2024 ANNUAL GROUNDWATER QUALITY REPORT

FOR THE
BENTON COUNTY SANITARY LANDFILL
06-SDP-02-81P
BLAIRSTOWN, IOWA

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

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Certification

Prepared by:  Date: 2-21-2025

Typed: Todd Whipple, CPG

Section 1.0 Background Information

1.1 Report Priority

It is recommended that the detection monitoring, assessment monitoring, and corrective action monitoring continue to be performed on a semi-annual basis at the monitoring points listed in Table 1.

MW-20, MW-24, and AW-3 should remain in the Assessment Monitoring System.

AW-2 and AW-9 should remain in the Corrective Action Monitoring System.

A report was issued to IDNR related to water quality at AW-2 on March 1, 2024 (Doc # 109398). The report documented the improvements in water quality at AW-2 over time while the background water quality was established for the site. At this time a Statistically Significant Level (SSL) for cobalt persists at AW-2 based on the 95% UCL values. Based on the information in report dated March 1, 2024 (Doc # 109398), the Assessment of Corrective Measures (ACM) activities are deemed to be unwarranted at AW-2. AW-2 continues to be included in the Corrective Action Monitoring System and AW-9 continues to be monitored as an additional step-out monitoring well. It is recommended that semi-annual monitoring be continued at AW-2 and AW-9 as outlined in Table 1.

1.2 Period of Report Coverage

Water quality data evaluation is based on a running compilation of data beginning in February 4, 2008. Statistical evaluations herein are based on the most recent water quality data collected October 2, 2024.

1.3 Current Site Map

Figure 1 and Figure 2 are attached illustrating the current site features, monitoring well locations, leachate piezometer locations, and subsurface gas probe locations.

1.4 Site Status and Applicable Rules

Site Location

The Benton County Sanitary Landfill is located in Section 35, T82N, R11W, Benton County, Iowa. The portion of the site that encompasses the waste footprint is limited to approximately 40 acres. An additional 80 acres (approximate) of land comprises the site (40 acres to the south of the waste footprint and 40 acres to the west of the waste footprint). The facility is situated approximately 2 miles south of Blairstown, Iowa. The facility operates under the Iowa Department of Natural Resources (IDNR) Permit Number 06-SDP-02-81P.

Landfill Layout

The site is situated on land described as loess (up to 20 feet thick) overlying glacial till soils. The Hydrogeologic Investigation Report was submitted on May 28, 1991 (Doc #1984).

The facility includes several closed landfill cells adjoined to operating RCRA Subtitle D Expansion Areas that are actively receiving waste from the planning area.

Applicable Rules

Iowa Administrative Code (IAC) 567-113 is applicable to the site. The original landfill cells (closed) and the adjoining RCRA Subtitle D landfill cells are regulated under (IAC) 567-113.

1.5 Summary of Hydrologic Monitoring System Plan (HMSP)

The HMSP includes background monitoring point MW-6, MW-7, MW-26, MW-27, and MW-28. Downgradient points include MW-12, MW-14, MW-20, MW-24, MW-25, AW-2, AW-3, AW-9, AW-1, and MW-41.

The site monitoring wells are evaluated by interwell statistical methods to determine whether a statistically significant increase (SSI) is documented in the vicinity of the landfill.

The Site Plan and the approved monitoring network is illustrated on Figure 2. The Water Table Contour Map is included as Figure 3. Monitoring Well Maintenance Performance Reevaluation activities associated with the HMSP monitoring wells are discussed in the information presented in Appendix A.

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

WELL	Monitoring Phase	Most Recent Appendix II	3/2025	9/2025
MW-6 (b)	Detection Monitoring	3/2012	Appendix I	Appendix I
MW-7 (b)	Detection Monitoring	---	Appendix I	Appendix I
MW-26 (b)	Detection Monitoring	---	Appendix I	Appendix I
MW-27 (b)	Detection Monitoring	---	Appendix I	Appendix I
MW-28 (b)	Detection Monitoring	---	Appendix I	Appendix I
MW-12	Detection Monitoring(1)	4/23/09, 4/27/10, 3/24/11, 3/20/12, 3/17/2017	Appendix I	Appendix I
MW-14	Detection Monitoring(1)	4/23/09, 4/27/10, 3/24/11, 3/20/12, 3/17/2017	Appendix I	Appendix I
MW-20	Assessment Monitoring	3/20/12, 8/28/12, 3/17/2017, 3/31/2022	Appendix I(3)	Appendix I(3)
MW-24	Assessment Monitoring	3/20/12, 3/17/2017, 3/31/2022	Appendix I(2)	Appendix I(2)
MW-25	Detection Monitoring(1)	3/17/17, 9/12/2018	Appendix I	Appendix I
AW-2	**CA - POC**	3/20/12, 3/17/2017, 3/31/2022	Appendix I(2)	Appendix I(2)
AW-9	**CA - SOW**	---	As, Co	As, Co
AW-3	Assessment Monitoring	3/20/12, 3/17/2017, 3/31/2022	Appendix I(2)	Appendix I(2)
AW-1	Detection Monitoring		Appendix I	Appendix I
MW-41	Detection Monitoring		Appendix I	Appendix I
Duplicate	QA/QC		Appendix I	Appendix I

(1) Returned to detection monitoring 1/1/2022
(2) Appendix I plus no detected Appendix II Compounds
(3) Sulfide

CA-POC = Corrective Action – Point of Compliance
CA-SOW = Corrective Action – Step-out Well

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 beginning February 4, 2008 is included in Appendix B.1.

Field sampling forms (IDNR Form 542-1322) for the March 11, 2024 and October 2, 2024 sampling episodes are included in Appendix B.2.

A comprehensive summary of Analytical Data for the episodes between February 4, 2008 and October 2, 2024 is included in Appendix C.

2.1 Current Detection Monitoring Activities

The background wells are MW-6, MW-7, MW-26, MW-27, and MW-28. Downgradient detection monitoring wells include MW-12, MW-14, MW-25, AW-1, and MW-41.

2.2 Current Assessment Monitoring Activities

Assessment monitoring wells include MW-20, MW-24, and AW-3.

A minimum of two (2) rounds of full Appendix II sampling are completed at every assessment monitoring/corrective action well. The full Appendix II sampling has an alternate sampling frequency of once per five (5) years based on the Special Provision X.4.i. of the Permit dated February 13, 2024 (Doc #108845).

2.3 Current Corrective Action Activities

GU-1, GU-2, and GU-3 were connected to the leachate collection system in satisfaction of IAC 567-113(10)2(3) and were removed from the HMSP in 2016.

Exploration for the waste boundary along the west side of the site was completed May 9, 2017 in accordance with the July 22, 2016 Workplan (Doc #86856).

Corrective Action Monitoring for arsenic and cobalt should continue at AW-2 and AW-9.

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 Benton County Sanitary Landfill, First Semi-Annual Monitoring Event in 2024, dated April, 2024 is included in Appendix D.1. The Groundwater Statistics Report for the Benton County Sanitary Landfill, Second Semi-Annual Monitoring Event in 2024, dated October, 2024 is included in Appendix D.2.

Analytical Reports for the laboratory testing on samples collected March 11, 2024; October 2, 2024, and December 11, 2024 are included in Appendix E.

QUALITY ASSURANCE/QUALITY CONTROL

A blind duplicate sample was collected at AW-1 during the March 11, 2024 sampling episode. A blind duplicate sample was collected at MW-14 during the October 2, 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 both the March 11, 2024, and the October 2, 2024 sampling episodes 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 # 80723). A TSS and Field Turbidity Correlation Report was prepared and submitted on February 2, 2017 (Doc# 88357). IDNR approval of the report is included in Special Provision X.4.f. of the Permit dated September 5, 2017 (Doc #90238) and Permit Revision #1, dated November 15, 2017 (Doc #90822). A summary of the recorded field turbidity measurements to date is included in Appendix D.3.

The background data utilized herein has been restricted to include only sample results collected since October, 2014.

Upgradient Data, Table 1, Attachment B, to the October, 2024 Statistical Evaluation Report (Appendix D.2) includes a summary of the background data utilized in this evaluation. The data is tested for statistical outlier values. Any statistical outlier is excluded from use in calculating the Prediction Limits. The current inorganic compound prediction limits are considered valid. Prediction limits for VOC compounds are set at the Laboratory Method detection limits and are considered valid.

SITE SPECIFIC GWPS

The comparison of the site prediction limits (see Summary Statistics and Prediction Limits, Table 5, Attachment B of the *Fall Statistical Evaluation Report* (Appendix D.2)) to the Groundwater Protection Standards (GWPS) in the Statewide Standards for Protected Groundwater in Iowa Administrative Code 567, Chapter 137 indicate that calculated Prediction Limits for arsenic and cobalt exceed the GWPS.

The following Site-Specific GWPS are utilized herein:

Compound	***Site-Specific GWPS***	***IAC 137 GWPS***
Arsenic	51.3 ug/L	10.0 ug/L
Cobalt	12.2 ug/L	2.1 ug/L

The Site-Specific GWPS should not be set lower than the Site Prediction Limit calculated from the site background data. For this report, the Site-Specific GWPS for arsenic and cobalt listed above are utilized. For all other compounds the published IAC 567, Chapter 137 Statewide Standard are utilized

STATISTICALLY SIGNIFICANT INCREASES (SSI)

The detected concentrations of each compound are compared to the site prediction limit for each respective compound calculated based on the background data set. A detected concentration for a compound that is in excess of the calculated site prediction limit is recorded as a Statistically Significant Increase (SSI). A side-by-side comparison of the result to the prediction limit is offered in the tables in Appendix F. A result that exceeds the prediction limit is highlighted in brown in the tables in Appendix F.

There are no new detection monitoring wells that have recorded a prediction limit exceedance. Only current Assessment Monitoring wells had recorded exceedances. The exceedances are not required to be reported as SSI, but a running summary of recorded exceedances is included in Appendix D.4. The current year exceedances are itemized in Table 2 below.

Based on the absence of SSI for several years, MW-12, MW-14, and MW-25 were returned to the Detection Monitoring System on January 1, 2022.

Table 2 – Exceedances of the Prediction Limits

Spring, 2024		**Fall, 2024**	
AW-2	Cobalt	AW-2	Cobalt
AW-3	1,4-dichlorobenzene	AW-3	1,4-dichlorobenzene
	Benzene		Chloroethane
	Chloroethane		
MW-20	1,4-dichlorobenzene	MW-20	1,4-dichlorobenzene
	Benzene		Benzene
	Chlorobenzene		Chlorobenzene
	Toluene		
MW-24	None	MW-24	Barium
			Cobalt

ASSESSMENT MONITORING SUMMARY

A five (5) year frequency for full Appendix II sampling was approved in Special Provision X.4.i. of the Permit dated February 13, 2024 (Doc #109266).

Full Appendix II monitoring has been completed at least three (3) times at all assessment monitoring wells. A summary of all compounds detected to date beyond the Appendix I list are included in Tables 3a – 3c. The full Appendix II sample collection events are highlighted in green.

The full Appendix II sampling will be in accordance with the approved five (5) year frequency.

Table 3a -Appendix II Assessment Monitoring Summary – bis(2-ethylhexyl)phthalate (ug/L)

Date	MW-20	MW-24	AW-2	AW-3
4/23/09	NT	NT	NT	NT
8/24/09	NT	NT	NT	NT
4/27/10	NT	NT	NT	NT
3/24/11	NT	NT	NT	NT
3/20/12	<10	<10	<20	<10
8/28/12	<10	NT	NT	NT
3/15/13	NT	NT	NT	NT
10/20/14	NT	NT	NT	NT
6/22/15	NT	NT	NT	NT
11/12/15	NT	NT	NT	NT
4/11/16	NT	NT	NT	NT
9/16/16	NT	NT	NT	NT
3/17/17	<8	<8	<8	**16.0**
9/27/17	NT	NT	NT	<6
3/14/18	NT	NT	NT	<6
9/12/18	NT	NT	NT	<6
4/1/19	NT	NT	NT	<6
10/12/19	NT	NT	NT	<6
5/6/20	NT	NT	NT	<6
9/3/20	NT	NT	NT	NT
3/30/21	NT	NT	NT	NT
9/8/2021	NT	NT	NT	NT
3/31/2022	<6	<6	<6	<6
8/30/2022	NT	NT	NT	NT
3/7/2023	NT	NT	NT	NT
9/28/2023	NT	NT	NT	NT
3/11/2024	NT	NT	NT	NT
10/2/2024	NT	NT	NT	NT

green highlights = full Appendix II sample collection events

Table 3b -Appendix II Assessment Monitoring Summary – cyanide (ug/L)

Date	MW-20	MW-24	AW-2	AW-3
4/23/09	NT	NT	NT	NT
8/24/09	NT	NT	NT	NT
4/27/10	NT	NT	NT	NT
3/24/11	NT	NT	NT	NT
3/20/12	<10	<10	<10	<10
8/28/12	<10	NT	NT	NT
3/15/13	<10	NT	NT	NT
10/20/14	NT	NT	NT	NT
6/22/15	NT	NT	NT	NT
11/12/15	NT	NT	NT	NT
4/11/16	NT	NT	NT	NT
9/16/16	NT	NT	NT	NT
3/17/17	<5	<5	**9.0**	<5
9/27/17	NT	NT	<5	NT
3/14/18	NT	NT	NT	NT
9/12/18	NT	NT	<5	NT
4/1/19	NT	NT	<5	NT
10/12/19	NT	NT	<5	NT
5/6/2020	NT	NT	<5	NT
9/3/20	NT	NT	NT	NT
3/30/21	NT	NT	NT	NT
9/8/2021	NT	NT	NT	NT
3/31/2022	<5	<5	<5	<5
8/30/2022	NT	NT	NT	NT
3/7/2023	NT	NT	NT	NT
9/28/2023	NT	NT	NT	NT
3/11/2024	NT	NT	NT	NT
10/2/2024	NT	NT	NT	NT

green highlights = full Appendix II sample collection events

Table 3c - Appendix II Assessment Monitoring Summary – sulfide (mg/L)

Date	MW-20	MW-24	AW-2	AW-3
4/23/09	NT	NT	NT	NT
8/24/09	NT	NT	NT	NT
4/27/10	NT	NT	NT	NT
3/24/11	NT	NT	NT	NT
3/20/12	<0.2	<0.2	<0.2	<0.2
8/28/12	<0.2	NT	NT	NT
3/15/13	<10	NT	NT	NT
10/20/14	NT	NT	NT	NT
6/22/15	NT	NT	NT	NT
11/12/15	NT	NT	NT	NT
4/11/16	NT	NT	NT	NT
9/16/16	NT	NT	NT	NT
3/17/17	<0.2	<0.2	<0.2	<0.2
9/27/17	NT	NT	<5	NT
3/14/18	NT	NT	NT	NT
9/12/18	NT	NT	<5	NT
4/1/19	NT	NT	<5	NT
10/12/19	NT	NT	<5	NT
5/6/2020	NT	NT	<5	NT
9/3/20	NT	NT	NT	NT
3/30/21	NT	NT	NT	NT
9/8/2021	NT	NT	NT	NT
3/31/2022	**0.33**	<0.2	<0.2	<0.2
8/30/2022	**0.23**	NT	NT	NT
3/7/2023	**0.16**	NT	NT	NT
9/28/2023	**0.44**	NT	NT	NT
3/11/2024	**<0.15**	NT	NT	NT
10/2/2024	**<0.10**	NT	NT	NT

green highlights = full Appendix II sample collection events

STATISTICALLY SIGNIFICANT LEVELS

Confidence Intervals (the 95% lower confidence limits (LCL) and the 95% upper control limits (UCL)) are calculated in accordance with the 2009 Unified Guidance for Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities by US EPA. The 95% LCL values are compared to applicable GWPS. Any 95% LCL value that exceeds an applicable GWPS is recorded as an SSL. All wells with a recorded SSL require the plume of impact to be defined in the horizontal and vertical directions and require completion of an Assessment of Corrective Measures (ACM).

The calculation of the confidence intervals is based on the most recent four (4) data points for each parameter that has exceeded a prediction limit. Tables in Appendix F report the 95% LCL values in comparison to the GWPS.

Any 95% LCL value that exceeds the GWPS is designated as a Statistically Significant Level (SSL) and is highlighted in yellow. The designation of an SSL remains in effect until such time as the 95% UCL value no longer exceeds the GWPS for a period of three (3) consecutive years (IAC 567-113.10(9)"e"(2)). For the SSL, the 95% UCL values that remain above the GWPS are highlighted in green. Brown highlights indicate the SSI.

Based on the absence of SSL, MW-20, MW-24, and AW-3 are designated Assessment Monitoring Wells.

Arsenic and Cobalt at AW-2 are the only compounds that have historically demonstrated a 95% LCL and 95% UCL exceedance of the GWPS. A summary is presented in Table 4 below. AW-2 and AW-9 are designated as corrective action monitoring wells.

The 95% LCL for arsenic and cobalt have been below the GWPS since March 30, 2021.

The 95% UCL for arsenic has been below the GWPS since August 30, 2022 (five (5) consecutive episodes). The 95% UCL for cobalt undulates slightly above and slightly below the GWPS.

The SSLs for cobalt persist at AW-2 based on the 95% UCL values. Monitoring well AW-2 should remain in the corrective action monitoring program through 2025 and should be evaluated again in the 2025 Annual Water Quality Report due March, 2026.

AW-9 is a step-out well to AW-2 that will continue to be sampled through 2025 to confirm water compliance is maintained.

Table 4 - Comparison of Results to Prediction Limit & 95%Confidence Limits to GWPS

Well	Date	Compound	Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	95% UCL (ug/L)	GWPS (ug/L) Bold = Site
AW-2	9/12/2018	Arsenic	46.8	43.9	38.675	55.775	**43.9**
AW-2	4/1/2019	Arsenic	66.6	51.3	44.356	64.694	**51.3**
AW-2	9/12/2019	Arsenic	62.9	51.3	45.328	67.922	**51.3**
AW-2	5/6/2020	Arsenic	69.2	51.3	49.548	73.202	**51.3**
AW-2	9/3/2020	Arsenic	55.7	51.3	56.699	70.501	**51.3**
AW-2	3/30/21	Arsenic	38.3	51.3	40.829	72.221	**51.3**
AW-2	9/8/2021	Arsenic	26.4	51.3	25.206	69.594	**51.3**
AW-2	3/31/2022	Arsenic	26.7	51.3	20.566	52.984	**51.3**
AW-2	8/30/2022	Arsenic	41.7	51.3	23.995	42.555	**51.3**
AW-2	3/7/2023	Arsenic	40.5	51.3	23.926	43.724	**51.3**
AW-2	9/28/2023	Arsenic	36.4	51.3	28.319	44.331	**51.3**
AW-2	3/11/2024	Arsenic	27.7	51.3	29.121	44.029	**51.3**
AW-2	10/2/2024	Arsenic	48.1	51.3	28.176	48.174	**51.3**
AW-2	9/12/2018	Cobalt	10.1	7.43	8.620	26.580	**7.43**
AW-2	4/1/2019	Cobalt	9.6	7.43	5.587	25.963	**7.43**
AW-2	9/12/2019	Cobalt	10.1	7.43	3.753	25.247	**7.43**
AW-2	5/6/2020	Cobalt	7.7	5.90	8.003	10.717	**7.43**
AW-2	9/3/2020	Cobalt	10.6	5.90	8.009	10.991	**7.43**
AW-2	3/30/21	Cobalt	8.8	12.2	7.760	10.840	**12.2**
AW-2	9/8/2021	Cobalt	<4.0	12.2	7.758	10.792	**12.2**
AW-2	3/31/2022	Cobalt	8.9	12.2	8.548	10.602	**12.2**
AW-2	8/30/2022	Cobalt	12.0	12.2	8.177	11.673	**12.2**
AW-2	3/7/2023	Cobalt	12.5	12.2	8.862	12.838	**12.2**
AW-2	9/28/2023	Cobalt	5.4	12.2	5.834	13.557	**12.2**
AW-2	3/11/2024	Cobalt	14.2	12.2	6.477	15.573	**12.2**
AW-2	10/2/2024	Cobalt	13.1	12.2	6.600	16.000	**12.2**

DELINEATION & ASSESSMENT OF CORRECTIVE MEASURES (ACM)

On April 23, 2021 a letter was submitted to IDNR (Doc # 100318) requesting that the deadline for determining whether an ACM is warranted be postponed until June 30, 2024. This request was approved by IDNR on September 15, 2021 (Doc # 101213). Drainage improvements in the vicinity of AW-2 were made in late 2020. The basis of the postponement request was that additional data pertaining to the confidence interval at AW-2 over time would benefit interpretation of the reported findings. As noted, the confidence interval values for arsenic decreased and are now below the GWPS. The confidence interval values for cobalt at AW-2 are also interpreted to be improved over the same period.

Monitoring Well AW-2 is located 43.7 feet from the waste boundary based on excavations in the field. Groundwater flow is south-southwest in the vicinity (Figure 3). Existing well AW-9 (installed 2012) is situated approximately 100 feet downgradient of AW-2.

A summary of arsenic and cobalt testing at AW-9 is summarized in Table 5 below. Results indicate that arsenic has remained undetected, except for a detection on March 11, 2024, when turbidity is documented to be elevated. The concentration detected March 11, 2024 (4.2 ug/L) is well below the GWPS (51.3 ug/L). Cobalt is commonly detected at AW-9 but is below the Prediction Limit and the GWPS.

Table 5 – Arsenic at Step-Out Well AW-9

Well	Date	Compound	Turbidity (NTU)	Result (ug/L)	Prediction Limit (ug/L)	GWPS (ug/L)
AW-9	9/12/2019	Arsenic	20.28	<4.0	51.3	51.3
AW-9	5/6/2020	Arsenic	38.7	<4.0	51.3	51.3
AW-9	3/30/21	Arsenic	11.2	<4.0	51.3	51.3
AW-9	9/8/2021	Arsenic	2.97	<4.0	51.3	51.3
AW-9	3/31/2022	Arsenic	5.46	<4.0	51.3	51.3
AW-9	8/30/2022	Arsenic	3.76	<4.0	51.3	51.3
AW-9	3/7/2023	Arsenic	7.24	<4.0	51.3	51.3
AW-9	9/28/2023	Arsenic	20.17	<4.0	51.3	51.3
AW-9	3/11/2024	Arsenic	191.6	**4.2**	51.3	51.3
AW-9	10/2/2024	Arsenic	23.51	<4.0	51.3	51.3
AW-9	9/12/2019	Cobalt	20.28	**10.50**	12.2	12.2
AW-9	5/6/2020	Cobalt	38.7	**5.40**	12.2	12.2
AW-9	3/30/21	Cobalt	11.2	**0.40**	12.2	12.2
AW-9	9/8/2021	Cobalt	2.97	**0.80**	12.2	12.2
AW-9	3/31/2022	Cobalt	5.46	**1.3**	12.2	12.2
AW-9	8/30/2022	Cobalt	3.76	**5.0**	12.2	12.2
AW-9	3/7/2023	Cobalt	7.24	**1.8**	12.2	12.2
AW-9	9/28/2023	Cobalt	20.17	**0.8**	12.2	12.2
AW-9	3/11/2024	Cobalt	191.6	**1.1**	12.2	12.2
AW-9	10/2/2024	Cobalt	23.51	**9.6**	12.2	12.2

MONITORING WELL MAINTENANCE PERFORMANCE EVALUATION

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

GAS MONITORING EVALUATION

See Appendix H.

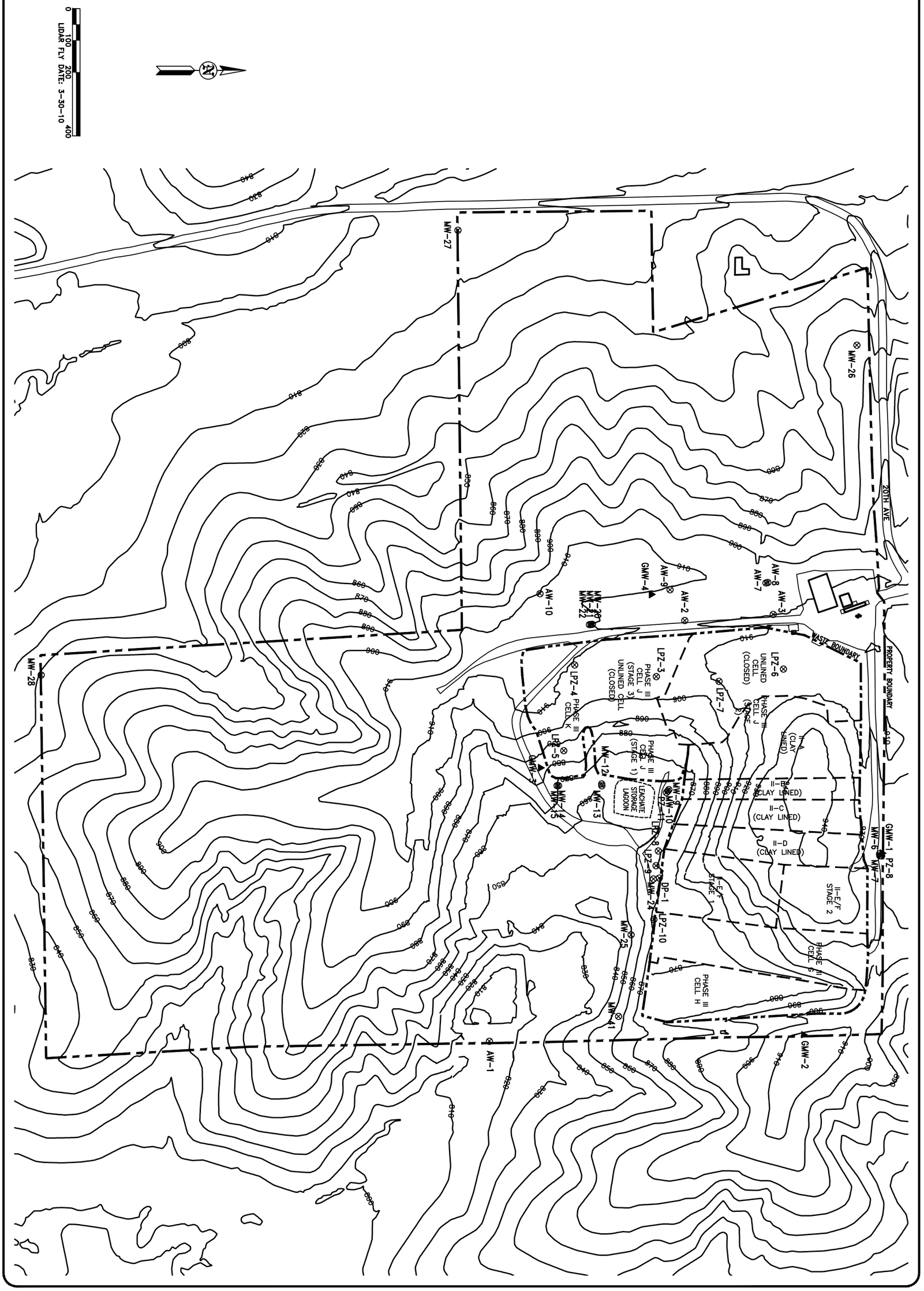
Section 4.0 Recommendations

It is recommended that the detection monitoring, assessment monitoring, and corrective action monitoring continue to be performed on a semi-annual basis at the monitoring points listed in Table 1.

MW-20, MW-24, and AW-3 should remain in Assessment Monitoring.

It is also recommended that Corrective Action Monitoring be continued at AW-2 and AW-9 through 2025.

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 – TOTAL PROPERTY

BENTON COUNTY SANITARY LANDFILL
BLAIRSTOWN, IOWA

FIGURE: 1

REVISION	NO.	DATE
DRAWN DRA	PROJECT NO. 6043	DATE 1–20–24

20TH AVE

PROPERTY BOUNDARY

WASTE BOUNDARY

GMW-1 PZ-8

MW-6 MW-7

AW-8 AW-7 AW-3 AW-2 AW-9 AW-10

LPZ-6 UNLINED CELL (CLOSED)

LPZ-7 LPZ-3 LPZ-4 LPZ-5

GMW-4 GMW-2 GMW-3

MW-20 MW-21 MW-22

PHASE III CELL J (STAGE 2)

PHASE III CELL J (STAGE 3) UNLINED CELL (CLOSED)

PHASE III CELL K

II-A (CLAY LINED)

II-B (CLAY LINED)

II-C (CLAY LINED)

II-D (CLAY LINED)

II-E/F STAGE 2

II-E/F STAGE 1

PHASE III CELL G

PHASE III CELL H

LIFT STATION

MW-9 MW-10 PZ-11

LEACHATE STORAGE LAGOON

MW-12 MW-13

MW-14 MW-15

LPZ-8 LPZ-9 MW-24 DP-1 LPZ-10

MW-25 MW-41

AW-1

0 100 200 400

LIDAR FLY DATE: 3-30-10

SITE PLAN – PERMITTED AREA

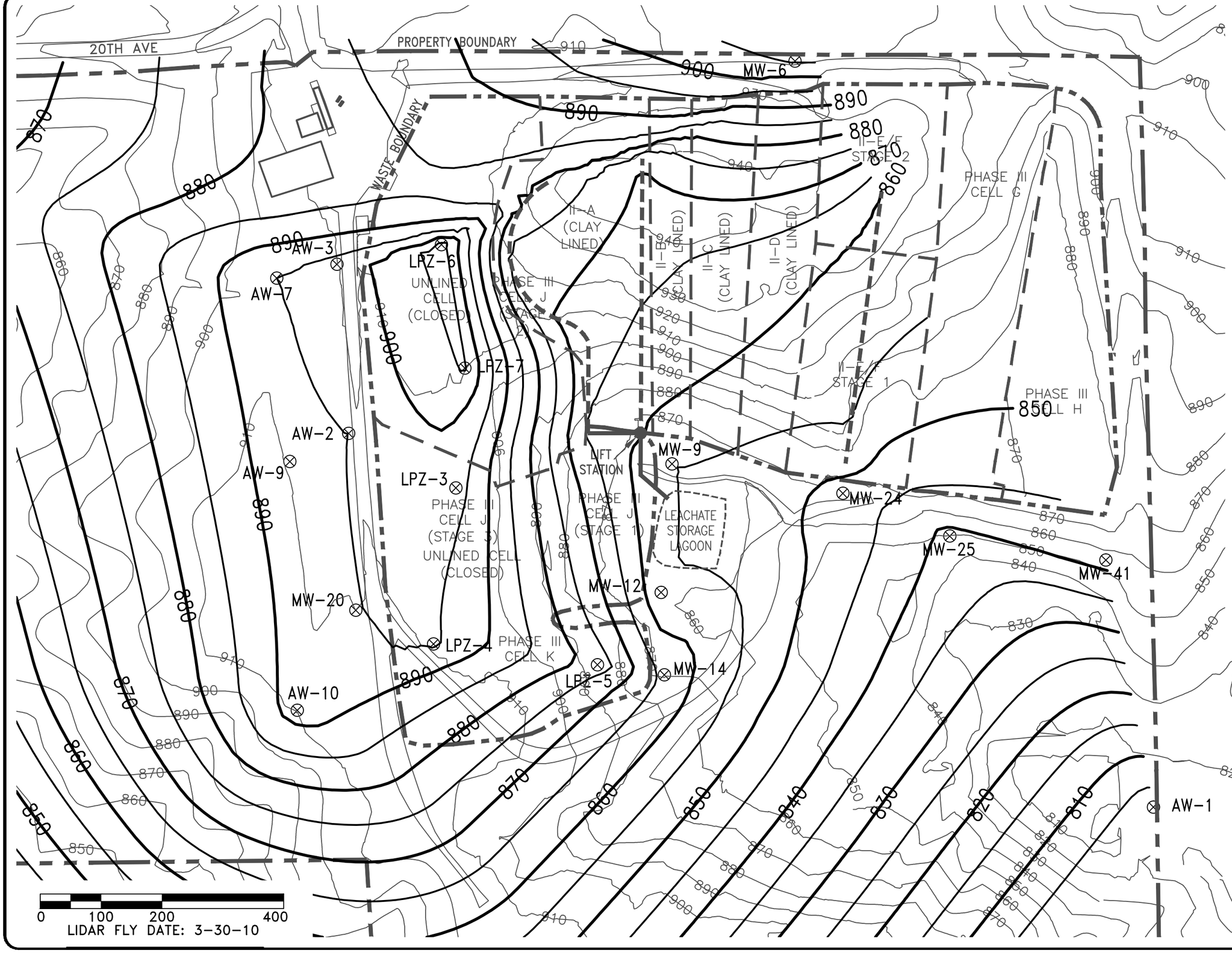
BENTON COUNTY SANITARY LANDFILL
BLAIRSTOWN, IOWA

FIGURE: 2

REVISION	NO.	DATE
DRAWN DRA	PROJECT NO. 6043	DATE 1-20-24

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

HLW Engineering Group



WATER ELEVATION OCT 2, 2024	
WELL	ELEV.
MW-6	905.43
MW-9	855.15
MW-12	855.63
MW-14	863.66
MW-20	894.88
MW-24	847.94
MW-25	838.69
MW-26	859.02
MW-27	798.65
MW-28	803.53
MW-41	841.72
AW-1	801.83
AW-2	895.02
AW-3	897.01
AW-7	894.99
AW-9	893.88
AW-10	892.56
LPZ-3	897.52
LPZ-4	895.72
LPZ-5	878.26
LPZ-6	907.14
LPZ-7	905.46

TABLE NOTE:
ELEVATIONS FOR MW-9 AND MW-28 FROM MAR 11, 2024.

FIGURE: 3

REVISION	NO.	DATE
DRAWN DRA	PROJECT NO. 6043	DATE 1-20-24

GROUNDWATER CONTOURS

BENTON COUNTY SANITARY LANDFILL
BLAIRSTOWN, IOWA

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

HLW Engineering Group

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.

Table A1 – Maintenance Activities Schedule

Years	2016	2017	2018	2019	2020	2021	2022	2023	2024
Annual water-quality report	X	X	X	X	X	X	X	X	X
High and low water levels	X	X	X	X	X	X	X	X	X
Six-month water levels	X	X	X	X	X	X	X	X	X
Well-depth measurement	X	X	X	X	X	X	X	X	X
Evaluation of recharge rates and chemistry		X	X		X		X		X

X, completed; O, scheduled.

Well Recharge Evaluation

Monitoring well recharge reevaluation is due biennially according to 113.10(2)f. Well recharge was evaluated on March 11, 2024. Each well was purged of 1 to 3 well volumes and water drawdown levels were recorded. Recovery was then recorded at each well 2 to 8 hours following purging.

Review of the data indicates that the wells recover by 90% within 8 hours of purging. Based on the information collected on March 11, 2024, recharge to each well from the formation is considered sufficient to promote the collection of representative water quality samples. Each well functions as intended. Well recharge should be evaluated again in 2026.

Well Depth Evaluation

The well depth is utilized to document significant well sedimentation that may occur over time. Table A2 summarizes the estimated sedimentation recorded at each well. The instances where the recorded well depth is now greater than construction records indicate are interpreted to reflect errors in the original well construction records.

The recorded sedimentation in each well is recorded to be 1.0 ft or less based on well depth measurements with the exception of:

AW-2 – 1.1 feet of sediment

The interpreted sedimentation is *not* considered to be detrimental to well performance.

Table A2 – Well Depth Changes Over Time

Well	Installed Depth (ft)	Measured Depth (ft) (10/2/2024)	Difference (ft)
MW-6 (b)	32.4	32.7	-0.3
MW-7 (b)	67.7	67.7	0.0
MW-26 (b)	32.45	32.45	0.0
MW-27 (b)	27.35	27.35	0.0
MW-28 (b)	51.75	51.75*	0.0
MW-12	18.8	19.3	-0.5
MW-14	20.0	20.2	-0.2
MW-20	20.1	20.2	-0.1
MW-24	29.2	29.50	-0.30
MW-25	23.18	23.8	-0.62
AW-2	22.8	21.7	1.1
AW-3	23.4	23.7	-0.3
AW-9	25.45	25.45	0.0
AW-1	18.8	18.8	0.0
MW-41	30.35	3.035	0.0

* = March 11, 2024 measurement

Water Elevation Information

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

A Water Table Contour Map (Figure 3) dated October 2, 2024 is included in the body of the report. Review of the map confirms the water table surface in the Original Landfill and in the RCRA Subtitle D Landfill. Figure 3 appears similar to previously recorded Water Table surfaces at the site, and no significant changes are noted.

The monitoring wells are interpreted to be properly located to detect impact from the landfill, should it occur. Based on the apparent static condition of the water table, the semi-annual water elevation data is sufficient to adequately monitor the hydrologic condition of the Site.

No Changes to the site monitoring wells are recommended.

Recent HMSP modifications

The HMSP was modified in 2024 following the March 2024 sampling event. In accordance with the approved plan (Doc #108809) dated January 15, 2024, monitoring wells MW-23, AW-4, AW-5, and AW-6 were plugged and abandoned by methods described in IAC 113.10(2)"d". The former monitoring well MW-19 (plugged 4/17/23 – Doc #108597) was replaced by MW-41 in 2024. Existing well AW-1 is utilized as the downgradient monitoring point to the future lagoon (2025 planned construction).

Appendix A.1 - Historic Water Elevation Data

03/11/2024 Benton County Water Elevations

Well	TOC	Depth	3/11/2024 SWL	3/11/2024 SW Elev.	screen length
MW-6	926.39	32.7	22.6	903.79	10
MW-7	926.25	67.7	22.8	903.45	10
PZ-8	925.76	88.5	24.71	901.05	2.5
MW-9	867.67	36.2	12.52	855.15	15
MW-10	866.21	66.4	12.7	853.51	10
PZ-11	857.98	86.9	21.37	836.61	2.5
MW-12	861.63	18.6	5.14	856.49	10
MW-13	861.93	39.2	6.88	855.05	10
MW-14	871.53	20	4.94	866.59	10
MW-15	871.1	50.2	7.46	863.64	10
MW-19	851.58	25.2	plugged	plugged	10
MW-20	912.52	19.95	17.45	895.07	10
MW-21	912.74	43.2	17.59	895.15	10
MW-22	913.41	67.6	21.64	891.77	10
MW-23	859.41	37.1	plugged	plugged	10
MW-24	870.24	29.5	10.57	859.67	10
MW-25	852.02	25.2	12.19	839.83	15
MW-26	877.75	32.45	17.1	860.65	10
MW-27	810.29	27.35	12.32	797.97	10
MW-28	833.99	51.75	30.46	803.53	10
MW-29	818.85	102.55	11.79	807.06	10
MW-30	857.25	26.1			10
MW-31	856.55	76.5			10
MW-32	838.32	26.4			10
MW-33	837.98	76.25			10
MW-34	854.31	26.4			10
MW-35	853.82	76.6			10
MW-36	834.47	65.9			5
MW-37	880.34	26.15			10
MW-38	879.75	76.75			5
AW-1	818.11	16.9	14.66	803.45	10
AW-2	911.22	22.35	15.36	895.86	15
AW-3	912.46	23.35	14.83	897.63	15
AW-4	855.96	22.9	8.32	847.64	10
AW-5	833.75	21.4	4.4	829.35	10
AW-6	845.37	20	4.76	840.61	10
AW-7	907.01	25.4	10.79	896.22	15
AW-8	907.29	72.05	17.8	889.49	15
AW-9	907.49	25.45	9.61	897.88	15
AW-10	912.06	25.45	20.41	891.65	15
LPZ-3	909.16	31		898	
LPZ-4	914.13	23.7		898.68	
LPZ-5	890.07	18.7		877.69	
LPZ-6	922.45	44.7		912.89	
LPZ-7	918.82	24.1		904.41	

10/02/2024 Benton County Water Elevations

Well	TOC	Depth	10/2/2024 SWL	10/2/2024 SW Elev.	screen length
MW-6	926.39	32.7	20.96	905.43	10
MW-7	926.25	67.7	21.22	905.03	10
PZ-8	925.76	88.5	24.64	901.12	2.5
MW-9	867.67	36.2			15
MW-10	866.21	66.4	13.82	852.39	10
PZ-11	857.98	86.9	21.44	836.54	2.5
MW-12	861.63	18.6	6	855.63	10
MW-13	861.93	39.2	5.92	856.01	10
MW-14	871.53	20	7.87	863.66	10
MW-15	871.1	50.2	7.31	863.79	10
MW-19	851.58	25.2	plugged	plugged	10
MW-20	912.52	19.95	17.64	894.88	10
MW-21	912.74	43.2	17.79	894.95	10
MW-22	913.41	67.6	20.87	892.54	10
MW-23	859.41	37.1	plugged	plugged	10
MW-24	870.24	29.5	22.3	847.94	10
MW-25	852.02	25.2	13.33	838.69	15
MW-26	877.75	32.45	18.73	859.02	10
MW-27	810.29	27.35	11.64	798.65	10
MW-28	833.99	51.75			10
MW-29	818.85	102.55	11.8	807.05	10
MW-30	857.25	26.1			10
MW-31	856.55	76.5			10
MW-32	838.32	26.4			10
MW-33	837.98	76.25			10
MW-34	854.31	26.4			10
MW-35	853.82	76.6			10
MW-36	834.47	65.9			5
MW-37	880.34	26.15			10
MW-38	879.75	76.75			5
MW-41	857.85	30.35	16.13	841.72	10
AW-1	818.11	18.8	16.28	801.83	10
AW-2	911.22	22.35	16.2	895.02	15
AW-3	912.46	23.35	15.45	897.01	15
AW-4	855.96	22.9	plugged	plugged	10
AW-5	833.75	21.4	plugged	plugged	10
AW-6	845.37	20	plugged	plugged	10
AW-7	907.01	25.4	12.02	894.99	15
AW-8	907.29	72.05	16.71	890.58	15
AW-9	907.49	25.45	13.61	893.88	15
AW-10	912.06	25.45	19.5	892.56	15
LPZ-3	909.16	31	11.64	897.52	
LPZ-4	914.13	23.7	18.41	895.72	
LPZ-5	890.07	18.7	11.81	878.26	
LPZ-6	922.45	44.7	15.31	907.14	
LPZ-7	918.82	24.1	13.36	905.46	

03/07/2023 Benton County Water Elevations

Well	TOC	Depth	3/7/2023 SWL	3/7/2023 SW Elev.	screen length
MW-6	926.39	32.7	17.15	909.24	10
MW-7	926.25	67.7	17.53	908.72	10
PZ-8	925.76	88.5	26.21	899.55	2.5
MW-9	867.67	36.2	12.91	854.76	15
MW-10	866.21	66.4	13.93	852.28	10
PZ-11	857.98	86.9	20.28	837.7	2.5
MW-12	861.63	18.6	5.37	856.26	10
MW-13	861.93	39.2	6.7	855.23	10
MW-14	871.53	20	2.98	868.55	10
MW-15	871.1	50.2	6.96	864.14	10
MW-19	851.58	25.2	removed	removed	10
MW-20	912.52	19.95	14.46	898.06	10
MW-21	912.74	43.2	15.19	897.55	10
MW-22	913.41	67.6	20.21	893.2	10
MW-23	859.41	37.1			10
MW-24	870.24	29.5	20.95	849.29	10
MW-25	852.02	25.2	11.9	840.12	15
MW-26	877.75	32.45	15.55	862.2	10
MW-27	810.29	27.35	8.33	801.96	10
MW-28	833.99	51.75	28.46	805.53	10
MW-29	818.85	102.55	8.3	810.55	10
MW-30	857.25	26.1			10
MW-31	856.55	76.5			10
MW-32	838.32	26.4			10
MW-33	837.98	76.25			10
MW-34	854.31	26.4			10
MW-35	853.82	76.6			10
MW-36	834.47	65.9			5
MW-37	880.34	26.15			10
MW-38	879.75	76.75			5
AW-1	818.11	16.9	10.6	807.51	10
AW-2	911.22	22.35	13.62	897.6	15
AW-3	912.46	23.35	12.48	899.98	15
AW-4	855.96	22.9	6.54	849.42	10
AW-5	833.75	21.4	3.36	830.39	10
AW-6	845.37	20	3.62	841.75	10
AW-7	907.01	25.4	8.9	898.11	15
AW-8	907.29	72.05	16.79	890.5	15
AW-9	907.49	25.45	7.76	899.73	15
AW-10	912.06	25.45	18.63	893.43	15
LPZ-2	868.05	22.9		850.9	
LPZ-3	909.16	31		898	
LPZ-4	914.13	23.7		898.68	
LPZ-5	890.07	18.7		877.69	
LPZ-6	922.45	44.7		912.89	
LPZ-7	918.82	24.1		904.41	

09/28/2023 Benton County Water Elevations

Well	TOC	Depth	9/28/2023 SWL	9/28/2023 SW Elev.	screen length
MW-6	926.39	32.7	22.08	904.31	10
MW-7	926.25	67.7	22.11	904.14	10
PZ-8	925.76	88.5	21.25	904.51	2.5
MW-9	867.67	36.2	14.06	853.61	15
MW-10	866.21	66.4	13.98	852.23	10
PZ-11	857.98	86.9	21.25	836.73	2.5
MW-12	861.63	18.6	7.18	854.45	10
MW-13	861.93	39.2	6.95	854.98	10
MW-14	871.53	20	9.58	861.95	10
MW-15	871.1	50.2	8.46	862.64	10
MW-19	851.58	25.2	removed	removed	10
MW-20	912.52	19.95	18.56	893.96	10
MW-21	912.74	43.2	18.71	894.03	10
MW-22	913.41	67.6	22.18	891.23	10
MW-23	859.41	37.1			10
MW-24	870.24	29.5	11.44	858.8	10
MW-25	852.02	25.2	13.14	838.88	15
MW-26	877.75	32.45	20.09	857.66	10
MW-27	810.29	27.35	12.85	797.44	10
MW-28	833.99	51.75			10
MW-29	818.85	102.55	11.39	807.46	10
MW-30	857.25	26.1			10
MW-31	856.55	76.5			10
MW-32	838.32	26.4			10
MW-33	837.98	76.25			10
MW-34	854.31	26.4			10
MW-35	853.82	76.6			10
MW-36	834.47	65.9			5
MW-37	880.34	26.15			10
MW-38	879.75	76.75			5
AW-1	818.11	16.9	14.42	803.69	10
AW-2	911.22	22.35	17.55	893.67	15
AW-3	912.46	23.35	17.39	895.07	15
AW-4	855.96	22.9	10.4	845.56	10
AW-5	833.75	21.4	10.09	823.66	10
AW-6	845.37	20	9.07	836.3	10
AW-7	907.01	25.4	13.96	893.05	15
AW-8	907.29	72.05	18.7	888.59	15
AW-9	907.49	25.45	15.62	891.87	15
AW-10	912.06	25.45	22.39	889.67	15
LPZ-2	868.05	22.9	17.79	850.26	
LPZ-3	909.16	31	10.52	898.64	
LPZ-4	914.13	23.7	16.51	897.62	
LPZ-5	890.07	18.7	12.93	877.14	
LPZ-6	922.45	44.7	13.31	909.14	
LPZ-7	918.82	24.1	15.91	902.91	

03/31/2022 Benton County Water Elevations

Well	TOC	Depth	3/31/2022 SWL	3/31/2022 SW Elev.	screen length
MW-6	926.39	32.7	19.6	906.79	10
MW-7	926.25	67.7	19.87	906.38	10
PZ-8	925.76	88.5	26.2	899.56	2.5
MW-9	867.67	36.2	15.05	852.62	15
MW-10	866.21	66.4	13.82	852.39	10
PZ-11	857.98	86.9	10.25	847.73	2.5
MW-12	861.63	18.6	4.75	856.88	10
MW-13	861.93	39.2	6.4	855.53	10
MW-14	871.53	20	2.5	869.03	10
MW-15	871.1	50.2	7	864.1	10
MW-19	851.58	25.2	8.96	842.62	10
MW-20	912.52	19.95	14.88	897.64	10
MW-21	912.74	43.2	15.45	897.29	10
MW-22	913.41	67.6	20.65	892.76	10
MW-23	859.41	37.1	18.69	840.72	10
MW-24	870.24	29.5	22.1	848.14	10
MW-25	852.02	25.2	11.41	840.61	15
MW-26	877.75	32.45	16.36	861.39	10
MW-27	810.29	27.35	8.79	801.5	10
MW-28	833.99	51.75	28.07	805.92	10
MW-29	818.85	102.55			10
MW-30	857.25	26.1			10
MW-31	856.55	76.5			10
MW-32	838.32	26.4			10
MW-33	837.98	76.25			10
MW-34	854.31	26.4			10
MW-35	853.82	76.6			10
MW-36	834.47	65.9			5
MW-37	880.34	26.15			10
MW-38	879.75	76.75			5
AW-1	818.11	16.9	2.79	815.32	10
AW-2	911.22	22.35	13.09	898.13	15
AW-3	912.46	23.35	12.38	900.08	15
AW-4	855.96	22.9	4.41	851.55	10
AW-5	833.75	21.4	2.85	830.9	10
AW-6	845.37	20	2.9	842.47	10
AW-7	907.01	25.4	8.6	898.41	15
AW-8	907.29	72.05	17.65	889.64	15
AW-9	907.49	25.45	8.19	899.3	15
AW-10	912.06	25.45	20.65	891.41	15

08/30/2022 Benton County Water Elevations

Well	TOC	Depth	8/30/2022 SWL	8/30/2022 SW Elev.	screen length
MW-6	926.39	32.7	19.96	906.43	10
MW-7	926.25	67.7	20.14	906.11	10
PZ-8	925.76	88.5	23.73	902.03	2.5
MW-9	867.67	36.2	16.82	850.85	15
MW-10	866.21	66.4	14.33	851.88	10
PZ-11	857.98	86.9	15.9	842.08	2.5
MW-12	861.63	18.6	6.46	855.17	10
MW-13	861.93	39.2	6.45	855.48	10
MW-14	871.53	20	7.5	864.03	10
MW-15	871.1	50.2	7.61	863.49	10
MW-19	851.58	25.2	10.4	841.18	10
MW-20	912.52	19.95	16.48	896.04	10
MW-21	912.74	43.2	16.58	896.16	10
MW-22	913.41	67.6	19.63	893.78	10
MW-23	859.41	37.1			10
MW-24	870.24	29.5	24.43	845.81	10
MW-25	852.02	25.2	11.88	840.14	15
MW-26	877.75	32.45	19.16	858.59	10
MW-27	810.29	27.35	11.3	798.99	10
MW-28	833.99	51.75			10
MW-29	818.85	102.55	8.13	810.72	10
MW-30	857.25	26.1			10
MW-31	856.55	76.5			10
MW-32	838.32	26.4			10
MW-33	837.98	76.25			10
MW-34	854.31	26.4			10
MW-35	853.82	76.6			10
MW-36	834.47	65.9			5
MW-37	880.34	26.15			10
MW-38	879.75	76.75			5
AW-1	818.11	16.9	12.14	805.97	10
AW-2	911.22	22.35	16.05	895.17	15
AW-3	912.46	23.35	15.55	896.91	15
AW-4	855.96	22.9	10.56	845.4	10
AW-5	833.75	21.4	9.74	824.01	10
AW-6	845.37	20	7.47	837.9	10
AW-7	907.01	25.4	12.22	894.79	15
AW-8	907.29	72.05	16.91	890.38	15
AW-9	907.49	25.45	12.61	894.88	15
AW-10	912.06	25.45	18.41	893.65	15

03/30/2021 Benton County Water Elevations

Well	TOC	Depth	3/30/2021 SWL	3/30/2021 SW Elev.	screen length
MW-6	926.39	32.7	10.86	915.53	10
MW-7	926.25	67.7	11.51	914.74	10
PZ-8	925.76	88.5	24.77	900.99	2.5
MW-9	867.67	36.2	12.31	855.36	15
MW-10	866.21	66.4	12.22	853.99	10
PZ-11	857.98	86.9	19.05	838.93	2.5
MW-12	861.63	18.6	3.56	858.07	10
MW-13	861.93	39.2	5.3	856.63	10
MW-14	871.53	20	2.2	869.33	10
MW-15	871.1	50.2	5.73	865.37	10
MW-19	851.58	25.2	5.44	846.14	10
MW-20	912.52	19.95	8.71	903.81	10
MW-21	912.74	43.2	8.93	903.81	10
MW-22	913.41	67.6	15.4	898.01	10
MW-23	859.41	37.1	16.2	843.21	10
MW-24	870.24	29.5	11.15	859.09	10
MW-25	852.02	25.2	10.5	841.52	15
MW-26	877.75	32.45	11.2	866.55	10
MW-27	810.29	27.35	6.9	803.39	10
MW-28	833.99	51.75	22.22	811.77	10
MW-29	818.85	102.55	7.65	811.2	10
MW-30	857.25	26.1	9.58	847.67	10
MW-31	856.55	76.5	22.55	834	10
MW-32	838.32	26.4	17.29	821.03	10
MW-33	837.98	76.25	52.82	785.16	10
MW-34	854.31	26.4	12.93	841.38	10
MW-35	853.82	76.6	63	790.82	10
MW-36	834.47	65.9	34.15	800.32	5
MW-37	880.34	26.15	8.15	872.19	10
MW-38	879.75	76.75	37.52	842.23	5
AW-1	818.11	16.9	2.82	815.29	10
AW-2	911.22	22.35	11.75	899.47	15
AW-3	912.46	23.35	10.78	901.68	15
AW-4	855.96	22.9	5.61	850.35	10
AW-5	833.75	21.4	2.95	830.8	10
AW-6	845.37	20	3	842.37	10
AW-7	907.01	25.4	8.18	898.83	15
AW-8	907.29	72.05	15.67	891.62	15
AW-9	907.49	25.45	6.18	901.31	15
AW-10	912.06	25.45	9.12	902.94	15

9/8/2021

Well	TOC	Depth	9/8/2021 SWL	9/8/2021 SW Elev.	screen length
MW-6	926.39	32.7	20.63	905.76	10
MW-7	926.25	67.7	20.71	905.54	10
PZ-8	925.76	88.5	24.29	901.47	2.5
MW-9	867.67	36.2	16.54	851.13	15
MW-10	866.21	66.4	14.45	851.76	10
PZ-11	857.98	86.9	20.95	837.03	2.5
MW-12	861.63	18.6	7.18	854.45	10
MW-13	861.93	39.2	7.29	854.64	10
MW-14	871.53	20	8.23	863.3	10
MW-15	871.1	50.2	7.98	863.12	10
MW-19	851.58	25.2	9.23	842.35	10
MW-20	912.52	19.95	16.18	896.34	10
MW-21	912.74	43.2	16.31	896.43	10
MW-22	913.41	67.6	19.79	893.62	10
MW-23	859.41	37.1	20.18	839.23	10
MW-24	870.24	29.5	24.42	845.82	10
MW-25	852.02	25.2	12.04	839.98	15
MW-26	877.75	32.45	19.45	858.3	10
MW-27	810.29	27.35	11.89	798.4	10
MW-28	833.99	51.75			10
MW-29	818.85	102.55	7.98	810.87	10
AW-1	818.11	16.9	12.14	805.97	10
AW-2	911.22	22.35	15.22	896	15
AW-3	912.46	23.35	14.72	897.74	15
AW-4	855.96	22.9	10.45	845.51	10
AW-5	833.75	21.4	9.96	823.79	10
AW-6	845.37	20	7.23	838.14	10
AW-7	907.01	25.4	11.11	895.9	15
AW-8	907.29	72.05	18.46	888.83	15
AW-9	907.49	25.45	12.5	894.99	15
AW-10	912.06	25.45	20.8	891.26	15

05/06/2020 Benton County Water Elevations

Well	TOC	Depth	5/6/2020 SWL	5/6/2020 SW Elev.	screen length
MW-6	926.39	32.7	18.09	908.3	10
MW-7	926.25	67.7	18.1	908.15	10
PZ-8	925.76	88.5	21.02	904.74	2.5
MW-9	867.67	36.2	12.45	855.22	15
MW-10	866.21	66.4	11.42	854.79	10
PZ-11	857.98	86.9	8.75	849.23	2.5
MW-12	861.63	18.6	3.9	857.73	10
MW-13	861.93	39.2	5.18	856.75	10
MW-14	871.53	20	2.81	868.72	10
MW-15	871.1	50.2	5.17	865.93	10
MW-19	851.58	25.2	4.84	846.74	10
MW-20	912.52	19.95	11.9	900.62	10
MW-21	912.74	43.2	11.98	900.76	10
MW-22	913.41	67.6	15.4	898.01	10
MW-23	859.41	37.1	15.57	843.84	10
MW-24	870.24	29.5	18.99	851.25	10
MW-25	852.02	25.2	10.92	841.1	15
MW-26	877.75	32.45	15.7	862.05	10
MW-27	810.29	27.35	8.03	802.26	10
MW-28	833.99	51.75	24.77	809.22	10
AW-1	818.11	16.9	4.18	813.93	10
AW-2	911.22	22.35	13.64	897.58	15
AW-3	912.46	23.35	13.05	899.41	15
AW-4	855.96	22.9	3.43	852.53	10
AW-5	833.75	21.4	3.42	830.33	10
AW-6	845.37	20	3.28	842.09	10
AW-7	907.01	25.4	9.95	897.06	15
AW-8	907.29	72.05	15.25	892.04	15
AW-9	907.49	25.45	9.82	897.67	15
AW-10	912.06	25.45	13.39	898.67	15

09/03/2020 Benton County Water Elevations

Well	TOC	Depth	9/3/2020 SWL	9/3/2020 SW Elev.	screen length
MW-6	926.39	32.7	20.3	906.09	10
MW-7	926.25	67.7	20.35	905.9	10
PZ-8	925.76	88.5	22.68	903.08	2.5
MW-9	867.67	36.2	14.97	852.7	15
MW-10	866.21	66.4	13.2	853.01	10
PZ-11	857.98	86.9	15.72	842.26	2.5
MW-12	861.63	18.6	7.25	854.38	10
MW-13	861.93	39.2	6.83	855.1	10
MW-14	871.53	20	10.11	861.42	10
MW-15	871.1	50.2	7.32	863.78	10
MW-19	851.58	25.2	7.16	844.42	10
MW-20	912.52	19.95	14.67	897.85	10
MW-21	912.74	43.2	14.31	898.43	10
MW-22	913.41	67.6	17.85	895.56	10
MW-23	859.41	37.1	18.51	840.9	10
MW-24	870.24	29.5	20.16	850.08	10
MW-25	852.02	25.2	11.14	840.88	15
MW-26	877.75	32.45	19.23	858.52	10
MW-27	810.29	27.35	11.43	798.86	10
MW-28	833.99	51.75	25.45	808.54	10
AW-1	818.11	16.9	7.95	810.16	10
AW-2	911.22	22.35	15.31	895.91	15
AW-3	912.46	23.35	15.21	897.25	15
AW-4	855.96	22.9	10.1	845.86	10
AW-5	833.75	21.4	10	823.75	10
AW-6	845.37	20	7.1	838.27	10
AW-7	907.01	25.4	12.18	894.83	15
AW-8	907.29	72.05	16.7	890.59	15
AW-9	907.49	25.45	12.52	894.97	15
AW-10	912.06	25.45	16.96	895.1	15

04/01/2019 Benton County Water Elevations

Well	TOC	Depth	4/1/2019 SWL	4/1/2019 SW Elev.	screen length
MW-6	926.39	32.7	14.32	912.07	10
MW-7	926.25	67.7	14.52	911.73	10
PZ-8	925.76	88.5	21.86	903.9	2.5
MW-9	867.67	36.2	11.4	856.27	15
MW-10	866.21	66.4	11.39	854.82	10
PZ-11	857.98	86.9	3.35	854.63	2.5
MW-12	861.63	18.6	3.71	857.92	10
MW-13	861.93	39.2	5.27	856.66	10
MW-14	871.53	20	2.3	869.23	10
MW-15	871.1	50.2	5.24	865.86	10
MW-19	851.58	25.2	5.8	845.78	10
MW-20	912.52	19.95	8.35	904.17	10
MW-21	912.74	43.2	8.46	904.28	10
MW-22	913.41	67.6	13.95	899.46	10
MW-23	859.41	37.1	15.17	844.24	10
MW-24	870.24	29.5	17.27	852.97	10
MW-25	852.02	25.2	11.59	840.43	15
MW-26	877.75	32.45	12.63	865.12	10
MW-27	810.29	27.35	7.8	802.49	10
MW-28	833.99	51.75	25.38	808.61	10
AW-1	818.11	16.9	3.83	814.28	10
AW-2	911.22	22.35	10.44	900.78	15
AW-3	912.46	23.35	10.78	901.68	15
AW-4	855.96	22.9		855.96	10
AW-5	833.75	21.4	3.27	830.48	10
AW-6	845.37	20	3.08	842.29	10
AW-7	907.01	25.4	8.8	898.21	15
AW-8	907.29	72.05	14.67	892.62	15
AW-9	907.49	25.45	4.19	903.3	15
AW-10	912.06	25.45	9.49	902.57	15

09/12/2019 Benton County Water Elevations

Well	TOC	Depth	9/12/2019 SWL	9/12/2019 SW Elev.	screen length
MW-6	926.39	32.7	16.47	909.92	10
MW-7	926.25	67.7	16.75	909.5	10
PZ-8	925.76	88.5	20.81	904.95	2.5
MW-9	867.67	36.2	12.41	855.26	15
MW-10	866.21	66.4	12.64	853.57	10
PZ-11	857.98	86.9	11.35	846.63	2.5
MW-12	861.63	18.6	6.48	855.15	10
MW-13	861.93	39.2	6.21	855.72	10
MW-14	871.53	20	7.11	864.42	10
MW-15	871.1	50.2	6.51	864.59	10
MW-19	851.58	25.2	7.03	844.55	10
MW-20	912.52	19.95	12.2	900.32	10
MW-21	912.74	43.2	12.31	900.43	10
MW-22	913.41	67.6	15.92	897.49	10
MW-23	859.41	37.1	16.03	843.38	10
MW-24	870.24	29.5	11	859.24	10
MW-25	852.02	25.2	10.98	841.04	15
MW-26	877.75	32.45	17.76	859.99	10
MW-27	810.29	27.35	8.22	802.07	10
MW-28	833.99	51.75		833.99	10
AW-1	818.11	16.9	10.72	807.39	10
AW-2	911.22	22.35	12.12	899.1	15
AW-3	912.46	23.35	11.92	900.54	15
AW-4	855.96	22.9	7.9	848.06	10
AW-5	833.75	21.4		833.75	10
AW-6	845.37	20	4.9	840.47	10
AW-7	907.01	25.4	8.89	898.12	15
AW-8	907.29	72.05	15.65	891.64	15
AW-9	907.49	25.45	7.76	899.73	15
AW-10	912.06	25.45	14.44	897.62	15

09/2016 Benton County Water Elevations

Well	TOC	Depth	9/15/2016 SWL	9/15/2016 SW Elev.	screen length
MW-6	926.39	32.7	13.45	912.94	10
MW-7	926.25	67.7	17.99	908.26	10
PZ-8	925.76	88.5	24.72	901.04	2.5
MW-9	867.67	36.2	13.87	853.8	15
MW-10	866.21	66.4	7.03	859.18	10
PZ-11	857.98	86.9	6.16	851.82	2.5
MW-12	861.63	18.6	4.8	856.83	10
MW-13	861.93	39.2	5.3	856.63	10
MW-14	871.53	20	2.15	869.38	10
MW-15	871.1	50.2	6.85	864.25	10
MW-19	851.58	25.2	6.04	845.54	10
MW-20	912.52	19.95	8.86	903.66	10
MW-21	912.74	43.2	9.3	903.44	10
MW-22	913.41	67.6	17.15	896.26	10
MW-23	859.41	37.1	17.85	841.56	10
MW-24	870.24	29.5	19.2	851.04	10
MW-25	852.02	25.2	11.56	840.46	15
MW-26	877.75	32.45	16.92	860.83	10
MW-27	810.29	27.35	8.76	801.53	10
MW-28	833.99	51.75	26.15	807.84	10
AW-1	818.11	16.9	7.01	811.1	10
AW-2	911.22	22.35	9.93	901.29	15
AW-3	912.46	23.35	10.12	902.34	15
AW-4	855.96	22.9	5.45	850.51	10
AW-5	833.75	21.4	3.6	830.15	10
AW-6	845.37	20	3.11	842.26	10
AW-7	907.01	25.4	5.77	901.24	15
AW-8	907.29	72.05	15.6	891.69	15
AW-9	907.49	25.45	5.76	901.73	15
AW-10	912.06	25.45	12.45	899.61	15

Appendix B

Monitoring Activities Information

Appendix B.1 – Summary of All Well Testing Activities

Table B.1 -- Itemized Summary of Monitoring at HMSP Points (to date)

WELL	**2/4/0/08**	**4/4/08**	**6/23/08**	**8/21/08**	**11/2/08**
MW-6 (b)	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
MW-9	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	Appendix I
MW-19	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
MW-20	NT	NT	NT	NT	NT
MW-23	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
MW-24	NT	NT	NT	NT	NT
MW-25	NT	NT	NT	NT	NT
AW-2	NT	NT	NT	NT	NT
AW-3	NT	NT	NT	NT	NT

WELL	**4/23/09**	**8/24/09**	**4/27/10**	**8/5/10**	**9/29/10**
MW-6 (b)	**Appendix II**	Appendix I	**Appendix II**	NT	Appendix I
MW-9	**Appendix II**	Appendix I	**Appendix II**	NT	Appendix I
MW-12	**Appendix II**	Appendix I	**Appendix II**	NT	Appendix I
MW-14	**Appendix II**	Appendix I	**Appendix II**	NT	Appendix I
MW-19	**Appendix II**	Appendix I	**Appendix II**	NT	Appendix I
MW-20	NT	NT	NT	Appendix I	Appendix I
MW-23	**Appendix II**	Appendix I	**Appendix II**	NT	Appendix I
MW-24	NT	NT	NT	NT	NT
MW-25	NT	NT	NT	NT	NT
AW-2	NT	NT	NT	Appendix I	Appendix I
AW-3	NT	NT	NT	Appendix I	Appendix I

WELL	**3/24/11**	**7/19/11**	**9/14/11**	**12/26/11**	**3/20/12**
MW-6 (b)	**Appendix II**	Appendix I	Appendix I	Appendix I	**Appendix II**
MW-9	**Appendix II**	NT	Appendix I	NT	**Appendix II**
MW-12	**Appendix II**	NT	Appendix I	NT	**Appendix II**
MW-14	**Appendix II**	NT	Appendix I	NT	**Appendix II**
MW-19	**Appendix II**	NT	Appendix I	NT	**Appendix II**
MW-20	Appendix I	Appendix I	Appendix I	Appendix I	**Appendix II**
MW-23	**Appendix II**	NT	Appendix I	NT	**Appendix II**
MW-24	Appendix I	Appendix I	Appendix I	Appendix I	**Appendix II**
MW-25	NT	NT	NT	NT	NT
AW-2	Appendix I	Appendix I	Appendix I	Appendix I	**Appendix II**
AW-3	Appendix I	Appendix I	Appendix I	Appendix I	**Appendix II**

WELL	8/28/12	10/15/12	3/15/13	9/7/13	3/17/14
MW-6 (b)	NT	Appendix I	Appendix I	Appendix I	Appendix I
MW-9	NT	Appendix I	NT	Appendix I	Appendix I
MW-12	NT	Appendix I	NT	Appendix I	Appendix I
MW-14	NT	Appendix I	NT	Appendix I	Appendix I
MW-19	NT	Appendix I	NT	Appendix I	Appendix I
MW-20	Appendix I	Appendix I	NT	Appendix I	Appendix I
MW-23	NT	Appendix I	NT	Appendix I	Appendix I
MW-24	NT	Appendix I	Appendix I	Appendix I	Appendix I
MW-25	NT	NT	NT	NT	NT
AW-2	NT	Appendix I	NT	Appendix I	Appendix I
AW-3	NT	Appendix I	NT	Appendix I	Appendix I

WELL	10/20/14	6/22/15	11/12/15	4/11/16	9/16/16
MW-6 (b)	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
MW-9	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I[(1)]
MW-12	Appendix I[(1)]	Appendix I[(1)]	Appendix I[(1)]	Appendix I[(1)]	Appendix I[(1)]
MW-14	Appendix I[(1)]	Appendix I[(1)]	Appendix I[(1)]	Appendix I[(1)]	Appendix I[(1)]
MW-19	Appendix I[(1)]	Appendix I[(1)]	Appendix I[(1)]	Appendix I[(1)]	Appendix I[(1)]
MW-20	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
MW-23	Appendix I[(1)]	Appendix I[(1)]	Appendix I[(1)]	Appendix I[(1)]	Appendix I[(1)]
MW-24	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
MW-25	NT	NT	Appendix I	Appendix I	Appendix I
AW-2	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
AW-3	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
Duplicate	At MW-24	At MW-20	At MW-19	NT	At MW-20

WELL	10/31/2016	3/15/2017	5/9/2017	9/27/2017	12/13/2017
MW-6 (b)		Appendix I		Appendix I	
MW-7 (b)		App I - metals	App I - metals	App I - metals	R – Ni, Zn
MW-26 (b)	Appendix I	App I - metals		App I - metals	
MW-27 (b)	Appendix I	App I - metals		App I - metals	R – As, Ba, Zn
MW-28 (b)	Appendix I	App I - metals		No Sample	
MW-9		**Appendix II**		Appendix I[(4)]	R - As
MW-12		**Appendix II**		Appendix I[(4)]	
MW-14		**Appendix II**		Appendix I[(2)]	
MW-19		**Appendix II**		Appendix I[(4)]	
MW-20		**Appendix II**		Appendix I[(4)]	
MW-23		**Appendix II**		Appendix I[(4)]	
MW-24		**Appendix II**		Appendix I[(4)]	
MW-25		**Appendix II**		Appendix I[(3)]	
AW-2		**Appendix II**		Appendix I[(2)]	R - Zn
AW-3		**Appendix II**		Appendix I[(3)]	
Duplicate		MW-6		MW-19	

WELL	3/14/2018	6/5/2018	9/12/2018	4/1/2019	9/12/2019
MW-6 (b)	No Sample		Appendix I	Appendix I	Appendix I
MW-7 (b)	Appendix I		Appendix I	Appendix I	Appendix I
MW-26 (b)	Appendix I		Appendix I	Appendix I	Appendix I
MW-27 (b)	Appendix I		Appendix I	Appendix I	Appendix I
MW-28 (b)	Appendix I		Appendix I	Appendix I	No Sample
MW-9	Appendix I[4]		Appendix I[4]	Appendix I[4]	Appendix I[4]
MW-12	Appendix I[4]	R – Ni	Appendix I[4]	Appendix I[4]	Appendix I[4]
MW-14	Appendix I[4]		Appendix I[2]	Appendix I[2]	Appendix I[2]
MW-19	Appendix I[4]		Appendix I[4]	Appendix I[4]	Appendix I[4]
MW-20	Appendix I[4]		Appendix I[4]	Appendix I[4]	Appendix I[4]
MW-23	Appendix I[4]		Appendix I[4]	Appendix I[4]	Appendix I[4]
MW-24	Appendix I[4]		Appendix I[4]	Appendix I[4]	Appendix I[4]
MW-25	Appendix I[3]		**Appendix II**	Appendix I[3]	Appendix I[3]
AW-2	Appendix I[4]	R – As, Ni	Appendix I[2]	Appendix I[2]	Appendix I[2]
AW-3	Appendix I[3]	R - As	Appendix I[3]	Appendix I[3]	Appendix I[3]
AW-9	---	---	---	As, Co	As, Co
Duplicate	MW-25		MW-26	MW-28	MW-25

WELL	5/6/2020	9/3/2020	3/30/2021	9/8/2021	
MW-6 (b)	Appendix I	Appendix I	Appendix I	Appendix I	
MW-7 (b)	Appendix I	Appendix I	Appendix I	Appendix I	
MW-26 (b)	Appendix I	Appendix I	Appendix I	Appendix I	
MW-27 (b)	Appendix I	Appendix I	Appendix I	Appendix I	
MW-28 (b)	Appendix I	Appendix I	Appendix I	---	
MW-9	Appendix I[4]	Appendix I[4]	Appendix I	Appendix I	
MW-12	Appendix I[4]	Appendix I[4]	Appendix I	Appendix I	
MW-14	Appendix I[2]	Appendix I[4]	Appendix I	Appendix I	
MW-19	Appendix I[4]	Appendix I[4]	Appendix I	Appendix I	
MW-20	Appendix I[4]	Appendix I[4]	Appendix I	Appendix I	
MW-23	Appendix I[4]	Appendix I[4]	Appendix I	Appendix I	
MW-24	Appendix I[4]	Appendix I[4]	Appendix I	Appendix I	
MW-25	Appendix I[3]	Appendix I[4]	Appendix I	Appendix I	
AW-2	Appendix I[2]	Appendix I[4]	Appendix I	Appendix I	
AW-3	Appendix I[3]	Appendix I[4]	Appendix I	Appendix I	
AW-9	As, Co	As, Co	As, Co	As, Co	
Duplicate	MW-19	MW-25	MW-9	AW-3	

1) Tin
2) Cyanide
3) Bis(2-ethylhexyl)phthalate
4) No additional Appendix II compound were detected

WELL	3/31/2022	8/30/2022	11/11/2022	3/7/2023	6/6/2023
MW-6 (b)	Appendix I	Appendix I		Appendix I	
MW-7 (b)	Appendix I	Appendix I		Appendix I	
MW-26 (b)	Appendix I	Appendix I		Appendix I	
MW-27 (b)	Appendix I	Appendix I		Appendix I	
MW-28 (b)	Appendix I	---		Appendix I	
MW-9	Appendix I	Appendix I	Toluene	Appendix I	Ni
MW-12	Appendix I	Appendix I	Ni	Appendix I	
MW-14	Appendix I	Appendix I		Appendix I	
MW-19	**Appendix II**	Appendix I		---	
MW-20	**Appendix II**	Appendix I[(1)]		Appendix I[(1)]	
MW-24	**Appendix II**	Appendix I		Appendix I	
MW-25	Appendix I	Appendix I		Appendix I	
AW-2	**Appendix II**	Appendix I		Appendix I	
AW-3	**Appendix II**	Appendix I		Appendix I	
AW-4	Appendix I	Appendix I		Appendix I	
AW-9	As, Co	As, Co		Appendix I	
Duplicate	MW-6	MW-26		MW-28	

1) +Sulfide
2) +Bis(2-ethylhexyl)phthalate

WELL	9/28/2023	3/11/2024	10/2/2024	12/11/2024	
MW-6 (b)	Appendix I	Appendix I	Appendix I		
MW-7 (b)	Appendix I	Appendix I	Appendix I		
MW-26 (b)	Appendix I	Appendix I	Appendix I		
MW-27 (b)	Appendix I	Appendix I	Appendix I		
MW-28 (b)	---	Appendix I	---		
MW-9	**Appendix II**	---	---		
MW-12	Appendix I	Appendix I	Appendix I	Ni	
MW-14	Appendix I	Appendix I	Appendix I		
MW-20	Appendix I[(1)]	Appendix I[(1)]	Appendix I[(1)]		
MW-24	Appendix I	Appendix I	Appendix I		
MW-25	Appendix I	Appendix I	Appendix I		
AW-2	Appendix I	Appendix I	Appendix I		
AW-3	Appendix I	Appendix I	Appendix I		
AW-4	Appendix I	---	---		
AW-9	As, Co	As, Co	As, Co		
AW-1	---	Appendix I	Appendix I		
MW-41	---	---	Appendix I		
Duplicate	MW-27	AW-1	MW-14		

1) +Sulfide
2) +Bis(2-ethylhexyl)phthalate

Appendix B.2 - Field Sampling Forms

Benton County Sanitary Landfill
PERMIT # 06-SDP-02-81P

3/11/2024 Sampled by: Todd Whipple Weather conditions: Sunny, breezy 45 degrees

IDNR Form 542-1322

Monitoring Well: MW-6 (ug)

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

GENERAL INFORMATION

TOC	926.4
Well Depth	32.36
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	926.4
Well Depth	32.36
Top Screen	904.04
Bottom Screen	894.04
Bottom Well	894.04
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	27.00
Top sample	899.40
Bottom sample	895.40
Turbidity(NTU)	2.48

Date	Time	Water Level	Water Elevation	Notes
3/11/2024	8:12	22.66	903.74	

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		2.48
Appendix I	Metals	150	150		2.48
Appendix I	VOC	240	240		2.48
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	Sulfide, Tin	250			
Supplemental	BEHP	1 - qt			
Total			400	0	

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

TOC	926.40	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	32.36	Before purging	3/11/2024	8:12	22.66	903.74	3	1.9	No
		After purging				926.40			
		Top of Screen after construction				904.04			
						-0.30	feet above (+) or below (-) top screen		
		Bottom of Well after construction				894.04			
		Bottom of Well	3/11/2024		32.70	893.70			
						-0.34	feet sedimentation		
		Before Sampling				926.40			
		Recovery	3/11/2024	8:43	24.90	901.50			
		Recovery	3/11/2024	14:51	22.66	903.74			
		Recovery				926.40			
		Recovery				926.40			

IDNR Form 542-1322

Monitoring Well: AW-2 (dg)

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

GENERAL INFORMATION

TOC	911.22
Well Depth	22.75
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	911.25
Well Depth	22.75
Top Screen	903.47
Bottom Screen	888.47
Bottom Well	888.47
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	16.00
Top sample	895.25
Bottom sample	891.25
Turbidity(NTU)	2.37

Date	Time	Water Level	Water Elevation	Notes
3/11/2024	13:53	15.36	895.86	

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		2.37
Appendix I	Metals	150	150		2.37
Appendix I	VOC	240	240		2.37
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	Cyanide	250			
Supplemental		1 - qt			
Total			400	0	

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

		2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
TOC	911.22								
Well Depth	22.75	Before purging	3/11/2024	13:53	15.36	895.86	2.5	2.1	No
		After purging				911.22			
		Top of Screen after construction				903.47			
						-7.61	feet above (+) or below (-) top screen		
		Bottom of Well after construction				888.47			
		Bottom of Well	3/11/2024		21.70	889.52			
						1.05	feet sedimentation		
		Before Sampling				911.22			
		Recovery	3/11/2024	14:05	18.95	892.27			
		Recovery	3/11/2024	15:25	15.36	895.86			
		Recovery				911.22			
		Recovery				911.22			

IDNR Form 542-1322

Monitoring Well: AW-3 (dg)

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

GENERAL INFORMATION

TOC	912.46
Well Depth	23.35
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	912.46
Well Depth	23.35
Top Screen	904.11
Bottom Screen	889.11
Bottom Well	889.11
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	18.00
Top sample	894.46
Bottom sample	890.46
Turbidity(NTU)	2.18

Date	Time	Water Level	Water Elevation	Notes
3/11/2024	14:27	14.83	897.63	

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		2.18
Appendix I	Metals	150	150		2.18
Appendix I	VOC	240	240		2.18
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	BEHP	250			
Supplemental		1 - qt			
Total			400	0	

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

TOC	912.46	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	23.35	Before purging	3/11/2024	14:27	14.83	897.63	3	2.2	No
		After purging				912.46			
		Top of Screen after construction				904.11			
						-6.48	feet above (+) or below (-) top screen		
		Bottom of Well after construction				889.11			
		Bottom of Well	3/11/2024		23.70	888.76			
						-0.35	feet sedimentation		
		Before Sampling				912.46	App I		
		Recovery	3/11/2024	14:35	17.18	895.28	Supplemental		
		Recovery	3/11/2024	15:29	14.81	897.65			
		Recovery				912.46			
		Recovery				912.46			

IDNR Form 542-1322

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	867.43
Well Depth	36.05
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	867.43
Well Depth	36.05
Top Screen	846.38
Bottom Screen	831.38
Bottom Well	831.38
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	31.00
Top sample	836.43
Bottom sample	832.43
Turbidity(NTU)	14.87

Date	Time	Water Level	Water Elevation	Notes
3/11/2024	12:15	12.52	854.91	

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		14.87
Appendix I	Metals	150	150		14.87
Appendix I	VOC	240	240		14.87
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental		250			
Supplemental		1 - qt			
Total			400	0	

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

TOC	867.43	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	36.05	Before purging	3/11/2024	12:15	12.52	854.91		0.0	
		After purging				867.43			
		Top of Screen after construction				846.38			
						8.53	feet above (+) or below (-) top screen		
		Bottom of Well after construction				831.38			
		Bottom of Well	3/11/2024		36.00	831.43			
						0.05	feet sedimentation		
		Before Sampling				867.43			
		Recovery				867.43			
		Recovery				867.43			
		Recovery				867.43			
		Recovery				867.43			

IDNR Form 542-1322

Monitoring Well: MW-12 (dg)

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

GENERAL INFORMATION

TOC	861.74
Well Depth	18.60
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	861.74
Well Depth	18.60
Top Screen	853.14
Bottom Screen	843.14
Bottom Well	843.14
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	14.00
Top sample	847.74
Bottom sample	843.74
Turbidity(NTU)	2.62

Date	Time	Water Level	Water Elevation	Notes
3/11/2024	12:50	5.14	856.6	

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		2.62
Appendix I	Metals	150	150		2.62
Appendix I	VOC	240	240		2.62
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental		250			
Supplemental		1 - qt			
Total			400	0	

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

TOC	861.74	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	18.60	Before purging	3/11/2024	12:50	5.14	856.60	3	1.4	No
		After purging				861.74			
		Top of Screen after construction				853.14			
						3.46	feet above (+) or below (-) top screen		
		Bottom of Well after construction				843.14			
		Bottom of Well	3/11/2024		19.00	842.74			
						-0.40	feet sedimentation		
		Before Sampling				861.74			
		Recovery	3/11/2024	13:00	10.27	851.47			
		Recovery	3/11/2024	15:18	5.32	856.42			
		Recovery				861.74			
		Recovery				861.74			

IDNR Form 542-1322

Monitoring Well: MW-14 (dg)

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

GENERAL INFORMATION

TOC	871.5
Well Depth	20.21
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	871.5
Well Depth	20.21
Top Screen	861.29
Bottom Screen	851.29
Bottom Well	851.29
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	14.00
Top sample	857.50
Bottom sample	853.50
Turbidity(NTU)	4.51

Date	Time	Water Level	Water Elevation	Notes
3/11/2024	13:11	4.94	866.56	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		4.51
Appendix I	Metals	150	150		4.51
Appendix I	VOC	240	240		4.51
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	Cyanide	250			
Supplemental		1 - qt			
Total			400	0	

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

		2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
TOC	871.5	Before purging	3/11/2024	13:11	4.94	866.56	3.5	1.4	No
Well Depth	20.21	After purging				871.50			
		Top of Screen after construction				861.29			
						5.27	feet above (+) or below (-) top screen		
		Bottom of Well after construction				851.29			
		Bottom of Well	3/11/2024		20.20	851.30			
						0.01	feet sedimentation		
		Before Sampling				871.50			
		Recovery	3/11/2024	13:20	11.30	860.20			
		Recovery	3/11/2024	15:21	5.64	865.86			
		Recovery				871.50			
		Recovery				871.50			

IDNR Form 542-1322

Monitoring Well: MW-20 (dg)

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

GENERAL INFORMATION

TOC	912.52
Well Depth	19.99
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	912.52
Well Depth	19.99
Top Screen	902.53
Bottom Screen	892.53
Bottom Well	892.53
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	17.00
Top sample	895.52
Bottom sample	891.52
Turbidity(NTU)	6.11

Date	Time	Water Level	Water Elevation	Notes
3/11/2024	13:33	17.45	895.07	

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		6.11
Appendix I	Metals	150	150		6.11
Appendix I	VOC	240	240		6.11
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	Sulfide	250	250		
Supplemental		1 - qt			
Total			650	0	

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

		2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
TOC	912.52								
Well Depth	19.99	Before purging	3/11/2024	13:33	17.45	895.07	1.5	3.6	Yes
		After purging				912.52			
		Top of Screen after construction				902.53			
						-7.46	feet above (+) or below (-) top screen		
		Bottom of Well after construction				892.53			
		Bottom of Well	3/11/2024		20.20	892.32			
						-0.21	feet sedimentation		
		Before Sampling				912.52			
		Recovery	3/11/2024	13:41	18.82	893.70			
		Recovery	3/11/2024	15:23	18.14	894.38			
		Recovery				912.52			
		Recovery				912.52			

IDNR Form 542-1322

Monitoring Well: MW-24 (dg)

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

GENERAL INFORMATION

TOC	870.24
Well Depth	29.20
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	870.24
Well Depth	29.20
Top Screen	851.04
Bottom Screen	841.04
Bottom Well	841.04
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	24.00
Top sample	846.24
Bottom sample	842.24
Turbidity(NTU)	14.51

Date	Time	Water Level	Water Elevation	Notes
3/11/2024	12:29	10.57	859.67	

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		14.51
Appendix I	Metals	150	150		14.51
Appendix I	VOC	240	240		14.51
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental		250			
Supplemental		1 - qt			
Total			400	0	

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

TOC	870.24	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	29.20	Before purging	3/11/2024	12:29	10.6	859.67	3	1.0	No
		After purging				870.24			
		Top of Screen after construction				851.04			
						8.63	feet above (+) or below (-) top screen		
		Bottom of Well after construction				841.04			
		Bottom of Well	3/11/2024		29.50	840.74			
						-0.30	feet sedimentation		
		Before Sampling				870.24			
		Recovery	3/11/2024	12:42	14.75	855.49			
		Recovery	3/11/2024	15:15	10.53	859.71			
		Recovery				870.24			
		Recovery				870.24			

IDNR Form 542-1322

Monitoring Well: MW-25 (dg)

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

GENERAL INFORMATION

TOC	852.02
Well Depth	23.18
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	852.02
Well Depth	23.20
Top Screen	843.80
Bottom Screen	828.80
Bottom Well	828.80
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	17.50
Top sample	834.52
Bottom sample	830.52
Turbidity(NTU)	5.11

Date	Time	Water Level	Water Elevation	Notes
3/11/2024	10:50	12.19	839.83	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		5.11
Appendix I	Metals	150	150		5.11
Appendix I	VOC	240	240		5.11
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	BEHP	250			
Supplemental		1 - qt			
Total			400	0	

