22:56	
Lead, total	<0.0040 mg/L	0.0040	1VD0259	EPA 6020A	RVV	04/13/12 22:56	
Antimony, total	<0.0020 mg/L	0.0020	1VD0259	EPA 6020A	RVV	04/13/12 22:56	
Selenium, total	<0.0040 mg/L	0.0040	1VD0259	EPA 6020A	RVV	04/13/12 22:56	
Thallium, total	<0.0020 mg/L	0.0020	1VD0259	EPA 6020A	RVV	04/13/12 22:56	
Vanadium, total	<0.0200 mg/L	0.0200	1VD0259	EPA 6020A	RVV	04/13/12 22:56	
Zinc, total	0.0126 mg/L	0.0080	1VD0259	EPA 6020A	RVV	04/13/12 22:56	
1D20026-04	14A			Matrix: Water		Collected: 03/30/12 10:50	
Chloromethane	<1.0 ug/L	1.0	1VD0209	EPA 8260B	TVK	04/06/12 5:46	
Vinyl Chloride	<1.0 ug/L	1.0	1VD0209	EPA 8260B	TVK	04/06/12 5:46	
Bromomethane	<1.0 ug/L	1.0	1VD0209	EPA 8260B	TVK	04/06/12 5:46	
Chloroethane	<1.0 ug/L	1.0	1VD0209	EPA 8260B	TVK	04/06/12 5:46	
Trichlorofluoromethane	<1.0 ug/L	1.0	1VD0209	EPA 8260B	TVK	04/06/12 5:46	
1,1-Dichloroethylene	<1.0 ug/L	1.0	1VD0209	EPA 8260B	TVK	04/06/12 5:46	
Acetone	<10.0 ug/L	10.0	1VD0209	EPA 8260B	TVK	04/06/12 5:46	
Methyl Iodide	<1.0 ug/L	1.0	1VD0209	EPA 8260B	TVK	04/06/12 5:46	
Carbon Disulfide	<1.0 ug/L	1.0	1VD0209	EPA 8260B	TVK	04/06/12 5:46	
Methylene Chloride	<5.0 ug/L	5.0	1VD0209	EPA 8260B	TVK	04/06/12 5:46	
Acrylonitrile	<5.0 ug/L	5.0	1VD0209	EPA 8260B	TVK	04/06/12 5:46	
trans-1,2-Dichloroethylene	<1.0 ug/L	1.0	1VD0209	EPA 8260B	TVK	04/06/12 5:46	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. Samples were preserved in accordance with 40 CFR for pH adjustment unless otherwise noted. MRL= Method Reporting Limit.

HLW Engineering
PO Box 314
Story City, IA 50248

April 16, 2012
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Work Order: 1D20026

Analyte	Result	MRL	Batch	Method	Analyst	Analyzed	Qualifier
1D20026-04	14A			Matrix: Water		Collected: 03/30/12 10:50	
1,1-Dichloroethane	<1.0 ug/L	1.0	1VD0209	EPA 8260B	TVK	04/06/12 5:46	
Vinyl Acetate	<5.0 ug/L	5.0	1VD0209	EPA 8260B	TVK	04/06/12 5:46	
cis-1,2-Dichloroethylene	<1.0 ug/L	1.0	1VD0209	EPA 8260B	TVK	04/06/12 5:46	
2-Butanone (MEK)	<5.0 ug/L	5.0	1VD0209	EPA 8260B	TVK	04/06/12 5:46	
Bromochloromethane	<1.0 ug/L	1.0	1VD0209	EPA 8260B	TVK	04/06/12 5:46	
Chloroform	<1.0 ug/L	1.0	1VD0209	EPA 8260B	TVK	04/06/12 5:46	
1,1,1-Trichloroethane	<1.0 ug/L	1.0	1VD0209	EPA 8260B	TVK	04/06/12 5:46	
Carbon Tetrachloride	<1.0 ug/L	1.0	1VD0209	EPA 8260B	TVK	04/06/12 5:46	
Benzene	<1.0 ug/L	1.0	1VD0209	EPA 8260B	TVK	04/06/12 5:46	
1,2-Dichloroethane	<1.0 ug/L	1.0	1VD0209	EPA 8260B	TVK	04/06/12 5:46	
Trichloroethylene	<1.0 ug/L	1.0	1VD0209	EPA 8260B	TVK	04/06/12 5:46	
1,2-Dichloropropane	<1.0 ug/L	1.0	1VD0209	EPA 8260B	TVK	04/06/12 5:46	
Dibromomethane	<1.0 ug/L	1.0	1VD0209	EPA 8260B	TVK	04/06/12 5:46	
Bromodichloromethane	<1.0 ug/L	1.0	1VD0209	EPA 8260B	TVK	04/06/12 5:46	
cis-1,3-Dichloropropene	<1.0 ug/L	1.0	1VD0209	EPA 8260B	TVK	04/06/12 5:46	
4-Methyl-2-pentanone (MIBK)	<5.0 ug/L	5.0	1VD0209	EPA 8260B	TVK	04/06/12 5:46	
Toluene	<1.0 ug/L	1.0	1VD0209	EPA 8260B	TVK	04/06/12 5:46	
trans-1,3-Dichloropropene	<1.0 ug/L	1.0	1VD0209	EPA 8260B	TVK	04/06/12 5:46	
1,1,2-Trichloroethane	<1.0 ug/L	1.0	1VD0209	EPA 8260B	TVK	04/06/12 5:46	
Tetrachloroethylene	<1.0 ug/L	1.0	1VD0209	EPA 8260B	TVK	04/06/12 5:46	
2-Hexanone (MBK)	<5.0 ug/L	5.0	1VD0209	EPA 8260B	TVK	04/06/12 5:46	
Dibromochloromethane	<1.0 ug/L	1.0	1VD0209	EPA 8260B	TVK	04/06/12 5:46	
1,2-Dibromoethane	<1.0 ug/L	1.0	1VD0209	EPA 8260B	TVK	04/06/12 5:46	
Chlorobenzene	<1.0 ug/L	1.0	1VD0209	EPA 8260B	TVK	04/06/12 5:46	
1,1,1,2-Tetrachloroethane	<1.0 ug/L	1.0	1VD0209	EPA 8260B	TVK	04/06/12 5:46	
Ethylbenzene	<1.0 ug/L	1.0	1VD0209	EPA 8260B	TVK	04/06/12 5:46	
Xylenes, total	<2.0 ug/L	2.0	1VD0209	EPA 8260B	TVK	04/06/12 5:46	
Styrene	<1.0 ug/L	1.0	1VD0209	EPA 8260B	TVK	04/06/12 5:46	
Bromoform	<1.0 ug/L	1.0	1VD0209	EPA 8260B	TVK	04/06/12 5:46	
1,2,3-Trichloropropane	<1.0 ug/L	1.0	1VD0209	EPA 8260B	TVK	04/06/12 5:46	
trans-1,4-Dichloro-2-butene	<5.0 ug/L	5.0	1VD0209	EPA 8260B	TVK	04/06/12 5:46	
1,1,2,2-Tetrachloroethane	<1.0 ug/L	1.0	1VD0209	EPA 8260B	TVK	04/06/12 5:46	
1,4-Dichlorobenzene	<1.0 ug/L	1.0	1VD0209	EPA 8260B	TVK	04/06/12 5:46	
1,2-Dichlorobenzene	<1.0 ug/L	1.0	1VD0209	EPA 8260B	TVK	04/06/12 5:46	
1,2-Dibromo-3-chloropropane	<1.0 ug/L	1.0	1VD0209	EPA 8260B	TVK	04/06/12 5:46	
Surrogate: Dibromofluoromethane	110 %			74-132	TVK	04/06/12 5:46	
Surrogate: 1,2-Dichloroethane-d4	97.3 %			74-133	TVK	04/06/12 5:46	
Surrogate: Toluene-d8	101 %			85-115	TVK	04/06/12 5:46	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. Samples were preserved in accordance with 40 CFR for pH adjustment unless otherwise noted. MRL= Method Reporting Limit.

HLW Engineering
PO Box 314
Story City, IA 50248

April 16, 2012
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Work Order: 1D20026

Analyte	Result	MRL	Batch	Method	Analyst	Analyzed	Qualifier
1D20026-04	14A			Matrix: Water		Collected: 03/30/12 10:50	
Surrogate: 4-Bromofluorobenzene	98.0 %			77-122	TVK	04/06/12 5:46	
Silver, total	<0.0040 mg/L	0.0040	1VD0259	EPA 6020A	RVV	04/13/12 23:03	
Arsenic, total	0.0063 mg/L ^{0.01}	0.0040	1VD0259	EPA 6020A	RVV	04/13/12 23:03	
Barium, total	0.371 mg/L ^{2.0}	0.0040	1VD0259	EPA 6020A	RVV	04/13/12 23:03	
Beryllium, total	<0.0040 mg/L	0.0040	1VD0259	EPA 6020A	RVV	04/13/12 23:03	
Cadmium, total	<0.0008 mg/L	0.0008	1VD0259	EPA 6020A	RVV	04/13/12 23:03	
Cobalt, total	<0.0040 mg/L	0.0040	1VD0259	EPA 6020A	RVV	04/13/12 23:03	
Chromium, total	<0.0080 mg/L	0.0080	1VD0259	EPA 6020A	RVV	04/13/12 23:03	
Copper, total	<0.0040 mg/L	0.0040	1VD0259	EPA 6020A	RVV	04/13/12 23:03	
Nickel, total	0.0195 mg/L ^{0.1}	0.0040	1VD0259	EPA 6020A	RVV	04/13/12 23:03	
Lead, total	<0.0040 mg/L	0.0040	1VD0259	EPA 6020A	RVV	04/13/12 23:03	
Antimony, total	<0.0020 mg/L	0.0020	1VD0259	EPA 6020A	RVV	04/13/12 23:03	
Selenium, total	<0.0040 mg/L	0.0040	1VD0259	EPA 6020A	RVV	04/13/12 23:03	
Thallium, total	<0.0020 mg/L	0.0020	1VD0259	EPA 6020A	RVV	04/13/12 23:03	
Vanadium, total	<0.0200 mg/L	0.0200	1VD0259	EPA 6020A	RVV	04/13/12 23:03	
Zinc, total	0.0080 mg/L ^{5.0-957}	0.0080	1VD0259	EPA 6020A	RVV	04/13/12 23:03	
1D20026-05	7D			Matrix: Water		Collected: 03/30/12 11:18	
Chloromethane	<1.0 ug/L	1.0	1VD0209	EPA 8260B	TVK	04/06/12 12:07	
Vinyl Chloride	1.6 ug/L ²	1.0	1VD0209	EPA 8260B	TVK	04/06/12 12:07	
Bromomethane	<1.0 ug/L	1.0	1VD0209	EPA 8260B	TVK	04/06/12 12:07	
Chloroethane	1.6 ug/L ^{2.0-0.0}	1.0	1VD0209	EPA 8260B	TVK	04/06/12 12:07	
Trichlorofluoromethane	<1.0 ug/L	1.0	1VD0209	EPA 8260B	TVK	04/06/12 12:07	
1,1-Dichloroethylene	<1.0 ug/L	1.0	1VD0209	EPA 8260B	TVK	04/06/12 12:07	
Acetone	<10.0 ug/L	10.0	1VD0209	EPA 8260B	TVK	04/06/12 12:07	
Methyl Iodide	<1.0 ug/L	1.0	1VD0209	EPA 8260B	TVK	04/06/12 12:07	
Carbon Disulfide	<1.0 ug/L	1.0	1VD0209	EPA 8260B	TVK	04/06/12 12:07	
Methylene Chloride	<5.0 ug/L	5.0	1VD0209	EPA 8260B	TVK	04/06/12 12:07	
Acrylonitrile	<5.0 ug/L	5.0	1VD0209	EPA 8260B	TVK	04/06/12 12:07	
trans-1,2-Dichloroethylene	<1.0 ug/L	1.0	1VD0209	EPA 8260B	TVK	04/06/12 12:07	
1,1-Dichloroethane	5.0 ug/L ^{1.0}	1.0	1VD0209	EPA 8260B	TVK	04/06/12 12:07	
Vinyl Acetate	<5.0 ug/L	5.0	1VD0209	EPA 8260B	TVK	04/06/12 12:07	
cis-1,2-Dichloroethylene	3.2 ug/L ^{7.0}	1.0	1VD0209	EPA 8260B	TVK	04/06/12 12:07	
2-Butanone (MEK)	<5.0 ug/L	5.0	1VD0209	EPA 8260B	TVK	04/06/12 12:07	
Bromochloromethane	<1.0 ug/L	1.0	1VD0209	EPA 8260B	TVK	04/06/12 12:07	
Chloroform	<1.0 ug/L	1.0	1VD0209	EPA 8260B	TVK	04/06/12 12:07	
1,1,1-Trichloroethane	<1.0 ug/L	1.0	1VD0209	EPA 8260B	TVK	04/06/12 12:07	
Carbon Tetrachloride	<1.0 ug/L	1.0	1VD0209	EPA 8260B	TVK	04/06/12 12:07	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. Samples were preserved in accordance with 40 CFR for pH adjustment unless otherwise noted. MRL = Method Reporting Limit.

Appendix G.3 –
MW-14A Well Plugging Record

Iowa Department of Natural Resources

**Abandoned Water Well
Plugging Record**

1. Owner:

Name: NORTHERN PLAINS REGIONAL LANDFILL City: GRAETTINGER State: IOWA
Address: 3032 420th Avenue Zip: 51342 Phone: (712) 859-3185

2. Well (Cistern) Location:

1/4 of, NW 1/4 of, NE 1/4 of, Section 21, Twp. 97 N, Range 33 (West/East(circle one))
PALO ALTO County, Describe well location on property: EAST-SOUTHEAST SIDE

3. Description:

Well depth: 15 ft. Casing material: steel, (plastic) concrete, clay, brick, stone
Depth to water: 2.2 ft. (circle one)
Casing diameter: 2.0 in. Type of construction: drilled, driven, bored, dug, (augered)
Yr. or decade constrd.: 2010 (circle one)
Depth of casing: 15 ft. Check if this is a Monitoring Well Well I.D.: TMW-14A

Check if Cistern depth: _____ ft. diameter: _____ ft.

I certify this well has been plugged as required by rule 567-39.8¹¹³ of the Iowa Administrative Code (IAC). I agree to provide any additional information the county or department may need concerning this well.

Signature of Owner: Carol Wilson, HLW Engineering Date Plugged: 8-9-13
Agent

If plugged by certified well contractor, complete this box:

I have plugged this well as required by rule 567-39.8¹¹³ of the Iowa Administrative Code (IAC).
Signature of Contractor: Jim White Cert. No. 1812

OR, If plugged by well owner, complete this box:

The property owner has plugged this well following requirements in rule 567-39.8 of the Iowa Administrative Code with the oversight and assistance of the designated county agent.
Signature of County Agent: _____ Date Approved: _____

Eligible for Grants-to-Counties cost share: YES NO (Determined by County Agent)

Complete one form for each well plugged and submit within 30 days to the local county agent:

or, only if no county agent is available, to:

**Water Supply Section
Department of Natural Resources
900 East Grand Avenue
Des Moines, IA 50319-0034**



HLW Engineering Group

HLW Engineering Group
 204 West Broad Street, P.O. Box 314
 Story City, Iowa 50248

Telephone: (515) 733-4144
 Fax: (515) 733-4146

LOG OF TEST BORING

Drillers Rewerts - Justin Rewerts Boring No. TMW-14A HLW Observer JGH
 HLW Project No. 6021-12A.200

Date Drilled 3/29/12 Project NORTHERN PLAINS REGIONAL LANDFILL
 Surface Elevation 1225.8 FT 74-SDP-2-76P
 Depth Drilled 15 FT ASSESSMENT OF CORRECTIVE MEASURES
 Drilling Method 7" HSA
 Depth to Water 2.4 ft @ completion (▽), 2.2 ft @ 24 hrs. (▼), _____ ft @ _____ hrs.

DEPTH FT	WELL DETAIL	SAMPLE		COLOR	MC %	CONSISTENCY	ELEV	SOIL DESCRIPTION
		NO.	TYPE					
0							0'	TOP PVC = 1227.19'
0				Brown Black	Moist	Medium	0'	Clay Topsoil
3				Black		Soft	2.5'	Organic Silty Clay
5					Wet		6'	Very Sandy Clay
15	END OF BORING @ 15'							

Appendix H

Leachate Collection System Performance Evaluation Report

Leachate Collection System Performance Evaluation Report

Between January 1, 2024, and December 31, 2024, 5,750,429.26 gallons of leachate were discharged to the Spencer POTW (Appendix H.1). This volume was weighed across the landfill scales prior to transport and is the official record. Chemical analysis of the waste stream hauled to Spencer (Appendix H.2) was conducted in accordance with the pretreatment agreement between the City of Spencer and the Northern Plains Regional Landfill (Appendix H.3).

Leachate Recirculation

A Revised Leachate Recirculation Operation Plan was submitted to IDNR on April 15, 2015 (Doc #83103). The revised plan was approved in Permit Amendment #15 dated April 22, 2015. Approval is also contained in Special Provision X.5 of the SDP Permit dated November 4, 2015. The “Daily Leachate Recirculation Logs” from weeks when leachate was recirculated in 2024 are included in Appendix H.4.

Based on data contained on the “Daily Leachate Recirculation Logs” in Appendix H.4, 55,360 gallons of leachate were recirculated by spray application and no leachate was recirculated by pumping to a trench in 2024. Recirculation only occurred in Cell C, no recirculation occurred in Cells A or B in 2024. A summary of the recirculation dates and volumes is included in Appendix H.4. Daily leachate head measurements during recirculation from the piezometer in Cell C, as per the Leachate Recirculation Operation Plan, were not conducted during 2024.

Leachate Level & Thickness Data – Closed Areas

Closed Areas include both the Original fill areas along the east and Cell 5A through Cell 22A to the south. The leachate control system (LCS) in the original fill areas consists of a series of retrofitted gravity collection pipes. The leachate control system (LCS) in Cell 5A through Cell 22A consists of a series of gravity collection pipes that drain to a central conveyance pipe. All leachate collected is conveyed to a holding lagoon in the west-southwest portion of the site.

Original Fill Area - Leachate piezometers in the Original Fill Area include PZ-1 through PZ-12. PZ-5 was destroyed and removed. Monthly leachate head measurements are recorded from the leachate piezometers in the Original Fill Area and are included in Appendix H.5. Note that piezometers were not measured during March, 2024. Leachate thickness data is calculated from the monthly measurements and is included in the appendix. The thickness data presented is estimated based on actual field measurements of both depth of well and depth to leachate. Leachate thickness is relatively small in the unlined landfill areas. The interpretation is made that the LCS demonstrates effective control of leachate flow paths.

Cell 5A through Cell 22A – The leachate piezometer in the Cell 5A through Cell 22A fill areas is PZ-22 located at the lowest end of the liner and leachate collection piping network. Monthly leachate head measurements are recorded from PZ-22 and are included in Appendix H.5. Note that piezometers were not measured during March, 2024. Leachate thickness data is calculated from the monthly measurements and is included in the appendix. The thickness data presented is

estimated based on actual field measurements of both depth of well and depth to leachate. Minimal change was noted throughout 2024 at PZ-22. The interpretation is made that the LCS demonstrates effective control of leachate flow paths.

Leachate Level & Thickness Data – Operating RCRA Landfill

The leachate control system that underlies the RCRA Subtitle D Expansion (Cell A, Cell B, Cell C, Cell D1, Cell D2) conforms to current rule. Leachate Piezometers PZ-23 (in leachate pipe trench) and PZ-24 (on liner) exist in Cell A. PZ-25 (in leachate pipe trench) and PZ-26 (on liner) exist in Cell B. PZ-27 (in leachate pipe trench) and PZ-28 (on liner) exist in Cell C. PZ-29 (in leachate pipe trench) and PZ-30 (on liner) exist in Cell D1. PZ-31 (in leachate pipe trench) and PZ-32 (on liner) exist in Cell D2. Historically, leachate data in PZ-23, PZ-25, and PZ-27 was recorded daily during recirculation events as per the Leachate Recirculation Operation Plan (daily measurements in PZ-29 and/or PZ-31 would be recorded in the event that leachate recirculation moves into Cell D1 and/or Cell D2 in the future). Daily leachate head measurements from PZ-23, PZ-25, and PZ-27 were not conducted during leachate recirculation in June, 2024.

The data in Appendix H.5 includes the measurement of both the depth to the liquid surface (in feet from the top of casing – Column F) and the piezometer depth (in feet from the top of casing – Column G). The difference represents the liquid standing in the piezometer pipe (Column H). In order to evaluate leachate head on the liner, a reference point set at the top of liner is necessary. In piezometers PZ-23, PZ-25, PZ-27, PZ-29, and PZ-31, the reference point is set 1.5 feet above the bottom of the piezometer. At piezometers PZ-24, PZ-26, PZ-28, PZ-30, and PZ-32, the reference point is set 0.083 feet (1-inch) below the bottom of piezometer. An adjustment column (Column I) is added to the Tables in Appendix H.5 in order to calculate the head (in feet) above liner (Column J) using the reference points. Leachate Piezometer Construction details illustrating the reference points related to leachate piezometer bottoms were provided in the 2014 AWQR (Doc# 82391).

Levels at four (4) of the piezometers in the operating RCRA landfill exceeded 12” during 2024. The points and the months levels exceeded 12” are below:

PZ-23, Cell A (Feb., Aug., Oct., Nov., Dec)
PZ-24, Cell A (May, Jun., Jul., Aug.)
PZ-25, Cell B (Feb., May through Dec.)
PZ-26, Cell B (May, Jun., Jul., Aug.)
PZ-27, Cell C (May, Jun., Jul., Aug.)
PZ-28, Cell C (Jan., May, Jun., Jul., Aug., Oct., Nov., Dec.)
PZ-30, Cell D (Dec)

The elevated readings noted above during 2024 do not appear to be associated with leachate recirculation. Recirculation occurred only in Cell C and only during June, 2024 (see Appendix H.4). The elevated readings in PZ-27 and PZ-28 occurred in advance to any leachate recirculation in Cell C.

It is recommended that the leachate surface and head data continue to be collected and then reevaluated on an annual basis at each of the referenced leachate piezometers.

Leachate Line Cleaning

IAC 567-113.7(5)b(5) requires that the leachate system be cleaned every three (3) years. The leachate collection and conveyance lines throughout the site were cleaned during September, 2024. The next cleaning is tentatively scheduled for 2027.

Separation from Groundwater

A groundwater tile network (dewatering system) exists beneath the Cell A, Cell B, Cell C, Cell D, and Cell E expansion areas. As stated in the May 20, 2013 Cell C Expansion Project correspondence related to cut-off trench design (Doc #77051), the tile inverts are set 6 feet below the solid waste base.

A field measurement in the cleanout of the dewatering system outlet at the west edge of Cell A was collected on April 6, 2023 indicated that the point was dry, confirming the separation between the water table and the waste. On October 9, 2023 the dewatering system cleanout was found to have been removed as the dewatering system from Cell E1 was connected along the west side of Cell A.

Appendix H.1-
Leachate Hauled to Spencer for Treatment

<u>2024 Leachate Summary</u>			<u>NOTES</u>
	<u>Gallons per Month</u>	<u>Gallons January to Year End</u>	
<u>January</u>	277,115.11	277,115.11	
<u>February</u>	286568.35	563683.45	
<u>March</u>	190081.53	753764.99	
<u>April</u>	402750.60	1156515.59	
<u>May</u>	896868.11	2053383.69	
<u>June</u>	656000.00	2709383.69	
<u>July</u>	1086482.01	3787906.47	
<u>August</u>	808637.89	4588695.44	
<u>September</u>	273263.79	4869808.15	
<u>October</u>	387930.46	5257738.61	
<u>November</u>	262083.93	5519822.54	
<u>December</u>	230606.71	5750429.26	

Appendix H.2-
Leachate Analyses by the POTW

**Northern Plains Regional Landfill
Leachate Testing Sumaary
Veolia North America Contract Services**

Date	Landfill GPD	Landfill (mg/l)	Landfill (mg/l)	Landfill NH- (mg/l)	Landfill pH SU	Flow MGD MGD
1/1/2024	0					0.000000
1/2/2024	15947	86	39	170.0		0.015947
1/3/2024	31845					0.031845
1/4/2024	23767					0.023767
1/5/2024	0					0.000000
1/6/2024	0					0.000000
1/7/2024	0					0.000000
1/8/2024	7652	78	47	185.0		0.007652
1/9/2024	0				7.68	0.000000
1/10/2024	7650					0.007650
1/11/2024	15724					0.015724
1/12/2024	0					0.000000
1/13/2024	0					0.000000
1/14/2024	0					0.000000
1/15/2024	0					0.000000
1/16/2024	0					0.000000
1/17/2024	31460	87	38	217.0		0.031460
1/18/2024	15832				7.56	0.015832
1/19/2024	0					0.000000
1/20/2024	0					0.000000
1/21/2024	0					0.000000
1/22/2024	15803	75	40	100.0		0.015803
1/23/2024	31782				7.60	0.031782
1/24/2024	7942					0.007942
1/25/2024	31731					0.031731
1/26/2024	23902					0.023902
1/27/2024	0					0.000000
1/28/2024	0					0.000000
1/29/2024	7933	85	22	278.0		0.007933
1/30/2024	0				7.52	0.000000
1/31/2024	0					0.000000

**Northern Plains Regional Landfill
Leachate Testing Sumaary
Veolia North America Contract Services**

Date	Landfill GPD	Landfill (mg/l)	Landfill (mg/l)	Landfill NH- (mg/l)	Landfill pH SU	Flow MGD MGD
2/1/2024	0					0.000000
2/2/2024	0					0.000000
2/3/2024	0					0.000000
2/4/2024	0					0.000000
2/5/2024	8223	96	25	110.0		0.008223
2/6/2024	15947				7.55	0.015947
2/7/2024	31928					0.031928
2/8/2024	15868					0.015868
2/9/2024	15981					0.015981
2/10/2024	0					0.000000
2/11/2024	0					0.000000
2/12/2024	23964					0.023964
2/13/2024	24031					0.024031
2/14/2024	15883					0.015883
2/15/2024	7918					0.007918
2/16/2024	0					0.000000
2/17/2024	0					0.000000
2/18/2024	0					0.000000
2/19/2024	23820	63	25	192.0	7.24	0.023820
2/20/2024	15959					0.015959
2/21/2024	23844					0.023844
2/22/2024	15898					0.015898
2/23/2024	0					0.000000
2/24/2024	0					0.000000
2/25/2024	0					0.000000
2/26/2024	7779	55	55	211.0	8.07	0.007779
2/27/2024	15667					0.015667
2/28/2024	0					0.000000
2/29/2024	23816					0.023816

**Northern Plains Regional Landfill
Leachate Testing Sumaary
Veolia North America Contract Services**

Date	Landfill GPD	Landfill (mg/l)	Landfill (mg/l)	Landfill NH- (mg/l)	Landfill pH SU	Flow MGD MGD
3/1/2024	15691					0.015691
3/2/2024	0					0.000000
3/3/2024	0					0.000000
3/4/2024	0	62	25	69.8		0.000000
3/5/2024	23856					0.023856
3/6/2024	7899					0.007899
3/7/2024	15453					0.015453
3/8/2024	0					0.000000
3/9/2024	0					0.000000
3/10/2024	0					0.000000
3/11/2024	8058	63		182.0	8.02	0.008058
3/12/2024	7962					0.007962
3/13/2024	7950					0.007950
3/14/2024	0					0.000000
3/15/2024	0					0.000000
3/16/2024	0					0.000000
3/17/2024	0					0.000000
3/18/2024	0					0.000000
3/19/2024	15693	64	40	227.0	7.96	0.015693
3/20/2024	0					0.000000
3/21/2024	0					0.000000
3/22/2024	7887					0.007887
3/23/2024	0					0.000000
3/24/2024	0	58				0.000000
3/25/2024	7825		50	229.0	7.92	0.007825
3/26/2024	7971					0.007971
3/27/2024	8067					0.008067
3/28/2024	15878					0.015878
3/29/2024	39871					0.039871
3/30/2024	0					0.000000
3/31/2024	0					0.000000

**Northern Plains Regional Landfill
Leachate Testing Sumaary
Veolia North America Contract Services**

Date	Landfill GPD	Landfill (mg/l)	Landfill (mg/l)	Landfill NH- (mg/l)	Landfill pH SU	Flow MGD MGD
4/1/2024	31631	57	30	208.0	7.83	0.031631
4/2/2024	15844					0.015844
4/3/2024	15887					0.015887
4/4/2024	7842					0.007842
4/5/2024	15789					0.015789
4/6/2024	0					0.000000
4/7/2024	0					0.000000
4/8/2024	23775	46	205	174.0		0.023775
4/9/2024	23878					0.023878
4/10/2024	0					0.000000
4/11/2024	7849					0.007849
4/12/2024	23369					0.023369
4/13/2024	0					0.000000
4/14/2024	0					0.000000
4/15/2024	15597	45	30			0.015597
4/16/2024	23634					0.023634
4/17/2024	23528					0.023528
4/18/2024	23544					0.023544
4/19/2024	31638					0.031638
4/20/2024	0					0.000000
4/21/2024	0					0.000000
4/22/2024	23707	51	25	119.0	7.82	0.023707
4/23/2024	7926					0.007926
4/24/2024	7993					0.007993
4/25/2024	0					0.000000
4/26/2024	23854		80	250.0	8.52	0.023854
4/27/2024	0					0.000000
4/28/2024	0					0.000000
4/29/2024	31554	49	30	79.6	7.86	0.031554
4/30/2024	23914					0.023914

**Northern Plains Regional Landfill
Leachate Testing Sumaary
Veolia North America Contract Services**

Date	Landfill GPD	Landfill (mg/l)	Landfill (mg/l)	Landfill NH- (mg/l)	Landfill pH SU	Flow MGD MGD
5/1/2024	31641					0.031641
5/2/2024	45614					0.045614
5/3/2024	31724					0.031724
5/4/2024						
5/5/2024						
5/6/2024	23716		10	92.6	7.91	0.023716
5/7/2024	31734					0.031734
5/8/2024	23884					0.023884
5/9/2024	39473					0.039473
5/10/2024	15900					0.015900
5/11/2024						
5/12/2024						
5/13/2024	39783	37	27	80.7	7.65	0.039783
5/14/2024	47611					0.047611
5/15/2024	47840					0.047840
5/16/2024	31647					0.031647
5/17/2024	31676					0.031676
5/18/2024						
5/19/2024						
5/20/2024	31681	101	40	120.0		0.031681
5/21/2024	50441					0.050441
5/22/2024	67989					0.067989
5/23/2024	60152					0.060152
5/24/2024	18363					0.018363
5/25/2024						
5/26/2024						
5/27/2024						
5/28/2024	80403	95	30	132.0	7.71	0.080403
5/29/2024	39699					0.039699
5/30/2024	47657					0.047657
5/31/2024						

**Northern Plains Regional Landfill
Leachate Testing Sumaary
Veolia North America Contract Services**

Date	Landfill GPD	Landfill (mg/l)	Landfill (mg/l)	Landfill NH- (mg/l)	Landfill pH SU	Flow MGD MGD
6/1/2024	0					0.000000
6/2/2024	0					0.000000
6/3/2024	36156	81	32	90.9	7.81	0.036156
6/4/2024	36285					0.036285
6/5/2024	42830					0.042830
6/6/2024	44331					0.044331
6/7/2024	13501					0.013501
6/8/2024	0					0.000000
6/9/2024	0					0.000000
6/10/2024	38058				7.75	0.038058
6/11/2024	65796	97	13	113.0		0.065796
6/12/2024	15784					0.015784
6/13/2024	46012					0.046012
6/14/2024	43875					0.043875
6/15/2024	0					0.000000
6/16/2024	0			188.0	7.79	0.000000
6/17/2024	70686					0.070686
6/18/2024	52221					0.052221
6/19/2024	58168					0.058168
6/20/2024	44475					0.044475
6/21/2024	32038					0.032038
6/22/2024	0					0.000000
6/23/2024	0					0.000000
6/24/2024	15894					0.015894
6/25/2024	0					0.000000
6/26/2024	0					0.000000
6/27/2024	0					0.000000
6/28/2024	0					0.000000
6/29/2024	0					0.000000
6/30/2024	0					0.000000

**Northern Plains Regional Landfill
Leachate Testing Sumaary
Veolia North America Contract Services**

Date	Landfill GPD	Landfill (mg/l)	Landfill (mg/l)	Landfill NH- (mg/l)	Landfill pH SU	Flow MGD MGD
7/1/2024	0					0.000000
7/2/2024	39612					0.039612
7/3/2024	39132					0.039132
7/4/2024	0					0.000000
7/5/2024	40180					0.040180
7/6/2024	0					0.000000
7/7/2024	0					0.000000
7/8/2024	54225					0.054225
7/9/2024	86698					0.086698
7/10/2024	87616	58		68.3	7.72	0.087616
7/11/2024	74602					0.074602
7/12/2024	40530					0.040530
7/13/2024	0					0.000000
7/14/2024	0					0.000000
7/15/2024	41084					0.041084
7/16/2024	40360					0.040360
7/17/2024	41019					0.041019
7/18/2024	40734					0.040734
7/19/2024	40650					0.040650
7/20/2024	0					0.000000
7/21/2024	0					0.000000
7/22/2024	40086					0.040086
7/23/2024	39794					0.039794
7/24/2024	46508					0.046508
7/25/2024	45476					0.045476
7/26/2024	40921					0.040921
7/27/2024	0					0.000000
7/28/2024	0					0.000000
7/29/2024	60820					0.060820
7/30/2024	66249					0.066249
7/31/2024	71825					0.071825

**Northern Plains Regional Landfill
Leachate Testing Sumaary
Veolia North America Contract Services**

Date	Landfill GPD	Landfill (mg/l)	Landfill (mg/l)	Landfill NH- (mg/l)	Landfill pH SU	Flow MGD MGD
8/1/2024	65281					0.065281
8/2/2024	39664					0.039664
8/3/2024	0					0.000000
8/4/2024	0					0.000000
8/5/2024	54396					0.054396
8/6/2024	53293					0.053293
8/7/2024	61952					0.061952
8/8/2024	75971					0.075971
8/9/2024	41137					0.041137
8/10/2024	0					0.000000
8/11/2024	0					0.000000
8/12/2024	61662	127	12	179.0	7.79	0.061662
8/13/2024	54789					0.054789
8/14/2024	68528					0.068528
8/15/2024	68199					0.068199
8/16/2024	67892					0.067892
8/17/2024	0					0.000000
8/18/2024	0					0.000000
8/19/2024	23945					0.023945
8/20/2024	32285					0.032285
8/21/2024	0					0.000000
8/22/2024	0					0.000000
8/23/2024	7921		23	39.4		0.007921
8/24/2024	0					0.000000
8/25/2024	0					0.000000
8/26/2024	7947	100	3	231.0	7.80	0.007947
8/27/2024	23777					0.023777
8/28/2024	0					0.000000
8/29/2024	0					0.000000
8/30/2024	0					0.000000
8/31/2024	0					0.000000

**Northern Plains Regional Landfill
Leachate Testing Sumaary
Veolia North America Contract Services**

Date	Landfill GPD	Landfill (mg/l)	Landfill (mg/l)	Landfill NH- (mg/l)	Landfill pH SU	Flow MGD MGD
9/1/2024	0					0.000000
9/2/2024	0					0.000000
9/3/2024	31376					0.031376
9/4/2024	0					0.000000
9/5/2024	31664	97	18	161.0		0.031664
9/6/2024	7899					0.007899
9/7/2024	0					0.000000
9/8/2024	0					0.000000
9/9/2024	23686					0.023686
9/10/2024	7859					0.007859
9/11/2024	12592					0.012592
9/12/2024	12592					0.012592
9/13/2024	6249					0.006249
9/14/2024	0					0.000000
9/15/2024	0					0.000000
9/16/2024	25005					0.025005
9/17/2024	6237					0.006237
9/18/2024	7700					0.007700
9/19/2024	22098	74	21	189.0	7.90	0.022098
9/20/2024	0					0.000000
9/21/2024	0					0.000000
9/22/2024	0					0.000000
9/23/2024	0					0.000000
9/24/2024	7784					0.007784
9/25/2024	0					0.000000
9/26/2024	0					0.000000
9/27/2024	15460					0.015460
9/28/2024	0					0.000000
9/29/2024	0					0.000000
9/30/2024	15657	64	31	206.0		0.015657

**Northern Plains Regional Landfill
Leachate Testing Sumaary
Veolia North America Contract Services**

Date	Landfill GPD	Landfill (mg/l)	Landfill (mg/l)	Landfill NH- (mg/l)	Landfill pH SU	Flow MGD MGD
10/1/2024	0					0.000000
10/2/2024	0					0.000000
10/3/2024	7897					0.007897
10/4/2024	0					0.000000
10/5/2024	0					0.000000
10/6/2024	0					0.000000
10/7/2024	31350	62	45	171.0	8.12	0.031350
10/8/2024	31813					0.031813
10/9/2024	31688					0.031688
10/10/2024	23676					0.023676
10/11/2024	0					0.000000
10/12/2024	0					0.000000
10/13/2024	0					0.000000
10/14/2024	15796					0.015796
10/15/2024	7892	65	47	164.0	8.05	0.007892
10/16/2024	0					0.000000
10/17/2024	23775					0.023775
10/18/2024	7990					0.007990
10/19/2024	0					0.000000
10/20/2024	0					0.000000
10/21/2024	15976	68	33	184.0	8.00	0.015976
10/22/2024	7971					0.007971
10/23/2024	31671					0.031671
10/24/2024	23556					0.023556
10/25/2024	31808					0.031808
10/26/2024	0					0.000000
10/27/2024	0					0.000000
10/28/2024	31484					0.031484
10/29/2024	23990					0.023990
10/30/2024	31847	79	48	49.9		0.031847
10/31/2024	15832					0.015832

**Northern Plains Regional Landfill
Leachate Testing Sumaary
Veolia North America Contract Services**

Date	Landfill GPD	Landfill (mg/l)	Landfill (mg/l)	Landfill NH- (mg/l)	Landfill pH SU	Flow MGD MGD
11/1/2024	23616					0.023616
11/2/2024	0					0.000000
11/3/2024	0					0.000000
11/4/2024	23969	89	51	284.0		0.023969
11/5/2024	23926					0.023926
11/6/2024	23772					0.023772
11/7/2024	31576					0.031576
11/8/2024	7959					0.007959
11/9/2024	0					0.000000
11/10/2024	0					0.000000
11/11/2024	0					0.000000
11/12/2024	16029					0.016029
11/13/2024	31863					0.031863
11/14/2024	15957					0.015957
11/15/2024	7959					0.007959
11/16/2024	0					0.000000
11/17/2024	0					0.000000
11/18/2024	0					0.000000
11/19/2024	7916		76	217.0		0.007916
11/20/2024	32019					0.032019
11/21/2024	7806					0.007806
11/22/2024	0					0.000000
11/23/2024	0					0.000000
11/24/2024	0					0.000000
11/25/2024	0	72	39	166.0	7.77	0.000000
11/26/2024	7717					0.007717
11/27/2024	0					0.000000
11/28/2024	0					0.000000
11/29/2024	0					0.000000
11/30/2024	0					0.000000

Northern Plains Regional Landfill
 Leachate Testing Sumaary
 Veolia North America Contract Services

Date	Landfill GPD	Landfill (mg/l)	Landfill (mg/l)	Landfill NH- (mg/l)	Landfill pH SU	Flow MGD MGD
12/1/2024	0					0.000000
12/2/2024	0					0.000000
12/3/2024	23588					0.023588
12/4/2024	0					0.000000
12/5/2024	31779					0.031779
12/6/2024	15998					0.015998
12/7/2024	0					0.000000
12/8/2024	0					0.000000
12/9/2024	0					0.000000
12/10/2024	0					0.000000
12/11/2024	15837					0.015837
12/12/2024	24031					0.024031
12/13/2024	0					0.000000
12/14/2024	0					0.000000
12/15/2024	0					0.000000
12/16/2024	0					0.000000
12/17/2024	0					0.000000
12/18/2024	0					0.000000
12/19/2024	0					0.000000
12/20/2024	0					0.000000
12/21/2024	0					0.000000
12/22/2024	0					0.000000
12/23/2024	32544					0.032544
12/24/2024	15830					0.015830
12/25/2024	0					0.000000
12/26/2024	23576	104	25	248.0	7.63	0.023576
12/27/2024	0					0.000000
12/28/2024	0					0.000000
12/29/2024	0					0.000000
12/30/2024	23699					0.023699

ANALYTICAL REPORT

PREPARED FOR

Attn: Shelby Anderson
Veolia Water N. America Operating Srvs
400 10th AVE. SE
PO BOX 1215
Spencer, Iowa 51301

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JOB DESCRIPTION

Leachate Discharge

JOB NUMBER

310-274812-1

Eurofins Cedar Falls

Job Notes

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

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

Authorization



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Case Narrative

Client: Veolia Water N. America Operating Svcs
Project: Leachate Discharge

Job ID: 310-274812-1

Job ID: 310-274812-1

Eurofins Cedar Falls

Job Narrative 310-274812-1

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

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

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

Receipt

The sample was received on 2/13/2024 9:25 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.6°C.

GC/MS VOA

Method 624.1_PREC: The following volatiles sample was diluted due to foaming at the time of sample preparation during the original sample analysis: Leachate Discharge (310-274812-1). Elevated reporting limits (RLs) are provided.