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

		2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
TOC	852.02	Before purging	3/11/2024	10:50	12.19	839.83	4	2.2	No
Well Depth	23.18	After purging				852.02			
		Top of Screen after construction				843.80			
						-3.97	feet above (+) or below (-) top screen		
		Bottom of Well after construction				828.80			
		Bottom of Well	3/11/2024		23.80	828.22			
						-0.58	feet sedimentation		
		Before Sampling				852.02			
		Recovery	3/11/2024	11:00	16.50	835.52			
		Recovery	3/11/2024	15:08	12.80	839.22			
		Recovery				852.02			
		Recovery				852.02			

IDNR Form 542-1322

Monitoring Well: MW-26 (ug)

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

GENERAL INFORMATION

TOC	877.75
Well Depth	32.45
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	877.75
Well Depth	32.45
Top Screen	855.55
Bottom Screen	845.55
Bottom Well	845.30
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	26.00
Top sample	851.75
Bottom sample	847.75
Turbidity(NTU)	4.73

Date	Time	Water Level	Water Elevation	Notes
3/11/2024	9:42	17.1	860.65	

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		4.73
Appendix I	Metals	150	150		4.73
Appendix I	VOC	240	240		4.73
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental		250			
Supplemental		1 - qt			
Total			400	0	

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

TOC	877.75	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	32.45	Before purging	3/11/2024	9:42	17.10	860.65	4	1.6	No
		After purging				877.75			
		Top of Screen after construction				855.55			
						5.10	feet above (+) or below (-) top screen		
		Bottom of Well after construction				845.30			
		Bottom of Well	3/11/2024		32.45	845.30			
						0.00	feet sedimentation		
		Before Sampling				877.75			
		Recovery	3/11/2024	9:55	22.99	854.76			
		Recovery	3/11/2024	14:42	17.13	860.62			
		Recovery				877.75			
		Recovery				877.75			

IDNR Form 542-1322

Monitoring Well: MW-27 (ug)

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

GENERAL INFORMATION

TOC	810.29
Well Depth	27.35
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	810.29
Well Depth	27.35
Top Screen	793.19
Bottom Screen	783.19
Bottom Well	782.94
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	22.00
Top sample	788.29
Bottom sample	784.29
Turbidity(NTU)	9.99

Date	Time	Water Level	Water Elevation	Notes
3/11/2024	8:55	12.32	797.97	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		9.99
Appendix I	Metals	150	150		9.99
Appendix I	VOC	240	240		9.99
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental		250			
Supplemental		1 - qt			
Total			400	0	

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

TOC	810.29	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	27.35	Before purging	3/11/2024	8:55	12.32	797.97	4	1.6	No
		After purging				810.29			
		Top of Screen after construction				793.19			
						4.78	feet above (+) or below (-) top screen		
		Bottom of Well after construction				782.94			
		Bottom of Well	3/11/2024		27.35	782.94			
						0.00	feet sedimentation		
		Before Sampling				810.29			
		Recovery	3/11/2024	9:08	20.30	789.99			
		Recovery	3/11/2024	14:57	12.37	797.92			
		Recovery				810.29			
		Recovery				810.29			

IDNR Form 542-1322

Monitoring Well: MW-28 (ug)

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

GENERAL INFORMATION

TOC	833.99
Well Depth	51.75
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	833.99
Well Depth	51.75
Top Screen	792.49
Bottom Screen	782.49
Bottom Well	782.24
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	46.00
Top sample	787.99
Bottom sample	783.99
Turbidity(NTU)	3.81

Date	Time	Water Level	Water Elevation	Notes
3/11/2024	9:16	30.46	803.53	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10			3.81
Appendix I	Metals	150			3.81
Appendix I	VOC	240			3.81
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental		250			
Supplemental		1 - qt			
Total			0	0	

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

		2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
TOC	833.99	Before purging	3/11/2024	9:16	30.46	803.53	3.5	1.0	No
Well Depth	51.75	After purging				833.99			
		Top of Screen after construction				792.49			
						11.04	feet above (+) or below (-) top screen		
		Bottom of Well after construction				782.24			
		Bottom of Well	3/11/2024		51.75	782.24			
						0.00	feet sedimentation		
		Before Sampling				833.99			
		Recovery	3/11/2024	9:32	36.40	797.59			
		Recovery	3/11/2024	15:00	31.18	802.81			
		Recovery				833.99			
		Recovery				833.99			

IDNR Form 542-1322

Monitoring Well: MW-7 (ug)

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

GENERAL INFORMATION

TOC	926.25
Well Depth	67.70
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	926.25
Well Depth	67.70
Top Screen	868.55
Bottom Screen	858.55
Bottom Well	858.55
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	61.00
Top sample	865.25
Bottom sample	861.25
Turbidity(NTU)	2.12

Date	Time	Water Level	Water Elevation	Notes
3/11/2024	8:19	22.81	903.44	

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		2.12
Appendix I	Metals	150	150		2.12
Appendix I	VOC	240	240		2.12
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental		250			
Supplemental		1 - qt			
Total			400	0	

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

TOC	926.25	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	67.70	Before purging	3/11/2024	8:19	22.81	903.44	5	0.7	No
		After purging				833.99			
		Top of Screen after construction				868.55			
						34.89	feet above (+) or below (-) top screen		
		Bottom of Well after construction				858.55			
		Bottom of Well	3/11/2024		67.70	858.55			
						0.00	feet sedimentation		
		Before Sampling				833.99			
		Recovery	3/11/2024	8:33	47.45	786.54			
		Recovery	3/11/2024	14:52	25.05	808.94			
		Recovery				833.99			
		Recovery				833.99			

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Monitoring Well: AW-4 (dg)

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

GENERAL INFORMATION

TOC	855.96
Well Depth	22.84
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	855.96
Well Depth	22.84
Top Screen	843.12
Bottom Screen	833.12
Bottom Well	833.12
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	
Top sample	855.96
Bottom sample	851.96
Turbidity(NTU)	

Date	Time	Water Level	Water Elevation	Notes
3/11/2024		8.32	847.64	

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		250			
Supplemental		1 - qt			
Total			400	0	

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

TOC	855.96	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	23.15	Before purging	3/11/2024	0:00	8.32	847.64	0	0.0	No
		After purging				855.96			
		Top of Screen after construction				843.12			
						4.52	feet above (+) or below (-) top screen		
		Bottom of Well after construction				833.12			
		Bottom of Well	3/11/2024		23.15	832.81			
						-0.31	feet sedimentation		
		Before Sampling				855.96			
		Recovery				855.96			
		Recovery				855.96			
		Recovery				855.96			
		Recovery				855.96			

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Monitoring Well: AW-9 (dg)

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

GENERAL INFORMATION

TOC	907.49
Well Depth	25.45
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	907.49
Well Depth	25.45
Top Screen	897.04
Bottom Screen	882.04
Bottom Well	882.04
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	20.00
Top sample	887.49
Bottom sample	883.49
Turbidity(NTU)	191.60

roots

Date	Time	Water Level	Water Elevation	Notes
3/11/2024	14:09	9.61	897.88	

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		191.60
Appendix I	Metals	150	150		191.60
Appendix I	VOC	240	240		191.60
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental		250			
Supplemental		1 - qt			
Total			400	0	

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

TOC	907.49	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	25.45	Before purging	3/11/2024	14:09	9.61	897.88	3	1.2	No
		After purging				907.49			
		Top of Screen after construction				897.04			
						0.84	feet above (+) or below (-) top screen		
		Bottom of Well after construction				882.04			
		Bottom of Well	3/11/2024		25.45	882.04			
						0.00	feet sedimentation		
		Before Sampling				907.49			
		Recovery	3/11/2024	14:19	13.10	894.39			
		Recovery	3/11/2024	15:26	10.17	897.32			
		Recovery				907.49			
		Recovery				907.49			

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Monitoring Well: AW-1

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

GENERAL INFORMATION

TOC	820.25
Well Depth	19.00
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	820.25
Well Depth	19.00
Top Screen	811.60
Bottom Screen	801.60
Bottom Well	801.25
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	14.00
Top sample	806.25
Bottom sample	802.25
Turbidity(NTU)	4.72

Date	Time	Water Level	Water Elevation	Notes
3/11/2024	10:32	14.66	805.59	

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		4.72
Appendix I	Metals	150	150		4.72
Appendix I	VOC	240	240		4.72
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental		250			
Supplemental		1 - qt			
Total			400	0	

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

TOC	820.25	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	19.00	Before purging	3/11/2024	10:32	14.66	805.59	3	4.2	No
		After purging				820.25			
		Top of Screen after construction				811.60			
						-6.01	feet above (+) or below (-) top screen		
		Bottom of Well after construction				801.25			
		Bottom of Well	3/11/2024		19.00	801.25			
						0.00	feet sedimentation		
		Before Sampling				820.25			
		Recovery	3/11/2024	11:13	17.35	802.90			
		Recovery	3/11/2024	15:06	14.89	805.36			
		Recovery				820.25			
		Recovery				820.25			

Benton County Sanitary Landfill
PERMIT # 06-SDP-02-81P

10/2/2024 Sampled by: Todd Whipple Weather conditions: Sunny,calm 42-72 degrees

IDNR Form 542-1322

Monitoring Well: MW-6 (ug)

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

GENERAL INFORMATION

TOC	926.4
Well Depth	32.36
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	926.4
Well Depth	32.36
Top Screen	904.04
Bottom Screen	894.04
Bottom Well	894.04
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	27.00
Top sample	899.40
Bottom sample	895.40
Turbidity(NTU)	2.50

Date	Time	Water Level	Water Elevation	Notes
10/2/2024	8:05	20.96	905.44	

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		2.50
Appendix I	Metals	150	150		2.50
Appendix I	VOC	240	240		2.50
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	Sulfide, Tin	250			
Supplemental	BEHP	1 - qt			
Total			400	0	

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

TOC	926.40	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	32.36	Before purging	10/2/2024	8:05	20.96	905.44		0.0	
		After purging				926.40			
		Top of Screen after construction				904.04			
						1.40	feet above (+) or below (-) top screen		
		Bottom of Well after construction				894.04			
		Bottom of Well	10/2/2024		32.70	893.70			
						-0.34	feet sedimentation		
		Before Sampling				926.40			
		Recovery				926.40			
		Recovery				926.40			
		Recovery				926.40			
		Recovery				926.40			

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Monitoring Well: AW-2 (dg)

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

GENERAL INFORMATION

TOC	911.22
Well Depth	22.75
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	911.25
Well Depth	22.75
Top Screen	903.47
Bottom Screen	888.47
Bottom Well	888.47
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	16.20
Top sample	895.05
Bottom sample	891.05
Turbidity(NTU)	2.45

Date	Time	Water Level	Water Elevation	Notes
10/2/2024	9:50	16.20	895.02	

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		2.45
Appendix I	Metals	150	150		2.45
Appendix I	VOC	240	240		2.45
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	Cyanide	250			
Supplemental		1 - qt			
Total			400	0	

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

		2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
TOC	911.22								
Well Depth	22.75	Before purging	10/2/2024	9:50	16.2	895.02		0.0	
		After purging				911.22			
		Top of Screen after construction				903.47			
						-8.45	feet above (+) or below (-) top screen		
		Bottom of Well after construction				888.47			
		Bottom of Well	10/2/2024		21.70	889.52			
						1.05	feet sedimentation		
		Before Sampling				911.22			
		Recovery				911.22			
		Recovery				911.22			
		Recovery				911.22			
		Recovery				911.22			

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Monitoring Well: AW-3 (dg)

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

GENERAL INFORMATION

TOC	912.46
Well Depth	23.35
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	912.46
Well Depth	23.35
Top Screen	904.11
Bottom Screen	889.11
Bottom Well	889.11
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	18.00
Top sample	894.46
Bottom sample	890.46
Turbidity(NTU)	2.24

Date	Time	Water Level	Water Elevation	Notes
10/2/2024	9:25	15.45	897.01	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		2.24
Appendix I	Metals	150	150		2.24
Appendix I	VOC	240	240		2.24
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	BEHP	250			
Supplemental		1 - qt			
Total			400	0	

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

TOC	912.46	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	23.35	Before purging	10/2/2024	9:25	15.45	897.01		0.0	
		After purging				912.46			
		Top of Screen after construction				904.11			
						-7.10	feet above (+) or below (-) top screen		
		Bottom of Well after construction				889.11			
		Bottom of Well	10/2/2024		23.70	888.76			
						-0.35	feet sedimentation		
		Before Sampling				912.46	App I		
		Recovery				912.46	Supplemental		
		Recovery				912.46			
		Recovery				912.46			
		Recovery				912.46			

IDNR Form 542-1322

Monitoring Well: MW-12 (dg)

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

GENERAL INFORMATION

TOC	861.74
Well Depth	18.60
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	861.74
Well Depth	18.60
Top Screen	853.14
Bottom Screen	843.14
Bottom Well	843.14
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	14.00
Top sample	847.74
Bottom sample	843.74
Turbidity(NTU)	4.14

Date	Time	Water Level	Water Elevation	Notes
10/2/2024	10:46	6	855.74	

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		4.14
Appendix I	Metals	150	150		4.14
Appendix I	VOC	240	240		4.14
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental		250			
Supplemental		1 - qt			
Total			400	0	

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

		2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
TOC	861.74								
Well Depth	18.60	Before purging	10/2/2024	10:46	6	855.74		0.0	
		After purging				861.74			
		Top of Screen after construction				853.14			
						2.60	feet above (+) or below (-) top screen		
		Bottom of Well after construction				843.14			
		Bottom of Well	10/2/2024		19.00	842.74			
						-0.40	feet sedimentation		
		Before Sampling				861.74			
		Recovery				861.74			
		Recovery				861.74			
		Recovery				861.74			
		Recovery				861.74			

IDNR Form 542-1322

Monitoring Well: MW-14 (dg)

Primary Sampling Method: No-Purge for Appendix I

Secondary Sampling Method: Purge & Sample for all analytes beyond Appendix I

GENERAL INFORMATION

TOC	871.5
Well Depth	20.21
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	871.5
Well Depth	20.21
Top Screen	861.29
Bottom Screen	851.29
Bottom Well	851.29
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	15.00
Top sample	856.50
Bottom sample	852.50
Turbidity(NTU)	1.91

Date	Time	Water Level	Water Elevation	Notes
10/2/2024	10:27	7.87	863.63	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		1.91
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	Cyanide	250			
Supplemental		1 - qt			
Total			400	0	

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

TOC	871.5	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	20.21	Before purging	10/2/2024	10:27	7.87	863.63		0.0	
		After purging				871.50			
		Top of Screen after construction				861.29			
						2.34	feet above (+) or below (-) top screen		
		Bottom of Well after construction				851.29			
		Bottom of Well	10/2/2024		20.20	851.30			
						0.01	feet sedimentation		
		Before Sampling				871.50			
		Recovery				871.50			
		Recovery				871.50			
		Recovery				871.50			
		Recovery				871.50			

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Monitoring Well: MW-20 (dg)

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

GENERAL INFORMATION

TOC	912.52
Well Depth	19.99
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	912.52
Well Depth	19.99
Top Screen	902.53
Bottom Screen	892.53
Bottom Well	892.53
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	18.00
Top sample	894.52
Bottom sample	890.52
Turbidity(NTU)	3.55

Date	Time	Water Level	Water Elevation	Notes
10/2/2024	10:03	17.64	894.88	

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		3.55
Appendix I	Metals	150	150		3.55
Appendix I	VOC	240	240		3.55
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	Sulfide	250	250		
Supplemental		1 - qt			
Total			650	0	

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

TOC	912.52	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	19.99	Before purging	10/2/2024	10:03	17.64	894.88		0.0	
		After purging				912.52			
		Top of Screen after construction				902.53			
						-7.65	feet above (+) or below (-) top screen		
		Bottom of Well after construction				892.53			
		Bottom of Well	10/2/2024		20.20	892.32			
						-0.21	feet sedimentation		
		Before Sampling				912.52			
		Recovery				912.52			
		Recovery				912.52			
		Recovery				912.52			
		Recovery				912.52			

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Monitoring Well: MW-24 (dg)

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

GENERAL INFORMATION

TOC	870.24
Well Depth	29.20
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	870.24
Well Depth	29.20
Top Screen	851.04
Bottom Screen	841.04
Bottom Well	841.04
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	24.00
Top sample	846.24
Bottom sample	842.24
Turbidity(NTU)	9.88

Date	Time	Water Level	Water Elevation	Notes
10/2/2024	11:05	22.30	847.94	

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		9.88
Appendix I	Metals	150	150		9.88
Appendix I	VOC	240	240		9.88
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental		250			
Supplemental		1 - qt			
Total			400	0	

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

TOC	870.24	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	29.20	Before purging	10/2/2024	11:05	22.3	847.94		0.0	
		After purging				870.24			
		Top of Screen after construction				851.04			
						-3.10	feet above (+) or below (-) top screen		
		Bottom of Well after construction				841.04			
		Bottom of Well	10/2/2024		29.50	840.74			
						-0.30	feet sedimentation		
		Before Sampling				870.24			
		Recovery				870.24			
		Recovery				870.24			
		Recovery				870.24			
		Recovery				870.24			

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Monitoring Well: MW-25 (dg)

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

GENERAL INFORMATION

TOC	852.02
Well Depth	23.18
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	852.02
Well Depth	23.20
Top Screen	843.80
Bottom Screen	828.80
Bottom Well	828.80
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	18.00
Top sample	834.02
Bottom sample	830.02
Turbidity(NTU)	2.36

Date	Time	Water Level	Water Elevation	Notes
10/2/2024	12:10	13.33	838.69	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		2.36
Appendix I	Metals	150	150		2.36
Appendix I	VOC	240	240		2.36
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	BEHP	250			
Supplemental		1 - qt			
Total			400	0	

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

TOC	852.02	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	23.18	Before purging	10/2/2024	12:10	13.33	838.69		0.0	
		After purging				852.02			
		Top of Screen after construction				843.80			
						-5.11	feet above (+) or below (-) top screen		
		Bottom of Well after construction				828.80			
		Bottom of Well	10/2/2024		23.80	828.22			
						-0.58	feet sedimentation		
		Before Sampling				852.02			
		Recovery				852.02			
		Recovery				852.02			
		Recovery				852.02			
		Recovery				852.02			

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Monitoring Well: MW-26 (ug)

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

GENERAL INFORMATION

TOC	877.75
Well Depth	32.45
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	877.75
Well Depth	32.45
Top Screen	855.55
Bottom Screen	845.55
Bottom Well	845.30
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	27.00
Top sample	850.75
Bottom sample	846.75
Turbidity(NTU)	2.12

Date	Time	Water Level	Water Elevation	Notes
10/2/2024	7:43	18.73	859.02	

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		2.12
Appendix I	Metals	150	150		2.12
Appendix I	VOC	240	240		2.12
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental		250			
Supplemental		1 - qt			
Total			400	0	

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

TOC	877.75	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	32.45	Before purging	10/2/2024	7:43	18.73	859.02		0.0	
		After purging				877.75			
		Top of Screen after construction				855.55			
						3.47	feet above (+) or below (-) top screen		
		Bottom of Well after construction				845.30			
		Bottom of Well	10/2/2024		32.45	845.30			
						0.00	feet sedimentation		
		Before Sampling				877.75			
		Recovery				877.75			
		Recovery				877.75			
		Recovery				877.75			
		Recovery				877.75			

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Monitoring Well: MW-27 (ug)

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

GENERAL INFORMATION

TOC	810.29
Well Depth	27.35
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	810.29
Well Depth	27.35
Top Screen	793.19
Bottom Screen	783.19
Bottom Well	782.94
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	22.00
Top sample	788.29
Bottom sample	784.29
Turbidity(NTU)	8.28

Date	Time	Water Level	Water Elevation	Notes
10/2/2024	7:28	11.64	798.65	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		8.28
Appendix I	Metals	150	150		8.28
Appendix I	VOC	240	240		8.28
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental		250			
Supplemental		1 - qt			
Total			400	0	

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

		2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
TOC	810.29								
Well Depth	27.35	Before purging	10/2/2024	7:28	11.64	798.65		0.0	
		After purging				810.29			
		Top of Screen after construction				793.19			
						5.46	feet above (+) or below (-) top screen		
		Bottom of Well after construction				782.94			
		Bottom of Well	10/2/2024		27.35	782.94			
						0.00	feet sedimentation		
		Before Sampling				810.29			
		Recovery				810.29			
		Recovery				810.29			
		Recovery				810.29			
		Recovery				810.29			

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Monitoring Well: MW-28 (ug)

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

GENERAL INFORMATION

TOC	833.99
Well Depth	51.75
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	833.99
Well Depth	51.75
Top Screen	792.49
Bottom Screen	782.49
Bottom Well	782.24
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	
Top sample	833.99
Bottom sample	829.99
Turbidity(NTU)	

Date	Time	Water Level	Water Elevation	Notes
10/2/2024			833.99	

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			0.00
Appendix I	Metals	150			0.00
Appendix I	VOC	240			0.00
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental		250			
Supplemental		1 - qt			
Total			0	0	

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

		2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
TOC	833.99	Before purging	10/2/2024	0:00	0.00	833.99		0.0	
Well Depth	51.75	After purging				833.99			
		Top of Screen after construction				792.49			
						41.50	feet above (+) or below (-) top screen		
		Bottom of Well after construction				782.24			
		Bottom of Well	10/2/2024			833.99			
						51.75	feet sedimentation		
		Before Sampling				833.99			
		Recovery				833.99			
		Recovery				833.99			
		Recovery				833.99			
		Recovery				833.99			

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Monitoring Well: MW-7 (ug)

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

GENERAL INFORMATION

TOC	926.25
Well Depth	67.70
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	926.25
Well Depth	67.70
Top Screen	868.55
Bottom Screen	858.55
Bottom Well	858.55
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	60.00
Top sample	866.25
Bottom sample	862.25
Turbidity(NTU)	3.45

Date	Time	Water Level	Water Elevation	Notes
10/2/2024	8:16	21.22	905.03	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		3.45
Appendix I	Metals	150	150		3.45
Appendix I	VOC	240	240		3.45
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental		250			
Supplemental		1 - qt			
Total			400	0	

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

TOC	926.25	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	67.70	Before purging	10/2/2024	8:16	21.22	905.03		0.0	
		After purging				833.99			
		Top of Screen after construction				868.55			
						36.48	feet above (+) or below (-) top screen		
		Bottom of Well after construction				858.55			
		Bottom of Well	10/2/2024		67.70	858.55			
						0.00	feet sedimentation		
		Before Sampling				833.99			
		Recovery				833.99			
		Recovery				833.99			
		Recovery				833.99			
		Recovery				833.99			

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Monitoring Well: AW-9 (dg)

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

GENERAL INFORMATION

TOC	907.49
Well Depth	25.45
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	907.49
Well Depth	25.45
Top Screen	897.04
Bottom Screen	882.04
Bottom Well	882.04
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	20.00
Top sample	887.49
Bottom sample	883.49
Turbidity(NTU)	23.51

roots

Date	Time	Water Level	Water Elevation	Notes
10/2/2024	9:40	13.61	893.88	

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		23.51
Appendix I	Metals	150	150		23.51
Appendix I	VOC	240	240		23.51
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental		250			
Supplemental		1 - qt			
Total			400	0	

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

TOC	907.49	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	25.45	Before purging	10/2/2024	9:40	13.61	893.88		0.0	
		After purging				907.49			
		Top of Screen after construction				897.04			
						-3.16	feet above (+) or below (-) top screen		
		Bottom of Well after construction				882.04			
		Bottom of Well	10/2/2024		25.45	882.04			
						0.00	feet sedimentation		
		Before Sampling				907.49			
		Recovery				907.49			
		Recovery				907.49			
		Recovery				907.49			
		Recovery				907.49			

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Monitoring Well: AW-1

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

GENERAL INFORMATION

TOC	820.05
Well Depth	18.80
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	820.05
Well Depth	18.80
Top Screen	811.60
Bottom Screen	801.60
Bottom Well	801.25
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	14.80
Top sample	805.25
Bottom sample	801.25
Turbidity(NTU)	82.46

Date	Time	Water Level	Water Elevation	Notes
10/2/2024	11:29	16.28	803.77	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		82.46
Appendix I	Metals	150	150		82.46
Appendix I	VOC	240	240		82.46
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental		250			
Supplemental		1 - qt			
Total			400	0	

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

TOC	820.05	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	18.80	Before purging	10/2/2024	11:29	16.28	803.77		0.0	
		After purging				820.05			
		Top of Screen after construction				811.60			
						-7.83	feet above (+) or below (-) top screen		
		Bottom of Well after construction				801.25			
		Bottom of Well	10/2/2024		18.80	801.25			
						0.00	feet sedimentation		
		Before Sampling				820.05			
		Recovery				820.05			
		Recovery				820.05			
		Recovery				820.05			
		Recovery				820.05			

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Monitoring Well: MW-41

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

GENERAL INFORMATION

TOC	857.85
Well Depth	30.35
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	857.85
Well Depth	30.35
Top Screen	837.85
Bottom Screen	827.85
Bottom Well	827.50
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	24.00
Top sample	833.85
Bottom sample	829.85
Turbidity(NTU)	5.37

Date	Time	Water Level	Water Elevation	Notes
10/2/2024	11:49	16.13	841.72	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		5.37
Appendix I	Metals	150	150		5.37
Appendix I	VOC	240	240		5.37
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental		250			
Supplemental		1 - qt			
Total			400	0	

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

TOC	857.85	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	30.35	Before purging	10/2/2024	11:49	16.13	841.72		0.0	
		After purging				857.85			
		Top of Screen after construction				837.85			
						3.87	feet above (+) or below (-) top screen		
		Bottom of Well after construction				827.50			
		Bottom of Well	10/2/2024		30.35	827.50			
						0.00	feet sedimentation		
		Before Sampling				857.85			
		Recovery				857.85			
		Recovery				857.85			
		Recovery				857.85			
		Recovery				857.85			

Appendix C

Summary Tables

Table 1

Analytical Data Summary for AW-1

Constituents	Units	10/20/2014	6/22/2015	6/23/2015	11/12/2015	4/11/2016	4/12/2016	3/11/2024	10/2/2024
1,1,1,2-tetrachloroethane	ug/L	<1						<1	<1
1,1,1-trichloroethane	ug/L	<1						<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1						<1	<1
1,1,2-trichloroethane	ug/L	<1						<1	<1
1,1-dichloroethane	ug/L	<1						<1	<1
1,1-dichloroethene	ug/L	<2						<1	<1
1,2,3-trichloropropane	ug/L	<1						<1	<1
1,2-dibromo-3-chloropropane	ug/L	<.12						<5.00	<5.00
1,2-dibromoethane	ug/L	<.13						<1.00	<1.00
1,2-dichlorobenzene	ug/L	<1						<1	<1
1,2-dichloroethane	ug/L	<1						<1	<1
1,2-dichloropropane	ug/L	<1						<1	<1
1,4-dichlorobenzene	ug/L	<1						<1	<1
2-butanone	ug/L	<10						<10	<10
2-hexanone	ug/L	<10						<5	<5
4-methyl-2-pentanone	ug/L	<10						<5	<5
Acetone	ug/L	<10						<10	<10
Acrylonitrile	ug/L	<10						<5	<5
Ammonia as n	mg/L			<.2 *	<.2 *	<.2	<.2		
Antimony, total	ug/L	<6						<2	<2
Arsenic, total	ug/L	3.81			<10.00		<2.00	<4.00	8.70
Barium, total	ug/L	637						361	413
Benzene	ug/L	<.5						<1.0	<1.0
Beryllium, total	ug/L	2.18						<4.00	<4.00
Bicarbonate alkalinity	mg/L as CaCO3			207 *	395 *				
Bromochloromethane	ug/L	<5						<1	<1
Bromodichloromethane	ug/L	<1						<1	<1
Bromoform	ug/L	<5						<1	<1
Bromomethane	ug/L	<4						<1	<1
Cadmium, total	ug/L	1.52						<.80	<.80
Calcium, total	mg/L			67.5 *	119.0 *				
Carbon disulfide	ug/L	<1						<1	<1
Carbon tetrachloride	ug/L	<2						<1	<1
Carbonate alkalinity	mg/L as CaCO3			<5 *	<5 *				
Chloride	mg/L			8.04 *	13.10 *				
Chlorobenzene	ug/L	<1						<1	<1
Chloroethane	ug/L	<4						<1	<1
Chloroform	ug/L	<1						<1	<1
Chloromethane	ug/L	<3						<1	<1
Chromium, total	ug/L	<5						<8	<8
Cis-1,2-dichloroethene	ug/L	<1						<1	<1
Cis-1,3-dichloropropene	ug/L	<5						<1	<1
Cobalt, total	ug/L	12.20			2.47		<.80	10.00	4.00
Copper, total	ug/L	49.9						<4.0	<4.0
Dibromochloromethane	ug/L	<5						<1	<1
Dibromomethane	ug/L							<1	<1
Ethylbenzene	ug/L	<1						<1	<1
Iodomethane	ug/L	<10						<1	<1
Iron, total	ug/L			363 *	1100 *	269	269		
Lead, total	ug/L	28.10		1.23				<4.00	<4.00
Magnesium, total	mg/L			19.1 *	38.0 *				
Manganese, total	ug/L			59.6 *	400.0 *	37.3	37.3		
Methylene bromide	ug/L	<1							
Methylene chloride	ug/L	<5						<5	<5
Nickel, total	ug/L	<50.0						7.2	4.3
Nitrate as n	mg/L			<.1 *	<.1 *	<.1	<.1		
Potassium, total	mg/L			<1.0 *	1.2 *				
Selenium, total	ug/L	<5						<4	<4
Silver, total	ug/L	<20						<4	<4
Sodium, total	mg/L			8.44 *	9.89 *				
Styrene	ug/L	<1						<1	<1
Sulfate	mg/L			37.6 *	41.4 *	22.6	22.6		
Tetrachloroethene	ug/L	<1						<1	<1
Thallium, total	ug/L	<2						<2	<2
Toluene	ug/L	<1						<1	<1
Total organic carbon	mg/L			2.99 *	3.31 *	1.74	1.74		
Total suspended solids	mg/L	3830.0 *	121.0	87.8 *	1770.0 *	66.4	66.4		
Trans-1,2-dichloroethene	ug/L	<1						<1	<1
Trans-1,3-dichloropropene	ug/L	<5						<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<10						<5	<5
Trichloroethene	ug/L	<1						<1	<1
Trichlorofluoromethane	ug/L	<4						<1	<1
Vanadium, total	ug/L	<50						<20	<20
Vinyl acetate	ug/L	<10						<5	<5
Vinyl chloride	ug/L	<1						<1	<1
Xylenes, total	ug/L	<3						<2	<2
Zinc, total	ug/L	82.7						<20.0	<20.0

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

Table 2

Analytical Data Summary for AW-2

Constituents	Units	10/20/2014	6/22/2015	6/23/2015	11/12/2015	4/11/2016	9/16/2016	3/15/2017
(3 4)-methylphenol	ug/L							<8
1,1,1,2-tetrachloroethane	ug/L	<1		<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1		<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1		<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1		<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1		<1	<1	<1	<1	<1
1,1-dichloroethene	ug/L	<2		<2	<2	<2	<1	<1
1,1-dichloropropene	ug/L							<1
1,2,3-trichloropropane	ug/L	<1		<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene	ug/L							<8
1,2,4-trichlorobenzene	ug/L							<1
1,2-dibromo-3-chloropropane	ug/L	<.12		<.50	<.50	<.50	<1.00	<1.00
1,2-dibromoethane	ug/L	<.13		<.13	<.13	<.13	<1.00	<1.00
1,2-dichlorobenzene	ug/L	<1		<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1		<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1		<1	<1	<1	<1	<1
1,2-dinitrobenzene	ug/L							<8
1,3,5-trinitrobenzene	ug/L							<8
1,3-dichlorobenzene	ug/L							<1
1,3-dichloropropane	ug/L							<1
1,3-dinitrobenzene	ug/L							<8
1,4-dichlorobenzene	ug/L	<1		<1	<1	<1	<1	<1
1,4-naphthoquinone	ug/L							<8
1,4-phenylenediamine	ug/L							<8
1-naphthylamine	ug/L							<8
2,2-dichloropropane	ug/L							<1
2,3,4,6-tetrachlorophenol	ug/L							<8
2,4,5-t	ug/L							<.5
2,4,5-tp (silvex)	ug/L							<.5
2,4,5-trichlorophenol	ug/L							<8
2,4,6-trichlorophenol	ug/L							<8
2,4-d	ug/L							<2
2,4-dichlorophenol	ug/L							<8
2,4-dimethylphenol	ug/L							<8
2,4-dinitrophenol	ug/L							<8
2,4-dinitrotoluene	ug/L							<8
2,6-dichlorophenol	ug/L							<8
2,6-dinitrotoluene	ug/L							<8
2-acetylaminofluorene	ug/L							<8
2-butanone	ug/L	<10.0		<10.0	<10.0	<10.0	<5.0	<5.0
2-chloronaphthalene	ug/L							<8
2-chlorophenol	ug/L							<8
2-hexanone	ug/L	<10		<10	<10	<10	<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	ug/L	<10		<10	<10	<10	<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
Acetonitrile	ug/L							<10
Acetophenone	ug/L							<8
Acrolein	ug/L							<10
Acrylonitrile	ug/L	<10		<10	<10	<10	<5	<5
Aldrin	ug/L							<.05
Allyl chloride	ug/L							<1
Alpha-bhc	ug/L							<.05
Ammonia as n	mg/L			.391 *	.261 *	<.200 *		

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

Table 2

Analytical Data Summary for AW-2

Constituents	9/27/2017	12/13/2017	3/14/2018	6/5/2018	9/12/2018	4/1/2019	9/12/2019	5/6/2020	9/3/2020
(3 4)-methylphenol									
1,1,1,2-tetrachloroethane	<1		<1		<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1		<1		<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1		<1		<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1		<1		<1	<1	<1	<1	<1
1,1-dichloroethane	<1		<1		<1	<1	<1	<1	<1
1,1-dichloroethene	<1		<1		<1	<1	<1	<1	<1
1,1-dichloropropene									
1,2,3-trichloropropane	<1		<1		<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene									
1,2,4-trichlorobenzene									
1,2-dibromo-3-chloropropane	<1.00		<1.00		<1.00	<1.00	<1.00	<5.00	<5.00
1,2-dibromoethane	<1.00		<1.00		<1.00	<1.00	<1.00	<1.00	<1.00
1,2-dichlorobenzene	<1		<1		<1	<1	<1	<1	<1
1,2-dichloroethane	<1		<1		<1	<1	<1	<1	<1
1,2-dichloropropane	<1		<1		<1	<1	<1	<1	<1
1,2-dinitrobenzene									
1,3,5-trinitrobenzene									
1,3-dichlorobenzene									
1,3-dichloropropane									
1,3-dinitrobenzene									
1,4-dichlorobenzene	<1		<1		<1	<1	<1	<1	<1
1,4-naphthoquinone									
1,4-phenylenediamine									
1-naphthylamine									
2,2-dichloropropane									
2,3,4,6-tetrachlorophenol									
2,4,5-t									
2,4,5-tp (silvex)									
2,4,5-trichlorophenol									
2,4,6-trichlorophenol									
2,4-d									
2,4-dichlorophenol									
2,4-dimethylphenol									
2,4-dinitrophenol									
2,4-dinitrotoluene									
2,6-dichlorophenol									
2,6-dinitrotoluene									
2-acetylaminofluorene									
2-butanone	<5.0		<5.0		<5.0	<5.0	<5.0	<5.0	<5.0
2-chloronaphthalene									
2-chlorophenol									
2-hexanone	<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	<5		<5		<5	<5	<5	<5	<5
4-nitroaniline									
4-nitrophenol									
5-nitro-o-toluidine									
7,12-dimethylbenz [a] anthracene									
Acenaphthene									
Acenaphthylene									
Acetone	14.4		<10.0		<10.0	<10.0	<10.0	<10.0	<10.0
Acetonitrile									
Acetophenone									
Acrolein									
Acrylonitrile	<5		<5		<5	<5	<5	<5	<5
Aldrin									
Allyl chloride									
Alpha-bhc									
Ammonia as n									

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

Table 2

Analytical Data Summary for AW-2

Constituents	3/30/2021	9/8/2021	3/31/2022	8/30/2022	3/7/2023	9/28/2023	3/11/2024	10/2/2024
(3 4)-methylphenol			<8					
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloropropene			<1					
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene			<8					
1,2,4-trichlorobenzene			<1					
1,2-dibromo-3-chloropropane	<5.00	<5.00	<1.00	<5.00	<5.00	<5.00	<5.00	<5.00
1,2-dibromoethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dinitrobenzene			<8					
1,3,5-trinitrobenzene			<8					
1,3-dichlorobenzene			<1					
1,3-dichloropropane			<1					
1,3-dinitrobenzene			<8					
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1
1,4-naphthoquinone			<8					
1,4-phenylenediamine			<8					
1-naphthylamine			<8					
2,2-dichloropropane			<1					
2,3,4,6-tetrachlorophenol			<8					
2,4,5-t			<.5					
2,4,5-tp (silvex)			<.5					
2,4,5-trichlorophenol			<8					
2,4,6-trichlorophenol			<8					
2,4-d			<2					
2,4-dichlorophenol			<8					
2,4-dimethylphenol			<8					
2,4-dinitrophenol			<8					
2,4-dinitrotoluene			<8					
2,6-dichlorophenol			<8					
2,6-dinitrotoluene			<8					
2-acetylaminofluorene			<8					
2-butanone	<5.0	8.5	<5.0	<10.0	<10.0	<10.0	<10.0	<10.0
2-chloronaphthalene			<8					
2-chlorophenol			<8					
2-hexanone	<5	<5	<5	<5	<5	<5	<5	<5
2-methylnaphthalene			<8					
2-methylphenol (o-cresol)			<8					
2-naphthylamine			<8					
2-nitroaniline			<8					
2-nitrophenol			<8					
3,3´-dichlorobenzidine			<8					
3,3-dimethylbenzidine			<8					
3-methylcholanthrene			<8					
3-nitroaniline			<8					
4,4`-ddd			<.05					
4,4`-dde			<.05					
4,4`-ddt			<.05					
4,6-dinitro-2-methylphenol			<8					
4-aminobiphenyl			<8					
4-bromophenyl phenyl ether			<8					
4-chloro-3-methylphenol			<8					
4-chloroaniline			<8					
4-chlorophenyl phenyl ether			<8					
4-methyl-2-pentanone	<5	<5	<5	<5	<5	<5	<5	<5
4-nitroaniline			<8					
4-nitrophenol			<8					
5-nitro-o-toluidine			<8					
7,12-dimethylbenz [a] anthracene			<8					
Acenaphthene			<8					
Acenaphthylene			<8					
Acetone	<10.0	138.0	<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
Aldrin			<.05					
Allyl chloride			<1					
Alpha-bhc			<.05					
Ammonia as n								

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

Table 2

Analytical Data Summary for AW-2

Constituents	Units	10/20/2014	6/22/2015	6/23/2015	11/12/2015	4/11/2016	9/16/2016	3/15/2017
Anthracene	ug/L							<8
Antimony, total	ug/L	<6		<1	<1	<1	<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	<1.0		43.2	48.4	62.0	50.5	49.4
Azobenzene	ug/L							<8
Barium, total	ug/L	893		188	281	213	122	113
Benzene	ug/L	1.870		1.950	.961	1.020	<1.000	<1.000
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	8.54		<1.00	<1.00	<1.00	<4.00	<4.00
Beta-bhc	ug/L							<.05
Bicarbonate alkalinity	mg/L as CaCO3			671 *	589 *			
Bis (2-chloroethoxy) methane	ug/L							<8
Bis(2-chloroethyl) ether	ug/L							<8
Bis(2-ethylhexyl) phthalate	ug/L							<8
Bis[2-chloroisopropyl]ether	ug/L							<8
Bromochloromethane	ug/L	<5		<5	<5	<5	<1	<1
Bromodichloromethane	ug/L	<1		<1	<1	<1	<1	<1
Bromoform	ug/L	<5		<5	<5	<5	<1	<1
Bromomethane	ug/L	<4		<4	<4	<4	<1	<1
Butyl benzyl phthalate	ug/L							<8
Cadmium, total	ug/L	1.39		<.50	<.50	1.42	<.80	<.80
Calcium, total	mg/L			179 *	154 *			
Carbon disulfide	ug/L	<1		<5	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<2		<2	<2	<2	<1	<1
Carbonate alkalinity	mg/L as CaCO3			<5 *	<5 *			
Chlordane	ug/L							<.1
Chloride	mg/L			5.94 *	3.86 *			
Chlorobenzene	ug/L	<1		<1	<1	<1	<1	<1
Chlorobenzilate	ug/L							<8
Chloroethane	ug/L	<4		<1	<4	<4	<1	<1
Chloroform	ug/L	<1		<1	<1	<1	<1	<1
Chloromethane	ug/L	<3		<3	<3	<3	<1	<1
Chloroprene	ug/L							<1
Chromium, total	ug/L	<20		<5	<5	<5	<8	<8
Chrysene	ug/L							<8
Cis-1,2-dichloroethene	ug/L	<1		<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L	<5		<5	<5	<5	<1	<1
Cobalt, total	ug/L	99.8		27.2	27.2	22.8	18.4	16.9
Copper, total	ug/L	<20.00		<2.00	2.88	11.00	<4.00	<4.00
Cyanide	mg/L							.009
Delta-bhc	ug/L							<.05
Diallate	ug/L							<8
Dibenzo(a,h)anthracene	ug/L							<8
Dibenzofuran	ug/L							<8
Dibromochloromethane	ug/L	<5		<5	<5	<5	<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
Disulfoton	ug/L							<.4
Endosulfan i	ug/L							<.05
Endosulfan ii	ug/L							<.05
Endosulfan sulfate	ug/L							<.05
Endrin	ug/L							<.05
Endrin aldehyde	ug/L							<.05
Ethyl methacrylate	ug/L							<10
Ethyl methanesulfonate	ug/L							<8
Ethylbenzene	ug/L	<1		<1	<1	<1	<1	<1
Famphur	ug/L							<.4
Fluoranthene	ug/L							<8

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

Table 2

Analytical Data Summary for AW-2

Constituents	9/27/2017	12/13/2017	3/14/2018	6/5/2018	9/12/2018	4/1/2019	9/12/2019	5/6/2020	9/3/2020
Anthracene									
Antimony, total	<2		<2		<2	<2	<2	<2	<2
Arochlor 1016									
Arochlor 1221									
Arochlor 1232									
Arochlor 1242									
Arochlor 1248									
Arochlor 1254									
Arochlor 1260									
Arsenic, total	37.4		54.5	50.2	46.8	66.6	62.9	69.2	55.7
Azobenzene									
Barium, total	117		211		214	137	101	118	122
Benzene	<1.000		<1.000		1.000	<1.000	<1.000	<1.000	<1.000
Benzo(a)anthracene									
Benzo(a)pyrene									
Benzo(b)fluoranthene									
Benzo(g,h,i)perylene									
Benzo(k)fluoranthene									
Benzyl alcohol									
Beryllium, total	<4.00		<4.00		<4.00	<4.00	<4.00	<4.00	<4.00
Beta-bhc									
Bicarbonate alkalinity									
Bis (2-chloroethoxy) methane									
Bis(2-chloroethyl) ether									
Bis(2-ethylhexyl) phthalate									
Bis[2-chloroisopropyl]ether									
Bromochloromethane	<1		<1		<1	<1	<1	<1	<1
Bromodichloromethane	<1		<1		<1	<1	<1	<1	<1
Bromoform	<1		<1		<1	<1	<1	<1	<1
Bromomethane	<1		<1		<1	<1	<1	<1	<1
Butyl benzyl phthalate									
Cadmium, total	<.80		<.80		<.80	<.80	<.80	<.80	<.80
Calcium, total									
Carbon disulfide	<1		<1		<1	<1	<1	<1	<1
Carbon tetrachloride	<1		<1		<1	<1	<1	<1	<1
Carbonate alkalinity									
Chlordane									
Chloride									
Chlorobenzene	<1		<1		<1	<1	<1	<1	<1
Chlorobenzilate									
Chloroethane	<1		<1		<1	<1	<1	<1	<1
Chloroform	<1		<1		<1	<1	<1	<1	<1
Chloromethane	<1		<1		<1	<1	<1	<1	<1
Chloroprene									
Chromium, total	<8		<8		<8	<8	<8	<8	<8
Chrysene									
Cis-1,2-dichloroethene	<1		<1		<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1		<1		<1	<1	<1	<1	<1
Cobalt, total	15.2		28.2		10.1	9.6	10.1	7.7	10.6
Copper, total	7.50		<4.00		<4.00	<4.00	<4.00	<4.00	<4.00
Cyanide	<.005				<.005	<.005	<.005	<.005	
Delta-bhc									
Diallate									
Dibenzo(a,h)anthracene									
Dibenzofuran									
Dibromochloromethane	<1		<1		<1	<1	<1	<1	<1
Dibromomethane	<1		<1		<1	<1	<1	<1	<1
Dichlorodifluoromethane									
Dieldrin									
Diethyl phthalate									
Dimethoate									
Dimethylphthalate									
Di-n-butyl phthalate									
Di-n-octyl phthalate									
Dinoseb									
Diphenylamine									
Disulfoton									
Endosulfan i									
Endosulfan ii									
Endosulfan sulfate									
Endrin									
Endrin aldehyde									
Ethyl methacrylate									
Ethyl methanesulfonate									
Ethylbenzene	<1		<1		<1	<1	<1	<1	<1
Famphur									
Fluoranthene									

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

Table 2

Analytical Data Summary for AW-2

Constituents	3/30/2021	9/8/2021	3/31/2022	8/30/2022	3/7/2023	9/28/2023	3/11/2024	10/2/2024
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	38.3	26.4	26.7	41.7	40.5	36.4	27.7	48.1
Azobenzene			<8					
Barium, total	126	145	182	120	133	150	138	141
Benzene	<1.000	1.400	<1.000	<1.000	<1.000	<1.000	<1.000	<1.000
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	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00
Beta-bhc			<.05					
Bicarbonate alkalinity								
Bis (2-chloroethoxy) methane			<8					
Bis(2-chloroethyl) ether			<8					
Bis(2-ethylhexyl) phthalate			<6					
Bis[2-chloroisopropyl]ether			<8					
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate			<8					
Cadmium, total	<.80	<.80	<.80	<.80	<.80	<.80	<.80	<.80
Calcium, total								
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1
Carbonate alkalinity								
Chlordane			<.1					
Chloride								
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzilate			<8					
Chloroethane	<1	1	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1
Chloroprene			<1					
Chromium, total	<8	<8	<8	<8	<8	<8	<8	<8
Chrysene			<8					
Cis-1,2-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	8.8	10.0	8.9	12.0	12.5	5.4	14.2	13.1
Copper, total	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00
Cyanide			<.005					
Delta-bhc			<.05					
Diallate			<8					
Dibenzo(a,h)anthracene			<8					
Dibenzofuran			<8					
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane			<1					
Dieldrin			<.05					
Diethyl phthalate			<8					
Dimethoate			<.4					
Dimethylphthalate			<8					
Di-n-butyl phthalate			<8					
Di-n-octyl phthalate			<8					
Dinoseb			<.5					
Diphenylamine			<8					
Disulfoton			<.4					
Endosulfan i			<.05					
Endosulfan ii			<.05					
Endosulfan sulfate			<.05					
Endrin			<.05					
Endrin aldehyde			<.05					
Ethyl methacrylate			<10					
Ethyl methanesulfonate			<8					
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1
Famphur			<.4					
Fluoranthene			<8					

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

Table 2

Analytical Data Summary for AW-2

Constituents	Units	10/20/2014	6/22/2015	6/23/2015	11/12/2015	4/11/2016	9/16/2016	3/15/2017
Fluorene	ug/L							<8
Gamma-bhc [lindane]	ug/L							<.05
Heptachlor	ug/L							<.05
Heptachlor epoxide	ug/L							<.05
Hexachlorobenzene	ug/L							<.05
Hexachlorobutadiene	ug/L							<8
Hexachlorocyclopentadiene	ug/L							<8
Hexachloroethane	ug/L							<8
Hexachloropropene	ug/L							<8
Indeno(1,2,3-cd)pyrene	ug/L							<8
Iodomethane	ug/L	<10		<10	<10	<10	<1	<1
Iron, total	ug/L			50600 *	50100 *	59900 *		
Isobutanol	mg/L							<1
Isodrin	ug/L							<8
Isophorone	ug/L							<8
Isosafrole	ug/L							<8
Kepone	ug/L							<8
Lead, total	ug/L	6.78		4.81	7.81	9.73	<4.00	<4.00
Magnesium, total	mg/L			73.6 *	75.6 *			
Manganese, total	ug/L			35000 *	36100 *	31900 *		
Mercury, total	ug/L							<.5
Methacrylonitrile	ug/L							<1
Methapyrilene	ug/L							<8
Methoxychlor	ug/L							<.05
Methyl methacrylate	ug/L							<1
Methyl methanesulfonate	ug/L							<8
Methyl parathion	ug/L							<.4
Methylene bromide	ug/L	<1		<1	<1	<1		
Methylene chloride	ug/L	<5		<5	<5	<5	<5	<5
Naphthalene	ug/L							<8
Nickel, total	ug/L	233.0		22.6	49.9	21.2	13.6	13.9
Nitrate as n	mg/L			<.10 *	<.10 *	1.17 *		
Nitrobenzene	ug/L							<8
N-nitrosodiethylamine	ug/L							<8
N-nitrosodimethylamine	ug/L							<8
N-nitrosodi-n-butylamine	ug/L							<8
N-nitroso-di-n-propylamine	ug/L							<8
N-nitrosodiphenylamine	ug/L							<8
N-nitrosomethylethylamine	ug/L							<8
N-nitrosopiperidine	ug/L							<8
N-nitrosopyrrolidine	ug/L							<8
O,o,o-triethyl phosphorothioate	ug/L							<.4
O-toluidine	ug/L							<8
P-(dimethylamino)azobenzene	ug/L							<8
Parathion	ug/L							<.4
Pentachlorobenzene	ug/L							<8
Pentachloronitrobenzene (pcnb)	ug/L							<8
Pentachlorophenol	ug/L							<8
Phenacetin	ug/L							<8
Phenanthrene	ug/L							<8
Phenol	ug/L							<8
Phorate	ug/L							<.4
Potassium, total	mg/L			<1 *	<1 *			
Pronamide	ug/L							<8
Propionitrile	ug/L							<10
Pyrene	ug/L							<8
Safrole	ug/L							<8
Selenium, total	ug/L	<5		<5	<5	<5	<4	<4
Silver, total	ug/L	<20		<1	<1	<1	<4	<4
Sodium, total	mg/L			14.1 *	14.2 *			
Styrene	ug/L	<1		<1	<1	<1	<1	<1
Sulfate	mg/L			136 *	121 *	144 *		
Sulfide	mg/L							<1.0
Tetrachloroethene	ug/L	<1		<1	<1	<1	<1	<1
Thallium, total	ug/L	<2		<2	<2	<2	<4	<4
Thionazin	ug/L							<.4
Tin, total	ug/L							<20
Toluene	ug/L	<1		<1	<1	<1	<1	<1
Total organic carbon	mg/L			6.00 *	7.09 *	5.26 *		
Total suspended solids	mg/L	6720 *	852	1264 *	2180 *	2120 *	107	4090
Toxaphene	ug/L							<.2
Trans-1,2-dichloroethene	ug/L	<1		<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<5		<5	<5	<5	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<10		<10	<10	<10	<5	<5
Trichloroethene	ug/L	<1		<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<4		<4	<4	<4	<1	<1
Vanadium, total	ug/L	131.00		8.38	15.00	11.20	<20.00	<20.00

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

Table 2

Analytical Data Summary for AW-2

Constituents	9/27/2017	12/13/2017	3/14/2018	6/5/2018	9/12/2018	4/1/2019	9/12/2019	5/6/2020	9/3/2020
Fluorene									
Gamma-bhc [lindane]									
Heptachlor									
Heptachlor epoxide									
Hexachlorobenzene									
Hexachlorobutadiene									
Hexachlorocyclopentadiene									
Hexachloroethane									
Hexachloropropene									
Indeno(1,2,3-cd)pyrene									
Iodomethane	<1		<1		<1	<1	<1	<1	<1
Iron, total									
Isobutanol									
Isodrin									
Isophorone									
Isosafrole									
Kepone									
Lead, total	<4.00		<4.00		<4.00	<4.00	<4.00	<4.00	5.00
Magnesium, total									
Manganese, total									
Mercury, total									
Methacrylonitrile									
Methapyrilene									
Methoxychlor									
Methyl methacrylate									
Methyl methanesulfonate									
Methyl parathion									
Methylene bromide									
Methylene chloride	<5		<5		<5	<5	<5	<5	<5
Naphthalene									
Nickel, total	14.2		28.9	14.0	7.0	6.2	8.6	5.9	10.2
Nitrate as n									
Nitrobenzene									
N-nitrosodiethylamine									
N-nitrosodimethylamine									
N-nitrosodi-n-butylamine									
N-nitroso-di-n-propylamine									
N-nitrosodiphenylamine									
N-nitrosomethylethylamine									
N-nitrosopiperidine									
N-nitrosopyrrolidine									
O,o,o-triethyl phosphorothioate									
O-toluidine									
P-(dimethylamino)azobenzene									
Parathion									
Pentachlorobenzene									
Pentachloronitrobenzene (pcnb)									
Pentachlorophenol									
Phenacetin									
Phenanthrene									
Phenol									
Phorate									
Potassium, total									
Pronamide									
Propionitrile									
Pyrene									
Safrole									
Selenium, total	<4		<4		<4	<4	<4	<4	<4
Silver, total	<4		<4		<4	<4	<4	<4	<4
Sodium, total									
Styrene	<1		<1		<1	<1	<1	<1	<1
Sulfate									
Sulfide									
Tetrachloroethene	<1		<1		<1	<1	<1	<1	<1
Thallium, total	<4		<4		<4	<2	<2	<2	<2
Thionazin									
Tin, total									
Toluene	<1		<1		<1	<1	<1	<1	<1
Total organic carbon									
Total suspended solids									
Toxaphene									
Trans-1,2-dichloroethene	<1		<1		<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1		<1		<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5		<5		<5	<5	<5	<5	<5
Trichloroethene	<1		<1		<1	<1	<1	<1	<1
Trichlorofluoromethane	<1		<1		<1	<1	<1	<1	<1
Vanadium, total	<20.00		<20.00		<20.00	<20.00	<20.00	<20.00	<20.00

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

Table 2

Analytical Data Summary for AW-2

Constituents	3/30/2021	9/8/2021	3/31/2022	8/30/2022	3/7/2023	9/28/2023	3/11/2024	10/2/2024
Fluorene			<8					
Gamma-bhc [lindane]			<.05					
Heptachlor			<.05					
Heptachlor epoxide			<.05					
Hexachlorobenzene			<.05					
Hexachlorobutadiene			<8					
Hexachlorocyclopentadiene			<8					
Hexachloroethane			<8					
Hexachloropropene			<8					
Indeno(1,2,3-cd)pyrene			<8					
Iodomethane	<1	<1	<2	<1	<1	<1	<1	<1
Iron, total								
Isobutanol			<1					
Isodrin			<8					
Isophorone			<8					
Isosafrole			<8					
Kepone			<8					
Lead, total	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00
Magnesium, total								
Manganese, total								
Mercury, total			<.5					
Methacrylonitrile			<1					
Methapyrilene			<8					
Methoxychlor			<.05					
Methyl methacrylate			<1					
Methyl methanesulfonate			<8					
Methyl parathion			<.4					
Methylene bromide								
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene			<8					
Nickel, total	8.5	11.1	8.7	11.0	11.6	5.0	12.8	9.2
Nitrate as n								
Nitrobenzene			<8					
N-nitrosodiethylamine			<8					
N-nitrosodimethylamine			<8					
N-nitrosodi-n-butylamine			<8					
N-nitroso-di-n-propylamine			<8					
N-nitrosodiphenylamine			<8					
N-nitrosomethylethylamine			<8					
N-nitrosopiperidine			<8					
N-nitrosopyrrolidine			<8					
O,o,o-triethyl phosphorothioate			<.4					
O-toluidine			<8					
P-(dimethylamino)azobenzene			<8					
Parathion			<.4					
Pentachlorobenzene			<8					
Pentachloronitrobenzene (pcnb)			<8					
Pentachlorophenol			<8					
Phenacetin			<8					
Phenanthrene			<8					
Phenol			<8					
Phorate			<.4					
Potassium, total								
Pronamide			<8					
Propionitrile			<10					
Pyrene			<8					
Safrole			<8					
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4
Sodium, total								
Styrene	<1	<1	<1	<1	<1	<1	<1	<1
Sulfate								
Sulfide			<.2					
Tetrachloroethene	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2	<2	<2	<2	<2
Thionazin			<.4					
Tin, total			<20					
Toluene	<1	<1	<1	<1	<1	<1	<1	<1
Total organic carbon								
Total suspended solids								
Toxaphene			<.2					
Trans-1,2-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	<20.00	<20.00	<20.00	<20.00	<20.00	<20.00	<20.00	<20.00

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

Table 2

Analytical Data Summary for AW-2

Constituents	Units	10/20/2014	6/22/2015	6/23/2015	11/12/2015	4/11/2016	9/16/2016	3/15/2017
Vinyl acetate	ug/L	<10		<10	<10	<10	<5	<5
Vinyl chloride	ug/L	<1		<1	<1	<1	<1	<1
Xylenes, total	ug/L	<3		<3	<3	<3	<2	<2
Zinc, total	ug/L	161.0		22.7	64.2	27.0	<8.0	<8.0

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

Table 2

Analytical Data Summary for AW-2

Constituents	9/27/2017	12/13/2017	3/14/2018	6/5/2018	9/12/2018	4/1/2019	9/12/2019	5/6/2020	9/3/2020
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	24.8	<8.0	<8.0		31.9	49.1	<20.0	<20.0	<20.0

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

Table 2

Analytical Data Summary for AW-2

Constituents	3/30/2021	9/8/2021	3/31/2022	8/30/2022	3/7/2023	9/28/2023	3/11/2024	10/2/2024
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 3

Analytical Data Summary for AW-3

Constituents	Units	10/20/2014	6/22/2015	6/23/2015	11/12/2015	11/13/2015	4/11/2016	9/16/2016
(3 4)-methylphenol	ug/L							
1,1,1,2-tetrachloroethane	ug/L	<1		<1		<1	<1	<1
1,1,1-trichloroethane	ug/L	<1		<1		<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1		<1		<1	<1	<1
1,1,2-trichloroethane	ug/L	<1		<1		<1	<1	<1
1,1-dichloroethane	ug/L	<1.00		<1.00		<1.00	1.02	1.20
1,1-dichloroethene	ug/L	<2		<2		<2	<2	<1
1,1-dichloropropene	ug/L							
1,2,3-trichloropropane	ug/L	<1		<1		<1	<1	<1
1,2,4,5-tetrachlorobenzene	ug/L							
1,2,4-trichlorobenzene	ug/L							
1,2-dibromo-3-chloropropane	ug/L	<.12		<.50		<.50	<.50	<1.00
1,2-dibromoethane	ug/L	<.13		<.13		<.13	<.13	<1.00
1,2-dichlorobenzene	ug/L	<1		<1		<1	<1	<1
1,2-dichloroethane	ug/L	<1		<1		<1	<1	<1
1,2-dichloropropane	ug/L	<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	2.8		<1.0		<1.0	<1.0	1.9
1,4-naphthoquinone	ug/L							
1,4-phenylenediamine	ug/L							
1-naphthylamine	ug/L							
2,2-dichloropropane	ug/L							
2,3,4,6-tetrachlorophenol	ug/L							
2,4,5-t	ug/L							
2,4,5-tp (silvex)	ug/L							
2,4,5-trichlorophenol	ug/L							
2,4,6-trichlorophenol	ug/L							
2,4-d	ug/L							
2,4-dichlorophenol	ug/L							
2,4-dimethylphenol	ug/L							
2,4-dinitrophenol	ug/L							
2,4-dinitrotoluene	ug/L							
2,6-dichlorophenol	ug/L							
2,6-dinitrotoluene	ug/L							
2-acetylaminofluorene	ug/L							
2-butanone	ug/L	<10		<10		<10	<10	<5
2-chloronaphthalene	ug/L							
2-chlorophenol	ug/L							
2-hexanone	ug/L	<10		<10		<10	<10	<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	ug/L	<10		<10		<10	<10	<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
Acetonitrile	ug/L							
Acetophenone	ug/L							
Acrolein	ug/L							
Acrylonitrile	ug/L	<10		<10		<10	<10	<5
Aldrin	ug/L							
Allyl chloride	ug/L							
Alpha-bhc	ug/L							
Ammonia as n	mg/L			1.440 *		1.050 *	.535 *	

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

Table 3

Analytical Data Summary for AW-3

Constituents	3/15/2017	9/27/2017	3/14/2018	6/5/2018	9/12/2018	4/1/2019	9/12/2019	5/6/2020	9/3/2020
(3 4)-methylphenol	<8								
1,1,1,2-tetrachloroethane	<1	<1	<1		<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1		<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1		<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1		<1	<1	<1	<1	<1
1,1-dichloroethane	2.50	1.60	<1.00		<1.00	<1.00	<1.00	<1.00	<1.00
1,1-dichloroethene	<1	<1	<1		<1	<1	<1	<1	<1
1,1-dichloropropene	<1								
1,2,3-trichloropropane	<1	<1	<1		<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene	<8								
1,2,4-trichlorobenzene	<1								
1,2-dibromo-3-chloropropane	<1.00	<1.00	<1.00		<1.00	<1.00	<1.00	<5.00	<5.00
1,2-dibromoethane	<1.00	<1.00	<1.00		<1.00	<1.00	<1.00	<1.00	<1.00
1,2-dichlorobenzene	<1	<1	<1		<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1		<1	<1	<1	<1	<1
1,2-dichloropropane	<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	<1.0	1.1	3.5		4.0	2.6	<1.0	2.2	2.0
1,4-naphthoquinone	<8								
1,4-phenylenediamine	<8								
1-naphthylamine	<8								
2,2-dichloropropane	<1								
2,3,4,6-tetrachlorophenol	<8								
2,4,5-t	<.5								
2,4,5-tp (silvex)	<.5								
2,4,5-trichlorophenol	<8								
2,4,6-trichlorophenol	<8								
2,4-d	<2								
2,4-dichlorophenol	<8								
2,4-dimethylphenol	<8								
2,4-dinitrophenol	<8								
2,4-dinitrotoluene	<8								
2,6-dichlorophenol	<8								
2,6-dinitrotoluene	<8								
2-acetylaminofluorene	<8								
2-butanone	<5	<5	<5		6	<5	<5	<5	<5
2-chloronaphthalene	<8								
2-chlorophenol	<8								
2-hexanone	<5	<5	<5		<5	<5	<5	<5	<5
2-methylnaphthalene	<8								
2-methylphenol (o-cresol)	<8								
2-naphthylamine	<8								
2-nitroaniline	<8								
2-nitrophenol	<8								
3,3´-dichlorobenzidine	<8								
3,3-dimethylbenzidine	<8								
3-methylcholanthrene	<8								
3-nitroaniline	<8								
4,4`-ddd	<.05								
4,4`-dde	<.05								
4,4`-ddt	<.05								
4,6-dinitro-2-methylphenol	<8								
4-aminobiphenyl	<8								
4-bromophenyl phenyl ether	<8								
4-chloro-3-methylphenol	<8								
4-chloroaniline	<8								
4-chlorophenyl phenyl ether	<8								
4-methyl-2-pentanone	<5	<5	<5		<5	<5	<5	<5	<5
4-nitroaniline	<8								
4-nitrophenol	<8								
5-nitro-o-toluidine	<8								
7,12-dimethylbenz [a] anthracene	<8								
Acenaphthene	<8								
Acenaphthylene	<8								
Acetone	<10.0	<10.0	<10.0		<10.0	<10.0	11.4	<10.0	<10.0
Acetonitrile	<10								
Acetophenone	<8								
Acrolein	<10								
Acrylonitrile	<5	<5	<5		<5	<5	<5	<5	<5
Aldrin	<.05								
Allyl chloride	<1								
Alpha-bhc	<.05								
Ammonia as n									

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

Table 3

Analytical Data Summary for AW-3

Constituents	3/30/2021	9/8/2021	3/31/2022	8/30/2022	3/7/2023	9/28/2023	3/11/2024	10/2/2024
(3 4)-methylphenol			<8					
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
1,1-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloropropene			<1					
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene			<8					
1,2,4-trichlorobenzene			<1					
1,2-dibromo-3-chloropropane	<5.00	<5.00	<1.00	<5.00	<5.00	<5.00	<5.00	<5.00
1,2-dibromoethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<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	2.8	3.8	2.3	2.2	2.7	3.4	3.2	2.8
1,4-naphthoquinone			<8					
1,4-phenylenediamine			<8					
1-naphthylamine			<8					
2,2-dichloropropane			<1					
2,3,4,6-tetrachlorophenol			<8					
2,4,5-t			<.5					
2,4,5-tp (silvex)			<.5					
2,4,5-trichlorophenol			<8					
2,4,6-trichlorophenol			<8					
2,4-d			<2					
2,4-dichlorophenol			<8					
2,4-dimethylphenol			<8					
2,4-dinitrophenol			<8					
2,4-dinitrotoluene			<8					
2,6-dichlorophenol			<8					
2,6-dinitrotoluene			<8					
2-acetylaminofluorene			<8					
2-butanone	<5	<5	<5	<10	<10	<10	<10	<10
2-chloronaphthalene			<8					
2-chlorophenol			<8					
2-hexanone	<5	<5	<5	<5	<5	<5	<5	<5
2-methylnaphthalene			<8					
2-methylphenol (o-cresol)			<8					
2-naphthylamine			<8					
2-nitroaniline			<8					
2-nitrophenol			<8					
3,3´-dichlorobenzidine			<8					
3,3-dimethylbenzidine			<8					
3-methylcholanthrene			<8					
3-nitroaniline			<8					
4,4`-ddd			<.05					
4,4`-dde			<.05					
4,4`-ddt			<.05					
4,6-dinitro-2-methylphenol			<8					
4-aminobiphenyl			<8					
4-bromophenyl phenyl ether			<8					
4-chloro-3-methylphenol			<8					
4-chloroaniline			<8					
4-chlorophenyl phenyl ether			<8					
4-methyl-2-pentanone	<5	<5	<5	<5	<5	<5	<5	<5
4-nitroaniline			<8					
4-nitrophenol			<8					
5-nitro-o-toluidine			<8					
7,12-dimethylbenz [a] anthracene			<8					
Acenaphthene			<8					
Acenaphthylene			<8					
Acetone	<10.0	<10.0	24.4	<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
Aldrin			<.05					
Allyl chloride			<1					
Alpha-bhc			<.05					
Ammonia as n								

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

Table 3

Analytical Data Summary for AW-3

Constituents	Units	10/20/2014	6/22/2015	6/23/2015	11/12/2015	11/13/2015	4/11/2016	9/16/2016
Anthracene	ug/L							
Antimony, total	ug/L	<6		<1		<1	<1	<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	<1.0		79.6		44.9	63.9	79.2
Azobenzene	ug/L							
Barium, total	ug/L	1060		471		496	498	634
Benzene	ug/L	4.19		4.98		1.53	1.62	1.00
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	<1		<1		<1	<1	<4
Beta-bhc	ug/L							
Bicarbonate alkalinity	mg/L as CaCO3			972 *		870 *		
Bis (2-chloroethoxy) methane	ug/L							
Bis(2-chloroethyl) ether	ug/L							
Bis(2-ethylhexyl) phthalate	ug/L							
Bis[2-chloroisopropyl]ether	ug/L							
Bromochloromethane	ug/L	<5		<5		<5	<5	<1
Bromodichloromethane	ug/L	<1		<1		<1	<1	<1
Bromoform	ug/L	<5		<5		<5	<5	<1
Bromomethane	ug/L	<4		<4		<4	<4	<1
Butyl benzyl phthalate	ug/L							
Cadmium, total	ug/L	<.5		<.5		<.5	<.5	<.8
Calcium, total	mg/L			236 *		210 *		
Carbon disulfide	ug/L	<1		<5		<1	<1	<1
Carbon tetrachloride	ug/L	<2		<2		<2	<2	<1
Carbonate alkalinity	mg/L as CaCO3			<5 *		<5 *		
Chlordane	ug/L							
Chloride	mg/L			19.8 *		22.6 *		
Chlorobenzene	ug/L	<1.0		<1.0		<1.0	<1.0	<1.0
Chlorobenzilate	ug/L							
Chloroethane	ug/L	7.13		8.62		<4.00	4.73	4.60
Chloroform	ug/L	<1		<1		<1	<1	<1
Chloromethane	ug/L	<3		<3		<3	<3	<1
Chloroprene	ug/L							
Chromium, total	ug/L	<10.00		<5.00		<5.00	6.96	<8.00
Chrysene	ug/L							
Cis-1,2-dichloroethene	ug/L	2.89		3.92		2.23	1.92	1.60
Cis-1,3-dichloropropene	ug/L	<5		<5		<5	<5	<1
Cobalt, total	ug/L	42.5		14.4		15.2	24.1	8.1
Copper, total	ug/L	<20.0		<2.0		<2.0	<5.0	<4.0
Cyanide	mg/L							
Delta-bhc	ug/L							
Diallate	ug/L							
Dibenzo(a,h)anthracene	ug/L							
Dibenzofuran	ug/L							
Dibromochloromethane	ug/L	<5		<5		<5	<5	<1
Dibromomethane	ug/L							<1
Dichlorodifluoromethane	ug/L							
Dieldrin	ug/L							
Diethyl phthalate	ug/L							
Dimethoate	ug/L							
Dimethylphthalate	ug/L							
Di-n-butyl phthalate	ug/L							
Di-n-octyl phthalate	ug/L							
Dinoseb	ug/L							
Diphenylamine	ug/L							
Disulfoton	ug/L							
Endosulfan i	ug/L							
Endosulfan ii	ug/L							
Endosulfan sulfate	ug/L							
Endrin	ug/L							
Endrin aldehyde	ug/L							
Ethyl methacrylate	ug/L							
Ethyl methanesulfonate	ug/L							
Ethylbenzene	ug/L	<1.0		2.1		<1.0	<1.0	<1.0
Famphur	ug/L							
Fluoranthene	ug/L							

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

Table 3

Analytical Data Summary for AW-3

Constituents	3/15/2017	9/27/2017	3/14/2018	6/5/2018	9/12/2018	4/1/2019	9/12/2019	5/6/2020	9/3/2020
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	26.2	26.8	84.6	36.7	45.4	10.5	34.0	25.3	41.8
Azobenzene	<8								
Barium, total	303	319	396		506	145	250	215	289
Benzene	<1.00	<1.00	5.60		4.10	<1.00	1.10	1.20	<1.00
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								
Bicarbonate alkalinity									
Bis (2-chloroethoxy) methane	<8								
Bis(2-chloroethyl) ether	<8								
Bis(2-ethylhexyl) phthalate	16	<6	<6		<6	<6	<6	<6	
Bis[2-chloroisopropyl]ether	<8								
Bromochloromethane	<1	<1	<1		<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1		<1	<1	<1	<1	<1
Bromoform	<1	<1	<1		<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1		<1	<1	<1	<1	<1
Butyl benzyl phthalate	<8								
Cadmium, total	<.8	<.8	<.8		<.8	<.8	<.8	<.8	<.8
Calcium, total									
Carbon disulfide	<1	<1	<1		<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1		<1	<1	<1	<1	<1
Carbonate alkalinity									
Chlordane	<.1								
Chloride									
Chlorobenzene	1.1	<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0
Chlorobenzilate	<8								
Chloroethane	6.80	4.60	5.50		3.00	1.20	<1.00	2.50	3.90
Chloroform	<1	<1	<1		<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1		<1	<1	<1	<1	<1
Chloroprene	<1								
Chromium, total	<8.00	<8.00	<8.00		<8.00	<8.00	<8.00	<8.00	<8.00
Chrysene	<8								
Cis-1,2-dichloroethene	3.00	2.10	<1.00		<1.00	<1.00	<1.00	1.20	2.70
Cis-1,3-dichloropropene	<1	<1	<1		<1	<1	<1	<1	<1
Cobalt, total	11.6	6.0	6.5		1.2	1.0	2.0	.8	1.2
Copper, total	<4.0	<4.0	<4.0		<4.0	4.1	5.1	<4.0	<4.0
Cyanide	<.005								
Delta-bhc	<.05								
Diallate	<8								
Dibenzo(a,h)anthracene	<8								
Dibenzofuran	<8								
Dibromochloromethane	<1	<1	<1		<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1		<1	<1	<1	<1	<1
Dichlorodifluoromethane	<1								
Dieldrin	<.05								
Diethyl phthalate	<8								
Dimethoate	<.4								
Dimethylphthalate	<8								
Di-n-butyl phthalate	<8								
Di-n-octyl phthalate	<8								
Dinoseb	<.5								
Diphenylamine	<8								
Disulfoton	<.4								
Endosulfan i	<.05								
Endosulfan ii	<.05								
Endosulfan sulfate	<.05								
Endrin	<.05								
Endrin aldehyde	<.05								
Ethyl methacrylate	<10								
Ethyl methanesulfonate	<8								
Ethylbenzene	<1.0	<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0
Famphur	<.4								
Fluoranthene	<8								

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

Table 3

Analytical Data Summary for AW-3

Constituents	3/30/2021	9/8/2021	3/31/2022	8/30/2022	3/7/2023	9/28/2023	3/11/2024	10/2/2024
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	11.0	50.8	35.6	87.6	11.1	38.3	40.9	25.1
Azobenzene			<8					
Barium, total	416	560	263	399	572	373	429	308
Benzene	5.20	4.10	1.40	2.30	2.60	2.60	2.70	<1.00
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					
Bicarbonate alkalinity								
Bis (2-chloroethoxy) methane			<8					
Bis(2-chloroethyl) ether			<8					
Bis(2-ethylhexyl) phthalate			<6					
Bis[2-chloroisopropyl]ether			<8					
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate			<8					
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Calcium, total								
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1
Carbonate alkalinity								
Chlordane			<.1					
Chloride								
Chlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chlorobenzilate			<8					
Chloroethane	4.50	4.20	3.00	4.20	3.50	3.80	3.00	3.00
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1
Chloroprene			<1					
Chromium, total	<8.00	<8.00	<8.00	<8.00	<8.00	<8.00	<8.00	<8.00
Chrysene			<8					
Cis-1,2-dichloroethene	4.00	<1.00	<1.00	1.10	2.90	1.20	<1.00	<1.00
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	.9	.7	.7	.5	.5	1.3	.7	.8
Copper, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	6.1	<4.0
Cyanide			<.005					
Delta-bhc			<.05					
Diallate			<8					
Dibenzo(a,h)anthracene			<8					
Dibenzofuran			<8					
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane			<1					
Dieldrin			<.05					
Diethyl phthalate			<8					
Dimethoate			<.4					
Dimethylphthalate			<8					
Di-n-butyl phthalate			<8					
Di-n-octyl phthalate			<8					
Dinoseb			<.5					
Diphenylamine			<8					
Disulfoton			<.4					
Endosulfan i			<.05					
Endosulfan ii			<.05					
Endosulfan sulfate			<.05					
Endrin			<.05					
Endrin aldehyde			<.05					
Ethyl methacrylate			<10					
Ethyl methanesulfonate			<8					
Ethylbenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Famphur			<.4					
Fluoranthene			<8					

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

Table 3

Analytical Data Summary for AW-3

Constituents	Units	10/20/2014	6/22/2015	6/23/2015	11/12/2015	11/13/2015	4/11/2016	9/16/2016
Fluorene	ug/L							
Gamma-bhc [lindane]	ug/L							
Heptachlor	ug/L							
Heptachlor epoxide	ug/L							
Hexachlorobenzene	ug/L							
Hexachlorobutadiene	ug/L							
Hexachlorocyclopentadiene	ug/L							
Hexachloroethane	ug/L							
Hexachloropropene	ug/L							
Indeno(1,2,3-cd)pyrene	ug/L							
Iodomethane	ug/L	<10		<10		<10	<10	<1
Iron, total	ug/L			77900 *		44600 *	52100 *	
Isobutanol	mg/L							
Isodrin	ug/L							
Isophorone	ug/L							
Isosafrole	ug/L							
Kepone	ug/L							
Lead, total	ug/L	<5.00		4.03		2.30	6.39	<4.00
Magnesium, total	mg/L			88.6 *		104.0 *		
Manganese, total	ug/L			14900 *		10500 *	17600 *	
Mercury, total	ug/L							
Methacrylonitrile	ug/L							
Methapyrilene	ug/L							
Methoxychlor	ug/L							
Methyl methacrylate	ug/L							
Methyl methanesulfonate	ug/L							
Methyl parathion	ug/L							
Methylene bromide	ug/L	<1		<1		<1	<1	
Methylene chloride	ug/L	<5		<1		<5	<5	<5
Naphthalene	ug/L							
Nickel, total	ug/L	183.0		22.4		54.3	76.8	15.3
Nitrate as n	mg/L			<.1 *		<.1 *	<.1 *	
Nitrobenzene	ug/L							
N-nitrosodiethylamine	ug/L							
N-nitrosodimethylamine	ug/L							
N-nitrosodi-n-butylamine	ug/L							
N-nitroso-di-n-propylamine	ug/L							
N-nitrosodiphenylamine	ug/L							
N-nitrosomethylethylamine	ug/L							
N-nitrosopiperidine	ug/L							
N-nitrosopyrrolidine	ug/L							
O,o,o-triethyl phosphorothioate	ug/L							
O-toluidine	ug/L							
P-(dimethylamino)azobenzene	ug/L							
Parathion	ug/L							
Pentachlorobenzene	ug/L							
Pentachloronitrobenzene (pcnb)	ug/L							
Pentachlorophenol	ug/L							
Phenacetin	ug/L							
Phenanthrene	ug/L							
Phenol	ug/L							
Phorate	ug/L							
Potassium, total	mg/L			<1.00 *		1.03 *		
Pronamide	ug/L							
Propionitrile	ug/L							
Pyrene	ug/L							
Safrole	ug/L							
Selenium, total	ug/L	<5		<5		<5	<5	<4
Silver, total	ug/L	<20		<1		<1	<1	<4
Sodium, total	mg/L			18.9 *		21.4 *		
Styrene	ug/L	<1		<1		<1	<1	<1
Sulfate	mg/L			34.3 *		42.3 *	30.1 *	
Sulfide	mg/L							
Tetrachloroethene	ug/L	<1		<1		<1	<1	<1
Thallium, total	ug/L	<2		<1		<1	<2	<4
Thionazin	ug/L							
Tin, total	ug/L							
Toluene	ug/L	<1		<1		<1	<1	<1
Total organic carbon	mg/L			9.21 *		6.40 *	5.97 *	
Total suspended solids	mg/L	7820 *	1310	911 *	1950	1950	657 *	126
Toxaphene	ug/L							
Trans-1,2-dichloroethene	ug/L	<1		<1		<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<5		<5		<5	<5	<1
Trans-1,4-dichloro-2-butene	ug/L	<10		<10		<10	<10	<5
Trichloroethene	ug/L	<1		<1		<1	<1	<1
Trichlorofluoromethane	ug/L	<4		<4		<4	<4	<1
Vanadium, total	ug/L	70.30		9.65		9.48	21.00	<20.00

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

Table 3

Analytical Data Summary for AW-3

Constituents	3/15/2017	9/27/2017	3/14/2018	6/5/2018	9/12/2018	4/1/2019	9/12/2019	5/6/2020	9/3/2020
Fluorene	<8								
Gamma-bhc [lindane]	<.05								
Heptachlor	<.05								
Heptachlor epoxide	<.05								
Hexachlorobenzene	<.05								
Hexachlorobutadiene	<8								
Hexachlorocyclopentadiene	<8								
Hexachloroethane	<8								
Hexachloropropene	<8								
Indeno(1,2,3-cd)pyrene	<8								
Iodomethane	<1	<1	<1		<1	<1	<1	<1	<1
Iron, total									
Isobutanol	<1								
Isodrin	<8								
Isophorone	<8								
Isosafrole	<8								
Kepone	<8								
Lead, total	<4.00	<4.00	<4.00		<4.00	<4.00	<4.00	<4.00	<4.00
Magnesium, total									
Manganese, total									
Mercury, total	<.5								
Methacrylonitrile	<1								
Methapyrilene	<8								
Methoxychlor	<.05								
Methyl methacrylate	<1								
Methyl methanesulfonate	<8								
Methyl parathion	<.4								
Methylene bromide									
Methylene chloride	<5	<5	<5		<5	<5	<5	<5	<5
Naphthalene	<8								
Nickel, total	42.6	22.8	10.7		<4.0	<4.0	4.0	4.1	6.4
Nitrate as n									
Nitrobenzene	<8								
N-nitrosodiethylamine	<8								
N-nitrosodimethylamine	<8								
N-nitrosodi-n-butylamine	<8								
N-nitroso-di-n-propylamine	<8								
N-nitrosodiphenylamine	<8								
N-nitrosomethylethylamine	<8								
N-nitrosopiperidine	<8								
N-nitrosopyrrolidine	<8								
O,o,o-triethyl phosphorothioate	<.4								
O-toluidine	<8								
P-(dimethylamino)azobenzene	<8								
Parathion	<.4								
Pentachlorobenzene	<8								
Pentachloronitrobenzene (pcnb)	<8								
Pentachlorophenol	<8								
Phenacetin	<8								
Phenanthrene	<8								
Phenol	<8								
Phorate	<.4								
Potassium, total									
Pronamide	<8								
Propionitrile	<10								
Pyrene	<8								
Safrole	<8								
Selenium, total	<4	<4	<4		<4	<4	<4	<4	<4
Silver, total	<4	<4	<4		<4	<4	<4	<4	<4
Sodium, total									
Styrene	<1	<1	<1		<1	<1	<1	<1	<1
Sulfate									
Sulfide	<1.0								
Tetrachloroethene	<1	<1	<1		<1	<1	<1	<1	<1
Thallium, total	<4	<4	<4		<4	<2	<2	<2	<2
Thionazin	<.4								
Tin, total	<20								
Toluene	<1	<1	<1		1	<1	<1	<1	<1
Total organic carbon									
Total suspended solids	1070								
Toxaphene	<.2								
Trans-1,2-dichloroethene	<1	<1	<1		<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1		<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5		<5	<5	<5	<5	<5
Trichloroethene	<1	<1	<1		<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1		<1	<1	<1	<1	<1
Vanadium, total	<20.00	<20.00	<20.00		<20.00	<20.00	<20.00	<20.00	<20.00

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

Table 3

Analytical Data Summary for AW-3

Constituents	3/30/2021	9/8/2021	3/31/2022	8/30/2022	3/7/2023	9/28/2023	3/11/2024	10/2/2024
Fluorene			<8					
Gamma-bhc [lindane]			<.05					
Heptachlor			<.05					
Heptachlor epoxide			<.05					
Hexachlorobenzene			<.05					
Hexachlorobutadiene			<8					
Hexachlorocyclopentadiene			<8					
Hexachloroethane			<8					
Hexachloropropene			<8					
Indeno(1,2,3-cd)pyrene			<8					
Iodomethane	<1	<1	<2	<1	<1	<1	<1	<1
Iron, total								
Isobutanol			<1					
Isodrin			<8					
Isophorone			<8					
Isosafrole			<8					
Kepone			<8					
Lead, total	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00
Magnesium, total								
Manganese, total								
Mercury, total			<.5					
Methacrylonitrile			<1					
Methapyrilene			<8					
Methoxychlor			<.05					
Methyl methacrylate			<1					
Methyl methanesulfonate			<8					
Methyl parathion			<.4					
Methylene bromide								
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene			<8					
Nickel, total	<4.0	<4.0	<4.0	<4.0	<4.0	5.3	<4.0	<4.0
Nitrate as n								
Nitrobenzene			<8					
N-nitrosodiethylamine			<8					
N-nitrosodimethylamine			<8					
N-nitrosodi-n-butylamine			<8					
N-nitroso-di-n-propylamine			<8					
N-nitrosodiphenylamine			<8					
N-nitrosomethylethylamine			<8					
N-nitrosopiperidine			<8					
N-nitrosopyrrolidine			<8					
O,o,o-triethyl phosphorothioate			<.4					
O-toluidine			<8					
P-(dimethylamino)azobenzene			<8					
Parathion			<.4					
Pentachlorobenzene			<8					
Pentachloronitrobenzene (pcnb)			<8					
Pentachlorophenol			<8					
Phenacetin			<8					
Phenanthrene			<8					
Phenol			<8					
Phorate			<.4					
Potassium, total								
Pronamide			<8					
Propionitrile			<10					
Pyrene			<8					
Safrole			<8					
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4
Sodium, total								
Styrene	<1	<1	<1	<1	<1	<1	<1	<1
Sulfate								
Sulfide			<.2					
Tetrachloroethene	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2	<2	<2	<2	<2
Thionazin			<.4					
Tin, total			<20					
Toluene	<1	<1	<1	<1	<1	<1	<1	<1
Total organic carbon								
Total suspended solids								
Toxaphene			<.2					
Trans-1,2-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	<20.00	<20.00	<20.00	<20.00	<20.00	<20.00	<20.00	<20.00

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

Table 3

Analytical Data Summary for AW-3

Constituents	Units	10/20/2014	6/22/2015	6/23/2015	11/12/2015	11/13/2015	4/11/2016	9/16/2016
Vinyl acetate	ug/L	<10		<10		<10	<10	<5
Vinyl chloride	ug/L	<1.0		<1.0		<1.0	<1.0	<1.0
Xylenes, total	ug/L	<3		<1		<3	<3	<2
Zinc, total	ug/L	110.0		28.6		25.4	53.0	<8.0

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

Table 3

Analytical Data Summary for AW-3

Constituents	3/15/2017	9/27/2017	3/14/2018	6/5/2018	9/12/2018	4/1/2019	9/12/2019	5/6/2020	9/3/2020
Vinyl acetate	<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
Xylenes, total	<2	<2	<2		<2	<2	<2	<2	<2
Zinc, total	<8.0	<8.0	<8.0		48.1	25.0	<20.0	<20.0	<20.0

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

Table 3

Analytical Data Summary for AW-3

Constituents	3/30/2021	9/8/2021	3/31/2022	8/30/2022	3/7/2023	9/28/2023	3/11/2024	10/2/2024
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	2.1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Xylenes, total	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	20.4	<20.0