Method 624.1_PREC: The initial calibration verification (ICV) result for batch 310-413574 was above the upper control limit. The affected analyte is: Bromomethane. Sample results were non-detects, and have been reported as qualified data.

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

GC/MS Semi VOA

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

PCBs

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

Pesticides

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

Metals

Method 200.7_CWA: The reference method requires samples to be preserved to a pH of <2. The following sample was received with insufficient preservation at a pH of >2: Leachate Discharge (310-274812-1). The sample(s) was preserved to the appropriate pH in the laboratory.

Method 200.7_CWA: The continuing calibration verification (CCV) associated with batch 310-414072 recovered above the upper control limit for Silver. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

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

General Chemistry

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

Eurofins Cedar Falls

Sample Summary

Client: Veolia Water N. America Operating Srvs
Project/Site: Leachate Discharge

Job ID: 310-274812-1

<u>Lab Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Collected</u>	<u>Received</u>
310-274812-1	Leachate Discharge	Water	02/12/24 08:30	02/13/24 09:25

1

2

3

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Detection Summary

Client: Veolia Water N. America Operating Srvs
 Project/Site: Leachate Discharge

Job ID: 310-274812-1

Client Sample ID: Leachate Discharge

Lab Sample ID: 310-274812-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2,6-Dinitrotoluene	13.7		9.26		ug/L	1		625.1	Total/NA
Barium	0.780		0.0100		mg/L	1		200.7 Rev 4.4	Total/NA
Boron	20.2		0.200		mg/L	1		200.7 Rev 4.4	Total/NA
Calcium	83.8		1.00		mg/L	1		200.7 Rev 4.4	Total/NA
Chromium	0.0371		0.0200		mg/L	1		200.7 Rev 4.4	Total/NA
Copper	0.0718		0.0200		mg/L	1		200.7 Rev 4.4	Total/NA
Iron	6.35		0.500		mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	56.3		1.00		mg/L	1		200.7 Rev 4.4	Total/NA
Manganese	0.421		0.0100		mg/L	1		200.7 Rev 4.4	Total/NA
Nickel	0.265		0.0500		mg/L	1		200.7 Rev 4.4	Total/NA
Potassium	154		2.00		mg/L	1		200.7 Rev 4.4	Total/NA
Strontium	0.537		0.100		mg/L	1		200.7 Rev 4.4	Total/NA
Ammonia as N	233		25.0		mg/L	1		350.1	Total/NA
Total Suspended Solids	42.0		30.0		mg/L	1		I-3765-85	Total/NA
Total Dissolved Solids	2680		250		mg/L	1		SM 2540C	Total/NA
pH	7.4	HF	1.0		SU	1		SM 4500 H+ B	Total/NA
Biochemical Oxygen Demand	148		3.00		mg/L	1		SM 5210B	Total/NA
Total Organic Carbon	288		40.0		mg/L	40		SM 5310C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Veolia Water N. America Operating Svcs
Project/Site: Leachate Discharge

Job ID: 310-274812-1

Client Sample ID: Leachate Discharge

Lab Sample ID: 310-274812-1

Date Collected: 02/12/24 08:30

Matrix: Water

Date Received: 02/13/24 09:25

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<5.00		5.00		ug/L			02/14/24 13:01	10
Bromodichloromethane	<10.0		10.0		ug/L			02/14/24 13:01	10
Bromoform	<50.0		50.0		ug/L			02/14/24 13:01	10
Bromomethane	<40.0		40.0		ug/L			02/14/24 13:01	10
Carbon tetrachloride	<20.0		20.0		ug/L			02/14/24 13:01	10
Chlorobenzene	<10.0		10.0		ug/L			02/14/24 13:01	10
Chloroethane	<40.0		40.0		ug/L			02/14/24 13:01	10
2-Chloroethyl vinyl ether	<20.0		20.0		ug/L			02/14/24 13:01	10
Chloroform	<30.0		30.0		ug/L			02/14/24 13:01	10
Chloromethane	<30.0		30.0		ug/L			02/14/24 13:01	10
cis-1,2-Dichloroethene	<10.0		10.0		ug/L			02/14/24 13:01	10
Dibromochloromethane	<50.0		50.0		ug/L			02/14/24 13:01	10
1,1-Dichloroethane	<10.0		10.0		ug/L			02/14/24 13:01	10
1,2-Dichloroethane	<10.0		10.0		ug/L			02/14/24 13:01	10
1,1-Dichloroethene	<20.0		20.0		ug/L			02/14/24 13:01	10
1,2-Dichloroethene, Total	<10.0		10.0		ug/L			02/14/24 13:01	10
1,2-Dichloropropane	<10.0		10.0		ug/L			02/14/24 13:01	10
1,3-Dichloropropene, Total	<50.0		50.0		ug/L			02/14/24 13:01	10
Ethylbenzene	<10.0		10.0		ug/L			02/14/24 13:01	10
Methylene Chloride	<50.0		50.0		ug/L			02/14/24 13:01	10
1,1,1,2-Tetrachloroethane	<10.0		10.0		ug/L			02/14/24 13:01	10
Tetrachloroethene	<10.0		10.0		ug/L			02/14/24 13:01	10
Toluene	<10.0		10.0		ug/L			02/14/24 13:01	10
trans-1,2-Dichloroethene	<10.0		10.0		ug/L			02/14/24 13:01	10
1,1,1-Trichloroethane	<10.0		10.0		ug/L			02/14/24 13:01	10
1,1,2-Trichloroethane	<10.0		10.0		ug/L			02/14/24 13:01	10
Trichloroethene	<10.0		10.0		ug/L			02/14/24 13:01	10
Vinyl chloride	<10.0		10.0		ug/L			02/14/24 13:01	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130		02/14/24 13:01	10
Dibromofluoromethane (Surr)	105		70 - 130		02/14/24 13:01	10
Toluene-d8 (Surr)	99		70 - 130		02/14/24 13:01	10

Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
1,2-Dichlorobenzene	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
1,3-Dichlorobenzene	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
1,4-Dichlorobenzene	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
2,4,5-Trichlorophenol	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
2,4,6-Trichlorophenol	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
2,4-Dichlorophenol	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
2,4-Dimethylphenol	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
2,4-Dinitrophenol	<18.5		18.5		ug/L		02/15/24 05:19	02/19/24 12:27	1
2,4-Dinitrotoluene	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
2,6-Dinitrotoluene	13.7		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
2-Chloronaphthalene	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
2-Chlorophenol	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
2-Methylnaphthalene	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1

Eurofins Cedar Falls

Client Sample Results

Client: Veolia Water N. America Operating Srvs
 Project/Site: Leachate Discharge

Job ID: 310-274812-1

Client Sample ID: Leachate Discharge

Lab Sample ID: 310-274812-1

Date Collected: 02/12/24 08:30

Matrix: Water

Date Received: 02/13/24 09:25

Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylphenol	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
2-Nitroaniline	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
2-Nitrophenol	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
3,3'-Dichlorobenzidine	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
3-Nitroaniline	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
4,6-Dinitro-2-methylphenol	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
4-Bromophenyl phenyl ether	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
4-Chloro-3-methylphenol	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
4-Chloroaniline	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
4-Chlorophenyl phenyl ether	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
4-Methylphenol (and/or 3-Methylphenol)	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
4-Nitroaniline	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
4-Nitrophenol	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
Acenaphthene	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
Acenaphthylene	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
Alpha-Terpineol	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
Anthracene	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
Benzidine	<18.5		18.5		ug/L		02/15/24 05:19	02/19/24 12:27	1
Benzo(a)anthracene	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
Benzo(a)pyrene	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
Benzo(b)fluoranthene	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
Benzo(g,h,i)perylene	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
Benzo(k)fluoranthene	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
Benzoic acid	<92.6		92.6		ug/L		02/15/24 05:19	02/19/24 12:27	1
Benzyl alcohol	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
Bis(2-chloroethoxy)methane	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
Bis(2-chloroethyl)ether	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
bis(2-chloroisopropyl) ether	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
Bis(2-ethylhexyl) phthalate	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
Butyl benzyl phthalate	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
Carbazole	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
Chrysene	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
Dibenz(a,h)anthracene	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
Dibenzofuran	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
Diethyl phthalate	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
Dimethyl phthalate	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
Di-n-butyl phthalate	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
Di-n-octyl phthalate	<18.5		18.5		ug/L		02/15/24 05:19	02/19/24 12:27	1
Fluoranthene	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
Fluorene	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
Hexachlorobenzene	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
Hexachlorobutadiene	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
Hexachlorocyclopentadiene	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
Hexachloroethane	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
Indeno(1,2,3-cd)pyrene	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
Isophorone	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
Naphthalene	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
Nitrobenzene	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
N-Nitrosodimethylamine	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1

Eurofins Cedar Falls

Client Sample Results

Client: Veolia Water N. America Operating Svcs
Project/Site: Leachate Discharge

Job ID: 310-274812-1

Client Sample ID: Leachate Discharge

Lab Sample ID: 310-274812-1

Date Collected: 02/12/24 08:30

Matrix: Water

Date Received: 02/13/24 09:25

Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
N-Nitrosodiphenylamine	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
Pentachlorophenol	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
Phenanthrene	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
Phenol	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
Pyrene	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
Pyridine	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
Total Cresols	<9.26		9.26		ug/L		02/15/24 05:19	02/19/24 12:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	89		27 - 136				02/15/24 05:19	02/19/24 12:27	1
2-Fluorobiphenyl (Surr)	77		39 - 118				02/15/24 05:19	02/19/24 12:27	1
2-Fluorophenol (Surr)	67		25 - 110				02/15/24 05:19	02/19/24 12:27	1
Nitrobenzene-d5 (Surr)	97		45 - 129				02/15/24 05:19	02/19/24 12:27	1
Phenol-d5 (Surr)	58		21 - 110				02/15/24 05:19	02/19/24 12:27	1
Terphenyl-d14 (Surr)	69		12 - 144				02/15/24 05:19	02/19/24 12:27	1

Method: EPA 608.3 - Organochlorine Pesticides in Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	<0.0593		0.0593		ug/L		02/14/24 07:51	02/22/24 15:47	1
4,4'-DDE	<0.0593		0.0593		ug/L		02/14/24 07:51	02/22/24 15:47	1
4,4'-DDT	<0.0593		0.0593		ug/L		02/14/24 07:51	02/22/24 15:47	1
Aldrin	<0.0593		0.0593		ug/L		02/14/24 07:51	02/22/24 15:47	1
alpha-BHC	<0.0593		0.0593		ug/L		02/14/24 07:51	02/22/24 15:47	1
beta-BHC	<0.0593		0.0593		ug/L		02/14/24 07:51	02/22/24 15:47	1
Chlordane (technical)	<1.85		1.85		ug/L		02/14/24 07:51	02/22/24 15:47	1
delta-BHC	<0.0593		0.0593		ug/L		02/14/24 07:51	02/22/24 15:47	1
Dieldrin	<0.0593		0.0593		ug/L		02/14/24 07:51	02/22/24 15:47	1
Endosulfan I	<0.0593		0.0593		ug/L		02/14/24 07:51	02/22/24 15:47	1
Endosulfan II	<0.0593		0.0593		ug/L		02/14/24 07:51	02/22/24 15:47	1
Endosulfan sulfate	<0.0593		0.0593		ug/L		02/14/24 07:51	02/22/24 15:47	1
Endrin	<0.0593		0.0593		ug/L		02/14/24 07:51	02/22/24 15:47	1
Endrin aldehyde	<0.0593		0.0593		ug/L		02/14/24 07:51	02/22/24 15:47	1
gamma-BHC (Lindane)	<0.0593		0.0593		ug/L		02/14/24 07:51	02/22/24 15:47	1
Heptachlor	<0.0593		0.0593		ug/L		02/14/24 07:51	02/22/24 15:47	1
Heptachlor epoxide	<0.0593		0.0593		ug/L		02/14/24 07:51	02/22/24 15:47	1
Methoxychlor	<0.0593		0.0593		ug/L		02/14/24 07:51	02/22/24 15:47	1
Toxaphene	<1.85		1.85		ug/L		02/14/24 07:51	02/22/24 15:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	44		10 - 136				02/14/24 07:51	02/22/24 15:47	1
Tetrachloro-m-xylene (Surr)	48		10 - 130				02/14/24 07:51	02/22/24 15:47	1

Method: EPA 608.3 - Polychlorinated Biphenyls (PCBs) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.741		0.741		ug/L		02/14/24 07:51	02/21/24 14:21	1
PCB-1221	<0.741		0.741		ug/L		02/14/24 07:51	02/21/24 14:21	1
PCB-1232	<0.741		0.741		ug/L		02/14/24 07:51	02/21/24 14:21	1
PCB-1242	<0.741		0.741		ug/L		02/14/24 07:51	02/21/24 14:21	1
PCB-1248	<0.741		0.741		ug/L		02/14/24 07:51	02/21/24 14:21	1

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Client Sample Results

Client: Veolia Water N. America Operating Srvs
 Project/Site: Leachate Discharge

Job ID: 310-274812-1

Client Sample ID: Leachate Discharge

Lab Sample ID: 310-274812-1

Date Collected: 02/12/24 08:30

Matrix: Water

Date Received: 02/13/24 09:25

Method: EPA 608.3 - Polychlorinated Biphenyls (PCBs) (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1254	<0.741		0.741		ug/L		02/14/24 07:51	02/21/24 14:21	1
PCB-1260	<0.741		0.741		ug/L		02/14/24 07:51	02/21/24 14:21	1
PCB-1268	<0.741		0.741		ug/L		02/14/24 07:51	02/21/24 14:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	41		10 - 136				02/14/24 07:51	02/21/24 14:21	1
Tetrachloro-m-xylene (Surr)	60		10 - 130				02/14/24 07:51	02/21/24 14:21	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0800		0.0800		mg/L		02/15/24 09:00	02/19/24 14:31	1
Barium	0.780		0.0100		mg/L		02/15/24 09:00	02/19/24 14:31	1
Boron	20.2		0.200		mg/L		02/15/24 09:00	02/19/24 14:31	1
Cadmium	<0.0200		0.0200		mg/L		02/15/24 09:00	02/19/24 14:31	1
Calcium	83.8		1.00		mg/L		02/15/24 09:00	02/19/24 14:31	1
Chromium	0.0371		0.0200		mg/L		02/15/24 09:00	02/19/24 14:31	1
Copper	0.0718		0.0200		mg/L		02/15/24 09:00	02/19/24 14:31	1
Iron	6.35		0.500		mg/L		02/15/24 09:00	02/19/24 14:31	1
Lead	<0.100		0.100		mg/L		02/15/24 09:00	02/19/24 14:31	1
Magnesium	56.3		1.00		mg/L		02/15/24 09:00	02/19/24 14:31	1
Manganese	0.421		0.0100		mg/L		02/15/24 09:00	02/19/24 14:31	1
Nickel	0.265		0.0500		mg/L		02/15/24 09:00	02/19/24 14:31	1
Potassium	154		2.00		mg/L		02/15/24 09:00	02/19/24 14:31	1
Selenium	<0.100		0.100		mg/L		02/15/24 09:00	02/19/24 14:31	1
Silver	<0.0200	^+	0.0200		mg/L		02/15/24 09:00	02/19/24 14:31	1
Strontium	0.537		0.100		mg/L		02/15/24 09:00	02/19/24 14:31	1
Zinc	<0.0400		0.0400		mg/L		02/15/24 09:00	02/19/24 14:31	1

Method: EPA 245.2 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000200	F1	0.000200		mg/L		02/16/24 12:31	02/19/24 11:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N (EPA 350.1)	233		25.0		mg/L		02/16/24 09:57	02/16/24 16:26	1
Total Suspended Solids (USGS I-3765-85)	42.0		30.0		mg/L			02/15/24 18:25	1
Total Dissolved Solids (SM 2540C)	2680		250		mg/L			02/15/24 16:34	1
Biochemical Oxygen Demand (SM 5210B)	148		3.00		mg/L			02/14/24 06:42	1
Total Organic Carbon (SM 5310C)	288		40.0		mg/L			02/14/24 07:11	40
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	7.4	HF	1.0		SU			02/13/24 10:41	1

Definitions/Glossary

Client: Veolia Water N. America Operating Srvs
Project/Site: Leachate Discharge

Job ID: 310-274812-1

Qualifiers

Metals

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
F1	MS and/or MSD recovery exceeds control limits.

General Chemistry

Qualifier	Qualifier Description
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.

Glossary

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

Surrogate Summary

Client: Veolia Water N. America Operating Srvs
 Project/Site: Leachate Discharge

Job ID: 310-274812-1

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		BFB (70-130)	DBFM (70-130)	TOL (70-130)
310-274812-1	Leachate Discharge	101	105	99
LCS 310-413574/6	Lab Control Sample	100	97	102
LCS 310-413574/7	Lab Control Sample	100	105	99
MB 310-413574/5	Method Blank	102	103	99

Surrogate Legend

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

Method: 625.1 - Semivolatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TBP (27-136)	FBP (39-118)	2FP (25-110)	NBZ (45-129)	PHL (21-110)	TPHL (12-144)
310-274812-1	Leachate Discharge	89	77	67	97	58	69
LCS 310-413671/2-A	Lab Control Sample	98	77	68	84	54	94
LCSD 310-413671/3-A	Lab Control Sample Dup	105	83	75	92	58	100
MB 310-413671/1-A	Method Blank	102	83	79	100	64	104

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
 FBP = 2-Fluorobiphenyl (Surr)
 2FP = 2-Fluorophenol (Surr)
 NBZ = Nitrobenzene-d5 (Surr)
 PHL = Phenol-d5 (Surr)
 TPHL = Terphenyl-d14 (Surr)

Method: 608.3 - Organochlorine Pesticides in Water

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		DCB1 (10-136)	TCX1 (10-130)
310-274812-1	Leachate Discharge	44	48
LCS 310-413556/4-A	Lab Control Sample	69	80
LCSD 310-413556/5-A	Lab Control Sample Dup	72	74
MB 310-413556/1-A	Method Blank	68	76

Surrogate Legend

DCB = DCB Decachlorobiphenyl (Surr)
 TCX = Tetrachloro-m-xylene (Surr)

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		DCB1 (10-136)	TCX1 (10-130)
310-274812-1	Leachate Discharge	41	60
LCS 310-413556/2-A	Lab Control Sample	61	75

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Surrogate Summary

Client: Veolia Water N. America Operating Srvs
Project/Site: Leachate Discharge

Job ID: 310-274812-1

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC) (Continued)

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCB1 (10-136)	TCX1 (10-130)
LCS D 310-413556/3-A	Lab Control Sample Dup	83	97
MB 310-413556/1-A	Method Blank	61	78

Surrogate Legend

DCB = DCB Decachlorobiphenyl (Surr)

TCX = Tetrachloro-m-xylene (Surr)

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

QC Sample Results

Client: Veolia Water N. America Operating Srvs
Project/Site: Leachate Discharge

Job ID: 310-274812-1

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 310-413574/5

Matrix: Water

Analysis Batch: 413574

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	<0.500		0.500		ug/L			02/14/24 10:07	1
Bromodichloromethane	<1.00		1.00		ug/L			02/14/24 10:07	1
Bromoform	<5.00		5.00		ug/L			02/14/24 10:07	1
Bromomethane	<4.00		4.00		ug/L			02/14/24 10:07	1
Carbon tetrachloride	<2.00		2.00		ug/L			02/14/24 10:07	1
Chlorobenzene	<1.00		1.00		ug/L			02/14/24 10:07	1
Chloroethane	<4.00		4.00		ug/L			02/14/24 10:07	1
2-Chloroethyl vinyl ether	<2.00		2.00		ug/L			02/14/24 10:07	1
Chloroform	<3.00		3.00		ug/L			02/14/24 10:07	1
Chloromethane	<3.00		3.00		ug/L			02/14/24 10:07	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			02/14/24 10:07	1
Dibromochloromethane	<5.00		5.00		ug/L			02/14/24 10:07	1
1,1-Dichloroethane	<1.00		1.00		ug/L			02/14/24 10:07	1
1,2-Dichloroethane	<1.00		1.00		ug/L			02/14/24 10:07	1
1,1-Dichloroethene	<2.00		2.00		ug/L			02/14/24 10:07	1
1,2-Dichloroethene, Total	<1.00		1.00		ug/L			02/14/24 10:07	1
1,2-Dichloropropane	<1.00		1.00		ug/L			02/14/24 10:07	1
1,3-Dichloropropene, Total	<5.00		5.00		ug/L			02/14/24 10:07	1
Ethylbenzene	<1.00		1.00		ug/L			02/14/24 10:07	1
Methylene Chloride	<5.00		5.00		ug/L			02/14/24 10:07	1
1,1,1,2-Tetrachloroethane	<1.00		1.00		ug/L			02/14/24 10:07	1
Tetrachloroethene	<1.00		1.00		ug/L			02/14/24 10:07	1
Toluene	<1.00		1.00		ug/L			02/14/24 10:07	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			02/14/24 10:07	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			02/14/24 10:07	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			02/14/24 10:07	1
Trichloroethene	<1.00		1.00		ug/L			02/14/24 10:07	1
Vinyl chloride	<1.00		1.00		ug/L			02/14/24 10:07	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	102		70 - 130		02/14/24 10:07	1
Dibromofluoromethane (Surr)	103		70 - 130		02/14/24 10:07	1
Toluene-d8 (Surr)	99		70 - 130		02/14/24 10:07	1

Lab Sample ID: LCS 310-413574/6

Matrix: Water

Analysis Batch: 413574

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Benzene	20.0	20.13		ug/L		101	70 - 130
Bromodichloromethane	20.0	17.55		ug/L		88	70 - 130
Bromoform	20.0	14.88		ug/L		74	70 - 130
Carbon tetrachloride	20.0	19.67		ug/L		98	70 - 130
Chlorobenzene	20.0	17.75		ug/L		89	70 - 130
2-Chloroethyl vinyl ether	20.0	18.32		ug/L		92	48 - 150
Chloroform	20.0	19.47		ug/L		97	70 - 130
cis-1,2-Dichloroethene	20.0	19.95		ug/L		100	70 - 130
cis-1,3-Dichloropropene	20.0	18.66		ug/L		93	70 - 130

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QC Sample Results

Client: Veolia Water N. America Operating Srvs
Project/Site: Leachate Discharge

Job ID: 310-274812-1

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 310-413574/6

Matrix: Water

Analysis Batch: 413574

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Dibromochloromethane	20.0	16.25		ug/L		81	70 - 130
1,1-Dichloroethane	20.0	20.64		ug/L		103	70 - 130
1,2-Dichloroethane	20.0	18.05		ug/L		90	70 - 130
1,1-Dichloroethene	20.0	22.25		ug/L		111	63 - 132
1,2-Dichloropropane	20.0	19.99		ug/L		100	70 - 130
Ethylbenzene	20.0	18.19		ug/L		91	70 - 130
Methylene Chloride	20.0	22.43		ug/L		112	60 - 140
1,1,2,2-Tetrachloroethane	20.0	16.95		ug/L		85	68 - 130
Tetrachloroethene	20.0	18.48		ug/L		92	70 - 130
Toluene	20.0	18.67		ug/L		93	70 - 130
trans-1,2-Dichloroethene	20.0	21.15		ug/L		106	70 - 130
trans-1,3-Dichloropropene	20.0	17.43		ug/L		87	69 - 130
1,1,1-Trichloroethane	20.0	19.37		ug/L		97	70 - 130
1,1,2-Trichloroethane	20.0	17.86		ug/L		89	70 - 130
Trichloroethene	20.0	19.27		ug/L		96	70 - 130

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	100		70 - 130
Dibromofluoromethane (Surr)	97		70 - 130
Toluene-d8 (Surr)	102		70 - 130

Lab Sample ID: LCS 310-413574/7

Matrix: Water

Analysis Batch: 413574

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromomethane	20.0	18.82		ug/L		94	23 - 150
Chloroethane	20.0	18.95		ug/L		95	54 - 136
Chloromethane	20.0	20.71		ug/L		104	38 - 150
Vinyl chloride	20.0	20.06		ug/L		100	56 - 140

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	100		70 - 130
Dibromofluoromethane (Surr)	105		70 - 130
Toluene-d8 (Surr)	99		70 - 130

Method: 625.1 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 310-413671/1-A

Matrix: Water

Analysis Batch: 413904

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 413671

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,2,4-Trichlorobenzene	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
1,2-Dichlorobenzene	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
1,3-Dichlorobenzene	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
1,4-Dichlorobenzene	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
2,4,5-Trichlorophenol	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1

Eurofins Cedar Falls

QC Sample Results

Client: Veolia Water N. America Operating Srvs
 Project/Site: Leachate Discharge

Job ID: 310-274812-1

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 310-413671/1-A

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 413904

Prep Batch: 413671

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
2,4,6-Trichlorophenol	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
2,4-Dichlorophenol	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
2,4-Dimethylphenol	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
2,4-Dinitrophenol	<20.0		20.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
2,4-Dinitrotoluene	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
2,6-Dinitrotoluene	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
2-Chloronaphthalene	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
2-Chlorophenol	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
2-Methylnaphthalene	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
2-Methylphenol	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
2-Nitroaniline	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
2-Nitrophenol	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
3,3'-Dichlorobenzidine	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
3-Nitroaniline	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
4,6-Dinitro-2-methylphenol	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
4-Bromophenyl phenyl ether	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
4-Chloro-3-methylphenol	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
4-Chloroaniline	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
4-Chlorophenyl phenyl ether	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
4-Methylphenol (and/or 3-Methylphenol)	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
4-Nitroaniline	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
4-Nitrophenol	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
Acenaphthene	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
Acenaphthylene	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
Alpha-Terpineol	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
Anthracene	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
Benzidine	<20.0		20.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
Benzo(a)anthracene	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
Benzo(a)pyrene	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
Benzo(b)fluoranthene	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
Benzo(g,h,i)perylene	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
Benzo(k)fluoranthene	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
Benzoic acid	<100		100		ug/L		02/15/24 05:19	02/19/24 11:10	1
Benzyl alcohol	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
Bis(2-chloroethoxy)methane	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
Bis(2-chloroethyl)ether	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
bis(2-chloroisopropyl) ether	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
Bis(2-ethylhexyl) phthalate	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
Butyl benzyl phthalate	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
Carbazole	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
Chrysene	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
Dibenz(a,h)anthracene	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
Dibenzofuran	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
Diethyl phthalate	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
Dimethyl phthalate	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
Di-n-butyl phthalate	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
Di-n-octyl phthalate	<20.0		20.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
Fluoranthene	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1

Eurofins Cedar Falls

QC Sample Results

Client: Veolia Water N. America Operating Srvs
Project/Site: Leachate Discharge

Job ID: 310-274812-1

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 310-413671/1-A
Matrix: Water
Analysis Batch: 413904

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 413671

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Fluorene	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
Hexachlorobenzene	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
Hexachlorobutadiene	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
Hexachlorocyclopentadiene	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
Hexachloroethane	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
Indeno(1,2,3-cd)pyrene	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
Isophorone	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
Naphthalene	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
Nitrobenzene	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
N-Nitrosodimethylamine	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
N-Nitrosodi-n-propylamine	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
N-Nitrosodiphenylamine	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
Pentachlorophenol	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
Phenanthrene	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
Phenol	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
Pyrene	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
Pyridine	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1
Total Cresols	<10.0		10.0		ug/L		02/15/24 05:19	02/19/24 11:10	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
2,4,6-Tribromophenol (Surr)	102		27 - 136	02/15/24 05:19	02/19/24 11:10	1
2-Fluorobiphenyl (Surr)	83		39 - 118	02/15/24 05:19	02/19/24 11:10	1
2-Fluorophenol (Surr)	79		25 - 110	02/15/24 05:19	02/19/24 11:10	1
Nitrobenzene-d5 (Surr)	100		45 - 129	02/15/24 05:19	02/19/24 11:10	1
Phenol-d5 (Surr)	64		21 - 110	02/15/24 05:19	02/19/24 11:10	1
Terphenyl-d14 (Surr)	104		12 - 144	02/15/24 05:19	02/19/24 11:10	1

Lab Sample ID: LCS 310-413671/2-A
Matrix: Water
Analysis Batch: 413904

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 413671

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
1,2,4-Trichlorobenzene	100	68.32		ug/L		68	44 - 110
1,2-Dichlorobenzene	100	61.70		ug/L		62	31 - 110
1,3-Dichlorobenzene	100	58.18		ug/L		58	28 - 110
1,4-Dichlorobenzene	100	58.65		ug/L		59	28 - 110
2,4,5-Trichlorophenol	100	94.67		ug/L		95	35 - 133
2,4,6-Trichlorophenol	100	94.67		ug/L		95	37 - 139
2,4-Dichlorophenol	100	92.56		ug/L		93	41 - 124
2,4-Dimethylphenol	100	72.90		ug/L		73	32 - 120
2,4-Dinitrophenol	200	152.8		ug/L		76	10 - 138
2,4-Dinitrotoluene	100	99.03		ug/L		99	47 - 137
2,6-Dinitrotoluene	100	98.77		ug/L		99	51 - 130
2-Chloronaphthalene	100	81.73		ug/L		82	60 - 110
2-Chlorophenol	100	84.57		ug/L		85	44 - 117
2-Methylnaphthalene	100	71.07		ug/L		71	33 - 110
2-Methylphenol	100	80.39		ug/L		80	47 - 118
2-Nitroaniline	100	92.78		ug/L		93	50 - 135

Eurofins Cedar Falls

QC Sample Results

Client: Veolia Water N. America Operating Srvs
 Project/Site: Leachate Discharge

Job ID: 310-274812-1

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 310-413671/2-A

Matrix: Water

Analysis Batch: 413904

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 413671

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec Limits
	Added	Result	Qualifier				
2-Nitrophenol	100	96.40		ug/L		96	41 - 129
3-Nitroaniline	100	96.13		ug/L		96	42 - 139
4,6-Dinitro-2-methylphenol	200	190.9		ug/L		95	22 - 143
4-Bromophenyl phenyl ether	100	97.17		ug/L		97	53 - 119
4-Chloro-3-methylphenol	100	93.55		ug/L		94	49 - 130
4-Chloroaniline	100	77.83		ug/L		78	21 - 139
4-Chlorophenyl phenyl ether	100	89.28		ug/L		89	44 - 116
4-Methylphenol (and/or 3-Methylphenol)	100	77.12		ug/L		77	46 - 117
4-Nitroaniline	100	98.11		ug/L		98	31 - 145
4-Nitrophenol	200	131.0		ug/L		66	18 - 110
Acenaphthene	100	83.26		ug/L		83	47 - 110
Acenaphthylene	100	85.01		ug/L		85	40 - 110
Anthracene	100	95.69		ug/L		96	51 - 120
Benzo(a)anthracene	100	94.79		ug/L		95	51 - 123
Benzo(a)pyrene	100	97.14		ug/L		97	48 - 125
Benzo(b)fluoranthene	100	100.2		ug/L		100	49 - 129
Benzo(g,h,i)perylene	100	96.65		ug/L		97	43 - 139
Benzo(k)fluoranthene	100	95.76		ug/L		96	47 - 130
Benzyl alcohol	100	83.50		ug/L		84	39 - 128
Bis(2-chloroethoxy)methane	100	85.79		ug/L		86	48 - 121
Bis(2-chloroethyl)ether	100	76.99		ug/L		77	43 - 123
bis(2-chloroisopropyl) ether	100	75.46		ug/L		75	36 - 123
Bis(2-ethylhexyl) phthalate	100	90.21		ug/L		90	43 - 143
Butyl benzyl phthalate	100	94.98		ug/L		95	46 - 135
Carbazole	100	92.10		ug/L		92	51 - 126
Chrysene	100	97.62		ug/L		98	51 - 125
Dibenz(a,h)anthracene	100	108.0		ug/L		108	38 - 149
Dibenzofuran	100	87.56		ug/L		88	45 - 112
Diethyl phthalate	100	85.75		ug/L		86	43 - 120
Dimethyl phthalate	100	91.49		ug/L		91	43 - 120
Di-n-butyl phthalate	100	100.9		ug/L		101	50 - 120
Di-n-octyl phthalate	100	83.98		ug/L		84	34 - 146
Fluoranthene	100	96.70		ug/L		97	47 - 128
Fluorene	100	87.89		ug/L		88	59 - 119
Hexachlorobenzene	100	94.88		ug/L		95	48 - 119
Hexachlorobutadiene	100	66.73		ug/L		67	32 - 110
Hexachlorocyclopentadiene	100	44.00		ug/L		44	10 - 110
Hexachloroethane	100	54.91		ug/L		55	40 - 110
Indeno(1,2,3-cd)pyrene	100	99.41		ug/L		99	37 - 150
Isophorone	100	87.37		ug/L		87	50 - 125
Naphthalene	100	72.04		ug/L		72	38 - 110
Nitrobenzene	100	87.12		ug/L		87	47 - 116
N-Nitrosodimethylamine	100	67.74		ug/L		68	37 - 111
N-Nitrosodi-n-propylamine	100	85.61		ug/L		86	45 - 130
N-Nitrosodiphenylamine	100	94.31		ug/L		94	49 - 121
Pentachlorophenol	200	164.4		ug/L		82	26 - 133
Phenanthrene	100	90.84		ug/L		91	54 - 117
Phenol	100	54.51		ug/L		55	29 - 110

Eurofins Cedar Falls

QC Sample Results

Client: Veolia Water N. America Operating Srvs
Project/Site: Leachate Discharge

Job ID: 310-274812-1

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 310-413671/2-A

Matrix: Water

Analysis Batch: 413904

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 413671

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Pyrene	100	95.13		ug/L		95	52 - 120
Pyridine	200	55.97		ug/L		28	10 - 110

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol (Surr)	98		27 - 136
2-Fluorobiphenyl (Surr)	77		39 - 118
2-Fluorophenol (Surr)	68		25 - 110
Nitrobenzene-d5 (Surr)	84		45 - 129
Phenol-d5 (Surr)	54		21 - 110
Terphenyl-d14 (Surr)	94		12 - 144

Lab Sample ID: LCSD 310-413671/3-A

Matrix: Water

Analysis Batch: 413904

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 413671

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2,4-Trichlorobenzene	100	74.14		ug/L		74	44 - 110	8	35
1,2-Dichlorobenzene	100	65.33		ug/L		65	31 - 110	6	35
1,3-Dichlorobenzene	100	64.11		ug/L		64	28 - 110	10	35
1,4-Dichlorobenzene	100	63.93		ug/L		64	28 - 110	9	35
2,4,5-Trichlorophenol	100	95.50		ug/L		96	35 - 133	1	35
2,4,6-Trichlorophenol	100	95.66		ug/L		96	37 - 139	1	35
2,4-Dichlorophenol	100	95.61		ug/L		96	41 - 124	3	35
2,4-Dimethylphenol	100	73.00		ug/L		73	32 - 120	0	35
2,4-Dinitrophenol	200	150.6		ug/L		75	10 - 138	1	35
2,4-Dinitrotoluene	100	95.90		ug/L		96	47 - 137	3	35
2,6-Dinitrotoluene	100	99.48		ug/L		99	51 - 130	1	35
2-Chloronaphthalene	100	83.50		ug/L		83	60 - 110	2	24
2-Chlorophenol	100	85.04		ug/L		85	44 - 117	1	35
2-Methylnaphthalene	100	73.55		ug/L		74	33 - 110	3	35
2-Methylphenol	100	78.87		ug/L		79	47 - 118	2	35
2-Nitroaniline	100	90.59		ug/L		91	50 - 135	2	35
2-Nitrophenol	100	97.39		ug/L		97	41 - 129	1	35
3-Nitroaniline	100	92.85		ug/L		93	42 - 139	3	35
4,6-Dinitro-2-methylphenol	200	191.9		ug/L		96	22 - 143	1	35
4-Bromophenyl phenyl ether	100	96.92		ug/L		97	53 - 119	0	35
4-Chloro-3-methylphenol	100	91.80		ug/L		92	49 - 130	2	35
4-Chloroaniline	100	78.34		ug/L		78	21 - 139	1	35
4-Chlorophenyl phenyl ether	100	87.32		ug/L		87	44 - 116	2	35
4-Methylphenol (and/or 3-Methylphenol)	100	76.65		ug/L		77	46 - 117	1	35
4-Nitroaniline	100	94.17		ug/L		94	31 - 145	4	35
4-Nitrophenol	200	123.7		ug/L		62	18 - 110	6	35
Acenaphthene	100	82.02		ug/L		82	47 - 110	1	35
Acenaphthylene	100	83.98		ug/L		84	40 - 110	1	35
Anthracene	100	93.78		ug/L		94	51 - 120	2	35
Benzo(a)anthracene	100	94.02		ug/L		94	51 - 123	1	35
Benzo(a)pyrene	100	96.47		ug/L		96	48 - 125	1	35
Benzo(b)fluoranthene	100	101.5		ug/L		102	49 - 129	1	35

Eurofins Cedar Falls

QC Sample Results

Client: Veolia Water N. America Operating Srvs
 Project/Site: Leachate Discharge

Job ID: 310-274812-1

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 310-413671/3-A

Matrix: Water

Analysis Batch: 413904

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 413671

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec		RPD	Limit
							Limits	RPD		
Benzo(g,h,i)perylene	100	94.18		ug/L		94	43 - 139	3	35	
Benzo(k)fluoranthene	100	93.46		ug/L		93	47 - 130	2	35	
Benzyl alcohol	100	83.99		ug/L		84	39 - 128	1	35	
Bis(2-chloroethoxy)methane	100	85.66		ug/L		86	48 - 121	0	35	
Bis(2-chloroethyl)ether	100	80.47		ug/L		80	43 - 123	4	35	
bis(2-chloroisopropyl) ether	100	75.12		ug/L		75	36 - 123	0	35	
Bis(2-ethylhexyl) phthalate	100	89.70		ug/L		90	43 - 143	1	35	
Butyl benzyl phthalate	100	94.41		ug/L		94	46 - 135	1	35	
Carbazole	100	92.07		ug/L		92	51 - 126	0	35	
Chrysene	100	95.22		ug/L		95	51 - 125	2	35	
Dibenz(a,h)anthracene	100	105.9		ug/L		106	38 - 149	2	35	
Dibenzofuran	100	85.19		ug/L		85	45 - 112	3	35	
Diethyl phthalate	100	84.09		ug/L		84	43 - 120	2	35	
Dimethyl phthalate	100	89.90		ug/L		90	43 - 120	2	35	
Di-n-butyl phthalate	100	102.3		ug/L		102	50 - 120	1	35	
Di-n-octyl phthalate	100	84.65		ug/L		85	34 - 146	1	35	
Fluoranthene	100	95.56		ug/L		96	47 - 128	1	35	
Fluorene	100	84.70		ug/L		85	59 - 119	4	35	
Hexachlorobenzene	100	95.17		ug/L		95	48 - 119	0	35	
Hexachlorobutadiene	100	77.31		ug/L		77	32 - 110	15	35	
Hexachlorocyclopentadiene	100	52.12		ug/L		52	10 - 110	17	35	
Hexachloroethane	100	63.73		ug/L		64	40 - 110	15	35	
Indeno(1,2,3-cd)pyrene	100	95.72		ug/L		96	37 - 150	4	35	
Isophorone	100	86.17		ug/L		86	50 - 125	1	35	
Naphthalene	100	72.05		ug/L		72	38 - 110	0	35	
Nitrobenzene	100	86.46		ug/L		86	47 - 116	1	35	
N-Nitrosodimethylamine	100	69.63		ug/L		70	37 - 111	3	35	
N-Nitrosodi-n-propylamine	100	83.70		ug/L		84	45 - 130	2	35	
N-Nitrosodiphenylamine	100	94.51		ug/L		95	49 - 121	0	35	
Pentachlorophenol	200	164.4		ug/L		82	26 - 133	0	35	
Phenanthrene	100	90.97		ug/L		91	54 - 117	0	35	
Phenol	100	55.49		ug/L		55	29 - 110	2	35	
Pyrene	100	92.62		ug/L		93	52 - 120	3	35	
Pyridine	200	46.99		ug/L		23	10 - 110	17	35	

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
2,4,6-Tribromophenol (Surr)	105		27 - 136
2-Fluorobiphenyl (Surr)	83		39 - 118
2-Fluorophenol (Surr)	75		25 - 110
Nitrobenzene-d5 (Surr)	92		45 - 129
Phenol-d5 (Surr)	58		21 - 110
Terphenyl-d14 (Surr)	100		12 - 144