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

Table 4

Analytical Data Summary for AW-4

Constituents	Units	10/20/2014	6/23/2015	11/12/2015	4/11/2016	4/12/2016	1/21/2021	3/31/2022
1,1,1,2-tetrachloroethane	ug/L	<1						<1
1,1,1-trichloroethane	ug/L	<1						<1
1,1,2,2-tetrachloroethane	ug/L	<1						<1
1,1,2-trichloroethane	ug/L	<1						<1
1,1-dichloroethane	ug/L	<1						<1
1,1-dichloroethene	ug/L	<2						<1
1,2,3-trichloropropane	ug/L	<1						<1
1,2-dibromo-3-chloropropane	ug/L	<.12						<5.00
1,2-dibromoethane	ug/L	<.13						<1.00
1,2-dichlorobenzene	ug/L	<1						<1
1,2-dichloroethane	ug/L	<1						<1
1,2-dichloropropane	ug/L	<1						<1
1,4-dichlorobenzene	ug/L	<1						<1
2-butanone	ug/L	<10						<10
2-hexanone	ug/L	<10						<5
4-methyl-2-pentanone	ug/L	<10						<5
Acetone	ug/L	<10						<10
Acrylonitrile	ug/L	<10						<5
Ammonia as n	mg/L		<.2 *	<.2 *	<.2	<.2		
Antimony, total	ug/L	<6					<2	<2
Arsenic, total	ug/L	27.70		16.50		7.34	5.30	4.40
Barium, total	ug/L	78.10000					96.10001	71.50000
Benzene	ug/L	<.5						<1.0
Beryllium, total	ug/L	<1					<4	<4
Bicarbonate alkalinity	mg/L as CaCO3		360 *	432 *				
Bromochloromethane	ug/L	<5						<1
Bromodichloromethane	ug/L	<1						<1
Bromoform	ug/L	<5						<1
Bromomethane	ug/L	<4						<1
Cadmium, total	ug/L	<.5					<.8	<.8
Calcium, total	mg/L		282 *	286 *				
Carbon disulfide	ug/L	<1						<1
Carbon tetrachloride	ug/L	<2						<1
Carbonate alkalinity	mg/L as CaCO3		<5 *	<5 *				
Chloride	mg/L		17.3 *	22.8 *				
Chlorobenzene	ug/L	<1						<1
Chloroethane	ug/L	<4						<1
Chloroform	ug/L	<1						<1
Chloromethane	ug/L	<3						<1
Chromium, total	ug/L	<20					<8	<8
Cis-1,2-dichloroethene	ug/L	<1						<1
Cis-1,3-dichloropropene	ug/L	<5						<1
Cobalt, total	ug/L	11.200				.994	.400	.400
Copper, total	ug/L	<10					<4	<4
Dibromochloromethane	ug/L	<5						<1
Dibromomethane	ug/L							<1
Ethylbenzene	ug/L	<1						<1
Iodomethane	ug/L	<10						<1
Iron, total	ug/L		16000 *	7900 *	3660	3660		
Lead, total	ug/L	10.7					<4.0	<4.0
Magnesium, total	mg/L		67.8 *	85.0 *				
Manganese, total	ug/L		988.0 *	1370.0 *	24.9	24.9		
Methylene bromide	ug/L	<1						
Methylene chloride	ug/L	<5						<5
Nickel, total	ug/L	<30					<4	5
Nitrate as n	mg/L		<.100 *	.298 *	6.890	6.890		
Potassium, total	mg/L		1.76 *	2.14 *				
Selenium, total	ug/L	<5					<4	<4
Silver, total	ug/L	<20					<4	<4
Sodium, total	mg/L		14.7 *	19.0 *				
Styrene	ug/L	<1						<1
Sulfate	mg/L		589 *	655 *	725	725		
Tetrachloroethene	ug/L	<1						<1
Thallium, total	ug/L	<2					<2	<2
Toluene	ug/L	<1						<1
Total organic carbon	mg/L		3.15 *	4.35 *	3.69	3.69		
Total suspended solids	mg/L	575.0 *	113.5 *	52.8 *	31.1	31.1		
Trans-1,2-dichloroethene	ug/L	<1						<1
Trans-1,3-dichloropropene	ug/L	<5						<1
Trans-1,4-dichloro-2-butene	ug/L	<10						<5
Trichloroethene	ug/L	<1						<1
Trichlorofluoromethane	ug/L	<4						<1
Vanadium, total	ug/L	<20					<20	<20
Vinyl acetate	ug/L	<10						<5
Vinyl chloride	ug/L	<1						<1
Xylenes, total	ug/L	<3						<2
Zinc, total	ug/L	38.4					<20.0	<20.0

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

Table 4

Analytical Data Summary for AW-4

Constituents	8/30/2022	3/7/2023	9/28/2023
1,1,1,2-tetrachloroethane	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1
1,1-dichloroethane	<1	<1	<1
1,1-dichloroethene	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1
1,2-dibromo-3-chloropropane	<5.00	<5.00	<5.00
1,2-dibromoethane	<1.00	<1.00	<1.00
1,2-dichlorobenzene	<1	<1	<1
1,2-dichloroethane	<1	<1	<1
1,2-dichloropropane	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1
2-butanone	<10	<10	<10
2-hexanone	<5	<5	<5
4-methyl-2-pentanone	<5	<5	<5
Acetone	<10	<10	<10
Acrylonitrile	<5	<5	<5
Ammonia as n			
Antimony, total	<2	<2	<2
Arsenic, total	<4.00	16.60	<4.00
Barium, total	167.00000	49.70000	305.00000
Benzene	<1.0	<1.0	<1.0
Beryllium, total	<4	<4	<4
Bicarbonate alkalinity			
Bromochloromethane	<1	<1	<1
Bromodichloromethane	<1	<1	<1
Bromoform	<1	<1	<1
Bromomethane	<1	<1	<1
Cadmium, total	<.8	<.8	<.8
Calcium, total			
Carbon disulfide	<1	<1	<1
Carbon tetrachloride	<1	<1	<1
Carbonate alkalinity			
Chloride			
Chlorobenzene	<1	<1	<1
Chloroethane	<1	<1	<1
Chloroform	<1	<1	<1
Chloromethane	<1	<1	<1
Chromium, total	<8	<8	<8
Cis-1,2-dichloroethene	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1
Cobalt, total	<.400	<.400	<.400
Copper, total	<4	<4	<4
Dibromochloromethane	<1	<1	<1
Dibromomethane	<1	<1	<1
Ethylbenzene	<1	<1	<1
Iodomethane	<1	<1	<1
Iron, total			
Lead, total	<4.0	<4.0	<4.0
Magnesium, total			
Manganese, total			
Methylene bromide			
Methylene chloride	<5	<5	<5
Nickel, total	<4	<4	<4
Nitrate as n			
Potassium, total			
Selenium, total	<4	<4	<4
Silver, total	<4	<4	<4
Sodium, total			
Styrene	<1	<1	<1
Sulfate			
Tetrachloroethene	<1	<1	<1
Thallium, total	<2	<2	<2
Toluene	<1	<1	<1
Total organic carbon			
Total suspended solids			
Trans-1,2-dichloroethene	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5
Trichloroethene	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1
Vanadium, total	<20	<20	<20
Vinyl acetate	<5	<5	<5
Vinyl chloride	<1	<1	<1
Xylenes, total	<2	<2	<2
Zinc, total	<20.0	<20.0	<20.0

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

Table 5

Analytical Data Summary for AW-9

Constituents	Units	10/20/2014	6/23/2015	11/12/2015	4/11/2016	3/16/2017	4/1/2019	9/12/2019	5/6/2020
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-dichloroethene	ug/L	<2							
1,2,3-trichloropropane	ug/L	<1							
1,2-dibromo-3-chloropropane	ug/L	<.12							
1,2-dibromoethane	ug/L	<.13							
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	ug/L	<10							
2-hexanone	ug/L	<10							
4-methyl-2-pentanone	ug/L	<10							
Acetone	ug/L	<10							
Acrylonitrile	ug/L	<10							
Ammonia as n	mg/L		<.2 *	<.2 *	<.2 *				
Antimony, total	ug/L	<6							
Arsenic, total	ug/L	<1.5			<1.0	<4.0			
Barium, total	ug/L	571				410			
Benzene	ug/L	<.5							
Beryllium, total	ug/L	<1							
Bicarbonate alkalinity	mg/L as CaCO3		528 *	541 *					
Bromochloromethane	ug/L	<5							
Bromodichloromethane	ug/L	<1							
Bromoform	ug/L	<5							
Bromomethane	ug/L	<4							
Cadmium, total	ug/L	1.16							
Calcium, total	mg/L		140 *	130 *					
Carbon disulfide	ug/L	<1							
Carbon tetrachloride	ug/L	<2							
Carbonate alkalinity	mg/L as CaCO3		<5 *	<5 *					
Chloride	mg/L		6.15 *	12.20 *					
Chlorobenzene	ug/L	<1							
Chloroethane	ug/L	<4							
Chloroform	ug/L	<1							
Chloromethane	ug/L	<3							
Chromium, total	ug/L	<20							
Cis-1,2-dichloroethene	ug/L	<1							
Cis-1,3-dichloropropene	ug/L	<5							
Cobalt, total	ug/L	45.60		3.17	3.08	<.80	23.30	10.50	5.40
Copper, total	ug/L	46.9							
Dibromochloromethane	ug/L	<5							
Dibromomethane	ug/L								
Ethylbenzene	ug/L	<1							
Iodomethane	ug/L	<10							
Iron, total	ug/L		471 *	341 *	1020 *				
Lead, total	ug/L	17.6							
Magnesium, total	mg/L		53.3 *	56.6 *					
Manganese, total	ug/L		3720 *	1080 *	329 *				
Methylene bromide	ug/L	<1							
Methylene chloride	ug/L	<5							
Nickel, total	ug/L	86.8				<4.0			
Nitrate as n	mg/L		1.05 *	1.67 *	3.36 *				
Potassium, total	mg/L		<1.0 *	1.2 *					
Selenium, total	ug/L	<5							
Silver, total	ug/L	<20							
Sodium, total	mg/L		16.7 *	18.1 *					
Styrene	ug/L	<1							
Sulfate	mg/L		27.6 *	25.4 *	21.2 *				
Tetrachloroethene	ug/L	<1							
Thallium, total	ug/L	<2							
Toluene	ug/L	<1							
Total organic carbon	mg/L		1.00 *	2.68 *	<1.00 *				
Total suspended solids	mg/L	754.0 *	70.5 *	184.0 *	58.5 *	20.0			
Trans-1,2-dichloroethene	ug/L	<1							
Trans-1,3-dichloropropene	ug/L	<5							
Trans-1,4-dichloro-2-butene	ug/L	<10							
Trichloroethene	ug/L	<1							
Trichlorofluoromethane	ug/L	<4							
Vanadium, total	ug/L	<20							
Vinyl acetate	ug/L	<10							
Vinyl chloride	ug/L	<1							
Xylenes, total	ug/L	<3							
Zinc, total	ug/L	34.9							

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

Table 5

Analytical Data Summary for AW-9

Constituents	3/30/2021	9/8/2021	3/31/2022	8/30/2022	3/7/2023	9/28/2023	3/11/2024	10/2/2024
1,1,1,2-tetrachloroethane					<1	<1		
1,1,1-trichloroethane					<1	<1		
1,1,2,2-tetrachloroethane					<1	<1		
1,1,2-trichloroethane					<1	<1		
1,1-dichloroethane					<1	<1		
1,1-dichloroethene					<1	<1		
1,2,3-trichloropropane					<1	<1		
1,2-dibromo-3-chloropropane					<5.00	<5.00		
1,2-dibromoethane					<1.00	<1.00		
1,2-dichlorobenzene					<1	<1		
1,2-dichloroethane					<1	<1		
1,2-dichloropropane					<1	<1		
1,4-dichlorobenzene					<1	<1		
2-butanone					<10	<10		
2-hexanone					<5	<5		
4-methyl-2-pentanone					<5	<5		
Acetone					<10	<10		
Acrylonitrile					<5	<5		
Ammonia as n								
Antimony, total					<2	<2		
Arsenic, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	4.2
Barium, total					208	447		
Benzene					<1.0	<1.0		
Beryllium, total					<4	<4		
Bicarbonate alkalinity								
Bromochloromethane					<1	<1		
Bromodichloromethane					<1	<1		
Bromoform					<1	<1		
Bromomethane					<1	<1		
Cadmium, total					<.80	<.80		
Calcium, total								
Carbon disulfide					<1	<1		
Carbon tetrachloride					<1	<1		
Carbonate alkalinity								
Chloride								
Chlorobenzene					<1	<1		
Chloroethane					<1	<1		
Chloroform					<1	<1		
Chloromethane					<1	<1		
Chromium, total					<8	<8		
Cis-1,2-dichloroethene					<1	<1		
Cis-1,3-dichloropropene					<1	<1		
Cobalt, total	.40	.80	1.30	5.00	1.80	.80	1.10	9.60
Copper, total					<4.0	<4.0		
Dibromochloromethane					<1	<1		
Dibromomethane					<1	<1		
Ethylbenzene					<1	<1		
Iodomethane					<1	<1		
Iron, total								
Lead, total					<4.0	<4.0		
Magnesium, total								
Manganese, total								
Methylene bromide								
Methylene chloride					<5	<5		
Nickel, total					<4.0	<4.0		
Nitrate as n								
Potassium, total								
Selenium, total					<4	<4		
Silver, total					<4	<4		
Sodium, total								
Styrene					<1	<1		
Sulfate								
Tetrachloroethene					<1	<1		
Thallium, total					<2	<2		
Toluene					<1	<1		
Total organic carbon								
Total suspended solids								
Trans-1,2-dichloroethene					<1	<1		
Trans-1,3-dichloropropene					<1	<1		
Trans-1,4-dichloro-2-butene					<5	<5		
Trichloroethene					<1	<1		
Trichlorofluoromethane					<1	<1		
Vanadium, total					<20	<20		
Vinyl acetate					<5	<5		
Vinyl chloride					<1	<1		
Xylenes, total					<2	<2		
Zinc, total					<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	10/20/2014	10/21/2014	6/22/2015	11/12/2015	4/11/2016	9/16/2016	3/15/2017
(3 4)-methylphenol	ug/L							<8
1,1,1,2-tetrachloroethane	ug/L		<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L		<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L		<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L		<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L		<1	<1	<1	<1	<1	<1
1,1-dichloroethene	ug/L		<2	<2	<2	<2	<1	<1
1,1-dichloropropene	ug/L							<1
1,2,3-trichloropropane	ug/L		<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene	ug/L							<8
1,2,4-trichlorobenzene	ug/L							<1
1,2-dibromo-3-chloropropane	ug/L		<.12	<.50	<.50	<.50	<1.00	<1.00
1,2-dibromoethane	ug/L		<.13	<.13	<.13	<.13	<1.00	<1.00
1,2-dichlorobenzene	ug/L		<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L		<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L		<1	<1	<1	<1	<1	<1
1,2-dinitrobenzene	ug/L							<8
1,3,5-trinitrobenzene	ug/L							<8
1,3-dichlorobenzene	ug/L							<1
1,3-dichloropropane	ug/L							<1
1,3-dinitrobenzene	ug/L							<8
1,4-dichlorobenzene	ug/L		<1	<1	<1	<1	<1	<1
1,4-naphthoquinone	ug/L							<8
1,4-phenylenediamine	ug/L							<8
1-naphthylamine	ug/L							<8
2,2-dichloropropane	ug/L							<1
2,3,4,6-tetrachlorophenol	ug/L							<8
2,4,5-t	ug/L							<.5
2,4,5-tp (silvex)	ug/L							<.5
2,4,5-trichlorophenol	ug/L							<8
2,4,6-trichlorophenol	ug/L							<8
2,4-d	ug/L							<2
2,4-dichlorophenol	ug/L							<8
2,4-dimethylphenol	ug/L							<8
2,4-dinitrophenol	ug/L							<8
2,4-dinitrotoluene	ug/L							<8
2,6-dichlorophenol	ug/L							<8
2,6-dinitrotoluene	ug/L							<8
2-acetylaminofluorene	ug/L							<8
2-butanone	ug/L		<10	<10	<10	<10	<5	<5
2-chloronaphthalene	ug/L							<8
2-chlorophenol	ug/L							<8
2-hexanone	ug/L		<10	<10	<10	<10	<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	ug/L		<10	<10	<10	<10	<5	<5
4-nitroaniline	ug/L							<8
4-nitrophenol	ug/L							<8
5-nitro-o-toluidine	ug/L							<8
7,12-dimethylbenz [a] anthracene	ug/L							<8
Acenaphthene	ug/L							<8
Acenaphthylene	ug/L							<8
Acetone	ug/L		<10	<10	<10	<10	<10	<10
Acetonitrile	ug/L							<10
Acetophenone	ug/L							<8
Acrolein	ug/L							<10
Acrylonitrile	ug/L		<10	<10	<10	<10	<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 6

Analytical Data Summary for MW-12

Constituents	9/27/2017	3/14/2018	6/5/2018	9/12/2018	4/1/2019	9/12/2019	5/6/2020	9/3/2020	3/30/2021
(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-dichloroethene	<1	<1		<1	<1	<1	<1	<1	<1
1,1-dichloropropene									
1,2,3-trichloropropane	<1	<1		<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene									
1,2,4-trichlorobenzene									
1,2-dibromo-3-chloropropane	<1.00	<1.00		<1.00	<1.00	<1.00	<5.00	<5.00	<5.00
1,2-dibromoethane	<1.00	<1.00		<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
1,2-dichlorobenzene	<1	<1		<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1		<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<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	<5	<5		<5	<5	<5	<5	<5	<5
2-chloronaphthalene									
2-chlorophenol									
2-hexanone	<5	<5		<5	<5	<5	<5	<5	<5
2-methylnaphthalene									
2-methylphenol (o-cresol)									
2-naphthylamine									
2-nitroaniline									
2-nitrophenol									
3,3´-dichlorobenzidine									
3,3-dimethylbenzidine									
3-methylcholanthrene									
3-nitroaniline									
4,4`-ddd									
4,4`-dde									
4,4`-ddt									
4,6-dinitro-2-methylphenol									
4-aminobiphenyl									
4-bromophenyl phenyl ether									
4-chloro-3-methylphenol									
4-chloroaniline									
4-chlorophenyl phenyl ether									
4-methyl-2-pentanone	<5	<5		<5	<5	<5	<5	<5	<5
4-nitroaniline									
4-nitrophenol									
5-nitro-o-toluidine									
7,12-dimethylbenz [a] anthracene									
Acenaphthene									
Acenaphthylene									
Acetone	<10	<10		<10	<10	<10	<10	<10	<10
Acetonitrile									
Acetophenone									
Acrolein									
Acrylonitrile	<5	<5		<5	<5	<5	<5	<5	<5
Aldrin									
Allyl chloride									
Alpha-bhc									
Anthracene									

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

Table 6

Analytical Data Summary for MW-12

Constituents	9/8/2021	3/31/2022	8/30/2022	11/11/2022	3/7/2023	9/28/2023	3/11/2024	10/2/2024
(3 4)-methylphenol								
1,1,1,2-tetrachloroethane	<1	<1	<1		<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1		<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1		<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1		<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1		<1	<1	<1	<1
1,1-dichloroethene	<1	<1	<1		<1	<1	<1	<1
1,1-dichloropropene								
1,2,3-trichloropropane	<1	<1	<1		<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene								
1,2,4-trichlorobenzene								
1,2-dibromo-3-chloropropane	<5.00	<5.00	<5.00		<5.00	<5.00	<5.00	<5.00
1,2-dibromoethane	<1.00	<1.00	<1.00		<1.00	<1.00	<1.00	<1.00
1,2-dichlorobenzene	<1	<1	<1		<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1		<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1		<1	<1	<1	<1
1,2-dinitrobenzene								
1,3,5-trinitrobenzene								
1,3-dichlorobenzene								
1,3-dichloropropane								
1,3-dinitrobenzene								
1,4-dichlorobenzene	<1	<1	<1		<1	<1	<1	<1
1,4-naphthoquinone								
1,4-phenylenediamine								
1-naphthylamine								
2,2-dichloropropane								
2,3,4,6-tetrachlorophenol								
2,4,5-t								
2,4,5-tp (silvex)								
2,4,5-trichlorophenol								
2,4,6-trichlorophenol								
2,4-d								
2,4-dichlorophenol								
2,4-dimethylphenol								
2,4-dinitrophenol								
2,4-dinitrotoluene								
2,6-dichlorophenol								
2,6-dinitrotoluene								
2-acetylaminofluorene								
2-butanone	<5	<10	<10		<10	<10	<10	<10
2-chloronaphthalene								
2-chlorophenol								
2-hexanone	<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	<5	<5	<5		<5	<5	<5	<5
4-nitroaniline								
4-nitrophenol								
5-nitro-o-toluidine								
7,12-dimethylbenz [a] anthracene								
Acenaphthene								
Acenaphthylene								
Acetone	<10	<10	<10		<10	<10	<10	<10
Acetonitrile								
Acetophenone								
Acrolein								
Acrylonitrile	<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 6

Analytical Data Summary for MW-12

Constituents	Units	10/20/2014	10/21/2014	6/22/2015	11/12/2015	4/11/2016	9/16/2016	3/15/2017
Antimony, total	ug/L		<6	<1	<1	<1	<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		4.08	2.21	<10.00	10.60	<4.00	<4.00
Azobenzene	ug/L							<8
Barium, total	ug/L		313.0	319.0	316.0	285.0	247.0	253.0
Benzene	ug/L		<.5	<.5	<.5	<.5	<1.0	<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		<1	<1	<1	<1	<4	<4
Beta-bhc	ug/L							<.05
Bicarbonate alkalinity	mg/L as CaCO3			716 *	600 *			
Bis (2-chloroethoxy) methane	ug/L							<8
Bis(2-chloroethyl) ether	ug/L							<8
Bis(2-ethylhexyl) phthalate	ug/L							<8
Bis[2-chloroisopropyl]ether	ug/L							<8
Bromochloromethane	ug/L		<5	<5	<5	<5	<1	<1
Bromodichloromethane	ug/L		<1	<1	<1	<1	<1	<1
Bromoform	ug/L		<5	<5	<5	<5	<1	<1
Bromomethane	ug/L		<4	<4	<4	<4	<1	<1
Butyl benzyl phthalate	ug/L							<8
Cadmium, total	ug/L		1.23	<.50	<.50	<.50	<.80	<.80
Calcium, total	mg/L			201 *	209 *			
Carbon disulfide	ug/L		<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L		<2	<2	<2	<2	<1	<1
Carbonate alkalinity	mg/L as CaCO3			<5 *	<5 *			
Chlordane	ug/L							<.1
Chloride	mg/L			628 *	399 *			
Chlorobenzene	ug/L		<1	<1	<1	<1	<1	<1
Chlorobenzilate	ug/L							<8
Chloroethane	ug/L		<4	<4	<4	<4	<1	<1
Chloroform	ug/L		<1	<1	<1	<1	<1	<1
Chloromethane	ug/L		<3	<3	<3	<3	<1	<1
Chloroprene	ug/L							<1
Chromium, total	ug/L		<20	<5	<5	<5	<8	<8
Chrysene	ug/L							<8
Cis-1,2-dichloroethene	ug/L		<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L		<5	<5	<5	<5	<1	<1
Cobalt, total	ug/L		3.880	.944	1.340	<.800	<.800	<.800
Copper, total	ug/L		64.70	2.68	<2.00	<5.00	<4.00	<4.00
Cyanide	mg/L							<.005
Delta-bhc	ug/L							<.05
Diallate	ug/L							<8
Dibenzo(a,h)anthracene	ug/L							<8
Dibenzofuran	ug/L							<8
Dibromochloromethane	ug/L		<5	<5	<5	<5	<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
Disulfoton	ug/L							<.4
Endosulfan i	ug/L							<.05
Endosulfan ii	ug/L							<.05
Endosulfan sulfate	ug/L							<.05
Endrin	ug/L							<.05
Endrin aldehyde	ug/L							<.05
Ethyl methacrylate	ug/L							<10
Ethyl methanesulfonate	ug/L							<8
Ethylbenzene	ug/L		<1	<1	<1	<1	<1	<1
Famphur	ug/L							<.4
Fluoranthene	ug/L							<8
Fluorene	ug/L							<8

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

Table 6

Analytical Data Summary for MW-12

Constituents	9/27/2017	3/14/2018	6/5/2018	9/12/2018	4/1/2019	9/12/2019	5/6/2020	9/3/2020	3/30/2021
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	<4.00	<4.00		<4.00	<4.00	4.40	14.50	<4.00	5.30
Azobenzene									
Barium, total	229.0	154.0		94.4	124.0	127.0	310.0	187.0	166.0
Benzene	<1.0	<1.0		<1.0	<1.0	<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	<4	<4	<4
Beta-bhc									
Bicarbonate alkalinity									
Bis (2-chloroethoxy) methane									
Bis(2-chloroethyl) ether									
Bis(2-ethylhexyl) phthalate									
Bis[2-chloroisopropyl]ether									
Bromochloromethane	<1	<1		<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1		<1	<1	<1	<1	<1	<1
Bromoform	<1	<1		<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1		<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate									
Cadmium, total	<.80	<.80		<.80	<.80	<.80	<.80	<.80	<.80
Calcium, total									
Carbon disulfide	<1	<1		<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1		<1	<1	<1	<1	<1	<1
Carbonate alkalinity									
Chlordane									
Chloride									
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-dichloroethene	<1	<1		<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1		<1	<1	<1	<1	<1	<1
Cobalt, total	1.200	<2.000		<.800	<.800	.900	.700	.900	<.400
Copper, total	<4.00	<4.00		<4.00	<4.00	<4.00	<4.00	<4.00	<4.00
Cyanide									
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									

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

Table 6

Analytical Data Summary for MW-12

Constituents	9/8/2021	3/31/2022	8/30/2022	11/11/2022	3/7/2023	9/28/2023	3/11/2024	10/2/2024
Antimony, total	<2	<2	<2		<2	<2	<2	<2
Arochlor 1016								
Arochlor 1221								
Arochlor 1232								
Arochlor 1242								
Arochlor 1248								
Arochlor 1254								
Arochlor 1260								
Arsenic, total	<4.00	<4.00	<4.00		5.10	<4.00	<4.00	<4.00
Azobenzene								
Barium, total	143.0	110.0	122.0		103.0	92.8	104.0	105.0
Benzene	<1.0	<1.0	<1.0		<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	<4	<4
Beta-bhc								
Bicarbonate alkalinity								
Bis (2-chloroethoxy) methane								
Bis(2-chloroethyl) ether								
Bis(2-ethylhexyl) phthalate								
Bis[2-chloroisopropyl]ether								
Bromochloromethane	<1	<1	<1		<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1		<1	<1	<1	<1
Bromoform	<1	<1	<1		<1	<1	<1	<1
Bromomethane	<1	<1	<1		<1	<1	<1	<1
Butyl benzyl phthalate								
Cadmium, total	<.80	<.80	<.80		<.80	<.80	<.80	<.80
Calcium, total								
Carbon disulfide	<1	<1	<1		<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1		<1	<1	<1	<1
Carbonate alkalinity								
Chlordane								
Chloride								
Chlorobenzene	<1	<1	<1		<1	<1	<1	<1
Chlorobenzilate								
Chloroethane	<1	<1	<1		<1	<1	<1	<1
Chloroform	<1	<1	<1		<1	<1	<1	<1
Chloromethane	<1	<1	<1		<1	<1	<1	<1
Chloroprene								
Chromium, total	<8	<8	<8		<8	<8	<8	<8
Chrysene								
Cis-1,2-dichloroethene	<1	<1	<1		<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1		<1	<1	<1	<1
Cobalt, total	.600	.600	2.100		.600	.700	1.300	2.600
Copper, total	<4.00	<4.00	<4.00		<4.00	<4.00	<4.00	<4.00
Cyanide								
Delta-bhc								
Diallate								
Dibenzo(a,h)anthracene								
Dibenzofuran								
Dibromochloromethane	<1	<1	<1		<1	<1	<1	<1
Dibromomethane	<1	<1	<1		<1	<1	<1	<1
Dichlorodifluoromethane								
Dieldrin								
Diethyl phthalate								
Dimethoate								
Dimethylphthalate								
Di-n-butyl phthalate								
Di-n-octyl phthalate								
Dinoseb								
Diphenylamine								
Disulfoton								
Endosulfan i								
Endosulfan ii								
Endosulfan sulfate								
Endrin								
Endrin aldehyde								
Ethyl methacrylate								
Ethyl methanesulfonate								
Ethylbenzene	<1	<1	<1		<1	<1	<1	<1
Famphur								
Fluoranthene								
Fluorene								

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

Table 6

Analytical Data Summary for MW-12

Constituents	Units	10/20/2014	10/21/2014	6/22/2015	11/12/2015	4/11/2016	9/16/2016	3/15/2017
Gamma-bhc [lindane]	ug/L							<.05
Heptachlor	ug/L							<.05
Heptachlor epoxide	ug/L							<.05
Hexachlorobenzene	ug/L							<.05
Hexachlorobutadiene	ug/L							<8
Hexachlorocyclopentadiene	ug/L							<8
Hexachloroethane	ug/L							<8
Hexachloropropene	ug/L							<8
Indeno(1,2,3-cd)pyrene	ug/L							<8
Iodomethane	ug/L		<10	<10	<10	<10	<1	<1
Isobutanol	mg/L							<1
Isodrin	ug/L							<8
Isophorone	ug/L							<8
Isosafrole	ug/L							<8
Kepone	ug/L							<8
Lead, total	ug/L		8.570	.577	.556	1.390	<4.000	<4.000
Magnesium, total	mg/L			83.2 *	84.7 *			
Mercury, total	ug/L							<.5
Methacrylonitrile	ug/L							<1
Methapyrilene	ug/L							<8
Methoxychlor	ug/L							<.05
Methyl methacrylate	ug/L							<1
Methyl methanesulfonate	ug/L							<8
Methyl parathion	ug/L							<.4
Methylene bromide	ug/L		<1	<1	<1	<1		
Methylene chloride	ug/L		<5	<5	<5	<5	<5	<5
Naphthalene	ug/L							<8
Nickel, total	ug/L		53.9	22.4	24.5	12.0	11.0	15.8
Nitrobenzene	ug/L							<8
N-nitrosodiethylamine	ug/L							<8
N-nitrosodimethylamine	ug/L							<8
N-nitrosodi-n-butylamine	ug/L							<8
N-nitroso-di-n-propylamine	ug/L							<8
N-nitrosodiphenylamine	ug/L							<8
N-nitrosomethylethylamine	ug/L							<8
N-nitrosopiperidine	ug/L							<8
N-nitrosopyrrolidine	ug/L							<8
O,o,o-triethyl phosphorothioate	ug/L							<.4
O-toluidine	ug/L							<8
P-(dimethylamino)azobenzene	ug/L							<8
Parathion	ug/L							<.4
Pentachlorobenzene	ug/L							<8
Pentachloronitrobenzene (pcnb)	ug/L							<8
Pentachlorophenol	ug/L							<8
Phenacetin	ug/L							<8
Phenanthrene	ug/L							<8
Phenol	ug/L							<8
Phorate	ug/L							<.4
Potassium, total	mg/L			1.26 *	1.50 *			
Pronamide	ug/L							<8
Propionitrile	ug/L							<10
Pyrene	ug/L							<8
Safrole	ug/L							<8
Selenium, total	ug/L		<5	<5	<5	<5	<4	<4
Silver, total	ug/L		<20	<1	<1	<1	<4	<4
Sodium, total	mg/L			153 *	144 *			
Styrene	ug/L		<1	<1	<1	<1	<1	<1
Sulfate	mg/L			89.3 *	86.5 *			
Sulfide	mg/L							<.1
Tetrachloroethene	ug/L		<1	<1	<1	<1	<1	<1
Thallium, total	ug/L		<2	<1	<1	<2	<4	<4
Thionazin	ug/L							<.4
Tin, total	ug/L	126	126	<5 *	<5 *	<5 *	<20	<20
Toluene	ug/L		<1	<1	<1	<1	<1	<1
Total suspended solids	mg/L	1380.0	1380.0	65.3 *	98.1 *	147.0 *	100.0	514.0
Toxaphene	ug/L							<.2
Trans-1,2-dichloroethene	ug/L		<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L		<5	<5	<5	<5	<1	<1
Trans-1,4-dichloro-2-butene	ug/L		<10	<10	<10	<10	<5	<5
Trichloroethene	ug/L		<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L		<4	<4	<4	<4	<1	<1
Vanadium, total	ug/L		<20	<5	<5	<5	<20	<20
Vinyl acetate	ug/L		<10	<10	<10	<10	<5	<5
Vinyl chloride	ug/L		<1	<1	<1	<1	<1	<1
Xylenes, total	ug/L		<3	<3	<3	<3	<2	<2
Zinc, total	ug/L		26.9	<10.0	<10.0	<10.0	<8.0	<8.0

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

Table 6

Analytical Data Summary for MW-12

Constituents	9/27/2017	3/14/2018	6/5/2018	9/12/2018	4/1/2019	9/12/2019	5/6/2020	9/3/2020	3/30/2021
Gamma-bhc [lindane]									
Heptachlor									
Heptachlor epoxide									
Hexachlorobenzene									
Hexachlorobutadiene									
Hexachlorocyclopentadiene									
Hexachloroethane									
Hexachloropropene									
Indeno(1,2,3-cd)pyrene									
Iodomethane	<1	<1		<1	<1	<1	<1	<1	<1
Isobutanol									
Isodrin									
Isophorone									
Isosafrole									
Kepone									
Lead, total	<4.000	<4.000		<4.000	<4.000	<4.000	<4.000	<4.000	<4.000
Magnesium, total									
Mercury, total									
Methacrylonitrile									
Methapyrilene									
Methoxychlor									
Methyl methacrylate									
Methyl methanesulfonate									
Methyl parathion									
Methylene bromide									
Methylene chloride	<5	<5		<5	<5	<5	<5	<5	<5
Naphthalene									
Nickel, total	11.7	29.7	12.7	8.4	7.6	7.9	8.9	11.1	7.6
Nitrobenzene									
N-nitrosodiethylamine									
N-nitrosodimethylamine									
N-nitrosodi-n-butylamine									
N-nitroso-di-n-propylamine									
N-nitrosodiphenylamine									
N-nitrosomethylethylamine									
N-nitrosopiperidine									
N-nitrosopyrrolidine									
O,o,o-triethyl phosphorothioate									
O-toluidine									
P-(dimethylamino)azobenzene									
Parathion									
Pentachlorobenzene									
Pentachloronitrobenzene (pcnb)									
Pentachlorophenol									
Phenacetin									
Phenanthrene									
Phenol									
Phorate									
Potassium, total									
Pronamide									
Propionitrile									
Pyrene									
Safrole									
Selenium, total	<4	<4		<4	<4	<4	<4	<4	<4
Silver, total	<4	<4		<4	<4	<4	<4	<4	<4
Sodium, total									
Styrene	<1	<1		<1	<1	<1	<1	<1	<1
Sulfate									
Sulfide									
Tetrachloroethene	<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
Total suspended solids									
Toxaphene									
Trans-1,2-dichloroethene	<1	<1		<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1		<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5		<5	<5	<5	<5	<5	<5
Trichloroethene	<1	<1		<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1		<1	<1	<1	<1	<1	<1
Vanadium, total	<20	<20		<20	<20	<20	<20	<20	<20
Vinyl acetate	<5	<5		<5	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1		<1	<1	<1	<1	<1	<1
Xylenes, total	<2	<2		<2	<2	<2	<2	<2	<2
Zinc, total	<8.0	<8.0		32.9	23.8	<20.0	37.9	<20.0	<20.0

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

Table 6

Analytical Data Summary for MW-12

Constituents	9/8/2021	3/31/2022	8/30/2022	11/11/2022	3/7/2023	9/28/2023	3/11/2024	10/2/2024
Gamma-bhc [lindane]								
Heptachlor								
Heptachlor epoxide								
Hexachlorobenzene								
Hexachlorobutadiene								
Hexachlorocyclopentadiene								
Hexachloroethane								
Hexachloropropene								
Indeno(1,2,3-cd)pyrene								
Iodomethane	<1	<1	<1		<1	<1	<1	<1
Isobutanol								
Isodrin								
Isophorone								
Isosafrole								
Kepone								
Lead, total	<4.000	<4.000	<4.000		<4.000	<4.000	<4.000	<4.000
Magnesium, total								
Mercury, total								
Methacrylonitrile								
Methapyrilene								
Methoxychlor								
Methyl methacrylate								
Methyl methanesulfonate								
Methyl parathion								
Methylene bromide								
Methylene chloride	<5	<5	<5		<5	<5	<5	<5
Naphthalene								
Nickel, total	6.6	6.4	26.8	14.2	5.7	8.1	13.1	41.6
Nitrobenzene								
N-nitrosodiethylamine								
N-nitrosodimethylamine								
N-nitrosodi-n-butylamine								
N-nitroso-di-n-propylamine								
N-nitrosodiphenylamine								
N-nitrosomethylethylamine								
N-nitrosopiperidine								
N-nitrosopyrrolidine								
O,o,o-triethyl phosphorothioate								
O-toluidine								
P-(dimethylamino)azobenzene								
Parathion								
Pentachlorobenzene								
Pentachloronitrobenzene (pcnb)								
Pentachlorophenol								
Phenacetin								
Phenanthrene								
Phenol								
Phorate								
Potassium, total								
Pronamide								
Propionitrile								
Pyrene								
Safrole								
Selenium, total	<4	<4	<4		<4	<4	<4	<4
Silver, total	<4	<4	<4		<4	<4	<4	<4
Sodium, total								
Styrene	<1	<1	<1		<1	<1	<1	<1
Sulfate								
Sulfide								
Tetrachloroethene	<1	<1	<1		<1	<1	<1	<1
Thallium, total	<2	<2	<2		<2	<2	<2	<2
Thionazin								
Tin, total								
Toluene	<1	<1	<1		<1	<1	<1	<1
Total suspended solids								
Toxaphene								
Trans-1,2-dichloroethene	<1	<1	<1		<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1		<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5		<5	<5	<5	<5
Trichloroethene	<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	<20.0	<20.0	<20.0		<20.0	<20.0	<20.0	<20.0

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

Table 7

Analytical Data Summary for MW-14

Constituents	Units	10/20/2014	10/21/2014	6/22/2015	11/12/2015	4/11/2016	9/16/2016	3/15/2017
(3 4)-methylphenol	ug/L							<8
1,1,1,2-tetrachloroethane	ug/L		<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L		<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L		<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L		<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L		2.46	1.52	<1.00	<1.00	<1.00	1.30
1,1-dichloroethene	ug/L		<2	<2	<2	<2	<1	<1
1,1-dichloropropene	ug/L							<1
1,2,3-trichloropropane	ug/L		<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene	ug/L							<8
1,2,4-trichlorobenzene	ug/L							<1
1,2-dibromo-3-chloropropane	ug/L		<.12	<.50	<.50	<.50	<1.00	<1.00
1,2-dibromoethane	ug/L		<.13	<.13	<.13	<.13	<1.00	<1.00
1,2-dichlorobenzene	ug/L		<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L		<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L		<1	<1	<1	<1	<1	<1
1,2-dinitrobenzene	ug/L							<8
1,3,5-trinitrobenzene	ug/L							<8
1,3-dichlorobenzene	ug/L							<1
1,3-dichloropropane	ug/L							<1
1,3-dinitrobenzene	ug/L							<8
1,4-dichlorobenzene	ug/L		<1	<1	<1	<1	<1	<1
1,4-naphthoquinone	ug/L							<8
1,4-phenylenediamine	ug/L							<8
1-naphthylamine	ug/L							<8
2,2-dichloropropane	ug/L							<1
2,3,4,6-tetrachlorophenol	ug/L							<8
2,4,5-t	ug/L							<.5
2,4,5-tp (silvex)	ug/L							<.5
2,4,5-trichlorophenol	ug/L							<8
2,4,6-trichlorophenol	ug/L							<8
2,4-d	ug/L							<2
2,4-dichlorophenol	ug/L							<8
2,4-dimethylphenol	ug/L							<8
2,4-dinitrophenol	ug/L							<8
2,4-dinitrotoluene	ug/L							<8
2,6-dichlorophenol	ug/L							<8
2,6-dinitrotoluene	ug/L							<8
2-acetylaminofluorene	ug/L							<8
2-butanone	ug/L		<10	<10	<10	<10	<5	<5
2-chloronaphthalene	ug/L							<8
2-chlorophenol	ug/L							<8
2-hexanone	ug/L		<10	<10	<10	<10	<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	ug/L		<10	<10	<10	<10	<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
Acetonitrile	ug/L							<10
Acetophenone	ug/L							<8
Acrolein	ug/L							<10
Acrylonitrile	ug/L		<10	<10	<10	<10	<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 7

Analytical Data Summary for MW-14

Constituents	9/27/2017	3/14/2018	9/12/2018	4/1/2019	9/12/2019	5/6/2020	9/3/2020	3/30/2021	9/8/2021
(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	1.10	<1.00	<1.00	1.00	<1.00	<1.00	<1.00	<1.00	<1.00
1,1-dichloroethene	<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	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<5.00	<5.00	<5.00
1,2-dibromoethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
1,2-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	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-chloronaphthalene									
2-chlorophenol									
2-hexanone	<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	<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	12.9	<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 7

Analytical Data Summary for MW-14

Constituents	3/31/2022	8/30/2022	3/7/2023	9/28/2023	3/11/2024	10/2/2024
(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	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
1,1-dichloroethene	<1	<1	<1	<1	<1	<1
1,1-dichloropropene						
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene						
1,2,4-trichlorobenzene						
1,2-dibromo-3-chloropropane	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
1,2-dibromoethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1
1,2-dinitrobenzene						
1,3,5-trinitrobenzene						
1,3-dichlorobenzene						
1,3-dichloropropane						
1,3-dinitrobenzene						
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1
1,4-naphthoquinone						
1,4-phenylenediamine						
1-naphthylamine						
2,2-dichloropropane						
2,3,4,6-tetrachlorophenol						
2,4,5-t						
2,4,5-tp (silvex)						
2,4,5-trichlorophenol						
2,4,6-trichlorophenol						
2,4-d						
2,4-dichlorophenol						
2,4-dimethylphenol						
2,4-dinitrophenol						
2,4-dinitrotoluene						
2,6-dichlorophenol						
2,6-dinitrotoluene						
2-acetylaminofluorene						
2-butanone	<10	<10	<10	<10	<10	<10
2-chloronaphthalene						
2-chlorophenol						
2-hexanone	<5	<5	<5	<5	<5	<5
2-methylnaphthalene						
2-methylphenol (o-cresol)						
2-naphthylamine						
2-nitroaniline						
2-nitrophenol						
3,3´-dichlorobenzidine						
3,3-dimethylbenzidine						
3-methylcholanthrene						
3-nitroaniline						
4,4`-ddd						
4,4`-dde						
4,4`-ddt						
4,6-dinitro-2-methylphenol						
4-aminobiphenyl						
4-bromophenyl phenyl ether						
4-chloro-3-methylphenol						
4-chloroaniline						
4-chlorophenyl phenyl ether						
4-methyl-2-pentanone	<5	<5	<5	<5	<5	<5
4-nitroaniline						
4-nitrophenol						
5-nitro-o-toluidine						
7,12-dimethylbenz [a] anthracene						
Acenaphthene						
Acenaphthylene						
Acetone	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
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 7

Analytical Data Summary for MW-14

Constituents	Units	10/20/2014	10/21/2014	6/22/2015	11/12/2015	4/11/2016	9/16/2016	3/15/2017
Antimony, total	ug/L		<6	<1	<1	<1	<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		2.11	<2.00	<2.00	<1.00	<4.00	<4.00
Azobenzene	ug/L							<8
Barium, total	ug/L		469	274	296	244	276	272
Benzene	ug/L		<.5	<.5	<.5	<.5	<1.0	<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		<1	<1	<1	<1	<4	<4
Beta-bhc	ug/L							<.05
Bicarbonate alkalinity	mg/L as CaCO3			459 *	486 *			
Bis (2-chloroethoxy) methane	ug/L							<8
Bis(2-chloroethyl) ether	ug/L							<8
Bis(2-ethylhexyl) phthalate	ug/L							<8
Bis[2-chloroisopropyl]ether	ug/L							<8
Bromochloromethane	ug/L		<5	<5	<5	<5	<1	<1
Bromodichloromethane	ug/L		<1	<1	<1	<1	<1	<1
Bromoform	ug/L		<5	<5	<5	<5	<1	<1
Bromomethane	ug/L		<4	<4	<4	<4	<1	<1
Butyl benzyl phthalate	ug/L							<8
Cadmium, total	ug/L		.909	<.500	<.500	<.500	<.800	<.800
Calcium, total	mg/L			110 *	127 *			
Carbon disulfide	ug/L		<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L		<2	<2	<2	<2	<1	<1
Carbonate alkalinity	mg/L as CaCO3			<5 *	<5 *			
Chlordane	ug/L							<.1
Chloride	mg/L			41.8 *	44.4 *			
Chlorobenzene	ug/L		<1	<1	<1	<1	<1	<1
Chlorobenzilate	ug/L							<8
Chloroethane	ug/L		<4	<4	<4	<4	<1	<1
Chloroform	ug/L		<1	<1	<1	<1	<1	<1
Chloromethane	ug/L		<3	<3	<3	<3	<1	<1
Chloroprene	ug/L							<1
Chromium, total	ug/L		<20	<5	<5	<5	<8	<8
Chrysene	ug/L							<8
Cis-1,2-dichloroethene	ug/L		<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L		<5	<5	<5	<5	<1	<1
Cobalt, total	ug/L		5.1	<.8	<.8	<.8	<.8	<.8
Copper, total	ug/L		20.4	<2.0	<2.0	<2.0	11.3	<4.0
Cyanide	mg/L							.010
Delta-bhc	ug/L							<.05
Diallate	ug/L							<8
Dibenzo(a,h)anthracene	ug/L							<8
Dibenzofuran	ug/L							<8
Dibromochloromethane	ug/L		<5	<5	<5	<5	<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
Disulfoton	ug/L							<.4
Endosulfan i	ug/L							<.05
Endosulfan ii	ug/L							<.05
Endosulfan sulfate	ug/L							<.05
Endrin	ug/L							<.05
Endrin aldehyde	ug/L							<.05
Ethyl methacrylate	ug/L							<10
Ethyl methanesulfonate	ug/L							<8
Ethylbenzene	ug/L		<1	<1	<1	<1	<1	<1
Famphur	ug/L							<.4
Fluoranthene	ug/L							<8
Fluorene	ug/L							<8

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

Table 7

Analytical Data Summary for MW-14

Constituents	9/27/2017	3/14/2018	9/12/2018	4/1/2019	9/12/2019	5/6/2020	9/3/2020	3/30/2021	9/8/2021
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	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00
Azobenzene									
Barium, total	300	311	272	320	353	318	330	302	388
Benzene	<1.0	<1.0	<1.0	<1.0	<1.0	<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	<4	<4	<4	<4
Beta-bhc									
Bicarbonate alkalinity									
Bis (2-chloroethoxy) methane									
Bis(2-chloroethyl) ether									
Bis(2-ethylhexyl) phthalate									
Bis[2-chloroisopropyl]ether									
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate									
Cadmium, total	<.800	<.800	<.800	<.800	1.200	<.800	<.800	<.800	<.800
Calcium, total									
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbonate alkalinity									
Chlordane									
Chloride									
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzilate									
Chloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroprene									
Chromium, total	<8	<8	<8	<8	<8	<8	<8	<8	<8
Chrysene									
Cis-1,2-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	<.8	<2.0	<.8	1.5	<.8	.4	.9	<.4	3.2
Copper, total	<4.0	<4.0	<4.0	<4.0	4.2	<4.0	<4.0	<4.0	<4.0
Cyanide	<.005		<.005	<.005	<.005	<.005			
Delta-bhc									
Diallate									
Dibenzo(a,h)anthracene									
Dibenzofuran									
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane									
Dieldrin									
Diethyl phthalate									
Dimethoate									
Dimethylphthalate									
Di-n-butyl phthalate									
Di-n-octyl phthalate									
Dinoseb									
Diphenylamine									
Disulfoton									
Endosulfan i									
Endosulfan ii									
Endosulfan sulfate									
Endrin									
Endrin aldehyde									
Ethyl methacrylate									
Ethyl methanesulfonate									
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Famphur									
Fluoranthene									
Fluorene									

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

Table 7

Analytical Data Summary for MW-14

Constituents	3/31/2022	8/30/2022	3/7/2023	9/28/2023	3/11/2024	10/2/2024
Antimony, total	<2	<2	<2	<2	<2	<2
Arochlor 1016						
Arochlor 1221						
Arochlor 1232						
Arochlor 1242						
Arochlor 1248						
Arochlor 1254						
Arochlor 1260						
Arsenic, total	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00
Azobenzene						
Barium, total	326	290	399	421	439	401
Benzene	<1.0	<1.0	<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	<4
Beta-bhc						
Bicarbonate alkalinity						
Bis (2-chloroethoxy) methane						
Bis(2-chloroethyl) ether						
Bis(2-ethylhexyl) phthalate						
Bis[2-chloroisopropyl]ether						
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	<.800	<.800	<.800	<.800	<.800	<.800
Calcium, total						
Carbon disulfide	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1
Carbonate alkalinity						
Chlordane						
Chloride						
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
Chrysene						
Cis-1,2-dichloroethene	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1
Cobalt, total	.6	<.4	<.4	<.4	<.4	<.4
Copper, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Cyanide						
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						

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

Table 7

Analytical Data Summary for MW-14

Constituents	Units	10/20/2014	10/21/2014	6/22/2015	11/12/2015	4/11/2016	9/16/2016	3/15/2017
Gamma-bhc [lindane]	ug/L							<.05
Heptachlor	ug/L							<.05
Heptachlor epoxide	ug/L							<.05
Hexachlorobenzene	ug/L							<.05
Hexachlorobutadiene	ug/L							<8
Hexachlorocyclopentadiene	ug/L							<8
Hexachloroethane	ug/L							<8
Hexachloropropene	ug/L							<8
Indeno(1,2,3-cd)pyrene	ug/L							<8
Iodomethane	ug/L		<10	<10	<10	<10	<1	<1
Isobutanol	mg/L							<1
Isodrin	ug/L							<8
Isophorone	ug/L							<8
Isosafrole	ug/L							<8
Kepone	ug/L							<8
Lead, total	ug/L		<5.0	<.5	<.5	<.5	<4.0	<4.0
Magnesium, total	mg/L			40.7 *	47.5 *			
Mercury, total	ug/L							<.5
Methacrylonitrile	ug/L							<1
Methapyrilene	ug/L							<8
Methoxychlor	ug/L							<.05
Methyl methacrylate	ug/L							<1
Methyl methanesulfonate	ug/L							<8
Methyl parathion	ug/L							<.4
Methylene bromide	ug/L		<1	<1	<1	<1		
Methylene chloride	ug/L		<5	<5	<5	<5	<5	<5
Naphthalene	ug/L							<8
Nickel, total	ug/L		<30.00	<5.00	6.49	5.40	27.40	4.90
Nitrobenzene	ug/L							<8
N-nitrosodiethylamine	ug/L							<8
N-nitrosodimethylamine	ug/L							<8
N-nitrosodi-n-butylamine	ug/L							<8
N-nitroso-di-n-propylamine	ug/L							<8
N-nitrosodiphenylamine	ug/L							<8
N-nitrosomethylethylamine	ug/L							<8
N-nitrosopiperidine	ug/L							<8
N-nitrosopyrrolidine	ug/L							<8
O,o,o-triethyl phosphorothioate	ug/L							<.4
O-toluidine	ug/L							<8
P-(dimethylamino)azobenzene	ug/L							<8
Parathion	ug/L							<.4
Pentachlorobenzene	ug/L							<8
Pentachloronitrobenzene (pcnb)	ug/L							<8
Pentachlorophenol	ug/L							<8
Phenacetin	ug/L							<8
Phenanthrene	ug/L							<8
Phenol	ug/L							<8
Phorate	ug/L							<.4
Potassium, total	mg/L			<1.00 *	1.14 *			
Pronamide	ug/L							<8
Propionitrile	ug/L							<10
Pyrene	ug/L							<8
Safrole	ug/L							<8
Selenium, total	ug/L		<5	<5	<5	<5	<4	<4
Silver, total	ug/L		<20	<1	<1	<1	<4	<4
Sodium, total	mg/L			24.2 *	22.7 *			
Styrene	ug/L		<1	<1	<1	<1	<1	<1
Sulfate	mg/L			15.2 *	23.1 *			
Sulfide	mg/L							<.1
Tetrachloroethene	ug/L		<1	<1	<1	<1	<1	<1
Thallium, total	ug/L		<2	<1	<2	<2	<4	<4
Thionazin	ug/L							<.4
Tin, total	ug/L	139	139	<5 *	<5 *	<5 *	<20	<20
Toluene	ug/L		<1	<1	<1	<1	<1	<1
Total suspended solids	mg/L	1200.0	1200.0	33.4 *	43.1 *	122.0 *	36.0	985.0
Toxaphene	ug/L							<.2
Trans-1,2-dichloroethene	ug/L		<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L		<5	<5	<5	<5	<1	<1
Trans-1,4-dichloro-2-butene	ug/L		<10	<10	<10	<10	<5	<5
Trichloroethene	ug/L		<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L		<4	<4	<4	<4	<1	<1
Vanadium, total	ug/L		<20	<5	<5	<5	<20	<20
Vinyl acetate	ug/L		<10	<10	<10	<10	<5	<5
Vinyl chloride	ug/L		<1	<1	<1	<1	<1	<1
Xylenes, total	ug/L		<3	<3	<3	<3	<2	<2
Zinc, total	ug/L		<20.0	12.9	<10.0	20.7	12.0	17.5

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

Table 7

Analytical Data Summary for MW-14

Constituents	9/27/2017	3/14/2018	9/12/2018	4/1/2019	9/12/2019	5/6/2020	9/3/2020	3/30/2021	9/8/2021
Gamma-bhc [lindane]									
Heptachlor									
Heptachlor epoxide									
Hexachlorobenzene									
Hexachlorobutadiene									
Hexachlorocyclopentadiene									
Hexachloroethane									
Hexachloropropene									
Indeno(1,2,3-cd)pyrene									
Iodomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Isobutanol									
Isodrin									
Isophorone									
Isosafrole									
Kepone									
Lead, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Magnesium, total									
Mercury, total									
Methacrylonitrile									
Methapyrilene									
Methoxychlor									
Methyl methacrylate									
Methyl methanesulfonate									
Methyl parathion									
Methylene bromide									
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene									
Nickel, total	4.50	5.70	7.00	22.90	14.40	17.60	11.20	4.30	12.00
Nitrobenzene									
N-nitrosodiethylamine									
N-nitrosodimethylamine									
N-nitrosodi-n-butylamine									
N-nitroso-di-n-propylamine									
N-nitrosodiphenylamine									
N-nitrosomethylethylamine									
N-nitrosopiperidine									
N-nitrosopyrrolidine									
O,o,o-triethyl phosphorothioate									
O-toluidine									
P-(dimethylamino)azobenzene									
Parathion									
Pentachlorobenzene									
Pentachloronitrobenzene (pcnb)									
Pentachlorophenol									
Phenacetin									
Phenanthrene									
Phenol									
Phorate									
Potassium, total									
Pronamide									
Propionitrile									
Pyrene									
Safrole									
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Sodium, total									
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfate									
Sulfide									
Tetrachloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4	<4	<4	<2	<2	<2	<2	<2	<2
Thionazin									
Tin, total									
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total suspended solids									
Toxaphene									
Trans-1,2-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	<8.0	15.3	31.3	29.4	29.9	<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-14

Constituents	3/31/2022	8/30/2022	3/7/2023	9/28/2023	3/11/2024	10/2/2024
Gamma-bhc [lindane]						
Heptachlor						
Heptachlor epoxide						
Hexachlorobenzene						
Hexachlorobutadiene						
Hexachlorocyclopentadiene						
Hexachloroethane						
Hexachloropropene						
Indeno(1,2,3-cd)pyrene						
Iodomethane	<1	<1	<1	<1	<1	<1
Isobutanol						
Isodrin						
Isophorone						
Isosafrole						
Kepone						
Lead, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Magnesium, total						
Mercury, total						
Methacrylonitrile						
Methapyrilene						
Methoxychlor						
Methyl methacrylate						
Methyl methanesulfonate						
Methyl parathion						
Methylene bromide						
Methylene chloride	<5	<5	<5	<5	<5	<5
Naphthalene						
Nickel, total	4.70	4.80	5.50	13.10	6.00	9.50
Nitrobenzene						
N-nitrosodiethylamine						
N-nitrosodimethylamine						
N-nitrosodi-n-butylamine						
N-nitroso-di-n-propylamine						
N-nitrosodiphenylamine						
N-nitrosomethylethylamine						
N-nitrosopiperidine						
N-nitrosopyrrolidine						
O,o,o-triethyl phosphorothioate						
O-toluidine						
P-(dimethylamino)azobenzene						
Parathion						
Pentachlorobenzene						
Pentachloronitrobenzene (pcnb)						
Pentachlorophenol						
Phenacetin						
Phenanthrene						
Phenol						
Phorate						
Potassium, total						
Pronamide						
Propionitrile						
Pyrene						
Safrole						
Selenium, total	<4	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4	<4
Sodium, total						
Styrene	<1	<1	<1	<1	<1	<1
Sulfate						
Sulfide						
Tetrachloroethene	<1	<1	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2	<2	<2
Thionazin						
Tin, total						
Toluene	<1	<1	<1	<1	<1	<1
Total suspended solids						
Toxaphene						
Trans-1,2-dichloroethene	<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
Trichloroethene	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2	<2
Zinc, total	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 8

Analytical Data Summary for MW-19

Constituents	Units	10/20/2014	10/21/2014	6/22/2015	11/12/2015	4/11/2016	4/12/2016	9/16/2016
(3 4)-methylphenol	ug/L							
1,1,1,2-tetrachloroethane	ug/L		<1	<1	<1		<1	<1
1,1,1-trichloroethane	ug/L		<1	<1	<1		<1	<1
1,1,2,2-tetrachloroethane	ug/L		<1	<1	<1		<1	<1
1,1,2-trichloroethane	ug/L		<1	<1	<1		<1	<1
1,1-dichloroethane	ug/L		<1	<1	<1		<1	<1
1,1-dichloroethene	ug/L		<2	<2	<2		<2	<1
1,1-dichloropropene	ug/L							
1,2,3-trichloropropane	ug/L		<1	<1	<1		<1	<1
1,2,4,5-tetrachlorobenzene	ug/L							
1,2,4-trichlorobenzene	ug/L							
1,2-dibromo-3-chloropropane	ug/L		<.12	<.50	<.50		<.50	<1.00
1,2-dibromoethane	ug/L		<.13	<.13	<.13		<.13	<1.00
1,2-dichlorobenzene	ug/L		<1	<1	<1		<1	<1
1,2-dichloroethane	ug/L		<1	<1	<1		<1	<1
1,2-dichloropropane	ug/L		<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
1,4-naphthoquinone	ug/L							
1,4-phenylenediamine	ug/L							
1-naphthylamine	ug/L							
2,2-dichloropropane	ug/L							
2,3,4,6-tetrachlorophenol	ug/L							
2,4,5-t	ug/L							
2,4,5-tp (silvex)	ug/L							
2,4,5-trichlorophenol	ug/L							
2,4,6-trichlorophenol	ug/L							
2,4-d	ug/L							
2,4-dichlorophenol	ug/L							
2,4-dimethylphenol	ug/L							
2,4-dinitrophenol	ug/L							
2,4-dinitrotoluene	ug/L							
2,6-dichlorophenol	ug/L							
2,6-dinitrotoluene	ug/L							
2-acetylaminofluorene	ug/L							
2-butanone	ug/L		<10	<10	<10		<10	<5
2-chloronaphthalene	ug/L							
2-chlorophenol	ug/L							
2-hexanone	ug/L		<10	<10	<10		<10	<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	ug/L		<10	<10	<10		<10	<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
Acetonitrile	ug/L							
Acetophenone	ug/L							
Acrolein	ug/L							
Acrylonitrile	ug/L		<10	<10	<10		<10	<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 8

Analytical Data Summary for MW-19

Constituents	3/15/2017	9/27/2017	3/14/2018	9/12/2018	4/1/2019	9/12/2019	5/6/2020	9/3/2020	3/30/2021
(3 4)-methylphenol	<8								
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloropropene	<1								
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene	<8								
1,2,4-trichlorobenzene	<1								
1,2-dibromo-3-chloropropane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<5.00	<5.00
1,2-dibromoethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
1,2-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	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-chloronaphthalene	<8								
2-chlorophenol	<8								
2-hexanone	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-methylnaphthalene	<8								
2-methylphenol (o-cresol)	<8								
2-naphthylamine	<8								
2-nitroaniline	<8								
2-nitrophenol	<8								
3,3´-dichlorobenzidine	<8								
3,3-dimethylbenzidine	<8								
3-methylcholanthrene	<8								
3-nitroaniline	<8								
4,4`-ddd	<.05								
4,4`-dde	<.05								
4,4`-ddt	<.05								
4,6-dinitro-2-methylphenol	<8								
4-aminobiphenyl	<8								
4-bromophenyl phenyl ether	<8								
4-chloro-3-methylphenol	<8								
4-chloroaniline	<8								
4-chlorophenyl phenyl ether	<8								
4-methyl-2-pentanone	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-nitroaniline	<8								
4-nitrophenol	<8								
5-nitro-o-toluidine	<8								
7,12-dimethylbenz [a] anthracene	<8								
Acenaphthene	<8								
Acenaphthylene	<8								
Acetone	<10.0	20.8	<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-19

Constituents	9/8/2021	3/31/2022	8/30/2022
(3 4)-methylphenol		<8	
1,1,1,2-tetrachloroethane	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1
1,1-dichloroethane	<1	<1	<1
1,1-dichloroethene	<1	<1	<1
1,1-dichloropropene		<1	
1,2,3-trichloropropane	<1	<1	<1
1,2,4,5-tetrachlorobenzene		<8	
1,2,4-trichlorobenzene		<1	
1,2-dibromo-3-chloropropane	<5.00	<1.00	<5.00
1,2-dibromoethane	<1.00	<1.00	<1.00
1,2-dichlorobenzene	<1	<1	<1
1,2-dichloroethane	<1	<1	<1
1,2-dichloropropane	<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
1,4-naphthoquinone		<8	
1,4-phenylenediamine		<8	
1-naphthylamine		<8	
2,2-dichloropropane		<1	
2,3,4,6-tetrachlorophenol		<8	
2,4,5-t		<.7	
2,4,5-tp (silvex)		<.7	
2,4,5-trichlorophenol		<8	
2,4,6-trichlorophenol		<8	
2,4-d		<2.9	
2,4-dichlorophenol		<8	
2,4-dimethylphenol		<8	
2,4-dinitrophenol		<8	
2,4-dinitrotoluene		<8	
2,6-dichlorophenol		<8	
2,6-dinitrotoluene		<8	
2-acetylaminofluorene		<8	
2-butanone	<5	<5	<10
2-chloronaphthalene		<8	
2-chlorophenol		<8	
2-hexanone	<5	<5	<5
2-methylnaphthalene		<8	
2-methylphenol (o-cresol)		<8	
2-naphthylamine		<8	
2-nitroaniline		<8	
2-nitrophenol		<8	
3,3´-dichlorobenzidine		<8	
3,3-dimethylbenzidine		<8	
3-methylcholanthrene		<8	
3-nitroaniline		<8	
4,4`-ddd		<.05	
4,4`-dde		<.05	
4,4`-ddt		<.05	
4,6-dinitro-2-methylphenol		<8	
4-aminobiphenyl		<8	
4-bromophenyl phenyl ether		<8	
4-chloro-3-methylphenol		<8	
4-chloroaniline		<8	
4-chlorophenyl phenyl ether		<8	
4-methyl-2-pentanone	<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
Acetonitrile		<10	
Acetophenone		<8	
Acrolein		<10	
Acrylonitrile	<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-19

Constituents	Units	10/20/2014	10/21/2014	6/22/2015	11/12/2015	4/11/2016	4/12/2016	9/16/2016
Antimony, total	ug/L		<6	<1	<1		<1	<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		<2	<2	<2		<1	<4
Azobenzene	ug/L							
Barium, total	ug/L		541	267	255		265	252
Benzene	ug/L		<.5	<.5	<.5		<.5	<1.0
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		1.06	<1.00	<1.00		<1.00	<4.00
Beta-bhc	ug/L							
Bicarbonate alkalinity	mg/L as CaCO3			681 *	686 *			
Bis (2-chloroethoxy) methane	ug/L							
Bis(2-chloroethyl) ether	ug/L							
Bis(2-ethylhexyl) phthalate	ug/L							
Bis[2-chloroisopropyl]ether	ug/L							
Bromochloromethane	ug/L		<5	<5	<5		<5	<1
Bromodichloromethane	ug/L		<1	<1	<1		<1	<1
Bromoform	ug/L		<5	<5	<5		<5	<1
Bromomethane	ug/L		<4	<4	<4		<4	<1
Butyl benzyl phthalate	ug/L							
Cadmium, total	ug/L		2.3	<.5	<.5		<.5	<.8
Calcium, total	mg/L			227 *	208 *			
Carbon disulfide	ug/L		<1	<1	<1		<1	<1
Carbon tetrachloride	ug/L		<2	<2	<2		<2	<1
Carbonate alkalinity	mg/L as CaCO3			<5 *	<5 *			
Chlordane	ug/L							
Chloride	mg/L			28.9 *	27.4 *			
Chlorobenzene	ug/L		<1	<1	<1		<1	<1
Chlorobenzilate	ug/L							
Chloroethane	ug/L		<4	<4	<4		<4	<1
Chloroform	ug/L		<1	<1	<1		<1	<1
Chloromethane	ug/L		<3	<3	<3		<3	<1
Chloroprene	ug/L							
Chromium, total	ug/L		<20	<5	<5		<5	<8
Chrysene	ug/L							
Cis-1,2-dichloroethene	ug/L		<1	<1	<1		<1	<1
Cis-1,3-dichloropropene	ug/L		<5	<5	<5		<5	<1
Cobalt, total	ug/L		16.90	5.72	2.09		5.01	7.40
Copper, total	ug/L		49.60	6.17	2.61		<5.00	<4.00
Cyanide	mg/L							
Delta-bhc	ug/L							
Diallate	ug/L							
Dibenzo(a,h)anthracene	ug/L							
Dibenzofuran	ug/L							
Dibromochloromethane	ug/L		<5	<5	<5		<5	<1
Dibromomethane	ug/L							<1
Dichlorodifluoromethane	ug/L							
Dieldrin	ug/L							
Diethyl phthalate	ug/L							
Dimethoate	ug/L							
Dimethylphthalate	ug/L							
Di-n-butyl phthalate	ug/L		<10.5					
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
Famphur	ug/L							
Fluoranthene	ug/L							
Fluorene	ug/L							

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

Table 8

Analytical Data Summary for MW-19

Constituents	3/15/2017	9/27/2017	3/14/2018	9/12/2018	4/1/2019	9/12/2019	5/6/2020	9/3/2020	3/30/2021
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	303	220	290	208	287	327	335	293	270
Benzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(a)anthracene	<8								
Benzo(a)pyrene	<8								
Benzo(b)fluoranthene	<8								
Benzo(g,h,i)perylene	<8								
Benzo(k)fluoranthene	<8								
Benzyl alcohol	<8								
Beryllium, total	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00
Beta-bhc	<.05								
Bicarbonate alkalinity									
Bis (2-chloroethoxy) methane	<8								
Bis(2-chloroethyl) ether	<8								
Bis(2-ethylhexyl) phthalate	<8								
Bis[2-chloroisopropyl]ether	<8								
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate	<8								
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Calcium, total									
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbonate alkalinity									
Chlordane	<.1								
Chloride									
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzilate	<8								
Chloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroprene	<1								
Chromium, total	<8	<8	<8	<8	<8	<8	<8	<8	<8
Chrysene	<8								
Cis-1,2-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	2.30	1.60	4.50	2.70	3.70	5.90	6.10	4.30	3.40
Copper, total	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00
Cyanide	<.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	<8.0								
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								

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

Table 8

Analytical Data Summary for MW-19

Constituents	9/8/2021	3/31/2022	8/30/2022
Antimony, total	<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
Azobenzene		<8	
Barium, total	281	278	223
Benzene	<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	<4.00	<4.00	<4.00
Beta-bhc		<.05	
Bicarbonate alkalinity			
Bis (2-chloroethoxy) methane		<8	
Bis(2-chloroethyl) ether		<8	
Bis(2-ethylhexyl) phthalate		<6	
Bis[2-chloroisopropyl]ether		<8	
Bromochloromethane	<1	<1	<1
Bromodichloromethane	<1	<1	<1
Bromoform	<1	<1	<1
Bromomethane	<1	<1	<1
Butyl benzyl phthalate		<8	
Cadmium, total	<.8	<.8	<.8
Calcium, total			
Carbon disulfide	<1	<1	<1
Carbon tetrachloride	<1	<1	<1
Carbonate alkalinity			
Chlordane		<.1	
Chloride			
Chlorobenzene	<1	<1	<1
Chlorobenzilate		<8	
Chloroethane	<1	<1	<1
Chloroform	<1	<1	<1
Chloromethane	<1	<1	<1
Chloroprene		<1	
Chromium, total	<8	<8	<8
Chrysene		<8	
Cis-1,2-dichloroethene	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1
Cobalt, total	3.00	4.80	1.40
Copper, total	<4.00	<4.00	<4.00
Cyanide		<.005	
Delta-bhc		<.05	
Diallate		<8	
Dibenzo(a,h)anthracene		<8	
Dibenzofuran		<8	
Dibromochloromethane	<1	<1	<1
Dibromomethane	<1	<1	<1
Dichlorodifluoromethane		<1	
Dieldrin		<.05	
Diethyl phthalate		<8	
Dimethoate		<.4	
Dimethylphthalate		<8	
Di-n-butyl phthalate		<8.0	
Di-n-octyl phthalate		<8	
Dinoseb		<.7	
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
Famphur		<.4	
Fluoranthene		<8	
Fluorene		<8	

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

Table 8

Analytical Data Summary for MW-19

Constituents	Units	10/20/2014	10/21/2014	6/22/2015	11/12/2015	4/11/2016	4/12/2016	9/16/2016
Gamma-bhc [lindane]	ug/L							
Heptachlor	ug/L							
Heptachlor epoxide	ug/L							
Hexachlorobenzene	ug/L							
Hexachlorobutadiene	ug/L							
Hexachlorocyclopentadiene	ug/L							
Hexachloroethane	ug/L							
Hexachloropropene	ug/L							
Indeno(1,2,3-cd)pyrene	ug/L							
Iodomethane	ug/L		<10	<10	<10		<10	<1
Isobutanol	mg/L							
Isodrin	ug/L							
Isophorone	ug/L							
Isosafrole	ug/L							
Kepone	ug/L							
Lead, total	ug/L		4.150	1.750	<.500		.873	<4.000
Magnesium, total	mg/L			72.4 *	77.7 *			
Mercury, total	ug/L							
Methacrylonitrile	ug/L							
Methapyrilene	ug/L							
Methoxychlor	ug/L							
Methyl methacrylate	ug/L							
Methyl methanesulfonate	ug/L							
Methyl parathion	ug/L							
Methylene bromide	ug/L		<1	<1	<1		<1	
Methylene chloride	ug/L		<5	<5	<5		<5	<5
Naphthalene	ug/L							
Nickel, total	ug/L		<50.00	8.11	8.46		11.10	8.00
Nitrobenzene	ug/L							
N-nitrosodiethylamine	ug/L							
N-nitrosodimethylamine	ug/L							
N-nitrosodi-n-butylamine	ug/L							
N-nitroso-di-n-propylamine	ug/L							
N-nitrosodiphenylamine	ug/L							
N-nitrosomethylethylamine	ug/L							
N-nitrosopiperidine	ug/L							
N-nitrosopyrrolidine	ug/L							
O,o,o-triethyl phosphorothioate	ug/L							
O-toluidine	ug/L							
P-(dimethylamino)azobenzene	ug/L							
Parathion	ug/L							
Pentachlorobenzene	ug/L							
Pentachloronitrobenzene (pcnb)	ug/L							
Pentachlorophenol	ug/L							
Phenacetin	ug/L							
Phenanthrene	ug/L							
Phenol	ug/L							
Phorate	ug/L							
Potassium, total	mg/L			1.68 *	2.38 *			
Pronamide	ug/L							
Propionitrile	ug/L							
Pyrene	ug/L							
Safrole	ug/L							
Selenium, total	ug/L		<5	<5	<5		<5	<4
Silver, total	ug/L		<20	<1	<1		<1	<4
Sodium, total	mg/L			25.6 *	29.7 *			
Styrene	ug/L		<1	<1	<1		<1	<1
Sulfate	mg/L			120 *	117 *			
Sulfide	mg/L							
Tetrachloroethene	ug/L		<1	<1	<1		<1	<1
Thallium, total	ug/L		<2	<2	<2		<2	<4
Thionazin	ug/L							
Tin, total	ug/L	126	126	<5 *	<5 *	<5	<5	<20
Toluene	ug/L		<1	<1	<1		<1	<1
Total suspended solids	mg/L	3570	3570	793 *	117 *	159	159	85
Toxaphene	ug/L							
Trans-1,2-dichloroethene	ug/L		<1	<1	<1		<1	<1
Trans-1,3-dichloropropene	ug/L		<5	<5	<5		<5	<1
Trans-1,4-dichloro-2-butene	ug/L		<10	<10	<10		<10	<5
Trichloroethene	ug/L		<1	<1	<1		<1	<1
Trichlorofluoromethane	ug/L		<4	<4	<4		<4	<1
Vanadium, total	ug/L		<20	<5	<5		<5	<20
Vinyl acetate	ug/L		<10	<10	<10		<10	<5
Vinyl chloride	ug/L		<1	<1	<1		<1	<1
Xylenes, total	ug/L		<3	<3	<3		<3	<2
Zinc, total	ug/L		46.6	13.9	<10.0		20.4	<8.0

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

Table 8

Analytical Data Summary for MW-19

Constituents	3/15/2017	9/27/2017	3/14/2018	9/12/2018	4/1/2019	9/12/2019	5/6/2020	9/3/2020	3/30/2021
Gamma-bhc [lindane]	<.05								
Heptachlor	<.05								
Heptachlor epoxide	<.05								
Hexachlorobenzene	<.05								
Hexachlorobutadiene	<8								
Hexachlorocyclopentadiene	<8								
Hexachloroethane	<8								
Hexachloropropene	<8								
Indeno(1,2,3-cd)pyrene	<8								
Iodomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Isobutanol	<1								
Isodrin	<8								
Isophorone	<8								
Isosafrole	<8								
Kepone	<8								
Lead, total	<4.000	<4.000	<4.000	<4.000	<4.000	<4.000	<4.000	<4.000	<4.000
Magnesium, total									
Mercury, total	<.5								
Methacrylonitrile	<1								
Methapyrilene	<8								
Methoxychlor	<.05								
Methyl methacrylate	<1								
Methyl methanesulfonate	<8								
Methyl parathion	<.4								
Methylene bromide									
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene	<8								
Nickel, total	11.20	8.20	12.00	7.00	12.90	15.20	12.40	15.30	11.00
Nitrobenzene	<8								
N-nitrosodiethylamine	<8								
N-nitrosodimethylamine	<8								
N-nitrosodi-n-butylamine	<8								
N-nitroso-di-n-propylamine	<8								
N-nitrosodiphenylamine	<8								
N-nitrosomethylethylamine	<8								
N-nitrosopiperidine	<8								
N-nitrosopyrrolidine	<8								
O,o,o-triethyl phosphorothioate	<.4								
O-toluidine	<8								
P-(dimethylamino)azobenzene	<8								
Parathion	<.4								
Pentachlorobenzene	<8								
Pentachloronitrobenzene (pcnb)	<8								
Pentachlorophenol	<8								
Phenacetin	<8								
Phenanthrene	<8								
Phenol	<8								
Phorate	<.4								
Potassium, total									
Pronamide	<8								
Propionitrile	<10								
Pyrene	<8								
Safrole	<8								
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Sodium, total									
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfate									
Sulfide	<1.0								
Tetrachloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4	<4	<4	<4	<2	<2	<2	<2	<2
Thionazin	<.4								
Tin, total	<20								
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total suspended solids	956								
Toxaphene	<.2								
Trans-1,2-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
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	8.3	<8.0	<8.0	25.4	36.8	<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-19

Constituents	9/8/2021	3/31/2022	8/30/2022
Gamma-bhc [lindane]		<.05	
Heptachlor		<.05	
Heptachlor epoxide		<.05	
Hexachlorobenzene		<.05	
Hexachlorobutadiene		<8	
Hexachlorocyclopentadiene		<8	
Hexachloroethane		<8	
Hexachloropropene		<8	
Indeno(1,2,3-cd)pyrene		<8	
Iodomethane	<1	<2	<1
Isobutanol		<1	
Isodrin		<8	
Isophorone		<8	
Isosafrole		<8	
Kepone		<8	
Lead, total	<4.000	<4.000	<4.000
Magnesium, total			
Mercury, total		<.5	
Methacrylonitrile		<1	
Methapyrilene		<8	
Methoxychlor		<.05	
Methyl methacrylate		<1	
Methyl methanesulfonate		<8	
Methyl parathion		<.4	
Methylene bromide			
Methylene chloride	<5	<5	<5
Naphthalene		<8	
Nickel, total	10.70	11.10	7.60
Nitrobenzene		<8	
N-nitrosodiethylamine		<8	
N-nitrosodimethylamine		<8	
N-nitrosodi-n-butylamine		<8	
N-nitroso-di-n-propylamine		<8	
N-nitrosodiphenylamine		<8	
N-nitrosomethylethylamine		<8	
N-nitrosopiperidine		<8	
N-nitrosopyrrolidine		<8	
O,o,o-triethyl phosphorothioate		<.4	
O-toluidine		<8	
P-(dimethylamino)azobenzene		<8	
Parathion		<.4	
Pentachlorobenzene		<8	
Pentachloronitrobenzene (pcnb)		<8	
Pentachlorophenol		<8	
Phenacetin		<8	
Phenanthrene		<8	
Phenol		<8	
Phorate		<.4	
Potassium, total			
Pronamide		<8	
Propionitrile		<10	
Pyrene		<8	
Safrole		<8	
Selenium, total	<4	<4	<4
Silver, total	<4	<4	<4
Sodium, total			
Styrene	<1	<1	<1
Sulfate			
Sulfide		<.2	
Tetrachloroethene	<1	<1	<1
Thallium, total	<2	<2	<2
Thionazin		<.4	
Tin, total		<20	
Toluene	<1	<1	<1
Total suspended solids			
Toxaphene		<.2	
Trans-1,2-dichloroethene	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5
Trichloroethene	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1
Vanadium, total	<20	<20	<20
Vinyl acetate	<5	<5	<5
Vinyl chloride	<1	<1	<1
Xylenes, total	<2	<2	<2
Zinc, total	76.0	<20.0	<20.0

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

Table 9

Analytical Data Summary for MW-20

Constituents	Units	10/20/2014	10/21/2014	6/22/2015	6/23/2015	11/12/2015	4/11/2016	9/16/2016
(3 4)-methylphenol	ug/L							
1,1,1,2-tetrachloroethane	ug/L		<1		<1	<1	<1	<1
1,1,1-trichloroethane	ug/L		<1		<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L		<1		<1	<1	<1	<1
1,1,2-trichloroethane	ug/L		<1		<1	<1	<1	<1
1,1-dichloroethane	ug/L		<1		<1	<1	<1	<1
1,1-dichloroethene	ug/L		<2		<2	<2	<2	<1
1,1-dichloropropene	ug/L							
1,2,3-trichloropropane	ug/L		<1		<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene	ug/L							
1,2,4-trichlorobenzene	ug/L							
1,2-dibromo-3-chloropropane	ug/L		<.12		<.50	<.50	<.50	<1.00
1,2-dibromoethane	ug/L		<.13		<.13	<.13	<.13	<1.00
1,2-dichlorobenzene	ug/L		<1		<1	<1	<1	<1
1,2-dichloroethane	ug/L		<1		<1	<1	<1	<1
1,2-dichloropropane	ug/L		<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		<1.0		<1.0	<1.0	<1.0	3.4
1,4-naphthoquinone	ug/L							
1,4-phenylenediamine	ug/L							
1-naphthylamine	ug/L							
2,2-dichloropropane	ug/L							
2,3,4,6-tetrachlorophenol	ug/L							
2,4,5-t	ug/L							
2,4,5-tp (silvex)	ug/L							
2,4,5-trichlorophenol	ug/L							
2,4,6-trichlorophenol	ug/L							
2,4-d	ug/L							
2,4-dichlorophenol	ug/L							
2,4-dimethylphenol	ug/L							
2,4-dinitrophenol	ug/L							
2,4-dinitrotoluene	ug/L							
2,6-dichlorophenol	ug/L							
2,6-dinitrotoluene	ug/L							
2-acetylaminofluorene	ug/L							
2-butanone	ug/L		<10		<10	<10	<10	<5
2-chloronaphthalene	ug/L							
2-chlorophenol	ug/L							
2-hexanone	ug/L		<10		<10	<10	<10	<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	ug/L		<10		<10	<10	<10	<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		14.8	<10.0	467.0	33.3
Acetonitrile	ug/L							
Acetophenone	ug/L							
Acrolein	ug/L							
Acrylonitrile	ug/L		<10		<10	<10	<10	<5
Aldrin	ug/L							
Allyl chloride	ug/L							
Alpha-bhc	ug/L							
Ammonia as n	mg/L				.535 *	1.180 *	.687 *	

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

Table 9

Analytical Data Summary for MW-20

Constituents	3/15/2017	9/27/2017	3/14/2018	9/12/2018	4/1/2019	9/12/2019	5/6/2020	9/3/2020	3/30/2021
(3 4)-methylphenol	<8								
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloropropene	<1								
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene	<8								
1,2,4-trichlorobenzene	<1								
1,2-dibromo-3-chloropropane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<5.00	<5.00
1,2-dibromoethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
1,2-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	1.2	1.4	1.7	3.0	2.9	<1.0	2.5	1.6	2.6
1,4-naphthoquinone	<8								
1,4-phenylenediamine	<8								
1-naphthylamine	<8								
2,2-dichloropropane	<1								
2,3,4,6-tetrachlorophenol	<8								
2,4,5-t	<.5								
2,4,5-tp (silvex)	<.5								
2,4,5-trichlorophenol	<8								
2,4,6-trichlorophenol	<8								
2,4-d	<2								
2,4-dichlorophenol	<8								
2,4-dimethylphenol	<8								
2,4-dinitrophenol	<8								
2,4-dinitrotoluene	<8								
2,6-dichlorophenol	<8								
2,6-dinitrotoluene	<8								
2-acetylaminofluorene	<8								
2-butanone	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-chloronaphthalene	<8								
2-chlorophenol	<8								
2-hexanone	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-methylnaphthalene	<8								
2-methylphenol (o-cresol)	<8								
2-naphthylamine	<8								
2-nitroaniline	<8								
2-nitrophenol	<8								
3,3´-dichlorobenzidine	<8								
3,3-dimethylbenzidine	<8								
3-methylcholanthrene	<8								
3-nitroaniline	<8								
4,4`-ddd	<.05								
4,4`-dde	<.05								
4,4`-ddt	<.05								
4,6-dinitro-2-methylphenol	<8								
4-aminobiphenyl	<8								
4-bromophenyl phenyl ether	<8								
4-chloro-3-methylphenol	<8								
4-chloroaniline	<8								
4-chlorophenyl phenyl ether	<8								
4-methyl-2-pentanone	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-nitroaniline	<8								
4-nitrophenol	<8								
5-nitro-o-toluidine	<8								
7,12-dimethylbenz [a] anthracene	<8								
Acenaphthene	<8								
Acenaphthylene	<8								
Acetone	<10.0	<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								
Ammonia as n									

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

Table 9

Analytical Data Summary for MW-20

Constituents	9/8/2021	3/31/2022	8/30/2022	3/7/2023	9/28/2023	3/11/2024	10/2/2024
(3 4)-methylphenol		<8					
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethene	<1	<1	<1	<1	<1	<1	<1
1,1-dichloropropene		<1					
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene		<8					
1,2,4-trichlorobenzene		<1					
1,2-dibromo-3-chloropropane	<5.00	<1.00	<5.00	<5.00	<5.00	<5.00	<5.00
1,2-dibromoethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1
1,2-dinitrobenzene		<8					
1,3,5-trinitrobenzene		<8					
1,3-dichlorobenzene		<1					
1,3-dichloropropane		<1					
1,3-dinitrobenzene		<8					
1,4-dichlorobenzene	2.9	2.4	2.8	2.8	3.4	2.6	3.2
1,4-naphthoquinone		<8					
1,4-phenylenediamine		<8					
1-naphthylamine		<8					
2,2-dichloropropane		<1					
2,3,4,6-tetrachlorophenol		<8					
2,4,5-t		<.5					
2,4,5-tp (silvex)		<.5					
2,4,5-trichlorophenol		<8					
2,4,6-trichlorophenol		<8					
2,4-d		<2					
2,4-dichlorophenol		<8					
2,4-dimethylphenol		<8					
2,4-dinitrophenol		<8					
2,4-dinitrotoluene		<8					
2,6-dichlorophenol		<8					
2,6-dinitrotoluene		<8					
2-acetylaminofluorene		<8					
2-butanone	<5	<5	<10	<10	<10	<10	<10
2-chloronaphthalene		<8					
2-chlorophenol		<8					
2-hexanone	<5	<5	<5	<5	<5	<5	<5
2-methylnaphthalene		<8					
2-methylphenol (o-cresol)		<8					
2-naphthylamine		<8					
2-nitroaniline		<8					
2-nitrophenol		<8					
3,3´-dichlorobenzidine		<8					
3,3-dimethylbenzidine		<8					
3-methylcholanthrene		<8					
3-nitroaniline		<8					
4,4`-ddd		<.05					
4,4`-dde		<.05					
4,4`-ddt		<.05					
4,6-dinitro-2-methylphenol		<8					
4-aminobiphenyl		<8					
4-bromophenyl phenyl ether		<8					
4-chloro-3-methylphenol		<8					
4-chloroaniline		<8					
4-chlorophenyl phenyl ether		<8					
4-methyl-2-pentanone	<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
Acetonitrile		<10					
Acetophenone		<8					
Acrolein		<10					
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5
Aldrin		<.05					
Allyl chloride		<1					
Alpha-bhc		<.05					
Ammonia as n							