QC Sample Results

Client: Veolia Water N. America Operating Srvs
 Project/Site: Leachate Discharge

Job ID: 310-274812-1

Method: 608.3 - Organochlorine Pesticides in Water

Lab Sample ID: MB 310-413556/1-A
Matrix: Water
Analysis Batch: 414244

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 413556

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
4,4'-DDD	<0.0640		0.0640		ug/L		02/14/24 07:51	02/22/24 14:58	1
4,4'-DDE	<0.0640		0.0640		ug/L		02/14/24 07:51	02/22/24 14:58	1
4,4'-DDT	<0.0640		0.0640		ug/L		02/14/24 07:51	02/22/24 14:58	1
Aldrin	<0.0640		0.0640		ug/L		02/14/24 07:51	02/22/24 14:58	1
alpha-BHC	<0.0640		0.0640		ug/L		02/14/24 07:51	02/22/24 14:58	1
beta-BHC	<0.0640		0.0640		ug/L		02/14/24 07:51	02/22/24 14:58	1
Chlordane (technical)	<2.00		2.00		ug/L		02/14/24 07:51	02/22/24 14:58	1
delta-BHC	<0.0640		0.0640		ug/L		02/14/24 07:51	02/22/24 14:58	1
Dieldrin	<0.0640		0.0640		ug/L		02/14/24 07:51	02/22/24 14:58	1
Endosulfan I	<0.0640		0.0640		ug/L		02/14/24 07:51	02/22/24 14:58	1
Endosulfan II	<0.0640		0.0640		ug/L		02/14/24 07:51	02/22/24 14:58	1
Endosulfan sulfate	<0.0640		0.0640		ug/L		02/14/24 07:51	02/22/24 14:58	1
Endrin	<0.0640		0.0640		ug/L		02/14/24 07:51	02/22/24 14:58	1
Endrin aldehyde	<0.0640		0.0640		ug/L		02/14/24 07:51	02/22/24 14:58	1
gamma-BHC (Lindane)	<0.0640		0.0640		ug/L		02/14/24 07:51	02/22/24 14:58	1
Heptachlor	<0.0640		0.0640		ug/L		02/14/24 07:51	02/22/24 14:58	1
Heptachlor epoxide	<0.0640		0.0640		ug/L		02/14/24 07:51	02/22/24 14:58	1
Methoxychlor	<0.0640		0.0640		ug/L		02/14/24 07:51	02/22/24 14:58	1
Toxaphene	<2.00		2.00		ug/L		02/14/24 07:51	02/22/24 14:58	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
DCB Decachlorobiphenyl (Surr)	68		10 - 136	02/14/24 07:51	02/22/24 14:58	1
Tetrachloro-m-xylene (Surr)	76		10 - 130	02/14/24 07:51	02/22/24 14:58	1

Lab Sample ID: LCS 310-413556/4-A
Matrix: Water
Analysis Batch: 414244

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 413556

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
4,4'-DDE	1.00	0.8310		ug/L		83	34 - 130
4,4'-DDT	1.00	0.8339		ug/L		83	25 - 150
Aldrin	1.00	0.6629		ug/L		66	42 - 120
alpha-BHC	1.00	0.8161		ug/L		82	37 - 127
beta-BHC	1.00	0.7824		ug/L		78	37 - 136
delta-BHC	1.00	0.7942		ug/L		79	33 - 134
Dieldrin	1.00	0.9993		ug/L		100	39 - 130
Endosulfan I	1.00	0.7596		ug/L		76	45 - 120
Endosulfan II	1.00	0.7999		ug/L		80	14 - 120
Endosulfan sulfate	1.00	0.8896		ug/L		89	36 - 144
Endrin	1.00	0.8181		ug/L		82	39 - 140
Endrin aldehyde	1.00	0.8167		ug/L		82	32 - 137
gamma-BHC (Lindane)	1.00	0.7860		ug/L		79	36 - 132
Heptachlor	1.00	0.8035		ug/L		80	34 - 120
Heptachlor epoxide	1.00	0.8811		ug/L		88	38 - 133
Methoxychlor	1.00	0.8416		ug/L		84	10 - 150

QC Sample Results

Client: Veolia Water N. America Operating Srvs
Project/Site: Leachate Discharge

Job ID: 310-274812-1

Method: 608.3 - Organochlorine Pesticides in Water (Continued)

Lab Sample ID: LCS 310-413556/4-A
Matrix: Water
Analysis Batch: 414244

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 413556

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
DCB Decachlorobiphenyl (Surr)	69		10 - 136
Tetrachloro-m-xylene (Surr)	80		10 - 130

Lab Sample ID: LCSD 310-413556/5-A
Matrix: Water
Analysis Batch: 414244

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 413556

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec		RPD	
							Limits	RPD	Limit	
4,4'-DDD	1.00	0.6757		ug/L		68	36 - 141	21	35	
4,4'-DDE	1.00	0.6770		ug/L		68	34 - 130	20	35	
4,4'-DDT	1.00	0.6720		ug/L		67	25 - 150	22	35	
Aldrin	1.00	0.5857		ug/L		59	42 - 120	12	35	
alpha-BHC	1.00	0.6711		ug/L		67	37 - 127	20	35	
beta-BHC	1.00	0.6454		ug/L		65	37 - 136	19	35	
delta-BHC	1.00	0.6541		ug/L		65	33 - 134	19	35	
Dieldrin	1.00	0.8202		ug/L		82	39 - 130	20	35	
Endosulfan I	1.00	0.6179		ug/L		62	45 - 120	21	28	
Endosulfan II	1.00	0.6486		ug/L		65	14 - 120	21	35	
Endosulfan sulfate	1.00	0.7213		ug/L		72	36 - 144	21	35	
Endrin	1.00	0.6644		ug/L		66	39 - 140	21	35	
Endrin aldehyde	1.00	0.6642		ug/L		66	32 - 137	21	35	
gamma-BHC (Lindane)	1.00	0.6448		ug/L		64	36 - 132	20	35	
Heptachlor	1.00	0.6728		ug/L		67	34 - 120	18	35	
Heptachlor epoxide	1.00	0.7186		ug/L		72	38 - 133	20	26	
Methoxychlor	1.00	0.6715		ug/L		67	10 - 150	22	35	

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
DCB Decachlorobiphenyl (Surr)	72		10 - 136
Tetrachloro-m-xylene (Surr)	74		10 - 130

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC)

Lab Sample ID: MB 310-413556/1-A
Matrix: Water
Analysis Batch: 414146

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 413556

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
PCB-1016	<0.800		0.800		ug/L		02/14/24 07:51	02/21/24 13:16	1
PCB-1221	<0.800		0.800		ug/L		02/14/24 07:51	02/21/24 13:16	1
PCB-1232	<0.800		0.800		ug/L		02/14/24 07:51	02/21/24 13:16	1
PCB-1242	<0.800		0.800		ug/L		02/14/24 07:51	02/21/24 13:16	1
PCB-1248	<0.800		0.800		ug/L		02/14/24 07:51	02/21/24 13:16	1
PCB-1254	<0.800		0.800		ug/L		02/14/24 07:51	02/21/24 13:16	1
PCB-1260	<0.800		0.800		ug/L		02/14/24 07:51	02/21/24 13:16	1
PCB-1268	<0.800		0.800		ug/L		02/14/24 07:51	02/21/24 13:16	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
DCB Decachlorobiphenyl (Surr)	61		10 - 136	02/14/24 07:51	02/21/24 13:16	1

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QC Sample Results

Client: Veolia Water N. America Operating Srvs
Project/Site: Leachate Discharge

Job ID: 310-274812-1

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC) (Continued)

Lab Sample ID: MB 310-413556/1-A
Matrix: Water
Analysis Batch: 414146

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 413556

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Tetrachloro-m-xylene (Surr)	78		10 - 130	02/14/24 07:51	02/21/24 13:16	1

Lab Sample ID: LCS 310-413556/2-A
Matrix: Water
Analysis Batch: 414146

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 413556

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
PCB-1016	10.0	6.947		ug/L		69	50 - 133
PCB-1260	10.0	6.776		ug/L		68	31 - 133

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
DCB Decachlorobiphenyl (Surr)	61		10 - 136
Tetrachloro-m-xylene (Surr)	75		10 - 130

Lab Sample ID: LCSD 310-413556/3-A
Matrix: Water
Analysis Batch: 414146

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 413556

Analyte	Spike Added	LCSD LCSD		Unit	D	%Rec	%Rec Limits	RPD	
		Result	Qualifier					RPD	Limit
PCB-1016	10.0	8.476		ug/L		85	50 - 133	20	35
PCB-1260	10.0	8.157		ug/L		82	31 - 133	18	35

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
DCB Decachlorobiphenyl (Surr)	83		10 - 136
Tetrachloro-m-xylene (Surr)	97		10 - 130

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 310-413654/1-A
Matrix: Water
Analysis Batch: 414072

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 413654

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Arsenic	<0.0800		0.0800		mg/L		02/15/24 09:00	02/19/24 14:07	1
Barium	<0.0100		0.0100		mg/L		02/15/24 09:00	02/19/24 14:07	1
Boron	<0.200		0.200		mg/L		02/15/24 09:00	02/19/24 14:07	1
Cadmium	<0.0200		0.0200		mg/L		02/15/24 09:00	02/19/24 14:07	1
Calcium	<1.00		1.00		mg/L		02/15/24 09:00	02/19/24 14:07	1
Chromium	<0.0200		0.0200		mg/L		02/15/24 09:00	02/19/24 14:07	1
Copper	<0.0200		0.0200		mg/L		02/15/24 09:00	02/19/24 14:07	1
Iron	<0.500		0.500		mg/L		02/15/24 09:00	02/19/24 14:07	1
Lead	<0.100		0.100		mg/L		02/15/24 09:00	02/19/24 14:07	1
Magnesium	<1.00		1.00		mg/L		02/15/24 09:00	02/19/24 14:07	1
Manganese	<0.0100		0.0100		mg/L		02/15/24 09:00	02/19/24 14:07	1
Nickel	<0.0500		0.0500		mg/L		02/15/24 09:00	02/19/24 14:07	1
Potassium	<2.00		2.00		mg/L		02/15/24 09:00	02/19/24 14:07	1
Selenium	<0.100		0.100		mg/L		02/15/24 09:00	02/19/24 14:07	1
Silver	<0.0200		0.0200		mg/L		02/15/24 09:00	02/19/24 14:07	1

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QC Sample Results

Client: Veolia Water N. America Operating Srvs
 Project/Site: Leachate Discharge

Job ID: 310-274812-1

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: MB 310-413654/1-A
Matrix: Water
Analysis Batch: 414072

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 413654

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Strontium	<0.100		0.100		mg/L		02/15/24 09:00	02/19/24 14:07	1
Zinc	<0.0400		0.0400		mg/L		02/15/24 09:00	02/19/24 14:07	1

Lab Sample ID: LCS 310-413654/2-A
Matrix: Water
Analysis Batch: 414072

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 413654

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
							Result	Limits
Arsenic	2.00	1.864		mg/L		93	85 - 115	
Barium	1.00	0.9521		mg/L		95	85 - 115	
Boron	2.00	1.851		mg/L		93	85 - 115	
Cadmium	1.00	0.8835		mg/L		88	85 - 115	
Calcium	20.0	17.64		mg/L		88	85 - 115	
Chromium	1.00	0.9082		mg/L		91	85 - 115	
Copper	2.00	1.866		mg/L		93	85 - 115	
Iron	2.00	1.865		mg/L		93	85 - 115	
Lead	2.00	1.773		mg/L		89	85 - 115	
Magnesium	20.0	17.92		mg/L		90	85 - 115	
Manganese	1.00	0.9342		mg/L		93	85 - 115	
Nickel	2.00	1.790		mg/L		89	85 - 115	
Potassium	20.0	19.71		mg/L		99	85 - 115	
Selenium	4.00	3.689		mg/L		92	85 - 115	
Silver	0.100	0.09708		mg/L		97	85 - 115	
Strontium	2.00	1.803		mg/L		90	85 - 115	
Zinc	2.00	1.866		mg/L		93	85 - 115	

Method: 245.2 - Mercury (CVAA)

Lab Sample ID: MB 310-413837/1-A
Matrix: Water
Analysis Batch: 413968

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 413837

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	<0.000200		0.000200		mg/L		02/16/24 12:31	02/19/24 11:44	1

Lab Sample ID: LCS 310-413837/2-A
Matrix: Water
Analysis Batch: 413968

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 413837

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
							Result	Limits
Mercury	0.00167	0.001724		mg/L		103	85 - 115	

Lab Sample ID: 310-274812-1 MS
Matrix: Water
Analysis Batch: 413968

Client Sample ID: Leachate Discharge
Prep Type: Total/NA
Prep Batch: 413837

Analyte	Sample Sample		Spike Added	MS MS		Unit	D	%Rec	%Rec Limits	
	Result	Qualifier		Result	Qualifier				Limits	
Mercury	<0.000200	F1	0.00167	0.0005424	F1	mg/L		33	70 - 130	

QC Sample Results

Client: Veolia Water N. America Operating Srvs
 Project/Site: Leachate Discharge

Job ID: 310-274812-1

Method: 245.2 - Mercury (CVAA) (Continued)

Lab Sample ID: 310-274812-1 MSD
 Matrix: Water
 Analysis Batch: 413968

Client Sample ID: Leachate Discharge
 Prep Type: Total/NA
 Prep Batch: 413837

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	<0.000200	F1	0.00167	0.0004911	F1	mg/L		29	70 - 130	10	20

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 310-413823/1-A
 Matrix: Water
 Analysis Batch: 413874

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 413823

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	<0.500		0.500		mg/L		02/16/24 09:57	02/16/24 16:13	1

Lab Sample ID: LCS 310-413823/2-A
 Matrix: Water
 Analysis Batch: 413874

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 413823

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia as N	4.00	4.035		mg/L		101	90 - 110

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

Lab Sample ID: MB 310-413785/1
 Matrix: Water
 Analysis Batch: 413785

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<5.0		5.0		mg/L			02/15/24 18:25	1

Lab Sample ID: LCS 310-413785/2
 Matrix: Water
 Analysis Batch: 413785

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	100	113.0		mg/L		113	75 - 116

Lab Sample ID: 310-274812-1 DU
 Matrix: Water
 Analysis Batch: 413785

Client Sample ID: Leachate Discharge
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	42.0		42.00		mg/L		0	35

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 310-413779/1
 Matrix: Water
 Analysis Batch: 413779

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<50.0		50.0		mg/L			02/15/24 16:34	1

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QC Sample Results

Client: Veolia Water N. America Operating Srvs
 Project/Site: Leachate Discharge

Job ID: 310-274812-1

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: LCS 310-413779/2
 Matrix: Water
 Analysis Batch: 413779

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	1000	936.0		mg/L		94	90 - 110

Lab Sample ID: 310-274812-1 DU
 Matrix: Water
 Analysis Batch: 413779

Client Sample ID: Leachate Discharge
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	2680		2710		mg/L		1	20

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 310-413491/1
 Matrix: Water
 Analysis Batch: 413491

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
pH	7.00	7.0		SU		101	98 - 102

Lab Sample ID: 310-274812-1 DU
 Matrix: Water
 Analysis Batch: 413491

Client Sample ID: Leachate Discharge
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	7.4	HF	7.4		SU		0.1	20

Method: SM 5210B - BOD, 5-Day

Lab Sample ID: USB 310-413543/1
 Matrix: Water
 Analysis Batch: 413543

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

Analyte	USB Result	USB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	<3.00		3.00		mg/L			02/14/24 06:20	1

Lab Sample ID: LCS 310-413543/2
 Matrix: Water
 Analysis Batch: 413543

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Biochemical Oxygen Demand	198	181.2		mg/L		92	85 - 115

Method: SM 5310C - TOC

Lab Sample ID: MB 310-413587/11
 Matrix: Water
 Analysis Batch: 413587

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	<1.00		1.00		mg/L			02/13/24 16:49	1

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QC Sample Results

Client: Veolia Water N. America Operating Srvs
Project/Site: Leachate Discharge

Job ID: 310-274812-1

Method: SM 5310C - TOC (Continued)

Lab Sample ID: LCS 310-413587/12

Matrix: Water

Analysis Batch: 413587

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon	9.99	10.43		mg/L		104	85 - 115

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

QC Association Summary

Client: Veolia Water N. America Operating Srvs
Project/Site: Leachate Discharge

Job ID: 310-274812-1

GC/MS VOA

Analysis Batch: 413574

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-274812-1	Leachate Discharge	Total/NA	Water	624.1	
MB 310-413574/5	Method Blank	Total/NA	Water	624.1	
LCS 310-413574/6	Lab Control Sample	Total/NA	Water	624.1	
LCS 310-413574/7	Lab Control Sample	Total/NA	Water	624.1	

GC/MS Semi VOA

Prep Batch: 413671

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-274812-1	Leachate Discharge	Total/NA	Water	625	
MB 310-413671/1-A	Method Blank	Total/NA	Water	625	
LCS 310-413671/2-A	Lab Control Sample	Total/NA	Water	625	
LCSD 310-413671/3-A	Lab Control Sample Dup	Total/NA	Water	625	

Analysis Batch: 413904

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-274812-1	Leachate Discharge	Total/NA	Water	625.1	413671
MB 310-413671/1-A	Method Blank	Total/NA	Water	625.1	413671
LCS 310-413671/2-A	Lab Control Sample	Total/NA	Water	625.1	413671
LCSD 310-413671/3-A	Lab Control Sample Dup	Total/NA	Water	625.1	413671

GC Semi VOA

Prep Batch: 413556

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-274812-1	Leachate Discharge	Total/NA	Water	608	
MB 310-413556/1-A	Method Blank	Total/NA	Water	608	
LCS 310-413556/2-A	Lab Control Sample	Total/NA	Water	608	
LCS 310-413556/4-A	Lab Control Sample	Total/NA	Water	608	
LCSD 310-413556/3-A	Lab Control Sample Dup	Total/NA	Water	608	
LCSD 310-413556/5-A	Lab Control Sample Dup	Total/NA	Water	608	

Analysis Batch: 414146

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-274812-1	Leachate Discharge	Total/NA	Water	608.3	413556
MB 310-413556/1-A	Method Blank	Total/NA	Water	608.3	413556
LCS 310-413556/2-A	Lab Control Sample	Total/NA	Water	608.3	413556
LCSD 310-413556/3-A	Lab Control Sample Dup	Total/NA	Water	608.3	413556

Analysis Batch: 414244

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-274812-1	Leachate Discharge	Total/NA	Water	608.3	413556
MB 310-413556/1-A	Method Blank	Total/NA	Water	608.3	413556
LCS 310-413556/4-A	Lab Control Sample	Total/NA	Water	608.3	413556
LCSD 310-413556/5-A	Lab Control Sample Dup	Total/NA	Water	608.3	413556

Metals

Prep Batch: 413654

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-274812-1	Leachate Discharge	Total/NA	Water	200.7	
MB 310-413654/1-A	Method Blank	Total/NA	Water	200.7	

Eurofins Cedar Falls

QC Association Summary

Client: Veolia Water N. America Operating Srvs
 Project/Site: Leachate Discharge

Job ID: 310-274812-1

Metals (Continued)

Prep Batch: 413654 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 310-413654/2-A	Lab Control Sample	Total/NA	Water	200.7	

Prep Batch: 413837

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-274812-1	Leachate Discharge	Total/NA	Water	245.1	
MB 310-413837/1-A	Method Blank	Total/NA	Water	245.1	
LCS 310-413837/2-A	Lab Control Sample	Total/NA	Water	245.1	
310-274812-1 MS	Leachate Discharge	Total/NA	Water	245.1	
310-274812-1 MSD	Leachate Discharge	Total/NA	Water	245.1	

Analysis Batch: 413968

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-274812-1	Leachate Discharge	Total/NA	Water	245.2	413837
MB 310-413837/1-A	Method Blank	Total/NA	Water	245.2	413837
LCS 310-413837/2-A	Lab Control Sample	Total/NA	Water	245.2	413837
310-274812-1 MS	Leachate Discharge	Total/NA	Water	245.2	413837
310-274812-1 MSD	Leachate Discharge	Total/NA	Water	245.2	413837

Analysis Batch: 414072

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-274812-1	Leachate Discharge	Total/NA	Water	200.7 Rev 4.4	413654
MB 310-413654/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	413654
LCS 310-413654/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	413654

General Chemistry

Analysis Batch: 413491

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-274812-1	Leachate Discharge	Total/NA	Water	SM 4500 H+ B	
LCS 310-413491/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
310-274812-1 DU	Leachate Discharge	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 413543

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-274812-1	Leachate Discharge	Total/NA	Water	SM 5210B	
USB 310-413543/1	Method Blank	Total/NA	Water	SM 5210B	
LCS 310-413543/2	Lab Control Sample	Total/NA	Water	SM 5210B	

Analysis Batch: 413587

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-274812-1	Leachate Discharge	Total/NA	Water	SM 5310C	
MB 310-413587/11	Method Blank	Total/NA	Water	SM 5310C	
LCS 310-413587/12	Lab Control Sample	Total/NA	Water	SM 5310C	

Analysis Batch: 413779

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-274812-1	Leachate Discharge	Total/NA	Water	SM 2540C	
MB 310-413779/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 310-413779/2	Lab Control Sample	Total/NA	Water	SM 2540C	
310-274812-1 DU	Leachate Discharge	Total/NA	Water	SM 2540C	

QC Association Summary

Client: Veolia Water N. America Operating Srvs
 Project/Site: Leachate Discharge

Job ID: 310-274812-1

General Chemistry

Analysis Batch: 413785

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-274812-1	Leachate Discharge	Total/NA	Water	I-3765-85	
MB 310-413785/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-413785/2	Lab Control Sample	Total/NA	Water	I-3765-85	
310-274812-1 DU	Leachate Discharge	Total/NA	Water	I-3765-85	

Prep Batch: 413823

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-274812-1	Leachate Discharge	Total/NA	Water	Distill/Ammonia	
MB 310-413823/1-A	Method Blank	Total/NA	Water	Distill/Ammonia	
LCS 310-413823/2-A	Lab Control Sample	Total/NA	Water	Distill/Ammonia	

Analysis Batch: 413874

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-274812-1	Leachate Discharge	Total/NA	Water	350.1	413823
MB 310-413823/1-A	Method Blank	Total/NA	Water	350.1	413823
LCS 310-413823/2-A	Lab Control Sample	Total/NA	Water	350.1	413823



Lab Chronicle

Client: Veolia Water N. America Operating Srvs
 Project/Site: Leachate Discharge

Job ID: 310-274812-1

Client Sample ID: Leachate Discharge

Lab Sample ID: 310-274812-1

Date Collected: 02/12/24 08:30

Matrix: Water

Date Received: 02/13/24 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		10	413574	WSE8	EET CF	02/14/24 13:01
Total/NA	Prep	625			413671	Y6AF	EET CF	02/15/24 05:19
Total/NA	Analysis	625.1		1	413904	L0FS	EET CF	02/19/24 12:27
Total/NA	Prep	608			413556	Y6AF	EET CF	02/14/24 07:51
Total/NA	Analysis	608.3		1	414146	BW2O	EET CF	02/21/24 14:21
Total/NA	Prep	608			413556	Y6AF	EET CF	02/14/24 07:51
Total/NA	Analysis	608.3		1	414244	BW2O	EET CF	02/22/24 15:47
Total/NA	Prep	200.7			413654	QTZ5	EET CF	02/15/24 09:00
Total/NA	Analysis	200.7 Rev 4.4		1	414072	ZRI4	EET CF	02/19/24 14:31
Total/NA	Prep	245.1			413837	DHM5	EET CF	02/16/24 12:31
Total/NA	Analysis	245.2		1	413968	NFT2	EET CF	02/19/24 11:48
Total/NA	Prep	Distill/Ammonia			413823	ENB7	EET CF	02/16/24 09:57
Total/NA	Analysis	350.1		1	413874	ZJX4	EET CF	02/16/24 16:26
Total/NA	Analysis	I-3765-85		1	413785	A4XP	EET CF	02/15/24 18:25
Total/NA	Analysis	SM 2540C		1	413779	ENB7	EET CF	02/15/24 16:34
Total/NA	Analysis	SM 4500 H+ B		1	413491	W9YR	EET CF	02/13/24 10:41
Total/NA	Analysis	SM 5210B		1	413543	W9YR	EET CF	02/14/24 06:42
Total/NA	Analysis	SM 5310C		40	413587	WZC8	EET CF	02/14/24 07:11

Laboratory References:

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

Accreditation/Certification Summary

Client: Veolia Water N. America Operating Srvs
 Project/Site: Leachate Discharge

Job ID: 310-274812-1

Laboratory: Eurofins Cedar Falls

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

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

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
200.7 Rev 4.4	200.7	Water	Strontium
608.3	608	Water	PCB-1268
624.1		Water	1,2-Dichloroethene, Total
624.1		Water	1,3-Dichloropropene, Total
625.1	625	Water	1,2-Dichlorobenzene
625.1	625	Water	1,3-Dichlorobenzene
625.1	625	Water	1,4-Dichlorobenzene
625.1	625	Water	2-Methylnaphthalene
625.1	625	Water	2-Methylphenol
625.1	625	Water	2-Nitroaniline
625.1	625	Water	3-Nitroaniline
625.1	625	Water	4-Chloroaniline
625.1	625	Water	4-Nitroaniline
625.1	625	Water	Alpha-Terpineol
625.1	625	Water	Carbazole
625.1	625	Water	Dibenzofuran
625.1	625	Water	Pyridine
625.1	625	Water	Total Cresols



Method Summary

Client: Veolia Water N. America Operating Srvs
 Project/Site: Leachate Discharge

Job ID: 310-274812-1

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	EPA	EET CF
625.1	Semivolatile Organic Compounds (GC/MS)	EPA	EET CF
608.3	Organochlorine Pesticides in Water	EPA	EET CF
608.3	Polychlorinated Biphenyls (PCBs) (GC)	EPA	EET CF
200.7 Rev 4.4	Metals (ICP)	EPA	EET CF
245.2	Mercury (CVAA)	EPA	EET CF
350.1	Nitrogen, Ammonia	EPA	EET CF
I-3765-85	Residue, Non-filterable (TSS)	USGS	EET CF
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET CF
SM 4500 H+ B	pH	SM	EET CF
SM 5210B	BOD, 5-Day	SM	EET CF
SM 5310C	TOC	SM	EET CF
200.7	Preparation, Total Metals	EPA	EET CF
245.1	Preparation, Mercury	EPA	EET CF
608	Liquid-Liquid Extraction (Separatory Funnel)	EPA	EET CF
625	Liquid-Liquid Extraction	EPA	EET CF
Distill/Ammonia	Distillation, Ammonia	None	EET CF

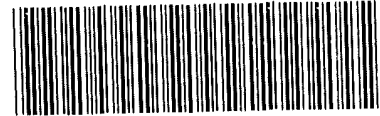
Protocol References:

- EPA = US Environmental Protection Agency
- None = None
- SM = "Standard Methods For The Examination Of Water And Wastewater"
- USGS = "Methods For Analysis Of Water And Fluvial Sediments", USGS, 1989

Laboratory References:

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





Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client: <u>Veolia Water</u>			
City/State:	CITY <u>Spencer</u>	STATE <u>IA</u>	Project:
Receipt Information			
Date/Time Received:	DATE <u>2/13/22</u>	TIME <u>0905</u>	Received By: <u>J</u>
Delivery Type: <input type="checkbox"/> UPS <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____			
Condition of Cooler/Containers			
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler ID: _____	
Multiple Coolers?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Cooler # _____ of _____	
Cooler Custody Seals Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler custody seals intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Sample Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Trip Blank Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Which VOA samples are in cooler? ↓	
Temperature Record			
Coolant:	<input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE		
Thermometer ID: <u>X</u>	Correction Factor (°C): <u>tu</u>		
• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature			
Uncorrected Temp (°C): <u>3.6</u>	Corrected Temp (°C): <u>3.6</u>		
• Sample Container Temperature			
Container(s) used:	<u>CONTAINER 1</u>	<u>CONTAINER 2</u>	
Uncorrected Temp (°C):			
Corrected Temp (°C):			
Exceptions Noted			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No			
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No			
NOTE If yes, contact PM before proceeding If no, proceed with login			
Additional Comments			



Chain of Custody Record

eurofins

Client Information		Lab PM Hummel Matthew R		Carrier Tracking No(s)		COC No 310-89819-24847 1	
Company Veolia Water N. America Operating Svcs		E-Mail Matthew.Hummel@eurofins.com		State of Origin		Page Page 1 of 1	
City Cedar Falls		PWSID		Analysis Requested		Job #:	
Address 400 10th AVE SE PO BOX 1215		Due Date Requested		608 3 PCB_PREC, 608 3 Pest_PREC, 625 1_PREC		Preservation Codes	
City Spencer		TAT Requested (days)		350 1 Nitrogen, Ammonia		A HCL B NaOH C Zn Acetate D Nitric Acid E NaHSO4 F MeOH G Amchlor H Ascorbic Acid I Ice J DI Water K EDTA L EDA Z - other (Specify)	
State Zip IA, 51301		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No		200 7_CWA, 245.2		M Hexane N None O AsNaO2 P Na2O4S Q Na2SO3 R Na2SO3 S H2SO4 T TSP Dodecahydrate U Acetone V MCAA W pH 4-5 Y Trizma Z - other (Specify)	
Phone		Purchase Order not required		624 1_PREC - (MOD) TTO Volatile List		Other	
Email shelby.anderson@veolia.com		WO #		5310C - TOC		Total Number of containers	
Project # 31005791		Sample Date		624 1_PREC - (MOD) TTO Volatile List		Special Instructions/Note:	
Leachate Discharge		Sample Time		2540C_CalcI, 1.3765_85, SM4500_H+, SM5210B_Calc		Accidently broke a 40mL then preserved vial. Used a 60 mL bottle for replacement	
Sample Identification		Sample Type (C=Comp, G=grab)		624 1_PREC - (MOD) TTO Volatile List			
Leachate Discharge		Sample Time		5310C - TOC			
		Sample Date		200 7_CWA, 245.2			
		Sample Time		350 1 Nitrogen, Ammonia			
		Sample Date		608 3 PCB_PREC, 608 3 Pest_PREC, 625 1_PREC			
		Sample Time		2540C_CalcI, 1.3765_85, SM4500_H+, SM5210B_Calc			
		Sample Date		624 1_PREC - (MOD) TTO Volatile List			
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		Sample Time		5310C - TOC			
		Sample Date		624 1_PREC - (MOD) TTO Volatile List			
		Sample Time		2540C_CalcI, 1.3765_85, SM4500_H+, SM5210B_Calc			
		Sample Date		624 1_PREC - (MOD) TTO Volatile List			
		Sample Time		5310C - TOC			
		Sample Date		624 1_PREC - (MOD) TTO Volatile List			
		Sample Time		2540C_CalcI, 1.3765_85, SM4500_H+, SM5210B_Calc			
		Sample Date		624 1_PREC - (MOD) TTO Volatile List			
		Sample Time		5310C - TOC			
		Sample Date		624 1_PREC - (MOD) TTO Volatile List			
		Sample Time		2540C_CalcI, 1.3765_85, SM4500_H+, SM5210B_Calc			
		Sample Date		624 1_PREC - (MOD) TTO Volatile List			
		Sample Time		5310C - TOC			
		Sample Date		624 1_PREC - (MOD) TTO Volatile List			
		Sample Time		2540C_CalcI, 1.3765_85, SM4500_H+, SM5210B_Calc			
		Sample Date		624 1_PREC - (MOD) TTO Volatile List			
		Sample Time		5310C - TOC			
		Sample Date		624 1_PREC - (MOD) TTO Volatile List			
		Sample Time		2540C_CalcI, 1.3765_85, SM4500_H+, SM5210B_Calc			
		Sample Date		624 1_PREC - (MOD) TTO Volatile List			
		Sample Time		5310C - TOC			
		Sample Date		624 1_PREC - (MOD) TTO Volatile List			
		Sample Time		2540C_CalcI, 1.3765_85, SM4500_H+, SM5210B_Calc			
		Sample Date		624 1_PREC - (MOD) TTO Volatile List			
		Sample Time		5310C - TOC			
		Sample Date		624 1_PREC - (MOD) TTO Volatile List			
		Sample Time		2540C_CalcI, 1.3765_85, SM4500_H+, SM5210B_Calc			
		Sample Date		624 1_PREC - (MOD) TTO Volatile List			
		Sample Time		5310C - TOC			
		Sample Date		624 1_PREC - (MOD) TTO Volatile List			
		Sample Time		2540C_CalcI, 1.3765_85, SM4500_H+, SM5210B_Calc			
		Sample Date		624 1_PREC - (MOD) TTO Volatile List			
		Sample Time		5310C - TOC			
		Sample Date		624 1_PREC - (MOD) TTO Volatile List			
		Sample Time		2540C_CalcI, 1.3765_85, SM4500_H+, SM5210B_Calc			
		Sample Date		624 1_PREC - (MOD) TTO Volatile List			
		Sample Time		5310C - TOC			
		Sample Date		624 1_PREC - (MOD) TTO Volatile List			
		Sample Time		2540C_CalcI,			

Login Sample Receipt Checklist

Client: Veolia Water N. America Operating Svcs

Job Number: 310-274812-1

Login Number: 274812

List Source: Eurofins Cedar Falls

List Number: 1

Creator: Costello, Mackenzie K

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

Appendix H.3 –
Treatment Agreement with Spencer POTW



CITY OF SPENCER, IOWA

City Hall

418 2nd Avenue West
SPENCER, IOWA 51301-3801

Telephone: (712) 580-7200
FAX: (712) 580-7236

April 26, 2006

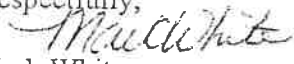
Amie Hart, P.E.
Environmental Engineer
Energy & Waste Management Bureau

RE: Northern Plains Regional Sanitary Landfill
Permit No. 74-SDP-02-76P
POTW Agreement

Dear Amie,

Please find the completed Operation Permit Application Treatment Agreement for the leachate from the Northern Plains Regional Sanitary Landfill to be treated at City of Spencer Wastewater Treatment Plant. Both facilities are owned by the City of Spencer.

Respectfully,


Mark White
Interim Director of Public Works
City of Spencer

cc: James E. Thiesse P.E.
Kruse Cate and Nelson Engineering
1801 Highway Blvd.
Spencer, Iowa 51301



CITY OF SPENCER, IOWA

City Hall

418 2nd Avenue West
SPENCER, IOWA 51301-3801

Telephone: (712) 580-7200

FAX: (712) 580-7236

FAX COVER SHEET

DATE: 7/26/06

TO: NAME Camie Hart
ORGANIZATION DNR
FAX # 515 281 8895

FROM: NAME Mark White City of Spencer
SPENCER CITY HALL

TOTAL NUMBER OF PAGES INCLUDING COVER SHEET 7

COMMENTS: _____

City of Spencer Administration FAX NUMBER is 712-580-7236

IOWA DEPARTMENT OF NATURAL RESOURCES
OPERATION PERMIT APPLICATION
TREATMENT AGREEMENT

<p>NOTICE</p> <p>A properly executed Treatment Agreement must be submitted by the contributor not less than one hundred eighty (180) days before the new major contributing industry proposes to discharge into a wastewater disposal system. Any proposed expansion, production increase or process modification that may result in <u>any</u> change to a previous Treatment Agreement requires execution of a new Treatment Agreement.</p>	<p>DNR USE</p> <p>IOWA FACILITY NO.</p> <hr/> <p>IND. CONT. AGREEMENT NO.</p> <hr/> <p>REPLACES AGREEMENT NO.</p> <hr/>
--	--

MAJOR INDUSTRIAL CONTRIBUTOR		SYSTEM RECEIVING WASTE	
NAME	Northern Plains Regional Landfill	NAME	City of Spencer
MAILING ADDRESS	418 2nd Avenue West	MAILING ADDRESS	418 2nd Avenue West
AUTHORIZED REPRESENTATIVE	PHONE NO.	AUTHORIZED REPRESENTATIVE	PHONE NO.
Mark White	712-580-7200	Jim Virelli	712-262-5584

CERTIFICATION OF CONTRIBUTING INDUSTRY

I am the duly authorized representative for the major industrial contributor identified above and state that the proposed discharge to the system receiving waste identified above shall not exceed the quantities listed on page two of this form after

EFFECTIVE DATE April 25, 2006

I further assure that notice of any anticipated increase in pollutants contributed shall be given to the owner of the system identified above sufficiently in advance of such increase to allow this contributor to submit a new treatment agreement to the Department of Natural Resources not later than sixty days in advance of the increase or change.

TYPED OR PRINTED NAME	TITLE	SIGNATURE	DATE
Mark White	Interim Director of Public Works	<i>Mark White</i>	April 25, 2006

CERTIFICATION OF SYSTEM RECEIVING WASTE

I am the duly authorized representative for the facility owner named above and state that the owner agrees to accept the discharge described on page two from the contractor identified above, and accepts responsibility for providing treatment of the volume and quantities described on the reverse in accordance with the provisions of Chapter 455B, Code of Iowa, and the rules of the Department of Natural Resources. This agreement is conditioned on the industrial contributor complying with all applicable standards and requirements of the Department of Natural Resources and the United State Environmental Protection Agency. This agreement is entered for the purpose of identifying pollutants contributed and limiting the quantity contributed, and shall not otherwise be construed to affect local ordinances, sewer service agreements or fee systems entered into between the parties.

This agreement may be modified or terminated by the owner of the disposal system if additional pollutants or additional quantities or volumes of pollutants are contributed other than identified on the reverse, or because of any condition that requires either a temporary or permanent reduction or elimination of the accepted contribution.

TYPED OR PRINTED NAME	TITLE	SIGNATURE	DATE
White	Interim Director of Public Works	<i>Mark White</i>	April 25, 2006

INSTRUCTIONS FOR COMPLETION OF PAGE 2

ITEM 1

A) Enter the industry's Standard Industrial Classification Code Number (SIC Code). The 1982 edition of the "Standard Industrial Classification Manual" or the current "Directory of Iowa Manufacturers" contains SIC code numbers and their descriptions.

B) Specify the principal product(s) or the principal raw material(s) and the maximum quantity produced or consumed in any day. Quantities are to be reported in units of measurement found in "Table III (Units of Measurement by SIC Code)". Other industrial SIC categories not included in Table III should be listed in units of measurement normally used by the industry. Table III is available from the Department on request.

ITEM 2

Day Maximum is the maximum discharge during any single hour in the peak period of operation.

ITEM 6

Describe all pretreatment of waste prior to discharge to municipal collection system.

ITEM 7

Describe any occasional or intermittent discharge and include the frequency of discharges and the amount. Such discharges could upset a treatment plant because of the shock effect of a sudden change in influent loading.

ITEM 8

Compatible Waste in Contribution means any waste parameter discharged that the receiving treatment works was designed to treat and does remove to a significant degree. Average is to represent the maximum 30-day average likely to occur in any year. Days when no discharge occurs should not be included in the average. Maximum is the maximum single-day contribution during a peak period of operation.

ITEM 9

Incompatible Waste in Contribution means any waste not qualifying within the definition of Item 8. List all such waste parameters that are contributed in concentrations greater than that present in the raw water supply.

*NOTE: A "Major Contributing Industry" means an industrial user of a treatment works that:

- a. Has a flow of 50,000 gallons or more per average work day;
- b. Has a flow greater than five percent of the treatment works receiving the waste;
- c. Has in its waste a toxic pollutant in toxic amounts as defined in standards issued under Section 307a of the Clean Water Act and adopted by reference in 567--62.5 of the Iowa Administrative Code; or
- d. Is found by the Department of Natural Resources to have a significant impact, either singly or in combination with other contributing industries, on that treatment works or on the quality of effluent from that treatment works.