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

Table 9

Analytical Data Summary for MW-20

Constituents	Units	10/20/2014	10/21/2014	6/22/2015	6/23/2015	11/12/2015	4/11/2016	9/16/2016
Anthracene	ug/L							
Antimony, total	ug/L		<6		<6	<6	<1	<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		55.1		78.2	80.9	151.0	63.8
Azobenzene	ug/L							
Barium, total	ug/L		415		335	419	368	319
Benzene	ug/L		2.51		3.59	3.67	2.67	3.70
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		<1		<1	<1	<1	<4
Beta-bhc	ug/L							
Bicarbonate alkalinity	mg/L as CaCO3				572 *	519 *		
Bis (2-chloroethoxy) methane	ug/L							
Bis(2-chloroethyl) ether	ug/L							
Bis(2-ethylhexyl) phthalate	ug/L							
Bis[2-chloroisopropyl]ether	ug/L							
Bromochloromethane	ug/L		<5		<5	<5	<5	<1
Bromodichloromethane	ug/L		<1		<1	<1	<1	<1
Bromoform	ug/L		<5		<5	<5	<5	<1
Bromomethane	ug/L		<4		<4	<4	<4	<1
Butyl benzyl phthalate	ug/L							
Cadmium, total	ug/L		<.5		<.5	<.5	<.5	<.8
Calcium, total	mg/L				101 *	102 *		
Carbon disulfide	ug/L		<1		<5	<1	<1	<1
Carbon tetrachloride	ug/L		<2		<2	<2	<2	<1
Carbonate alkalinity	mg/L as CaCO3				<5 *	<5 *		
Chlordane	ug/L							
Chloride	mg/L				3.87 *	8.87 *		
Chlorobenzene	ug/L		2.42		3.25	<1.00	<1.00	3.10
Chlorobenzilate	ug/L							
Chloroethane	ug/L		<4.0		<4.0	<4.0	<1.0	1.4
Chloroform	ug/L		<1		<1	<1	<1	<1
Chloromethane	ug/L		<3		<3	<3	<3	<1
Chloroprene	ug/L							
Chromium, total	ug/L		<20		<5	<5	<5	<8
Chrysene	ug/L							
Cis-1,2-dichloroethene	ug/L		<1		<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L		<5		<5	<5	<5	<1
Cobalt, total	ug/L		4.48		1.06	2.19	1.72	6.10
Copper, total	ug/L		27.00		<2.00	2.73	<2.00	6.20
Cyanide	mg/L							
Delta-bhc	ug/L							
Diallate	ug/L							
Dibenzo(a,h)anthracene	ug/L							
Dibenzofuran	ug/L							
Dibromochloromethane	ug/L		<5		<5	<5	<5	<1
Dibromomethane	ug/L							<1
Dichlorodifluoromethane	ug/L							
Dieldrin	ug/L							
Diethyl phthalate	ug/L							
Dimethoate	ug/L							
Dimethylphthalate	ug/L							
Di-n-butyl phthalate	ug/L							
Di-n-octyl phthalate	ug/L							
Dinoseb	ug/L							
Diphenylamine	ug/L							
Disulfoton	ug/L							
Endosulfan i	ug/L							
Endosulfan ii	ug/L							
Endosulfan sulfate	ug/L							
Endrin	ug/L							
Endrin aldehyde	ug/L							
Ethyl methacrylate	ug/L							
Ethyl methanesulfonate	ug/L							
Ethylbenzene	ug/L		<1		<1	<1	<1	<1
Famphur	ug/L							
Fluoranthene	ug/L							

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

Table 9

Analytical Data Summary for MW-20

Constituents	3/15/2017	9/27/2017	3/14/2018	9/12/2018	4/1/2019	9/12/2019	5/6/2020	9/3/2020	3/30/2021
Anthracene	<8								
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arochlor 1016	<.1								
Arochlor 1221	<.2								
Arochlor 1232	<.2								
Arochlor 1242	<.2								
Arochlor 1248	<.2								
Arochlor 1254	<.1								
Arochlor 1260	<.1								
Arsenic, total	89.5	26.8	23.7	44.9	19.5	72.0	42.3	50.6	38.9
Azobenzene	<8								
Barium, total	384	355	301	435	289	321	284	280	286
Benzene	2.50	2.60	1.70	2.70	2.40	2.80	2.50	2.70	1.90
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								
Bicarbonate alkalinity									
Bis (2-chloroethoxy) methane	<8								
Bis(2-chloroethyl) ether	<8								
Bis(2-ethylhexyl) phthalate	<8								
Bis[2-chloroisopropyl]ether	<8								
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate	<8								
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Calcium, total									
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbonate alkalinity									
Chlordane	<.1								
Chloride									
Chlorobenzene	1.40	1.60	<1.00	3.10	2.60	3.60	2.20	1.70	2.20
Chlorobenzilate	<8								
Chloroethane	1.1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroprene	<1								
Chromium, total	<8	<8	<8	<8	<8	<8	<8	<8	<8
Chrysene	<8								
Cis-1,2-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	2.00	<.80	<2.00	<.80	.90	<.80	.50	.70	7.90
Copper, total	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00
Cyanide	<.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								

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

Table 9

Analytical Data Summary for MW-20

Constituents	9/8/2021	3/31/2022	8/30/2022	3/7/2023	9/28/2023	3/11/2024	10/2/2024
Anthracene		<8					
Antimony, total	<2	<2	<2	<2	<2	<2	<2
Arochlor 1016		<.1					
Arochlor 1221		<.2					
Arochlor 1232		<.2					
Arochlor 1242		<.2					
Arochlor 1248		<.2					
Arochlor 1254		<.1					
Arochlor 1260		<.1					
Arsenic, total	40.2	44.1	23.3	106.0	37.5	27.9	26.7
Azobenzene		<8					
Barium, total	308	285	338	279	313	326	332
Benzene	2.80	2.30	3.60	2.20	2.60	2.30	2.80
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
Beta-bhc		<.05					
Bicarbonate alkalinity							
Bis (2-chloroethoxy) methane		<8					
Bis(2-chloroethyl) ether		<8					
Bis(2-ethylhexyl) phthalate		<6					
Bis[2-chloroisopropyl]ether		<8					
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate		<8					
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Calcium, total							
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1
Carbonate alkalinity							
Chlordane		<.1					
Chloride							
Chlorobenzene	2.70	2.60	3.10	2.50	3.40	2.80	3.60
Chlorobenzilate		<8					
Chloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroform	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1
Chloroprene		<1					
Chromium, total	<8	<8	<8	<8	<8	<8	<8
Chrysene		<8					
Cis-1,2-dichloroethene	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	2.70	.60	.40	<.40	2.80	<.40	.90
Copper, total	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00
Cyanide		<.005					
Delta-bhc		<.05					
Diallate		<8					
Dibenzo(a,h)anthracene		<8					
Dibenzofuran		<8					
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<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
Famphur		<.4					
Fluoranthene		<8					

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

Table 9

Analytical Data Summary for MW-20

Constituents	Units	10/20/2014	10/21/2014	6/22/2015	6/23/2015	11/12/2015	4/11/2016	9/16/2016
Fluorene	ug/L							
Gamma-bhc [lindane]	ug/L							
Heptachlor	ug/L							
Heptachlor epoxide	ug/L							
Hexachlorobenzene	ug/L							
Hexachlorobutadiene	ug/L							
Hexachlorocyclopentadiene	ug/L							
Hexachloroethane	ug/L							
Hexachloropropene	ug/L							
Indeno(1,2,3-cd)pyrene	ug/L							
Iodomethane	ug/L		<10		<10	<10	<10	<1
Iron, total	ug/L				64700 *	60600 *	55100 *	
Isobutanol	mg/L							
Isodrin	ug/L							
Isophorone	ug/L							
Isosafrole	ug/L							
Kepone	ug/L							
Lead, total	ug/L		<4.000		.804	1.730	1.730	<4.000
Magnesium, total	mg/L				44.1 *	50.5 *		
Manganese, total	ug/L				10200 *	11700 *	8180 *	
Mercury, total	ug/L							
Methacrylonitrile	ug/L							
Methapyrilene	ug/L							
Methoxychlor	ug/L							
Methyl methacrylate	ug/L							
Methyl methanesulfonate	ug/L							
Methyl parathion	ug/L							
Methylene bromide	ug/L		<1		<1	<1	<1	
Methylene chloride	ug/L		<5		<5	<5	<5	<5
Naphthalene	ug/L							
Nickel, total	ug/L		<30.00		<5.00	7.80	5.35	8.00
Nitrate as n	mg/L				<.10 *	<.10 *	1.35 *	
Nitrobenzene	ug/L							
N-nitrosodiethylamine	ug/L							
N-nitrosodimethylamine	ug/L							
N-nitrosodi-n-butylamine	ug/L							
N-nitroso-di-n-propylamine	ug/L							
N-nitrosodiphenylamine	ug/L							
N-nitrosomethylethylamine	ug/L							
N-nitrosopiperidine	ug/L							
N-nitrosopyrrolidine	ug/L							
O,o,o-triethyl phosphorothioate	ug/L							
O-toluidine	ug/L							
P-(dimethylamino)azobenzene	ug/L							
Parathion	ug/L							
Pentachlorobenzene	ug/L							
Pentachloronitrobenzene (pcnb)	ug/L							
Pentachlorophenol	ug/L							
Phenacetin	ug/L							
Phenanthrene	ug/L							
Phenol	ug/L							
Phorate	ug/L							
Potassium, total	mg/L				<1 *	<1 *		
Pronamide	ug/L							
Propionitrile	ug/L							
Pyrene	ug/L							
Safrole	ug/L							
Selenium, total	ug/L		<5		<5	<5	<5	<4
Silver, total	ug/L		<20		<1	<1	<1	<4
Sodium, total	mg/L				13.6 *	13.4 *		
Styrene	ug/L		<1		<1	<1	<1	<1
Sulfate	mg/L				1.60 *	<5.00 *	5.42 *	
Sulfide	mg/L							
Tetrachloroethene	ug/L		<1		<1	<1	<1	<1
Thallium, total	ug/L		<2		<1	<1	<2	<4
Thionazin	ug/L							
Tin, total	ug/L							
Toluene	ug/L		3.15		3.09	<1.00	<1.00	1.40
Total organic carbon	mg/L				18.7 *	16.1 *	12.1 *	
Total suspended solids	mg/L	92.0	92.0	55.5 *	55.2 *	115.0 *	318.0 *	87.0
Toxaphene	ug/L							
Trans-1,2-dichloroethene	ug/L		<1		<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L		<5		<5	<5	<5	<1
Trans-1,4-dichloro-2-butene	ug/L		<10		<10	<10	<10	<5
Trichloroethene	ug/L		<1		<1	<1	<1	<1
Trichlorofluoromethane	ug/L		<4		<4	<4	<4	<1
Vanadium, total	ug/L		<5.0		<5.0	5.8	<5.0	<20.0

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

Table 9

Analytical Data Summary for MW-20

Constituents	3/15/2017	9/27/2017	3/14/2018	9/12/2018	4/1/2019	9/12/2019	5/6/2020	9/3/2020	3/30/2021
Fluorene	<8								
Gamma-bhc [lindane]	<.05								
Heptachlor	<.05								
Heptachlor epoxide	<.05								
Hexachlorobenzene	<.05								
Hexachlorobutadiene	<8								
Hexachlorocyclopentadiene	<8								
Hexachloroethane	<8								
Hexachloropropene	<8								
Indeno(1,2,3-cd)pyrene	<8								
Iodomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Iron, total									
Isobutanol	<1								
Isodrin	<8								
Isophorone	<8								
Isosafrole	<8								
Kepone	<8								
Lead, total	<4.000	<4.000	<4.000	<4.000	<4.000	<4.000	<4.000	<4.000	<4.000
Magnesium, total									
Manganese, total									
Mercury, total	<.5								
Methacrylonitrile	<1								
Methapyrilene	<8								
Methoxychlor	<.05								
Methyl methacrylate	<1								
Methyl methanesulfonate	<8								
Methyl parathion	<.4								
Methylene bromide									
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene	<8								
Nickel, total	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00
Nitrate as n									
Nitrobenzene	<8								
N-nitrosodiethylamine	<8								
N-nitrosodimethylamine	<8								
N-nitrosodi-n-butylamine	<8								
N-nitroso-di-n-propylamine	<8								
N-nitrosodiphenylamine	<8								
N-nitrosomethylethylamine	<8								
N-nitrosopiperidine	<8								
N-nitrosopyrrolidine	<8								
O,o,o-triethyl phosphorothioate	<.4								
O-toluidine	<8								
P-(dimethylamino)azobenzene	<8								
Parathion	<.4								
Pentachlorobenzene	<8								
Pentachloronitrobenzene (pcnb)	<8								
Pentachlorophenol	<8								
Phenacetin	<8								
Phenanthrene	<8								
Phenol	<8								
Phorate	<.4								
Potassium, total									
Pronamide	<8								
Propionitrile	<10								
Pyrene	<8								
Safrole	<8								
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Sodium, total									
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfate									
Sulfide	<.10								
Tetrachloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4	<4	<4	<4	<2	<2	<2	<2	<2
Thionazin	<.4								
Tin, total	<20								
Toluene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Total organic carbon									
Total suspended solids	152.0								
Toxaphene	<.2								
Trans-1,2-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 9

Analytical Data Summary for MW-20

Constituents	9/8/2021	3/31/2022	8/30/2022	3/7/2023	9/28/2023	3/11/2024	10/2/2024
Fluorene		<8					
Gamma-bhc [lindane]		<.05					
Heptachlor		<.05					
Heptachlor epoxide		<.05					
Hexachlorobenzene		<.05					
Hexachlorobutadiene		<8					
Hexachlorocyclopentadiene		<8					
Hexachloroethane		<8					
Hexachloropropene		<8					
Indeno(1,2,3-cd)pyrene		<8					
Iodomethane	<1	<2	<1	<1	<1	<1	<1
Iron, total							
Isobutanol		<1					
Isodrin		<8					
Isophorone		<8					
Isosafrole		<8					
Kepone		<8					
Lead, total	<4.000	<4.000	<4.000	<4.000	<4.000	<4.000	<4.000
Magnesium, total							
Manganese, total							
Mercury, total		<.5					
Methacrylonitrile		<1					
Methapyrilene		<8					
Methoxychlor		<.05					
Methyl methacrylate		<1					
Methyl methanesulfonate		<8					
Methyl parathion		<.4					
Methylene bromide							
Methylene chloride	<5	<5	<5	<5	<5	<5	<5
Naphthalene		<8					
Nickel, total	6.10	<4.00	<4.00	<4.00	7.40	<4.00	<4.00
Nitrate as n							
Nitrobenzene		<8					
N-nitrosodiethylamine		<8					
N-nitrosodimethylamine		<8					
N-nitrosodi-n-butylamine		<8					
N-nitroso-di-n-propylamine		<8					
N-nitrosodiphenylamine		<8					
N-nitrosomethylethylamine		<8					
N-nitrosopiperidine		<8					
N-nitrosopyrrolidine		<8					
O,o,o-triethyl phosphorothioate		<.4					
O-toluidine		<8					
P-(dimethylamino)azobenzene		<8					
Parathion		<.4					
Pentachlorobenzene		<8					
Pentachloronitrobenzene (pcnb)		<8					
Pentachlorophenol		<8					
Phenacetin		<8					
Phenanthrene		<8					
Phenol		<8					
Phorate		<.4					
Potassium, total							
Pronamide		<8					
Propionitrile		<10					
Pyrene		<8					
Safrole		<8					
Selenium, total	<4	<4	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4	<4	<4
Sodium, total							
Styrene	<1	<1	<1	<1	<1	<1	<1
Sulfate							
Sulfide		.33	.23	.16	.44	<.15	<.10
Tetrachloroethene	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2	<2	<2	<2
Thionazin		<.4					
Tin, total		<20					
Toluene	<1.00	<1.00	2.10	<1.00	<1.00	1.10	<1.00
Total organic carbon							
Total suspended solids							
Toxaphene		<.2					
Trans-1,2-dichloroethene	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 9

Analytical Data Summary for MW-20

Constituents	Units	10/20/2014	10/21/2014	6/22/2015	6/23/2015	11/12/2015	4/11/2016	9/16/2016
Vinyl acetate	ug/L		<10		<10	<10	<10	<5
Vinyl chloride	ug/L		<1		<1	<1	<1	<1
Xylenes, total	ug/L		<3		<3	<3	<3	<2
Zinc, total	ug/L		22.8		<10.0	13.5	<10.0	<8.0

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

Table 9

Analytical Data Summary for MW-20

Constituents	3/15/2017	9/27/2017	3/14/2018	9/12/2018	4/1/2019	9/12/2019	5/6/2020	9/3/2020	3/30/2021
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	<8.0	55.1	36.2	27.7	<20.0	<20.0	<20.0

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

Table 9

Analytical Data Summary for MW-20

Constituents	9/8/2021	3/31/2022	8/30/2022	3/7/2023	9/28/2023	3/11/2024	10/2/2024
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2	<2	<2
Zinc, total	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 10

Analytical Data Summary for MW-23

Constituents	Units	10/20/2014	10/21/2014	6/22/2015	11/12/2015	4/11/2016	4/12/2016	9/16/2016
(3 4)-methylphenol	ug/L							
1,1,1,2-tetrachloroethane	ug/L		<1	<1	<1		<1	<1
1,1,1-trichloroethane	ug/L		<1	<1	<1		<1	<1
1,1,2,2-tetrachloroethane	ug/L		<1	<1	<1		<1	<1
1,1,2-trichloroethane	ug/L		<1	<1	<1		<1	<1
1,1-dichloroethane	ug/L		<1	<1	<1		<1	<1
1,1-dichloroethene	ug/L		<2	<2	<2		<2	<1
1,1-dichloropropene	ug/L							
1,2,3-trichloropropane	ug/L		<1	<1	<1		<1	<1
1,2,4,5-tetrachlorobenzene	ug/L							
1,2,4-trichlorobenzene	ug/L							
1,2-dibromo-3-chloropropane	ug/L		<.12	<.50	<.50		<.50	<1.00
1,2-dibromoethane	ug/L		<.13	<.13	<.13		<.13	<1.00
1,2-dichlorobenzene	ug/L		<1	<1	<1		<1	<1
1,2-dichloroethane	ug/L		<1	<1	<1		<1	<1
1,2-dichloropropane	ug/L		<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
1,4-naphthoquinone	ug/L							
1,4-phenylenediamine	ug/L							
1-naphthylamine	ug/L							
2,2-dichloropropane	ug/L							
2,3,4,6-tetrachlorophenol	ug/L							
2,4,5-t	ug/L							
2,4,5-tp (silvex)	ug/L							
2,4,5-trichlorophenol	ug/L							
2,4,6-trichlorophenol	ug/L							
2,4-d	ug/L							
2,4-dichlorophenol	ug/L							
2,4-dimethylphenol	ug/L							
2,4-dinitrophenol	ug/L							
2,4-dinitrotoluene	ug/L							
2,6-dichlorophenol	ug/L							
2,6-dinitrotoluene	ug/L							
2-acetylaminofluorene	ug/L							
2-butanone	ug/L		<10	<10	<10		<10	<5
2-chloronaphthalene	ug/L							
2-chlorophenol	ug/L							
2-hexanone	ug/L		<10	<10	<10		<10	<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	ug/L		<10	<10	<10		<10	<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
Acetonitrile	ug/L							
Acetophenone	ug/L							
Acrolein	ug/L							
Acrylonitrile	ug/L		<10	<10	<10		<10	<5
Aldrin	ug/L							
Allyl chloride	ug/L							
Alpha-bhc	ug/L							
Ammonia as n	mg/L				2.53 *	2.27	2.27	

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

Table 10

Analytical Data Summary for MW-23

Constituents	3/15/2017	9/27/2017	3/14/2018	9/12/2018	4/1/2019	9/12/2019	5/6/2020	9/3/2020	3/30/2021
(3 4)-methylphenol	<8								
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloropropene	<1								
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene	<8								
1,2,4-trichlorobenzene	<1								
1,2-dibromo-3-chloropropane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<5.00	<5.00
1,2-dibromoethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dinitrobenzene	<8								
1,3,5-trinitrobenzene	<8								
1,3-dichlorobenzene	<1								
1,3-dichloropropane	<1								
1,3-dinitrobenzene	<8								
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-naphthoquinone	<8								
1,4-phenylenediamine	<8								
1-naphthylamine	<8								
2,2-dichloropropane	<1								
2,3,4,6-tetrachlorophenol	<8								
2,4,5-t	<.5								
2,4,5-tp (silvex)	<.5								
2,4,5-trichlorophenol	<8								
2,4,6-trichlorophenol	<8								
2,4-d	<2								
2,4-dichlorophenol	<8								
2,4-dimethylphenol	<8								
2,4-dinitrophenol	<8								
2,4-dinitrotoluene	<8								
2,6-dichlorophenol	<8								
2,6-dinitrotoluene	<8								
2-acetylaminofluorene	<8								
2-butanone	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-chloronaphthalene	<8								
2-chlorophenol	<8								
2-hexanone	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-methylnaphthalene	<8								
2-methylphenol (o-cresol)	<8								
2-naphthylamine	<8								
2-nitroaniline	<8								
2-nitrophenol	<8								
3,3´-dichlorobenzidine	<8								
3,3-dimethylbenzidine	<8								
3-methylcholanthrene	<8								
3-nitroaniline	<8								
4,4`-ddd	<.05								
4,4`-dde	<.05								
4,4`-ddt	<.05								
4,6-dinitro-2-methylphenol	<8								
4-aminobiphenyl	<8								
4-bromophenyl phenyl ether	<8								
4-chloro-3-methylphenol	<8								
4-chloroaniline	<8								
4-chlorophenyl phenyl ether	<8								
4-methyl-2-pentanone	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-nitroaniline	<8								
4-nitrophenol	<8								
5-nitro-o-toluidine	<8								
7,12-dimethylbenz [a] anthracene	<8								
Acenaphthene	<8								
Acenaphthylene	<8								
Acetone	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acetonitrile	<10								
Acetophenone	<8								
Acrolein	<10								
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5
Aldrin	<.05								
Allyl chloride	<1								
Alpha-bhc	<.05								
Ammonia as n									

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

Table 10

Analytical Data Summary for MW-23

Constituents	9/8/2021
(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-dichloroethene	<1
1,1-dichloropropene	
1,2,3-trichloropropane	<1
1,2,4,5-tetrachlorobenzene	
1,2,4-trichlorobenzene	
1,2-dibromo-3-chloropropane	<5.00
1,2-dibromoethane	<1.00
1,2-dichlorobenzene	<1
1,2-dichloroethane	<1
1,2-dichloropropane	<1
1,2-dinitrobenzene	
1,3,5-trinitrobenzene	
1,3-dichlorobenzene	
1,3-dichloropropane	
1,3-dinitrobenzene	
1,4-dichlorobenzene	<1
1,4-naphthoquinone	
1,4-phenylenediamine	
1-naphthylamine	
2,2-dichloropropane	
2,3,4,6-tetrachlorophenol	
2,4,5-t	
2,4,5-tp (silvex)	
2,4,5-trichlorophenol	
2,4,6-trichlorophenol	
2,4-d	
2,4-dichlorophenol	
2,4-dimethylphenol	
2,4-dinitrophenol	
2,4-dinitrotoluene	
2,6-dichlorophenol	
2,6-dinitrotoluene	
2-acetylaminofluorene	
2-butanone	<5
2-chloronaphthalene	
2-chlorophenol	
2-hexanone	<5
2-methylnaphthalene	
2-methylphenol (o-cresol)	
2-naphthylamine	
2-nitroaniline	
2-nitrophenol	
3,3´-dichlorobenzidine	
3,3-dimethylbenzidine	
3-methylcholanthrene	
3-nitroaniline	
4,4`-ddd	
4,4`-dde	
4,4`-ddt	
4,6-dinitro-2-methylphenol	
4-aminobiphenyl	
4-bromophenyl phenyl ether	
4-chloro-3-methylphenol	
4-chloroaniline	
4-chlorophenyl phenyl ether	
4-methyl-2-pentanone	<5
4-nitroaniline	
4-nitrophenol	
5-nitro-o-toluidine	
7,12-dimethylbenz [a] anthracene	
Acenaphthene	
Acenaphthylene	
Acetone	<10
Acetonitrile	
Acetophenone	
Acrolein	
Acrylonitrile	<5
Aldrin	
Allyl chloride	
Alpha-bhc	
Ammonia as n	

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

Table 10

Analytical Data Summary for MW-23

Constituents	Units	10/20/2014	10/21/2014	6/22/2015	11/12/2015	4/11/2016	4/12/2016	9/16/2016
Anthracene	ug/L							
Antimony, total	ug/L		<6	<1	<6		<1	<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		62.3	106.0	108.0		55.3	136.0
Azobenzene	ug/L							
Barium, total	ug/L		772	1120	524		463	505
Benzene	ug/L		<.5	<.5	<.5		<.5	<1.0
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		<1	<1	<1		<1	<4
Beta-bhc	ug/L							
Bicarbonate alkalinity	mg/L as CaCO3				584 *			
Bis (2-chloroethoxy) methane	ug/L							
Bis(2-chloroethyl) ether	ug/L							
Bis(2-ethylhexyl) phthalate	ug/L							
Bis[2-chloroisopropyl]ether	ug/L							
Bromochloromethane	ug/L		<5	<5	<5		<5	<1
Bromodichloromethane	ug/L		<1	<1	<1		<1	<1
Bromoform	ug/L		<5	<5	<5		<5	<1
Bromomethane	ug/L		<4	<4	<4		<4	<1
Butyl benzyl phthalate	ug/L							
Cadmium, total	ug/L		1.400	.758	<.500		<.500	<.800
Calcium, total	mg/L				130 *			
Carbon disulfide	ug/L		<1	<1	<1		<1	<1
Carbon tetrachloride	ug/L		<2	<2	<2		<2	<1
Carbonate alkalinity	mg/L as CaCO3				<5 *			
Chlordane	ug/L							
Chloride	mg/L				53.1 *			
Chlorobenzene	ug/L		<1	<1	<1		<1	<1
Chlorobenzilate	ug/L							
Chloroethane	ug/L		<4	<4	<4		<4	<1
Chloroform	ug/L		<1	<1	<1		<1	<1
Chloromethane	ug/L		<3	<3	<3		<3	<1
Chloroprene	ug/L							
Chromium, total	ug/L		<20	<5	<5		<5	<8
Chrysene	ug/L							
Cis-1,2-dichloroethene	ug/L		<1	<1	<1		<1	<1
Cis-1,3-dichloropropene	ug/L		<5	<5	<5		<5	<1
Cobalt, total	ug/L		20.90	13.40	7.39		6.41	6.60
Copper, total	ug/L		<20.00	9.04	3.70		<5.00	<4.00
Cyanide	mg/L							
Delta-bhc	ug/L							
Diallate	ug/L							
Dibenzo(a,h)anthracene	ug/L							
Dibenzofuran	ug/L							
Dibromochloromethane	ug/L		<5	<5	<5		<5	<1
Dibromomethane	ug/L							<1
Dichlorodifluoromethane	ug/L							
Dieldrin	ug/L							
Diethyl phthalate	ug/L							
Dimethoate	ug/L							
Dimethylphthalate	ug/L							
Di-n-butyl phthalate	ug/L		<10.4					
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
Famphur	ug/L							
Fluoranthene	ug/L							

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

Table 10

Analytical Data Summary for MW-23

Constituents	3/15/2017	9/27/2017	3/14/2018	9/12/2018	4/1/2019	9/12/2019	5/6/2020	9/3/2020	3/30/2021
Anthracene	<8								
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arochlor 1016	<.1								
Arochlor 1221	<.2								
Arochlor 1232	<.2								
Arochlor 1242	<.2								
Arochlor 1248	<.2								
Arochlor 1254	<.1								
Arochlor 1260	<.1								
Arsenic, total	23.3	54.7	31.6	39.2	81.9	154.0	179.0	115.0	37.8
Azobenzene	<8								
Barium, total	350	393	352	353	465	510	687	515	410
Benzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(a)anthracene	<8								
Benzo(a)pyrene	<8								
Benzo(b)fluoranthene	<8								
Benzo(g,h,i)perylene	<8								
Benzo(k)fluoranthene	<8								
Benzyl alcohol	<8								
Beryllium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Beta-bhc	<.05								
Bicarbonate alkalinity									
Bis (2-chloroethoxy) methane	<8								
Bis(2-chloroethyl) ether	<8								
Bis(2-ethylhexyl) phthalate	<8								
Bis[2-chloroisopropyl]ether	<8								
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate	<8								
Cadmium, total	<.800	<.800	<.800	<.800	<.800	<.800	<.800	<.800	<.800
Calcium, total									
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbonate alkalinity									
Chlordane	<.1								
Chloride									
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzilate	<8								
Chloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroprene	<1								
Chromium, total	<8	<8	<8	<8	<8	<8	<8	<8	<8
Chrysene	<8								
Cis-1,2-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	7.60	7.80	7.20	7.90	7.70	8.00	8.10	8.30	6.80
Copper, total	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00
Cyanide	<.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	<8.0								
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								

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

Table 10

Analytical Data Summary for MW-23

Constituents	9/8/2021
Anthracene	
Antimony, total	<2
Arochlor 1016	
Arochlor 1221	
Arochlor 1232	
Arochlor 1242	
Arochlor 1248	
Arochlor 1254	
Arochlor 1260	
Arsenic, total	105.0
Azobenzene	
Barium, total	424
Benzene	<1.0
Benzo(a)anthracene	
Benzo(a)pyrene	
Benzo(b)fluoranthene	
Benzo(g,h,i)perylene	
Benzo(k)fluoranthene	
Benzyl alcohol	
Beryllium, total	<4
Beta-bhc	
Bicarbonate alkalinity	
Bis (2-chloroethoxy) methane	
Bis(2-chloroethyl) ether	
Bis(2-ethylhexyl) phthalate	
Bis[2-chloroisopropyl]ether	
Bromochloromethane	<1
Bromodichloromethane	<1
Bromoform	<1
Bromomethane	<1
Butyl benzyl phthalate	
Cadmium, total	<.800
Calcium, total	
Carbon disulfide	<1
Carbon tetrachloride	<1
Carbonate alkalinity	
Chlordane	
Chloride	
Chlorobenzene	<1
Chlorobenzilate	
Chloroethane	<1
Chloroform	<1
Chloromethane	<1
Chloroprene	
Chromium, total	<8
Chrysene	
Cis-1,2-dichloroethene	<1
Cis-1,3-dichloropropene	<1
Cobalt, total	6.30
Copper, total	<4.00
Cyanide	
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	

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

Table 10

Analytical Data Summary for MW-23

Constituents	Units	10/20/2014	10/21/2014	6/22/2015	11/12/2015	4/11/2016	4/12/2016	9/16/2016
Fluorene	ug/L							
Gamma-bhc [lindane]	ug/L							
Heptachlor	ug/L							
Heptachlor epoxide	ug/L							
Hexachlorobenzene	ug/L							
Hexachlorobutadiene	ug/L							
Hexachlorocyclopentadiene	ug/L							
Hexachloroethane	ug/L							
Hexachloropropene	ug/L							
Indeno(1,2,3-cd)pyrene	ug/L							
Iodomethane	ug/L		<10	<10	<10		<10	<1
Iron, total	ug/L				35100 *	34700	34700	
Isobutanol	mg/L							
Isodrin	ug/L							
Isophorone	ug/L							
Isosafrole	ug/L							
Kepone	ug/L							
Lead, total	ug/L		6.610	1.750	1.700		.547	<4.000
Magnesium, total	mg/L				61.8 *			
Manganese, total	ug/L				3680 *	5130	5130	
Mercury, total	ug/L							
Methacrylonitrile	ug/L							
Methapyrilene	ug/L							
Methoxychlor	ug/L							
Methyl methacrylate	ug/L							
Methyl methanesulfonate	ug/L							
Methyl parathion	ug/L							
Methylene bromide	ug/L		<1	<1	<1		<1	
Methylene chloride	ug/L		<5	<5	<5		<5	<5
Naphthalene	ug/L							
Nickel, total	ug/L		<50.00	13.00	11.50		9.58	7.20
Nitrate as n	mg/L				<.1 *	<.1	<.1	
Nitrobenzene	ug/L							
N-nitrosodiethylamine	ug/L							
N-nitrosodimethylamine	ug/L							
N-nitrosodi-n-butylamine	ug/L							
N-nitroso-di-n-propylamine	ug/L							
N-nitrosodiphenylamine	ug/L							
N-nitrosomethylethylamine	ug/L							
N-nitrosopiperidine	ug/L							
N-nitrosopyrrolidine	ug/L							
O,o,o-triethyl phosphorothioate	ug/L							
O-toluidine	ug/L							
P-(dimethylamino)azobenzene	ug/L							
Parathion	ug/L							
Pentachlorobenzene	ug/L							
Pentachloronitrobenzene (pcnb)	ug/L							
Pentachlorophenol	ug/L							
Phenacetin	ug/L							
Phenanthrene	ug/L							
Phenol	ug/L							
Phorate	ug/L							
Potassium, total	mg/L				1.14 *			
Pronamide	ug/L							
Propionitrile	ug/L							
Pyrene	ug/L							
Safrole	ug/L							
Selenium, total	ug/L		<5	<5	<5		<5	<4
Silver, total	ug/L		<20	<1	<1		<1	<4
Sodium, total	mg/L				31.5 *			
Styrene	ug/L		<1	<1	<1		<1	<1
Sulfate	mg/L				<5 *			
Sulfide	mg/L							
Tetrachloroethene	ug/L		<1	<1	<1		<1	<1
Thallium, total	ug/L		<2	<2	<1		<1	<4
Thionazin	ug/L							
Tin, total	ug/L	124	124	<5 *	<5 *	<5	<5	<20
Toluene	ug/L		<1	<1	<1		<1	<1
Total organic carbon	mg/L				18.4 *	12.7	12.7	
Total suspended solids	mg/L	1170	1170	183 *	277 *	185	185	78
Toxaphene	ug/L							
Trans-1,2-dichloroethene	ug/L		<1	<1	<1		<1	<1
Trans-1,3-dichloropropene	ug/L		<5	<5	<5		<5	<1
Trans-1,4-dichloro-2-butene	ug/L		<10	<10	<10		<10	<5
Trichloroethene	ug/L		<1	<1	<1		<1	<1
Trichlorofluoromethane	ug/L		<4	<4	<4		<4	<1
Vanadium, total	ug/L		<20	<5	<5		<5	<20

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

Table 10

Analytical Data Summary for MW-23

Constituents	3/15/2017	9/27/2017	3/14/2018	9/12/2018	4/1/2019	9/12/2019	5/6/2020	9/3/2020	3/30/2021
Fluorene	<8								
Gamma-bhc [lindane]	<.05								
Heptachlor	<.05								
Heptachlor epoxide	<.05								
Hexachlorobenzene	<.05								
Hexachlorobutadiene	<8								
Hexachlorocyclopentadiene	<8								
Hexachloroethane	<8								
Hexachloropropene	<8								
Indeno(1,2,3-cd)pyrene	<8								
Iodomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Iron, total									
Isobutanol	<1								
Isodrin	<8								
Isophorone	<8								
Isosafrole	<8								
Kepone	<8								
Lead, total	<4.000	<4.000	<4.000	<4.000	<4.000	<4.000	<4.000	<4.000	<4.000
Magnesium, total									
Manganese, total									
Mercury, total	<.5								
Methacrylonitrile	<1								
Methapyrilene	<8								
Methoxychlor	<.05								
Methyl methacrylate	<1								
Methyl methanesulfonate	<8								
Methyl parathion	<.4								
Methylene bromide									
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene	<8								
Nickel, total	11.80	13.00	11.70	13.20	13.30	12.60	14.70	12.90	11.70
Nitrate as n									
Nitrobenzene	<8								
N-nitrosodiethylamine	<8								
N-nitrosodimethylamine	<8								
N-nitrosodi-n-butylamine	<8								
N-nitroso-di-n-propylamine	<8								
N-nitrosodiphenylamine	<8								
N-nitrosomethylethylamine	<8								
N-nitrosopiperidine	<8								
N-nitrosopyrrolidine	<8								
O,o,o-triethyl phosphorothioate	<.4								
O-toluidine	<8								
P-(dimethylamino)azobenzene	<8								
Parathion	<.4								
Pentachlorobenzene	<8								
Pentachloronitrobenzene (pcnb)	<8								
Pentachlorophenol	<8								
Phenacetin	<8								
Phenanthrene	<8								
Phenol	<8								
Phorate	<.4								
Potassium, total									
Pronamide	<8								
Propionitrile	<10								
Pyrene	<8								
Safrole	<8								
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Sodium, total									
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfate									
Sulfide	<.1								
Tetrachloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4	<4	<4	<4	<2	<2	<2	<2	<2
Thionazin	<.4								
Tin, total	<20								
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total organic carbon									
Total suspended solids	317								
Toxaphene	<.2								
Trans-1,2-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20	<20	<20	<20	<20	<20

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

Table 10

Analytical Data Summary for MW-23

Constituents	9/8/2021
Fluorene	
Gamma-bhc [lindane]	
Heptachlor	
Heptachlor epoxide	
Hexachlorobenzene	
Hexachlorobutadiene	
Hexachlorocyclopentadiene	
Hexachloroethane	
Hexachloropropene	
Indeno(1,2,3-cd)pyrene	
Iodomethane	<1
Iron, total	
Isobutanol	
Isodrin	
Isophorone	
Isosafrole	
Kepone	
Lead, total	<4.000
Magnesium, total	
Manganese, total	
Mercury, total	
Methacrylonitrile	
Methapyrilene	
Methoxychlor	
Methyl methacrylate	
Methyl methanesulfonate	
Methyl parathion	
Methylene bromide	
Methylene chloride	<5
Naphthalene	
Nickel, total	10.30
Nitrate as n	
Nitrobenzene	
N-nitrosodiethylamine	
N-nitrosodimethylamine	
N-nitrosodi-n-butylamine	
N-nitroso-di-n-propylamine	
N-nitrosodiphenylamine	
N-nitrosomethylethylamine	
N-nitrosopiperidine	
N-nitrosopyrrolidine	
O,o,o-triethyl phosphorothioate	
O-toluidine	
P-(dimethylamino)azobenzene	
Parathion	
Pentachlorobenzene	
Pentachloronitrobenzene (pcnb)	
Pentachlorophenol	
Phenacetin	
Phenanthrene	
Phenol	
Phorate	
Potassium, total	
Pronamide	
Propionitrile	
Pyrene	
Safrole	
Selenium, total	<4
Silver, total	<4
Sodium, total	
Styrene	<1
Sulfate	
Sulfide	
Tetrachloroethene	<1
Thallium, total	<2
Thionazin	
Tin, total	
Toluene	<1
Total organic carbon	
Total suspended solids	
Toxaphene	
Trans-1,2-dichloroethene	<1
Trans-1,3-dichloropropene	<1
Trans-1,4-dichloro-2-butene	<5
Trichloroethene	<1
Trichlorofluoromethane	<1
Vanadium, total	<20

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

Table 10

Analytical Data Summary for MW-23

Constituents	Units	10/20/2014	10/21/2014	6/22/2015	11/12/2015	4/11/2016	4/12/2016	9/16/2016
Vinyl acetate	ug/L		<10	<10	<10		<10	<5
Vinyl chloride	ug/L		<1	<1	<1		<1	<1
Xylenes, total	ug/L		<3	<3	<3		<3	<2
Zinc, total	ug/L		52.6	44.6	11.4		<10.0	<8.0

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

Table 10

Analytical Data Summary for MW-23

Constituents	3/15/2017	9/27/2017	3/14/2018	9/12/2018	4/1/2019	9/12/2019	5/6/2020	9/3/2020	3/30/2021
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	<8.0	100.0	<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 10

Analytical Data Summary for MW-23

Constituents	9/8/2021
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 11

Analytical Data Summary for MW-24

Constituents	Units	10/20/2014	10/21/2014	6/22/2015	6/23/2015	11/12/2015	4/11/2016	4/12/2016
(3 4)-methylphenol	ug/L							
1,1,1,2-tetrachloroethane	ug/L		<1		<1	<1		<1
1,1,1-trichloroethane	ug/L		<1		<1	<1		<1
1,1,2,2-tetrachloroethane	ug/L		<1		<1	<1		<1
1,1,2-trichloroethane	ug/L		<1		<1	<1		<1
1,1-dichloroethane	ug/L		<1		<1	<1		<1
1,1-dichloroethene	ug/L		<2		<2	<2		<2
1,1-dichloropropene	ug/L							
1,2,3-trichloropropane	ug/L		<1		<1	<1		<1
1,2,4,5-tetrachlorobenzene	ug/L							
1,2,4-trichlorobenzene	ug/L							
1,2-dibromo-3-chloropropane	ug/L		<.12		<.50	<.50		<.50
1,2-dibromoethane	ug/L		<.13		<.13	<.13		<.13
1,2-dichlorobenzene	ug/L		<1		<1	<1		<1
1,2-dichloroethane	ug/L		<1		<1	<1		<1
1,2-dichloropropane	ug/L		<1		<1	<1		<1
1,2-dinitrobenzene	ug/L							
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
1,4-naphthoquinone	ug/L							
1,4-phenylenediamine	ug/L							
1-naphthylamine	ug/L							
2,2-dichloropropane	ug/L							
2,3,4,6-tetrachlorophenol	ug/L							
2,4,5-t	ug/L							
2,4,5-tp (silvex)	ug/L							
2,4,5-trichlorophenol	ug/L							
2,4,6-trichlorophenol	ug/L							
2,4-d	ug/L							
2,4-dichlorophenol	ug/L							
2,4-dimethylphenol	ug/L							
2,4-dinitrophenol	ug/L							
2,4-dinitrotoluene	ug/L							
2,6-dichlorophenol	ug/L							
2,6-dinitrotoluene	ug/L							
2-acetylaminofluorene	ug/L							
2-butanone	ug/L		<10		<10	<10		<10
2-chloronaphthalene	ug/L							
2-chlorophenol	ug/L							
2-hexanone	ug/L		<10		<10	<10		<10
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	ug/L		<10		<10	<10		<10
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
Acetonitrile	ug/L							
Acetophenone	ug/L							
Acrolein	ug/L							
Acrylonitrile	ug/L		<10		<10	<10		<10
Aldrin	ug/L							
Allyl chloride	ug/L							
Alpha-bhc	ug/L							
Ammonia as n	mg/L				1.51 *	1.54 *	1.11	1.11

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

Table 11

Analytical Data Summary for MW-24

Constituents	9/16/2016	3/15/2017	9/27/2017	3/14/2018	9/12/2018	4/1/2019	9/12/2019	5/6/2020	9/3/2020
(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-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloropropene		<1							
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene		<8							
1,2,4-trichlorobenzene		<1							
1,2-dibromo-3-chloropropane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<5.00
1,2-dibromoethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dinitrobenzene		<8							
1,3,5-trinitrobenzene		<8							
1,3-dichlorobenzene		<1							
1,3-dichloropropane		<1							
1,3-dinitrobenzene		<8							
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-naphthoquinone		<8							
1,4-phenylenediamine		<8							
1-naphthylamine		<8							
2,2-dichloropropane		<1							
2,3,4,6-tetrachlorophenol		<8							
2,4,5-t		<.5							
2,4,5-tp (silvex)		<.5							
2,4,5-trichlorophenol		<8							
2,4,6-trichlorophenol		<8							
2,4-d		<2							
2,4-dichlorophenol		<8							
2,4-dimethylphenol		<8							
2,4-dinitrophenol		<8							
2,4-dinitrotoluene		<8							
2,6-dichlorophenol		<8							
2,6-dinitrotoluene		<8							
2-acetylaminofluorene		<8							
2-butanone	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-chloronaphthalene		<8							
2-chlorophenol		<8							
2-hexanone	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-methylnaphthalene		<8							
2-methylphenol (o-cresol)		<8							
2-naphthylamine		<8							
2-nitroaniline		<8							
2-nitrophenol		<8							
3,3´-dichlorobenzidine		<8							
3,3-dimethylbenzidine		<8							
3-methylcholanthrene		<8							
3-nitroaniline		<8							
4,4`-ddd		<.05							
4,4`-dde		<.05							
4,4`-ddt		<.05							
4,6-dinitro-2-methylphenol		<8							
4-aminobiphenyl		<8							
4-bromophenyl phenyl ether		<8							
4-chloro-3-methylphenol		<8							
4-chloroaniline		<8							
4-chlorophenyl phenyl ether		<8							
4-methyl-2-pentanone	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-nitroaniline		<8							
4-nitrophenol		<8							
5-nitro-o-toluidine		<8							
7,12-dimethylbenz [a] anthracene		<8							
Acenaphthene		<8							
Acenaphthylene		<8							
Acetone	<10.0	<10.0	13.6	<10.0	<10.0	25.0	<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							
Ammonia as n									

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

Table 11

Analytical Data Summary for MW-24

Constituents	3/30/2021	9/8/2021	3/31/2022	8/30/2022	3/7/2023	9/28/2023	3/11/2024	10/2/2024
(3 4)-methylphenol			<8					
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloropropene			<1					
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene			<8					
1,2,4-trichlorobenzene			<1					
1,2-dibromo-3-chloropropane	<5.00	<5.00	<1.00	<5.00	<5.00	<5.00	<5.00	<5.00
1,2-dibromoethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dinitrobenzene			<8					
1,3,5-trinitrobenzene			<8					
1,3-dichlorobenzene			<1					
1,3-dichloropropane			<1					
1,3-dinitrobenzene			<8					
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1
1,4-naphthoquinone			<8					
1,4-phenylenediamine			<8					
1-naphthylamine			<8					
2,2-dichloropropane			<1					
2,3,4,6-tetrachlorophenol			<8					
2,4,5-t			<.5					
2,4,5-tp (silvex)			<.5					
2,4,5-trichlorophenol			<8					
2,4,6-trichlorophenol			<8					
2,4-d			<2					
2,4-dichlorophenol			<8					
2,4-dimethylphenol			<8					
2,4-dinitrophenol			<8					
2,4-dinitrotoluene			<8					
2,6-dichlorophenol			<8					
2,6-dinitrotoluene			<8					
2-acetylaminofluorene			<8					
2-butanone	<5	<5	<5	<10	<10	<10	<10	<10
2-chloronaphthalene			<8					
2-chlorophenol			<8					
2-hexanone	<5	<5	<5	<5	<5	<5	<5	<5
2-methylnaphthalene			<8					
2-methylphenol (o-cresol)			<8					
2-naphthylamine			<8					
2-nitroaniline			<8					
2-nitrophenol			<8					
3,3´-dichlorobenzidine			<8					
3,3-dimethylbenzidine			<8					
3-methylcholanthrene			<8					
3-nitroaniline			<8					
4,4`-ddd			<.05					
4,4`-dde			<.05					
4,4`-ddt			<.05					
4,6-dinitro-2-methylphenol			<8					
4-aminobiphenyl			<8					
4-bromophenyl phenyl ether			<8					
4-chloro-3-methylphenol			<8					
4-chloroaniline			<8					
4-chlorophenyl phenyl ether			<8					
4-methyl-2-pentanone	<5	<5	<5	<5	<5	<5	<5	<5
4-nitroaniline			<8					
4-nitrophenol			<8					
5-nitro-o-toluidine			<8					
7,12-dimethylbenz [a] anthracene			<8					
Acenaphthene			<8					
Acenaphthylene			<8					
Acetone	<10.0	<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
Aldrin			<.05					
Allyl chloride			<1					
Alpha-bhc			<.05					
Ammonia as n								

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

Table 11

Analytical Data Summary for MW-24

Constituents	Units	10/20/2014	10/21/2014	6/22/2015	6/23/2015	11/12/2015	4/11/2016	4/12/2016
Anthracene	ug/L							
Antimony, total	ug/L		<6		<1	<1		<1
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		<1.0		36.3	20.4		10.8
Azobenzene	ug/L							
Barium, total	ug/L		130.0		339.0	393.0		374.0
Benzene	ug/L		<.5		<.5	<.5		<.5
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		<1.00		<1.00	1.40		1.04
Beta-bhc	ug/L							
Bicarbonate alkalinity	mg/L as CaCO3				780 *	740 *		
Bis (2-chloroethoxy) methane	ug/L							
Bis(2-chloroethyl) ether	ug/L							
Bis(2-ethylhexyl) phthalate	ug/L							
Bis[2-chloroisopropyl]ether	ug/L							
Bromochloromethane	ug/L		<5		<5	<5		<5
Bromodichloromethane	ug/L		<1		<1	<1		<1
Bromoform	ug/L		<5		<5	<5		<5
Bromomethane	ug/L		<4		<4	<4		<4
Butyl benzyl phthalate	ug/L							
Cadmium, total	ug/L		.547		<.500	.582		.706
Calcium, total	mg/L				196 *	257 *		
Carbon disulfide	ug/L		<1		<5	<1		<1
Carbon tetrachloride	ug/L		<2		<2	<2		<2
Carbonate alkalinity	mg/L as CaCO3				<5 *	<5 *		
Chlordane	ug/L							
Chloride	mg/L				11.0 *	19.9 *		
Chlorobenzene	ug/L		<1		<1	<1		<1
Chlorobenzilate	ug/L							
Chloroethane	ug/L		<4.0		<4.0	<4.0		<4.0
Chloroform	ug/L		<1		<1	<1		<1
Chloromethane	ug/L		<3		<3	<3		<3
Chloroprene	ug/L							
Chromium, total	ug/L		<20		<5	<5		<5
Chrysene	ug/L							
Cis-1,2-dichloroethene	ug/L		<1		<1	<1		<1
Cis-1,3-dichloropropene	ug/L		<5		<5	<5		<5
Cobalt, total	ug/L		6.800		.834	11.700		11.800
Copper, total	ug/L		<10.0		<2.0	<2.0		<5.0
Cyanide	mg/L							
Delta-bhc	ug/L							
Diallate	ug/L							
Dibenzo(a,h)anthracene	ug/L							
Dibenzofuran	ug/L							
Dibromochloromethane	ug/L		<5		<5	<5		<5
Dibromomethane	ug/L							
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		<1.0		<1.0	<1.0		<1.0
Famphur	ug/L							
Fluoranthene	ug/L							

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

Table 11

Analytical Data Summary for MW-24

Constituents	9/16/2016	3/15/2017	9/27/2017	3/14/2018	9/12/2018	4/1/2019	9/12/2019	5/6/2020	9/3/2020
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	32.6	26.4	27.2	22.9	25.6	100.0	23.8	6.5	12.8
Azobenzene		<8							
Barium, total	333.0	544.0	567.0	632.0	382.0	665.0	310.0	303.0	149.0
Benzene	<1.0	1.3	<1.0	<1.0	<1.0	2.1	<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	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00
Beta-bhc		<.05							
Bicarbonate alkalinity									
Bis (2-chloroethoxy) methane		<8							
Bis(2-chloroethyl) ether		<8							
Bis(2-ethylhexyl) phthalate		<8							
Bis[2-chloroisopropyl]ether		<8							
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate		<8							
Cadmium, total	<.800	<.800	<.800	<.800	<.800	<.800	<.800	<.800	.800
Calcium, total									
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbonate alkalinity									
Chlordane		<.1							
Chloride									
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzilate		<8							
Chloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	1.6	<1.0	<1.0	<1.0
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroprene		<1							
Chromium, total	<8	<8	<8	<8	<8	<8	<8	<8	<8
Chrysene		<8							
Cis-1,2-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	1.000	.800	1.000	1.400	3.500	21.900	19.000	5.100	16.100
Copper, total	<4.0	<4.0	<4.0	<4.0	<4.0	4.0	<4.0	<4.0	10.7
Cyanide		<.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	1.2	1.9	<1.0	<1.0	<1.0	4.8	<1.0	<1.0	<1.0
Famphur		<.4							
Fluoranthene		<8							

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

Table 11

Analytical Data Summary for MW-24

Constituents	3/30/2021	9/8/2021	3/31/2022	8/30/2022	3/7/2023	9/28/2023	3/11/2024	10/2/2024
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	22.3	20.5	<4.0	5.1	<4.0	17.1	36.9	33.3
Azobenzene			<8					
Barium, total	179.0	302.0	96.2	82.7	65.1	298.0	409.0	602.0
Benzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(a)anthracene			<8					
Benzo(a)pyrene			<8					
Benzo(b)fluoranthene			<8					
Benzo(g,h,i)perylene			<8					
Benzo(k)fluoranthene			<8					
Benzyl alcohol			<8					
Beryllium, total	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00
Beta-bhc			<.05					
Bicarbonate alkalinity								
Bis (2-chloroethoxy) methane			<8					
Bis(2-chloroethyl) ether			<8					
Bis(2-ethylhexyl) phthalate			<6					
Bis[2-chloroisopropyl]ether			<8					
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate			<8					
Cadmium, total	<.800	<.800	<.800	<.800	<.800	<.800	<.800	<.800
Calcium, total								
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1
Carbonate alkalinity								
Chlordane			<.1					
Chloride								
Chlorobenzene	<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
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1
Chloroprene			<1					
Chromium, total	<8	<8	<8	<8	<8	<8	<8	<8
Chrysene			<8					
Cis-1,2-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	14.200	3.500	8.000	12.000	5.200	7.400	6.400	12.900
Copper, total	<4.0	7.7	8.2	<4.0	8.1	<4.0	<4.0	<4.0
Cyanide			<.005					
Delta-bhc			<.05					
Diallate			<8					
Dibenzo(a,h)anthracene			<8					
Dibenzofuran			<8					
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane			<1					
Dieldrin			<.05					
Diethyl phthalate			<8					
Dimethoate			<.4					
Dimethylphthalate			<8					
Di-n-butyl phthalate			<8					
Di-n-octyl phthalate			<8					
Dinoseb			<.5					
Diphenylamine			<8					
Disulfoton			<.4					
Endosulfan i			<.05					
Endosulfan ii			<.05					
Endosulfan sulfate			<.05					
Endrin			<.05					
Endrin aldehyde			<.05					
Ethyl methacrylate			<10					
Ethyl methanesulfonate			<8					
Ethylbenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Famphur			<.4					
Fluoranthene			<8					

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

Table 11

Analytical Data Summary for MW-24

Constituents	Units	10/20/2014	10/21/2014	6/22/2015	6/23/2015	11/12/2015	4/11/2016	4/12/2016
Fluorene	ug/L							
Gamma-bhc [lindane]	ug/L							
Heptachlor	ug/L							
Heptachlor epoxide	ug/L							
Hexachlorobenzene	ug/L							
Hexachlorobutadiene	ug/L							
Hexachlorocyclopentadiene	ug/L							
Hexachloroethane	ug/L							
Hexachloropropene	ug/L							
Indeno(1,2,3-cd)pyrene	ug/L							
Iodomethane	ug/L		<10		<10	<10		<10
Iron, total	ug/L				49200 *	70800 *	32300	32300
Isobutanol	mg/L							
Isodrin	ug/L							
Isophorone	ug/L							
Isosafrole	ug/L							
Kepone	ug/L							
Lead, total	ug/L		6.390		.901	6.340		10.400
Magnesium, total	mg/L				68.5 *	99.8 *		
Manganese, total	ug/L				2180 *	3680 *	2090	2090
Mercury, total	ug/L							
Methacrylonitrile	ug/L							
Methapyrilene	ug/L							
Methoxychlor	ug/L							
Methyl methacrylate	ug/L							
Methyl methanesulfonate	ug/L							
Methyl parathion	ug/L							
Methylene bromide	ug/L		<1		<1	<1		<1
Methylene chloride	ug/L		<5		<5	<5		<5
Naphthalene	ug/L							
Nickel, total	ug/L		<30.0		<5.0	29.1		27.1
Nitrate as n	mg/L				<.1 *	<.1 *	<.1	<.1
Nitrobenzene	ug/L							
N-nitrosodiethylamine	ug/L							
N-nitrosodimethylamine	ug/L							
N-nitrosodi-n-butylamine	ug/L							
N-nitroso-di-n-propylamine	ug/L							
N-nitrosodiphenylamine	ug/L							
N-nitrosomethylethylamine	ug/L							
N-nitrosopiperidine	ug/L							
N-nitrosopyrrolidine	ug/L							
O,o,o-triethyl phosphorothioate	ug/L							
O-toluidine	ug/L							
P-(dimethylamino)azobenzene	ug/L							
Parathion	ug/L							
Pentachlorobenzene	ug/L							
Pentachloronitrobenzene (pcnb)	ug/L							
Pentachlorophenol	ug/L							
Phenacetin	ug/L							
Phenanthrene	ug/L							
Phenol	ug/L							
Phorate	ug/L							
Potassium, total	mg/L				3.45 *	4.17 *		
Pronamide	ug/L							
Propionitrile	ug/L							
Pyrene	ug/L							
Safrole	ug/L							
Selenium, total	ug/L		<5		<5	<5		<5
Silver, total	ug/L		<20		<1	<1		<1
Sodium, total	mg/L				16.1 *	22.7 *		
Styrene	ug/L		<1		<1	<1		<1
Sulfate	mg/L				35.1 *	200.0 *	23.0	23.0
Sulfide	mg/L							
Tetrachloroethene	ug/L		<1		<1	<1		<1
Thallium, total	ug/L		<2		<1	<1		<2
Thionazin	ug/L							
Tin, total	ug/L							
Toluene	ug/L		<1.0		<1.0	<1.0		<1.0
Total organic carbon	mg/L				8.87 *	6.09 *	6.80	6.80
Total suspended solids	mg/L	583.0 *	420.0	209.0	126.5 *	1740.0 *	272.0	272.0
Toxaphene	ug/L							
Trans-1,2-dichloroethene	ug/L		<1		<1	<1		<1
Trans-1,3-dichloropropene	ug/L		<5		<5	<5		<5
Trans-1,4-dichloro-2-butene	ug/L		<10		<10	<10		<10
Trichloroethene	ug/L		<1		<1	<1		<1
Trichlorofluoromethane	ug/L		<4		<4	<4		<4
Vanadium, total	ug/L		<10.0		<5.0	14.2		23.4

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

Table 11

Analytical Data Summary for MW-24

Constituents	9/16/2016	3/15/2017	9/27/2017	3/14/2018	9/12/2018	4/1/2019	9/12/2019	5/6/2020	9/3/2020
Fluorene		<8							
Gamma-bhc [lindane]		<.05							
Heptachlor		<.05							
Heptachlor epoxide		<.05							
Hexachlorobenzene		<.05							
Hexachlorobutadiene		<8							
Hexachlorocyclopentadiene		<8							
Hexachloroethane		<8							
Hexachloropropene		<8							
Indeno(1,2,3-cd)pyrene		<8							
Iodomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Iron, total									
Isobutanol		<1							
Isodrin		<8							
Isophorone		<8							
Isosafrole		<8							
Kepone		<8							
Lead, total	<4.000	<4.000	<4.000	<4.000	<4.000	<4.000	<4.000	<4.000	<4.000
Magnesium, total									
Manganese, total									
Mercury, total		<.5							
Methacrylonitrile		<1							
Methapyrilene		<8							
Methoxychlor		<.05							
Methyl methacrylate		<1							
Methyl methanesulfonate		<8							
Methyl parathion		<.4							
Methylene bromide									
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene		<8							
Nickel, total	<4.0	8.6	8.0	10.9	14.3	61.1	16.2	14.9	30.6
Nitrate as n									
Nitrobenzene		<8							
N-nitrosodiethylamine		<8							
N-nitrosodimethylamine		<8							
N-nitrosodi-n-butylamine		<8							
N-nitroso-di-n-propylamine		<8							
N-nitrosodiphenylamine		<8							
N-nitrosomethylethylamine		<8							
N-nitrosopiperidine		<8							
N-nitrosopyrrolidine		<8							
O,o,o-triethyl phosphorothioate		<.4							
O-toluidine		<8							
P-(dimethylamino)azobenzene		<8							
Parathion		<.4							
Pentachlorobenzene		<8							
Pentachloronitrobenzene (pcnb)		<8							
Pentachlorophenol		<8							
Phenacetin		<8							
Phenanthrene		<8							
Phenol		<8							
Phorate		<.4							
Potassium, total									
Pronamide		<8							
Propionitrile		<10							
Pyrene		<8							
Safrole		<8							
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Sodium, total									
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfate									
Sulfide		<.1							
Tetrachloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4	<4	<4	<4	<4	<2	<2	<2	<2
Thionazin		<.4							
Tin, total		<20							
Toluene	5.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Total organic carbon									
Total suspended solids	66.0	289.0							
Toxaphene		<.2							
Trans-1,2-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 11

Analytical Data Summary for MW-24

Constituents	3/30/2021	9/8/2021	3/31/2022	8/30/2022	3/7/2023	9/28/2023	3/11/2024	10/2/2024
Fluorene			<8					
Gamma-bhc [lindane]			<.05					
Heptachlor			<.05					
Heptachlor epoxide			<.05					
Hexachlorobenzene			<.05					
Hexachlorobutadiene			<8					
Hexachlorocyclopentadiene			<8					
Hexachloroethane			<8					
Hexachloropropene			<8					
Indeno(1,2,3-cd)pyrene			<8					
Iodomethane	<1	<1	<2	<1	<1	<1	<1	<1
Iron, total								
Isobutanol			<1					
Isodrin			<8					
Isophorone			<8					
Isosafrole			<8					
Kepone			<8					
Lead, total	4.700	<4.000	<4.000	<4.000	<4.000	<4.000	<4.000	<4.000
Magnesium, total								
Manganese, total								
Mercury, total			<.5					
Methacrylonitrile			<1					
Methapyrilene			<8					
Methoxychlor			<.05					
Methyl methacrylate			<1					
Methyl methanesulfonate			<8					
Methyl parathion			<.4					
Methylene bromide								
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene			<8					
Nickel, total	17.9	13.4	66.7	43.0	48.0	29.4	8.2	29.3
Nitrate as n								
Nitrobenzene			<8					
N-nitrosodiethylamine			<8					
N-nitrosodimethylamine			<8					
N-nitrosodi-n-butylamine			<8					
N-nitroso-di-n-propylamine			<8					
N-nitrosodiphenylamine			<8					
N-nitrosomethylethylamine			<8					
N-nitrosopiperidine			<8					
N-nitrosopyrrolidine			<8					
O,o,o-triethyl phosphorothioate			<.4					
O-toluidine			<8					
P-(dimethylamino)azobenzene			<8					
Parathion			<.4					
Pentachlorobenzene			<8					
Pentachloronitrobenzene (pcnb)			<8					
Pentachlorophenol			<8					
Phenacetin			<8					
Phenanthrene			<8					
Phenol			<8					
Phorate			<.4					
Potassium, total								
Pronamide			<8					
Propionitrile			<10					
Pyrene			<8					
Safrole			<8					
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4
Sodium, total								
Styrene	<1	<1	<1	<1	<1	<1	<1	<1
Sulfate								
Sulfide			<.2					
Tetrachloroethene	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2	<2	<2	<2	<2
Thionazin			<.4					
Tin, total			<20					
Toluene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Total organic carbon								
Total suspended solids								
Toxaphene			<.2					
Trans-1,2-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 11

Analytical Data Summary for MW-24

Constituents	Units	10/20/2014	10/21/2014	6/22/2015	6/23/2015	11/12/2015	4/11/2016	4/12/2016
Vinyl acetate	ug/L		<10		<10	<10		<10
Vinyl chloride	ug/L		<1		<1	<1		<1
Xylenes, total	ug/L		<3.0		<3.0	<3.0		<3.0
Zinc, total	ug/L		33.2		10.7	53.8		97.0

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

Table 11

Analytical Data Summary for MW-24

Constituents	9/16/2016	3/15/2017	9/27/2017	3/14/2018	9/12/2018	4/1/2019	9/12/2019	5/6/2020	9/3/2020
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	2.3	<2.0	<2.0	<2.0	6.2	<2.0	<2.0	<2.0
Zinc, total	15.1	8.1	<8.0	8.7	24.5	69.3	<20.0	<20.0	25.7

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

Table 11

Analytical Data Summary for MW-24

Constituents	3/30/2021	9/8/2021	3/31/2022	8/30/2022	3/7/2023	9/28/2023	3/11/2024	10/2/2024
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Zinc, total	<20.0	<20.0	27.2	<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-25

Constituents	Units	11/12/2015	2/1/2016	4/11/2016	4/12/2016	9/16/2016	3/15/2017	9/27/2017
(3 4)-methylphenol	ug/L						<8	
1,1,1,2-tetrachloroethane	ug/L	<1	<1		<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1		<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1		<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1		<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1	<1		<1	<1	<1	<1
1,1-dichloroethene	ug/L	<2	<2		<2	<1	<1	<1
1,1-dichloropropene	ug/L						<1	
1,2,3-trichloropropane	ug/L	<1	<1		<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene	ug/L						<8	
1,2,4-trichlorobenzene	ug/L						<1	
1,2-dibromo-3-chloropropane	ug/L	<.5	<.5		<.5	<1.0	<1.0	<1.0
1,2-dibromoethane	ug/L	<.13	<.13		<.13	<1.00	<1.00	<1.00
1,2-dichlorobenzene	ug/L	<1	<1		<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1		<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1		<1	<1	<1	<1
1,2-dinitrobenzene	ug/L						<8	
1,3,5-trinitrobenzene	ug/L						<8	
1,3-dichlorobenzene	ug/L						<1	
1,3-dichloropropane	ug/L						<1	
1,3-dinitrobenzene	ug/L						<8	
1,4-dichlorobenzene	ug/L	<1	<1		<1	<1	<1	<1
1,4-naphthoquinone	ug/L						<8	
1,4-phenylenediamine	ug/L						<8	
1-naphthylamine	ug/L						<8	
2,2-dichloropropane	ug/L						<1	
2,3,4,6-tetrachlorophenol	ug/L						<8	
2,4,5-t	ug/L						<.5	
2,4,5-tp (silvex)	ug/L						<.5	
2,4,5-trichlorophenol	ug/L						<8	
2,4,6-trichlorophenol	ug/L						<8	
2,4-d	ug/L						<2	
2,4-dichlorophenol	ug/L						<8	
2,4-dimethylphenol	ug/L						<8	
2,4-dinitrophenol	ug/L						<8	
2,4-dinitrotoluene	ug/L						<8	
2,6-dichlorophenol	ug/L						<8	
2,6-dinitrotoluene	ug/L						<8	
2-acetylaminofluorene	ug/L						<8	
2-butanone	ug/L	<10	<10		<10	<5	<5	<5
2-chloronaphthalene	ug/L						<8	
2-chlorophenol	ug/L						<8	
2-hexanone	ug/L	<10	<10		<10	<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	ug/L	<10	<10		<10	<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	13.1
Acetonitrile	ug/L						<10	
Acetophenone	ug/L						<8	
Acrolein	ug/L						<10	
Acrylonitrile	ug/L	<10	<10		<10	<5	<5	<5
Aldrin	ug/L						<.05	
Allyl chloride	ug/L						<1	
Alpha-bhc	ug/L						<.05	
Anthracene	ug/L						<8	

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

Table 12

Analytical Data Summary for MW-25

Constituents	3/14/2018	9/12/2018	4/1/2019	9/12/2019	5/6/2020	9/3/2020	3/30/2021	9/8/2021	3/31/2022
(3 4)-methylphenol		<8							
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloropropene		<1							
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene		<8							
1,2,4-trichlorobenzene		<1							
1,2-dibromo-3-chloropropane	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2-dibromoethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dinitrobenzene		<8							
1,3,5-trinitrobenzene		<8							
1,3-dichlorobenzene		<1							
1,3-dichloropropane		<1							
1,3-dinitrobenzene		<8							
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-naphthoquinone		<8							
1,4-phenylenediamine		<8							
1-naphthylamine		<8							
2,2-dichloropropane		<1							
2,3,4,6-tetrachlorophenol		<8							
2,4,5-t		<.5							
2,4,5-tp (silvex)		<.5							
2,4,5-trichlorophenol		<8							
2,4,6-trichlorophenol		<8							
2,4-d		<2							
2,4-dichlorophenol		<8							
2,4-dimethylphenol		<8							
2,4-dinitrophenol		<8							
2,4-dinitrotoluene		<8							
2,6-dichlorophenol		<8							
2,6-dinitrotoluene		<8							
2-acetylaminofluorene		<8							
2-butanone	<5	<5	<5	<5	<5	<5	<5	<5	<10
2-chloronaphthalene		<8							
2-chlorophenol		<8							
2-hexanone	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-methylnaphthalene		<8							
2-methylphenol (o-cresol)		<8							
2-naphthylamine		<8							
2-nitroaniline		<8							
2-nitrophenol		<8							
3,3´-dichlorobenzidine		<8							
3,3-dimethylbenzidine		<8							
3-methylcholanthrene		<8							
3-nitroaniline		<8							
4,4`-ddd		<.05							
4,4`-dde		<.05							
4,4`-ddt		<.05							
4,6-dinitro-2-methylphenol		<8							
4-aminobiphenyl		<8							
4-bromophenyl phenyl ether		<8							
4-chloro-3-methylphenol		<8							
4-chloroaniline		<8							
4-chlorophenyl phenyl ether		<8							
4-methyl-2-pentanone	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-nitroaniline		<8							
4-nitrophenol		<8							
5-nitro-o-toluidine		<8							
7,12-dimethylbenz [a] anthracene		<8							
Acenaphthene		<8							
Acenaphthylene		<8							
Acetone	<10.0	<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 12

Analytical Data Summary for MW-25

Constituents	8/30/2022	3/7/2023	9/28/2023	3/11/2024	10/2/2024
(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-dichloroethene	<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	<5.0	<5.0	<5.0	<5.0	<5.0
1,2-dibromoethane	<1.00	<1.00	<1.00	<1.00	<1.00
1,2-dichlorobenzene	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1
1,2-dinitrobenzene					
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	<10	<10	<10	<10	<10
2-chloronaphthalene					
2-chlorophenol					
2-hexanone	<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	<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 12

Analytical Data Summary for MW-25

Constituents	Units	11/12/2015	2/1/2016	4/11/2016	4/12/2016	9/16/2016	3/15/2017	9/27/2017
Antimony, total	ug/L	<6	<6		<1	<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	<10.00	4.03		5.04	<4.00	<4.00	<4.00
Azobenzene	ug/L						<8	
Barium, total	ug/L	38.4	52.4		34.5	29.4	33.8	32.0
Benzene	ug/L	<.5	<.5		<.5	<1.0	<1.0	<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	<1	<1		<1	<4	<4	<4
Beta-bhc	ug/L						<.05	
Bicarbonate alkalinity	mg/L as CaCO3	513 *						
Bis (2-chloroethoxy) methane	ug/L						<8	
Bis(2-chloroethyl) ether	ug/L						<8	
Bis(2-ethylhexyl) phthalate	ug/L						17	8
Bis[2-chloroisopropyl]ether	ug/L						<8	
Bromochloromethane	ug/L	<5	<5		<5	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1		<1	<1	<1	<1
Bromoform	ug/L	<5	<5		<5	<1	<1	<1
Bromomethane	ug/L	<4	<4		<4	<1	<1	<1
Butyl benzyl phthalate	ug/L						<8	
Cadmium, total	ug/L	<.5	<.5		<.5	<.8	<.8	<.8
Calcium, total	mg/L	520 *						
Carbon disulfide	ug/L	<1	<1		<1	<1	<1	<1
Carbon tetrachloride	ug/L	<2	<2		<2	<1	<1	<1
Carbonate alkalinity	mg/L as CaCO3	<5 *						
Chlordane	ug/L						<.1	
Chloride	mg/L	9.45 *						
Chlorobenzene	ug/L	<1	<1		<1	<1	<1	<1
Chlorobenzilate	ug/L						<8	
Chloroethane	ug/L	<4	<4		<4	<1	<1	<1
Chloroform	ug/L	<1	<1		<1	<1	<1	<1
Chloromethane	ug/L	<3	<3		<3	<1	<1	<1
Chloroprene	ug/L						<1	
Chromium, total	ug/L	<5	<5		<5	<8	<8	<8
Chrysene	ug/L						<8	
Cis-1,2-dichloroethene	ug/L	<1	<1		<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L	<5	<5		<5	<1	<1	<1
Cobalt, total	ug/L	4.86	9.31		8.82	2.10	10.40	2.60
Copper, total	ug/L	4.20	7.84		8.08	<4.00	<4.00	<4.00
Cyanide	mg/L						<.005	
Delta-bhc	ug/L						<.05	
Diallate	ug/L						<8	
Dibenzo(a,h)anthracene	ug/L						<8	
Dibenzofuran	ug/L						<8	
Dibromochloromethane	ug/L	<5	<5		<5	<1	<1	<1
Dibromomethane	ug/L					<1	<1	<1
Dichlorodifluoromethane	ug/L						<1	
Dieldrin	ug/L						<.05	
Diethyl phthalate	ug/L						<8	
Dimethoate	ug/L						<.4	
Dimethylphthalate	ug/L						<8	
Di-n-butyl phthalate	ug/L						<8	
Di-n-octyl phthalate	ug/L						<8	
Dinoseb	ug/L						<.5	
Diphenylamine	ug/L						<8	
Disulfoton	ug/L						<.4	
Endosulfan i	ug/L						<.05	
Endosulfan ii	ug/L						<.05	
Endosulfan sulfate	ug/L						<.05	
Endrin	ug/L						<.05	
Endrin aldehyde	ug/L						<.05	
Ethyl methacrylate	ug/L						<10	
Ethyl methanesulfonate	ug/L						<8	
Ethylbenzene	ug/L	<1	<1		<1	<1	<1	<1
Famphur	ug/L						<.4	
Fluoranthene	ug/L						<8	
Fluorene	ug/L						<8	

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

Table 12

Analytical Data Summary for MW-25

Constituents	3/14/2018	9/12/2018	4/1/2019	9/12/2019	5/6/2020	9/3/2020	3/30/2021	9/8/2021	3/31/2022
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arochlor 1016		<.1							
Arochlor 1221		<.2							
Arochlor 1232		<.2							
Arochlor 1242		<.2							
Arochlor 1248		<.2							
Arochlor 1254		<.1							
Arochlor 1260		<.1							
Arsenic, total	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00
Azobenzene		<8							
Barium, total	24.5	32.1	22.2	18.4	21.2	19.7	22.6	25.7	24.7
Benzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(a)anthracene		<8							
Benzo(a)pyrene		<8							
Benzo(b)fluoranthene		<8							
Benzo(g,h,i)perylene		<8							
Benzo(k)fluoranthene		<8							
Benzyl alcohol		<8							
Beryllium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Beta-bhc		<.05							
Bicarbonate alkalinity									
Bis (2-chloroethoxy) methane		<8							
Bis(2-chloroethyl) ether		<8							
Bis(2-ethylhexyl) phthalate	7	<6	<6	<6	<6				
Bis[2-chloroisopropyl]ether		<8							
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate		<8							
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Calcium, total									
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbonate alkalinity									
Chlordane		<.1							
Chloride									
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzilate		<8							
Chloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroprene		<1							
Chromium, total	<8	<8	<8	<8	<8	<8	<8	<8	<8
Chrysene		<8							
Cis-1,2-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	3.00	<.80	2.80	<.80	<.40	<.40	1.90	.40	1.80
Copper, total	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00
Cyanide		<.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							

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

Table 12

Analytical Data Summary for MW-25

Constituents	8/30/2022	3/7/2023	9/28/2023	3/11/2024	10/2/2024
Antimony, total	<2	<2	<2	<2	<2
Arochlor 1016					
Arochlor 1221					
Arochlor 1232					
Arochlor 1242					
Arochlor 1248					
Arochlor 1254					
Arochlor 1260					
Arsenic, total	<4.00	<4.00	<4.00	<4.00	<4.00
Azobenzene					
Barium, total	18.3	22.7	22.9	23.5	27.7
Benzene	<1.0	<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					
Bicarbonate alkalinity					
Bis (2-chloroethoxy) methane					
Bis(2-chloroethyl) ether					
Bis(2-ethylhexyl) phthalate					
Bis[2-chloroisopropyl]ether					
Bromochloromethane	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1
Butyl benzyl phthalate					
Cadmium, total	<.8	<.8	<.8	<.8	<.8
Calcium, total					
Carbon disulfide	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1
Carbonate alkalinity					
Chlordane					
Chloride					
Chlorobenzene	<1	<1	<1	<1	<1
Chlorobenzilate					
Chloroethane	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1
Chloroprene					
Chromium, total	<8	<8	<8	<8	<8
Chrysene					
Cis-1,2-dichloroethene	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1
Cobalt, total	<.40	.90	.60	.80	<.40
Copper, total	<4.00	<4.00	<4.00	<4.00	<4.00
Cyanide					
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					

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

Table 12

Analytical Data Summary for MW-25

Constituents	Units	11/12/2015	2/1/2016	4/11/2016	4/12/2016	9/16/2016	3/15/2017	9/27/2017
Gamma-bhc [lindane]	ug/L						<.05	
Heptachlor	ug/L						<.05	
Heptachlor epoxide	ug/L						<.05	
Hexachlorobenzene	ug/L						<.05	
Hexachlorobutadiene	ug/L						<8	
Hexachlorocyclopentadiene	ug/L						<8	
Hexachloroethane	ug/L						<8	
Hexachloropropene	ug/L						<8	
Indeno(1,2,3-cd)pyrene	ug/L						<8	
Iodomethane	ug/L	<10	<10		<10	<1	<1	<1
Isobutanol	mg/L						<1	
Isodrin	ug/L						<8	
Isophorone	ug/L						<8	
Isosafrole	ug/L						<8	
Kepone	ug/L						<8	
Lead, total	ug/L	2.40	4.35		8.22	<4.00	<4.00	<4.00
Magnesium, total	mg/L	202 *						
Mercury, total	ug/L						<.5	
Methacrylonitrile	ug/L						<1	
Methapyrilene	ug/L						<8	
Methoxychlor	ug/L						<.05	
Methyl methacrylate	ug/L						<1	
Methyl methanesulfonate	ug/L						<8	
Methyl parathion	ug/L						<.4	
Methylene bromide	ug/L	<1	<1		<1			
Methylene chloride	ug/L	<5	<5		<5	<5	<5	<5
Naphthalene	ug/L						<8	
Nickel, total	ug/L	27.1	28.0		21.7	18.1	26.5	18.9
Nitrobenzene	ug/L						<8	
N-nitrosodiethylamine	ug/L						<8	
N-nitrosodimethylamine	ug/L						<8	
N-nitrosodi-n-butylamine	ug/L						<8	
N-nitroso-di-n-propylamine	ug/L						<8	
N-nitrosodiphenylamine	ug/L						<8	
N-nitrosomethylethylamine	ug/L						<8	
N-nitrosopiperidine	ug/L						<8	
N-nitrosopyrrolidine	ug/L						<8	
O,o,o-triethyl phosphorothioate	ug/L						<.4	
O-toluidine	ug/L						<8	
P-(dimethylamino)azobenzene	ug/L						<8	
Parathion	ug/L						<.4	
Pentachlorobenzene	ug/L						<8	
Pentachloronitrobenzene (pcnb)	ug/L						<8	
Pentachlorophenol	ug/L						<8	
Phenacetin	ug/L						<8	
Phenanthrene	ug/L						<8	
Phenol	ug/L						<8	
Phorate	ug/L						<.4	
Potassium, total	mg/L	8.41 *						
Pronamide	ug/L						<8	
Propionitrile	ug/L						<10	
Pyrene	ug/L						<8	
Safrole	ug/L						<8	
Selenium, total	ug/L	<5	<5		<5	<4	<4	<4
Silver, total	ug/L	<1	<1		<1	<4	<4	<4
Sodium, total	mg/L	39.1 *						
Styrene	ug/L	<1	<1		<1	<1	<1	<1
Sulfate	mg/L	1490 *						
Sulfide	mg/L						<.1	
Tetrachloroethene	ug/L	<1	<1		<1	<1	<1	<1
Thallium, total	ug/L	<2	<2		<2	<4	<4	<4
Thionazin	ug/L						<.4	
Tin, total	ug/L						<20	
Toluene	ug/L	<1	<1		<1	<1	<1	<1
Total suspended solids	mg/L	109 *	277 *	503	503	23	2070	
Toxaphene	ug/L						<.2	
Trans-1,2-dichloroethene	ug/L	<1	<1		<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<5	<5		<5	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<10	<10		<10	<5	<5	<5
Trichloroethene	ug/L	<1	<1		<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<4	<4		<4	<1	<1	<1
Vanadium, total	ug/L	<5.00	8.27		17.20	<20.00	<20.00	<20.00
Vinyl acetate	ug/L	<10	<10		<10	<5	<5	<5
Vinyl chloride	ug/L	<1	<1		<1	<1	<1	<1
Xylenes, total	ug/L	<3	<3		<3	<2	<2	<2
Zinc, total	ug/L	11.7	24.6		30.5	<8.0	8.4	9.0

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

Table 12

Analytical Data Summary for MW-25

Constituents	3/14/2018	9/12/2018	4/1/2019	9/12/2019	5/6/2020	9/3/2020	3/30/2021	9/8/2021	3/31/2022
Gamma-bhc [lindane]		<.05							
Heptachlor		<.05							
Heptachlor epoxide		<.05							
Hexachlorobenzene		<.05							
Hexachlorobutadiene		<8							
Hexachlorocyclopentadiene		<8							
Hexachloroethane		<8							
Hexachloropropene		<8							
Indeno(1,2,3-cd)pyrene		<8							
Iodomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Isobutanol		<1							
Isodrin		<8							
Isophorone		<8							
Isosafrole		<8							
Kepone		<8							
Lead, total	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00
Magnesium, total									
Mercury, total		<.5							
Methacrylonitrile		<1							
Methapyrilene		<8							
Methoxychlor		<.05							
Methyl methacrylate		<1							
Methyl methanesulfonate		<8							
Methyl parathion		<.4							
Methylene bromide									
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene		<8							
Nickel, total	9.7	18.3	15.4	4.9	9.7	4.2	15.6	8.4	10.5
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							
P-(dimethylamino)azobenzene		<8							
Parathion		<.4							
Pentachlorobenzene		<8							
Pentachloronitrobenzene (pcnb)		<8							
Pentachlorophenol		<8							
Phenacetin		<8							
Phenanthrene		<8							
Phenol		<8							
Phorate		<.4							
Potassium, total									
Pronamide		<8							
Propionitrile		<10							
Pyrene		<8							
Safrole		<8							
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Sodium, total									
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfate									
Sulfide		<.1							
Tetrachloroethene	<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
Total suspended solids									
Toxaphene		<.2							
Trans-1,2-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	<20.00	<20.00	<20.00	<20.00	<20.00	<20.00	<20.00	<20.00	<20.00
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	25.8	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 12

Analytical Data Summary for MW-25

Constituents	8/30/2022	3/7/2023	9/28/2023	3/11/2024	10/2/2024
Gamma-bhc [lindane]					
Heptachlor					
Heptachlor epoxide					
Hexachlorobenzene					
Hexachlorobutadiene					
Hexachlorocyclopentadiene					
Hexachloroethane					
Hexachloropropene					
Indeno(1,2,3-cd)pyrene					
Iodomethane	<1	<1	<1	<1	<1
Isobutanol					
Isodrin					
Isophorone					
Isosafrole					
Kepone					
Lead, total	<4.00	<4.00	<4.00	<4.00	<4.00
Magnesium, total					
Mercury, total					
Methacrylonitrile					
Methapyrilene					
Methoxychlor					
Methyl methacrylate					
Methyl methanesulfonate					
Methyl parathion					
Methylene bromide					
Methylene chloride	<5	<5	<5	<5	<5
Naphthalene					
Nickel, total	4.2	9.0	5.7	5.1	4.7
Nitrobenzene					
N-nitrosodiethylamine					
N-nitrosodimethylamine					
N-nitrosodi-n-butylamine					
N-nitroso-di-n-propylamine					
N-nitrosodiphenylamine					
N-nitrosomethylethylamine					
N-nitrosopiperidine					
N-nitrosopyrrolidine					
O,o,o-triethyl phosphorothioate					
O-toluidine					
P-(dimethylamino)azobenzene					
Parathion					
Pentachlorobenzene					
Pentachloronitrobenzene (pcnb)					
Pentachlorophenol					
Phenacetin					
Phenanthrene					
Phenol					
Phorate					
Potassium, total					
Pronamide					
Propionitrile					
Pyrene					
Safrole					
Selenium, total	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4
Sodium, total					
Styrene	<1	<1	<1	<1	<1
Sulfate					
Sulfide					
Tetrachloroethene	<1	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2	<2
Thionazin					
Tin, total					
Toluene	<1	<1	<1	<1	<1
Total suspended solids					
Toxaphene					
Trans-1,2-dichloroethene	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5
Trichloroethene	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1
Vanadium, total	<20.00	<20.00	<20.00	<20.00	<20.00
Vinyl acetate	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2
Zinc, total	<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 13