STANDARD UNITS OF MEASUREMENT BY SIC CODE

SIC CODE	CODE	UNITS OF MEASUREMENT	INDUSTRY
201; 2077	A-1	Pounds live weight killed (meatpacking in slaughterhouse or packinghouse; poultry processing)	Meat products
	A-2	Pound product (slaughtering & rendering; processing)	
	A-3	Pound raw material (rendering in offsite plant)	
202; 5145	B-1	1,000 lb. milk equivalent	Dairy products
2033; 2034; 2037; 2038	C-1	Ton raw material	Canned and preserved fruits and vegetables
204	D-1	1,000 bu. processed	Grain mill products
2061	E-1	Ton sugar cane processed	Raw cane sugar
2062	E-2	Ton raw sugar processed	Cane sugar refining
2063	E-3	Ton beets sliced	Beet sugar
2077		See SIC 201	
2084	F-1	Ton grapes pressed	Wine, brandy, and brandy spirits
	F-2	1,000 gallon wine (table wine for process season only)	
2085	F-3	1,000 bu. grain processed	Distilled liquor, except brandy
2086	F-4	1,000 standard cases	Bottled and canned soft drinks
2091; 2092	G-1	Ton raw material	Seafoods
22	H-1	1,000 lb. raw material	Textile mill products
	H-2	or 1,000 lb. product	
2421	I-1	1,000 fbm	Sawmills and planing mills
2435; 2436	I-2	1,000 ft ² on three-eighths inch basis	Veneer and plywood
2491	I-3	1,000 ft ² treated	Wood preserving
2492	I-4	1,000 ft ² on three-fourths inch basis	Particle board
26	J-1	Ton product	Paper and allied products
2812; 2816; 2819	K-1	Ton product	Inorganic chemicals
2821; 2823; 2824; 2891; 2892	L-1	1,000 lb. product	Plastic material and synthetics industry
2822	M-1	1,000 lb. rubber produced	Synthetic rubber (vulcanizable elastomers)
283	N-1	1,000 lb. raw material	Drugs and pharmaceuticals
2481	O-1	1,000 lb. product	Soap and detergent
	O-2	or 1,000 gallon product	
2865; 2869	P-1	1,000 lb. product	Organic chemicals
2873; 2874; 2875	Q-1	1,000 ton product	Fertilizer industry
2879	R-1	1,000 lb. product	Agricultural chemicals and pesticides
2891		See SIC 2821	
2911	S-1	1,000 bbl. crude or partially refined feed stock (stream day)	Petroleum refining
3011; 3021; 3031; 3041; 3069	T-1	1,000 lb. raw material	Rubber products
3111	U-1	1,000 lb. green salted hides or pickled skins	Leather tanning and finishing
3211; 3231	V-1	1,000 ton product	Flat glass and glass products made; purchased glass
	V-2	or 1,000 ft ² mirrored surface (for mirrored glass only)	
3241	V-3	1,000 bbl. product	Hydraulic cement
327	V-4	1,000 ton product	Concrete, gypsum and plastic products
3292	V-5	1,000 ton asbestos used	Asbestos products
331	W-1	Ton dry coal	Coke making
	W-2	Ton hot metal	Blast furnaces
	W-3	Ton liquid steel	Steelworks
	W-4	Ton hot formed steel	Hot forming
	W-5	Ton processed steel	Rolling and finishing mills
332	W-6	Ton metal cast	Iron and steel foundries
333	X-1	1,000 lb. metal product	Primary smelting and refining of nonferrous metals
334	X-2	1,000 lb. metal product	Secondary smelting and refining of nonferrous metals
335	X-3	1,000 lb. metal processed	Rolling, drawing, and extruding of nonferrous metals
336	X-4	1,000 lb. metal cast	Nonferrous foundries
3465; 3711; 3714	Y-1	Unit production	Automobile manufacturing
	Y-2	or square feet	
4911; 4931	Z-1	1,000 MWh generated	Electric power services
51	Z-1	1 million lb. steam produced	Steam supply

Appendix H.4 -
Recirculation Volume Summary
Daily Leachate Recirculation Logs

**Leachate Recirculation
Northern Plains Sanitary Landfill
2024**

JUNE			
Date	Trench Gallons	Date	Spray Gallons
		6/12/2024	2,256
		6/13/2024	12,304
		6/14/2024	12,576
		6/18/2024	9,024
		6/22/2024	19,200
			55,360
			55,360

Northern Plains Regional Landfill ~ Daily Leachate Recirculation Log

	<u>Sunday</u>	<u>Monday</u>	<u>Tuesday</u>	<u>Wednesday</u>	<u>Thursday</u>	<u>Friday</u>	<u>Saturday</u>
<u>Date</u>	6/9/2024	6/10/2024	6/11/2024	6/12/2024	6/13/2024	6/14/2024	6/15/2024
<u>Liquid Levels</u>							
LPZ-23 >	33.64						
LPZ-25 >	43.21						
LPZ-27 >	39.75						
<u>Rainbird Hrs.</u>							
Start				2712.00	2713.41	2721.10	
End				2713.41	2721.10	2728.96	
Total				1.41	7.69	7.86	
<u>Rainbird Gal.</u>	26 GPM						
To Cell A							
To Cell B							
To Cell C				2256.00	12304.00	12576.00	
<u>Trench Hrs.</u>							
Start							
End							
Total							
<u>Trench Gal.</u>	41 GPM						
To Cell A							
To Cell B							
To Cell C							
<u>Lagoon Data</u>							
<u>Lift Station #3 - Hrs.</u>		74.70	20.90	27.00	21.60	23.70	
<u>Lift Station #3 - Gal.</u>		268920.00	75240.00	97200.00	77760.00	85320.00	
<u>Lagoon Level</u>		11.70 measured in suction line	11.70 measured in suction line	11.70 measured in suction line	11.70 measured in suction line	11.70 measured in suction line	
<u>Leachate to POTW - Gal.</u>		38057.46	65796.17	15784.17	46012.00	43875.30	
<u>Weather</u>							
<u>Rainfall (in.)</u>							

DLL

Northern Plains Regional Landfill ~ Daily Leachate Recirculation Log

	<u>Sunday</u>	<u>Monday</u>	<u>Tuesday</u>	<u>Wednesday</u>	<u>Thursday</u>	<u>Friday</u>	<u>Saturday</u>
<u>Date</u>	6/16/2024	6/17/2024	6/18/2024	6/19/2024	6/20/2024	6/21/2024	6/22/2024
<u>Liquid Levels</u>							
LPZ-23 >	33.64						
LPZ-25 >	43.21						
LPZ-27 >	39.75						
<u>Rainbird Hrs.</u>							
Start			2728.96				2734.60
End			2734.60				2746.60
Total			5.64				12.00
<u>Rainbird Gal.</u>	<u>26 GPM</u>						
To Cell A							
To Cell B							
To Cell C			9024				19200.00
<u>Trench Hrs.</u>							
Start							
End							
Total							
<u>Trench Gal.</u>	<u>41 GPM</u>						
To Cell A							
To Cell B							
To Cell C							
<u>Lagoon Data</u>							
	<u>60 GPM</u>						
Lift Station #3 - Hrs.		41.50	18.30	29.40	20.20	30.60	
Lift Station #3 - Gal.		149400.00	65880.00	105840.00	72720.00	110160.00	
Lagoon Level		11.70 measured in suction line	11.70 measured in suction line	11.70 measured in suction line	11.70 measured in suction line	11.70 measured in suction line	
Leachate to POTW - Gal.		70575.54	52220.63	58167.87	44474.81	33038.37	
<u>Weather</u>							
Rainfall (in.)							

DCC

Appendix H.5 -
Leachate Measurement and Head Calculations

**Northern Plains Regional Sanitary Landfill
Leachate**

1/30/2024

Column A	Column B	Column C	Column D	Column E	Column F	Column G	Column H	Column I	Column J	Column K
Leachate PZ Well No.		Date Installed	Top of Casing Elevation	Current Condition	Depth to Water from Top (ft)	Measured Depth of PZ from Top (ft)	Standing Liquid in PZ (ft)	Reference Point (ft)	Head Above Liner (ft)	Elevation Leachate MSL (ft)
1	Original Landfill	Sept. 1994	1292.52	Okay	35.68	39.70	4.02	N/A	N/A	1256.84
2	Original Landfill	Sept. 1994	1288.7	Okay	35.60	50.48	14.88	N/A	N/A	1253.10
3	Original Landfill	Sept. 1994	1290.76	Okay	26.90	30.90	4.00	N/A	N/A	1263.86
4	Original Landfill	Sept. 1994	1290.16	Okay	37.20	36.80	-0.40	N/A	N/A	1252.96
5	Original Landfill	Sept. 1994	1285.14	Destroyed	---	---	---	N/A	N/A	---
6	Original Landfill	Sept. 1994	1283	Okay	26.85	26.95	0.10	N/A	N/A	1256.15
7	Original Landfill	Sept. 1994	1285.41	Okay	27.30	29.91	2.61	N/A	N/A	1258.11
8	Original Landfill	Sept. 1994	1281.65	Okay	29.05	29.70	0.65	N/A	N/A	1252.60
9	Original Landfill	Sept. 1994	1280.13	Okay	26.18	29.63	3.45	N/A	N/A	1253.95
10	Original Landfill	Sept. 1994	1290.61	Okay	11.88	27.04	15.16	N/A	N/A	1278.73
11	Original Landfill	Sept. 1994	1290.86	Okay	37.10	37.19	0.09	N/A	N/A	1253.76
12	Original Landfill	Sept. 1994	1289.28	Okay	18.52	19.23	0.71	N/A	N/A	1270.76
22	Cell 21A	Mar. 2006	N/A	Okay	24.00	30.72	6.72	N/A	N/A	N/A
23	Cell A	N/A	N/A	Okay	35.80	34.40	-1.40	-1.50	-2.90	N/A
24	Cell A	N/A	N/A	Okay	35.20	34.00	-1.20	0.083	-1.117	N/A
25	Cell B	N/A	N/A	Okay	44.60	45.71	1.11	-1.50	-0.39	N/A
26	Cell B	N/A	N/A	Okay	39.40	38.00	-1.40	0.083	-1.317	N/A
27	Cell C	Aug. 22, 2014	N/A	Okay	39.80	41.80	2.00	-1.50	0.500	N/A
28	Cell C	Mar-14	N/A	Okay	40.00	41.20	1.20	0.083	1.283	N/A
29	Cell D1	Jun-17	N/A	Okay	49.90	50.00	0.10	-1.50	-1.400	N/A
30	Cell D1	Jun-17	N/A	Okay	45.60	45.60	0.00	0.083	0.083	N/A
31	Cell D2	Jun-17	N/A	Okay	29.80	29.8	0.00	-1.50	-1.500	N/A
32	Cell D2	Jun-17	N/A	Okay	31.00	29.1	-1.90	0.083	-1.817	N/A

**Northern Plains Regional Sanitary Landfill
Leachate**

2/26/2024

Column A	Column B	Column C	Column D	Column E	Column F	Column G	Column H	Column I	Column J	Column K
Leachate PZ Well No.		Date Installed	Top of Casing Elevation	Current Condition	Depth to Water from Top (ft)	Measured Depth of PZ from Top (ft)	Standing Liquid in PZ (ft)	Reference Point (ft)	Head Above Liner (ft)	Elevation Leachate MSL (ft)
1	Original Landfill	Sept. 1994	1292.52	Okay	35.83	39.70	3.87	N/A	N/A	1256.69
2	Original Landfill	Sept. 1994	1288.7	Okay	35.60	50.48	14.88	N/A	N/A	1253.10
3	Original Landfill	Sept. 1994	1290.76	Okay	26.90	30.90	4.00	N/A	N/A	1263.86
4	Original Landfill	Sept. 1994	1290.16	Okay	37.20	36.80	-0.40	N/A	N/A	1252.96
5	Original Landfill	Sept. 1994	1285.14	Destroyed	---	---	---	N/A	N/A	---
6	Original Landfill	Sept. 1994	1283	Okay	26.85	26.95	0.10	N/A	N/A	1256.15
7	Original Landfill	Sept. 1994	1285.41	Okay	27.30	29.91	2.61	N/A	N/A	1258.11
8	Original Landfill	Sept. 1994	1281.65	Okay	29.10	29.70	0.60	N/A	N/A	1252.55
9	Original Landfill	Sept. 1994	1280.13	Okay	30.19	29.63	-0.56	N/A	N/A	1249.94
10	Original Landfill	Sept. 1994	1290.61	Okay	11.15	27.04	15.89	N/A	N/A	1279.46
11	Original Landfill	Sept. 1994	1290.86	Okay	30.09	37.19	7.10	N/A	N/A	1260.77
12	Original Landfill	Sept. 1994	1289.28	Okay	18.65	19.23	0.58	N/A	N/A	1270.63
22	Cell 21A	Mar. 2006	N/A	Okay	24.00	30.72	6.72	N/A	N/A	N/A
23	Cell A	N/A	N/A	Okay	26.99	34.40	7.41	-1.50	5.91	N/A
24	Cell A	N/A	N/A	Okay	34.09	34.00	-0.09	0.083	-0.007	N/A
25	Cell B	N/A	N/A	Okay	40.13	45.71	5.58	-1.50	4.08	N/A
26	Cell B	N/A	N/A	Okay	38.24	38.00	-0.24	0.083	-0.157	N/A
27	Cell C	Aug. 22, 2014	N/A	Okay	41.85	41.80	-0.05	-1.50	-1.550	N/A
28	Cell C	Mar-14	N/A	Okay	40.90	41.20	0.30	0.083	0.383	N/A
29	Cell D	Jun-17	N/A	Okay - Extended	49.90	50.00	0.10	-1.50	-1.400	N/A
30	Cell D1	Jun-17	N/A	Okay	45.60	45.60	0.00	0.083	0.083	N/A
31	Cell D2	Jun-17	N/A	Okay	29.80	29.8	0.00	-1.50	-1.500	N/A
32	Cell D2	Jun-17	N/A	Okay	31.00	29.1	-1.90	0.083	-1.817	N/A

**Northern Plains Regional Sanitary Landfill
Leachate**

4/4/2024

Column A	Column B	Column C	Column D	Column E	Column F	Column G	Column H	Column I	Column J	Column K
Leachate PZ Well No.		Date Installed	Top of Casing Elevation	Current Condition	Depth to Water from Top (ft)	Measured Depth of PZ from Top (ft)	Standing Liquid in PZ (ft)	Reference Point (ft)	Head Above Liner (ft)	Elevation Leachate MSL (ft)
1	Original Landfill	Sept. 1994	1292.52	Okay	34.31	39.70	5.39	N/A	N/A	1258.21
2	Original Landfill	Sept. 1994	1288.7	Okay	35.61	50.48	14.87	N/A	N/A	1253.09
3	Original Landfill	Sept. 1994	1290.76	Okay	26.24	30.90	4.66	N/A	N/A	1264.52
4	Original Landfill	Sept. 1994	1290.16	Okay	35.21	36.80	1.59	N/A	N/A	1254.95
5	Original Landfill	Sept. 1994	1285.14	Destroyed	---	---	---	N/A	N/A	---
6	Original Landfill	Sept. 1994	1283	Okay	27.80	26.95	-0.85	N/A	N/A	1255.20
7	Original Landfill	Sept. 1994	1285.41	Okay	26.95	29.91	2.96	N/A	N/A	1258.46
8	Original Landfill	Sept. 1994	1281.65	Okay	27.58	29.70	2.12	N/A	N/A	1254.07
9	Original Landfill	Sept. 1994	1280.13	Okay	29.89	29.63	-0.26	N/A	N/A	1250.24
10	Original Landfill	Sept. 1994	1290.61	Okay	11.20	27.04	15.84	N/A	N/A	1279.41
11	Original Landfill	Sept. 1994	1290.86	Okay	27.50	37.19	9.69	N/A	N/A	1263.36
12	Original Landfill	Sept. 1994	1289.28	Okay	18.25	19.23	0.98	N/A	N/A	1271.03
22	Cell 21A	Mar. 2006	N/A	Okay	23.10	30.72	7.62	N/A	N/A	N/A
23	Cell A	N/A	N/A	Okay	34.90	34.40	-0.50	-1.50	-2.00	N/A
24	Cell A	N/A	N/A	Okay	34.10	34.00	-0.10	0.083	-0.017	N/A
25	Cell B	N/A	N/A	Okay	44.20	45.71	1.51	-1.50	0.01	N/A
26	Cell B	N/A	N/A	Okay	38.20	38.00	-0.20	0.083	-0.117	N/A
27	Cell C	Aug. 22, 2014	N/A	Okay	42.15	41.80	-0.35	-1.50	-1.850	N/A
28	Cell C	Mar-14	N/A	Okay	40.30	41.20	0.90	0.083	0.983	N/A
29	Cell D1	Jun-17	N/A	Okay	50.30	50.00	-0.30	-1.500	-1.800	N/A
30	Cell D1	Jun-17	N/A	Okay	45.80	45.60	-0.20	0.083	-0.117	N/A
31	Cell D2	Jun-17	N/A	Okay	29.75	29.8	0.05	-1.50	-1.450	N/A
32	Cell D2	Jun-17	N/A	Okay	29.30	29.1	-0.20	0.083	-0.117	N/A

**Northern Plains Regional Sanitary Landfill
Leachate**

5/6/2024

Column A	Column B	Column C	Column D	Column E	Column F	Column G	Column H	Column I	Column J	Column K
Leachate PZ Well No.		Date Installed	Top of Casing Elevation	Current Condition	Depth to Water from Top (ft)	Measured Depth of PZ from Top (ft)	Standing Liquid in PZ (ft)	Reference Point (ft)	Head Above Liner (ft)	Elevation Leachate MSL (ft)
1	Original Landfill	Sept. 1994	1292.52	Okay	31.10	39.70	8.60	N/A	N/A	1261.42
2	Original Landfill	Sept. 1994	1288.7	Okay	35.60	50.48	14.88	N/A	N/A	1253.10
3	Original Landfill	Sept. 1994	1290.76	Okay	26.24	30.90	4.66	N/A	N/A	1264.52
4	Original Landfill	Sept. 1994	1290.16	Okay	25.21	36.80	11.59	N/A	N/A	1264.95
5	Original Landfill	Sept. 1994	1285.14	Destroyed	---	---	---	N/A	N/A	---
6	Original Landfill	Sept. 1994	1283	Okay	27.80	26.95	-0.85	N/A	N/A	1255.20
7	Original Landfill	Sept. 1994	1285.41	Okay	25.60	29.91	4.31	N/A	N/A	1259.81
8	Original Landfill	Sept. 1994	1281.65	Okay	24.48	29.70	5.22	N/A	N/A	1257.17
9	Original Landfill	Sept. 1994	1280.13	Okay	29.89	29.63	-0.26	N/A	N/A	1250.24
10	Original Landfill	Sept. 1994	1290.61	Okay	11.20	27.04	15.84	N/A	N/A	1279.41
11	Original Landfill	Sept. 1994	1290.86	Okay	25.72	37.19	11.47	N/A	N/A	1265.14
12	Original Landfill	Sept. 1994	1289.28	Okay	18.25	19.23	0.98	N/A	N/A	1271.03
22	Cell 21A	Mar. 2006	N/A	Okay	24.00	30.72	6.72	N/A	N/A	N/A
23	Cell A	N/A	N/A	Okay	35.80	34.40	-1.40	-1.50	-2.90	N/A
24	Cell A	N/A	N/A	Okay	30.39	34.00	3.61	0.083	3.693	N/A
25	Cell B	N/A	N/A	Okay	35.81	45.71	9.90	-1.50	8.40	N/A
26	Cell B	N/A	N/A	Okay	34.25	38.00	3.75	0.083	3.833	N/A
27	Cell C	Aug. 22, 2014	N/A	Okay	36.21	41.80	5.59	-1.50	4.090	N/A
28	Cell C	Mar-14	N/A	Okay	37.49	41.20	3.71	0.083	3.793	N/A
29	Cell D1	Jun-17	N/A	Okay	50.30	50.00	-0.30	-1.500	-1.800	N/A
30	Cell D1	Jun-17	N/A	Okay	45.80	45.60	-0.20	0.083	-0.117	N/A
31	Cell D2	Jun-17	N/A	Okay	30.05	29.8	-0.25	-1.50	-1.750	N/A
32	Cell D2	Jun-17	N/A	Okay	29.30	29.1	-0.20	0.083	-0.117	N/A

**Northern Plains Regional Sanitary Landfill
Leachate**

5/30/2024 (FOR JUNE 24)

Column A	Column B	Column C	Column D	Column E	Column F	Column G	Column H	Column I	Column J	Column K
Leachate PZ Well No.		Date Installed	Top of Casing Elevation	Current Condition	Depth to Water from Top (ft)	Measured Depth of PZ from Top (ft)	Standing Liquid in PZ (ft)	Reference Point (ft)	Head Above Liner (ft)	Elevation Leachate MSL (ft)
1	Original Landfill	Sept. 1994	1292.52	Okay	37.99	39.70	1.71	N/A	N/A	1254.53
2	Original Landfill	Sept. 1994	1288.7	Okay	35.60	50.48	14.88	N/A	N/A	1253.10
3	Original Landfill	Sept. 1994	1290.76	Okay	26.24	30.90	4.66	N/A	N/A	1264.52
4	Original Landfill	Sept. 1994	1290.16	Okay	36.80	36.80	0.00	N/A	N/A	1253.36
5	Original Landfill	Sept. 1994	1285.14	Destroyed	---	---	---	N/A	N/A	---
6	Original Landfill	Sept. 1994	1283	Okay	26.92	26.95	0.03	N/A	N/A	1256.08
7	Original Landfill	Sept. 1994	1285.41	Okay	26.95	29.91	2.96	N/A	N/A	1258.46
8	Original Landfill	Sept. 1994	1281.65	Okay	24.05	29.70	5.65	N/A	N/A	1257.60
9	Original Landfill	Sept. 1994	1280.13	Okay	29.89	29.63	-0.26	N/A	N/A	1250.24
10	Original Landfill	Sept. 1994	1290.61	Okay	10.50	27.04	16.54	N/A	N/A	1280.11
11	Original Landfill	Sept. 1994	1290.86	Okay	32.82	37.19	4.37	N/A	N/A	1258.04
12	Original Landfill	Sept. 1994	1289.28	Okay	17.27	19.23	1.96	N/A	N/A	1272.01
22	Cell 21A	Mar. 2006	N/A	Okay	24.00	30.72	6.72	N/A	N/A	N/A
23	Cell A	N/A	N/A	Okay	35.80	34.40	-1.40	-1.50	-2.90	N/A
24	Cell A	N/A	N/A	Okay	32.45	34.00	1.55	0.083	1.633	N/A
25	Cell B	N/A	N/A	Okay	35.93	45.71	9.78	-1.50	8.28	N/A
26	Cell B	N/A	N/A	Okay	36.21	38.00	1.79	0.083	1.873	N/A
27	Cell C	Aug. 22, 2014	N/A	Okay	38.05	41.80	3.75	-1.50	2.250	N/A
28	Cell C	Mar-14	N/A	Okay	39.30	41.20	1.90	0.083	1.983	N/A
29	Cell D1	Jun-17	N/A	Okay	50.30	50.00	-0.30	-1.500	-1.800	N/A
30	Cell D1	Jun-17	N/A	Okay	45.80	45.60	-0.20	0.083	-0.117	N/A
31	Cell D2	Jun-17	N/A	Okay	30.05	29.8	-0.25	-1.50	-1.750	N/A
32	Cell D2	Jun-17	N/A	Okay	29.30	29.1	-0.20	0.083	-0.117	N/A