Analytical Data Summary for MW-26

Constituents	Units	10/31/2016	3/16/2017	9/27/2017	3/14/2018	9/12/2018	4/1/2019	9/12/2019	5/6/2020	9/3/2020
1,1,1,2-tetrachloroethane	ug/L	<1			<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1			<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1			<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1			<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1			<1	<1	<1	<1	<1	<1
1,1-dichloroethene	ug/L	<1			<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	ug/L	<1			<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L	<1			<1	<1	<1	<1	<5	<5
1,2-dibromoethane	ug/L	<1			<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1			<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1			<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1			<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	ug/L	<1			<1	<1	<1	<1	<1	<1
2-butanone	ug/L	<5			<5	<5	<5	<5	<5	<5
2-hexanone	ug/L	<5			<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone	ug/L	<5			<5	<5	<5	<5	<5	<5
Acetone	ug/L	<10			<10	<10	<10	<10	<10	<10
Acrylonitrile	ug/L	<5			<5	<5	<5	<5	<5	<5
Antimony, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Barium, total	ug/L	155	161	155	201	170	176	158	158	148
Benzene	ug/L	<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
Bromodichloromethane	ug/L	<1			<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<1			<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1			<1	<1	<1	<1	<1	<1
Cadmium, total	ug/L	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	ug/L	<1			<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1			<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<1			<1	<1	<1	<1	<1	<1
Chloroethane	ug/L	<1			<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<1			<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	<1			<1	<1	<1	<1	<1	<1
Chromium, total	ug/L	<8	<8	<8	<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethene	ug/L	<1			<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L	<1			<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	<.8	<.8	<.8	<2.0	<.8	<.8	<.8	<.4	<.4
Copper, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Dibromochloromethane	ug/L	<1			<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1			<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1			<1	<1	<1	<1	<1	<1
Iodomethane	ug/L	<2			<1	<1	<1	<1	<1	<1
Lead, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Methylene chloride	ug/L	<5			<5	<5	<5	<5	<5	<5
Nickel, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Selenium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	ug/L	<1			<1	<1	<1	<1	<1	<1
Tetrachloroethene	ug/L	<1			<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4	<4	<4	<4	<4	<2	<2	<2	<2
Toluene	ug/L	<1			<1	<1	<1	<1	<1	<1
Total suspended solids	mg/L	11	5							
Trans-1,2-dichloroethene	ug/L	<1			<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1			<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5			<5	<5	<5	<5	<5	<5
Trichloroethene	ug/L	<1			<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1			<1	<1	<1	<1	<1	<1
Vanadium, total	ug/L	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	ug/L	<10			<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	<8.0	<8.0	<8.0	<8.0	<20.0	<20.0	12.5	<20.0	<20.0

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

Table 13

Analytical Data Summary for MW-26

Constituents	3/30/2021	9/8/2021	3/31/2022	8/30/2022	3/7/2023	9/28/2023	3/11/2024	10/2/2024
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<5	<5	<5	<5	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone	<5	<5	<10	<10	<10	<10	<10	<10
2-hexanone	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	<4	<4	<4	<4	<4	<4	<4	<4
Barium, total	154	141	178	156	174	170	188	150
Benzene	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	<4	<4	<4	<4	<4	<4	<4	<4
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1
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-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	<.4	<.4	<.4	<.4	<.4	<.4	<.4	<.4
Copper, total	<4	<4	<4	<4	<4	<4	<4	<4
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1
Iodomethane	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	<4	<4	<4	<4	<4	<4	<4	<4
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	<4	<4	<4	<4	<4	<4	<4	<4
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2	<2	<2	<2	<2
Toluene	<1	<1	<1	<1	<1	<1	<1	<1
Total suspended solids								
Trans-1,2-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 14

Analytical Data Summary for MW-27

Constituents	Units	10/31/2016	3/16/2017	9/27/2017	12/13/2017	3/14/2018	9/12/2018	4/1/2019	9/12/2019	5/6/2020
1,1,1,2-tetrachloroethane	ug/L	<1				<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1				<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1				<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1				<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1				<1	<1	<1	<1	<1
1,1-dichloroethene	ug/L	<1				<1	<1	<1	<1	<1
1,2,3-trichloropropane	ug/L	<1				<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L	<1				<1	<1	<1	<1	<5
1,2-dibromoethane	ug/L	<1				<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1				<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1				<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1				<1	<1	<1	<1	<1
1,4-dichlorobenzene	ug/L	<1				<1	<1	<1	<1	<1
2-butanone	ug/L	<5				<5	<5	<5	<5	<5
2-hexanone	ug/L	<5				<5	<5	<5	<5	<5
4-methyl-2-pentanone	ug/L	<5				<5	<5	<5	<5	<5
Acetone	ug/L	<10				<10	<10	<10	<10	<10
Acrylonitrile	ug/L	<5				<5	<5	<5	<5	<5
Antimony, total	ug/L	<2	<2	<2		<2	<2	<2	<2	<2
Arsenic, total	ug/L	<4.0	9.3	84.4	8.8	43.9	26.3	51.3	18.8	9.2
Barium, total	ug/L	143	113	501	134	302	189	289	182	138
Benzene	ug/L	<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
Bromodichloromethane	ug/L	<1				<1	<1	<1	<1	<1
Bromoform	ug/L	<1				<1	<1	<1	<1	<1
Bromomethane	ug/L	<1				<1	<1	<1	<1	<1
Cadmium, total	ug/L	<.8	<.8	<.8		<.8	<.8	<.8	<.8	<.8
Carbon disulfide	ug/L	<1				<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1				<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<1				<1	<1	<1	<1	<1
Chloroethane	ug/L	<1				<1	<1	<1	<1	<1
Chloroform	ug/L	<1				<1	<1	<1	<1	<1
Chloromethane	ug/L	<1				<1	<1	<1	<1	<1
Chromium, total	ug/L	<8	<8	<8		<8	<8	<8	<8	<8
Cis-1,2-dichloroethene	ug/L	<1				<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L	<1				<1	<1	<1	<1	<1
Cobalt, total	ug/L	<.8	<.8	1.3		<2.0	<.8	.8	<.8	1.0
Copper, total	ug/L	<4.0	<4.0	6.3		<4.0	<4.0	<4.0	<4.0	<4.0
Dibromochloromethane	ug/L	<1				<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1				<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1				<1	<1	<1	<1	<1
Iodomethane	ug/L	<1				<1	<1	<1	<1	<1
Lead, total	ug/L	<4	<4	<4		<4	<4	<4	<4	<4
Methylene chloride	ug/L	<5				<5	<5	<5	<5	<5
Nickel, total	ug/L	<4	<4	<4		<4	<4	<4	<4	<4
Selenium, total	ug/L	<4	<4	<4		<4	<4	<4	<4	<4
Silver, total	ug/L	<4	<4	<4		<4	<4	<4	<4	<4
Styrene	ug/L	<1				<1	<1	<1	<1	<1
Tetrachloroethene	ug/L	<1				<1	<1	<1	<1	<1
Thallium, total	ug/L	<4	<4	<4		<4	<4	<2	<2	<2
Toluene	ug/L	<1				<1	<1	<1	<1	<1
Total suspended solids	mg/L	58	78							
Trans-1,2-dichloroethene	ug/L	<1				<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1				<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5				<5	<5	<5	<5	<5
Trichloroethene	ug/L	<1				<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1				<1	<1	<1	<1	<1
Vanadium, total	ug/L	<20	<20	<20		<20	<20	<20	<20	<20
Vinyl acetate	ug/L	<5				<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1				<1	<1	<1	<1	<1
Xylenes, total	ug/L	<2				<2	<2	<2	<2	<2
Zinc, total	ug/L	<8.0	<8.0	24.2	<8.0	<8.0	31.9	<20.0	8.2	<20.0

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

Table 14

Analytical Data Summary for MW-27

Constituents	9/3/2020	3/30/2021	9/8/2021	3/31/2022	8/30/2022	3/7/2023	9/28/2023	3/11/2024	10/2/2024
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone	<5	<5	<5	<10	<10	<10	<10	<10	<10
2-hexanone	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	<4.0	8.6	5.6	<4.0	13.5	<4.0	5.3	4.5	5.2
Barium, total	124	127	111	106	134	107	112	104	111
Benzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	<8	<8	<8	<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	.8	.7	.6	.7	.6	.7	.6	.7	.4
Copper, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Iodomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total suspended solids									
Trans-1,2-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 15

Analytical Data Summary for MW-28

Constituents	Units	10/31/2016	3/16/2017	3/14/2018	9/12/2018	4/1/2019	5/6/2020	9/3/2020	3/30/2021	3/31/2022
1,1,1,2-tetrachloroethane	ug/L	<1		<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1		<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1		<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1		<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1		<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethene	ug/L	<1		<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	ug/L	<1		<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L	<1		<1	<1	<1	<5	<5	<5	<5
1,2-dibromoethane	ug/L	<1		<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1		<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1		<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1		<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	ug/L	<1		<1	<1	<1	<1	<1	<1	<1
2-butanone	ug/L	<5		<5	<5	<5	<5	<5	<5	<10
2-hexanone	ug/L	<5		<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone	ug/L	<5		<5	<5	<5	<5	<5	<5	<5
Acetone	ug/L	<10		<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	ug/L	<5		<5	<5	<5	<5	<5	<5	<5
Antimony, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Barium, total	ug/L	37.1	71.6	50.3	37.0	35.1	26.2	24.6	27.2	31.1
Benzene	ug/L	<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
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	<.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	<8
Cis-1,2-dichloroethene	ug/L	<1		<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L	<1		<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	.9	1.7	<2.0	<.8	<.8	<.4	<.4	.6	1.0
Copper, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Dibromochloromethane	ug/L	<1		<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1		<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1		<1	<1	<1	<1	<1	<1	<1
Iodomethane	ug/L	<1		<1	<1	<1	<1	<1	<1	<1
Lead, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Methylene chloride	ug/L	<5		<5	<5	<5	<5	<5	<5	<5
Nickel, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	4.1	<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
Styrene	ug/L	<1		<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	ug/L	<1		<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4	<4	<4	<4	<2	<2	<2	<2	<2
Toluene	ug/L	<1		<1	<1	<1	<1	<1	<1	<1
Total suspended solids	mg/L	692	14							
Trans-1,2-dichloroethene	ug/L	<1		<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1		<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5		<5	<5	<5	<5	<5	<5	<5
Trichloroethene	ug/L	<1		<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1		<1	<1	<1	<1	<1	<1	<1
Vanadium, total	ug/L	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	ug/L	<5		<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1		<1	<1	<1	<1	<1	<1	<1
Xylenes, total	ug/L	<2		<2	<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	<8.0	<8.0	<8.0	33.2	<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 15

Analytical Data Summary for MW-28

Constituents	3/7/2023	3/11/2024
1,1,1,2-tetrachloroethane	<1	<1
1,1,1-trichloroethane	<1	<1
1,1,2,2-tetrachloroethane	<1	<1
1,1,2-trichloroethane	<1	<1
1,1-dichloroethane	<1	<1
1,1-dichloroethene	<1	<1
1,2,3-trichloropropane	<1	<1
1,2-dibromo-3-chloropropane	<5	<5
1,2-dibromoethane	<1	<1
1,2-dichlorobenzene	<1	<1
1,2-dichloroethane	<1	<1
1,2-dichloropropane	<1	<1
1,4-dichlorobenzene	<1	<1
2-butanone	<10	<10
2-hexanone	<5	<5
4-methyl-2-pentanone	<5	<5
Acetone	<10	<10
Acrylonitrile	<5	<5
Antimony, total	<2	<2
Arsenic, total	<4	<4
Barium, total	27.3	26.5
Benzene	<1	<1
Beryllium, total	<4	<4
Bromochloromethane	<1	<1
Bromodichloromethane	<1	<1
Bromoform	<1	<1
Bromomethane	<1	<1
Cadmium, total	<.8	<.8
Carbon disulfide	<1	<1
Carbon tetrachloride	<1	<1
Chlorobenzene	<1	<1
Chloroethane	<1	<1
Chloroform	<1	<1
Chloromethane	<1	<1
Chromium, total	<8	<8
Cis-1,2-dichloroethene	<1	<1
Cis-1,3-dichloropropene	<1	<1
Cobalt, total	.4	<.4
Copper, total	<4	<4
Dibromochloromethane	<1	<1
Dibromomethane	<1	<1
Ethylbenzene	<1	<1
Iodomethane	<1	<1
Lead, total	<4	<4
Methylene chloride	<5	<5
Nickel, total	<4.0	<4.0
Selenium, total	<4	<4
Silver, total	<4	<4
Styrene	<1	<1
Tetrachloroethene	<1	<1
Thallium, total	<2	<2
Toluene	<1	<1
Total suspended solids		
Trans-1,2-dichloroethene	<1	<1
Trans-1,3-dichloropropene	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5
Trichloroethene	<1	<1
Trichlorofluoromethane	<1	<1
Vanadium, total	<20	<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 16

Analytical Data Summary for MW-41

Constituents	Units	10/2/2024
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-dichloroethene	ug/L	<1
1,2,3-trichloropropane	ug/L	<1
1,2-dibromo-3-chloropropane	ug/L	<5
1,2-dibromoethane	ug/L	<1
1,2-dichlorobenzene	ug/L	<1
1,2-dichloroethane	ug/L	<1
1,2-dichloropropane	ug/L	<1
1,4-dichlorobenzene	ug/L	<1
2-butanone	ug/L	<10
2-hexanone	ug/L	<5
4-methyl-2-pentanone	ug/L	<5
Acetone	ug/L	<10
Acrylonitrile	ug/L	<5
Antimony, total	ug/L	<2
Arsenic, total	ug/L	<4
Barium, total	ug/L	394
Benzene	ug/L	<1
Beryllium, total	ug/L	<4
Bromochloromethane	ug/L	<1
Bromodichloromethane	ug/L	<1
Bromoform	ug/L	<1
Bromomethane	ug/L	<1
Cadmium, total	ug/L	<.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
Cis-1,2-dichloroethene	ug/L	<1
Cis-1,3-dichloropropene	ug/L	<1
Cobalt, total	ug/L	1
Copper, total	ug/L	<4
Dibromochloromethane	ug/L	<1
Dibromomethane	ug/L	<1
Ethylbenzene	ug/L	<1
Iodomethane	ug/L	<1
Lead, total	ug/L	<4
Methylene chloride	ug/L	<5
Nickel, total	ug/L	<4
Selenium, total	ug/L	<4
Silver, total	ug/L	<4
Styrene	ug/L	<1
Tetrachloroethene	ug/L	<1
Thallium, total	ug/L	<2
Toluene	ug/L	<1
Trans-1,2-dichloroethene	ug/L	<1
Trans-1,3-dichloropropene	ug/L	<1
Trans-1,4-dichloro-2-butene	ug/L	<5
Trichloroethene	ug/L	<1
Trichlorofluoromethane	ug/L	<1
Vanadium, total	ug/L	<20
Vinyl acetate	ug/L	<5
Vinyl chloride	ug/L	<1
Xylenes, total	ug/L	<2
Zinc, total	ug/L	<20

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

Table 17

Analytical Data Summary for MW-6

Constituents	Units	10/20/2014	6/22/2015	6/23/2015	11/12/2015	11/13/2015	4/11/2016	9/16/2016
1,1,1,2-tetrachloroethane	ug/L	<1		<1		<1	<1	<1
1,1,1-trichloroethane	ug/L	<1		<1		<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1		<1		<1	<1	<1
1,1,2-trichloroethane	ug/L	<1		<1		<1	<1	<1
1,1-dichloroethane	ug/L	<1		<1		<1	<1	<1
1,1-dichloroethene	ug/L	<2		<2		<2	<2	<1
1,2,3-trichloropropane	ug/L	<1		<1		<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L	<.12		<.50		<.50	<.50	<1.00
1,2-dibromoethane	ug/L	<.13		<.13		<.13	<.13	<1.00
1,2-dichlorobenzene	ug/L	<1		<1		<1	<1	<1
1,2-dichloroethane	ug/L	<1		<1		<1	<1	<1
1,2-dichloropropane	ug/L	<1		<1		<1	<1	<1
1,4-dichlorobenzene	ug/L	<1		<1		<1	<1	<1
2-butanone	ug/L	<10		<10		<10	<10	<5
2-hexanone	ug/L	<10		<10		<10	<10	<5
4-methyl-2-pentanone	ug/L	<10		<10		<10	<10	<5
Acetone	ug/L	<10		<10		<10	<10	<10
Acrylonitrile	ug/L	<10		<10		<10	<10	<5
Ammonia as n	mg/L			<.2 *		<.2 *	<.2 *	
Antimony, total	ug/L	<6		<6		<6	<6	<2
Arsenic, total	ug/L	1.69		<2.00		<2.00	<10.00	<4.00
Barium, total	ug/L	346		237		294	279	316
Benzene	ug/L	<.5		<.5		<.5	<.5	<1.0
Beryllium, total	ug/L	<1		<1		<1	<1	<4
Bicarbonate alkalinity	mg/L as CaCO3			508 *		557 *		
Bromochloromethane	ug/L	<5		<5		<5	<5	<1
Bromodichloromethane	ug/L	<1		<1		<1	<1	<1
Bromoform	ug/L	<5		<5		<5	<5	<1
Bromomethane	ug/L	<4		<4		<4	<4	<1
Cadmium, total	ug/L	<.5		<.5		<.5	<.5	<.8
Calcium, total	mg/L			136 *		161 *		
Carbon disulfide	ug/L	<1		<1		<1	<1	<1
Carbon tetrachloride	ug/L	<2		<2		<2	<2	<1
Carbonate alkalinity	mg/L as CaCO3			<5 *		<5 *		
Chloride	mg/L			4.52 *		6.64 *		
Chlorobenzene	ug/L	<1		<1		<1	<1	<1
Chloroethane	ug/L	<4		<4		<4	<4	<1
Chloroform	ug/L	<1		<1		<1	<1	<1
Chloromethane	ug/L	<3		<3		<3	<3	<1
Chromium, total	ug/L	<5		<5		<5	<5	<8
Cis-1,2-dichloroethene	ug/L	<1		<1		<1	<1	<1
Cis-1,3-dichloropropene	ug/L	<5		<5		<5	<5	<1
Cobalt, total	ug/L	7.43		<.80		<.80	<.80	<.80
Copper, total	ug/L	25.70		<2.00		2.68	<2.00	<4.00
Dibromochloromethane	ug/L	<5		<5		<5	<5	<1
Dibromomethane	ug/L							<1
Ethylbenzene	ug/L	<1		<1		<1	<1	<1
Iodomethane	ug/L	<10		<10		<10	<10	<1
Iron, total	ug/L			366 *		337 *	248 *	
Lead, total	ug/L	6.030		.608		.503	<.500	<4.000
Magnesium, total	mg/L			55.5 *		62.4 *		
Manganese, total	ug/L			51.5 *		67.9 *	54.4 *	
Methylene bromide	ug/L	<1		<1		<1	<1	
Methylene chloride	ug/L	<5		<5		<5	<5	<5
Nickel, total	ug/L	<30.0		<5.0		<5.0	<5.0	<4.0
Nitrate as n	mg/L			<.1 *		<.1 *	<.1 *	
Potassium, total	mg/L			<1.00 *		1.08 *		
Selenium, total	ug/L	<5		<5		<5	<5	<4
Silver, total	ug/L	<20		<1		<1	<1	<4
Sodium, total	mg/L			9.37 *		15.10 *		
Styrene	ug/L	<1		<1		<1	<1	<1
Sulfate	mg/L			59.4 *		49.6 *	103.0 *	
Tetrachloroethene	ug/L	<1		<1		<1	<1	<1
Thallium, total	ug/L	<2		<1		<1	<2	<4
Tin, total	ug/L		<5	<5				
Toluene	ug/L	<1		<1		<1	<1	<1
Total organic carbon	mg/L			<1.00 *		2.88 *	<1.00 *	
Total suspended solids	mg/L	512.0 *	53.5	56.5 *	47.1	47.1	14.0 *	3.0
Trans-1,2-dichloroethene	ug/L	<1		<1		<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<5		<5		<5	<5	<1
Trans-1,4-dichloro-2-butene	ug/L	<10		<10		<10	<10	<5
Trichloroethene	ug/L	<1		<1		<1	<1	<1
Trichlorofluoromethane	ug/L	<4		<4		<4	<4	<1
Vanadium, total	ug/L	<20		<5		<5	<5	<20
Vinyl acetate	ug/L	<10		<10		<10	<10	<5
Vinyl chloride	ug/L	<1		<1		<1	<1	<1
Xylenes, total	ug/L	<3		<3		<3	<3	<2

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

Table 17

Analytical Data Summary for MW-6

Constituents	3/15/2017	9/27/2017	9/12/2018	4/1/2019	9/12/2019	5/6/2020	9/3/2020	3/30/2021	9/8/2021	3/31/2022
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<5.00	<5.00	<5.00	<5.00
1,2-dibromoethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10
2-hexanone	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Ammonia as n										
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00
Barium, total	326	193	333	409	349	477	299	264	197	227
Benzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Beryllium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bicarbonate alkalinity										
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Calcium, total										
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbonate alkalinity										
Chloride										
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	<.80	<.80	<.80	<.80	<.80	<.40	<.40	<.40	<.40	1.10
Copper, total	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Iodomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Iron, total										
Lead, total	<4.000	<4.000	<4.000	<4.000	<4.000	<4.000	<4.000	<4.000	<4.000	<4.000
Magnesium, total										
Manganese, total										
Methylene bromide										
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	<4.0	<4.0	7.8	8.4	7.3	6.9	5.5	5.0	5.7	9.9
Nitrate as n										
Potassium, total										
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Sodium, total										
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfate										
Tetrachloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2
Tin, total										
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total organic carbon										
Total suspended solids	18.0									
Trans-1,2-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2

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

Table 17

Analytical Data Summary for MW-6

Constituents	8/30/2022	3/7/2023	9/28/2023	3/11/2024	10/2/2024
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-dichloroethene	<1	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<5.00	<5.00	<5.00	<5.00	<5.00
1,2-dibromoethane	<1.00	<1.00	<1.00	<1.00	<1.00
1,2-dichlorobenzene	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1	<1
2-butanone	<10	<10	<10	<10	<10
2-hexanone	<5	<5	<5	<5	<5
4-methyl-2-pentanone	<5	<5	<5	<5	<5
Acetone	<10	<10	<10	<10	<10
Acrylonitrile	<5	<5	<5	<5	<5
Ammonia as n					
Antimony, total	<2	<2	<2	<2	<2
Arsenic, total	<4.00	<4.00	<4.00	<4.00	<4.00
Barium, total	208	253	237	285	233
Benzene	<1.0	<1.0	<1.0	<1.0	<1.0
Beryllium, total	<4	<4	<4	<4	<4
Bicarbonate alkalinity					
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
Calcium, total					
Carbon disulfide	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1
Carbonate alkalinity					
Chloride					
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-dichloroethene	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1
Cobalt, total	<.40	11.40	1.80	2.30	1.50
Copper, total	<4.00	<4.00	<4.00	15.00	<4.00
Dibromochloromethane	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1	<1
Iodomethane	<1	<1	<1	<1	<1
Iron, total					
Lead, total	<4.000	<4.000	<4.000	<4.000	<4.000
Magnesium, total					
Manganese, total					
Methylene bromide					
Methylene chloride	<5	<5	<5	<5	<5
Nickel, total	11.3	29.5	25.3	16.4	14.6
Nitrate as n					
Potassium, total					
Selenium, total	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4
Sodium, total					
Styrene	<1	<1	<1	<1	<1
Sulfate					
Tetrachloroethene	<1	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2	<2
Tin, total					
Toluene	<1	<1	<1	<1	<1
Total organic carbon					
Total suspended solids					
Trans-1,2-dichloroethene	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5
Trichloroethene	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1
Xylenes, total		<2	<2	<2	<2

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

Table 17

Analytical Data Summary for MW-6

Constituents	Units	10/20/2014	6/22/2015	6/23/2015	11/12/2015	11/13/2015	4/11/2016	9/16/2016
Zinc, total	ug/L	22.6		<10.0		<10.0	<10.0	21.7

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

Table 17

Analytical Data Summary for MW-6

Constituents	3/15/2017	9/27/2017	9/12/2018	4/1/2019	9/12/2019	5/6/2020	9/3/2020	3/30/2021	9/8/2021	3/31/2022
Zinc, total	<8.0	10.1	21.6	44.1	<8.0	<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 17

Analytical Data Summary for MW-6

Constituents	8/30/2022	3/7/2023	9/28/2023	3/11/2024	10/2/2024
Zinc, total	<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 18

Analytical Data Summary for MW-7

Constituents	Units	3/15/2017	5/9/2017	9/27/2017	12/13/2017	3/14/2018	9/12/2018	4/1/2019	9/12/2019	5/6/2020
1,1,1,2-tetrachloroethane	ug/L					<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L					<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L					<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L					<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L					<1	<1	<1	<1	<1
1,1-dichloroethene	ug/L					<1	<1	<1	<1	<1
1,2,3-trichloropropane	ug/L					<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L					<1	<1	<1	<1	<5
1,2-dibromoethane	ug/L					<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L					<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L					<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L					<1	<1	<1	<1	<1
1,4-dichlorobenzene	ug/L					<1	<1	<1	<1	<1
2-butanone	ug/L					<5	<5	<5	<5	<5
2-hexanone	ug/L					<5	<5	<5	<5	<5
4-methyl-2-pentanone	ug/L					<5	<5	<5	<5	<5
Acetone	ug/L					<10	<10	<10	<10	<10
Acrylonitrile	ug/L					<5	<5	<5	<5	<5
Antimony, total	ug/L	<2	<2	<2		<2	<2	<2	<2	<2
Arsenic, total	ug/L	6.5	<4.0	<4.0		<4.0	6.3	<4.0	13.9	<4.0
Barium, total	ug/L	331	224	380		214	325	235	386	191
Benzene	ug/L					<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
Bromodichloromethane	ug/L					<1	<1	<1	<1	<1
Bromoform	ug/L					<1	<1	<1	<1	<1
Bromomethane	ug/L					<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
Carbon tetrachloride	ug/L					<1	<1	<1	<1	<1
Chlorobenzene	ug/L					<1	<1	<1	<1	<1
Chloroethane	ug/L					<1	<1	<1	<1	<1
Chloroform	ug/L					<1	<1	<1	<1	<1
Chloromethane	ug/L					<1	<1	<1	<1	<1
Chromium, total	ug/L	16.5	<8.0	<8.0		<8.0	14.6	<8.0	31.6	<8.0
Cis-1,2-dichloroethene	ug/L					<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L					<1	<1	<1	<1	<1
Cobalt, total	ug/L	5.9	<.8	3.4		<2.0	5.8	1.9	12.2	.4
Copper, total	ug/L	13.7	<4.0	10.6		<4.0	12.7	<4.0	25.8	<4.0
Dibromochloromethane	ug/L					<1	<1	<1	<1	<1
Dibromomethane	ug/L					<1	<1	<1	<1	<1
Ethylbenzene	ug/L					<1	<1	<1	<1	<1
Iodomethane	ug/L					<1	<1	<1	<1	<1
Lead, total	ug/L	6.8	<4.0	<4.0		<4.0	6.6	<4.0	13.1	<4.0
Methylene chloride	ug/L					<5	<5	<5	<5	<5
Nickel, total	ug/L	19.0	<4.0	11.4	<4.0	<4.0	17.4	7.4	34.2	<4.0
Selenium, total	ug/L	<4.0	<4.0	<4.0		<4.0	<4.0	<4.0	<4.0	<4.0
Silver, total	ug/L	<4	<4	<4		<4	<4	<4	<4	<4
Styrene	ug/L					<1	<1	<1	<1	<1
Tetrachloroethene	ug/L					<1	<1	<1	<1	<1
Thallium, total	ug/L	<4	<4	<4		<4	<4	<2	<2	<2
Toluene	ug/L					<1	<1	<1	<1	<1
Total suspended solids	mg/L	253								
Trans-1,2-dichloroethene	ug/L					<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L					<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L					<5	<5	<5	<5	<5
Trichloroethene	ug/L					<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L					<1	<1	<1	<1	<1
Vanadium, total	ug/L	26.5	<20.0	<20.0		<20.0	23.0	<20.0	55.0	<20.0
Vinyl acetate	ug/L					<5	<5	<5	<5	<5
Vinyl chloride	ug/L					<1	<1	<1	<1	<1
Xylenes, total	ug/L					<2	<2	<2	<2	<2
Zinc, total	ug/L	34.2	<8.0	26.9	<8.0	<8.0	63.4	28.5	69.0	<20.0

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

Table 18

Analytical Data Summary for MW-7

Constituents	9/3/2020	3/30/2021	9/8/2021	3/31/2022	8/30/2022	3/7/2023	9/28/2023	3/11/2024	10/2/2024
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone	<5	<5	<5	<10	<10	<10	<10	<10	<10
2-hexanone	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	<4.0	35.8	<4.0	18.6	<4.0	<4.0	<4.0	<4.0	<4.0
Barium, total	172	880	163	569	211	166	161	168	162
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	1.7	<.8	1.0	<.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	<8.0	77.5	<8.0	49.5	<8.0	<8.0	<8.0	<8.0	<8.0
Cis-1,2-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	<.4	39.3	<.4	22.9	2.1	<.4	<.4	<.4	<.4
Copper, total	<4.0	83.4	<4.0	47.2	4.8	<4.0	4.1	<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
Iodomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	<4.0	43.4	<4.0	25.8	5.5	<4.0	<4.0	<4.0	<4.0
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	<4.0	105.0	<4.0	61.9	6.5	<4.0	<4.0	<4.0	4.1
Selenium, total	<4.0	5.8	<4.0	6.2	<4.0	<4.0	<4.0	<4.0	<4.0
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total suspended solids									
Trans-1,2-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	<20.0	120.0	<20.0	75.9	<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	<20.0	615.0	<20.0	116.0	<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-9

Constituents	Units	10/20/2014	10/21/2014	6/22/2015	11/12/2015	4/11/2016	9/16/2016	3/15/2017
(3 4)-methylphenol	ug/L							<8
1,1,1,2-tetrachloroethane	ug/L		<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L		<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L		<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L		<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L		<1	<1	<1	<1	<1	<1
1,1-dichloroethene	ug/L		<2	<2	<2	<2	<1	<1
1,1-dichloropropene	ug/L							<1
1,2,3-trichloropropane	ug/L		<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene	ug/L							<8
1,2,4-trichlorobenzene	ug/L							<1
1,2-dibromo-3-chloropropane	ug/L		<.12	<.50	<.50	<.50	<1.00	<1.00
1,2-dibromoethane	ug/L		<.13	<.13	<.13	<.13	<1.00	<1.00
1,2-dichlorobenzene	ug/L		<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L		<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L		<1	<1	<1	<1	<1	<1
1,2-dinitrobenzene	ug/L							<8
1,3,5-trinitrobenzene	ug/L							<8
1,3-dichlorobenzene	ug/L							<1
1,3-dichloropropane	ug/L							<1
1,3-dinitrobenzene	ug/L							<8
1,4-dichlorobenzene	ug/L		<1	<1	<1	<1	<1	<1
1,4-naphthoquinone	ug/L							<8
1,4-phenylenediamine	ug/L							<8
1-naphthylamine	ug/L							<8
2,2-dichloropropane	ug/L							<1
2,3,4,6-tetrachlorophenol	ug/L							<8
2,4,5-t	ug/L							<.5
2,4,5-tp (silvex)	ug/L							<.5
2,4,5-trichlorophenol	ug/L							<8
2,4,6-trichlorophenol	ug/L							<8
2,4-d	ug/L							<2
2,4-dichlorophenol	ug/L							<8
2,4-dimethylphenol	ug/L							<8
2,4-dinitrophenol	ug/L							<8
2,4-dinitrotoluene	ug/L							<8
2,6-dichlorophenol	ug/L							<8
2,6-dinitrotoluene	ug/L							<8
2-acetylaminofluorene	ug/L							<8
2-butanone	ug/L		<10	<10	<10	<10	<5	<5
2-chloronaphthalene	ug/L							<8
2-chlorophenol	ug/L							<8
2-hexanone	ug/L		<10	<10	<10	<10	<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	ug/L		<10	<10	<10	<10	<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
Acetonitrile	ug/L							<10
Acetophenone	ug/L							<8
Acrolein	ug/L							<10
Acrylonitrile	ug/L		<10	<10	<10	<10	<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-9

Constituents	9/27/2017	12/13/2017	3/14/2018	9/12/2018	4/1/2019	9/12/2019	5/6/2020	9/3/2020	3/30/2021
(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-dichloroethene	<1		<1	<1	<1	<1	<1	<1	<1
1,1-dichloropropene									
1,2,3-trichloropropane	<1		<1	<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene									
1,2,4-trichlorobenzene									
1,2-dibromo-3-chloropropane	<1.00		<1.00	<1.00	<1.00	<1.00	<5.00	<5.00	<5.00
1,2-dibromoethane	<1.00		<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
1,2-dichlorobenzene	<1		<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1		<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<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	<5		<5	<5	<5	<5	<5	<5	<5
2-chloronaphthalene									
2-chlorophenol									
2-hexanone	<5		<5	<5	<5	<5	<5	<5	<5
2-methylnaphthalene									
2-methylphenol (o-cresol)									
2-naphthylamine									
2-nitroaniline									
2-nitrophenol									
3,3´-dichlorobenzidine									
3,3-dimethylbenzidine									
3-methylcholanthrene									
3-nitroaniline									
4,4`-ddd									
4,4`-dde									
4,4`-ddt									
4,6-dinitro-2-methylphenol									
4-aminobiphenyl									
4-bromophenyl phenyl ether									
4-chloro-3-methylphenol									
4-chloroaniline									
4-chlorophenyl phenyl ether									
4-methyl-2-pentanone	<5		<5	<5	<5	<5	<5	<5	<5
4-nitroaniline									
4-nitrophenol									
5-nitro-o-toluidine									
7,12-dimethylbenz [a] anthracene									
Acenaphthene									
Acenaphthylene									
Acetone	17.4		<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 19

Analytical Data Summary for MW-9

Constituents	9/8/2021	3/31/2022	8/30/2022	11/11/2022	3/7/2023	6/6/2023	9/28/2023	3/11/2024
(3 4)-methylphenol							<8	
1,1,1,2-tetrachloroethane	<1	<1	<1		<1		<1	<1
1,1,1-trichloroethane	<1	<1	<1		<1		<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1		<1		<1	<1
1,1,2-trichloroethane	<1	<1	<1		<1		<1	<1
1,1-dichloroethane	<1	<1	<1		<1		<1	<1
1,1-dichloroethene	<1	<1	<1		<1		<1	<1
1,1-dichloropropene							<1	
1,2,3-trichloropropane	<1	<1	<1		<1		<1	<1
1,2,4,5-tetrachlorobenzene							<8	
1,2,4-trichlorobenzene							<1	
1,2-dibromo-3-chloropropane	<5.00	<5.00	<5.00		<5.00		<1.00	<5.00
1,2-dibromoethane	<1.00	<1.00	<1.00		<1.00		<1.00	<1.00
1,2-dichlorobenzene	<1	<1	<1		<1		<1	<1
1,2-dichloroethane	<1	<1	<1		<1		<1	<1
1,2-dichloropropane	<1	<1	<1		<1		<1	<1
1,2-dinitrobenzene							<8	
1,3,5-trinitrobenzene							<8	
1,3-dichlorobenzene							<1	
1,3-dichloropropane							<1	
1,3-dinitrobenzene							<8	
1,4-dichlorobenzene	<1	<1	<1		<1		<1	<1
1,4-naphthoquinone							<8	
1,4-phenylenediamine							<8	
1-naphthylamine							<8	
2,2-dichloropropane							<1	
2,3,4,6-tetrachlorophenol							<8	
2,4,5-t							<.5	
2,4,5-tp (silvex)							<.5	
2,4,5-trichlorophenol							<8	
2,4,6-trichlorophenol							<8	
2,4-d							<2	
2,4-dichlorophenol							<8	
2,4-dimethylphenol							<8	
2,4-dinitrophenol							<8	
2,4-dinitrotoluene							<8	
2,6-dichlorophenol							<8	
2,6-dinitrotoluene							<8	
2-acetylaminofluorene							<8	
2-butanone	<5	<10	<10		<10		<5	<10
2-chloronaphthalene							<8	
2-chlorophenol							<8	
2-hexanone	<5	<5	<5		<5		<5	<5
2-methylnaphthalene							<8	
2-methylphenol (o-cresol)							<8	
2-naphthylamine							<8	
2-nitroaniline							<8	
2-nitrophenol							<8	
3,3´-dichlorobenzidine							<8	
3,3-dimethylbenzidine							<8	
3-methylcholanthrene							<8	
3-nitroaniline							<8	
4,4`-ddd							<.05	
4,4`-dde							<.05	
4,4`-ddt							<.05	
4,6-dinitro-2-methylphenol							<8	
4-aminobiphenyl							<8	
4-bromophenyl phenyl ether							<8	
4-chloro-3-methylphenol							<8	
4-chloroaniline							<8	
4-chlorophenyl phenyl ether							<8	
4-methyl-2-pentanone	<5	<5	<5		<5		<5	<5
4-nitroaniline							<8	
4-nitrophenol							<8	
5-nitro-o-toluidine							<8	
7,12-dimethylbenz [a] anthracene							<8	
Acenaphthene							<8	
Acenaphthylene							<8	
Acetone	<10.0	<10.0	<10.0		<10.0		<10.0	<10.0
Acetonitrile							<10	
Acetophenone							<8	
Acrolein							<10	
Acrylonitrile	<5	<5	<5		<5		<5	<5
Aldrin							<.05	
Allyl chloride							<1	
Alpha-bhc							<.05	
Anthracene							<8	

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

Table 19

Analytical Data Summary for MW-9

Constituents	Units	10/20/2014	10/21/2014	6/22/2015	11/12/2015	4/11/2016	9/16/2016	3/15/2017
Antimony, total	ug/L		<6	<1	<1	<1	<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		16.30	6.62	3.53	2.66	4.20	<4.00
Azobenzene	ug/L							<8
Barium, total	ug/L		687	540	487	410	501	505
Benzene	ug/L		<.5	<.5	<.5	<.5	<1.0	<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		<1	<1	<1	<1	<4	<4
Beta-bhc	ug/L							<.05
Bicarbonate alkalinity	mg/L as CaCO3			651 *	665 *			
Bis (2-chloroethoxy) methane	ug/L							<8
Bis(2-chloroethyl) ether	ug/L							<8
Bis(2-ethylhexyl) phthalate	ug/L							<8
Bis[2-chloroisopropyl]ether	ug/L							<8
Bromochloromethane	ug/L		<5	<5	<5	<5	<1	<1
Bromodichloromethane	ug/L		<1	<1	<1	<1	<1	<1
Bromoform	ug/L		<5	<5	<5	<5	<1	<1
Bromomethane	ug/L		<4	<4	<4	<4	<1	<1
Butyl benzyl phthalate	ug/L							<8
Cadmium, total	ug/L		4.44	<.50	<.50	<.50	<.80	<.80
Calcium, total	mg/L			215 *	201 *			
Carbon disulfide	ug/L		<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L		<2	<2	<2	<2	<1	<1
Carbonate alkalinity	mg/L as CaCO3			<5 *	<5 *			
Chlordane	ug/L							<.1
Chloride	mg/L			125 *	135 *			
Chlorobenzene	ug/L		<1	<1	<1	<1	<1	<1
Chlorobenzilate	ug/L							<8
Chloroethane	ug/L		<4	<1	<1	<4	<1	<1
Chloroform	ug/L		<1	<1	<1	<1	<1	<1
Chloromethane	ug/L		<3	<3	<3	<3	<1	<1
Chloroprene	ug/L							<1
Chromium, total	ug/L		<20	<5	<5	<5	<8	<8
Chrysene	ug/L							<8
Cis-1,2-dichloroethene	ug/L		<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L		<5	<5	<5	<5	<1	<1
Cobalt, total	ug/L		10.30	2.25	2.95	2.56	1.70	2.20
Copper, total	ug/L		37.50	2.16	2.88	<2.00	<4.00	<4.00
Cyanide	mg/L							<.005
Delta-bhc	ug/L							<.05
Diallate	ug/L							<8
Dibenzo(a,h)anthracene	ug/L							<8
Dibenzofuran	ug/L							<8
Dibromochloromethane	ug/L		<5	<5	<5	<5	<1	<1
Dibromomethane	ug/L						<1	<1
Dichlorodifluoromethane	ug/L		<3					<1
Dieldrin	ug/L							<.05
Diethyl phthalate	ug/L							<8
Dimethoate	ug/L							<.4
Dimethylphthalate	ug/L							<8
Di-n-butyl phthalate	ug/L							<8
Di-n-octyl phthalate	ug/L							<8
Dinoseb	ug/L							<.5
Diphenylamine	ug/L							<8
Disulfoton	ug/L							<.4
Endosulfan i	ug/L							<.05
Endosulfan ii	ug/L							<.05
Endosulfan sulfate	ug/L							<.05
Endrin	ug/L							<.05
Endrin aldehyde	ug/L							<.05
Ethyl methacrylate	ug/L							<10
Ethyl methanesulfonate	ug/L							<8
Ethylbenzene	ug/L		<1	<1	<1	<1	<1	<1
Famphur	ug/L							<.4
Fluoranthene	ug/L							<8
Fluorene	ug/L							<8

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

Table 19

Analytical Data Summary for MW-9

Constituents	9/27/2017	12/13/2017	3/14/2018	9/12/2018	4/1/2019	9/12/2019	5/6/2020	9/3/2020	3/30/2021
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	21.80	4.50	<4.00	4.60	<4.00	15.20	8.20	5.30	14.80
Azobenzene									
Barium, total	614		470	477	492	971	546	493	574
Benzene	<1.0		<1.0	<1.0	<1.0	<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	<4	<4	<4
Beta-bhc									
Bicarbonate alkalinity									
Bis (2-chloroethoxy) methane									
Bis(2-chloroethyl) ether									
Bis(2-ethylhexyl) phthalate									
Bis[2-chloroisopropyl]ether									
Bromochloromethane	<1		<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1		<1	<1	<1	<1	<1	<1	<1
Bromoform	<1		<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1		<1	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate									
Cadmium, total	<.80		<.80	<.80	<.80	<.80	<.80	<.80	<.80
Calcium, total									
Carbon disulfide	<1		<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1		<1	<1	<1	<1	<1	<1	<1
Carbonate alkalinity									
Chlordane									
Chloride									
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-dichloroethene	<1		<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1		<1	<1	<1	<1	<1	<1	<1
Cobalt, total	2.90		2.00	1.60	2.20	5.30	2.90	2.40	2.80
Copper, total	<4.00		<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00
Cyanide									
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									

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

Table 19

Analytical Data Summary for MW-9

Constituents	9/8/2021	3/31/2022	8/30/2022	11/11/2022	3/7/2023	6/6/2023	9/28/2023	3/11/2024
Antimony, total	<2	<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	15.90	<4.00	12.10		<4.00		4.90	4.00
Azobenzene							<8	
Barium, total	544	462	545		481		486	517
Benzene	<1.0	<1.0	<1.0		<1.0		<1.0	<1.0
Benzo(a)anthracene							<8	
Benzo(a)pyrene							<8	
Benzo(b)fluoranthene							<8	
Benzo(g,h,i)perylene							<8	
Benzo(k)fluoranthene							<8	
Benzyl alcohol							<8	
Beryllium, total	<4	<4	<4		<4		<4	<4
Beta-bhc							<.05	
Bicarbonate alkalinity								
Bis (2-chloroethoxy) methane							<8	
Bis(2-chloroethyl) ether							<8	
Bis(2-ethylhexyl) phthalate							<6	
Bis[2-chloroisopropyl]ether							<8	
Bromochloromethane	<1	<1	<1		<1		<1	<1
Bromodichloromethane	<1	<1	<1		<1		<1	<1
Bromoform	<1	<1	<1		<1		<1	<1
Bromomethane	<1	<1	<1		<1		<1	<1
Butyl benzyl phthalate							<8	
Cadmium, total	<.80	<.80	<.80		<.80		<.80	<.80
Calcium, total								
Carbon disulfide	<1	<1	<1		<1		<1	<1
Carbon tetrachloride	<1	<1	<1		<1		<1	<1
Carbonate alkalinity								
Chlordane							<.1	
Chloride								
Chlorobenzene	<1	<1	<1		<1		<1	<1
Chlorobenzilate							<8	
Chloroethane	<1	<1	<1		<1		<1	<1
Chloroform	<1	<1	<1		<1		<1	<1
Chloromethane	<1	<1	<1		<1		<1	<1
Chloroprene							<1	
Chromium, total	<8	<8	<8		<8		<8	<8
Chrysene							<8	
Cis-1,2-dichloroethene	<1	<1	<1		<1		<1	<1
Cis-1,3-dichloropropene	<1	<1	<1		<1		<1	<1
Cobalt, total	2.80	1.90	2.60		2.70		1.90	2.20
Copper, total	<4.00	<4.00	<4.00		<4.00		<4.00	<4.00
Cyanide							<.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	

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

Table 19

Analytical Data Summary for MW-9

Constituents	Units	10/20/2014	10/21/2014	6/22/2015	11/12/2015	4/11/2016	9/16/2016	3/15/2017
Gamma-bhc [lindane]	ug/L							<.05
Heptachlor	ug/L							<.05
Heptachlor epoxide	ug/L							<.05
Hexachlorobenzene	ug/L							<.05
Hexachlorobutadiene	ug/L							<8
Hexachlorocyclopentadiene	ug/L							<8
Hexachloroethane	ug/L							<8
Hexachloropropene	ug/L							<8
Indeno(1,2,3-cd)pyrene	ug/L							<8
Iodomethane	ug/L		<10	<10	<10	<10	<1	<1
Isobutanol	mg/L							<1
Isodrin	ug/L							<8
Isophorone	ug/L							<8
Isosafrole	ug/L							<8
Kepone	ug/L							<8
Lead, total	ug/L		13.200	<.500	.838	.754	<4.000	<4.000
Magnesium, total	mg/L			73.5 *	70.2 *			
Mercury, total	ug/L							<.5
Methacrylonitrile	ug/L							<1
Methapyrilene	ug/L							<8
Methoxychlor	ug/L							<.05
Methyl methacrylate	ug/L							<1
Methyl methanesulfonate	ug/L							<8
Methyl parathion	ug/L							<.4
Methylene bromide	ug/L		<1	<1	<1	<1		
Methylene chloride	ug/L		<5	<5	<5	<5	<5	<5
Naphthalene	ug/L							<8
Nickel, total	ug/L		<50.0	12.1	14.6	12.7	11.7	14.5
Nitrobenzene	ug/L							<8
N-nitrosodiethylamine	ug/L							<8
N-nitrosodimethylamine	ug/L							<8
N-nitrosodi-n-butylamine	ug/L							<8
N-nitroso-di-n-propylamine	ug/L							<8
N-nitrosodiphenylamine	ug/L							<8
N-nitrosomethylethylamine	ug/L							<8
N-nitrosopiperidine	ug/L							<8
N-nitrosopyrrolidine	ug/L							<8
O,o,o-triethyl phosphorothioate	ug/L							<.4
O-toluidine	ug/L							<8
P-(dimethylamino)azobenzene	ug/L							<8
Parathion	ug/L							<.4
Pentachlorobenzene	ug/L							<8
Pentachloronitrobenzene (pcnb)	ug/L							<8
Pentachlorophenol	ug/L							<8
Phenacetin	ug/L							<8
Phenanthrene	ug/L							<8
Phenol	ug/L							<8
Phorate	ug/L							<.4
Potassium, total	mg/L			<1 *	<1 *			
Pronamide	ug/L							<8
Propionitrile	ug/L							<10
Pyrene	ug/L							<8
Safrole	ug/L							<8
Selenium, total	ug/L		<5	<5	<5	<5	<4	<4
Silver, total	ug/L		<20	<1	<1	<1	<4	<4
Sodium, total	mg/L			22.7 *	21.9 *			
Styrene	ug/L		<1	<1	<1	<1	<1	<1
Sulfate	mg/L			6.78 *	6.50 *			
Sulfide	mg/L							<.1
Tetrachloroethene	ug/L		<1	<1	<1	<1	<1	<1
Thallium, total	ug/L		<2	<1	<1	<2	<4	<4
Thionazin	ug/L							<.4
Tin, total	ug/L	122	122	<5 *	<5 *	<5 *	<20	<20
Toluene	ug/L		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Total suspended solids	mg/L	556.0	556.0	64.9 *	236.0 *	131.0 *	29.0	414.0
Toxaphene	ug/L							<.2
Trans-1,2-dichloroethene	ug/L		<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L		<5	<5	<5	<5	<1	<1
Trans-1,4-dichloro-2-butene	ug/L		<10	<10	<10	<10	<5	<5
Trichloroethene	ug/L		<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L		<4	<4	<4	<4	<1	<1
Vanadium, total	ug/L		<20	<5	<5	<5	<20	<20
Vinyl acetate	ug/L		<10	<10	<10	<10	<5	<5
Vinyl chloride	ug/L		<1	<1	<1	<1	<1	<1
Xylenes, total	ug/L		<3	<3	<3	<3	<2	<2
Zinc, total	ug/L		31.1	<10.0	<10.0	<10.0	<8.0	<8.0

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

Table 19

Analytical Data Summary for MW-9

Constituents	9/27/2017	12/13/2017	3/14/2018	9/12/2018	4/1/2019	9/12/2019	5/6/2020	9/3/2020	3/30/2021
Gamma-bhc [lindane]									
Heptachlor									
Heptachlor epoxide									
Hexachlorobenzene									
Hexachlorobutadiene									
Hexachlorocyclopentadiene									
Hexachloroethane									
Hexachloropropene									
Indeno(1,2,3-cd)pyrene									
Iodomethane	<1		<1	<1	<1	<1	<1	<1	<1
Isobutanol									
Isodrin									
Isophorone									
Isosafrole									
Kepone									
Lead, total	<4.000		<4.000	<4.000	<4.000	<4.000	<4.000	<4.000	<4.000
Magnesium, total									
Mercury, total									
Methacrylonitrile									
Methapyrilene									
Methoxychlor									
Methyl methacrylate									
Methyl methanesulfonate									
Methyl parathion									
Methylene bromide									
Methylene chloride	<5		<5	<5	<5	<5	<5	<5	<5
Naphthalene									
Nickel, total	12.9		13.5	13.6	13.2	25.5	13.9	14.2	16.0
Nitrobenzene									
N-nitrosodiethylamine									
N-nitrosodimethylamine									
N-nitrosodi-n-butylamine									
N-nitroso-di-n-propylamine									
N-nitrosodiphenylamine									
N-nitrosomethylethylamine									
N-nitrosopiperidine									
N-nitrosopyrrolidine									
O,o,o-triethyl phosphorothioate									
O-toluidine									
P-(dimethylamino)azobenzene									
Parathion									
Pentachlorobenzene									
Pentachloronitrobenzene (pcnb)									
Pentachlorophenol									
Phenacetin									
Phenanthrene									
Phenol									
Phorate									
Potassium, total									
Pronamide									
Propionitrile									
Pyrene									
Safrole									
Selenium, total	<4		<4	<4	<4	<4	<4	<4	<4
Silver, total	<4		<4	<4	<4	<4	<4	<4	<4
Sodium, total									
Styrene	<1		<1	<1	<1	<1	<1	<1	<1
Sulfate									
Sulfide									
Tetrachloroethene	<1		<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4		<4	<4	<2	<2	<2	<2	<2
Thionazin									
Tin, total									
Toluene	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Total suspended solids									
Toxaphene									
Trans-1,2-dichloroethene	<1		<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1		<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5		<5	<5	<5	<5	<5	<5	<5
Trichloroethene	<1		<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1		<1	<1	<1	<1	<1	<1	<1
Vanadium, total	<20		<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	<5		<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1		<1	<1	<1	<1	<1	<1	<1
Xylenes, total	<2		<2	<2	<2	<2	<2	<2	<2
Zinc, total	<8.0		<8.0	41.5	<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-9

Constituents	9/8/2021	3/31/2022	8/30/2022	11/11/2022	3/7/2023	6/6/2023	9/28/2023	3/11/2024
Gamma-bhc [lindane]							<.05	
Heptachlor							<.05	
Heptachlor epoxide							<.05	
Hexachlorobenzene							<.05	
Hexachlorobutadiene							<8	
Hexachlorocyclopentadiene							<8	
Hexachloroethane							<8	
Hexachloropropene							<8	
Indeno(1,2,3-cd)pyrene							<8	
Iodomethane	<1	<1	<1		<1		<2	<1
Isobutanol							<1	
Isodrin							<8	
Isophorone							<8	
Isosafrole							<8	
Kepone							<8	
Lead, total	<4.000	<4.000	<4.000		<4.000		<4.000	<4.000
Magnesium, total								
Mercury, total							<.5	
Methacrylonitrile							<1	
Methapyrilene							<8	
Methoxychlor							<.05	
Methyl methacrylate							<1	
Methyl methanesulfonate							<8	
Methyl parathion							<.4	
Methylene bromide								
Methylene chloride	<5	<5	<5		<5		<5	<5
Naphthalene							<8	
Nickel, total	14.3	13.8	13.9		15.4	15.3	15.2	14.6
Nitrobenzene							<8	
N-nitrosodiethylamine							<8	
N-nitrosodimethylamine							<8	
N-nitrosodi-n-butylamine							<8	
N-nitroso-di-n-propylamine							<8	
N-nitrosodiphenylamine							<8	
N-nitrosomethylethylamine							<8	
N-nitrosopiperidine							<8	
N-nitrosopyrrolidine							<8	
O,o,o-triethyl phosphorothioate							<.4	
O-toluidine							<8	
P-(dimethylamino)azobenzene							<8	
Parathion							<.4	
Pentachlorobenzene							<8	
Pentachloronitrobenzene (pcnb)							<8	
Pentachlorophenol							<8	
Phenacetin							<8	
Phenanthrene							<8	
Phenol							<8	
Phorate							<.4	
Potassium, total								
Pronamide							<8	
Propionitrile							<10	
Pyrene							<8	
Safrole							<8	
Selenium, total	<4	<4	<4		<4		<4	<4
Silver, total	<4	<4	<4		<4		<4	<4
Sodium, total								
Styrene	<1	<1	<1		<1		<1	<1
Sulfate								
Sulfide							<.1	
Tetrachloroethene	<1	<1	<1		<1		<1	<1
Thallium, total	<2	<2	<2		<2		<2	<2
Thionazin							<.4	
Tin, total							<20	
Toluene	<1.0	<1.0	1.8	<1.0	<1.0		<1.0	<1.0
Total suspended solids								
Toxaphene							<.2	
Trans-1,2-dichloroethene	<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
Trichloroethene	<1	<1	<1		<1		<1	<1
Trichlorofluoromethane	<1	<1	<1		<1		<1	<1
Vanadium, total	<20	<20	<20		<20		<20	<20
Vinyl acetate	<5	<5	<5		<5		<5	<5
Vinyl chloride	<1	<1	<1		<1		<1	<1
Xylenes, total	<2	<2	<2		<2		<2	<2
Zinc, total	<20.0	<20.0	<20.0		<20.0		<20.0	<20.0

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

Appendix D

Statistical Report

APPENDIX D.1 –Spring Statistical Evaluation

Results of the Ground Water Statistics

for Benton County Sanitary Landfill

First Semi-Annual Monitoring Event in 2024

Prepared for:
Benton County Solid Waste Disposal Commission
7904 20th Avenue
Blairstown, Iowa 52209

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

April 2024

INTRODUCTION

This report contains the results of the statistical analyses used to evaluate the ground water data obtained during the first semi-annual monitoring event in 2024 at Benton County Sanitary Landfill. The ground water at Benton County Sanitary Landfill is monitored by a network of wells including AW-2, AW-3, AW-4, AW-9, MW-12, MW-14, MW-19, MW-20, MW-24, MW-25, MW-26, MW-27, MW-28, MW-6, MW-7, and MW-9. Ground water well MW-23 was replaced with AW-4 in the HMSP. Monitoring wells AW-1, AW-2, AW-3, AW-9, MW-12, MW-14, MW-20, MW-24, MW-25, MW-26, MW-27, MW-28, MW-6, MW-7, and MW-9 were sampled on March 11, 2024 and analyzed for the parameters required by permit. The statistical plan is designed to detect a release from the facility at the earliest indication so that it is protective of human health and the environment. The interwell methodology is described and then applied to the Benton County Sanitary Landfill data. The statistical plan conforms with IAC 567, Chapter 113.10, USEPA Guidance document ("*Statistical Analysis of Ground-Water Monitoring Data at RCRA Facilities, Unified Guidance"*, March 2009), and the American Society for Testing and Materials (ASTM) standard D6312-98, *Developing Appropriate Statistical Approaches for Ground-Water Detection Monitoring Programs*.

Ground Water Monitoring Program

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 below.

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

Organic Compounds:

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

Inorganic constituents:

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

The ground water data obtained during the first semi-annual monitoring event in 2024 are summarized in Attachment A.

STATISTICAL METHODOLOGIES FOR DETECTION MONITORING

IAC 567, Chapter 113.10(4) provides several options for statistically evaluating the ground water data at those wells that monitor the open cells or contiguous MSWLF units. The preferred methods for comparing ground water data are using either prediction limits or using control charts. The site prediction limit method was applied to the Benton County Sanitary Landfill data using the DUMPStat® statistical program. DUMPStat® is a program for the statistical analysis of groundwater monitoring data using methods described in "Statistical Methods for Groundwater Monitoring" by Dr. Robert D. Gibbons. The DUMPStat program is completely consistent with all USEPA regulations and guidance and the ASTM D6312-98 guidance.

Ground water statistics are to be done on the inorganic constituents listed. The organic constituents are compared to maximum contaminant levels (MCLs) or practical quantitation limits (PQLs), in lieu of statistical comparisons to historical concentrations.

Interwell Statistics: Upgradient versus Downgradient Comparisons

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

Results of the Interwell Statistics

The background data used in this statistical analysis includes the ground water data collected from ground water wells MW-6, MW-7, MW-26, MW-27, and MW-28 during the period from October 2014 through the current data. A summary of the background data from monitoring wells MW-6, MW-7, MW-26, MW-27, and MW-28 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 AW-1, AW-2, AW-3, AW-9, MW-12, MW-14, MW-20, MW-24, MW-25, and MW-9, compared to

the site prediction limits once sufficient data are available. Prediction limit exceedances are flagged with asterisks. For the most current data, the site prediction limit exceedances detected are summarized in the Table below.

Summary of Prediction Limit Exceedances for the First Semi-Annual Monitoring Event in 2024

Well	Trace Metal	Result	Prediction Limit	Prediction Limit Type	Verified or Awaiting Verification
AW-2	Cobalt, µg/L	14.2	12.2000	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 greater than or equal to 50% in the upgradient well so only this metal 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 trace metal exceedances were evaluated against the ground water protection standards (GWPS) using confidence limits calculated in accordance with the Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, USEPA, March 2009. The analysis was conducted to evaluate whether verified concentrations are significantly above the water quality standard. The 95% lower confidence limit (LCL) for the mean of the historical data was used to evaluate whether the regulated unit is in compliance with the ground-water protection standards under 40 CFR 264 (e.g. whether the verified constituent is detected at a significant level above the GWPS). An exceedance is verified if the LCL is above the Regulatory GWPS. The calculated 95% LCLs for the verified trace metal exceedances are included in Attachment C.

The 95% LCL for arsenic at AW-2 (29.121 µg/L) exceeds the USEPA MCL of 10 µg/L, though the current concentration (27.7 µg/L) does not exceed the site prediction limit of 51.3 µg/L.

The 95% LCL for cobalt at AW-2 (6.477 µg/L) exceeds the Iowa Statewide Standard of 2.1 µg/L.

The 95% LCL for cobalt at MW-24 (4.253 µg/L) exceeds the Iowa Statewide Standard of 2.1 µg/L, though the current concentration (6.4 µg/L) does not exceed the site prediction limit of 12.2 µg/L.

The calculated 95% LCLs for the remainder of the verified trace metal exceedances are below the respective GWPS.

Intrawell Comparisons

Intrawell statistics are appropriate for facilities where the upgradient wells do not accurately characterize the natural ground water conditions downgradient from the facility. This may be due to different hydrogeological conditions where the wells are screened, having too few upgradient wells to account for the spatial variability, or the site exhibiting no definable hydraulic gradient. Intrawell statistics compare new measurements to the historical data at each ground water monitoring well independently. It is recommended that at least eight background samples be obtained prior to performing the statistics to control the number of false assessments.

The most useful technique for intrawell comparisons is the combined Shewhart-CUSUM control chart. This control chart procedure is useful because it will detect releases both in terms of the constituent concentration and cumulative increases. This method is also extremely sensitive to sudden and gradual releases. A requirement for constructing these control charts is that the parameter is detected at a frequency greater than or equal to 25%, otherwise the data variance is not properly defined.

Many ground water monitoring parameters are not detected at a frequency great enough to generate the combined Shewhart-CUSUM control charts. For constituents that are detected less than 25% of the time monitored at a particular well, the data should be plotted as a time series until a sufficient number of data points are available to provide a 99% confidence nonparametric prediction limit. Nonparametric prediction limits are the largest value detected during background at that well for that parameter.

In developing the statistical background, the historical data must be thoroughly screened for anomalous data due to sampling error, analytical error, or simply by chance alone. An erroneous data point, if not removed prior to the mean and variance computations, would yield a larger control limit thus increasing the false negative rate. The DUMPStat® program screens for outliers using the Dixon test. If the Dixon test indicates an outlier, the value is compared to three times the median value for intrawell analyses. If the value fails both criteria of the two-stage screening, the value is considered a statistical outlier and will not be used in the mean and variance determinations. Anomalous data will still be plotted on the graphs (with a unique symbol) but will not be included in the calculations.

The verification resample plan is an integral function of the statistical plan to reduce the probability that anomalous data obtained after the background has been established is indicative of a landfill release. The outliers have generally not been substantiated by either the resample events or the subsequent routine monitoring event.

The background data is tested for existing trends using Sen's slope test. If contamination exists prior to completing the background, the control limits could be potentially high and this control chart method would not be able to detect an increasing trend unless the increase is severe.

Results of the Intrawell Statistics

The trace metals data for monitoring well MW24 were evaluated using the combined Shewhart-CUSUM control chart method. The background data previously included ground water data obtained from October 2014 through 2020. As ground water monitoring at a municipal solid waste facility proceeds, it is recommended to update background data sets periodically with valid detection monitoring results that are representative of background groundwater quality not affected by leakage from a monitored unit. Failure to update background will exclude factors such as natural temporal variation, changes in field or laboratory methodologies, and changes in the water table due to meteorological conditions or other influences. Since there were no exceedances attributed to the landfill, the background was updated to include data collected from October 2014 through 2022.

A summary of the intrawell statistics is included in Attachment D, Table 1 "Summary Statistics and Intermediate Computations for Combined Shewhart-CUSUM Control Charts". The control charts or time series graphs follow the summary table. For the parameters compared using the combined Shewhart-CUSUM control chart, there were no control limit exceedances detected.

The background range was tested for increasing trends using Sen's Test. An increasing trend was detected in the background data for nickel at MW-24. For intrawell analysis, the site-wide false positive rate is 2% and the test becomes sensitive to 3 standard deviation unit increases over background.

Volatile Organic Compounds

Volatile Organic Compounds (VOCs) are generally man-made compounds not present in ambient ground water. If VOCs are detected above their statistical limit (i.e., the laboratory PQL or reporting limit), a verification resample will be conducted at the next scheduled sampling event. A statistical exceedance will be indicated if the VOC detection is confirmed by the subsequent monitoring. VOCs detected in the ground water at Benton County Sanitary Landfill during the first semi-annual monitoring event in 2024 are summarized below.

VOCs detected during the first semi-annual monitoring period in 2024

Well	VOC Detected	Result, µg/L	Reporting Limit, µg/L	Verified/ Awaiting verification	Water Quality Standard
AW-3	1,4-Dichlorobenzene	3.2	1	Verified	75[a]
	Benzene	2.7	1	Verified	5[a]
	Chloroethane	3.0	1	Verified	2800[b]
MW-20	1,4-Dichlorobenzene	2.6	1	Verified	75[a]
	Benzene	2.3	1	Verified	5[a]
	Chlorobenzene	2.8	1	Verified	100[a]
	Toluene	1.1	1	Awaiting verification	1000[a]

a - USEPA MCL, b- Iowa Statewide Standard for a protected groundwater source

Historical detections from October 2014 to the present are summarized in Attachment E.

The verified VOC detections were evaluated against the ground water protection standards (GWPS) using confidence limits calculated in accordance with the Statistical Analysis of Groundwater Monitoring Data

at RCRA Facilities, USEPA, March 2009. The analysis was conducted to evaluate whether verified concentrations are significantly above the water quality standard. The 95% lower confidence limit (LCL) for the mean of the historical data was used to evaluate whether the regulated unit is in compliance with the ground-water protection standards under 40 CFR 264 (e.g. whether the verified constituent is detected at a significant level above the GWPS). An exceedance is verified if the LCL is above the Regulatory GWPS. The calculated 95% LCLs for each of the verified VOCs are below the respective GWPS (Attachment F).

Attachment A

Ground Water Data obtained during the First Semi-Annual Monitoring Event in 2024

Table 1

Analytical Data Summary for 3/11/2024

Constituents	Units	AW-1	AW-2	AW-3	AW-9	MW-12	MW-14	MW-20	MW-24	MW-25	MW-26	MW-27	MW-28	MW-6	MW-7	MW-9
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethene	ug/L	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	ug/L	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L	<5	<5	<5		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2-dibromoethane	ug/L	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	ug/L	<1.0	<1.0	3.2		<1.0	<1.0	2.6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2-butanone	ug/L	<10	<10	<10		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-hexanone	ug/L	<5	<5	<5		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone	ug/L	<5	<5	<5		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	ug/L	<10	<10	<10		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	ug/L	<5	<5	<5		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Antimony, total	ug/L	<2	<2	<2		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	ug/L	<4.0	27.7	40.9	<4.0	<4.0	<4.0	27.9	36.9	<4.0	<4.0	4.5	<4.0	<4.0	<4.0	4.0
Barium, total	ug/L	361.0	138.0	429.0		104.0	439.0	326.0	409.0	23.5	188.0	104.0	26.5	285.0	168.0	517.0
Benzene	ug/L	<1.0	<1.0	2.7		<1.0	<1.0	2.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Beryllium, total	ug/L	<4	<4	<4		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bromochloromethane	ug/L	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	ug/L	<.8	<.8	<.8		<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	ug/L	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<1.0	<1.0	<1.0		<1.0	<1.0	2.8	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroethane	ug/L	<1	<1	3		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	ug/L	<8	<8	<8		<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethene	ug/L	<1	<1	<1		<1	<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	<1	<1	<1	<1
Cobalt, total	ug/L	10.0	14.2	.7	1.1	1.3	<.4	<.4	6.4	.8	<.4	.7	<.4	2.3	<.4	2.2
Copper, total	ug/L	<4.0	<4.0	6.1		<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	15.0	<4.0	<4.0
Dibromochloromethane	ug/L	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Iodomethane	ug/L	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	ug/L	<4	<4	<4		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Methylene chloride	ug/L	<5	<5	<5		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	ug/L	7.2	12.8	<4.0		13.1	6.0	<4.0	8.2	5.1	<4.0	<4.0	<4.0	16.4	<4.0	14.6
Selenium, total	ug/L	<4	<4	<4		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	ug/L	<4	<4	<4		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	ug/L	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfide	mg/L							<.15								
Tetrachloroethene	ug/L	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<2	<2	<2		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Toluene	ug/L	<1.0	<1.0	<1.0		<1.0	<1.0	1.1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trans-1,2-dichloroethene	ug/L	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1

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

Table 1

Analytical Data Summary for 3/11/2024

Constituents	Units	AW-1	AW-2	AW-3	AW-9	MW-12	MW-14	MW-20	MW-24	MW-25	MW-26	MW-27	MW-28	MW-6	MW-7	MW-9
Trans-1,3-dichloropropene	ug/L	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	ug/L	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	ug/L	<20	<20	<20		<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	ug/L	<5	<5	<5		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	ug/L	<2	<2	<2		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	<20.0	<20.0	20.4		<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0