**Northern Plains Regional Sanitary Landfill
Leachate**

7/24/2024

Column A	Column B	Column C	Column D	Column E	Column F	Column G	Column H	Column I	Column J	Column K
Leachate PZ Well No.		Date Installed	Top of Casing Elevation	Current Condition	Depth to Water from Top (ft)	Measured Depth of PZ from Top (ft)	Standing Liquid in PZ (ft)	Reference Point (ft)	Head Above Liner (ft)	Elevation Leachate MSL (ft)
1	Original Landfill	Sept. 1994	1292.52	Okay	39.45	39.70	0.25	N/A	N/A	1253.07
2	Original Landfill	Sept. 1994	1288.7	Okay	35.60	50.48	14.88	N/A	N/A	1253.10
3	Original Landfill	Sept. 1994	1290.76	Okay	26.24	30.90	4.66	N/A	N/A	1264.52
4	Original Landfill	Sept. 1994	1290.16	Okay	37.33	36.80	-0.53	N/A	N/A	1252.83
5	Original Landfill	Sept. 1994	1285.14	Destroyed	---	---	---	N/A	N/A	---
6	Original Landfill	Sept. 1994	1283	Okay	27.80	26.95	-0.85	N/A	N/A	1255.20
7	Original Landfill	Sept. 1994	1285.41	Okay	26.95	29.91	2.96	N/A	N/A	1258.46
8	Original Landfill	Sept. 1994	1281.65	Okay	23.87	29.70	5.83	N/A	N/A	1257.78
9	Original Landfill	Sept. 1994	1280.13	Okay	29.89	29.63	-0.26	N/A	N/A	1250.24
10	Original Landfill	Sept. 1994	1290.61	Okay	10.45	27.04	16.59	N/A	N/A	1280.16
11	Original Landfill	Sept. 1994	1290.86	Okay	35.99	37.19	1.20	N/A	N/A	1254.87
12	Original Landfill	Sept. 1994	1289.28	Okay	16.35	19.23	2.88	N/A	N/A	1272.93
22	Cell 21A	Mar. 2006	N/A	Okay	24.00	30.72	6.72	N/A	N/A	N/A
23	Cell A	N/A	N/A	Okay	35.80	34.40	-1.40	-1.50	-2.90	N/A
24	Cell A	N/A	N/A	Okay	31.32	34.00	2.68	0.083	2.763	N/A
25	Cell B	N/A	N/A	Okay	35.40	45.71	10.31	-1.50	8.81	N/A
26	Cell B	N/A	N/A	Okay	33.15	38.00	4.85	0.083	4.933	N/A
27	Cell C	Aug. 22, 2014	N/A	Okay	35.30	41.80	6.50	-1.50	5.000	N/A
28	Cell C	Mar-14	N/A	Okay	26.50	41.20	14.70	0.083	14.783	N/A
29	Cell D1	Jun-17	N/A	Okay	50.30	50.00	-0.30	-1.500	-1.800	N/A
30	Cell D1	Jun-17	N/A	Okay	45.80	45.60	-0.20	0.083	-0.117	N/A
31	Cell D2	Jun-17	N/A	Okay	30.50	29.8	-0.70	-1.50	-2.200	N/A
32	Cell D2	Jun-17	N/A	Okay	29.30	29.1	-0.20	0.083	-0.117	N/A

**Northern Plains Regional Sanitary Landfill
Leachate**

8/1/2024

Column A	Column B	Column C	Column D	Column E	Column F	Column G	Column H	Column I	Column J	Column K
Leachate PZ Well No.		Date Installed	Top of Casing Elevation	Current Condition	Depth to Water from Top (ft)	Measured Depth of PZ from Top (ft)	Standing Liquid in PZ (ft)	Reference Point (ft)	Head Above Liner (ft)	Elevation Leachate MSL (ft)
1	Original Landfill	Sept. 1994	1292.52	Okay	36.54	39.70	3.16	N/A	N/A	1255.98
2	Original Landfill	Sept. 1994	1288.7	Okay	35.60	50.48	14.88	N/A	N/A	1253.10
3	Original Landfill	Sept. 1994	1290.76	Okay	26.24	30.90	4.66	N/A	N/A	1264.52
4	Original Landfill	Sept. 1994	1290.16	Okay	37.30	36.80	-0.50	N/A	N/A	1252.86
5	Original Landfill	Sept. 1994	1285.14	Destroyed	---	---	---	N/A	N/A	---
6	Original Landfill	Sept. 1994	1283	Okay	27.80	26.95	-0.85	N/A	N/A	1255.20
7	Original Landfill	Sept. 1994	1285.41	Okay	26.95	29.91	2.96	N/A	N/A	1258.46
8	Original Landfill	Sept. 1994	1281.65	Okay	24.90	29.70	4.80	N/A	N/A	1256.75
9	Original Landfill	Sept. 1994	1280.13	Okay	29.89	29.63	-0.26	N/A	N/A	1250.24
10	Original Landfill	Sept. 1994	1290.61	Okay	10.50	27.04	16.54	N/A	N/A	1280.11
11	Original Landfill	Sept. 1994	1290.86	Okay	35.95	37.19	1.24	N/A	N/A	1254.91
12	Original Landfill	Sept. 1994	1289.28	Okay	17.27	19.23	1.96	N/A	N/A	1272.01
22	Cell 21A	Mar. 2006	N/A	Okay	24.00	30.72	6.72	N/A	N/A	N/A
23	Cell A	N/A	N/A	Okay	27.05	34.40	7.35	-1.50	5.85	N/A
24	Cell A	N/A	N/A	Okay	32.75	34.00	1.25	0.083	1.333	N/A
25	Cell B	N/A	N/A	Okay	36.33	45.71	9.38	-1.50	7.88	N/A
26	Cell B	N/A	N/A	Okay	34.25	38.00	3.75	0.083	3.833	N/A
27	Cell C	Aug. 22, 2014	N/A	Okay	35.99	41.80	5.81	-1.50	4.310	N/A
28	Cell C	Mar-14	N/A	Okay	37.77	41.20	3.43	0.083	3.513	N/A
29	Cell D1	Jun-17	N/A	Okay	50.30	50.00	-0.30	-1.50	-1.800	N/A
30	Cell D1	Jun-17	N/A	Okay	45.80	45.60	-0.20	0.083	-0.117	N/A
31	Cell D2	Jun-17	N/A	Okay	30.05	29.8	-0.25	-1.50	-1.750	N/A
32	Cell D2	Jun-17	N/A	Okay	29.30	29.1	-0.20	0.083	-0.117	N/A

**Northern Plains Regional Sanitary Landfill
Leachate**

10/10/2024 (FOR SEPT 24)

Column A	Column B	Column C	Column D	Column E	Column F	Column G	Column H	Column I	Column J	Column K
Leachate PZ Well No.		Date Installed	Top of Casing Elevation	Current Condition	Depth to Water from Top (ft)	Measured Depth of PZ from Top (ft)	Standing Liquid in PZ (ft)	Reference Point (ft)	Head Above Liner (ft)	Elevation Leachate MSL (ft)
1	Original Landfill	Sept. 1994	1292.52	Okay	38.00	39.70	1.70	N/A	N/A	1254.52
2	Original Landfill	Sept. 1994	1288.7	Okay	35.60	50.48	14.88	N/A	N/A	---
3	Original Landfill	Sept. 1994	1290.76	Okay	26.24	30.90	4.66	N/A	N/A	1264.52
4	Original Landfill	Sept. 1994	1290.16	Okay	36.85	36.80	-0.05	N/A	N/A	1253.31
5	Original Landfill	Sept. 1994	1285.14	Destroyed	---	---	---	N/A	N/A	---
6	Original Landfill	Sept. 1994	1283	Okay	27.80	26.95	-0.85	N/A	N/A	1255.20
7	Original Landfill	Sept. 1994	1285.41	Okay	26.95	29.91	2.96	N/A	N/A	1258.46
8	Original Landfill	Sept. 1994	1281.65	Okay	27.58	29.70	2.12	N/A	N/A	1254.07
9	Original Landfill	Sept. 1994	1280.13	Okay	29.89	29.63	-0.26	N/A	N/A	1250.24
10	Original Landfill	Sept. 1994	1290.61	Okay	11.20	27.04	15.84	N/A	N/A	1279.41
11	Original Landfill	Sept. 1994	1290.86	Okay	36.97	37.19	0.22	N/A	N/A	1253.89
12	Original Landfill	Sept. 1994	1289.28	Okay	18.25	19.23	0.98	N/A	N/A	1271.03
22	Cell 21A	Mar. 2006	N/A	Okay	24.00	30.72	6.72	N/A	N/A	---
23	Cell A	N/A	N/A	Okay	27.02	34.40	7.38	N/A	N/A	---
24	Cell A	N/A	N/A	Okay	35.20	34.00	-1.20	0.083	-1.117	N/A
25	Cell B	N/A	N/A	Okay	36.45	45.71	9.26	-1.50	7.76	N/A
26	Cell B	N/A	N/A	Okay	39.40	38.00	-1.40	0.083	-1.317	N/A
27	Cell C	Aug. 22, 2014	N/A	Okay	42.15	41.80	-0.35	-1.50	-1.850	N/A
28	Cell C	Mar-14	N/A	Okay	40.30	41.20	0.90	0.083	0.983	N/A
29	Cell D1	Jun-17	N/A	Okay	50.30	50.00	-0.30	-1.50	-1.800	N/A
30	Cell D1	Jun-17	N/A	Okay	45.80	45.60	-0.20	0.083	-0.117	N/A
31	Cell D2	Jun-17	N/A	Okay	30.05	29.8	-0.25	-1.50	-1.750	N/A
32	Cell D2	Jun-17	N/A	Okay	29.30	29.1	-0.20	0.083	-0.117	N/A

**Northern Plains Regional Sanitary Landfill
Leachate**

10/16/2024

Column A	Column B	Column C	Column D	Column E	Column F	Column G	Column H	Column I	Column J	Column K
Leachate PZ Well No.		Date Installed	Top of Casing Elevation	Current Condition	Depth to Water from Top (ft)	Measured Depth of PZ from Top (ft)	Standing Liquid in PZ (ft)	Reference Point (ft)	Head Above Liner (ft)	Elevation Leachate MSL (ft)
1	Original Landfill	Sept. 1994	1292.52	Okay	31.47	39.70	8.23	N/A	N/A	1261.05
2	Original Landfill	Sept. 1994	1288.7	Okay	35.60	50.48	14.88	N/A	N/A	1253.10
3	Original Landfill	Sept. 1994	1290.76	Okay	26.68	30.90	4.22	N/A	N/A	1264.08
4	Original Landfill	Sept. 1994	1290.16	Okay	27.17	36.80	9.63	N/A	N/A	1262.99
5	Original Landfill	Sept. 1994	1285.14	Destroyed	---	---	---	N/A	N/A	---
6	Original Landfill	Sept. 1994	1283	Okay	22.63	26.95	4.32	N/A	N/A	1260.37
7	Original Landfill	Sept. 1994	1285.41	Okay	26.59	29.91	3.32	N/A	N/A	1258.82
8	Original Landfill	Sept. 1994	1281.65	Okay	26.71	29.70	2.99	N/A	N/A	1254.94
9	Original Landfill	Sept. 1994	1280.13	Okay	25.70	29.63	3.93	N/A	N/A	1254.43
10	Original Landfill	Sept. 1994	1290.61	Okay	11.53	27.04	15.51	N/A	N/A	1279.08
11	Original Landfill	Sept. 1994	1290.86	Okay	33.56	37.19	3.63	N/A	N/A	1257.30
12	Original Landfill	Sept. 1994	1289.28	Okay	14.72	19.23	4.51	N/A	N/A	1274.56
22	Cell 21A	Mar. 2006	N/A	Okay	23.00	30.72	7.72	N/A	N/A	---
23	Cell A	N/A	N/A	Okay	27.00	34.40	7.40	-1.50	5.90	N/A
24	Cell A	N/A	N/A	Okay	34.10	34.00	-0.10	0.083	-0.017	N/A
25	Cell B	N/A	N/A	Okay	36.15	45.71	9.56	-1.50	8.06	N/A
26	Cell B	N/A	N/A	Okay	38.20	38.00	-0.20	0.083	-0.117	N/A
27	Cell C	Aug. 22, 2014	N/A	Okay	41.75	41.80	0.05	-1.50	-1.450	N/A
28	Cell C	Mar-14	N/A	Okay	40.20	41.20	1.00	0.083	1.083	N/A
29	Cell D1	Jun-17	N/A	Okay	50.00	50.00	0.00	-1.500	-1.500	N/A
30	Cell D1	Jun-17	N/A	Okay	45.50	45.60	0.10	0.083	0.183	N/A
31	Cell D2	Jun-20	N/A	Okay	30.15	29.8	-0.35	-1.500	-1.850	N/A
32	Cell D2	Jun-20	N/A	Okay	29.3	29.1	-0.20	0.083	-0.117	N/A

**Northern Plains Regional Sanitary Landfill
Leachate**

12/6/2024 (FOR NOV 24)

Column A	Column B	Column C	Column D	Column E	Column F	Column G	Column H	Column I	Column J	Column K
Leachate PZ Well No.		Date Installed	Top of Casing Elevation	Current Condition	Depth to Water from Top (ft)	Measured Depth of PZ from Top (ft)	Standing Liquid in PZ (ft)	Reference Point (ft)	Head Above Liner (ft)	Elevation Leachate MSL (ft)
1	Original Landfill	Sept. 1994	1292.52	Okay	36.25	39.70	3.45	N/A	N/A	1256.27
2	Original Landfill	Sept. 1994	1288.7	Okay	35.60	50.48	14.88	N/A	N/A	1253.10
3	Original Landfill	Sept. 1994	1290.76	Okay	26.68	30.90	4.22	N/A	N/A	1264.08
4	Original Landfill	Sept. 1994	1290.16	Okay	37.20	36.80	-0.40	N/A	N/A	1252.96
5	Original Landfill	Sept. 1994	1285.14	Destroyed	---	---	---	N/A	N/A	---
6	Original Landfill	Sept. 1994	1283	Okay	27.23	26.95	-0.28	N/A	N/A	1255.77
7	Original Landfill	Sept. 1994	1285.41	Okay	29.95	29.91	-0.04	N/A	N/A	1255.46
8	Original Landfill	Sept. 1994	1281.65	Okay	27.75	29.70	1.95	N/A	N/A	1253.90
9	Original Landfill	Sept. 1994	1280.13	Okay	25.70	29.63	3.93	N/A	N/A	1254.43
10	Original Landfill	Sept. 1994	1290.61	Okay	11.53	27.04	15.51	N/A	N/A	1279.08
11	Original Landfill	Sept. 1994	1290.86	Okay	35.60	37.19	1.59	N/A	N/A	1255.26
12	Original Landfill	Sept. 1994	1289.28	Okay	17.81	19.23	1.42	N/A	N/A	1271.47
22	Cell 21A	Mar. 2006	N/A	Okay	24.00	30.72	6.72	N/A	N/A	N/A
23	Cell A	N/A	N/A	Okay	27.00	34.40	7.40	-1.50	5.90	N/A
24	Cell A	N/A	N/A	Okay	34.10	34.00	-0.10	0.083	-0.017	N/A
25	Cell B	N/A	N/A	Okay	36.15	45.71	9.56	-1.50	8.06	N/A
26	Cell B	N/A	N/A	Okay	38.20	38.00	-0.20	0.083	-0.117	N/A
27	Cell C	Aug. 22, 2014	N/A	Okay	39.65	41.80	2.15	-1.50	0.650	N/A
28	Cell C	Mar-14	N/A	Okay	20.20	41.20	21.00	0.083	21.083	N/A
29	Cell D1	Jun-17	N/A	Okay	50.30	50.00	-0.30	-1.500	-1.800	N/A
30	Cell D1	Jun-17	N/A	Okay	45.50	45.60	0.10	0.083	0.183	N/A
31	Cell D2	Jun-17	N/A	Okay	30.15	29.8	-0.35	-1.50	-1.850	N/A
32	Cell D2	Jun-17	N/A	Okay	29.3	29.1	-0.20	0.083	-0.117	N/A

**Northern Plains Regional Sanitary Landfill
Leachate**

12/27/2024

Column A	Column B	Column C	Column D	Column E	Column F	Column G	Column H	Column I	Column J	Column K
Leachate PZ Well No.		Date Installed	Top of Casing Elevation	Current Condition	Depth to Water from Top (ft)	Measured Depth of PZ from Top (ft)	Standing Liquid in PZ (ft)	Reference Point (ft)	Head Above Liner (ft)	Elevation Leachate MSL (ft)
1	Original Landfill	Sept. 1994	1292.52	Okay	37.88	39.70	1.82	N/A	N/A	1254.64
2	Original Landfill	Sept. 1994	1288.7	Okay	35.60	50.48	14.88	N/A	N/A	1253.10
3	Original Landfill	Sept. 1994	1290.76	Okay	19.03	30.90	11.87	N/A	N/A	1271.73
4	Original Landfill	Sept. 1994	1290.16	Okay	37.17	36.80	-0.37	N/A	N/A	1252.99
5	Original Landfill	Sept. 1994	1285.14	Destroyed	---	---	---	N/A	N/A	---
6	Original Landfill	Sept. 1994	1283	Okay	22.63	26.95	4.32	N/A	N/A	1260.37
7	Original Landfill	Sept. 1994	1285.41	Okay	25.80	29.91	4.11	N/A	N/A	1259.61
8	Original Landfill	Sept. 1994	1281.65	Okay	26.71	29.70	2.99	N/A	N/A	1254.94
9	Original Landfill	Sept. 1994	1280.13	Okay	25.70	29.63	3.93	N/A	N/A	1254.43
10	Original Landfill	Sept. 1994	1290.61	Okay	10.40	27.04	16.64	N/A	N/A	1280.21
11	Original Landfill	Sept. 1994	1290.86	Okay	36.22	37.19	0.97	N/A	N/A	1254.64
12	Original Landfill	Sept. 1994	1289.28	Okay	14.72	19.23	4.51	N/A	N/A	1274.56
22	Cell 21A	Mar. 2006	N/A	Okay	24.00	30.72	6.72	N/A	N/A	N/A
23	Cell A	N/A	N/A	Okay	26.00	34.40	8.40	-1.50	6.90	N/A
24	Cell A	N/A	N/A	Okay	34.10	34.00	-0.10	0.083	-0.017	N/A
25	Cell B	N/A	N/A	Okay	30.00	45.71	15.71	-1.50	14.21	N/A
26	Cell B	N/A	N/A	Okay	38.20	38.00	-0.20	0.083	-0.117	N/A
27	Cell C	Aug. 22, 2014	N/A	Okay	41.75	41.80	0.05	-1.50	-1.450	N/A
28	Cell C	Mar-14	N/A	Okay	35.80	41.20	5.40	0.083	5.483	N/A
29	Cell D1	Jun-17	N/A	Okay	50.30	50.00	-0.30	-1.500	-1.800	N/A
30	Cell D1	Jun-17	N/A	Okay	41.60	45.60	4.00	0.083	4.083	N/A
31	Cell D2	Jun-17	N/A	Okay	30.15	29.8	-0.35	-1.50	-1.850	N/A
32	Cell D2	Jun-17	N/A	Okay	29.30	29.1	-0.20	0.083	-0.117	N/A

Appendix I

Gas Monitoring Report

Gas Monitoring Report

Explosive gas monitoring per 113.9(2) are required to be performed quarterly. Monitoring episodes were performed according to the approved May 4, 2012 Gas Monitoring System Plan (GMSP).

Explosive gas concentrations are reported as percent lower explosive limit (% LEL) and were within regulatory limits during the monitoring episodes that were completed. Summary tables of gas monitoring are attached in Appendix I.1

Appendix I.1 –
Explosive Gas Monitoring Results

2024 - Northern Plains Regional Landfill

Gas Monitoring Results

Location	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
	2/2/2024	4/4/2024	7/31/2024	10/16/2024
	% LEL	% LEL	% LEL	% LEL
GP-1	0	0	0	0
GP-2	0	0	0	0
GP-3	0	0	0	0
GP-4	0	0	0	0
GP-5	0	0	0	0
GP-6	0	0	0	0
SCALE HOUSE (A)	0	0	0	0
LOAD OUT BLDG (B)	0	0	0	0
PERIMETER	0	0	0	0
GU-1	0	0	0	7.8
GU-2	0	0	0	0
GU-3	Connected to LCP	Connected to LCP	Connected to LCP	Connected to LCP
MW-6B	0	0	0	0
MW-3AR	0	0	0	0
MW-7A	0	0	0	0
MW-8	0	0	0	0
MW-11	0	0	0	0

NR = No Record