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

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-26	10/31/2016	ND	2.0000		
Antimony, total	ug/L	MW-26	03/16/2017	ND	2.0000		
Antimony, total	ug/L	MW-26	09/27/2017	ND	2.0000		
Antimony, total	ug/L	MW-26	03/14/2018	ND	2.0000		
Antimony, total	ug/L	MW-26	09/12/2018	ND	2.0000		
Antimony, total	ug/L	MW-26	04/01/2019	ND	2.0000		
Antimony, total	ug/L	MW-26	09/12/2019	ND	2.0000		
Antimony, total	ug/L	MW-26	05/06/2020	ND	2.0000		
Antimony, total	ug/L	MW-26	09/03/2020	ND	2.0000		
Antimony, total	ug/L	MW-26	03/30/2021	ND	2.0000		
Antimony, total	ug/L	MW-26	09/08/2021	ND	2.0000		
Antimony, total	ug/L	MW-26	03/31/2022	ND	2.0000		
Antimony, total	ug/L	MW-26	08/30/2022	ND	2.0000		
Antimony, total	ug/L	MW-26	03/07/2023	ND	2.0000		
Antimony, total	ug/L	MW-26	09/28/2023	ND	2.0000		
Antimony, total	ug/L	MW-26	03/11/2024	ND	2.0000		
Arsenic, total	ug/L	MW-26	10/31/2016	ND	4.0000		
Arsenic, total	ug/L	MW-26	03/16/2017	ND	4.0000		
Arsenic, total	ug/L	MW-26	09/27/2017	ND	4.0000		
Arsenic, total	ug/L	MW-26	03/14/2018	ND	4.0000		
Arsenic, total	ug/L	MW-26	09/12/2018	ND	4.0000		
Arsenic, total	ug/L	MW-26	04/01/2019	ND	4.0000		
Arsenic, total	ug/L	MW-26	09/12/2019	ND	4.0000		
Arsenic, total	ug/L	MW-26	05/06/2020	ND	4.0000		
Arsenic, total	ug/L	MW-26	09/03/2020	ND	4.0000		
Arsenic, total	ug/L	MW-26	03/30/2021	ND	4.0000		
Arsenic, total	ug/L	MW-26	09/08/2021	ND	4.0000		
Arsenic, total	ug/L	MW-26	03/31/2022	ND	4.0000		
Arsenic, total	ug/L	MW-26	08/30/2022	ND	4.0000		
Arsenic, total	ug/L	MW-26	03/07/2023	ND	4.0000		
Arsenic, total	ug/L	MW-26	09/28/2023	ND	4.0000		
Arsenic, total	ug/L	MW-26	03/11/2024	ND	4.0000		
Barium, total	ug/L	MW-26	10/31/2016		155.0000		
Barium, total	ug/L	MW-26	03/16/2017		161.0000		
Barium, total	ug/L	MW-26	09/27/2017		155.0000		
Barium, total	ug/L	MW-26	03/14/2018		201.0000		
Barium, total	ug/L	MW-26	09/12/2018		170.0000		
Barium, total	ug/L	MW-26	04/01/2019		176.0000		
Barium, total	ug/L	MW-26	09/12/2019		158.0000		
Barium, total	ug/L	MW-26	05/06/2020		158.0000		
Barium, total	ug/L	MW-26	09/03/2020		148.0000		
Barium, total	ug/L	MW-26	03/30/2021		154.0000		
Barium, total	ug/L	MW-26	09/08/2021		141.0000		
Barium, total	ug/L	MW-26	03/31/2022		178.0000		
Barium, total	ug/L	MW-26	08/30/2022		156.0000		
Barium, total	ug/L	MW-26	03/07/2023		174.0000		
Barium, total	ug/L	MW-26	09/28/2023		170.0000		
Barium, total	ug/L	MW-26	03/11/2024		188.0000		
Beryllium, total	ug/L	MW-26	10/31/2016	ND	4.0000		
Beryllium, total	ug/L	MW-26	03/16/2017	ND	4.0000		
Beryllium, total	ug/L	MW-26	09/27/2017	ND	4.0000		
Beryllium, total	ug/L	MW-26	03/14/2018	ND	4.0000		
Beryllium, total	ug/L	MW-26	09/12/2018	ND	4.0000		
Beryllium, total	ug/L	MW-26	04/01/2019	ND	4.0000		
Beryllium, total	ug/L	MW-26	09/12/2019	ND	4.0000		
Beryllium, total	ug/L	MW-26	05/06/2020	ND	4.0000		
Beryllium, total	ug/L	MW-26	09/03/2020	ND	4.0000		
Beryllium, total	ug/L	MW-26	03/30/2021	ND	4.0000		
Beryllium, total	ug/L	MW-26	09/08/2021	ND	4.0000		
Beryllium, total	ug/L	MW-26	03/31/2022	ND	4.0000		
Beryllium, total	ug/L	MW-26	08/30/2022	ND	4.0000		
Beryllium, total	ug/L	MW-26	03/07/2023	ND	4.0000		
Beryllium, total	ug/L	MW-26	09/28/2023	ND	4.0000		
Beryllium, total	ug/L	MW-26	03/11/2024	ND	4.0000		
Cadmium, total	ug/L	MW-26	10/31/2016	ND	0.8000		
Cadmium, total	ug/L	MW-26	03/16/2017	ND	0.8000		
Cadmium, total	ug/L	MW-26	09/27/2017	ND	0.8000		
Cadmium, total	ug/L	MW-26	03/14/2018	ND	0.8000		
Cadmium, total	ug/L	MW-26	09/12/2018	ND	0.8000		
Cadmium, total	ug/L	MW-26	04/01/2019	ND	0.8000		
Cadmium, total	ug/L	MW-26	09/12/2019	ND	0.8000		
Cadmium, total	ug/L	MW-26	05/06/2020	ND	0.8000		
Cadmium, total	ug/L	MW-26	09/03/2020	ND	0.8000		
Cadmium, total	ug/L	MW-26	03/30/2021	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-26	09/08/2021	ND	0.8000		
Cadmium, total	ug/L	MW-26	03/31/2022	ND	0.8000		
Cadmium, total	ug/L	MW-26	08/30/2022	ND	0.8000		
Cadmium, total	ug/L	MW-26	03/07/2023	ND	0.8000		
Cadmium, total	ug/L	MW-26	09/28/2023	ND	0.8000		
Cadmium, total	ug/L	MW-26	03/11/2024	ND	0.8000		
Chromium, total	ug/L	MW-26	10/31/2016	ND	8.0000		
Chromium, total	ug/L	MW-26	03/16/2017	ND	8.0000		
Chromium, total	ug/L	MW-26	09/27/2017	ND	8.0000		
Chromium, total	ug/L	MW-26	03/14/2018	ND	8.0000		
Chromium, total	ug/L	MW-26	09/12/2018	ND	8.0000		
Chromium, total	ug/L	MW-26	04/01/2019	ND	8.0000		
Chromium, total	ug/L	MW-26	09/12/2019	ND	8.0000		
Chromium, total	ug/L	MW-26	05/06/2020	ND	8.0000		
Chromium, total	ug/L	MW-26	09/03/2020	ND	8.0000		
Chromium, total	ug/L	MW-26	03/30/2021	ND	8.0000		
Chromium, total	ug/L	MW-26	09/08/2021	ND	8.0000		
Chromium, total	ug/L	MW-26	03/31/2022	ND	8.0000		
Chromium, total	ug/L	MW-26	08/30/2022	ND	8.0000		
Chromium, total	ug/L	MW-26	03/07/2023	ND	8.0000		
Chromium, total	ug/L	MW-26	09/28/2023	ND	8.0000		
Chromium, total	ug/L	MW-26	03/11/2024	ND	8.0000		
Cobalt, total	ug/L	MW-26	10/31/2016	ND	0.8000		
Cobalt, total	ug/L	MW-26	03/16/2017	ND	0.8000		
Cobalt, total	ug/L	MW-26	09/27/2017	ND	0.8000		
Cobalt, total	ug/L	MW-26	03/14/2018	ND	2.0000		*
Cobalt, total	ug/L	MW-26	09/12/2018	ND	0.8000		
Cobalt, total	ug/L	MW-26	04/01/2019	ND	0.8000		
Cobalt, total	ug/L	MW-26	09/12/2019	ND	0.8000		
Cobalt, total	ug/L	MW-26	05/06/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-26	09/03/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-26	03/30/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-26	09/08/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-26	03/31/2022	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-26	08/30/2022	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-26	03/07/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-26	09/28/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-26	03/11/2024	ND	0.4000	0.8000	**
Copper, total	ug/L	MW-26	10/31/2016	ND	4.0000		
Copper, total	ug/L	MW-26	03/16/2017	ND	4.0000		
Copper, total	ug/L	MW-26	09/27/2017	ND	4.0000		
Copper, total	ug/L	MW-26	03/14/2018	ND	4.0000		
Copper, total	ug/L	MW-26	09/12/2018	ND	4.0000		
Copper, total	ug/L	MW-26	04/01/2019	ND	4.0000		
Copper, total	ug/L	MW-26	09/12/2019	ND	4.0000		
Copper, total	ug/L	MW-26	05/06/2020	ND	4.0000		
Copper, total	ug/L	MW-26	09/03/2020	ND	4.0000		
Copper, total	ug/L	MW-26	03/30/2021	ND	4.0000		
Copper, total	ug/L	MW-26	09/08/2021	ND	4.0000		
Copper, total	ug/L	MW-26	03/31/2022	ND	4.0000		
Copper, total	ug/L	MW-26	08/30/2022	ND	4.0000		
Copper, total	ug/L	MW-26	03/07/2023	ND	4.0000		
Copper, total	ug/L	MW-26	09/28/2023	ND	4.0000		
Copper, total	ug/L	MW-26	03/11/2024	ND	4.0000		
Lead, total	ug/L	MW-26	10/31/2016	ND	4.0000		
Lead, total	ug/L	MW-26	03/16/2017	ND	4.0000		
Lead, total	ug/L	MW-26	09/27/2017	ND	4.0000		
Lead, total	ug/L	MW-26	03/14/2018	ND	4.0000		
Lead, total	ug/L	MW-26	09/12/2018	ND	4.0000		
Lead, total	ug/L	MW-26	04/01/2019	ND	4.0000		
Lead, total	ug/L	MW-26	09/12/2019	ND	4.0000		
Lead, total	ug/L	MW-26	05/06/2020	ND	4.0000		
Lead, total	ug/L	MW-26	09/03/2020	ND	4.0000		
Lead, total	ug/L	MW-26	03/30/2021	ND	4.0000		
Lead, total	ug/L	MW-26	09/08/2021	ND	4.0000		
Lead, total	ug/L	MW-26	03/31/2022	ND	4.0000		
Lead, total	ug/L	MW-26	08/30/2022	ND	4.0000		
Lead, total	ug/L	MW-26	03/07/2023	ND	4.0000		
Lead, total	ug/L	MW-26	09/28/2023	ND	4.0000		
Lead, total	ug/L	MW-26	03/11/2024	ND	4.0000		
Nickel, total	ug/L	MW-26	10/31/2016	ND	4.0000		
Nickel, total	ug/L	MW-26	03/16/2017	ND	4.0000		
Nickel, total	ug/L	MW-26	09/27/2017	ND	4.0000		
Nickel, total	ug/L	MW-26	03/14/2018	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	
Nickel, total	ug/L	MW-26	09/12/2018	ND	4.0000		
Nickel, total	ug/L	MW-26	04/01/2019	ND	4.0000		
Nickel, total	ug/L	MW-26	09/12/2019	ND	4.0000		
Nickel, total	ug/L	MW-26	05/06/2020	ND	4.0000		
Nickel, total	ug/L	MW-26	09/03/2020	ND	4.0000		
Nickel, total	ug/L	MW-26	03/30/2021	ND	4.0000		
Nickel, total	ug/L	MW-26	09/08/2021	ND	4.0000		
Nickel, total	ug/L	MW-26	03/31/2022	ND	4.0000		
Nickel, total	ug/L	MW-26	08/30/2022	ND	4.0000		
Nickel, total	ug/L	MW-26	03/07/2023	ND	4.0000		
Nickel, total	ug/L	MW-26	09/28/2023	ND	4.0000		
Nickel, total	ug/L	MW-26	03/11/2024	ND	4.0000		
Selenium, total	ug/L	MW-26	10/31/2016	ND	4.0000		
Selenium, total	ug/L	MW-26	03/16/2017	ND	4.0000		
Selenium, total	ug/L	MW-26	09/27/2017	ND	4.0000		
Selenium, total	ug/L	MW-26	03/14/2018	ND	4.0000		
Selenium, total	ug/L	MW-26	09/12/2018	ND	4.0000		
Selenium, total	ug/L	MW-26	04/01/2019	ND	4.0000		
Selenium, total	ug/L	MW-26	09/12/2019	ND	4.0000		
Selenium, total	ug/L	MW-26	05/06/2020	ND	4.0000		
Selenium, total	ug/L	MW-26	09/03/2020	ND	4.0000		
Selenium, total	ug/L	MW-26	03/30/2021	ND	4.0000		
Selenium, total	ug/L	MW-26	09/08/2021	ND	4.0000		
Selenium, total	ug/L	MW-26	03/31/2022	ND	4.0000		
Selenium, total	ug/L	MW-26	08/30/2022	ND	4.0000		
Selenium, total	ug/L	MW-26	03/07/2023	ND	4.0000		
Selenium, total	ug/L	MW-26	09/28/2023	ND	4.0000		
Selenium, total	ug/L	MW-26	03/11/2024	ND	4.0000		
Silver, total	ug/L	MW-26	10/31/2016	ND	4.0000		
Silver, total	ug/L	MW-26	03/16/2017	ND	4.0000		
Silver, total	ug/L	MW-26	09/27/2017	ND	4.0000		
Silver, total	ug/L	MW-26	03/14/2018	ND	4.0000		
Silver, total	ug/L	MW-26	09/12/2018	ND	4.0000		
Silver, total	ug/L	MW-26	04/01/2019	ND	4.0000		
Silver, total	ug/L	MW-26	09/12/2019	ND	4.0000		
Silver, total	ug/L	MW-26	05/06/2020	ND	4.0000		
Silver, total	ug/L	MW-26	09/03/2020	ND	4.0000		
Silver, total	ug/L	MW-26	03/30/2021	ND	4.0000		
Silver, total	ug/L	MW-26	09/08/2021	ND	4.0000		
Silver, total	ug/L	MW-26	03/31/2022	ND	4.0000		
Silver, total	ug/L	MW-26	08/30/2022	ND	4.0000		
Silver, total	ug/L	MW-26	03/07/2023	ND	4.0000		
Silver, total	ug/L	MW-26	09/28/2023	ND	4.0000		
Silver, total	ug/L	MW-26	03/11/2024	ND	4.0000		
Thallium, total	ug/L	MW-26	10/31/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-26	03/16/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-26	09/27/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-26	03/14/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-26	09/12/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-26	04/01/2019	ND	2.0000		
Thallium, total	ug/L	MW-26	09/12/2019	ND	2.0000		
Thallium, total	ug/L	MW-26	05/06/2020	ND	2.0000		
Thallium, total	ug/L	MW-26	09/03/2020	ND	2.0000		
Thallium, total	ug/L	MW-26	03/30/2021	ND	2.0000		
Thallium, total	ug/L	MW-26	09/08/2021	ND	2.0000		
Thallium, total	ug/L	MW-26	03/31/2022	ND	2.0000		
Thallium, total	ug/L	MW-26	08/30/2022	ND	2.0000		
Thallium, total	ug/L	MW-26	03/07/2023	ND	2.0000		
Thallium, total	ug/L	MW-26	09/28/2023	ND	2.0000		
Thallium, total	ug/L	MW-26	03/11/2024	ND	2.0000		
Vanadium, total	ug/L	MW-26	10/31/2016	ND	20.0000		
Vanadium, total	ug/L	MW-26	03/16/2017	ND	20.0000		
Vanadium, total	ug/L	MW-26	09/27/2017	ND	20.0000		
Vanadium, total	ug/L	MW-26	03/14/2018	ND	20.0000		
Vanadium, total	ug/L	MW-26	09/12/2018	ND	20.0000		
Vanadium, total	ug/L	MW-26	04/01/2019	ND	20.0000		
Vanadium, total	ug/L	MW-26	09/12/2019	ND	20.0000		
Vanadium, total	ug/L	MW-26	05/06/2020	ND	20.0000		
Vanadium, total	ug/L	MW-26	09/03/2020	ND	20.0000		
Vanadium, total	ug/L	MW-26	03/30/2021	ND	20.0000		
Vanadium, total	ug/L	MW-26	09/08/2021	ND	20.0000		
Vanadium, total	ug/L	MW-26	03/31/2022	ND	20.0000		
Vanadium, total	ug/L	MW-26	08/30/2022	ND	20.0000		
Vanadium, total	ug/L	MW-26	03/07/2023	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-26	09/28/2023	ND	20.0000		
Vanadium, total	ug/L	MW-26	03/11/2024	ND	20.0000		
Zinc, total	ug/L	MW-26	10/31/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-26	03/16/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-26	09/27/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-26	03/14/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-26	09/12/2018	ND	20.0000		
Zinc, total	ug/L	MW-26	04/01/2019	ND	20.0000		
Zinc, total	ug/L	MW-26	09/12/2019		12.5000		
Zinc, total	ug/L	MW-26	05/06/2020	ND	20.0000		
Zinc, total	ug/L	MW-26	09/03/2020	ND	20.0000		
Zinc, total	ug/L	MW-26	03/30/2021	ND	20.0000		
Zinc, total	ug/L	MW-26	09/08/2021	ND	20.0000		
Zinc, total	ug/L	MW-26	03/31/2022	ND	20.0000		
Zinc, total	ug/L	MW-26	08/30/2022	ND	20.0000		
Zinc, total	ug/L	MW-26	03/07/2023	ND	20.0000		
Zinc, total	ug/L	MW-26	09/28/2023	ND	20.0000		
Zinc, total	ug/L	MW-26	03/11/2024	ND	20.0000		
Antimony, total	ug/L	MW-27	10/31/2016	ND	2.0000		
Antimony, total	ug/L	MW-27	03/16/2017	ND	2.0000		
Antimony, total	ug/L	MW-27	09/27/2017	ND	2.0000		
Antimony, total	ug/L	MW-27	03/14/2018	ND	2.0000		
Antimony, total	ug/L	MW-27	09/12/2018	ND	2.0000		
Antimony, total	ug/L	MW-27	04/01/2019	ND	2.0000		
Antimony, total	ug/L	MW-27	09/12/2019	ND	2.0000		
Antimony, total	ug/L	MW-27	05/06/2020	ND	2.0000		
Antimony, total	ug/L	MW-27	09/03/2020	ND	2.0000		
Antimony, total	ug/L	MW-27	03/30/2021	ND	2.0000		
Antimony, total	ug/L	MW-27	09/08/2021	ND	2.0000		
Antimony, total	ug/L	MW-27	03/31/2022	ND	2.0000		
Antimony, total	ug/L	MW-27	08/30/2022	ND	2.0000		
Antimony, total	ug/L	MW-27	03/07/2023	ND	2.0000		
Antimony, total	ug/L	MW-27	09/28/2023	ND	2.0000		
Antimony, total	ug/L	MW-27	03/11/2024	ND	2.0000		
Arsenic, total	ug/L	MW-27	10/31/2016	ND	4.0000		
Arsenic, total	ug/L	MW-27	03/16/2017		9.3000		
Arsenic, total	ug/L	MW-27	09/27/2017		84.4000		*
Arsenic, total	ug/L	MW-27	12/13/2017		8.8000		
Arsenic, total	ug/L	MW-27	03/14/2018		43.9000		
Arsenic, total	ug/L	MW-27	09/12/2018		26.3000		
Arsenic, total	ug/L	MW-27	04/01/2019		51.3000		
Arsenic, total	ug/L	MW-27	09/12/2019		18.8000		
Arsenic, total	ug/L	MW-27	05/06/2020		9.2000		
Arsenic, total	ug/L	MW-27	09/03/2020	ND	4.0000		
Arsenic, total	ug/L	MW-27	03/30/2021		8.6000		
Arsenic, total	ug/L	MW-27	09/08/2021		5.6000		
Arsenic, total	ug/L	MW-27	03/31/2022	ND	4.0000		
Arsenic, total	ug/L	MW-27	08/30/2022		13.5000		
Arsenic, total	ug/L	MW-27	03/07/2023	ND	4.0000		
Arsenic, total	ug/L	MW-27	09/28/2023		5.3000		
Arsenic, total	ug/L	MW-27	03/11/2024		4.5000		
Barium, total	ug/L	MW-27	10/31/2016		143.0000		
Barium, total	ug/L	MW-27	03/16/2017		113.0000		
Barium, total	ug/L	MW-27	09/27/2017		501.0000		
Barium, total	ug/L	MW-27	12/13/2017		134.0000		
Barium, total	ug/L	MW-27	03/14/2018		302.0000		
Barium, total	ug/L	MW-27	09/12/2018		189.0000		
Barium, total	ug/L	MW-27	04/01/2019		289.0000		
Barium, total	ug/L	MW-27	09/12/2019		182.0000		
Barium, total	ug/L	MW-27	05/06/2020		138.0000		
Barium, total	ug/L	MW-27	09/03/2020		124.0000		
Barium, total	ug/L	MW-27	03/30/2021		127.0000		
Barium, total	ug/L	MW-27	09/08/2021		111.0000		
Barium, total	ug/L	MW-27	03/31/2022		106.0000		
Barium, total	ug/L	MW-27	08/30/2022		134.0000		
Barium, total	ug/L	MW-27	03/07/2023		107.0000		
Barium, total	ug/L	MW-27	09/28/2023		112.0000		
Barium, total	ug/L	MW-27	03/11/2024		104.0000		
Beryllium, total	ug/L	MW-27	10/31/2016	ND	4.0000		
Beryllium, total	ug/L	MW-27	03/16/2017	ND	4.0000		
Beryllium, total	ug/L	MW-27	09/27/2017	ND	4.0000		
Beryllium, total	ug/L	MW-27	03/14/2018	ND	4.0000		
Beryllium, total	ug/L	MW-27	09/12/2018	ND	4.0000		
Beryllium, total	ug/L	MW-27	04/01/2019	ND	4.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Beryllium, total	ug/L	MW-27	09/12/2019	ND	4.0000		
Beryllium, total	ug/L	MW-27	05/06/2020	ND	4.0000		
Beryllium, total	ug/L	MW-27	09/03/2020	ND	4.0000		
Beryllium, total	ug/L	MW-27	03/30/2021	ND	4.0000		
Beryllium, total	ug/L	MW-27	09/08/2021	ND	4.0000		
Beryllium, total	ug/L	MW-27	03/31/2022	ND	4.0000		
Beryllium, total	ug/L	MW-27	08/30/2022	ND	4.0000		
Beryllium, total	ug/L	MW-27	03/07/2023	ND	4.0000		
Beryllium, total	ug/L	MW-27	09/28/2023	ND	4.0000		
Beryllium, total	ug/L	MW-27	03/11/2024	ND	4.0000		
Cadmium, total	ug/L	MW-27	10/31/2016	ND	0.8000		
Cadmium, total	ug/L	MW-27	03/16/2017	ND	0.8000		
Cadmium, total	ug/L	MW-27	09/27/2017	ND	0.8000		
Cadmium, total	ug/L	MW-27	03/14/2018	ND	0.8000		
Cadmium, total	ug/L	MW-27	09/12/2018	ND	0.8000		
Cadmium, total	ug/L	MW-27	04/01/2019	ND	0.8000		
Cadmium, total	ug/L	MW-27	09/12/2019	ND	0.8000		
Cadmium, total	ug/L	MW-27	05/06/2020	ND	0.8000		
Cadmium, total	ug/L	MW-27	09/03/2020	ND	0.8000		
Cadmium, total	ug/L	MW-27	03/30/2021	ND	0.8000		
Cadmium, total	ug/L	MW-27	09/08/2021	ND	0.8000		
Cadmium, total	ug/L	MW-27	03/31/2022	ND	0.8000		
Cadmium, total	ug/L	MW-27	08/30/2022	ND	0.8000		
Cadmium, total	ug/L	MW-27	03/07/2023	ND	0.8000		
Cadmium, total	ug/L	MW-27	09/28/2023	ND	0.8000		
Cadmium, total	ug/L	MW-27	03/11/2024	ND	0.8000		
Chromium, total	ug/L	MW-27	10/31/2016	ND	8.0000		
Chromium, total	ug/L	MW-27	03/16/2017	ND	8.0000		
Chromium, total	ug/L	MW-27	09/27/2017	ND	8.0000		
Chromium, total	ug/L	MW-27	03/14/2018	ND	8.0000		
Chromium, total	ug/L	MW-27	09/12/2018	ND	8.0000		
Chromium, total	ug/L	MW-27	04/01/2019	ND	8.0000		
Chromium, total	ug/L	MW-27	09/12/2019	ND	8.0000		
Chromium, total	ug/L	MW-27	05/06/2020	ND	8.0000		
Chromium, total	ug/L	MW-27	09/03/2020	ND	8.0000		
Chromium, total	ug/L	MW-27	03/30/2021	ND	8.0000		
Chromium, total	ug/L	MW-27	09/08/2021	ND	8.0000		
Chromium, total	ug/L	MW-27	03/31/2022	ND	8.0000		
Chromium, total	ug/L	MW-27	08/30/2022	ND	8.0000		
Chromium, total	ug/L	MW-27	03/07/2023	ND	8.0000		
Chromium, total	ug/L	MW-27	09/28/2023	ND	8.0000		
Chromium, total	ug/L	MW-27	03/11/2024	ND	8.0000		
Cobalt, total	ug/L	MW-27	10/31/2016	ND	0.8000		
Cobalt, total	ug/L	MW-27	03/16/2017	ND	0.8000		
Cobalt, total	ug/L	MW-27	09/27/2017		1.3000		
Cobalt, total	ug/L	MW-27	03/14/2018	ND	2.0000	0.8000	**
Cobalt, total	ug/L	MW-27	09/12/2018	ND	0.8000		
Cobalt, total	ug/L	MW-27	04/01/2019		0.8000		
Cobalt, total	ug/L	MW-27	09/12/2019	ND	0.8000		
Cobalt, total	ug/L	MW-27	05/06/2020		1.0000		
Cobalt, total	ug/L	MW-27	09/03/2020		0.8000		
Cobalt, total	ug/L	MW-27	03/30/2021		0.7000		
Cobalt, total	ug/L	MW-27	09/08/2021		0.6000		
Cobalt, total	ug/L	MW-27	03/31/2022		0.7000		
Cobalt, total	ug/L	MW-27	08/30/2022		0.6000		
Cobalt, total	ug/L	MW-27	03/07/2023		0.7000		
Cobalt, total	ug/L	MW-27	09/28/2023		0.6000		
Cobalt, total	ug/L	MW-27	03/11/2024		0.7000		
Copper, total	ug/L	MW-27	10/31/2016	ND	4.0000		
Copper, total	ug/L	MW-27	03/16/2017	ND	4.0000		
Copper, total	ug/L	MW-27	09/27/2017		6.3000		
Copper, total	ug/L	MW-27	03/14/2018	ND	4.0000		
Copper, total	ug/L	MW-27	09/12/2018	ND	4.0000		
Copper, total	ug/L	MW-27	04/01/2019	ND	4.0000		
Copper, total	ug/L	MW-27	09/12/2019	ND	4.0000		
Copper, total	ug/L	MW-27	05/06/2020	ND	4.0000		
Copper, total	ug/L	MW-27	09/03/2020	ND	4.0000		
Copper, total	ug/L	MW-27	03/30/2021	ND	4.0000		
Copper, total	ug/L	MW-27	09/08/2021	ND	4.0000		
Copper, total	ug/L	MW-27	03/31/2022	ND	4.0000		
Copper, total	ug/L	MW-27	08/30/2022	ND	4.0000		
Copper, total	ug/L	MW-27	03/07/2023	ND	4.0000		
Copper, total	ug/L	MW-27	09/28/2023	ND	4.0000		
Copper, total	ug/L	MW-27	03/11/2024	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-27	10/31/2016	ND	4.0000		
Lead, total	ug/L	MW-27	03/16/2017	ND	4.0000		
Lead, total	ug/L	MW-27	09/27/2017	ND	4.0000		
Lead, total	ug/L	MW-27	03/14/2018	ND	4.0000		
Lead, total	ug/L	MW-27	09/12/2018	ND	4.0000		
Lead, total	ug/L	MW-27	04/01/2019	ND	4.0000		
Lead, total	ug/L	MW-27	09/12/2019	ND	4.0000		
Lead, total	ug/L	MW-27	05/06/2020	ND	4.0000		
Lead, total	ug/L	MW-27	09/03/2020	ND	4.0000		
Lead, total	ug/L	MW-27	03/30/2021	ND	4.0000		
Lead, total	ug/L	MW-27	09/08/2021	ND	4.0000		
Lead, total	ug/L	MW-27	03/31/2022	ND	4.0000		
Lead, total	ug/L	MW-27	08/30/2022	ND	4.0000		
Lead, total	ug/L	MW-27	03/07/2023	ND	4.0000		
Lead, total	ug/L	MW-27	09/28/2023	ND	4.0000		
Lead, total	ug/L	MW-27	03/11/2024	ND	4.0000		
Nickel, total	ug/L	MW-27	10/31/2016	ND	4.0000		
Nickel, total	ug/L	MW-27	03/16/2017	ND	4.0000		
Nickel, total	ug/L	MW-27	09/27/2017	ND	4.0000		
Nickel, total	ug/L	MW-27	03/14/2018	ND	4.0000		
Nickel, total	ug/L	MW-27	09/12/2018	ND	4.0000		
Nickel, total	ug/L	MW-27	04/01/2019	ND	4.0000		
Nickel, total	ug/L	MW-27	09/12/2019	ND	4.0000		
Nickel, total	ug/L	MW-27	05/06/2020	ND	4.0000		
Nickel, total	ug/L	MW-27	09/03/2020	ND	4.0000		
Nickel, total	ug/L	MW-27	03/30/2021	ND	4.0000		
Nickel, total	ug/L	MW-27	09/08/2021	ND	4.0000		
Nickel, total	ug/L	MW-27	03/31/2022	ND	4.0000		
Nickel, total	ug/L	MW-27	08/30/2022	ND	4.0000		
Nickel, total	ug/L	MW-27	03/07/2023	ND	4.0000		
Nickel, total	ug/L	MW-27	09/28/2023	ND	4.0000		
Nickel, total	ug/L	MW-27	03/11/2024	ND	4.0000		
Selenium, total	ug/L	MW-27	10/31/2016	ND	4.0000		
Selenium, total	ug/L	MW-27	03/16/2017	ND	4.0000		
Selenium, total	ug/L	MW-27	09/27/2017	ND	4.0000		
Selenium, total	ug/L	MW-27	03/14/2018	ND	4.0000		
Selenium, total	ug/L	MW-27	09/12/2018	ND	4.0000		
Selenium, total	ug/L	MW-27	04/01/2019	ND	4.0000		
Selenium, total	ug/L	MW-27	09/12/2019	ND	4.0000		
Selenium, total	ug/L	MW-27	05/06/2020	ND	4.0000		
Selenium, total	ug/L	MW-27	09/03/2020	ND	4.0000		
Selenium, total	ug/L	MW-27	03/30/2021	ND	4.0000		
Selenium, total	ug/L	MW-27	09/08/2021	ND	4.0000		
Selenium, total	ug/L	MW-27	03/31/2022	ND	4.0000		
Selenium, total	ug/L	MW-27	08/30/2022	ND	4.0000		
Selenium, total	ug/L	MW-27	03/07/2023	ND	4.0000		
Selenium, total	ug/L	MW-27	09/28/2023	ND	4.0000		
Selenium, total	ug/L	MW-27	03/11/2024	ND	4.0000		
Silver, total	ug/L	MW-27	10/31/2016	ND	4.0000		
Silver, total	ug/L	MW-27	03/16/2017	ND	4.0000		
Silver, total	ug/L	MW-27	09/27/2017	ND	4.0000		
Silver, total	ug/L	MW-27	03/14/2018	ND	4.0000		
Silver, total	ug/L	MW-27	09/12/2018	ND	4.0000		
Silver, total	ug/L	MW-27	04/01/2019	ND	4.0000		
Silver, total	ug/L	MW-27	09/12/2019	ND	4.0000		
Silver, total	ug/L	MW-27	05/06/2020	ND	4.0000		
Silver, total	ug/L	MW-27	09/03/2020	ND	4.0000		
Silver, total	ug/L	MW-27	03/30/2021	ND	4.0000		
Silver, total	ug/L	MW-27	09/08/2021	ND	4.0000		
Silver, total	ug/L	MW-27	03/31/2022	ND	4.0000		
Silver, total	ug/L	MW-27	08/30/2022	ND	4.0000		
Silver, total	ug/L	MW-27	03/07/2023	ND	4.0000		
Silver, total	ug/L	MW-27	09/28/2023	ND	4.0000		
Silver, total	ug/L	MW-27	03/11/2024	ND	4.0000		
Thallium, total	ug/L	MW-27	10/31/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-27	03/16/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-27	09/27/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-27	03/14/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-27	09/12/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-27	04/01/2019	ND	2.0000		
Thallium, total	ug/L	MW-27	09/12/2019	ND	2.0000		
Thallium, total	ug/L	MW-27	05/06/2020	ND	2.0000		
Thallium, total	ug/L	MW-27	09/03/2020	ND	2.0000		
Thallium, total	ug/L	MW-27	03/30/2021	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-27	09/08/2021	ND	2.0000		
Thallium, total	ug/L	MW-27	03/31/2022	ND	2.0000		
Thallium, total	ug/L	MW-27	08/30/2022	ND	2.0000		
Thallium, total	ug/L	MW-27	03/07/2023	ND	2.0000		
Thallium, total	ug/L	MW-27	09/28/2023	ND	2.0000		
Thallium, total	ug/L	MW-27	03/11/2024	ND	2.0000		
Vanadium, total	ug/L	MW-27	10/31/2016	ND	20.0000		
Vanadium, total	ug/L	MW-27	03/16/2017	ND	20.0000		
Vanadium, total	ug/L	MW-27	09/27/2017	ND	20.0000		
Vanadium, total	ug/L	MW-27	03/14/2018	ND	20.0000		
Vanadium, total	ug/L	MW-27	09/12/2018	ND	20.0000		
Vanadium, total	ug/L	MW-27	04/01/2019	ND	20.0000		
Vanadium, total	ug/L	MW-27	09/12/2019	ND	20.0000		
Vanadium, total	ug/L	MW-27	05/06/2020	ND	20.0000		
Vanadium, total	ug/L	MW-27	09/03/2020	ND	20.0000		
Vanadium, total	ug/L	MW-27	03/30/2021	ND	20.0000		
Vanadium, total	ug/L	MW-27	09/08/2021	ND	20.0000		
Vanadium, total	ug/L	MW-27	03/31/2022	ND	20.0000		
Vanadium, total	ug/L	MW-27	08/30/2022	ND	20.0000		
Vanadium, total	ug/L	MW-27	03/07/2023	ND	20.0000		
Vanadium, total	ug/L	MW-27	09/28/2023	ND	20.0000		
Vanadium, total	ug/L	MW-27	03/11/2024	ND	20.0000		
Zinc, total	ug/L	MW-27	10/31/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-27	03/16/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-27	09/27/2017		24.2000		
Zinc, total	ug/L	MW-27	12/13/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-27	03/14/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-27	09/12/2018		31.9000		
Zinc, total	ug/L	MW-27	04/01/2019	ND	20.0000		
Zinc, total	ug/L	MW-27	09/12/2019		8.2000		
Zinc, total	ug/L	MW-27	05/06/2020	ND	20.0000		
Zinc, total	ug/L	MW-27	09/03/2020	ND	20.0000		
Zinc, total	ug/L	MW-27	03/30/2021	ND	20.0000		
Zinc, total	ug/L	MW-27	09/08/2021	ND	20.0000		
Zinc, total	ug/L	MW-27	03/31/2022	ND	20.0000		
Zinc, total	ug/L	MW-27	08/30/2022	ND	20.0000		
Zinc, total	ug/L	MW-27	03/07/2023	ND	20.0000		
Zinc, total	ug/L	MW-27	09/28/2023	ND	20.0000		
Zinc, total	ug/L	MW-27	03/11/2024	ND	20.0000		
Antimony, total	ug/L	MW-28	10/31/2016	ND	2.0000		
Antimony, total	ug/L	MW-28	03/16/2017	ND	2.0000		
Antimony, total	ug/L	MW-28	03/14/2018	ND	2.0000		
Antimony, total	ug/L	MW-28	09/12/2018	ND	2.0000		
Antimony, total	ug/L	MW-28	04/01/2019	ND	2.0000		
Antimony, total	ug/L	MW-28	05/06/2020	ND	2.0000		
Antimony, total	ug/L	MW-28	09/03/2020	ND	2.0000		
Antimony, total	ug/L	MW-28	03/30/2021	ND	2.0000		
Antimony, total	ug/L	MW-28	03/31/2022	ND	2.0000		
Antimony, total	ug/L	MW-28	03/07/2023	ND	2.0000		
Antimony, total	ug/L	MW-28	03/11/2024	ND	2.0000		
Arsenic, total	ug/L	MW-28	10/31/2016	ND	4.0000		
Arsenic, total	ug/L	MW-28	03/16/2017	ND	4.0000		
Arsenic, total	ug/L	MW-28	03/14/2018	ND	4.0000		
Arsenic, total	ug/L	MW-28	09/12/2018	ND	4.0000		
Arsenic, total	ug/L	MW-28	04/01/2019	ND	4.0000		
Arsenic, total	ug/L	MW-28	05/06/2020	ND	4.0000		
Arsenic, total	ug/L	MW-28	09/03/2020	ND	4.0000		
Arsenic, total	ug/L	MW-28	03/30/2021	ND	4.0000		
Arsenic, total	ug/L	MW-28	03/31/2022	ND	4.0000		
Arsenic, total	ug/L	MW-28	03/07/2023	ND	4.0000		
Arsenic, total	ug/L	MW-28	03/11/2024	ND	4.0000		
Barium, total	ug/L	MW-28	10/31/2016		37.1000		
Barium, total	ug/L	MW-28	03/16/2017		71.6000		
Barium, total	ug/L	MW-28	03/14/2018		50.3000		
Barium, total	ug/L	MW-28	09/12/2018		37.0000		
Barium, total	ug/L	MW-28	04/01/2019		35.1000		
Barium, total	ug/L	MW-28	05/06/2020		26.2000		
Barium, total	ug/L	MW-28	09/03/2020		24.6000		
Barium, total	ug/L	MW-28	03/30/2021		27.2000		
Barium, total	ug/L	MW-28	03/31/2022		31.1000		
Barium, total	ug/L	MW-28	03/07/2023		27.3000		
Barium, total	ug/L	MW-28	03/11/2024		26.5000		
Beryllium, total	ug/L	MW-28	10/31/2016	ND	4.0000		
Beryllium, total	ug/L	MW-28	03/16/2017	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-28	03/14/2018	ND	4.0000		
Beryllium, total	ug/L	MW-28	09/12/2018	ND	4.0000		
Beryllium, total	ug/L	MW-28	04/01/2019	ND	4.0000		
Beryllium, total	ug/L	MW-28	05/06/2020	ND	4.0000		
Beryllium, total	ug/L	MW-28	09/03/2020	ND	4.0000		
Beryllium, total	ug/L	MW-28	03/30/2021	ND	4.0000		
Beryllium, total	ug/L	MW-28	03/31/2022	ND	4.0000		
Beryllium, total	ug/L	MW-28	03/07/2023	ND	4.0000		
Beryllium, total	ug/L	MW-28	03/11/2024	ND	4.0000		
Cadmium, total	ug/L	MW-28	10/31/2016	ND	0.8000		
Cadmium, total	ug/L	MW-28	03/16/2017	ND	0.8000		
Cadmium, total	ug/L	MW-28	03/14/2018	ND	0.8000		
Cadmium, total	ug/L	MW-28	09/12/2018	ND	0.8000		
Cadmium, total	ug/L	MW-28	04/01/2019	ND	0.8000		
Cadmium, total	ug/L	MW-28	05/06/2020	ND	0.8000		
Cadmium, total	ug/L	MW-28	09/03/2020	ND	0.8000		
Cadmium, total	ug/L	MW-28	03/30/2021	ND	0.8000		
Cadmium, total	ug/L	MW-28	03/31/2022	ND	0.8000		
Cadmium, total	ug/L	MW-28	03/07/2023	ND	0.8000		
Cadmium, total	ug/L	MW-28	03/11/2024	ND	0.8000		
Chromium, total	ug/L	MW-28	10/31/2016	ND	8.0000		
Chromium, total	ug/L	MW-28	03/16/2017	ND	8.0000		
Chromium, total	ug/L	MW-28	03/14/2018	ND	8.0000		
Chromium, total	ug/L	MW-28	09/12/2018	ND	8.0000		
Chromium, total	ug/L	MW-28	04/01/2019	ND	8.0000		
Chromium, total	ug/L	MW-28	05/06/2020	ND	8.0000		
Chromium, total	ug/L	MW-28	09/03/2020	ND	8.0000		
Chromium, total	ug/L	MW-28	03/30/2021	ND	8.0000		
Chromium, total	ug/L	MW-28	03/31/2022	ND	8.0000		
Chromium, total	ug/L	MW-28	03/07/2023	ND	8.0000		
Chromium, total	ug/L	MW-28	03/11/2024	ND	8.0000		
Cobalt, total	ug/L	MW-28	10/31/2016		0.9000		
Cobalt, total	ug/L	MW-28	03/16/2017		1.7000		
Cobalt, total	ug/L	MW-28	03/14/2018	ND	2.0000	0.8000	**
Cobalt, total	ug/L	MW-28	09/12/2018	ND	0.8000		
Cobalt, total	ug/L	MW-28	04/01/2019	ND	0.8000		
Cobalt, total	ug/L	MW-28	05/06/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-28	09/03/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-28	03/30/2021		0.6000		
Cobalt, total	ug/L	MW-28	03/31/2022		1.0000		
Cobalt, total	ug/L	MW-28	03/07/2023		0.4000		
Cobalt, total	ug/L	MW-28	03/11/2024	ND	0.4000	0.8000	**
Copper, total	ug/L	MW-28	10/31/2016	ND	4.0000		
Copper, total	ug/L	MW-28	03/16/2017	ND	4.0000		
Copper, total	ug/L	MW-28	03/14/2018	ND	4.0000		
Copper, total	ug/L	MW-28	09/12/2018	ND	4.0000		
Copper, total	ug/L	MW-28	04/01/2019	ND	4.0000		
Copper, total	ug/L	MW-28	05/06/2020	ND	4.0000		
Copper, total	ug/L	MW-28	09/03/2020	ND	4.0000		
Copper, total	ug/L	MW-28	03/30/2021	ND	4.0000		
Copper, total	ug/L	MW-28	03/31/2022	ND	4.0000		
Copper, total	ug/L	MW-28	03/07/2023	ND	4.0000		
Copper, total	ug/L	MW-28	03/11/2024	ND	4.0000		
Lead, total	ug/L	MW-28	10/31/2016	ND	4.0000		
Lead, total	ug/L	MW-28	03/16/2017	ND	4.0000		
Lead, total	ug/L	MW-28	03/14/2018	ND	4.0000		
Lead, total	ug/L	MW-28	09/12/2018	ND	4.0000		
Lead, total	ug/L	MW-28	04/01/2019	ND	4.0000		
Lead, total	ug/L	MW-28	05/06/2020	ND	4.0000		
Lead, total	ug/L	MW-28	09/03/2020	ND	4.0000		
Lead, total	ug/L	MW-28	03/30/2021	ND	4.0000		
Lead, total	ug/L	MW-28	03/31/2022	ND	4.0000		
Lead, total	ug/L	MW-28	03/07/2023	ND	4.0000		
Lead, total	ug/L	MW-28	03/11/2024	ND	4.0000		
Nickel, total	ug/L	MW-28	10/31/2016	ND	4.0000		
Nickel, total	ug/L	MW-28	03/16/2017	ND	4.0000		
Nickel, total	ug/L	MW-28	03/14/2018	ND	4.0000		
Nickel, total	ug/L	MW-28	09/12/2018	ND	4.0000		
Nickel, total	ug/L	MW-28	04/01/2019	ND	4.0000		
Nickel, total	ug/L	MW-28	05/06/2020	ND	4.0000		
Nickel, total	ug/L	MW-28	09/03/2020	ND	4.0000		
Nickel, total	ug/L	MW-28	03/30/2021		4.1000		
Nickel, total	ug/L	MW-28	03/31/2022	ND	4.0000		
Nickel, total	ug/L	MW-28	03/07/2023	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	
Nickel, total	ug/L	MW-28	03/11/2024	ND	4.0000		
Selenium, total	ug/L	MW-28	10/31/2016	ND	4.0000		
Selenium, total	ug/L	MW-28	03/16/2017	ND	4.0000		
Selenium, total	ug/L	MW-28	03/14/2018	ND	4.0000		
Selenium, total	ug/L	MW-28	09/12/2018	ND	4.0000		
Selenium, total	ug/L	MW-28	04/01/2019	ND	4.0000		
Selenium, total	ug/L	MW-28	05/06/2020	ND	4.0000		
Selenium, total	ug/L	MW-28	09/03/2020	ND	4.0000		
Selenium, total	ug/L	MW-28	03/30/2021	ND	4.0000		
Selenium, total	ug/L	MW-28	03/31/2022	ND	4.0000		
Selenium, total	ug/L	MW-28	03/07/2023	ND	4.0000		
Selenium, total	ug/L	MW-28	03/11/2024	ND	4.0000		
Silver, total	ug/L	MW-28	10/31/2016	ND	4.0000		
Silver, total	ug/L	MW-28	03/16/2017	ND	4.0000		
Silver, total	ug/L	MW-28	03/14/2018	ND	4.0000		
Silver, total	ug/L	MW-28	09/12/2018	ND	4.0000		
Silver, total	ug/L	MW-28	04/01/2019	ND	4.0000		
Silver, total	ug/L	MW-28	05/06/2020	ND	4.0000		
Silver, total	ug/L	MW-28	09/03/2020	ND	4.0000		
Silver, total	ug/L	MW-28	03/30/2021	ND	4.0000		
Silver, total	ug/L	MW-28	03/31/2022	ND	4.0000		
Silver, total	ug/L	MW-28	03/07/2023	ND	4.0000		
Silver, total	ug/L	MW-28	03/11/2024	ND	4.0000		
Thallium, total	ug/L	MW-28	10/31/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-28	03/16/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-28	03/14/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-28	09/12/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-28	04/01/2019	ND	2.0000		
Thallium, total	ug/L	MW-28	05/06/2020	ND	2.0000		
Thallium, total	ug/L	MW-28	09/03/2020	ND	2.0000		
Thallium, total	ug/L	MW-28	03/30/2021	ND	2.0000		
Thallium, total	ug/L	MW-28	03/31/2022	ND	2.0000		
Thallium, total	ug/L	MW-28	03/07/2023	ND	2.0000		
Thallium, total	ug/L	MW-28	03/11/2024	ND	2.0000		
Vanadium, total	ug/L	MW-28	10/31/2016	ND	20.0000		
Vanadium, total	ug/L	MW-28	03/16/2017	ND	20.0000		
Vanadium, total	ug/L	MW-28	03/14/2018	ND	20.0000		
Vanadium, total	ug/L	MW-28	09/12/2018	ND	20.0000		
Vanadium, total	ug/L	MW-28	04/01/2019	ND	20.0000		
Vanadium, total	ug/L	MW-28	05/06/2020	ND	20.0000		
Vanadium, total	ug/L	MW-28	09/03/2020	ND	20.0000		
Vanadium, total	ug/L	MW-28	03/30/2021	ND	20.0000		
Vanadium, total	ug/L	MW-28	03/31/2022	ND	20.0000		
Vanadium, total	ug/L	MW-28	03/07/2023	ND	20.0000		
Vanadium, total	ug/L	MW-28	03/11/2024	ND	20.0000		
Zinc, total	ug/L	MW-28	10/31/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-28	03/16/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-28	03/14/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-28	09/12/2018		33.2000		
Zinc, total	ug/L	MW-28	04/01/2019	ND	20.0000		
Zinc, total	ug/L	MW-28	05/06/2020	ND	20.0000		
Zinc, total	ug/L	MW-28	09/03/2020	ND	20.0000		
Zinc, total	ug/L	MW-28	03/30/2021	ND	20.0000		
Zinc, total	ug/L	MW-28	03/31/2022	ND	20.0000		
Zinc, total	ug/L	MW-28	03/07/2023	ND	20.0000		
Zinc, total	ug/L	MW-28	03/11/2024	ND	20.0000		
Antimony, total	ug/L	MW-6	10/20/2014	ND	6.0000	2.0000	**
Antimony, total	ug/L	MW-6	06/23/2015	ND	6.0000	2.0000	**
Antimony, total	ug/L	MW-6	11/13/2015	ND	6.0000	2.0000	**
Antimony, total	ug/L	MW-6	04/11/2016	ND	6.0000	2.0000	**
Antimony, total	ug/L	MW-6	09/16/2016	ND	2.0000		
Antimony, total	ug/L	MW-6	03/15/2017	ND	2.0000		
Antimony, total	ug/L	MW-6	09/27/2017	ND	2.0000		
Antimony, total	ug/L	MW-6	09/12/2018	ND	2.0000		
Antimony, total	ug/L	MW-6	04/01/2019	ND	2.0000		
Antimony, total	ug/L	MW-6	09/12/2019	ND	2.0000		
Antimony, total	ug/L	MW-6	05/06/2020	ND	2.0000		
Antimony, total	ug/L	MW-6	09/03/2020	ND	2.0000		
Antimony, total	ug/L	MW-6	03/30/2021	ND	2.0000		
Antimony, total	ug/L	MW-6	09/08/2021	ND	2.0000		
Antimony, total	ug/L	MW-6	03/31/2022	ND	2.0000		
Antimony, total	ug/L	MW-6	08/30/2022	ND	2.0000		
Antimony, total	ug/L	MW-6	03/07/2023	ND	2.0000		
Antimony, total	ug/L	MW-6	09/28/2023	ND	2.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Antimony, total	ug/L	MW-6	03/11/2024	ND	2.0000		
Arsenic, total	ug/L	MW-6	10/20/2014		1.6900		
Arsenic, total	ug/L	MW-6	06/23/2015	ND	2.0000	4.0000	**
Arsenic, total	ug/L	MW-6	11/13/2015	ND	2.0000	4.0000	**
Arsenic, total	ug/L	MW-6	04/11/2016	ND	10.0000	4.0000	**
Arsenic, total	ug/L	MW-6	09/16/2016	ND	4.0000		
Arsenic, total	ug/L	MW-6	03/15/2017	ND	4.0000		
Arsenic, total	ug/L	MW-6	09/27/2017	ND	4.0000		
Arsenic, total	ug/L	MW-6	09/12/2018	ND	4.0000		
Arsenic, total	ug/L	MW-6	04/01/2019	ND	4.0000		
Arsenic, total	ug/L	MW-6	09/12/2019	ND	4.0000		
Arsenic, total	ug/L	MW-6	05/06/2020	ND	4.0000		
Arsenic, total	ug/L	MW-6	09/03/2020	ND	4.0000		
Arsenic, total	ug/L	MW-6	03/30/2021	ND	4.0000		
Arsenic, total	ug/L	MW-6	09/08/2021	ND	4.0000		
Arsenic, total	ug/L	MW-6	03/31/2022	ND	4.0000		
Arsenic, total	ug/L	MW-6	08/30/2022	ND	4.0000		
Arsenic, total	ug/L	MW-6	03/07/2023	ND	4.0000		
Arsenic, total	ug/L	MW-6	09/28/2023	ND	4.0000		
Arsenic, total	ug/L	MW-6	03/11/2024	ND	4.0000		
Barium, total	ug/L	MW-6	10/20/2014		346.0000		
Barium, total	ug/L	MW-6	06/23/2015		237.0000		
Barium, total	ug/L	MW-6	11/13/2015		294.0000		
Barium, total	ug/L	MW-6	04/11/2016		279.0000		
Barium, total	ug/L	MW-6	09/16/2016		316.0000		
Barium, total	ug/L	MW-6	03/15/2017		326.0000		
Barium, total	ug/L	MW-6	09/27/2017		193.0000		
Barium, total	ug/L	MW-6	09/12/2018		333.0000		
Barium, total	ug/L	MW-6	04/01/2019		409.0000		
Barium, total	ug/L	MW-6	09/12/2019		349.0000		
Barium, total	ug/L	MW-6	05/06/2020		477.0000		
Barium, total	ug/L	MW-6	09/03/2020		299.0000		
Barium, total	ug/L	MW-6	03/30/2021		264.0000		
Barium, total	ug/L	MW-6	09/08/2021		197.0000		
Barium, total	ug/L	MW-6	03/31/2022		227.0000		
Barium, total	ug/L	MW-6	08/30/2022		208.0000		
Barium, total	ug/L	MW-6	03/07/2023		253.0000		
Barium, total	ug/L	MW-6	09/28/2023		237.0000		
Barium, total	ug/L	MW-6	03/11/2024		285.0000		
Beryllium, total	ug/L	MW-6	10/20/2014	ND	1.0000	4.0000	**
Beryllium, total	ug/L	MW-6	06/23/2015	ND	1.0000	4.0000	**
Beryllium, total	ug/L	MW-6	11/13/2015	ND	1.0000	4.0000	**
Beryllium, total	ug/L	MW-6	04/11/2016	ND	1.0000	4.0000	**
Beryllium, total	ug/L	MW-6	09/16/2016	ND	4.0000		
Beryllium, total	ug/L	MW-6	03/15/2017	ND	4.0000		
Beryllium, total	ug/L	MW-6	09/27/2017	ND	4.0000		
Beryllium, total	ug/L	MW-6	09/12/2018	ND	4.0000		
Beryllium, total	ug/L	MW-6	04/01/2019	ND	4.0000		
Beryllium, total	ug/L	MW-6	09/12/2019	ND	4.0000		
Beryllium, total	ug/L	MW-6	05/06/2020	ND	4.0000		
Beryllium, total	ug/L	MW-6	09/03/2020	ND	4.0000		
Beryllium, total	ug/L	MW-6	03/30/2021	ND	4.0000		
Beryllium, total	ug/L	MW-6	09/08/2021	ND	4.0000		
Beryllium, total	ug/L	MW-6	03/31/2022	ND	4.0000		
Beryllium, total	ug/L	MW-6	08/30/2022	ND	4.0000		
Beryllium, total	ug/L	MW-6	03/07/2023	ND	4.0000		
Beryllium, total	ug/L	MW-6	09/28/2023	ND	4.0000		
Beryllium, total	ug/L	MW-6	03/11/2024	ND	4.0000		
Cadmium, total	ug/L	MW-6	10/20/2014	ND	0.5000	0.8000	**
Cadmium, total	ug/L	MW-6	06/23/2015	ND	0.5000	0.8000	**
Cadmium, total	ug/L	MW-6	11/13/2015	ND	0.5000	0.8000	**
Cadmium, total	ug/L	MW-6	04/11/2016	ND	0.5000	0.8000	**
Cadmium, total	ug/L	MW-6	09/16/2016	ND	0.8000		
Cadmium, total	ug/L	MW-6	03/15/2017	ND	0.8000		
Cadmium, total	ug/L	MW-6	09/27/2017	ND	0.8000		
Cadmium, total	ug/L	MW-6	09/12/2018	ND	0.8000		
Cadmium, total	ug/L	MW-6	04/01/2019	ND	0.8000		
Cadmium, total	ug/L	MW-6	09/12/2019	ND	0.8000		
Cadmium, total	ug/L	MW-6	05/06/2020	ND	0.8000		
Cadmium, total	ug/L	MW-6	09/03/2020	ND	0.8000		
Cadmium, total	ug/L	MW-6	03/30/2021	ND	0.8000		
Cadmium, total	ug/L	MW-6	09/08/2021	ND	0.8000		
Cadmium, total	ug/L	MW-6	03/31/2022	ND	0.8000		
Cadmium, total	ug/L	MW-6	08/30/2022	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-6	03/07/2023	ND	0.8000		
Cadmium, total	ug/L	MW-6	09/28/2023	ND	0.8000		
Cadmium, total	ug/L	MW-6	03/11/2024	ND	0.8000		
Chromium, total	ug/L	MW-6	10/20/2014	ND	5.0000	8.0000	**
Chromium, total	ug/L	MW-6	06/23/2015	ND	5.0000	8.0000	**
Chromium, total	ug/L	MW-6	11/13/2015	ND	5.0000	8.0000	**
Chromium, total	ug/L	MW-6	04/11/2016	ND	5.0000	8.0000	**
Chromium, total	ug/L	MW-6	09/16/2016	ND	8.0000		
Chromium, total	ug/L	MW-6	03/15/2017	ND	8.0000		
Chromium, total	ug/L	MW-6	09/27/2017	ND	8.0000		
Chromium, total	ug/L	MW-6	09/12/2018	ND	8.0000		
Chromium, total	ug/L	MW-6	04/01/2019	ND	8.0000		
Chromium, total	ug/L	MW-6	09/12/2019	ND	8.0000		
Chromium, total	ug/L	MW-6	05/06/2020	ND	8.0000		
Chromium, total	ug/L	MW-6	09/03/2020	ND	8.0000		
Chromium, total	ug/L	MW-6	03/30/2021	ND	8.0000		
Chromium, total	ug/L	MW-6	09/08/2021	ND	8.0000		
Chromium, total	ug/L	MW-6	03/31/2022	ND	8.0000		
Chromium, total	ug/L	MW-6	08/30/2022	ND	8.0000		
Chromium, total	ug/L	MW-6	03/07/2023	ND	8.0000		
Chromium, total	ug/L	MW-6	09/28/2023	ND	8.0000		
Chromium, total	ug/L	MW-6	03/11/2024	ND	8.0000		
Cobalt, total	ug/L	MW-6	10/20/2014		7.4300		*
Cobalt, total	ug/L	MW-6	06/23/2015	ND	0.8000		
Cobalt, total	ug/L	MW-6	11/13/2015	ND	0.8000		
Cobalt, total	ug/L	MW-6	04/11/2016	ND	0.8000		
Cobalt, total	ug/L	MW-6	09/16/2016	ND	0.8000		
Cobalt, total	ug/L	MW-6	03/15/2017	ND	0.8000		
Cobalt, total	ug/L	MW-6	09/27/2017	ND	0.8000		
Cobalt, total	ug/L	MW-6	09/12/2018	ND	0.8000		
Cobalt, total	ug/L	MW-6	04/01/2019	ND	0.8000		
Cobalt, total	ug/L	MW-6	09/12/2019	ND	0.8000		
Cobalt, total	ug/L	MW-6	05/06/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-6	09/03/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-6	03/30/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-6	09/08/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-6	03/31/2022		1.1000		
Cobalt, total	ug/L	MW-6	08/30/2022	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-6	03/07/2023		11.4000		*
Cobalt, total	ug/L	MW-6	09/28/2023		1.8000		
Cobalt, total	ug/L	MW-6	03/11/2024		2.3000		
Copper, total	ug/L	MW-6	10/20/2014		25.7000		*
Copper, total	ug/L	MW-6	06/23/2015	ND	2.0000	4.0000	**
Copper, total	ug/L	MW-6	11/13/2015		2.6800		
Copper, total	ug/L	MW-6	04/11/2016	ND	2.0000	4.0000	**
Copper, total	ug/L	MW-6	09/16/2016	ND	4.0000		
Copper, total	ug/L	MW-6	03/15/2017	ND	4.0000		
Copper, total	ug/L	MW-6	09/27/2017	ND	4.0000		
Copper, total	ug/L	MW-6	09/12/2018	ND	4.0000		
Copper, total	ug/L	MW-6	04/01/2019	ND	4.0000		
Copper, total	ug/L	MW-6	09/12/2019	ND	4.0000		
Copper, total	ug/L	MW-6	05/06/2020	ND	4.0000		
Copper, total	ug/L	MW-6	09/03/2020	ND	4.0000		
Copper, total	ug/L	MW-6	03/30/2021	ND	4.0000		
Copper, total	ug/L	MW-6	09/08/2021	ND	4.0000		
Copper, total	ug/L	MW-6	03/31/2022	ND	4.0000		
Copper, total	ug/L	MW-6	08/30/2022	ND	4.0000		
Copper, total	ug/L	MW-6	03/07/2023	ND	4.0000		
Copper, total	ug/L	MW-6	09/28/2023	ND	4.0000		
Copper, total	ug/L	MW-6	03/11/2024		15.0000		*
Lead, total	ug/L	MW-6	10/20/2014		6.0300		
Lead, total	ug/L	MW-6	06/23/2015		0.6080		
Lead, total	ug/L	MW-6	11/13/2015		0.5030		*
Lead, total	ug/L	MW-6	04/11/2016	ND	0.5000		*
Lead, total	ug/L	MW-6	09/16/2016	ND	4.0000		
Lead, total	ug/L	MW-6	03/15/2017	ND	4.0000		
Lead, total	ug/L	MW-6	09/27/2017	ND	4.0000		
Lead, total	ug/L	MW-6	09/12/2018	ND	4.0000		
Lead, total	ug/L	MW-6	04/01/2019	ND	4.0000		
Lead, total	ug/L	MW-6	09/12/2019	ND	4.0000		
Lead, total	ug/L	MW-6	05/06/2020	ND	4.0000		
Lead, total	ug/L	MW-6	09/03/2020	ND	4.0000		
Lead, total	ug/L	MW-6	03/30/2021	ND	4.0000		
Lead, total	ug/L	MW-6	09/08/2021	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	
Lead, total	ug/L	MW-6	03/31/2022	ND	4.0000		
Lead, total	ug/L	MW-6	08/30/2022	ND	4.0000		
Lead, total	ug/L	MW-6	03/07/2023	ND	4.0000		
Lead, total	ug/L	MW-6	09/28/2023	ND	4.0000		
Lead, total	ug/L	MW-6	03/11/2024	ND	4.0000		
Nickel, total	ug/L	MW-6	10/20/2014	ND	30.0000	4.0000	**
Nickel, total	ug/L	MW-6	06/23/2015	ND	5.0000	4.0000	**
Nickel, total	ug/L	MW-6	11/13/2015	ND	5.0000	4.0000	**
Nickel, total	ug/L	MW-6	04/11/2016	ND	5.0000	4.0000	**
Nickel, total	ug/L	MW-6	09/16/2016	ND	4.0000		
Nickel, total	ug/L	MW-6	03/15/2017	ND	4.0000		
Nickel, total	ug/L	MW-6	09/27/2017	ND	4.0000		
Nickel, total	ug/L	MW-6	09/12/2018		7.8000		
Nickel, total	ug/L	MW-6	04/01/2019		8.4000		
Nickel, total	ug/L	MW-6	09/12/2019		7.3000		
Nickel, total	ug/L	MW-6	05/06/2020		6.9000		
Nickel, total	ug/L	MW-6	09/03/2020		5.5000		
Nickel, total	ug/L	MW-6	03/30/2021		5.0000		
Nickel, total	ug/L	MW-6	09/08/2021		5.7000		
Nickel, total	ug/L	MW-6	03/31/2022		9.9000		
Nickel, total	ug/L	MW-6	08/30/2022		11.3000		
Nickel, total	ug/L	MW-6	03/07/2023		29.5000		
Nickel, total	ug/L	MW-6	09/28/2023		25.3000		
Nickel, total	ug/L	MW-6	03/11/2024		16.4000		
Selenium, total	ug/L	MW-6	10/20/2014	ND	5.0000	4.0000	**
Selenium, total	ug/L	MW-6	06/23/2015	ND	5.0000	4.0000	**
Selenium, total	ug/L	MW-6	11/13/2015	ND	5.0000	4.0000	**
Selenium, total	ug/L	MW-6	04/11/2016	ND	5.0000	4.0000	**
Selenium, total	ug/L	MW-6	09/16/2016	ND	4.0000		
Selenium, total	ug/L	MW-6	03/15/2017	ND	4.0000		
Selenium, total	ug/L	MW-6	09/27/2017	ND	4.0000		
Selenium, total	ug/L	MW-6	09/12/2018	ND	4.0000		
Selenium, total	ug/L	MW-6	04/01/2019	ND	4.0000		
Selenium, total	ug/L	MW-6	09/12/2019	ND	4.0000		
Selenium, total	ug/L	MW-6	05/06/2020	ND	4.0000		
Selenium, total	ug/L	MW-6	09/03/2020	ND	4.0000		
Selenium, total	ug/L	MW-6	03/30/2021	ND	4.0000		
Selenium, total	ug/L	MW-6	09/08/2021	ND	4.0000		
Selenium, total	ug/L	MW-6	03/31/2022	ND	4.0000		
Selenium, total	ug/L	MW-6	08/30/2022	ND	4.0000		
Selenium, total	ug/L	MW-6	03/07/2023	ND	4.0000		
Selenium, total	ug/L	MW-6	09/28/2023	ND	4.0000		
Selenium, total	ug/L	MW-6	03/11/2024	ND	4.0000		
Silver, total	ug/L	MW-6	10/20/2014	ND	20.0000		*
Silver, total	ug/L	MW-6	06/23/2015	ND	1.0000		*
Silver, total	ug/L	MW-6	11/13/2015	ND	1.0000		*
Silver, total	ug/L	MW-6	04/11/2016	ND	1.0000		*
Silver, total	ug/L	MW-6	09/16/2016	ND	4.0000		
Silver, total	ug/L	MW-6	03/15/2017	ND	4.0000		
Silver, total	ug/L	MW-6	09/27/2017	ND	4.0000		
Silver, total	ug/L	MW-6	09/12/2018	ND	4.0000		
Silver, total	ug/L	MW-6	04/01/2019	ND	4.0000		
Silver, total	ug/L	MW-6	09/12/2019	ND	4.0000		
Silver, total	ug/L	MW-6	05/06/2020	ND	4.0000		
Silver, total	ug/L	MW-6	09/03/2020	ND	4.0000		
Silver, total	ug/L	MW-6	03/30/2021	ND	4.0000		
Silver, total	ug/L	MW-6	09/08/2021	ND	4.0000		
Silver, total	ug/L	MW-6	03/31/2022	ND	4.0000		
Silver, total	ug/L	MW-6	08/30/2022	ND	4.0000		
Silver, total	ug/L	MW-6	03/07/2023	ND	4.0000		
Silver, total	ug/L	MW-6	09/28/2023	ND	4.0000		
Silver, total	ug/L	MW-6	03/11/2024	ND	4.0000		
Thallium, total	ug/L	MW-6	10/20/2014	ND	2.0000		
Thallium, total	ug/L	MW-6	06/23/2015	ND	1.0000	2.0000	**
Thallium, total	ug/L	MW-6	11/13/2015	ND	1.0000	2.0000	**
Thallium, total	ug/L	MW-6	04/11/2016	ND	2.0000		
Thallium, total	ug/L	MW-6	09/16/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-6	03/15/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-6	09/27/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-6	09/12/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-6	04/01/2019	ND	2.0000		
Thallium, total	ug/L	MW-6	09/12/2019	ND	2.0000		
Thallium, total	ug/L	MW-6	05/06/2020	ND	2.0000		
Thallium, total	ug/L	MW-6	09/03/2020	ND	2.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Thallium, total	ug/L	MW-6	03/30/2021	ND	2.0000		
Thallium, total	ug/L	MW-6	09/08/2021	ND	2.0000		
Thallium, total	ug/L	MW-6	03/31/2022	ND	2.0000		
Thallium, total	ug/L	MW-6	08/30/2022	ND	2.0000		
Thallium, total	ug/L	MW-6	03/07/2023	ND	2.0000		
Thallium, total	ug/L	MW-6	09/28/2023	ND	2.0000		
Thallium, total	ug/L	MW-6	03/11/2024	ND	2.0000		
Vanadium, total	ug/L	MW-6	10/20/2014	ND	20.0000		
Vanadium, total	ug/L	MW-6	06/23/2015	ND	5.0000		*
Vanadium, total	ug/L	MW-6	11/13/2015	ND	5.0000		*
Vanadium, total	ug/L	MW-6	04/11/2016	ND	5.0000		*
Vanadium, total	ug/L	MW-6	09/16/2016	ND	20.0000		
Vanadium, total	ug/L	MW-6	03/15/2017	ND	20.0000		
Vanadium, total	ug/L	MW-6	09/27/2017	ND	20.0000		
Vanadium, total	ug/L	MW-6	09/12/2018	ND	20.0000		
Vanadium, total	ug/L	MW-6	04/01/2019	ND	20.0000		
Vanadium, total	ug/L	MW-6	09/12/2019	ND	20.0000		
Vanadium, total	ug/L	MW-6	05/06/2020	ND	20.0000		
Vanadium, total	ug/L	MW-6	09/03/2020	ND	20.0000		
Vanadium, total	ug/L	MW-6	03/30/2021	ND	20.0000		
Vanadium, total	ug/L	MW-6	09/08/2021	ND	20.0000		
Vanadium, total	ug/L	MW-6	03/31/2022	ND	20.0000		
Vanadium, total	ug/L	MW-6	08/30/2022	ND	20.0000		
Vanadium, total	ug/L	MW-6	03/07/2023	ND	20.0000		
Vanadium, total	ug/L	MW-6	09/28/2023	ND	20.0000		
Vanadium, total	ug/L	MW-6	03/11/2024	ND	20.0000		
Zinc, total	ug/L	MW-6	10/20/2014		22.6000		
Zinc, total	ug/L	MW-6	06/23/2015	ND	10.0000	20.0000	**
Zinc, total	ug/L	MW-6	11/13/2015	ND	10.0000	20.0000	**
Zinc, total	ug/L	MW-6	04/11/2016	ND	10.0000	20.0000	**
Zinc, total	ug/L	MW-6	09/16/2016		21.7000		
Zinc, total	ug/L	MW-6	03/15/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-6	09/27/2017		10.1000		
Zinc, total	ug/L	MW-6	09/12/2018		21.6000		
Zinc, total	ug/L	MW-6	04/01/2019		44.1000		
Zinc, total	ug/L	MW-6	09/12/2019	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-6	05/06/2020	ND	20.0000		
Zinc, total	ug/L	MW-6	09/03/2020	ND	20.0000		
Zinc, total	ug/L	MW-6	03/30/2021	ND	20.0000		
Zinc, total	ug/L	MW-6	09/08/2021	ND	20.0000		
Zinc, total	ug/L	MW-6	03/31/2022	ND	20.0000		
Zinc, total	ug/L	MW-6	08/30/2022	ND	20.0000		
Zinc, total	ug/L	MW-6	03/07/2023	ND	20.0000		
Zinc, total	ug/L	MW-6	09/28/2023	ND	20.0000		
Zinc, total	ug/L	MW-6	03/11/2024	ND	20.0000		
Antimony, total	ug/L	MW-7	03/15/2017	ND	2.0000		
Antimony, total	ug/L	MW-7	05/09/2017	ND	2.0000		
Antimony, total	ug/L	MW-7	09/27/2017	ND	2.0000		
Antimony, total	ug/L	MW-7	03/14/2018	ND	2.0000		
Antimony, total	ug/L	MW-7	09/12/2018	ND	2.0000		
Antimony, total	ug/L	MW-7	04/01/2019	ND	2.0000		
Antimony, total	ug/L	MW-7	09/12/2019	ND	2.0000		
Antimony, total	ug/L	MW-7	05/06/2020	ND	2.0000		
Antimony, total	ug/L	MW-7	09/03/2020	ND	2.0000		
Antimony, total	ug/L	MW-7	03/30/2021	ND	2.0000		*
Antimony, total	ug/L	MW-7	09/08/2021	ND	2.0000		
Antimony, total	ug/L	MW-7	03/31/2022	ND	2.0000		
Antimony, total	ug/L	MW-7	08/30/2022	ND	2.0000		
Antimony, total	ug/L	MW-7	03/07/2023	ND	2.0000		
Antimony, total	ug/L	MW-7	09/28/2023	ND	2.0000		
Antimony, total	ug/L	MW-7	03/11/2024	ND	2.0000		
Arsenic, total	ug/L	MW-7	03/15/2017		6.5000		
Arsenic, total	ug/L	MW-7	05/09/2017	ND	4.0000		
Arsenic, total	ug/L	MW-7	09/27/2017	ND	4.0000		
Arsenic, total	ug/L	MW-7	03/14/2018	ND	4.0000		
Arsenic, total	ug/L	MW-7	09/12/2018		6.3000		
Arsenic, total	ug/L	MW-7	04/01/2019	ND	4.0000		
Arsenic, total	ug/L	MW-7	09/12/2019		13.9000		*
Arsenic, total	ug/L	MW-7	05/06/2020	ND	4.0000		
Arsenic, total	ug/L	MW-7	09/03/2020	ND	4.0000		
Arsenic, total	ug/L	MW-7	03/30/2021		35.8000		*
Arsenic, total	ug/L	MW-7	09/08/2021	ND	4.0000		
Arsenic, total	ug/L	MW-7	03/31/2022		18.6000		*
Arsenic, total	ug/L	MW-7	08/30/2022	ND	4.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Arsenic, total	ug/L	MW-7	03/07/2023	ND	4.0000		
Arsenic, total	ug/L	MW-7	09/28/2023	ND	4.0000		
Arsenic, total	ug/L	MW-7	03/11/2024	ND	4.0000		
Barium, total	ug/L	MW-7	03/15/2017		331.0000		
Barium, total	ug/L	MW-7	05/09/2017		224.0000		
Barium, total	ug/L	MW-7	09/27/2017		380.0000		
Barium, total	ug/L	MW-7	03/14/2018		214.0000		
Barium, total	ug/L	MW-7	09/12/2018		325.0000		
Barium, total	ug/L	MW-7	04/01/2019		235.0000		
Barium, total	ug/L	MW-7	09/12/2019		386.0000		
Barium, total	ug/L	MW-7	05/06/2020		191.0000		
Barium, total	ug/L	MW-7	09/03/2020		172.0000		
Barium, total	ug/L	MW-7	03/30/2021		880.0000		*
Barium, total	ug/L	MW-7	09/08/2021		163.0000		
Barium, total	ug/L	MW-7	03/31/2022		569.0000		
Barium, total	ug/L	MW-7	08/30/2022		211.0000		
Barium, total	ug/L	MW-7	03/07/2023		166.0000		
Barium, total	ug/L	MW-7	09/28/2023		161.0000		
Barium, total	ug/L	MW-7	03/11/2024		168.0000		
Beryllium, total	ug/L	MW-7	03/15/2017	ND	4.0000		
Beryllium, total	ug/L	MW-7	05/09/2017	ND	4.0000		
Beryllium, total	ug/L	MW-7	09/27/2017	ND	4.0000		
Beryllium, total	ug/L	MW-7	03/14/2018	ND	4.0000		
Beryllium, total	ug/L	MW-7	09/12/2018	ND	4.0000		
Beryllium, total	ug/L	MW-7	04/01/2019	ND	4.0000		
Beryllium, total	ug/L	MW-7	09/12/2019	ND	4.0000		
Beryllium, total	ug/L	MW-7	05/06/2020	ND	4.0000		
Beryllium, total	ug/L	MW-7	09/03/2020	ND	4.0000		
Beryllium, total	ug/L	MW-7	03/30/2021	ND	4.0000		*
Beryllium, total	ug/L	MW-7	09/08/2021	ND	4.0000		
Beryllium, total	ug/L	MW-7	03/31/2022	ND	4.0000		
Beryllium, total	ug/L	MW-7	08/30/2022	ND	4.0000		
Beryllium, total	ug/L	MW-7	03/07/2023	ND	4.0000		
Beryllium, total	ug/L	MW-7	09/28/2023	ND	4.0000		
Beryllium, total	ug/L	MW-7	03/11/2024	ND	4.0000		
Cadmium, total	ug/L	MW-7	03/15/2017	ND	0.8000		
Cadmium, total	ug/L	MW-7	05/09/2017	ND	0.8000		
Cadmium, total	ug/L	MW-7	09/27/2017	ND	0.8000		
Cadmium, total	ug/L	MW-7	03/14/2018	ND	0.8000		
Cadmium, total	ug/L	MW-7	09/12/2018	ND	0.8000		
Cadmium, total	ug/L	MW-7	04/01/2019	ND	0.8000		
Cadmium, total	ug/L	MW-7	09/12/2019	ND	0.8000		
Cadmium, total	ug/L	MW-7	05/06/2020	ND	0.8000		
Cadmium, total	ug/L	MW-7	09/03/2020	ND	0.8000		
Cadmium, total	ug/L	MW-7	03/30/2021		1.7000		*
Cadmium, total	ug/L	MW-7	09/08/2021	ND	0.8000		
Cadmium, total	ug/L	MW-7	03/31/2022		1.0000		
Cadmium, total	ug/L	MW-7	08/30/2022	ND	0.8000		
Cadmium, total	ug/L	MW-7	03/07/2023	ND	0.8000		
Cadmium, total	ug/L	MW-7	09/28/2023	ND	0.8000		
Cadmium, total	ug/L	MW-7	03/11/2024	ND	0.8000		
Chromium, total	ug/L	MW-7	03/15/2017		16.5000		
Chromium, total	ug/L	MW-7	05/09/2017	ND	8.0000		
Chromium, total	ug/L	MW-7	09/27/2017	ND	8.0000		
Chromium, total	ug/L	MW-7	03/14/2018	ND	8.0000		
Chromium, total	ug/L	MW-7	09/12/2018		14.6000		
Chromium, total	ug/L	MW-7	04/01/2019	ND	8.0000		
Chromium, total	ug/L	MW-7	09/12/2019		31.6000		*
Chromium, total	ug/L	MW-7	05/06/2020	ND	8.0000		
Chromium, total	ug/L	MW-7	09/03/2020	ND	8.0000		
Chromium, total	ug/L	MW-7	03/30/2021		77.5000		*
Chromium, total	ug/L	MW-7	09/08/2021	ND	8.0000		
Chromium, total	ug/L	MW-7	03/31/2022		49.5000		*
Chromium, total	ug/L	MW-7	08/30/2022	ND	8.0000		
Chromium, total	ug/L	MW-7	03/07/2023	ND	8.0000		
Chromium, total	ug/L	MW-7	09/28/2023	ND	8.0000		
Chromium, total	ug/L	MW-7	03/11/2024	ND	8.0000		
Cobalt, total	ug/L	MW-7	03/15/2017		5.9000		
Cobalt, total	ug/L	MW-7	05/09/2017	ND	0.8000		
Cobalt, total	ug/L	MW-7	09/27/2017		3.4000		
Cobalt, total	ug/L	MW-7	03/14/2018	ND	2.0000	0.8000	**
Cobalt, total	ug/L	MW-7	09/12/2018		5.8000		
Cobalt, total	ug/L	MW-7	04/01/2019		1.9000		
Cobalt, total	ug/L	MW-7	09/12/2019		12.2000		

* - 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	
Cobalt, total	ug/L	MW-7	05/06/2020		0.4000		
Cobalt, total	ug/L	MW-7	09/03/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-7	03/30/2021		39.3000		*
Cobalt, total	ug/L	MW-7	09/08/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-7	03/31/2022		22.9000		*
Cobalt, total	ug/L	MW-7	08/30/2022		2.1000		
Cobalt, total	ug/L	MW-7	03/07/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-7	09/28/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-7	03/11/2024	ND	0.4000	0.8000	**
Copper, total	ug/L	MW-7	03/15/2017		13.7000		*
Copper, total	ug/L	MW-7	05/09/2017	ND	4.0000		
Copper, total	ug/L	MW-7	09/27/2017		10.6000		
Copper, total	ug/L	MW-7	03/14/2018	ND	4.0000		
Copper, total	ug/L	MW-7	09/12/2018		12.7000		*
Copper, total	ug/L	MW-7	04/01/2019	ND	4.0000		
Copper, total	ug/L	MW-7	09/12/2019		25.8000		*
Copper, total	ug/L	MW-7	05/06/2020	ND	4.0000		
Copper, total	ug/L	MW-7	09/03/2020	ND	4.0000		
Copper, total	ug/L	MW-7	03/30/2021		83.4000		*
Copper, total	ug/L	MW-7	09/08/2021	ND	4.0000		
Copper, total	ug/L	MW-7	03/31/2022		47.2000		*
Copper, total	ug/L	MW-7	08/30/2022		4.8000		
Copper, total	ug/L	MW-7	03/07/2023	ND	4.0000		
Copper, total	ug/L	MW-7	09/28/2023		4.1000		
Copper, total	ug/L	MW-7	03/11/2024	ND	4.0000		
Lead, total	ug/L	MW-7	03/15/2017		6.8000		
Lead, total	ug/L	MW-7	05/09/2017	ND	4.0000		
Lead, total	ug/L	MW-7	09/27/2017	ND	4.0000		
Lead, total	ug/L	MW-7	03/14/2018	ND	4.0000		
Lead, total	ug/L	MW-7	09/12/2018		6.6000		
Lead, total	ug/L	MW-7	04/01/2019	ND	4.0000		
Lead, total	ug/L	MW-7	09/12/2019		13.1000		*
Lead, total	ug/L	MW-7	05/06/2020	ND	4.0000		
Lead, total	ug/L	MW-7	09/03/2020	ND	4.0000		
Lead, total	ug/L	MW-7	03/30/2021		43.4000		*
Lead, total	ug/L	MW-7	09/08/2021	ND	4.0000		
Lead, total	ug/L	MW-7	03/31/2022		25.8000		*
Lead, total	ug/L	MW-7	08/30/2022		5.5000		
Lead, total	ug/L	MW-7	03/07/2023	ND	4.0000		
Lead, total	ug/L	MW-7	09/28/2023	ND	4.0000		
Lead, total	ug/L	MW-7	03/11/2024	ND	4.0000		
Nickel, total	ug/L	MW-7	03/15/2017		19.0000		*
Nickel, total	ug/L	MW-7	05/09/2017	ND	4.0000		
Nickel, total	ug/L	MW-7	09/27/2017		11.4000		
Nickel, total	ug/L	MW-7	12/13/2017	ND	4.0000		
Nickel, total	ug/L	MW-7	03/14/2018	ND	4.0000		
Nickel, total	ug/L	MW-7	09/12/2018		17.4000		*
Nickel, total	ug/L	MW-7	04/01/2019		7.4000		
Nickel, total	ug/L	MW-7	09/12/2019		34.2000		*
Nickel, total	ug/L	MW-7	05/06/2020	ND	4.0000		
Nickel, total	ug/L	MW-7	09/03/2020	ND	4.0000		
Nickel, total	ug/L	MW-7	03/30/2021		105.0000		*
Nickel, total	ug/L	MW-7	09/08/2021	ND	4.0000		
Nickel, total	ug/L	MW-7	03/31/2022		61.9000		*
Nickel, total	ug/L	MW-7	08/30/2022		6.5000		
Nickel, total	ug/L	MW-7	03/07/2023	ND	4.0000		
Nickel, total	ug/L	MW-7	09/28/2023	ND	4.0000		
Nickel, total	ug/L	MW-7	03/11/2024	ND	4.0000		
Selenium, total	ug/L	MW-7	03/15/2017	ND	4.0000		
Selenium, total	ug/L	MW-7	05/09/2017	ND	4.0000		
Selenium, total	ug/L	MW-7	09/27/2017	ND	4.0000		
Selenium, total	ug/L	MW-7	03/14/2018	ND	4.0000		
Selenium, total	ug/L	MW-7	09/12/2018	ND	4.0000		
Selenium, total	ug/L	MW-7	04/01/2019	ND	4.0000		
Selenium, total	ug/L	MW-7	09/12/2019	ND	4.0000		
Selenium, total	ug/L	MW-7	05/06/2020	ND	4.0000		
Selenium, total	ug/L	MW-7	09/03/2020	ND	4.0000		
Selenium, total	ug/L	MW-7	03/30/2021		5.8000		*
Selenium, total	ug/L	MW-7	09/08/2021	ND	4.0000		
Selenium, total	ug/L	MW-7	03/31/2022		6.2000		*
Selenium, total	ug/L	MW-7	08/30/2022	ND	4.0000		
Selenium, total	ug/L	MW-7	03/07/2023	ND	4.0000		
Selenium, total	ug/L	MW-7	09/28/2023	ND	4.0000		
Selenium, total	ug/L	MW-7	03/11/2024	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-7	03/15/2017	ND	4.0000		
Silver, total	ug/L	MW-7	05/09/2017	ND	4.0000		
Silver, total	ug/L	MW-7	09/27/2017	ND	4.0000		
Silver, total	ug/L	MW-7	03/14/2018	ND	4.0000		
Silver, total	ug/L	MW-7	09/12/2018	ND	4.0000		
Silver, total	ug/L	MW-7	04/01/2019	ND	4.0000		
Silver, total	ug/L	MW-7	09/12/2019	ND	4.0000		
Silver, total	ug/L	MW-7	05/06/2020	ND	4.0000		
Silver, total	ug/L	MW-7	09/03/2020	ND	4.0000		
Silver, total	ug/L	MW-7	03/30/2021	ND	4.0000		*
Silver, total	ug/L	MW-7	09/08/2021	ND	4.0000		
Silver, total	ug/L	MW-7	03/31/2022	ND	4.0000		
Silver, total	ug/L	MW-7	08/30/2022	ND	4.0000		
Silver, total	ug/L	MW-7	03/07/2023	ND	4.0000		
Silver, total	ug/L	MW-7	09/28/2023	ND	4.0000		
Silver, total	ug/L	MW-7	03/11/2024	ND	4.0000		
Thallium, total	ug/L	MW-7	03/15/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-7	05/09/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-7	09/27/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-7	03/14/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-7	09/12/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-7	04/01/2019	ND	2.0000		
Thallium, total	ug/L	MW-7	09/12/2019	ND	2.0000		
Thallium, total	ug/L	MW-7	05/06/2020	ND	2.0000		
Thallium, total	ug/L	MW-7	09/03/2020	ND	2.0000		
Thallium, total	ug/L	MW-7	03/30/2021	ND	2.0000		*
Thallium, total	ug/L	MW-7	09/08/2021	ND	2.0000		
Thallium, total	ug/L	MW-7	03/31/2022	ND	2.0000		
Thallium, total	ug/L	MW-7	08/30/2022	ND	2.0000		
Thallium, total	ug/L	MW-7	03/07/2023	ND	2.0000		
Thallium, total	ug/L	MW-7	09/28/2023	ND	2.0000		
Thallium, total	ug/L	MW-7	03/11/2024	ND	2.0000		
Vanadium, total	ug/L	MW-7	03/15/2017		26.5000		
Vanadium, total	ug/L	MW-7	05/09/2017	ND	20.0000		
Vanadium, total	ug/L	MW-7	09/27/2017	ND	20.0000		
Vanadium, total	ug/L	MW-7	03/14/2018	ND	20.0000		
Vanadium, total	ug/L	MW-7	09/12/2018		23.0000		
Vanadium, total	ug/L	MW-7	04/01/2019	ND	20.0000		
Vanadium, total	ug/L	MW-7	09/12/2019		55.0000		*
Vanadium, total	ug/L	MW-7	05/06/2020	ND	20.0000		
Vanadium, total	ug/L	MW-7	09/03/2020	ND	20.0000		
Vanadium, total	ug/L	MW-7	03/30/2021		120.0000		*
Vanadium, total	ug/L	MW-7	09/08/2021	ND	20.0000		
Vanadium, total	ug/L	MW-7	03/31/2022		75.9000		*
Vanadium, total	ug/L	MW-7	08/30/2022	ND	20.0000		
Vanadium, total	ug/L	MW-7	03/07/2023	ND	20.0000		
Vanadium, total	ug/L	MW-7	09/28/2023	ND	20.0000		
Vanadium, total	ug/L	MW-7	03/11/2024	ND	20.0000		
Zinc, total	ug/L	MW-7	03/15/2017		34.2000		
Zinc, total	ug/L	MW-7	05/09/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-7	09/27/2017		26.9000		
Zinc, total	ug/L	MW-7	12/13/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-7	03/14/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-7	09/12/2018		63.4000		
Zinc, total	ug/L	MW-7	04/01/2019		28.5000		
Zinc, total	ug/L	MW-7	09/12/2019		69.0000		
Zinc, total	ug/L	MW-7	05/06/2020	ND	20.0000		
Zinc, total	ug/L	MW-7	09/03/2020	ND	20.0000		
Zinc, total	ug/L	MW-7	03/30/2021		615.0000		*
Zinc, total	ug/L	MW-7	09/08/2021	ND	20.0000		
Zinc, total	ug/L	MW-7	03/31/2022		116.0000		*
Zinc, total	ug/L	MW-7	08/30/2022	ND	20.0000		
Zinc, total	ug/L	MW-7	03/07/2023	ND	20.0000		
Zinc, total	ug/L	MW-7	09/28/2023	ND	20.0000		
Zinc, total	ug/L	MW-7	03/11/2024	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	AW-1	03/11/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	AW-1	03/11/2024	ND	4.0000		51.3000
Barium, total	ug/L	AW-1	03/11/2024		361.0000		944.5267
Beryllium, total	ug/L	AW-1	03/11/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	AW-1	03/11/2024	ND	0.8000	**	1.0000
Chromium, total	ug/L	AW-1	03/11/2024	ND	8.0000		16.5000
Cobalt, total	ug/L	AW-1	03/11/2024		10.0000		12.2000
Copper, total	ug/L	AW-1	03/11/2024	ND	4.0000	**	10.6000
Lead, total	ug/L	AW-1	03/11/2024	ND	4.0000		6.8000
Nickel, total	ug/L	AW-1	03/11/2024		7.2000		29.5000
Selenium, total	ug/L	AW-1	03/11/2024	ND	4.0000		4.0000
Silver, total	ug/L	AW-1	03/11/2024	ND	4.0000		4.0000
Thallium, total	ug/L	AW-1	03/11/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	AW-1	03/11/2024	ND	20.0000		26.5000
Zinc, total	ug/L	AW-1	03/11/2024	ND	20.0000	**	69.0000
Antimony, total	ug/L	AW-2	03/11/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	AW-2	03/11/2024		27.7000		51.3000
Barium, total	ug/L	AW-2	03/11/2024		138.0000		944.5267
Beryllium, total	ug/L	AW-2	03/11/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	AW-2	03/11/2024	ND	0.8000		1.0000
Chromium, total	ug/L	AW-2	03/11/2024	ND	8.0000		16.5000
Cobalt, total	ug/L	AW-2	03/11/2024		14.2000	*	12.2000
Copper, total	ug/L	AW-2	03/11/2024	ND	4.0000		10.6000
Lead, total	ug/L	AW-2	03/11/2024	ND	4.0000		6.8000
Nickel, total	ug/L	AW-2	03/11/2024		12.8000		29.5000
Selenium, total	ug/L	AW-2	03/11/2024	ND	4.0000		4.0000
Silver, total	ug/L	AW-2	03/11/2024	ND	4.0000		4.0000
Thallium, total	ug/L	AW-2	03/11/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	AW-2	03/11/2024	ND	20.0000		26.5000
Zinc, total	ug/L	AW-2	03/11/2024	ND	20.0000		69.0000
Antimony, total	ug/L	AW-3	03/11/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	AW-3	03/11/2024		40.9000		51.3000
Barium, total	ug/L	AW-3	03/11/2024		429.0000		944.5267
Beryllium, total	ug/L	AW-3	03/11/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	AW-3	03/11/2024	ND	0.8000		1.0000
Chromium, total	ug/L	AW-3	03/11/2024	ND	8.0000		16.5000
Cobalt, total	ug/L	AW-3	03/11/2024		0.7000		12.2000
Copper, total	ug/L	AW-3	03/11/2024		6.1000		10.6000
Lead, total	ug/L	AW-3	03/11/2024	ND	4.0000		6.8000
Nickel, total	ug/L	AW-3	03/11/2024	ND	4.0000		29.5000
Selenium, total	ug/L	AW-3	03/11/2024	ND	4.0000		4.0000
Silver, total	ug/L	AW-3	03/11/2024	ND	4.0000		4.0000
Thallium, total	ug/L	AW-3	03/11/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	AW-3	03/11/2024	ND	20.0000		26.5000
Zinc, total	ug/L	AW-3	03/11/2024		20.4000		69.0000
Antimony, total	ug/L	AW-9	09/28/2023	ND	2.0000		2.0000
Arsenic, total	ug/L	AW-9	03/11/2024	ND	4.0000		51.3000
Barium, total	ug/L	AW-9	09/28/2023		447.0000		944.5267
Beryllium, total	ug/L	AW-9	09/28/2023	ND	4.0000		4.0000
Cadmium, total	ug/L	AW-9	09/28/2023	ND	0.8000		1.0000
Chromium, total	ug/L	AW-9	09/28/2023	ND	8.0000		16.5000
Cobalt, total	ug/L	AW-9	03/11/2024		1.1000		12.2000
Copper, total	ug/L	AW-9	09/28/2023	ND	4.0000		10.6000
Lead, total	ug/L	AW-9	09/28/2023	ND	4.0000		6.8000
Nickel, total	ug/L	AW-9	09/28/2023	ND	4.0000		29.5000
Selenium, total	ug/L	AW-9	09/28/2023	ND	4.0000		4.0000
Silver, total	ug/L	AW-9	09/28/2023	ND	4.0000		4.0000
Thallium, total	ug/L	AW-9	09/28/2023	ND	2.0000		2.0000
Vanadium, total	ug/L	AW-9	09/28/2023	ND	20.0000		26.5000
Zinc, total	ug/L	AW-9	09/28/2023	ND	20.0000		69.0000
Antimony, total	ug/L	MW-12	03/11/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-12	03/11/2024	ND	4.0000		51.3000
Barium, total	ug/L	MW-12	03/11/2024		104.0000		944.5267
Beryllium, total	ug/L	MW-12	03/11/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-12	03/11/2024	ND	0.8000		1.0000
Chromium, total	ug/L	MW-12	03/11/2024	ND	8.0000		16.5000
Cobalt, total	ug/L	MW-12	03/11/2024		1.3000		12.2000
Copper, total	ug/L	MW-12	03/11/2024	ND	4.0000		10.6000
Lead, total	ug/L	MW-12	03/11/2024	ND	4.0000		6.8000
Nickel, total	ug/L	MW-12	03/11/2024		13.1000		29.5000
Selenium, total	ug/L	MW-12	03/11/2024	ND	4.0000		4.0000
Silver, total	ug/L	MW-12	03/11/2024	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-12	03/11/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-12	03/11/2024	ND	20.0000		26.5000
Zinc, total	ug/L	MW-12	03/11/2024	ND	20.0000		69.0000
Antimony, total	ug/L	MW-14	03/11/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-14	03/11/2024	ND	4.0000		51.3000
Barium, total	ug/L	MW-14	03/11/2024		439.0000		944.5267
Beryllium, total	ug/L	MW-14	03/11/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-14	03/11/2024	ND	0.8000		1.0000
Chromium, total	ug/L	MW-14	03/11/2024	ND	8.0000		16.5000
Cobalt, total	ug/L	MW-14	03/11/2024	ND	0.4000		12.2000
Copper, total	ug/L	MW-14	03/11/2024	ND	4.0000		10.6000
Lead, total	ug/L	MW-14	03/11/2024	ND	4.0000		6.8000
Nickel, total	ug/L	MW-14	03/11/2024		6.0000		29.5000
Selenium, total	ug/L	MW-14	03/11/2024	ND	4.0000		4.0000
Silver, total	ug/L	MW-14	03/11/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW-14	03/11/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-14	03/11/2024	ND	20.0000		26.5000
Zinc, total	ug/L	MW-14	03/11/2024	ND	20.0000		69.0000
Antimony, total	ug/L	MW-20	03/11/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-20	03/11/2024		27.9000		51.3000
Barium, total	ug/L	MW-20	03/11/2024		326.0000		944.5267
Beryllium, total	ug/L	MW-20	03/11/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-20	03/11/2024	ND	0.8000		1.0000
Chromium, total	ug/L	MW-20	03/11/2024	ND	8.0000		16.5000
Cobalt, total	ug/L	MW-20	03/11/2024	ND	0.4000		12.2000
Copper, total	ug/L	MW-20	03/11/2024	ND	4.0000		10.6000
Lead, total	ug/L	MW-20	03/11/2024	ND	4.0000		6.8000
Nickel, total	ug/L	MW-20	03/11/2024	ND	4.0000		29.5000
Selenium, total	ug/L	MW-20	03/11/2024	ND	4.0000		4.0000
Silver, total	ug/L	MW-20	03/11/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW-20	03/11/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-20	03/11/2024	ND	20.0000		26.5000
Zinc, total	ug/L	MW-20	03/11/2024	ND	20.0000		69.0000
Antimony, total	ug/L	MW-24	03/11/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-24	03/11/2024		36.9000		51.3000
Barium, total	ug/L	MW-24	03/11/2024		409.0000		944.5267
Beryllium, total	ug/L	MW-24	03/11/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-24	03/11/2024	ND	0.8000		1.0000
Chromium, total	ug/L	MW-24	03/11/2024	ND	8.0000		16.5000
Cobalt, total	ug/L	MW-24	03/11/2024		6.4000		12.2000
Copper, total	ug/L	MW-24	03/11/2024	ND	4.0000		10.6000
Lead, total	ug/L	MW-24	03/11/2024	ND	4.0000		6.8000
Nickel, total	ug/L	MW-24	03/11/2024		8.2000		29.5000
Selenium, total	ug/L	MW-24	03/11/2024	ND	4.0000		4.0000
Silver, total	ug/L	MW-24	03/11/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW-24	03/11/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-24	03/11/2024	ND	20.0000		26.5000
Zinc, total	ug/L	MW-24	03/11/2024	ND	20.0000		69.0000
Antimony, total	ug/L	MW-25	03/11/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-25	03/11/2024	ND	4.0000		51.3000
Barium, total	ug/L	MW-25	03/11/2024		23.5000		944.5267
Beryllium, total	ug/L	MW-25	03/11/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-25	03/11/2024	ND	0.8000		1.0000
Chromium, total	ug/L	MW-25	03/11/2024	ND	8.0000		16.5000
Cobalt, total	ug/L	MW-25	03/11/2024		0.8000		12.2000
Copper, total	ug/L	MW-25	03/11/2024	ND	4.0000		10.6000
Lead, total	ug/L	MW-25	03/11/2024	ND	4.0000		6.8000
Nickel, total	ug/L	MW-25	03/11/2024		5.1000		29.5000
Selenium, total	ug/L	MW-25	03/11/2024	ND	4.0000		4.0000
Silver, total	ug/L	MW-25	03/11/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW-25	03/11/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-25	03/11/2024	ND	20.0000		26.5000
Zinc, total	ug/L	MW-25	03/11/2024	ND	20.0000		69.0000
Antimony, total	ug/L	MW-9	03/11/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-9	03/11/2024		4.0000		51.3000
Barium, total	ug/L	MW-9	03/11/2024		517.0000		944.5267
Beryllium, total	ug/L	MW-9	03/11/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-9	03/11/2024	ND	0.8000		1.0000
Chromium, total	ug/L	MW-9	03/11/2024	ND	8.0000		16.5000
Cobalt, total	ug/L	MW-9	03/11/2024		2.2000		12.2000
Copper, total	ug/L	MW-9	03/11/2024	ND	4.0000		10.6000
Lead, total	ug/L	MW-9	03/11/2024	ND	4.0000		6.8000

* - 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	03/11/2024		14.6000		29.5000
Selenium, total	ug/L	MW-9	03/11/2024	ND	4.0000		4.0000
Silver, total	ug/L	MW-9	03/11/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW-9	03/11/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-9	03/11/2024	ND	20.0000		26.5000
Zinc, total	ug/L	MW-9	03/11/2024	ND	20.0000		69.0000

* - 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 3

Detection Frequencies in Upgradient and Downgradient Wells

Constituent	Detect	Upgradient N	Proportion	Detect	Downgradient N	Proportion
Antimony, total	0	77	0.000	5	268	0.019
Arsenic, total	15	75	0.200	183	288	0.635
Barium, total	78	78	1.000	281	281	1.000
Beryllium, total	0	77	0.000	11	272	0.040
Cadmium, total	1	77	0.013	21	272	0.077
Chromium, total	2	75	0.027	4	269	0.015
Cobalt, total	26	73	0.356	169	282	0.599
Copper, total	5	71	0.070	32	272	0.118
Lead, total	5	73	0.068	39	273	0.143
Nickel, total	16	74	0.216	152	274	0.555
Selenium, total	0	76	0.000	1	267	0.004
Silver, total	0	73	0.000	0	267	0.000
Thallium, total	0	77	0.000	0	267	0.000
Vanadium, total	2	72	0.028	16	269	0.059
Zinc, total	15	78	0.192	109	280	0.389

N = Total number of measurements in all wells.
Detect = Total number of detections in all wells.
Proportion = Detect/N.

Table 4

Shapiro-Wilk Multiple Group Test of Normality

Constituent	Detect	N	Detect Freq	G raw	G log	G cbrt	G sqrt	G sqr	G cub	Crit Value	Dist Form	Model Type
Antimony, total	0	77	0.000									nonpar
Arsenic, total	15	75	0.200	2.730	0.667					2.326	lognor	nonpar
Barium, total	78	78	1.000	4.691	2.112					2.326	lognor	lognor
Beryllium, total	0	77	0.000									nonpar
Cadmium, total	1	77	0.013									nonpar
Chromium, total	2	75	0.027									nonpar
Cobalt, total	26	73	0.356	1.023	0.282					2.326	normal	nonpar
Copper, total	5	71	0.070	0.883	0.533					2.326	normal	nonpar
Lead, total	5	73	0.068	0.603	0.677					2.326	normal	nonpar
Nickel, total	16	74	0.216	2.216	0.891					2.326	normal	nonpar
Selenium, total	0	76	0.000									nonpar
Silver, total	0	73	0.000									nonpar
Thallium, total	0	77	0.000									nonpar
Vanadium, total	2	72	0.028									nonpar
Zinc, total	15	78	0.192	1.027	0.921					2.326	normal	nonpar

* - Distribution override for that constituent.
Fit to distribution is confirmed if G <= critical value.
Model type may not match distributional form when detection frequency < 50%.

Table 5

Summary Statistics and Prediction Limits

Constituent	Units	Detect	N	Mean	SD	alpha	Factor	Pred Limit	Type		Conf
Antimony, total	ug/L	0	77					2.0000	nonpar	***	0.99
Arsenic, total	ug/L	15	75					51.3000	nonpar		0.99
Barium, total	ug/L	78	78	5.0695	0.7450	0.0100	2.3909	944.5267	lognor		
Beryllium, total	ug/L	0	77					4.0000	nonpar	***	0.99
Cadmium, total	ug/L	1	77					1.0000	nonpar		0.99
Chromium, total	ug/L	2	75					16.5000	nonpar		0.99
Cobalt, total	ug/L	26	73					12.2000	nonpar		0.99
Copper, total	ug/L	5	71					10.6000	nonpar		0.99
Lead, total	ug/L	5	73					6.8000	nonpar		0.99
Nickel, total	ug/L	16	74					29.5000	nonpar		0.99
Selenium, total	ug/L	0	76					4.0000	nonpar	***	0.99
Silver, total	ug/L	0	73					4.0000	nonpar	***	0.99
Thallium, total	ug/L	0	77					2.0000	nonpar	***	0.99
Vanadium, total	ug/L	2	72					26.5000	nonpar		0.99
Zinc, total	ug/L	15	78					69.0000	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
5% Significance Level

Constituent	Units	Well	Date	Result	ND Qualifier	Date Range	N	Critical Value
Cobalt, total	ug/L	MW-26	03/14/2018	2.0000	< 2.0000	10/31/2016-03/11/2024	16	0.5054
Cobalt, total	ug/L	MW-6	10/20/2014	7.4300		10/20/2014-03/11/2024	19	0.4746
Cobalt, total	ug/L	MW-6	03/07/2023	11.4000		10/20/2014-03/11/2024	19	0.4746
Copper, total	ug/L	MW-6	03/11/2024	15.0000		10/20/2014-03/11/2024	18	0.4746
Lead, total	ug/L	MW-6	11/13/2015	0.5030		10/20/2014-03/11/2024	19	0.4746
Lead, total	ug/L	MW-6	04/11/2016	0.5000	< 0.5000	10/20/2014-03/11/2024	19	0.4746
Silver, total	ug/L	MW-6	10/20/2014	20.0000	< 20.0000	10/20/2014-03/11/2024	19	0.4621
Silver, total	ug/L	MW-6	06/23/2015	1.0000	< 1.0000	10/20/2014-03/11/2024	19	0.4746
Silver, total	ug/L	MW-6	11/13/2015	1.0000	< 1.0000	10/20/2014-03/11/2024	19	0.4746
Silver, total	ug/L	MW-6	04/11/2016	1.0000	< 1.0000	10/20/2014-03/11/2024	19	0.4746
Vanadium, total	ug/L	MW-6	06/23/2015	5.0000	< 5.0000	10/20/2014-03/11/2024	19	0.4746
Vanadium, total	ug/L	MW-6	11/13/2015	5.0000	< 5.0000	10/20/2014-03/11/2024	19	0.4746
Vanadium, total	ug/L	MW-6	04/11/2016	5.0000	< 5.0000	10/20/2014-03/11/2024	19	0.4746
Arsenic, total	ug/L	MW-7	09/12/2019	13.9000		03/15/2017-03/11/2024	15	0.5457
Arsenic, total	ug/L	MW-7	03/31/2022	18.6000		03/15/2017-03/11/2024	15	0.5457
Copper, total	ug/L	MW-7	03/15/2017	13.7000		03/15/2017-03/11/2024	13	0.5454
Copper, total	ug/L	MW-7	09/12/2018	12.7000		03/15/2017-03/11/2024	13	0.5454
Nickel, total	ug/L	MW-7	03/15/2017	19.0000		03/15/2017-03/11/2024	14	0.5213
Nickel, total	ug/L	MW-7	09/12/2018	17.4000		03/15/2017-03/11/2024	14	0.5213

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.

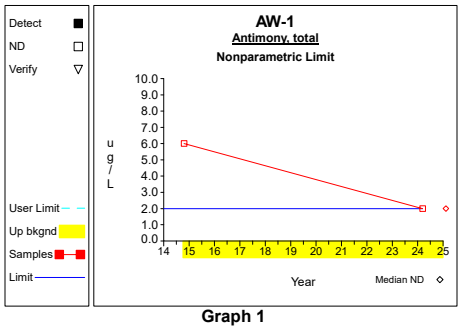
Table 8

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

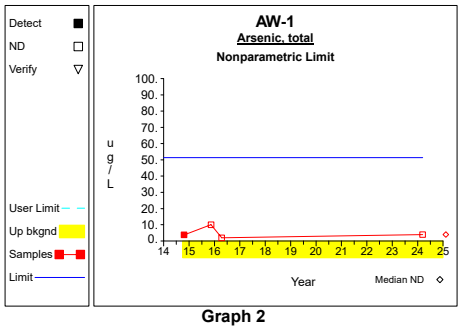
Constituent	Units	Well	Date		Result		Pred. Limit
Cadmium, total	ug/L	AW-1	08/05/2010	ND	0.5000		1.0000
Cadmium, total	ug/L	AW-1	09/29/2010	ND	0.5000		1.0000
Cadmium, total	ug/L	AW-1	03/24/2011	ND	0.5000		1.0000
Cadmium, total	ug/L	AW-1	09/14/2011		1.6000	*	1.0000
Cadmium, total	ug/L	AW-1	12/26/2011	ND	0.5000		1.0000
Cadmium, total	ug/L	AW-1	03/20/2012	ND	0.5000		1.0000
Cadmium, total	ug/L	AW-1	10/15/2012	ND	0.5000		1.0000
Cadmium, total	ug/L	AW-1	03/15/2013	ND	0.5000		1.0000
Cadmium, total	ug/L	AW-1	09/07/2013	ND	0.5000		1.0000
Cadmium, total	ug/L	AW-1	03/17/2014	ND	0.5000		1.0000
Cadmium, total	ug/L	AW-1	10/20/2014		1.5200	*	1.0000
Cadmium, total	ug/L	AW-1	03/11/2024	ND	0.8000		1.0000
Copper, total	ug/L	AW-1	08/05/2010	ND	20.0000		10.6000
Copper, total	ug/L	AW-1	09/29/2010	ND	20.0000		10.6000
Copper, total	ug/L	AW-1	03/24/2011	ND	20.0000		10.6000
Copper, total	ug/L	AW-1	09/14/2011		37.7000	*	10.6000
Copper, total	ug/L	AW-1	12/26/2011	ND	20.0000		10.6000
Copper, total	ug/L	AW-1	03/20/2012	ND	20.0000		10.6000
Copper, total	ug/L	AW-1	10/15/2012	ND	20.0000		10.6000
Copper, total	ug/L	AW-1	03/15/2013	ND	20.0000		10.6000
Copper, total	ug/L	AW-1	09/07/2013	ND	20.0000		10.6000
Copper, total	ug/L	AW-1	03/17/2014	ND	20.0000		10.6000
Copper, total	ug/L	AW-1	10/20/2014		49.9000	*	10.6000
Copper, total	ug/L	AW-1	03/11/2024	ND	4.0000		10.6000
Zinc, total	ug/L	AW-1	08/05/2010		26.8000		69.0000
Zinc, total	ug/L	AW-1	09/29/2010		25.0000		69.0000
Zinc, total	ug/L	AW-1	03/24/2011	ND	20.0000		69.0000
Zinc, total	ug/L	AW-1	09/14/2011		77.0000	*	69.0000
Zinc, total	ug/L	AW-1	12/26/2011	ND	20.0000		69.0000
Zinc, total	ug/L	AW-1	03/20/2012	ND	20.0000		69.0000
Zinc, total	ug/L	AW-1	10/15/2012	ND	20.0000		69.0000
Zinc, total	ug/L	AW-1	03/15/2013		24.1000		69.0000
Zinc, total	ug/L	AW-1	09/07/2013		45.9000		69.0000
Zinc, total	ug/L	AW-1	03/17/2014	ND	20.0000		69.0000
Zinc, total	ug/L	AW-1	10/20/2014		82.7000	*	69.0000
Zinc, total	ug/L	AW-1	03/11/2024	ND	20.0000		69.0000
Cobalt, total	ug/L	AW-2	08/05/2010		59.8000	*	12.2000
Cobalt, total	ug/L	AW-2	09/29/2010		41.3000	*	12.2000
Cobalt, total	ug/L	AW-2	03/24/2011		24.3000	*	12.2000
Cobalt, total	ug/L	AW-2	07/19/2011		23.1000	*	12.2000
Cobalt, total	ug/L	AW-2	09/14/2011		27.3000	*	12.2000
Cobalt, total	ug/L	AW-2	12/26/2011		23.7000	*	12.2000
Cobalt, total	ug/L	AW-2	03/20/2012		27.6000	*	12.2000
Cobalt, total	ug/L	AW-2	10/15/2012		25.5000	*	12.2000
Cobalt, total	ug/L	AW-2	03/15/2013		32.3000	*	12.2000
Cobalt, total	ug/L	AW-2	09/07/2013		44.0000	*	12.2000
Cobalt, total	ug/L	AW-2	03/17/2014		33.3000	*	12.2000
Cobalt, total	ug/L	AW-2	10/20/2014		99.8000	*	12.2000
Cobalt, total	ug/L	AW-2	06/23/2015		27.2000	*	12.2000
Cobalt, total	ug/L	AW-2	11/12/2015		27.2000	*	12.2000
Cobalt, total	ug/L	AW-2	04/11/2016		22.8000	*	12.2000
Cobalt, total	ug/L	AW-2	09/16/2016		18.4000	*	12.2000
Cobalt, total	ug/L	AW-2	03/15/2017		16.9000	*	12.2000
Cobalt, total	ug/L	AW-2	09/27/2017		15.2000	*	12.2000
Cobalt, total	ug/L	AW-2	03/14/2018		28.2000	*	12.2000
Cobalt, total	ug/L	AW-2	09/12/2018		10.1000		12.2000
Cobalt, total	ug/L	AW-2	04/01/2019		9.6000		12.2000
Cobalt, total	ug/L	AW-2	09/12/2019		10.1000		12.2000
Cobalt, total	ug/L	AW-2	05/06/2020		7.7000		12.2000
Cobalt, total	ug/L	AW-2	09/03/2020		10.6000		12.2000
Cobalt, total	ug/L	AW-2	03/30/2021		8.8000		12.2000
Cobalt, total	ug/L	AW-2	09/08/2021		10.0000		12.2000
Cobalt, total	ug/L	AW-2	03/31/2022		8.9000		12.2000
Cobalt, total	ug/L	AW-2	08/30/2022		12.0000		12.2000
Cobalt, total	ug/L	AW-2	03/07/2023		12.5000	*	12.2000
Cobalt, total	ug/L	AW-2	09/28/2023		5.4000		12.2000
Cobalt, total	ug/L	AW-2	03/11/2024		14.2000	*	12.2000

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

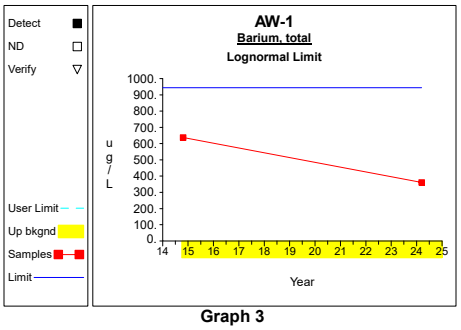
Up vs. Down Prediction Limits



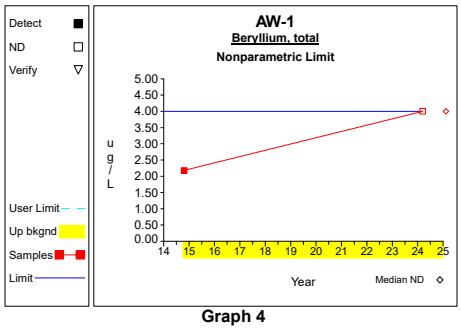
Graph 1



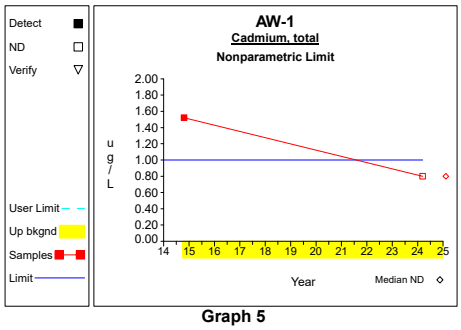
Graph 2



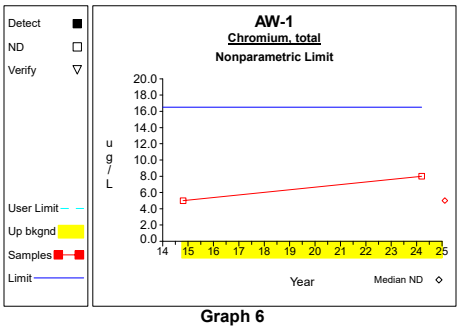
Graph 3



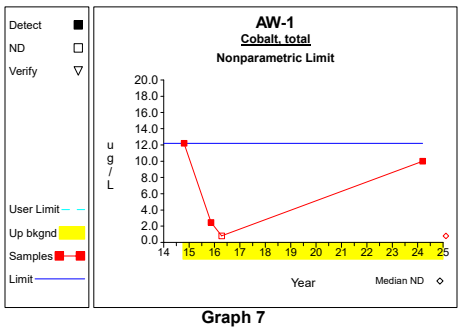
Graph 4



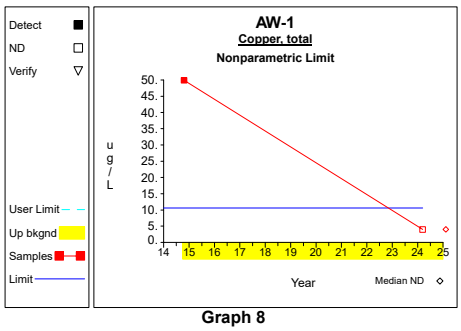
Graph 5



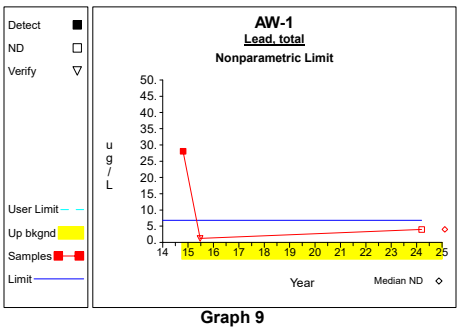
Graph 6



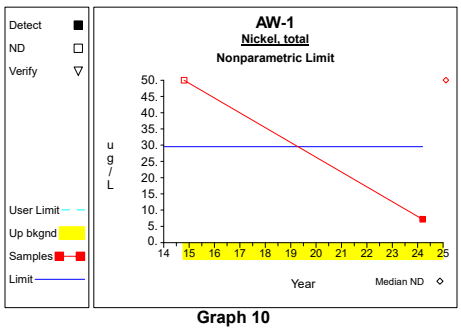
Graph 7



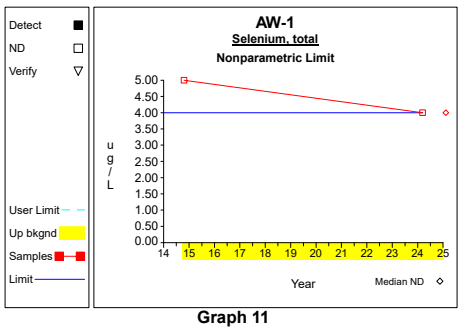
Graph 8



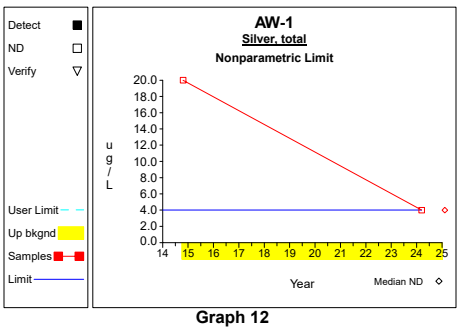
Graph 9



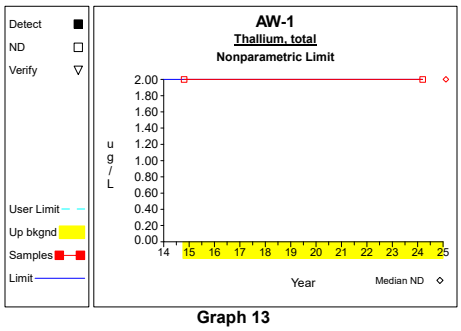
Graph 10



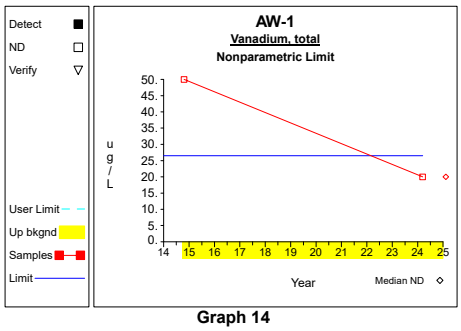
Graph 11



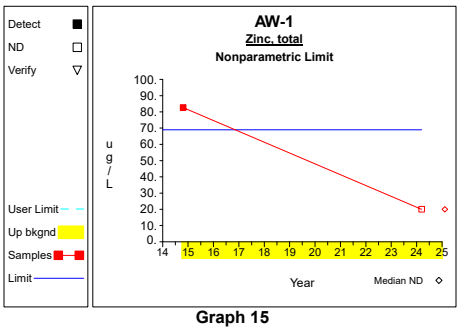
Graph 12



Graph 13



Graph 14



Graph 15

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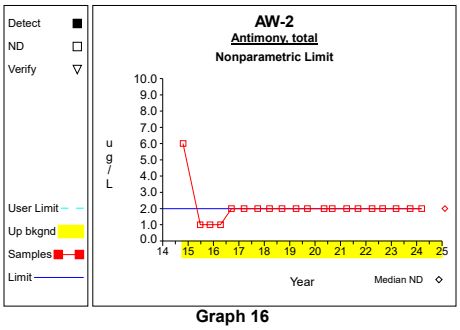
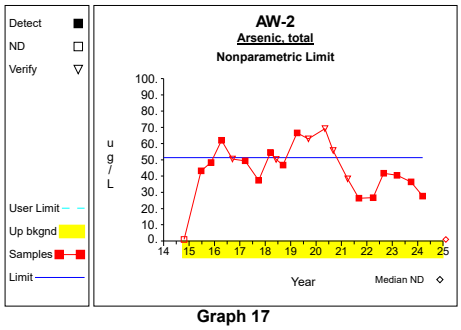
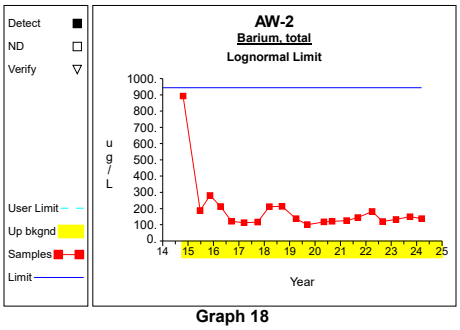
Up vs. Down Prediction Limits



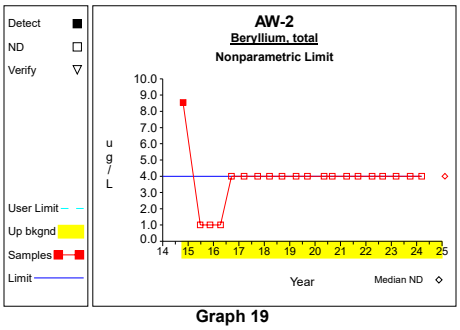
Graph 16



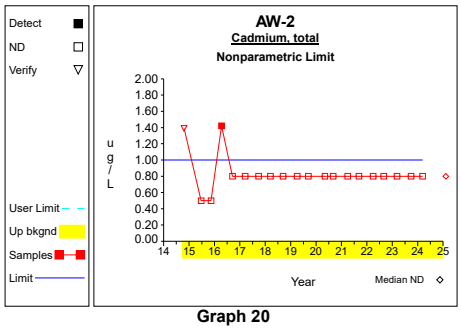
Graph 17



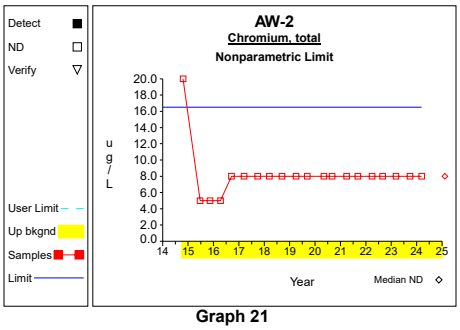
Graph 18



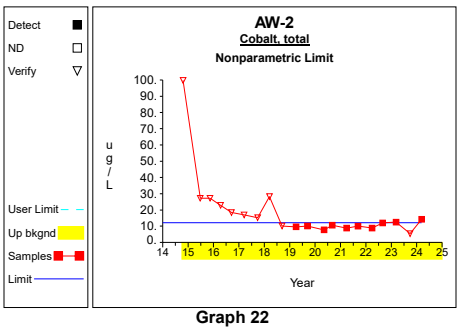
Graph 19



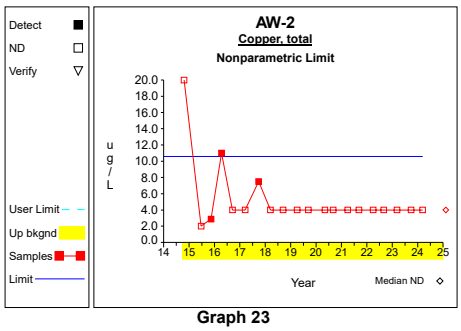
Graph 20



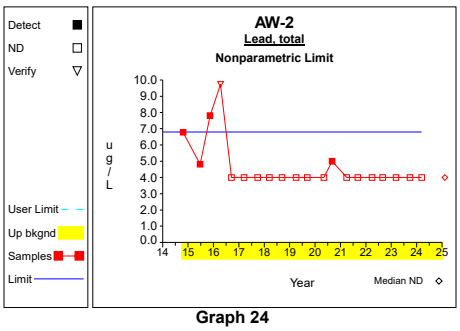
Graph 21



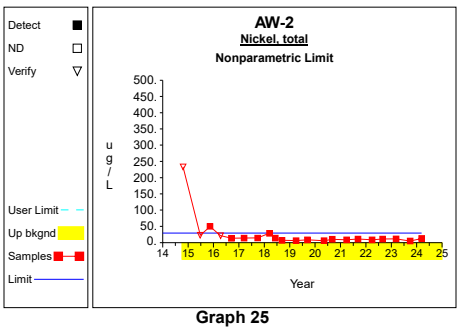
Graph 22



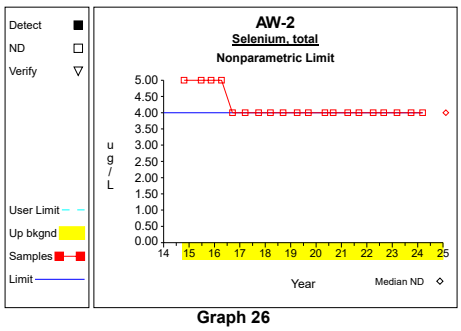
Graph 23



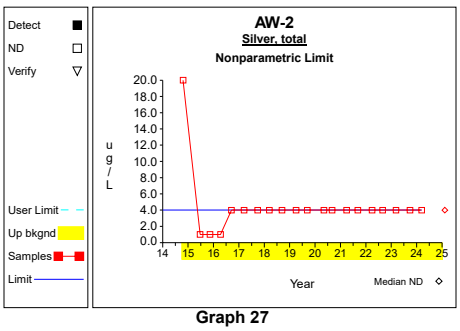
Graph 24



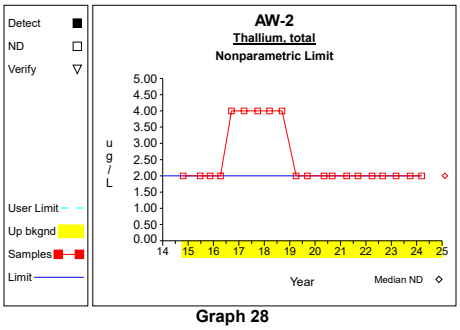
Graph 25



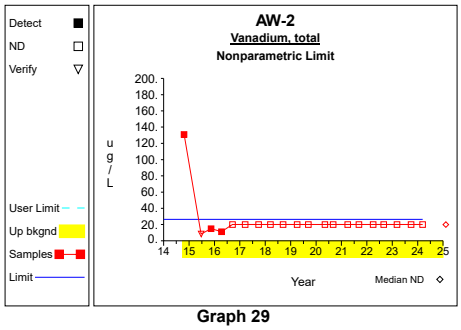
Graph 26



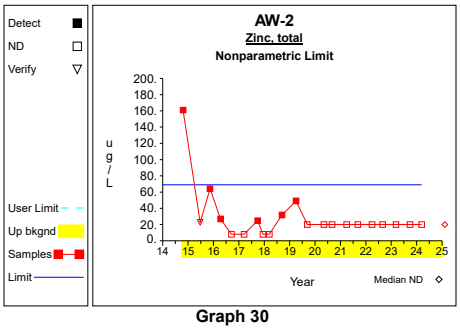
Graph 27



Graph 28



Graph 29



Graph 30

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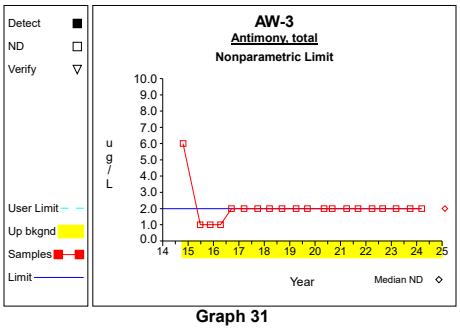
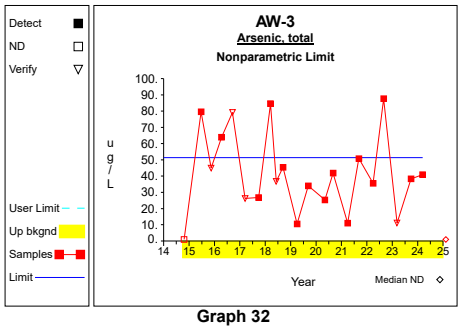
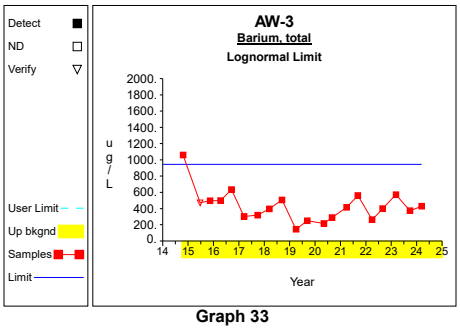
Up vs. Down Prediction Limits



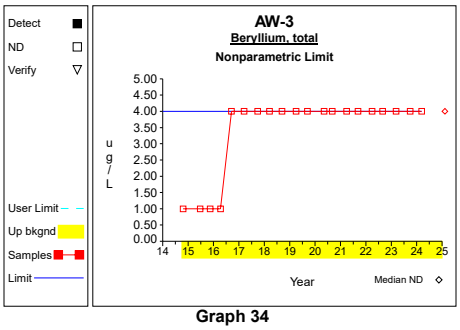
Graph 31



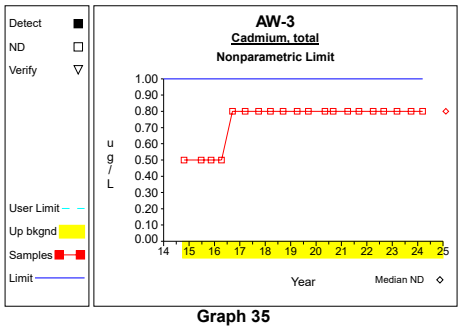
Graph 32



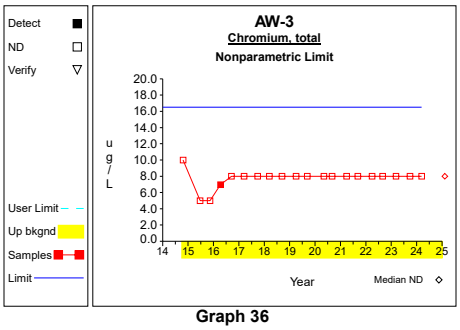
Graph 33



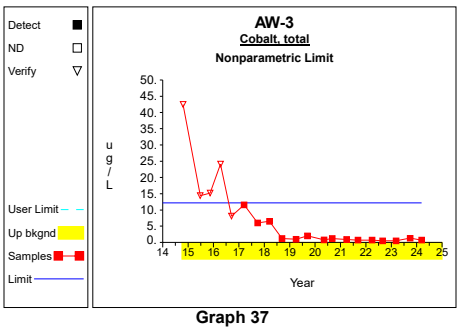
Graph 34



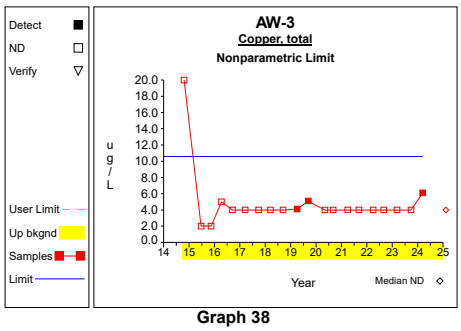
Graph 35



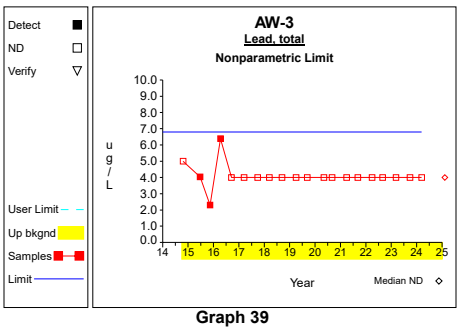
Graph 36



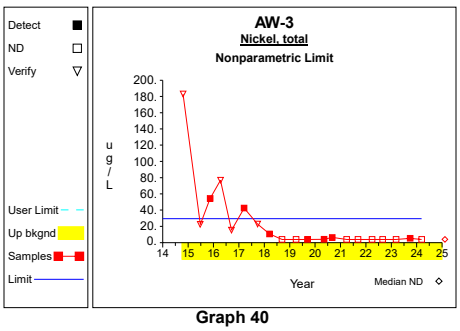
Graph 37



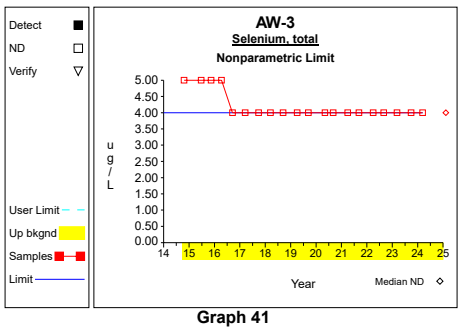
Graph 38



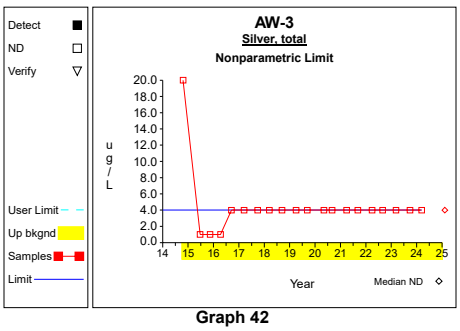
Graph 39



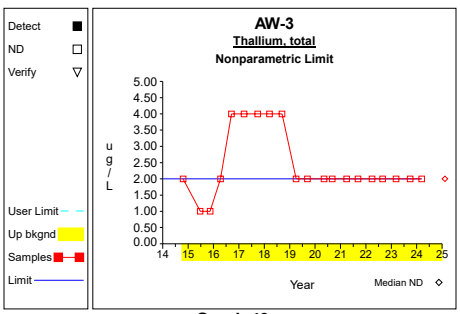
Graph 40



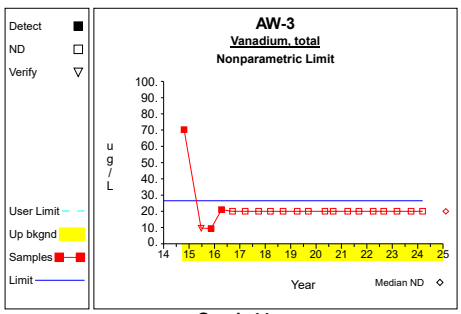
Graph 41



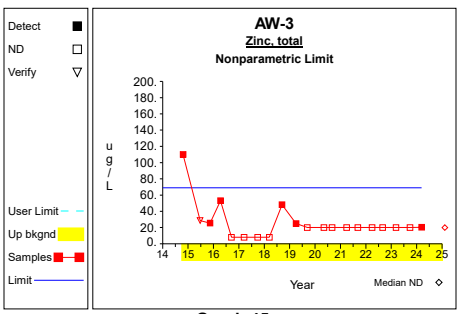
Graph 42



Graph 43



Graph 44



Graph 45

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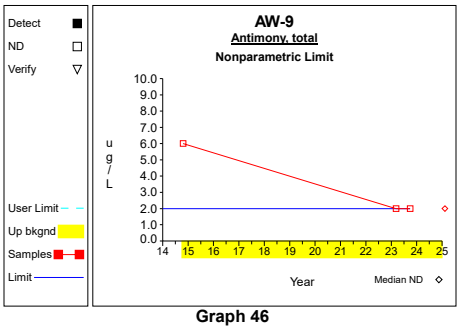
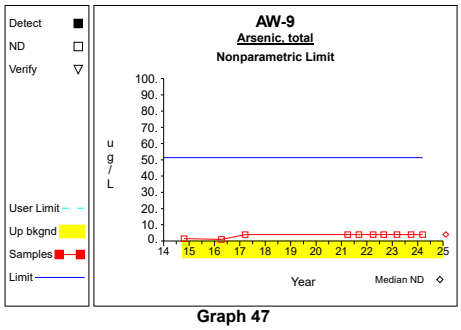
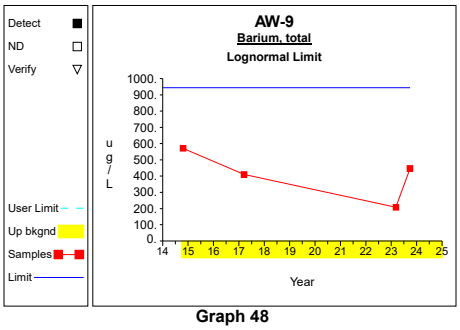
Up vs. Down Prediction Limits



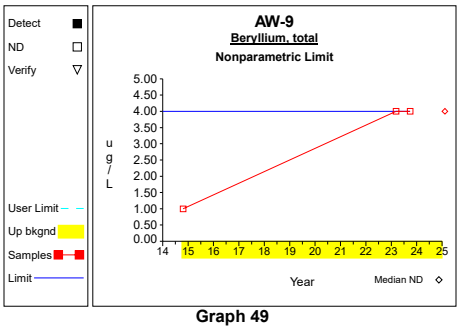
Graph 46



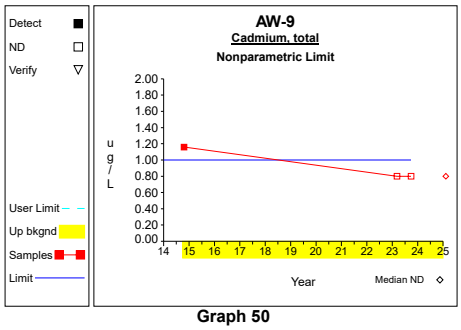
Graph 47



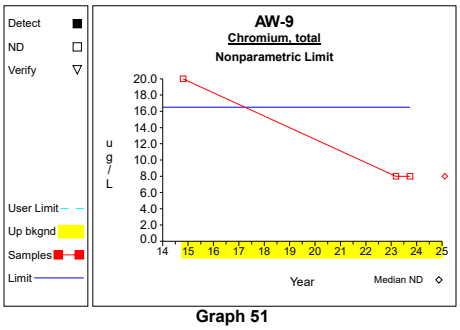
Graph 48



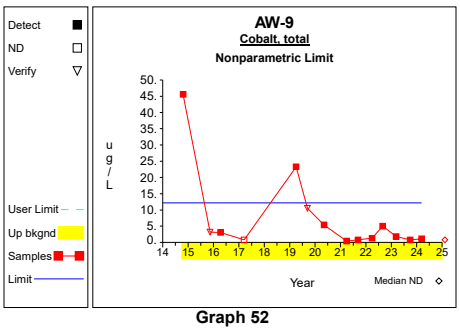
Graph 49



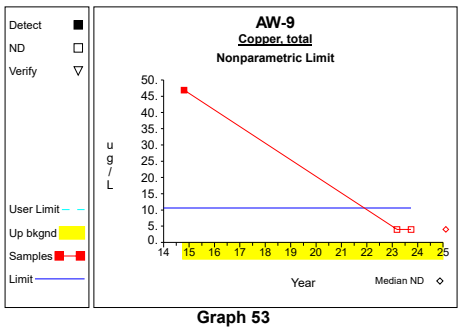
Graph 50



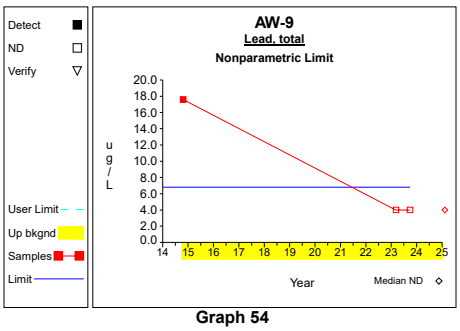
Graph 51



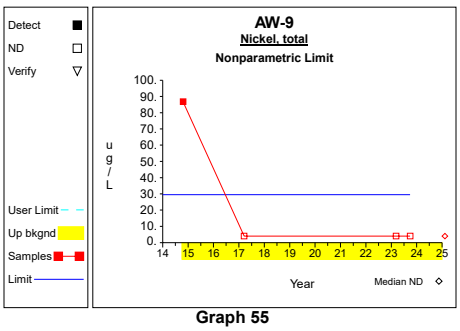
Graph 52



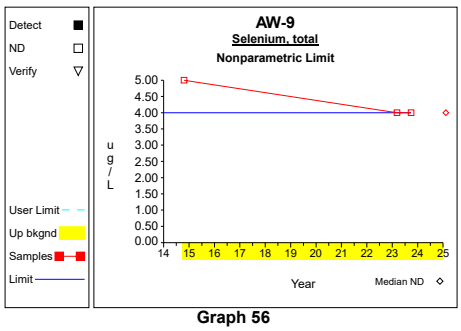
Graph 53



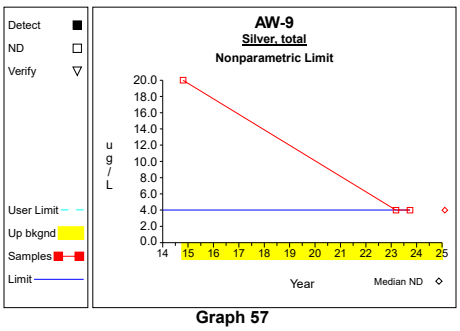
Graph 54



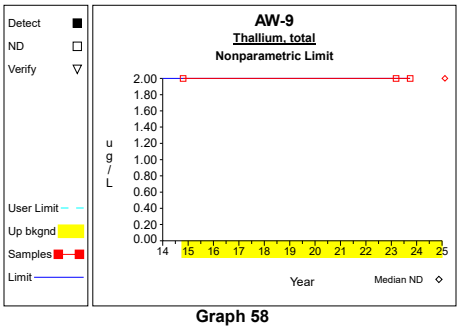
Graph 55



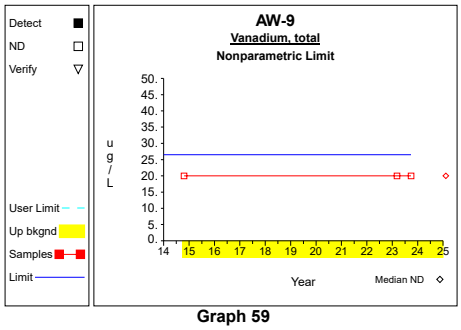
Graph 56



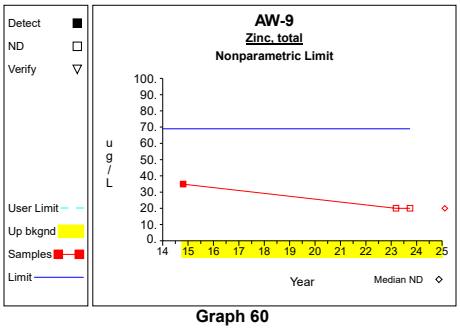
Graph 57



Graph 58



Graph 59



Graph 60

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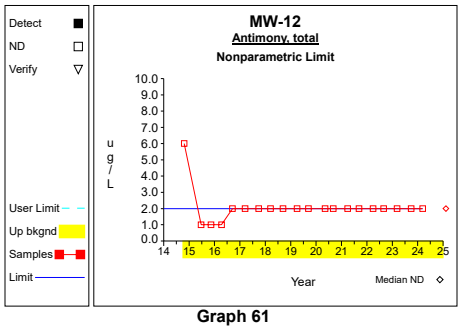
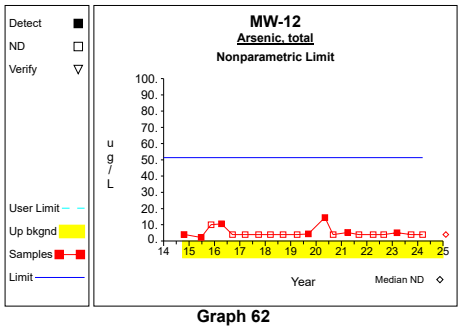
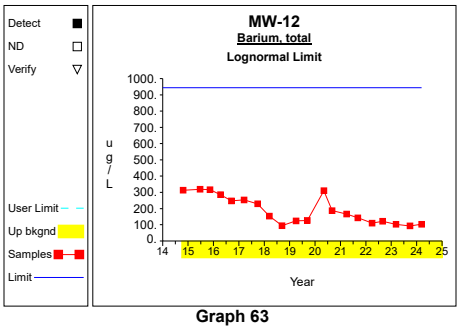
Up vs. Down Prediction Limits



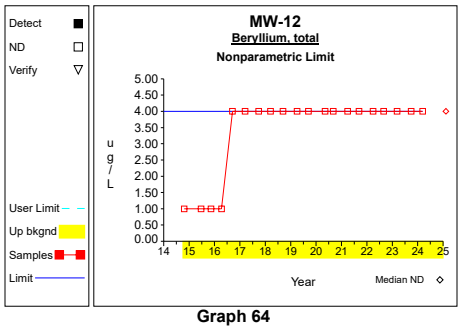
Graph 61



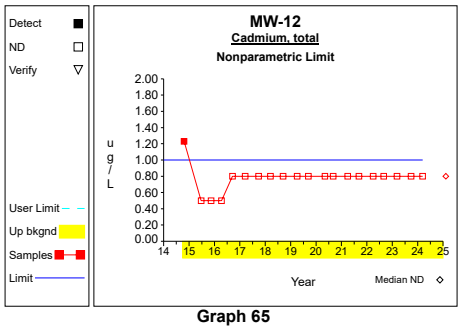
Graph 62



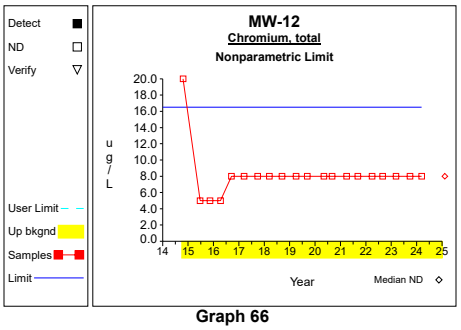
Graph 63



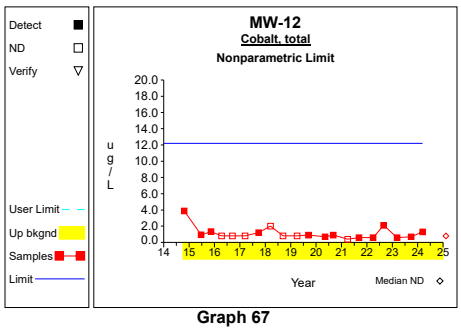
Graph 64



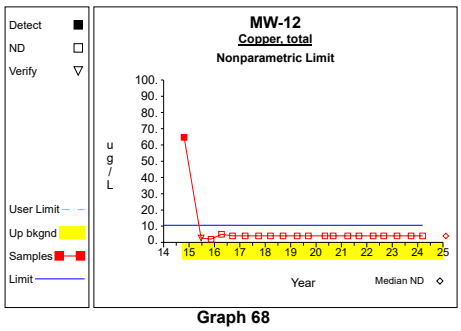
Graph 65



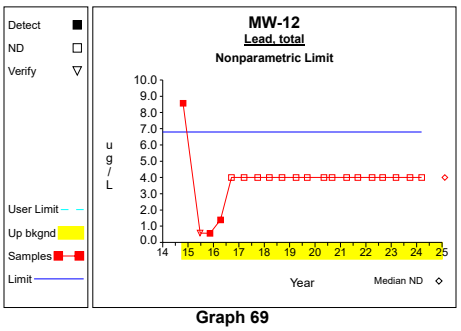
Graph 66



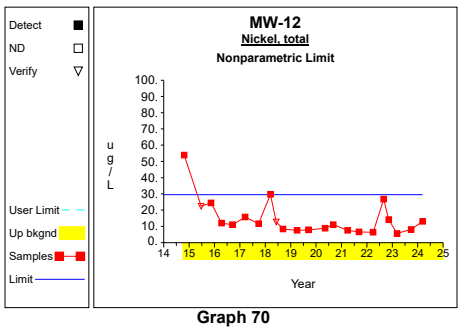
Graph 67



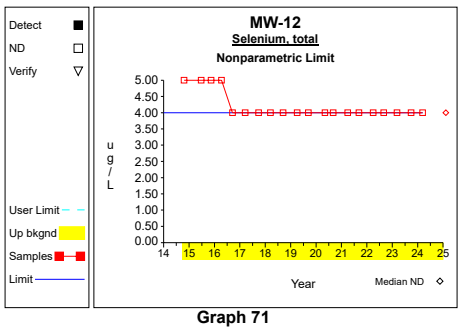
Graph 68



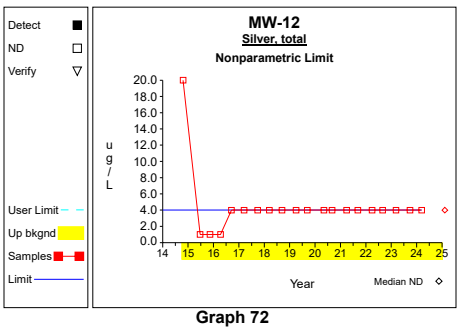
Graph 69



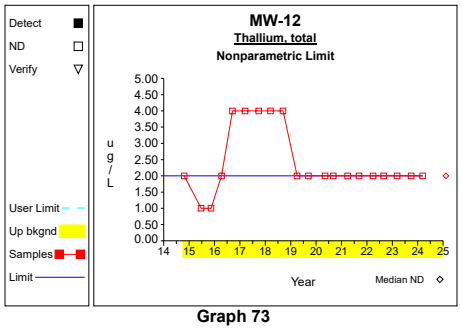
Graph 70



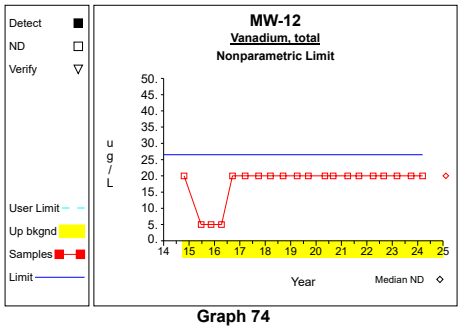
Graph 71



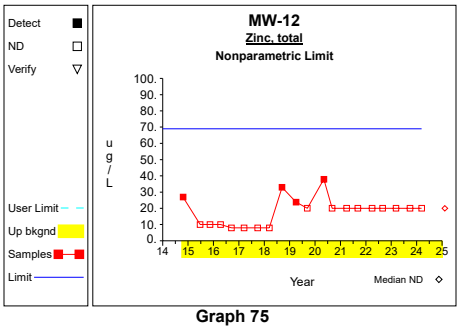
Graph 72



Graph 73



Graph 74



Graph 75

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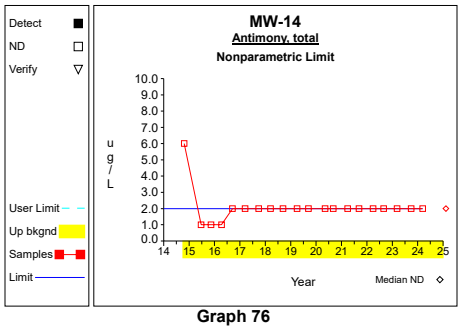
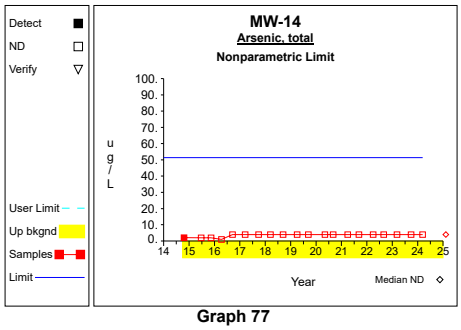
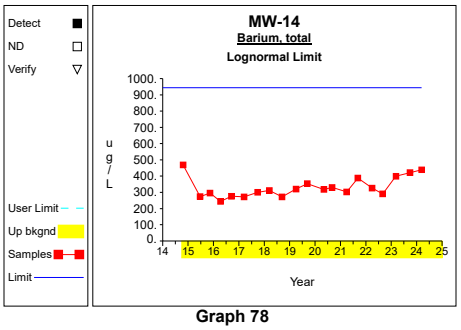
Up vs. Down Prediction Limits



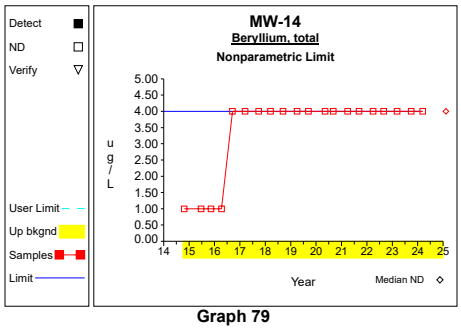
Graph 76



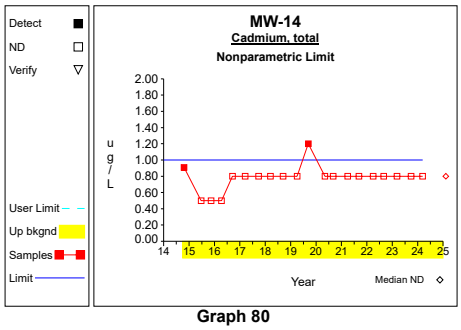
Graph 77



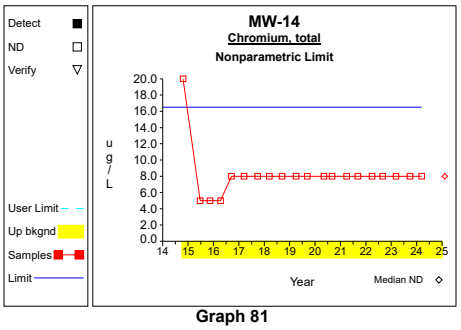
Graph 78



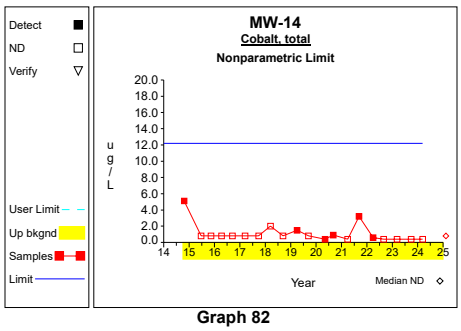
Graph 79



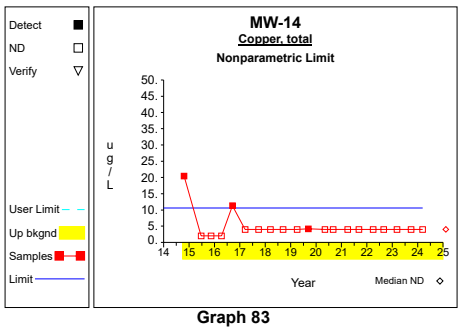
Graph 80



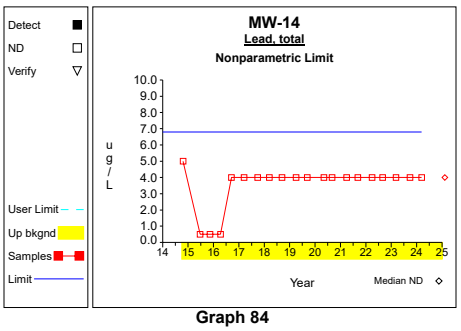
Graph 81



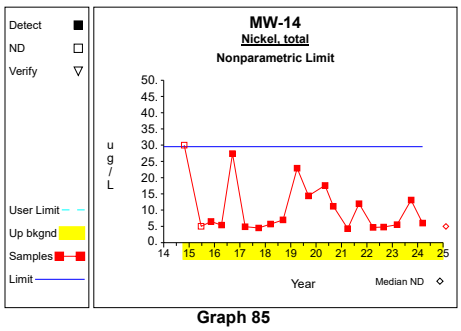
Graph 82



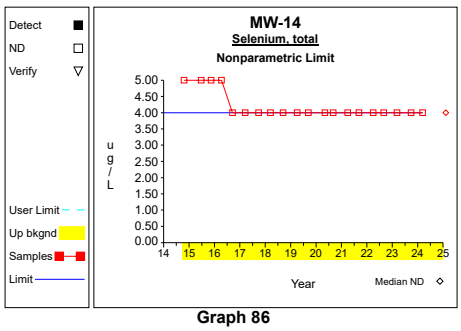
Graph 83



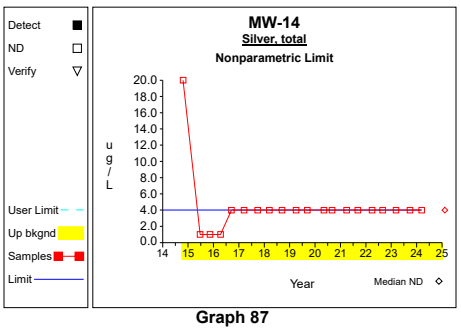
Graph 84



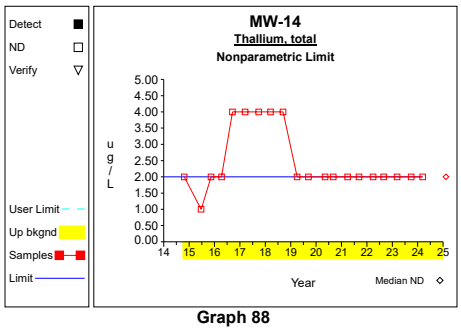
Graph 85



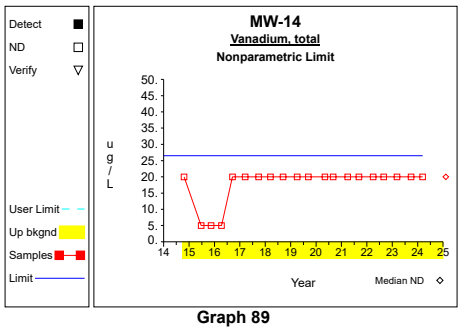
Graph 86



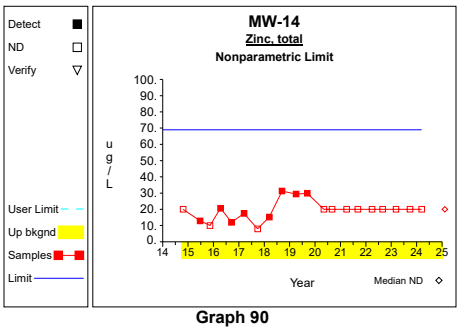
Graph 87



Graph 88



Graph 89



Graph 90

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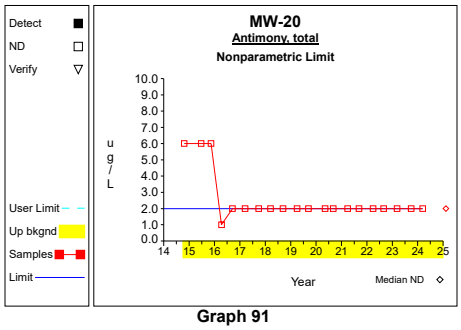
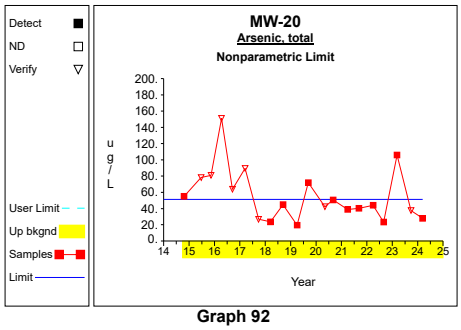
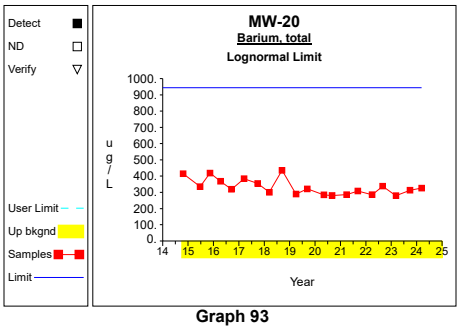
Up vs. Down Prediction Limits



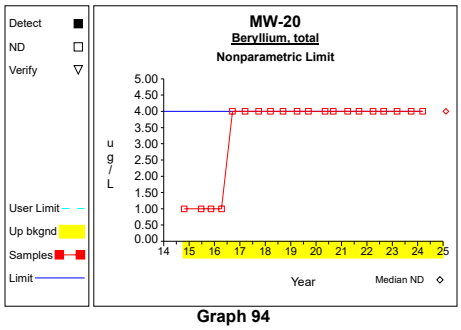
Graph 91



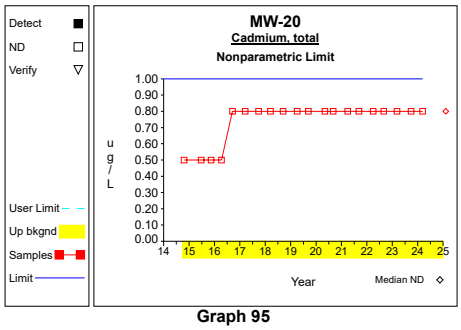
Graph 92



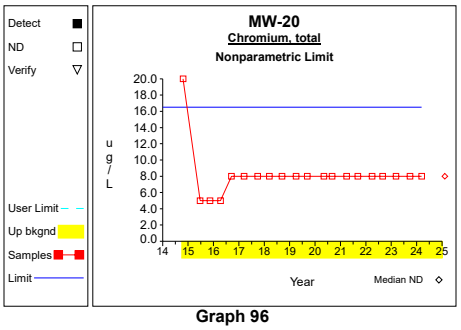
Graph 93



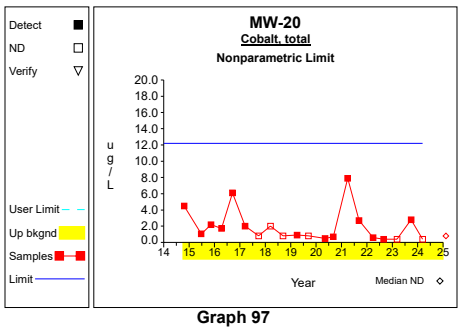
Graph 94



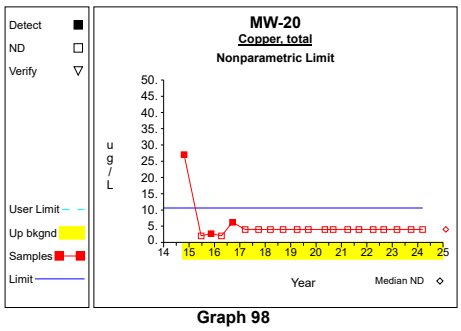
Graph 95



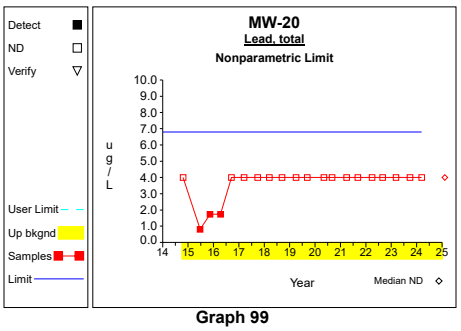
Graph 96



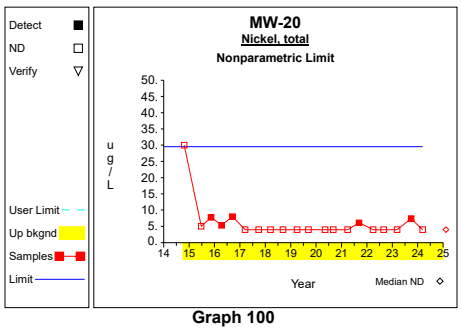
Graph 97



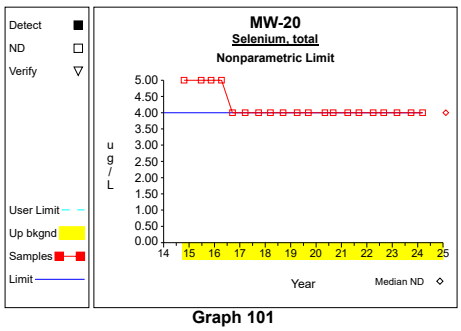
Graph 98



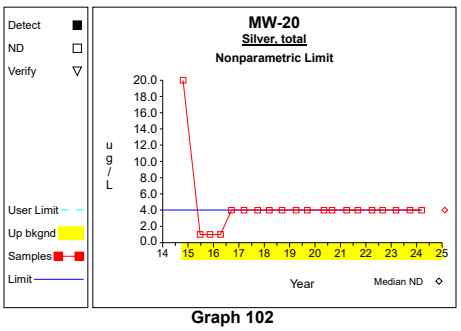
Graph 99



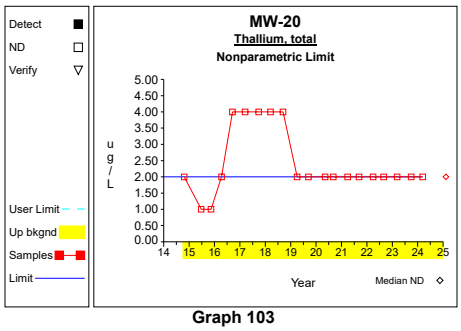
Graph 100



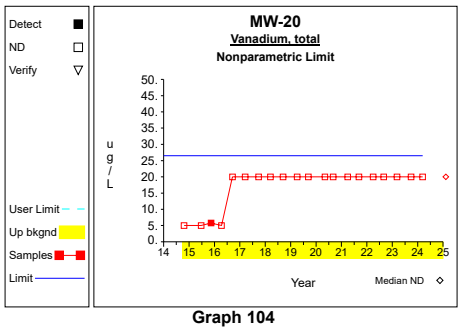
Graph 101



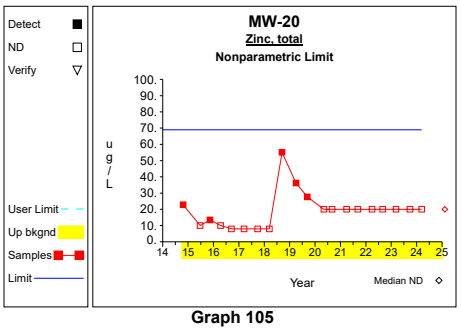
Graph 102



Graph 103



Graph 104



Graph 105

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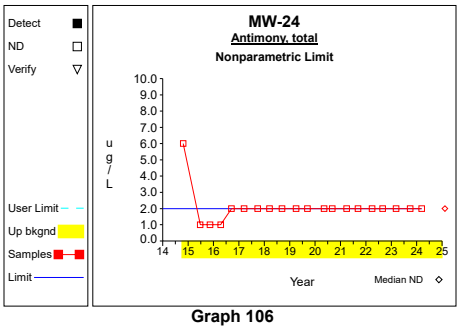
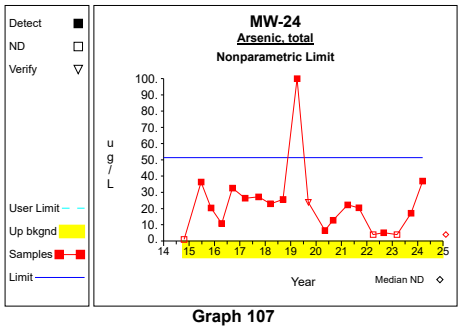
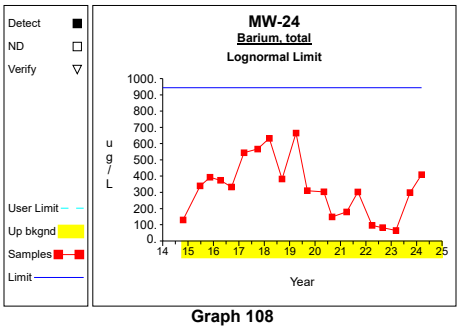
Up vs. Down Prediction Limits



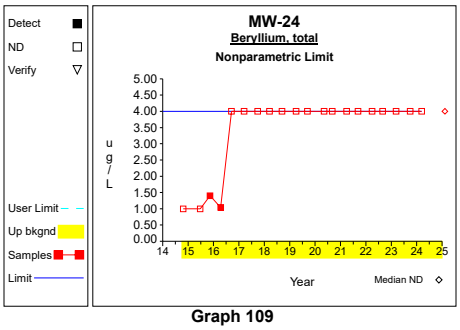
Graph 106



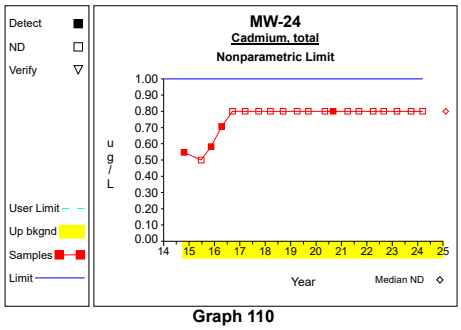
Graph 107



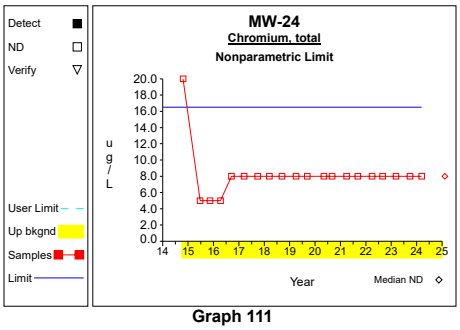
Graph 108



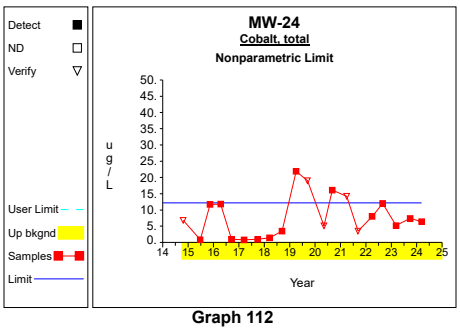
Graph 109



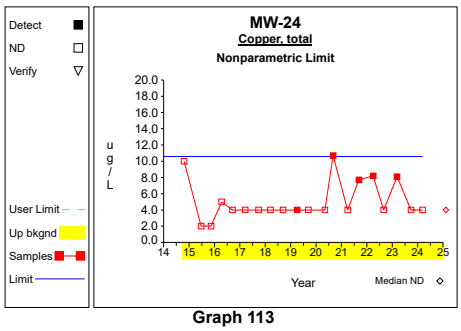
Graph 110



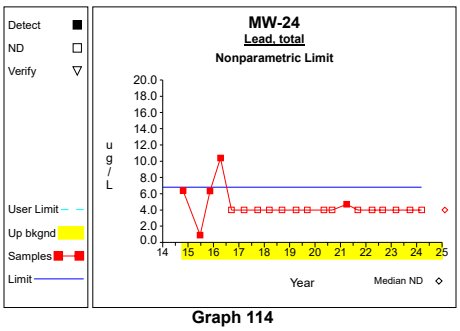
Graph 111



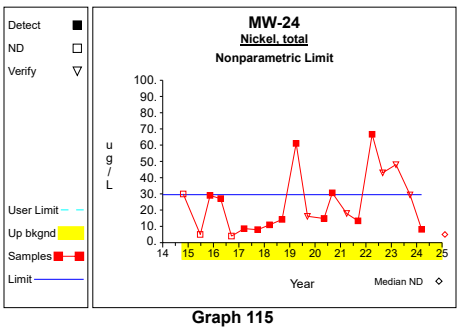
Graph 112



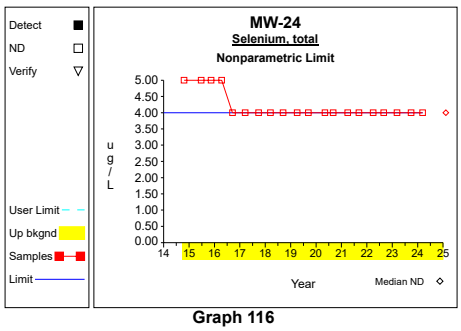
Graph 113



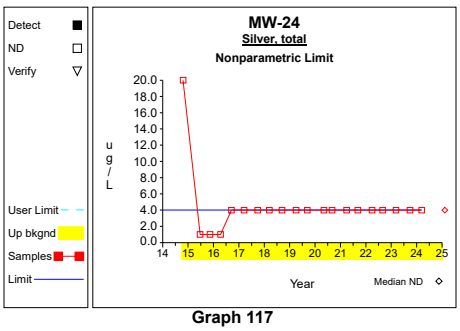
Graph 114



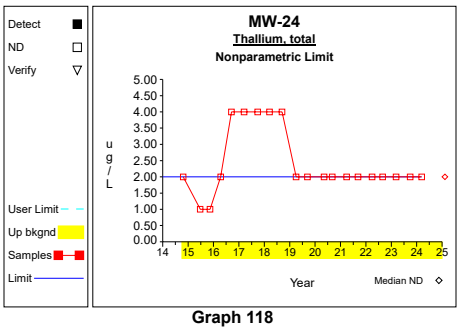
Graph 115



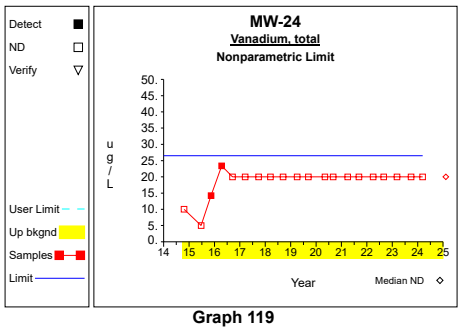
Graph 116



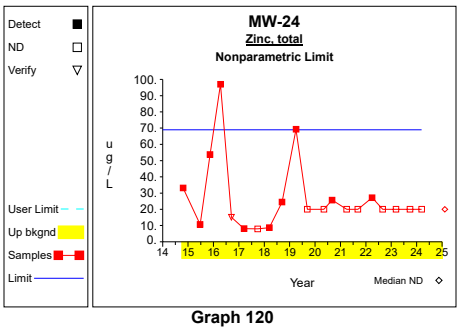
Graph 117



Graph 118



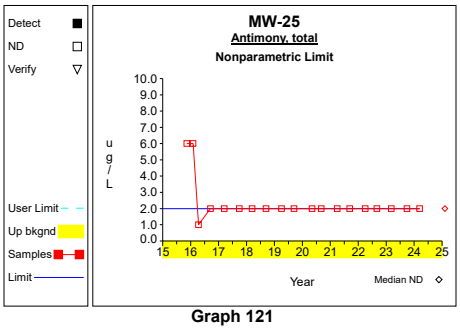
Graph 119



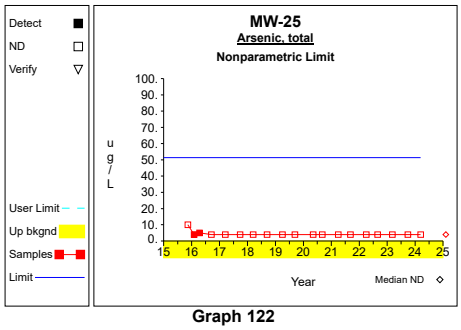
Graph 120

Prepared by: Otter Creek Environmental

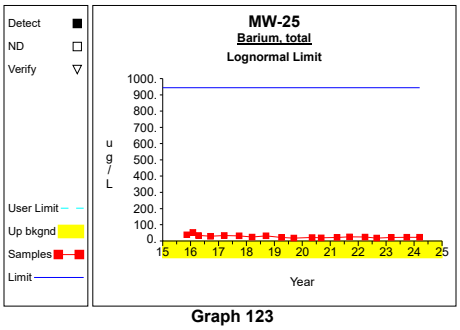
Up vs. Down Prediction Limits



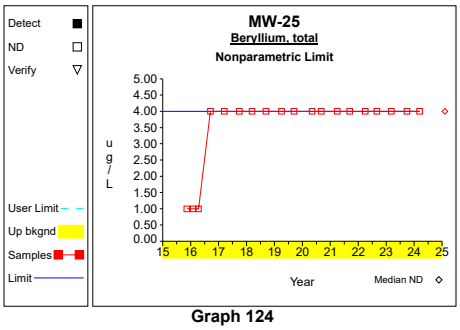
Graph 121



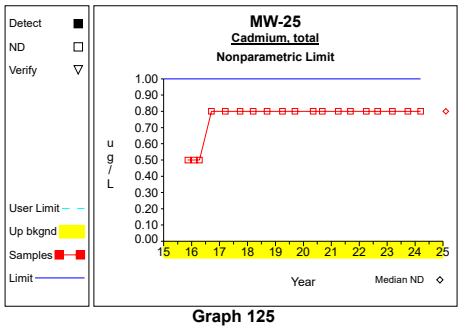
Graph 122



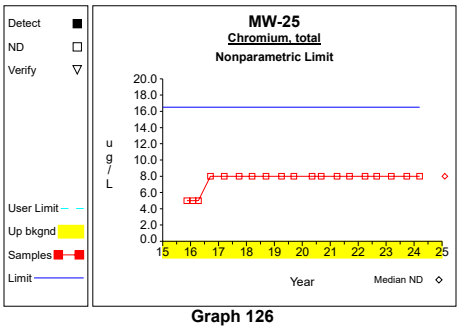
Graph 123



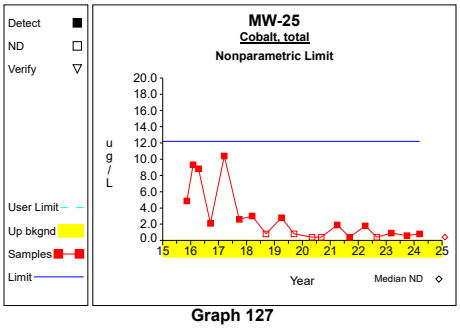
Graph 124



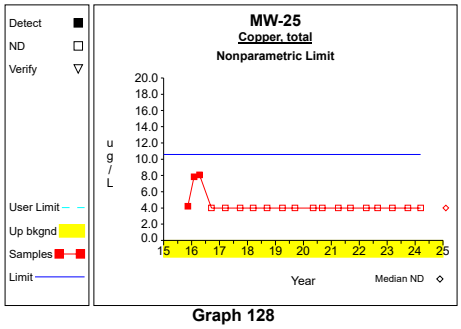
Graph 125



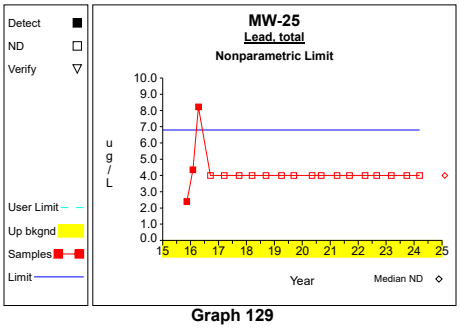
Graph 126



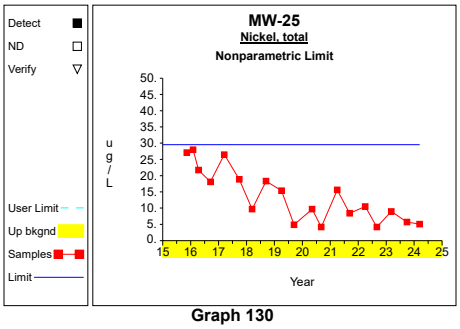
Graph 127



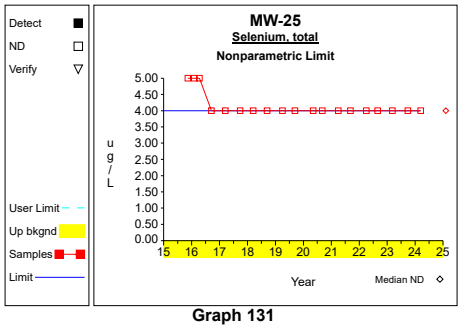
Graph 128



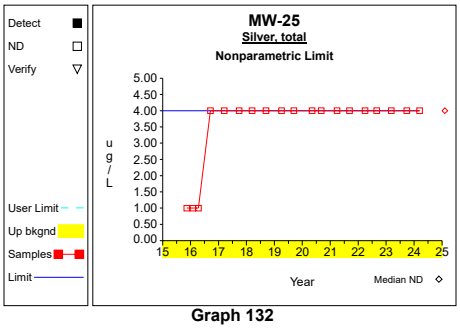
Graph 129



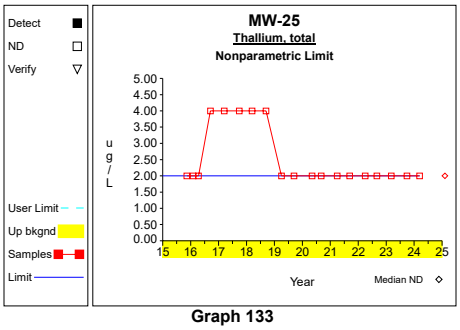
Graph 130



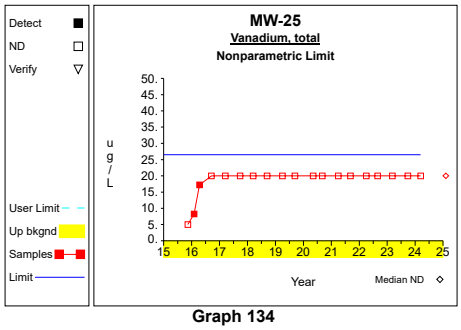
Graph 131



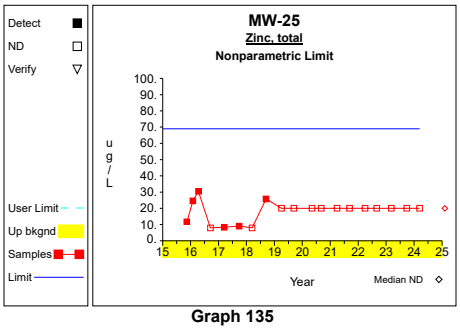
Graph 132



Graph 133



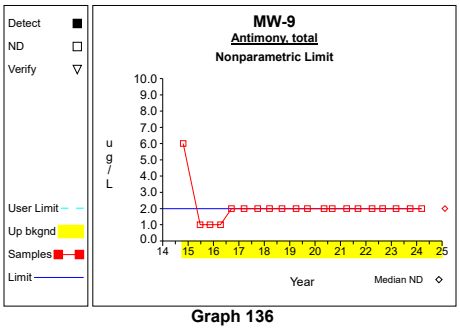
Graph 134



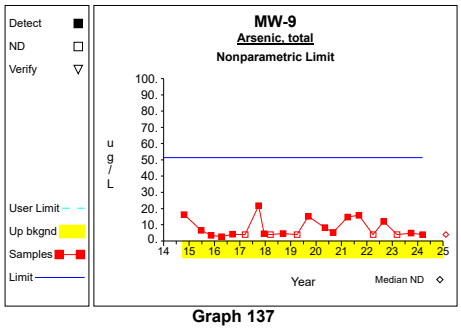
Graph 135

Prepared by: Otter Creek Environmental

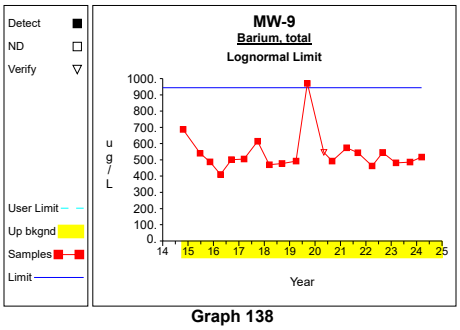
Up vs. Down Prediction Limits



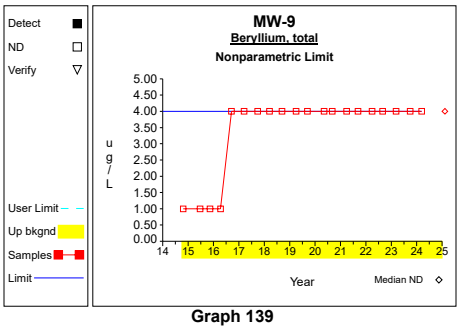
Graph 136



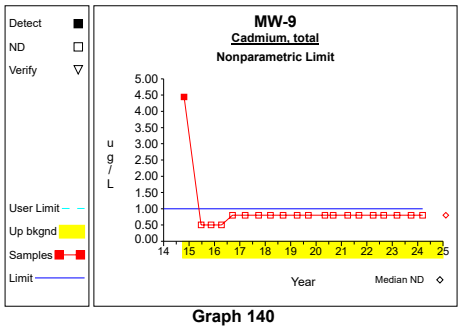
Graph 137



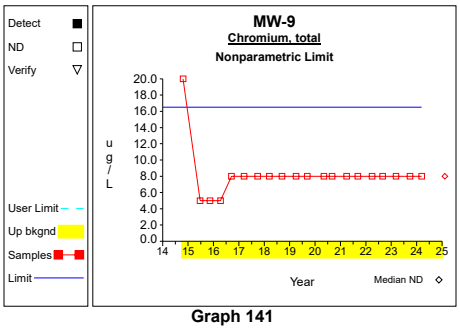
Graph 138



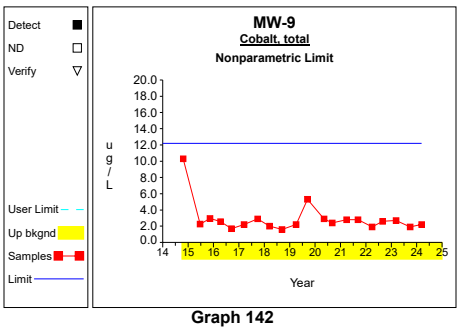
Graph 139



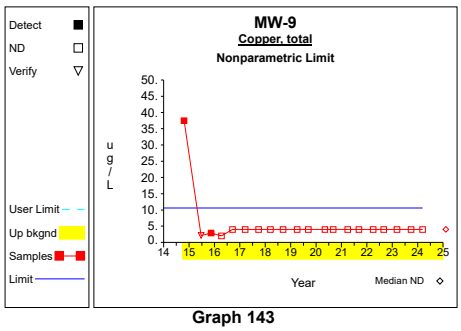
Graph 140



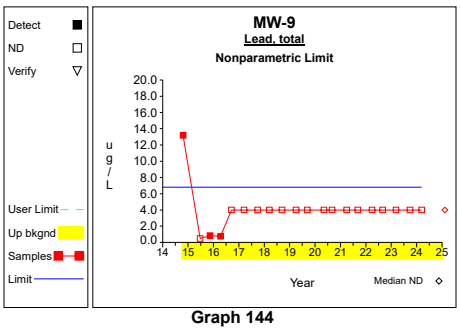
Graph 141



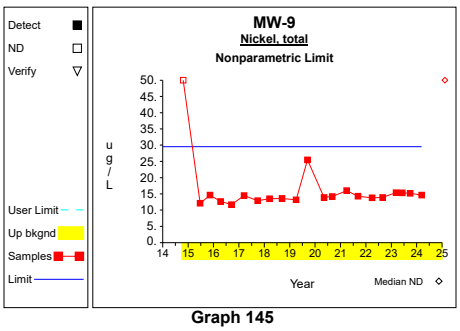
Graph 142



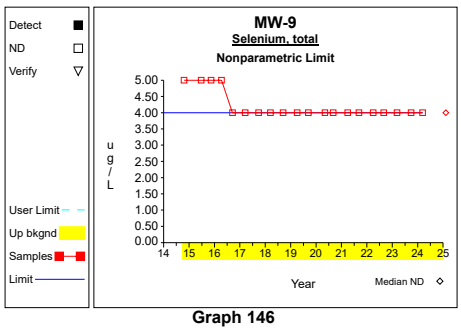
Graph 143



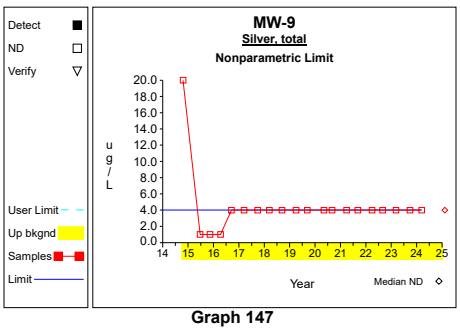
Graph 144



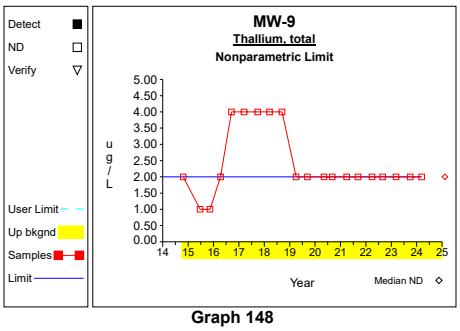
Graph 145



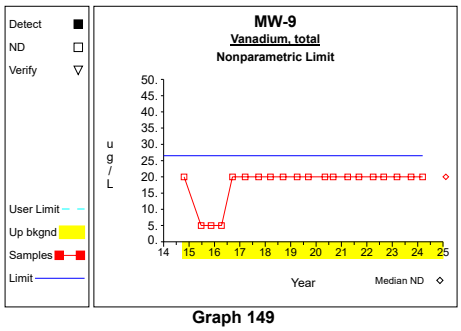
Graph 146



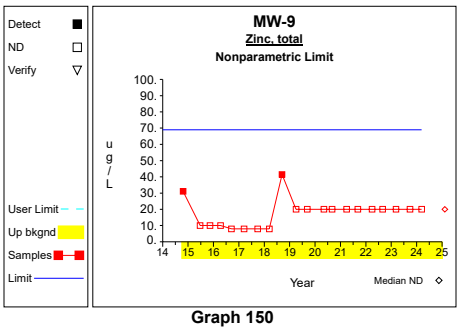
Graph 147



Graph 148



Graph 149

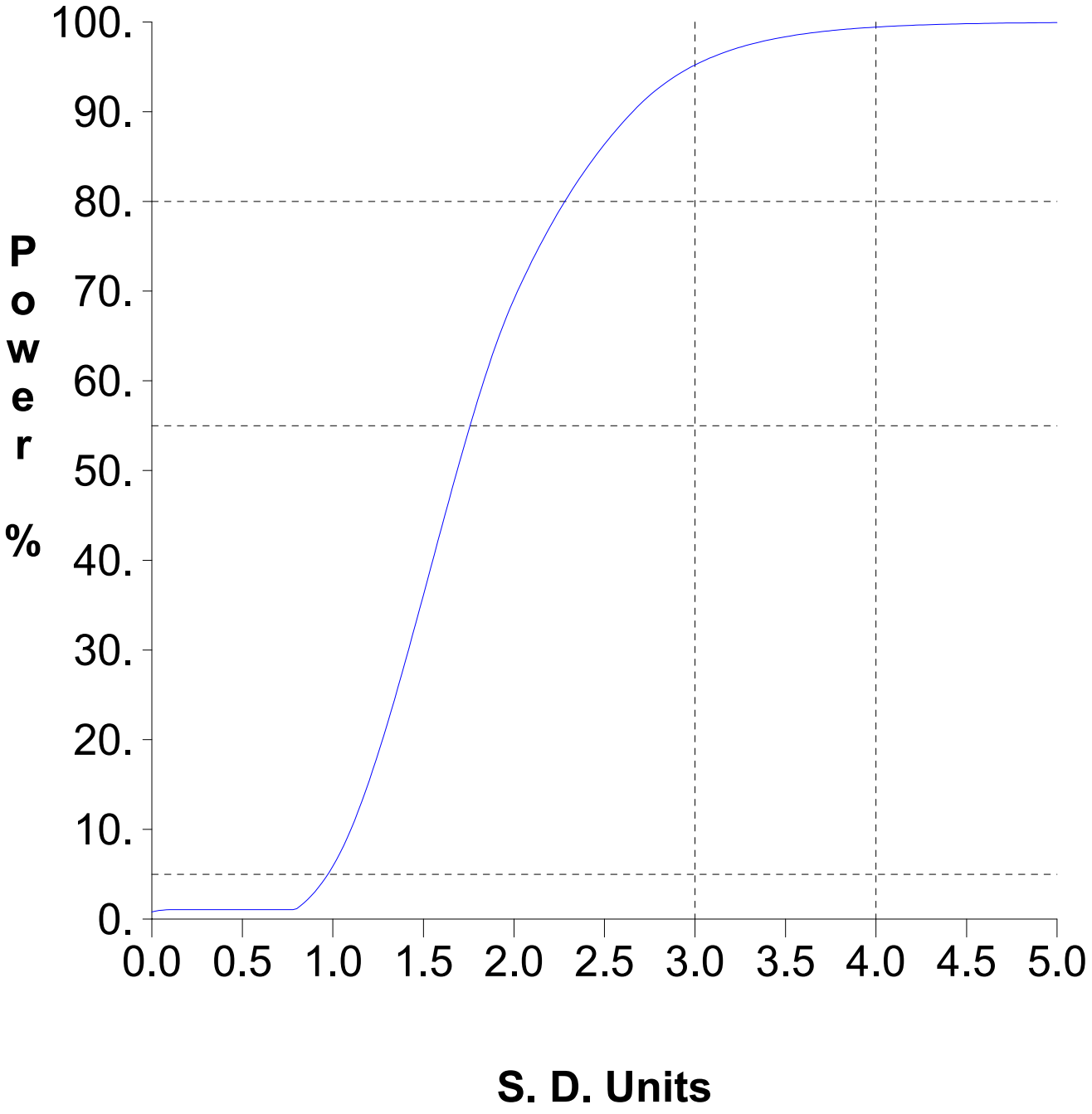


Graph 150

Prepared by: Otter Creek Environmental

False Positive and False Negative Rates for Current

Upgradient vs. Downgradient Monitoring Program



Attachment C

Assessment Statistics for Trace Metals

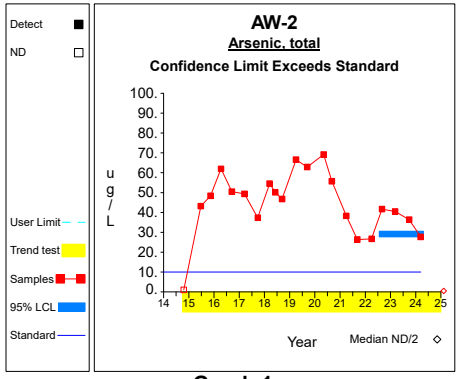
Table 1

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

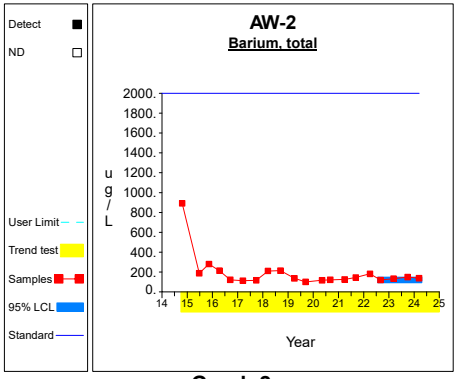
Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend	
Arsenic, total	ug/L	AW-2	4	36.575	6.337	1.176	29.121	44.029	10.000		**
Barium, total	ug/L	AW-2	4	135.250	12.420	1.176	120.641	149.859	2000.000		
Cobalt, total	ug/L	AW-2	4	11.025	3.866	1.176	6.477	15.573	2.100	dec	**
Nickel, total	ug/L	AW-2	4	10.100	3.481	1.176	6.005	14.195	100.000	dec	
Arsenic, total	ug/L	AW-3	4	44.475	31.752	1.176	7.125	81.825	10.000		
Barium, total	ug/L	AW-3	4	443.250	88.831	1.176	338.759	547.741	2000.000		
Cobalt, total	ug/L	AW-3	4	0.750	0.379	1.176	0.305	1.195	2.100	dec	
Nickel, total	ug/L	AW-3	4	2.825	1.650	1.176	0.884	4.766	100.000	dec	
Arsenic, total	ug/L	AW-9	4	2.000	0.000	1.176	2.000	2.000	10.000		
Barium, total	ug/L	AW-9	4	409.000	150.654	1.176	231.787	586.213	2000.000		
Cobalt, total	ug/L	AW-9	4	2.175	1.929	1.176	0.000	4.445	2.100		
Nickel, total	ug/L	AW-9	4	23.200	42.400	1.176	0.000	73.075	100.000		
Arsenic, total	ug/L	MW-12	4	2.775	1.550	1.176	0.952	4.598	10.000		
Barium, total	ug/L	MW-12	4	105.450	12.139	1.176	91.172	119.728	2000.000	dec	
Cobalt, total	ug/L	MW-12	4	1.175	0.690	1.176	0.364	1.986	2.100		
Nickel, total	ug/L	MW-12	4	10.275	4.043	1.176	5.519	15.031	100.000	dec	
Arsenic, total	ug/L	MW-14	4	2.000	0.000	1.176	2.000	2.000	10.000		
Barium, total	ug/L	MW-14	4	387.250	66.865	1.176	308.598	465.902	2000.000	inc	
Cobalt, total	ug/L	MW-14	4	0.400	0.000	1.176	0.400	0.400	2.100		
Nickel, total	ug/L	MW-14	4	7.350	3.865	1.176	2.804	11.896	100.000		
Arsenic, total	ug/L	MW-20	4	48.675	38.672	1.176	3.186	94.164	10.000		
Barium, total	ug/L	MW-20	4	314.000	25.469	1.176	284.041	343.959	2000.000		
Cobalt, total	ug/L	MW-20	4	1.000	1.200	1.176	0.000	2.412	2.100		
Nickel, total	ug/L	MW-20	4	3.350	2.700	1.176	0.174	6.526	100.000		
Arsenic, total	ug/L	MW-24	4	15.275	15.819	1.176	0.000	33.883	10.000		
Barium, total	ug/L	MW-24	4	213.700	167.821	1.176	16.294	411.106	2000.000		
Cobalt, total	ug/L	MW-24	4	7.750	2.973	1.176	4.253	11.247	2.100		**
Nickel, total	ug/L	MW-24	4	32.150	17.796	1.176	11.217	53.083	100.000		
Arsenic, total	ug/L	MW-25	4	2.000	0.000	1.176	2.000	2.000	10.000		
Barium, total	ug/L	MW-25	4	21.850	2.391	1.176	19.038	24.662	2000.000	dec	
Cobalt, total	ug/L	MW-25	4	0.625	0.310	1.176	0.261	0.989	2.100		
Nickel, total	ug/L	MW-25	4	6.000	2.093	1.176	3.538	8.462	100.000	dec	
Arsenic, total	ug/L	MW-9	4	5.750	4.403	1.176	0.570	10.930	10.000		
Barium, total	ug/L	MW-9	4	507.250	29.781	1.176	472.219	542.281	2000.000		
Cobalt, total	ug/L	MW-9	4	2.350	0.370	1.176	1.915	2.785	2.100		
Nickel, total	ug/L	MW-9	4	15.125	0.359	1.176	14.702	15.548	100.000		

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

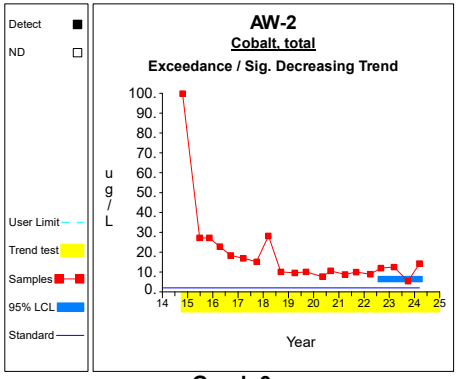
Confidence Limits (Assessment)



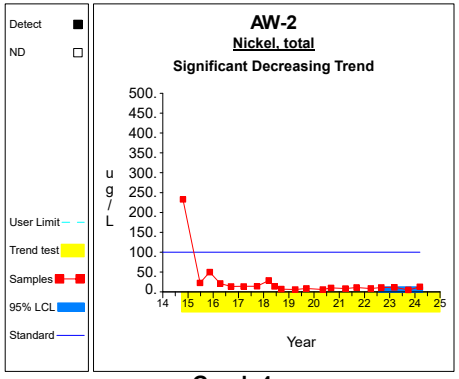
Graph 1



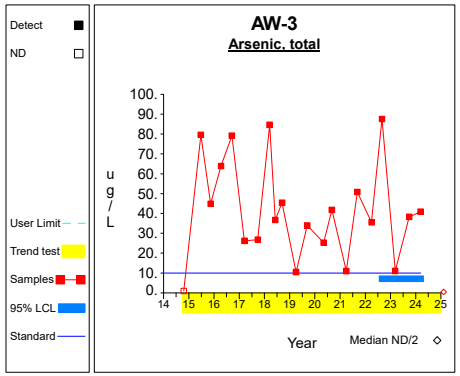
Graph 2



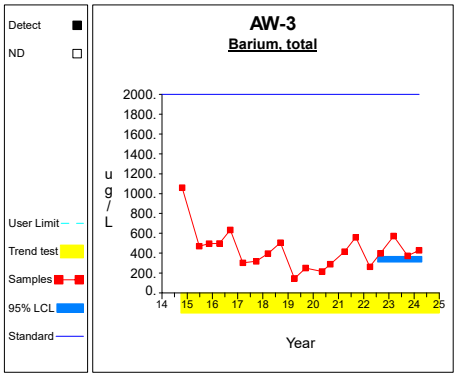
Graph 3



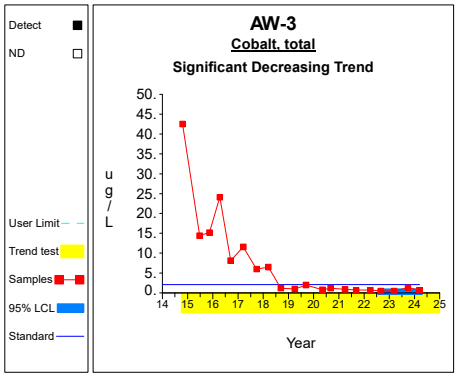
Graph 4



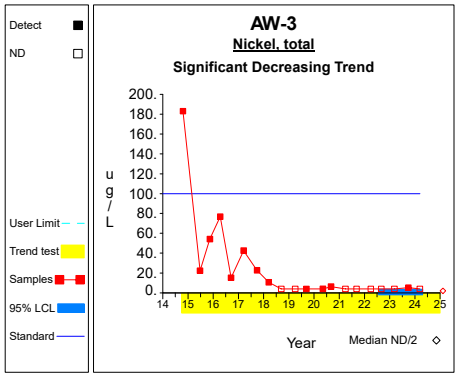
Graph 5



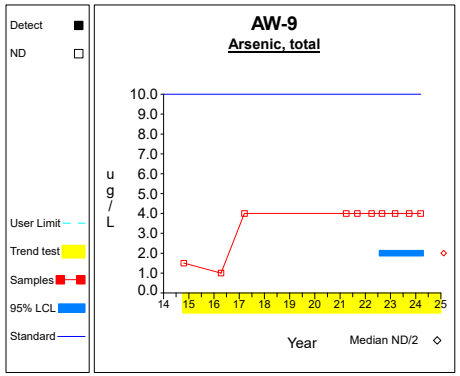
Graph 6



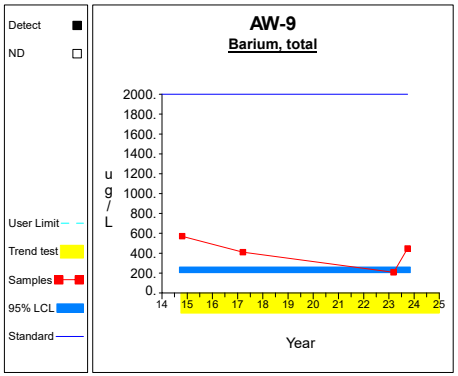
Graph 7



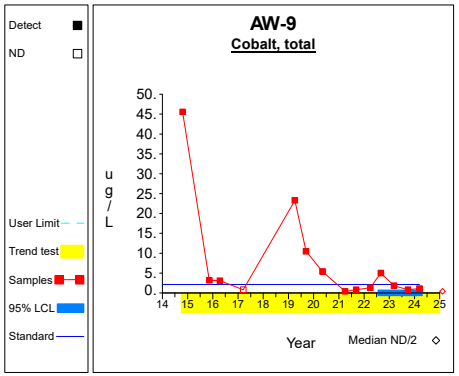
Graph 8



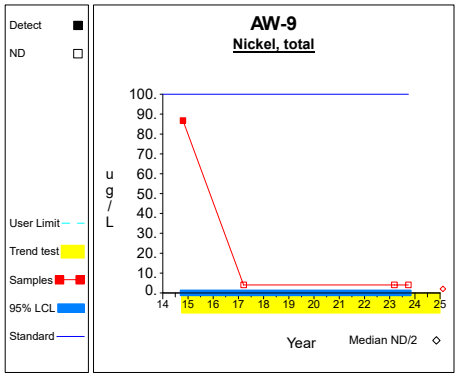
Graph 9



Graph 10



Graph 11



Graph 12

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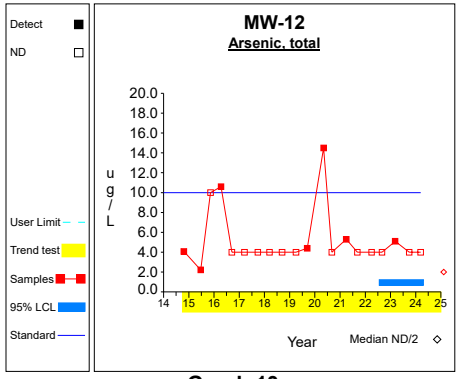
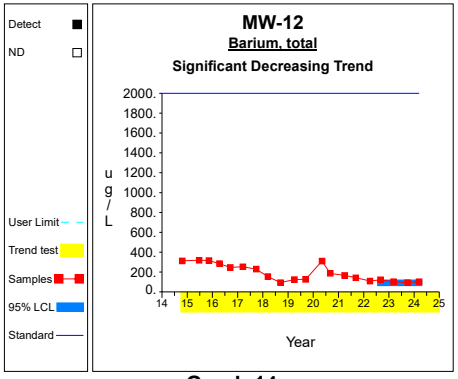
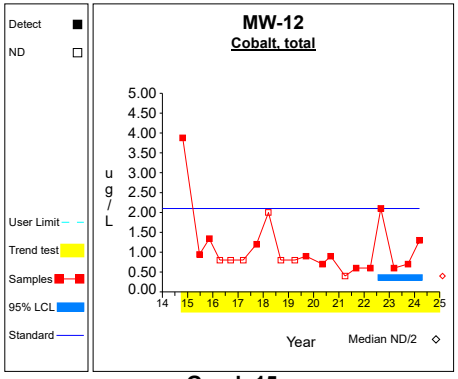
Confidence Limits (Assessment)



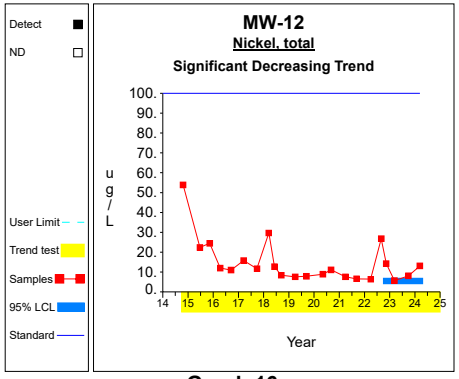
Graph 13



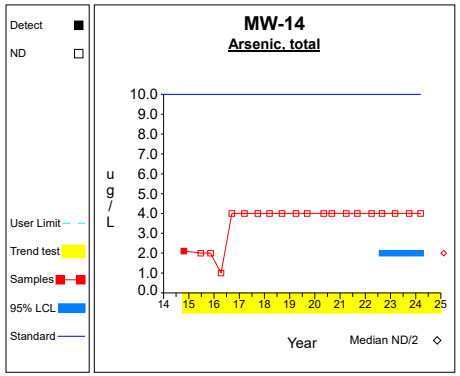
Graph 14



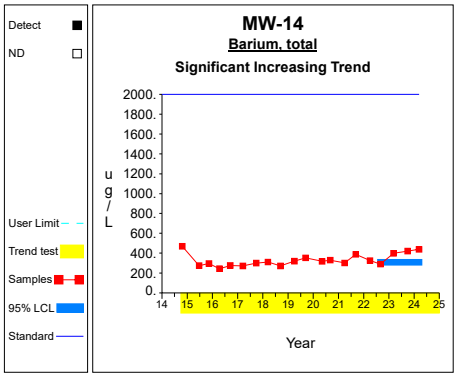
Graph 15



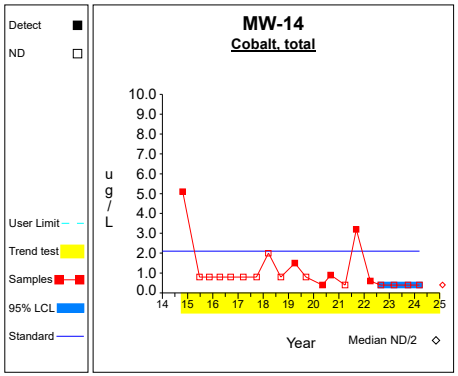
Graph 16



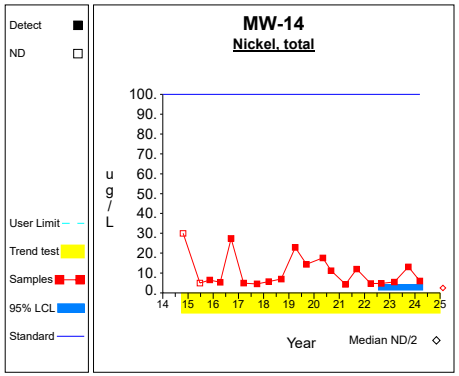
Graph 17



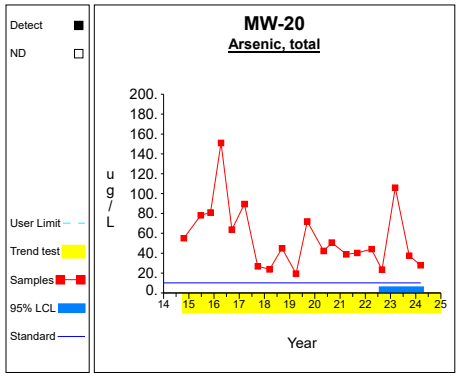
Graph 18



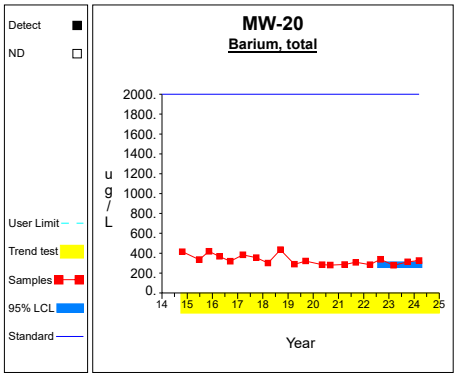
Graph 19



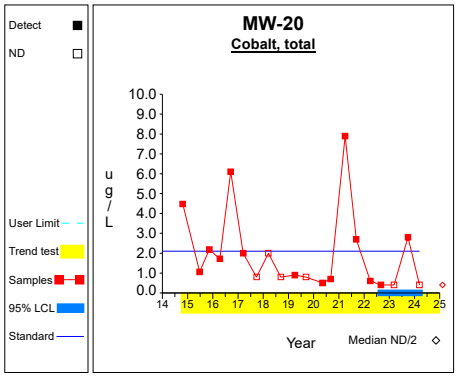
Graph 20



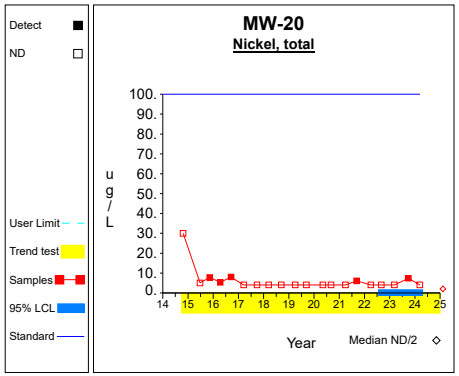
Graph 21



Graph 22



Graph 23



Graph 24

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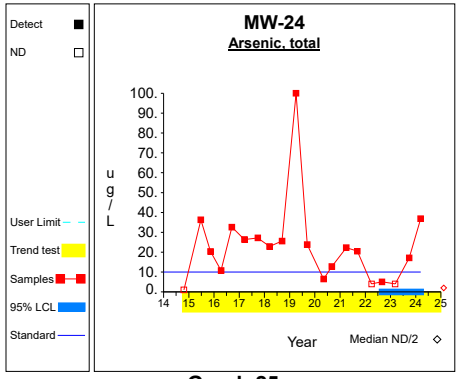
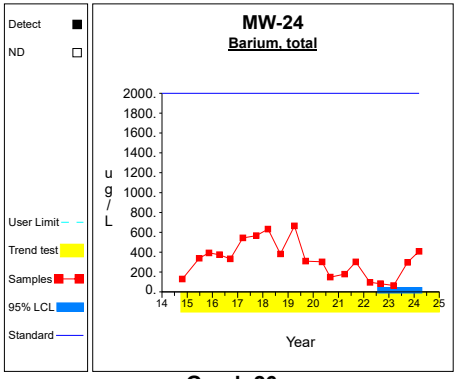
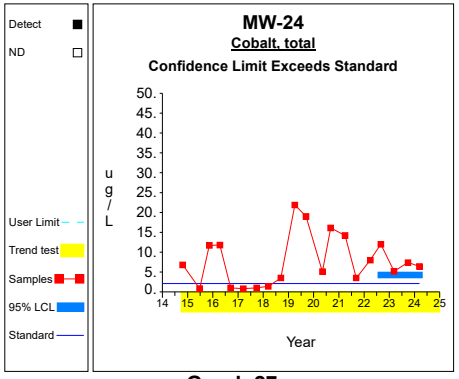
Confidence Limits (Assessment)



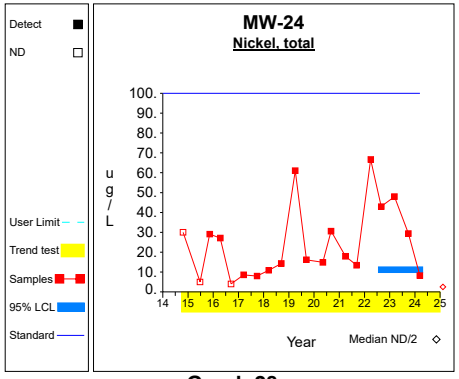
Graph 25



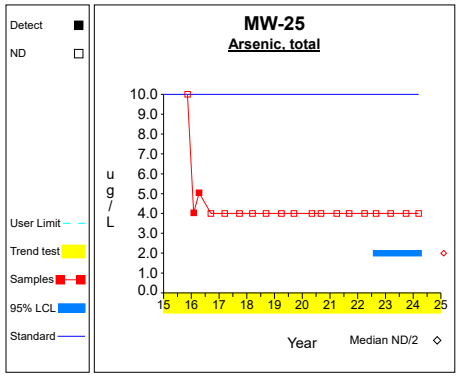
Graph 26



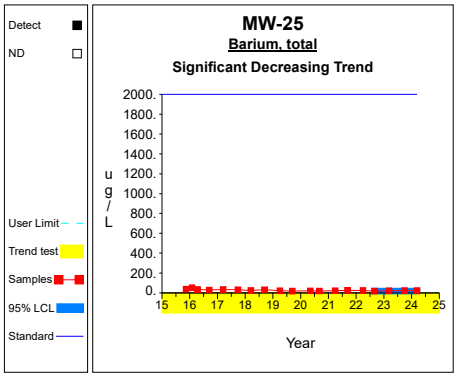
Graph 27



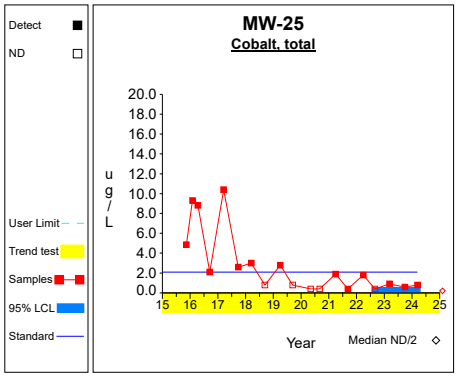
Graph 28



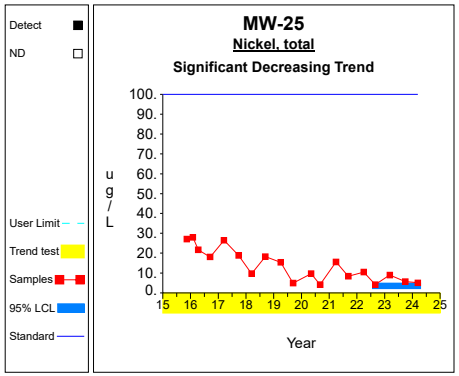
Graph 29



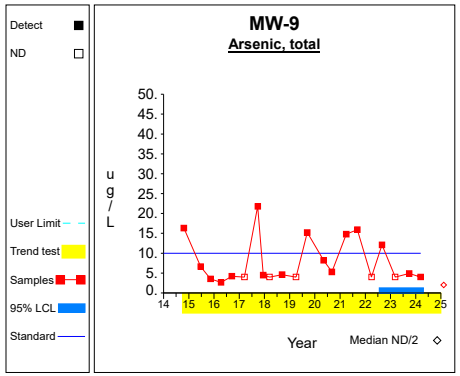
Graph 30



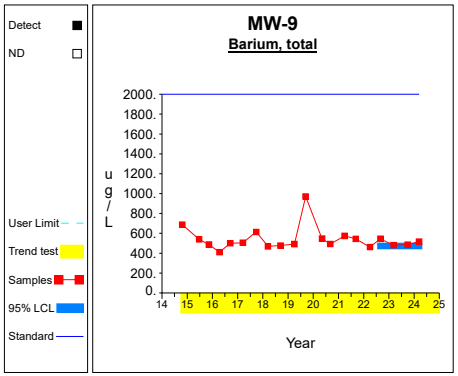
Graph 31



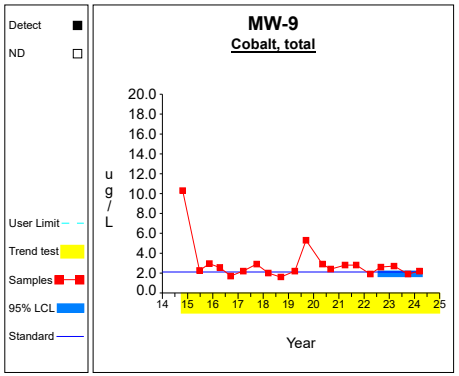
Graph 32



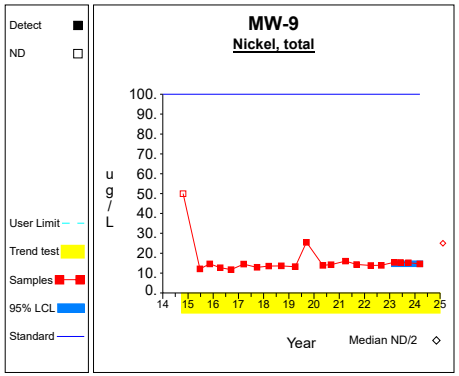
Graph 33



Graph 34



Graph 35



Graph 36

Attachment D

Summary Tables and Graphs for the Intrawell Comparisons

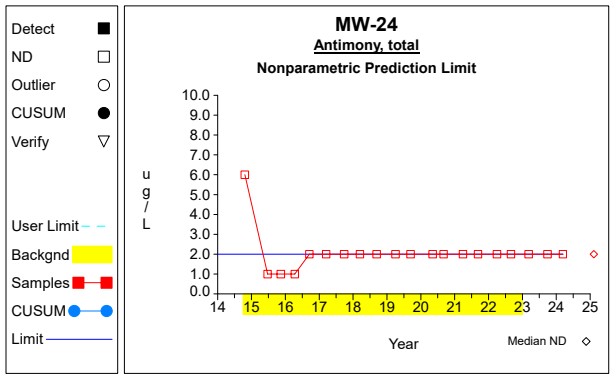
Table 1

Summary Statistics and Intermediate Computations for Combined Shewhart-CUSUM Control Charts

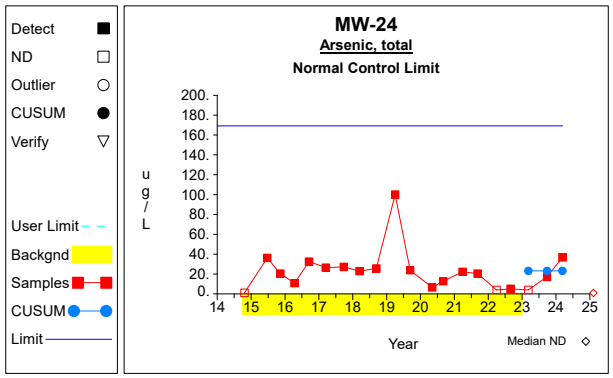
Constituent	Units	Well	N(back)	N(mon)	N(tot)	Mean	SD	R(i-1)	R(i)	S(i-1)	S(i)	Limit	Type	Conf	
Antimony, total	ug/L	MW-24	17	3	29			2.0000	2.0000			2.0000	nonpar	.99	**
Arsenic, total	ug/L	MW-24	17	3	29	23.2471	22.4453	17.1000	36.9000	23.2471	23.2471	169.1415	normal		
Barium, total	ug/L	MW-24	17	3	29	340.0529	181.2577	298.0000	409.0000	340.0529	340.0529	1518.2280	normal		
Beryllium, total	ug/L	MW-24	17	3	29			4.0000	4.0000			4.0000	nonpar	.99	**
Cadmium, total	ug/L	MW-24	17	3	29			0.8000	0.8000			0.8000	nonpar	.99	**
Chromium, total	ug/L	MW-24	17	3	29			8.0000	8.0000			8.0000	nonpar	.99	**
Cobalt, total	ug/L	MW-24	17	3	29	8.1549	6.8788	7.4000	6.4000	8.1549	8.1549	52.8671	normal		
Copper, total	ug/L	MW-24	17	3	29			4.0000	4.0000			10.7000	nonpar	.99	**
Lead, total	ug/L	MW-24	16	3	29	4.7394	1.7106	4.0000	4.0000	4.7394	4.7394	15.8581	normal		
Nickel, total	ug/L	MW-24	17	3	29	22.1647	18.9039	29.4000	8.2000	26.8795	22.1647	145.0398	normal		
Selenium, total	ug/L	MW-24	17	3	29			4.0000	4.0000			4.0000	nonpar	.99	**
Silver, total	ug/L	MW-24	13	3	29			4.0000	4.0000			4.0000	nonpar	.99	**
Thallium, total	ug/L	MW-24	17	3	29			2.0000	2.0000			2.0000	nonpar	.99	**
Vanadium, total	ug/L	MW-24	16	3	29			20.0000	20.0000			23.4000	nonpar	.99	**
Zinc, total	ug/L	MW-24	17	3	29	29.0176	23.4229	20.0000	20.0000	29.0176	29.0176	181.2667	normal		

N(back) and N(mon) = Non-outlier measurements in the background and monitoring periods.
N(tot) = All independent measurements for that constituent and well.
For transformed data, mean and SD in transformed units and control limit in original units.
Conf = confidence level for passing initial test or one verification resample (nonparametric test only).
* - Insufficient Data.
** - Detection Frequency < 25%.
*** - Zero Variance.

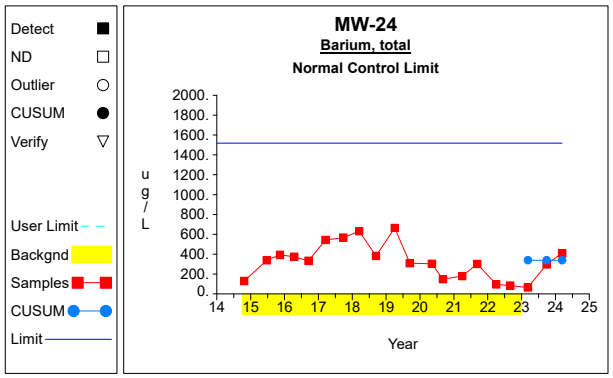
Intra-Well Control Charts / Prediction Limits



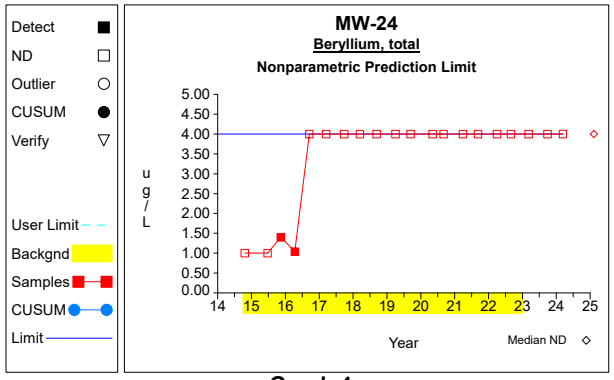
Graph 1



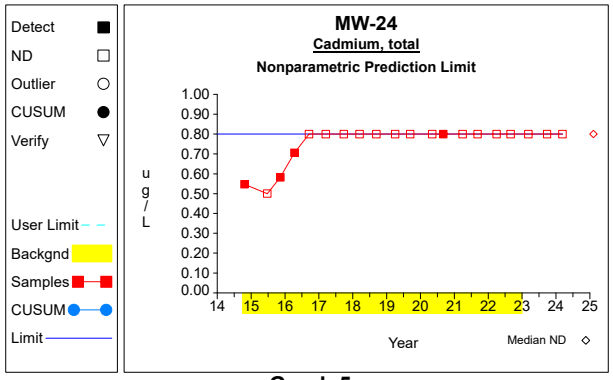
Graph 2



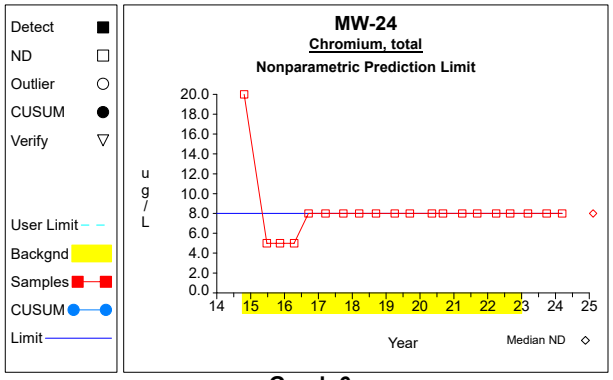
Graph 3



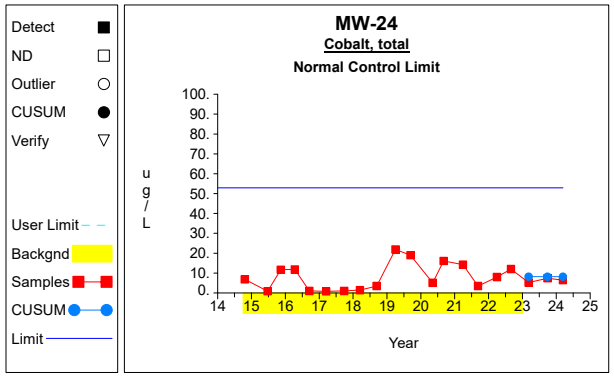
Graph 4



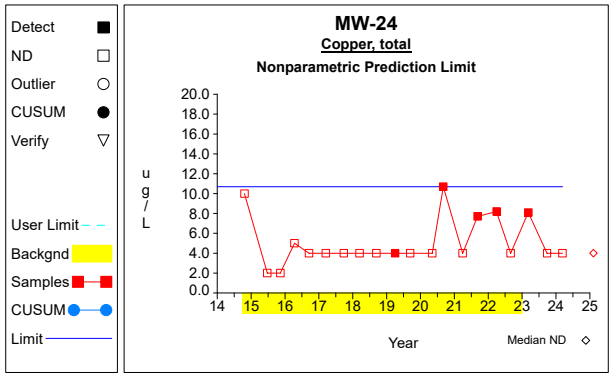
Graph 5



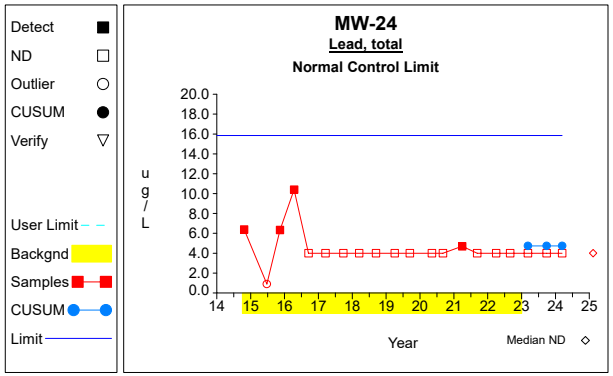
Graph 6



Graph 7



Graph 8



Graph 9

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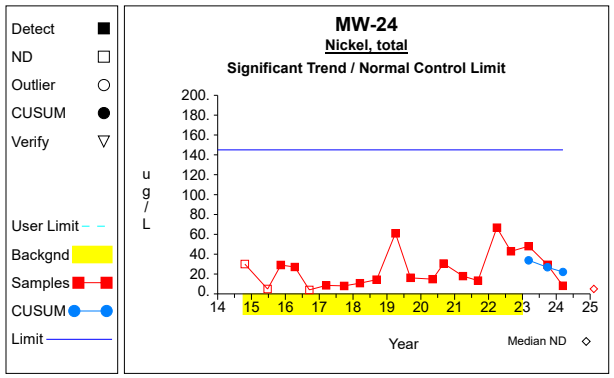
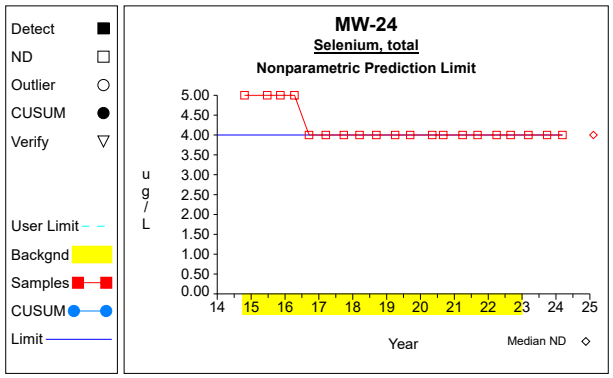
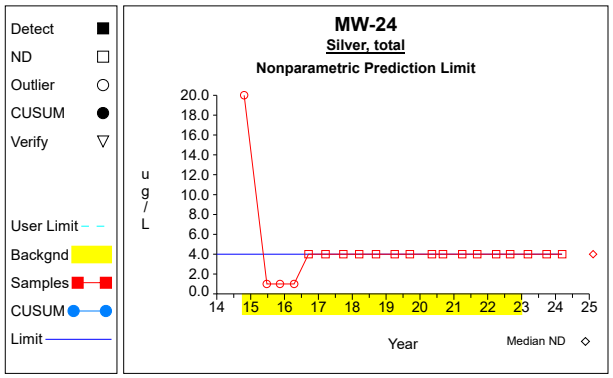
Intra-Well Control Charts / Prediction Limits



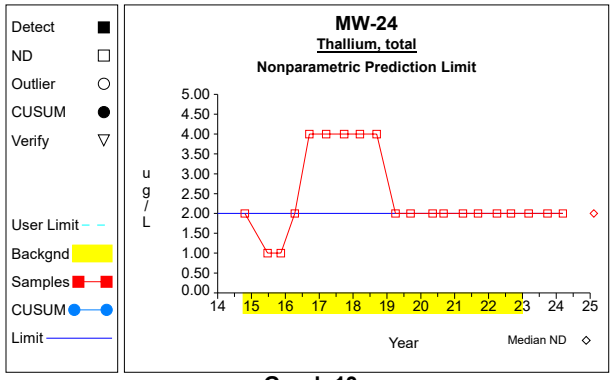
Graph 10



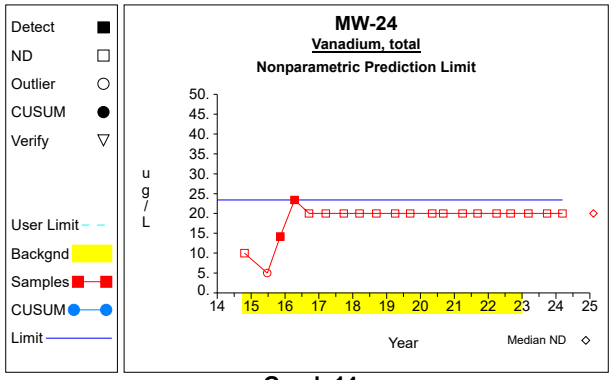
Graph 11



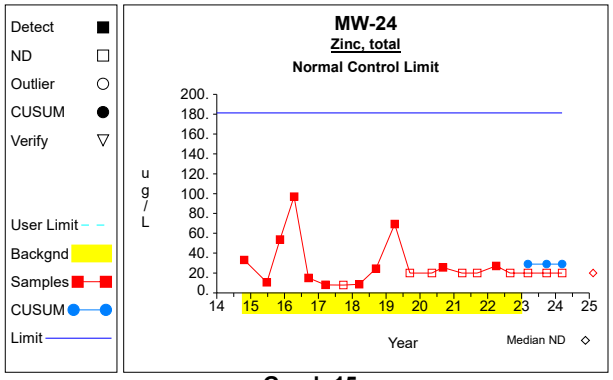
Graph 12



Graph 13



Graph 14



Graph 15

False Positive and False Negative Rates for Current Intra-Well Control Charts Monitoring Program

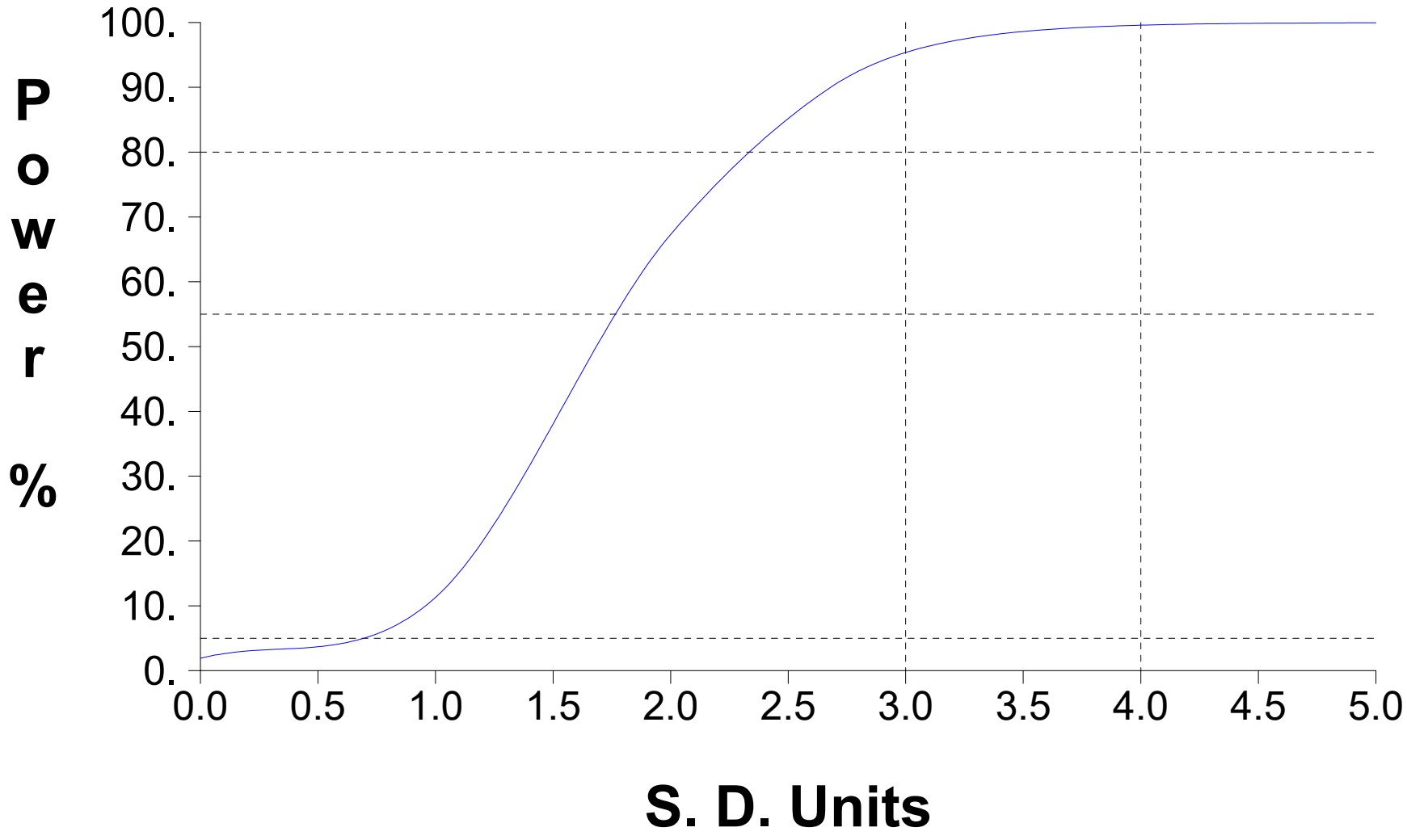


Table 2

Analytical Data and CUSUM Summary

Constituent	Units	Well	Date	Background	Result		Outlier	CUSUM	Adjusted	
Antimony, total	ug/L	MW-24	10/21/2014	yes	6.0000	ND			2.0000	***
Antimony, total	ug/L	MW-24	06/23/2015	yes	1.0000	ND			2.0000	***
Antimony, total	ug/L	MW-24	11/12/2015	yes	1.0000	ND			2.0000	***
Antimony, total	ug/L	MW-24	04/12/2016	yes	1.0000	ND			2.0000	***
Antimony, total	ug/L	MW-24	09/16/2016	yes	2.0000	ND				
Antimony, total	ug/L	MW-24	03/15/2017	yes	2.0000	ND				
Antimony, total	ug/L	MW-24	09/27/2017	yes	2.0000	ND				
Antimony, total	ug/L	MW-24	03/14/2018	yes	2.0000	ND				
Antimony, total	ug/L	MW-24	09/12/2018	yes	2.0000	ND				
Antimony, total	ug/L	MW-24	04/01/2019	yes	2.0000	ND				
Antimony, total	ug/L	MW-24	09/12/2019	yes	2.0000	ND				
Antimony, total	ug/L	MW-24	05/06/2020	yes	2.0000	ND				
Antimony, total	ug/L	MW-24	09/03/2020	yes	2.0000	ND				
Antimony, total	ug/L	MW-24	03/30/2021	yes	2.0000	ND				
Antimony, total	ug/L	MW-24	09/08/2021	yes	2.0000	ND				
Antimony, total	ug/L	MW-24	03/31/2022	yes	2.0000	ND				
Antimony, total	ug/L	MW-24	08/30/2022	yes	2.0000	ND				
Antimony, total	ug/L	MW-24	03/07/2023		2.0000	ND				
Antimony, total	ug/L	MW-24	09/28/2023		2.0000	ND				
Antimony, total	ug/L	MW-24	03/11/2024		2.0000	ND				
Arsenic, total	ug/L	MW-24	10/21/2014	yes	1.0000	ND				
Arsenic, total	ug/L	MW-24	06/23/2015	yes	36.3000					
Arsenic, total	ug/L	MW-24	11/12/2015	yes	20.4000					
Arsenic, total	ug/L	MW-24	04/12/2016	yes	10.8000					
Arsenic, total	ug/L	MW-24	09/16/2016	yes	32.6000					
Arsenic, total	ug/L	MW-24	03/15/2017	yes	26.4000					
Arsenic, total	ug/L	MW-24	09/27/2017	yes	27.2000					
Arsenic, total	ug/L	MW-24	03/14/2018	yes	22.9000					
Arsenic, total	ug/L	MW-24	09/12/2018	yes	25.6000					
Arsenic, total	ug/L	MW-24	04/01/2019	yes	100.0000					
Arsenic, total	ug/L	MW-24	09/12/2019	yes	23.8000					
Arsenic, total	ug/L	MW-24	05/06/2020	yes	6.5000					
Arsenic, total	ug/L	MW-24	09/03/2020	yes	12.8000					
Arsenic, total	ug/L	MW-24	03/30/2021	yes	22.3000					
Arsenic, total	ug/L	MW-24	09/08/2021	yes	20.5000					
Arsenic, total	ug/L	MW-24	03/31/2022	yes	4.0000	ND			1.0000	***
Arsenic, total	ug/L	MW-24	08/30/2022	yes	5.1000					
Arsenic, total	ug/L	MW-24	03/07/2023		4.0000	ND		23.2471		
Arsenic, total	ug/L	MW-24	09/28/2023		17.1000			23.2471		
Arsenic, total	ug/L	MW-24	03/11/2024		36.9000			23.2471		
Barium, total	ug/L	MW-24	10/21/2014	yes	130.0000					
Barium, total	ug/L	MW-24	06/23/2015	yes	339.0000					
Barium, total	ug/L	MW-24	11/12/2015	yes	393.0000					
Barium, total	ug/L	MW-24	04/12/2016	yes	374.0000					
Barium, total	ug/L	MW-24	09/16/2016	yes	333.0000					
Barium, total	ug/L	MW-24	03/15/2017	yes	544.0000					
Barium, total	ug/L	MW-24	09/27/2017	yes	567.0000					
Barium, total	ug/L	MW-24	03/14/2018	yes	632.0000					
Barium, total	ug/L	MW-24	09/12/2018	yes	382.0000					
Barium, total	ug/L	MW-24	04/01/2019	yes	665.0000					

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Table 2

Analytical Data and CUSUM Summary

Constituent	Units	Well	Date	Background	Result		Outlier	CUSUM	Adjusted	
Barium, total	ug/L	MW-24	09/12/2019	yes	310.0000					
Barium, total	ug/L	MW-24	05/06/2020	yes	303.0000					
Barium, total	ug/L	MW-24	09/03/2020	yes	149.0000					
Barium, total	ug/L	MW-24	03/30/2021	yes	179.0000					
Barium, total	ug/L	MW-24	09/08/2021	yes	302.0000					
Barium, total	ug/L	MW-24	03/31/2022	yes	96.2000					
Barium, total	ug/L	MW-24	08/30/2022	yes	82.7000					
Barium, total	ug/L	MW-24	03/07/2023		65.1000			340.0529		
Barium, total	ug/L	MW-24	09/28/2023		298.0000			340.0529		
Barium, total	ug/L	MW-24	03/11/2024		409.0000			340.0529		
Beryllium, total	ug/L	MW-24	10/21/2014	yes	1.0000	ND			4.0000	***
Beryllium, total	ug/L	MW-24	06/23/2015	yes	1.0000	ND			4.0000	***
Beryllium, total	ug/L	MW-24	11/12/2015	yes	1.4000					
Beryllium, total	ug/L	MW-24	04/12/2016	yes	1.0400					
Beryllium, total	ug/L	MW-24	09/16/2016	yes	4.0000	ND				
Beryllium, total	ug/L	MW-24	03/15/2017	yes	4.0000	ND				
Beryllium, total	ug/L	MW-24	09/27/2017	yes	4.0000	ND				
Beryllium, total	ug/L	MW-24	03/14/2018	yes	4.0000	ND				
Beryllium, total	ug/L	MW-24	09/12/2018	yes	4.0000	ND				
Beryllium, total	ug/L	MW-24	04/01/2019	yes	4.0000	ND				
Beryllium, total	ug/L	MW-24	09/12/2019	yes	4.0000	ND				
Beryllium, total	ug/L	MW-24	05/06/2020	yes	4.0000	ND				
Beryllium, total	ug/L	MW-24	09/03/2020	yes	4.0000	ND				
Beryllium, total	ug/L	MW-24	03/30/2021	yes	4.0000	ND				
Beryllium, total	ug/L	MW-24	09/08/2021	yes	4.0000	ND				
Beryllium, total	ug/L	MW-24	03/31/2022	yes	4.0000	ND				
Beryllium, total	ug/L	MW-24	08/30/2022	yes	4.0000	ND				
Beryllium, total	ug/L	MW-24	03/07/2023		4.0000	ND				
Beryllium, total	ug/L	MW-24	09/28/2023		4.0000	ND				
Beryllium, total	ug/L	MW-24	03/11/2024		4.0000	ND				
Cadmium, total	ug/L	MW-24	10/21/2014	yes	0.5470					
Cadmium, total	ug/L	MW-24	06/23/2015	yes	0.5000	ND			0.8000	***
Cadmium, total	ug/L	MW-24	11/12/2015	yes	0.5820					
Cadmium, total	ug/L	MW-24	04/12/2016	yes	0.7060					
Cadmium, total	ug/L	MW-24	09/16/2016	yes	0.8000	ND				
Cadmium, total	ug/L	MW-24	03/15/2017	yes	0.8000	ND				
Cadmium, total	ug/L	MW-24	09/27/2017	yes	0.8000	ND				
Cadmium, total	ug/L	MW-24	03/14/2018	yes	0.8000	ND				
Cadmium, total	ug/L	MW-24	09/12/2018	yes	0.8000	ND				
Cadmium, total	ug/L	MW-24	04/01/2019	yes	0.8000	ND				
Cadmium, total	ug/L	MW-24	09/12/2019	yes	0.8000	ND				
Cadmium, total	ug/L	MW-24	05/06/2020	yes	0.8000	ND				
Cadmium, total	ug/L	MW-24	09/03/2020	yes	0.8000					
Cadmium, total	ug/L	MW-24	03/30/2021	yes	0.8000	ND				
Cadmium, total	ug/L	MW-24	09/08/2021	yes	0.8000	ND				
Cadmium, total	ug/L	MW-24	03/31/2022	yes	0.8000	ND				
Cadmium, total	ug/L	MW-24	08/30/2022	yes	0.8000	ND				
Cadmium, total	ug/L	MW-24	03/07/2023		0.8000	ND				
Cadmium, total	ug/L	MW-24	09/28/2023		0.8000	ND				
Cadmium, total	ug/L	MW-24	03/11/2024		0.8000	ND				

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Table 2

Analytical Data and CUSUM Summary

Constituent	Units	Well	Date	Background	Result		Outlier	CUSUM	Adjusted	
Chromium, total	ug/L	MW-24	10/21/2014	yes	20.0000	ND			8.0000	***
Chromium, total	ug/L	MW-24	06/23/2015	yes	5.0000	ND			8.0000	***
Chromium, total	ug/L	MW-24	11/12/2015	yes	5.0000	ND			8.0000	***
Chromium, total	ug/L	MW-24	04/12/2016	yes	5.0000	ND			8.0000	***
Chromium, total	ug/L	MW-24	09/16/2016	yes	8.0000	ND				
Chromium, total	ug/L	MW-24	03/15/2017	yes	8.0000	ND				
Chromium, total	ug/L	MW-24	09/27/2017	yes	8.0000	ND				
Chromium, total	ug/L	MW-24	03/14/2018	yes	8.0000	ND				
Chromium, total	ug/L	MW-24	09/12/2018	yes	8.0000	ND				
Chromium, total	ug/L	MW-24	04/01/2019	yes	8.0000	ND				
Chromium, total	ug/L	MW-24	09/12/2019	yes	8.0000	ND				
Chromium, total	ug/L	MW-24	05/06/2020	yes	8.0000	ND				
Chromium, total	ug/L	MW-24	09/03/2020	yes	8.0000	ND				
Chromium, total	ug/L	MW-24	03/30/2021	yes	8.0000	ND				
Chromium, total	ug/L	MW-24	09/08/2021	yes	8.0000	ND				
Chromium, total	ug/L	MW-24	03/31/2022	yes	8.0000	ND				
Chromium, total	ug/L	MW-24	08/30/2022	yes	8.0000	ND				
Chromium, total	ug/L	MW-24	03/07/2023		8.0000	ND				
Chromium, total	ug/L	MW-24	09/28/2023		8.0000	ND				
Chromium, total	ug/L	MW-24	03/11/2024		8.0000	ND				
Cobalt, total	ug/L	MW-24	10/21/2014	yes	6.8000					
Cobalt, total	ug/L	MW-24	06/23/2015	yes	0.8340					
Cobalt, total	ug/L	MW-24	11/12/2015	yes	11.7000					
Cobalt, total	ug/L	MW-24	04/12/2016	yes	11.8000					
Cobalt, total	ug/L	MW-24	09/16/2016	yes	1.0000					
Cobalt, total	ug/L	MW-24	03/15/2017	yes	0.8000					
Cobalt, total	ug/L	MW-24	09/27/2017	yes	1.0000					
Cobalt, total	ug/L	MW-24	03/14/2018	yes	1.4000					
Cobalt, total	ug/L	MW-24	09/12/2018	yes	3.5000					
Cobalt, total	ug/L	MW-24	04/01/2019	yes	21.9000					
Cobalt, total	ug/L	MW-24	09/12/2019	yes	19.0000					
Cobalt, total	ug/L	MW-24	05/06/2020	yes	5.1000					
Cobalt, total	ug/L	MW-24	09/03/2020	yes	16.1000					
Cobalt, total	ug/L	MW-24	03/30/2021	yes	14.2000					
Cobalt, total	ug/L	MW-24	09/08/2021	yes	3.5000					
Cobalt, total	ug/L	MW-24	03/31/2022	yes	8.0000					
Cobalt, total	ug/L	MW-24	08/30/2022	yes	12.0000					
Cobalt, total	ug/L	MW-24	03/07/2023		5.2000			8.1549		
Cobalt, total	ug/L	MW-24	09/28/2023		7.4000			8.1549		
Cobalt, total	ug/L	MW-24	03/11/2024		6.4000			8.1549		
Copper, total	ug/L	MW-24	10/21/2014	yes	10.0000	ND			4.0000	***
Copper, total	ug/L	MW-24	06/23/2015	yes	2.0000	ND			4.0000	***
Copper, total	ug/L	MW-24	11/12/2015	yes	2.0000	ND			4.0000	***
Copper, total	ug/L	MW-24	04/12/2016	yes	5.0000	ND			4.0000	***
Copper, total	ug/L	MW-24	09/16/2016	yes	4.0000	ND				
Copper, total	ug/L	MW-24	03/15/2017	yes	4.0000	ND				
Copper, total	ug/L	MW-24	09/27/2017	yes	4.0000	ND				
Copper, total	ug/L	MW-24	03/14/2018	yes	4.0000	ND				
Copper, total	ug/L	MW-24	09/12/2018	yes	4.0000	ND				
Copper, total	ug/L	MW-24	04/01/2019	yes	4.0000					

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Table 2

Analytical Data and CUSUM Summary

Constituent	Units	Well	Date	Background	Result		Outlier	CUSUM	Adjusted	
Copper, total	ug/L	MW-24	09/12/2019	yes	4.0000	ND				
Copper, total	ug/L	MW-24	05/06/2020	yes	4.0000	ND				
Copper, total	ug/L	MW-24	09/03/2020	yes	10.7000					
Copper, total	ug/L	MW-24	03/30/2021	yes	4.0000	ND				
Copper, total	ug/L	MW-24	09/08/2021	yes	7.7000					
Copper, total	ug/L	MW-24	03/31/2022	yes	8.2000					
Copper, total	ug/L	MW-24	08/30/2022	yes	4.0000	ND				
Copper, total	ug/L	MW-24	03/07/2023		8.1000					
Copper, total	ug/L	MW-24	09/28/2023		4.0000	ND				
Copper, total	ug/L	MW-24	03/11/2024		4.0000	ND				
Lead, total	ug/L	MW-24	10/21/2014	yes	6.3900					
Lead, total	ug/L	MW-24	06/23/2015	yes	0.9010		yes			*
Lead, total	ug/L	MW-24	11/12/2015	yes	6.3400					
Lead, total	ug/L	MW-24	04/12/2016	yes	10.4000					
Lead, total	ug/L	MW-24	09/16/2016	yes	4.0000	ND				
Lead, total	ug/L	MW-24	03/15/2017	yes	4.0000	ND				
Lead, total	ug/L	MW-24	09/27/2017	yes	4.0000	ND				
Lead, total	ug/L	MW-24	03/14/2018	yes	4.0000	ND				
Lead, total	ug/L	MW-24	09/12/2018	yes	4.0000	ND				
Lead, total	ug/L	MW-24	04/01/2019	yes	4.0000	ND				
Lead, total	ug/L	MW-24	09/12/2019	yes	4.0000	ND				
Lead, total	ug/L	MW-24	05/06/2020	yes	4.0000	ND				
Lead, total	ug/L	MW-24	09/03/2020	yes	4.0000	ND				
Lead, total	ug/L	MW-24	03/30/2021	yes	4.7000					
Lead, total	ug/L	MW-24	09/08/2021	yes	4.0000	ND				
Lead, total	ug/L	MW-24	03/31/2022	yes	4.0000	ND				
Lead, total	ug/L	MW-24	08/30/2022	yes	4.0000	ND				
Lead, total	ug/L	MW-24	03/07/2023		4.0000	ND		4.7394		
Lead, total	ug/L	MW-24	09/28/2023		4.0000	ND		4.7394		
Lead, total	ug/L	MW-24	03/11/2024		4.0000	ND		4.7394		
Nickel, total	ug/L	MW-24	10/21/2014	yes	30.0000	ND			5.0000	***
Nickel, total	ug/L	MW-24	06/23/2015	yes	5.0000	ND				
Nickel, total	ug/L	MW-24	11/12/2015	yes	29.1000					
Nickel, total	ug/L	MW-24	04/12/2016	yes	27.1000					
Nickel, total	ug/L	MW-24	09/16/2016	yes	4.0000	ND			5.0000	***
Nickel, total	ug/L	MW-24	03/15/2017	yes	8.6000					
Nickel, total	ug/L	MW-24	09/27/2017	yes	8.0000					
Nickel, total	ug/L	MW-24	03/14/2018	yes	10.9000					
Nickel, total	ug/L	MW-24	09/12/2018	yes	14.3000					
Nickel, total	ug/L	MW-24	04/01/2019	yes	61.1000					
Nickel, total	ug/L	MW-24	09/12/2019	yes	16.2000					
Nickel, total	ug/L	MW-24	05/06/2020	yes	14.9000					
Nickel, total	ug/L	MW-24	09/03/2020	yes	30.6000					
Nickel, total	ug/L	MW-24	03/30/2021	yes	17.9000					
Nickel, total	ug/L	MW-24	09/08/2021	yes	13.4000					
Nickel, total	ug/L	MW-24	03/31/2022	yes	66.7000					
Nickel, total	ug/L	MW-24	08/30/2022	yes	43.0000					
Nickel, total	ug/L	MW-24	03/07/2023		48.0000			33.8221		
Nickel, total	ug/L	MW-24	09/28/2023		29.4000			26.8795		
Nickel, total	ug/L	MW-24	03/11/2024		8.2000			22.1647		

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Table 2

Analytical Data and CUSUM Summary

Constituent	Units	Well	Date	Background	Result		Outlier	CUSUM	Adjusted	
Selenium, total	ug/L	MW-24	10/21/2014	yes	5.0000	ND			4.0000	***
Selenium, total	ug/L	MW-24	06/23/2015	yes	5.0000	ND			4.0000	***
Selenium, total	ug/L	MW-24	11/12/2015	yes	5.0000	ND			4.0000	***
Selenium, total	ug/L	MW-24	04/12/2016	yes	5.0000	ND			4.0000	***
Selenium, total	ug/L	MW-24	09/16/2016	yes	4.0000	ND				
Selenium, total	ug/L	MW-24	03/15/2017	yes	4.0000	ND				
Selenium, total	ug/L	MW-24	09/27/2017	yes	4.0000	ND				
Selenium, total	ug/L	MW-24	03/14/2018	yes	4.0000	ND				
Selenium, total	ug/L	MW-24	09/12/2018	yes	4.0000	ND				
Selenium, total	ug/L	MW-24	04/01/2019	yes	4.0000	ND				
Selenium, total	ug/L	MW-24	09/12/2019	yes	4.0000	ND				
Selenium, total	ug/L	MW-24	05/06/2020	yes	4.0000	ND				
Selenium, total	ug/L	MW-24	09/03/2020	yes	4.0000	ND				
Selenium, total	ug/L	MW-24	03/30/2021	yes	4.0000	ND				
Selenium, total	ug/L	MW-24	09/08/2021	yes	4.0000	ND				
Selenium, total	ug/L	MW-24	03/31/2022	yes	4.0000	ND				
Selenium, total	ug/L	MW-24	08/30/2022	yes	4.0000	ND				
Selenium, total	ug/L	MW-24	03/07/2023		4.0000	ND				
Selenium, total	ug/L	MW-24	09/28/2023		4.0000	ND				
Selenium, total	ug/L	MW-24	03/11/2024		4.0000	ND				
Silver, total	ug/L	MW-24	10/21/2014	yes	20.0000	ND	yes			*
Silver, total	ug/L	MW-24	06/23/2015	yes	1.0000	ND	yes			*
Silver, total	ug/L	MW-24	11/12/2015	yes	1.0000	ND	yes			*
Silver, total	ug/L	MW-24	04/12/2016	yes	1.0000	ND	yes			*
Silver, total	ug/L	MW-24	09/16/2016	yes	4.0000	ND				
Silver, total	ug/L	MW-24	03/15/2017	yes	4.0000	ND				
Silver, total	ug/L	MW-24	09/27/2017	yes	4.0000	ND				
Silver, total	ug/L	MW-24	03/14/2018	yes	4.0000	ND				
Silver, total	ug/L	MW-24	09/12/2018	yes	4.0000	ND				
Silver, total	ug/L	MW-24	04/01/2019	yes	4.0000	ND				
Silver, total	ug/L	MW-24	09/12/2019	yes	4.0000	ND				
Silver, total	ug/L	MW-24	05/06/2020	yes	4.0000	ND				
Silver, total	ug/L	MW-24	09/03/2020	yes	4.0000	ND				
Silver, total	ug/L	MW-24	03/30/2021	yes	4.0000	ND				
Silver, total	ug/L	MW-24	09/08/2021	yes	4.0000	ND				
Silver, total	ug/L	MW-24	03/31/2022	yes	4.0000	ND				
Silver, total	ug/L	MW-24	08/30/2022	yes	4.0000	ND				
Silver, total	ug/L	MW-24	03/07/2023		4.0000	ND				
Silver, total	ug/L	MW-24	09/28/2023		4.0000	ND				
Silver, total	ug/L	MW-24	03/11/2024		4.0000	ND				
Thallium, total	ug/L	MW-24	10/21/2014	yes	2.0000	ND				
Thallium, total	ug/L	MW-24	06/23/2015	yes	1.0000	ND			2.0000	***
Thallium, total	ug/L	MW-24	11/12/2015	yes	1.0000	ND			2.0000	***
Thallium, total	ug/L	MW-24	04/12/2016	yes	2.0000	ND				
Thallium, total	ug/L	MW-24	09/16/2016	yes	4.0000	ND			2.0000	***
Thallium, total	ug/L	MW-24	03/15/2017	yes	4.0000	ND			2.0000	***
Thallium, total	ug/L	MW-24	09/27/2017	yes	4.0000	ND			2.0000	***
Thallium, total	ug/L	MW-24	03/14/2018	yes	4.0000	ND			2.0000	***
Thallium, total	ug/L	MW-24	09/12/2018	yes	4.0000	ND			2.0000	***
Thallium, total	ug/L	MW-24	04/01/2019	yes	2.0000	ND				

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Analytical Data and CUSUM Summary

Constituent	Units	Well	Date	Background	Result		Outlier	CUSUM	Adjusted	
Thallium, total	ug/L	MW-24	09/12/2019	yes	2.0000	ND				
Thallium, total	ug/L	MW-24	05/06/2020	yes	2.0000	ND				
Thallium, total	ug/L	MW-24	09/03/2020	yes	2.0000	ND				
Thallium, total	ug/L	MW-24	03/30/2021	yes	2.0000	ND				
Thallium, total	ug/L	MW-24	09/08/2021	yes	2.0000	ND				
Thallium, total	ug/L	MW-24	03/31/2022	yes	2.0000	ND				
Thallium, total	ug/L	MW-24	08/30/2022	yes	2.0000	ND				
Thallium, total	ug/L	MW-24	03/07/2023		2.0000	ND				
Thallium, total	ug/L	MW-24	09/28/2023		2.0000	ND				
Thallium, total	ug/L	MW-24	03/11/2024		2.0000	ND				
Vanadium, total	ug/L	MW-24	10/21/2014	yes	10.0000	ND			20.0000	***
Vanadium, total	ug/L	MW-24	06/23/2015	yes	5.0000	ND	yes			*
Vanadium, total	ug/L	MW-24	11/12/2015	yes	14.2000					
Vanadium, total	ug/L	MW-24	04/12/2016	yes	23.4000					
Vanadium, total	ug/L	MW-24	09/16/2016	yes	20.0000	ND				
Vanadium, total	ug/L	MW-24	03/15/2017	yes	20.0000	ND				
Vanadium, total	ug/L	MW-24	09/27/2017	yes	20.0000	ND				
Vanadium, total	ug/L	MW-24	03/14/2018	yes	20.0000	ND				
Vanadium, total	ug/L	MW-24	09/12/2018	yes	20.0000	ND				
Vanadium, total	ug/L	MW-24	04/01/2019	yes	20.0000	ND				
Vanadium, total	ug/L	MW-24	09/12/2019	yes	20.0000	ND				
Vanadium, total	ug/L	MW-24	05/06/2020	yes	20.0000	ND				
Vanadium, total	ug/L	MW-24	09/03/2020	yes	20.0000	ND				
Vanadium, total	ug/L	MW-24	03/30/2021	yes	20.0000	ND				
Vanadium, total	ug/L	MW-24	09/08/2021	yes	20.0000	ND				
Vanadium, total	ug/L	MW-24	03/31/2022	yes	20.0000	ND				
Vanadium, total	ug/L	MW-24	08/30/2022	yes	20.0000	ND				
Vanadium, total	ug/L	MW-24	03/07/2023		20.0000	ND				
Vanadium, total	ug/L	MW-24	09/28/2023		20.0000	ND				
Vanadium, total	ug/L	MW-24	03/11/2024		20.0000	ND				
Zinc, total	ug/L	MW-24	10/21/2014	yes	33.2000					
Zinc, total	ug/L	MW-24	06/23/2015	yes	10.7000					
Zinc, total	ug/L	MW-24	11/12/2015	yes	53.8000					
Zinc, total	ug/L	MW-24	04/12/2016	yes	97.0000					
Zinc, total	ug/L	MW-24	09/16/2016	yes	15.1000					
Zinc, total	ug/L	MW-24	03/15/2017	yes	8.1000					
Zinc, total	ug/L	MW-24	09/27/2017	yes	8.0000	ND			20.0000	***
Zinc, total	ug/L	MW-24	03/14/2018	yes	8.7000					
Zinc, total	ug/L	MW-24	09/12/2018	yes	24.5000					
Zinc, total	ug/L	MW-24	04/01/2019	yes	69.3000					
Zinc, total	ug/L	MW-24	09/12/2019	yes	20.0000	ND				
Zinc, total	ug/L	MW-24	05/06/2020	yes	20.0000	ND				
Zinc, total	ug/L	MW-24	09/03/2020	yes	25.7000					
Zinc, total	ug/L	MW-24	03/30/2021	yes	20.0000	ND				
Zinc, total	ug/L	MW-24	09/08/2021	yes	20.0000	ND				
Zinc, total	ug/L	MW-24	03/31/2022	yes	27.2000					
Zinc, total	ug/L	MW-24	08/30/2022	yes	20.0000	ND				
Zinc, total	ug/L	MW-24	03/07/2023		20.0000	ND		29.0176		
Zinc, total	ug/L	MW-24	09/28/2023		20.0000	ND		29.0176		
Zinc, total	ug/L	MW-24	03/11/2024		20.0000	ND		29.0176		

* - Outlier for that well and constituent.
** - Non-outlier detected sample Result and / or CUSUM value exceeds limit.
*** - ND value replaced with median RL.
**** - ND value replaced with manual RL.
ND = Not detected, Result = detection limit.

Table 4

Dixon's Test Outliers
5% Significance Level

Constituent	Units	Well	Date	Result	ND Qualifier	Date Range	N	Critical Value
Lead, total	ug/L	MW-24	06/23/2015	0.9010		10/21/2014-08/30/2022	17	0.4891
Silver, total	ug/L	MW-24	10/21/2014	20.0000	< 20.0000	10/21/2014-08/30/2022	17	0.4891
Silver, total	ug/L	MW-24	06/23/2015	1.0000	< 1.0000	10/21/2014-08/30/2022	17	0.5054
Silver, total	ug/L	MW-24	11/12/2015	1.0000	< 1.0000	10/21/2014-08/30/2022	17	0.5054
Silver, total	ug/L	MW-24	04/12/2016	1.0000	< 1.0000	10/21/2014-08/30/2022	17	0.5054
Vanadium, total	ug/L	MW-24	06/23/2015	5.0000	< 5.0000	10/21/2014-08/30/2022	17	0.4891

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.

Attachment E

Historical VOC Detections

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
2-butanone	AW-2	9/08/2021		8.5	5.0	ug/L
Acetone	AW-2	9/27/2017		14.4	10.0	ug/L
Acetone	AW-2	9/08/2021		138.0	10.0	ug/L
Benzene	AW-2	10/20/2014		1.870	.500	ug/L
Benzene	AW-2	6/23/2015		1.950	.500	ug/L
Benzene	AW-2	11/12/2015		.961	.500	ug/L
Benzene	AW-2	4/11/2016		1.020	.500	ug/L
Benzene	AW-2	9/12/2018		1.000	1.000	ug/L
Benzene	AW-2	9/08/2021		1.400	1.000	ug/L
Chloroethane	AW-2	9/08/2021		1	1	ug/L
1,1-dichloroethane	AW-3	4/11/2016		1.02	1.00	ug/L
1,1-dichloroethane	AW-3	9/16/2016		1.20	1.00	ug/L
1,1-dichloroethane	AW-3	3/15/2017		2.50	1.00	ug/L
1,1-dichloroethane	AW-3	9/27/2017		1.60	1.00	ug/L
1,4-dichlorobenzene	AW-3	10/20/2014		2.8	1.0	ug/L
1,4-dichlorobenzene	AW-3	9/16/2016		1.9	1.0	ug/L
1,4-dichlorobenzene	AW-3	9/27/2017		1.1	1.0	ug/L
1,4-dichlorobenzene	AW-3	3/14/2018		3.5	1.0	ug/L
1,4-dichlorobenzene	AW-3	9/12/2018		4.0	1.0	ug/L
1,4-dichlorobenzene	AW-3	4/01/2019		2.6	1.0	ug/L
1,4-dichlorobenzene	AW-3	5/06/2020		2.2	1.0	ug/L
1,4-dichlorobenzene	AW-3	9/03/2020		2.0	1.0	ug/L
1,4-dichlorobenzene	AW-3	3/30/2021		2.8	1.0	ug/L
1,4-dichlorobenzene	AW-3	9/08/2021		3.8	1.0	ug/L
1,4-dichlorobenzene	AW-3	3/31/2022		2.3	1.0	ug/L
1,4-dichlorobenzene	AW-3	8/30/2022		2.2	1.0	ug/L
1,4-dichlorobenzene	AW-3	3/07/2023		2.7	1.0	ug/L
1,4-dichlorobenzene	AW-3	9/28/2023		3.4	1.0	ug/L
1,4-dichlorobenzene	AW-3	3/11/2024		3.2	1.0	ug/L
2-butanone	AW-3	9/12/2018		6	5	ug/L
Acetone	AW-3	9/12/2019		11.4	10.0	ug/L
Acetone	AW-3	3/31/2022		24.4	10.0	ug/L
Benzene	AW-3	10/20/2014		4.19	.50	ug/L
Benzene	AW-3	6/23/2015		4.98	.50	ug/L
Benzene	AW-3	11/13/2015		1.53	.50	ug/L
Benzene	AW-3	4/11/2016		1.62	.50	ug/L
Benzene	AW-3	9/16/2016		1.00	1.00	ug/L
Benzene	AW-3	3/14/2018		5.60	1.00	ug/L
Benzene	AW-3	9/12/2018		4.10	1.00	ug/L
Benzene	AW-3	9/12/2019		1.10	1.00	ug/L
Benzene	AW-3	5/06/2020		1.20	1.00	ug/L
Benzene	AW-3	3/30/2021		5.20	1.00	ug/L
Benzene	AW-3	9/08/2021		4.10	1.00	ug/L
Benzene	AW-3	3/31/2022		1.40	1.00	ug/L
Benzene	AW-3	8/30/2022		2.30	1.00	ug/L
Benzene	AW-3	3/07/2023		2.60	1.00	ug/L
Benzene	AW-3	9/28/2023		2.60	1.00	ug/L
Benzene	AW-3	3/11/2024		2.70	1.00	ug/L
Bis(2-ethylhexyl) phthalate	AW-3	3/15/2017		16	8	ug/L
Chlorobenzene	AW-3	3/15/2017		1.1	1.0	ug/L
Chloroethane	AW-3	10/20/2014		7.13	1.00	ug/L
Chloroethane	AW-3	6/23/2015		8.62	1.00	ug/L
Chloroethane	AW-3	4/11/2016		4.73	1.00	ug/L
Chloroethane	AW-3	9/16/2016		4.60	1.00	ug/L
Chloroethane	AW-3	3/15/2017		6.80	1.00	ug/L
Chloroethane	AW-3	9/27/2017		4.60	1.00	ug/L
Chloroethane	AW-3	3/14/2018		5.50	1.00	ug/L
Chloroethane	AW-3	9/12/2018		3.00	1.00	ug/L
Chloroethane	AW-3	4/01/2019		1.20	1.00	ug/L
Chloroethane	AW-3	5/06/2020		2.50	1.00	ug/L
Chloroethane	AW-3	9/03/2020		3.90	1.00	ug/L
Chloroethane	AW-3	3/30/2021		4.50	1.00	ug/L
Chloroethane	AW-3	9/08/2021		4.20	1.00	ug/L
Chloroethane	AW-3	3/31/2022		3.00	1.00	ug/L
Chloroethane	AW-3	8/30/2022		4.20	1.00	ug/L
Chloroethane	AW-3	3/07/2023		3.50	1.00	ug/L
Chloroethane	AW-3	9/28/2023		3.80	1.00	ug/L
Chloroethane	AW-3	3/11/2024		3.00	1.00	ug/L
Cis-1,2-dichloroethene	AW-3	10/20/2014		2.89	1.00	ug/L
Cis-1,2-dichloroethene	AW-3	6/23/2015		3.92	1.00	ug/L
Cis-1,2-dichloroethene	AW-3	11/13/2015		2.23	1.00	ug/L
Cis-1,2-dichloroethene	AW-3	4/11/2016		1.92	1.00	ug/L
Cis-1,2-dichloroethene	AW-3	9/16/2016		1.60	1.00	ug/L
Cis-1,2-dichloroethene	AW-3	3/15/2017		3.00	1.00	ug/L
Cis-1,2-dichloroethene	AW-3	9/27/2017		2.10	1.00	ug/L
Cis-1,2-dichloroethene	AW-3	5/06/2020		1.20	1.00	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Cis-1,2-dichloroethene	AW-3	9/03/2020		2.70	1.00	ug/L
Cis-1,2-dichloroethene	AW-3	3/30/2021		4.00	1.00	ug/L
Cis-1,2-dichloroethene	AW-3	8/30/2022		1.10	1.00	ug/L
Cis-1,2-dichloroethene	AW-3	3/07/2023		2.90	1.00	ug/L
Cis-1,2-dichloroethene	AW-3	9/28/2023		1.20	1.00	ug/L
Ethylbenzene	AW-3	6/23/2015		2.1	1.0	ug/L
Toluene	AW-3	9/12/2018		1	1	ug/L
Vinyl chloride	AW-3	3/30/2021		2.1	1.0	ug/L
1,1-dichloroethane	MW-14	10/21/2014		2.46	1.00	ug/L
1,1-dichloroethane	MW-14	6/22/2015		1.52	1.00	ug/L
1,1-dichloroethane	MW-14	3/15/2017		1.30	1.00	ug/L
1,1-dichloroethane	MW-14	9/27/2017		1.10	1.00	ug/L
1,1-dichloroethane	MW-14	4/01/2019		1.00	1.00	ug/L
Acetone	MW-14	9/27/2017		12.9	10.0	ug/L
Acetone	MW-19	9/27/2017		20.8	10.0	ug/L
1,4-dichlorobenzene	MW-20	9/16/2016		3.4	1.0	ug/L
1,4-dichlorobenzene	MW-20	3/15/2017		1.2	1.0	ug/L
1,4-dichlorobenzene	MW-20	9/27/2017		1.4	1.0	ug/L
1,4-dichlorobenzene	MW-20	3/14/2018		1.7	1.0	ug/L
1,4-dichlorobenzene	MW-20	9/12/2018		3.0	1.0	ug/L
1,4-dichlorobenzene	MW-20	4/01/2019		2.9	1.0	ug/L
1,4-dichlorobenzene	MW-20	5/06/2020		2.5	1.0	ug/L
1,4-dichlorobenzene	MW-20	9/03/2020		1.6	1.0	ug/L
1,4-dichlorobenzene	MW-20	3/30/2021		2.6	1.0	ug/L
1,4-dichlorobenzene	MW-20	9/08/2021		2.9	1.0	ug/L
1,4-dichlorobenzene	MW-20	3/31/2022		2.4	1.0	ug/L
1,4-dichlorobenzene	MW-20	8/30/2022		2.8	1.0	ug/L
1,4-dichlorobenzene	MW-20	3/07/2023		2.8	1.0	ug/L
1,4-dichlorobenzene	MW-20	9/28/2023		3.4	1.0	ug/L
1,4-dichlorobenzene	MW-20	3/11/2024		2.6	1.0	ug/L
Acetone	MW-20	6/23/2015		14.8	10.0	ug/L
Acetone	MW-20	4/11/2016		467.0	10.0	ug/L
Acetone	MW-20	9/16/2016		33.3	10.0	ug/L
Benzene	MW-20	10/21/2014		2.51	.50	ug/L
Benzene	MW-20	6/23/2015		3.59	.50	ug/L
Benzene	MW-20	11/12/2015		3.67	.50	ug/L
Benzene	MW-20	4/11/2016		2.67	.50	ug/L
Benzene	MW-20	9/16/2016		3.70	1.00	ug/L
Benzene	MW-20	3/15/2017		2.50	1.00	ug/L
Benzene	MW-20	9/27/2017		2.60	1.00	ug/L
Benzene	MW-20	3/14/2018		1.70	1.00	ug/L
Benzene	MW-20	9/12/2018		2.70	1.00	ug/L
Benzene	MW-20	4/01/2019		2.40	1.00	ug/L
Benzene	MW-20	9/12/2019		2.80	1.00	ug/L
Benzene	MW-20	5/06/2020		2.50	1.00	ug/L
Benzene	MW-20	9/03/2020		2.70	1.00	ug/L
Benzene	MW-20	3/30/2021		1.90	1.00	ug/L
Benzene	MW-20	9/08/2021		2.80	1.00	ug/L
Benzene	MW-20	3/31/2022		2.30	1.00	ug/L
Benzene	MW-20	8/30/2022		3.60	1.00	ug/L
Benzene	MW-20	3/07/2023		2.20	1.00	ug/L
Benzene	MW-20	9/28/2023		2.60	1.00	ug/L
Benzene	MW-20	3/11/2024		2.30	1.00	ug/L
Chlorobenzene	MW-20	10/21/2014		2.42	1.00	ug/L
Chlorobenzene	MW-20	6/23/2015		3.25	1.00	ug/L
Chlorobenzene	MW-20	9/16/2016		3.10	1.00	ug/L
Chlorobenzene	MW-20	3/15/2017		1.40	1.00	ug/L
Chlorobenzene	MW-20	9/27/2017		1.60	1.00	ug/L
Chlorobenzene	MW-20	9/12/2018		3.10	1.00	ug/L
Chlorobenzene	MW-20	4/01/2019		2.60	1.00	ug/L
Chlorobenzene	MW-20	9/12/2019		3.60	1.00	ug/L
Chlorobenzene	MW-20	5/06/2020		2.20	1.00	ug/L
Chlorobenzene	MW-20	9/03/2020		1.70	1.00	ug/L
Chlorobenzene	MW-20	3/30/2021		2.20	1.00	ug/L
Chlorobenzene	MW-20	9/08/2021		2.70	1.00	ug/L
Chlorobenzene	MW-20	3/31/2022		2.60	1.00	ug/L
Chlorobenzene	MW-20	8/30/2022		3.10	1.00	ug/L
Chlorobenzene	MW-20	3/07/2023		2.50	1.00	ug/L
Chlorobenzene	MW-20	9/28/2023		3.40	1.00	ug/L
Chlorobenzene	MW-20	3/11/2024		2.80	1.00	ug/L
Chloroethane	MW-20	9/16/2016		1.4	1.0	ug/L
Chloroethane	MW-20	3/15/2017		1.1	1.0	ug/L
Toluene	MW-20	10/21/2014		3.15	1.00	ug/L
Toluene	MW-20	6/23/2015		3.09	1.00	ug/L
Toluene	MW-20	9/16/2016		1.40	1.00	ug/L
Toluene	MW-20	8/30/2022		2.10	1.00	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Toluene	MW-20	3/11/2024		1.10	1.00	ug/L
Acetone	MW-24	9/27/2017		13.6	10.0	ug/L
Acetone	MW-24	4/01/2019		25.0	10.0	ug/L
Benzene	MW-24	3/15/2017		1.3	1.0	ug/L
Benzene	MW-24	4/01/2019		2.1	1.0	ug/L
Chloroethane	MW-24	4/01/2019		1.6	1.0	ug/L
Ethylbenzene	MW-24	9/16/2016		1.2	1.0	ug/L
Ethylbenzene	MW-24	3/15/2017		1.9	1.0	ug/L
Ethylbenzene	MW-24	4/01/2019		4.8	1.0	ug/L
Toluene	MW-24	9/16/2016		5.5	1.0	ug/L
Xylenes, total	MW-24	9/16/2016		2.2	2.0	ug/L
Xylenes, total	MW-24	3/15/2017		2.3	2.0	ug/L
Xylenes, total	MW-24	4/01/2019		6.2	2.0	ug/L
Acetone	MW-25	9/27/2017		13.1	10.0	ug/L
Bis(2-ethylhexyl) phthalate	MW-25	3/15/2017		17	8	ug/L
Bis(2-ethylhexyl) phthalate	MW-25	9/27/2017		8	6	ug/L
Bis(2-ethylhexyl) phthalate	MW-25	3/14/2018		7	6	ug/L
Acetone	MW-9	9/27/2017		17.4	10.0	ug/L
Toluene	MW-9	8/30/2022		1.8	1.0	ug/L
Vinyl chloride	South Underdrain	8/30/2022		2	1	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 F

Assessment Statistics for Historical VOC Detections

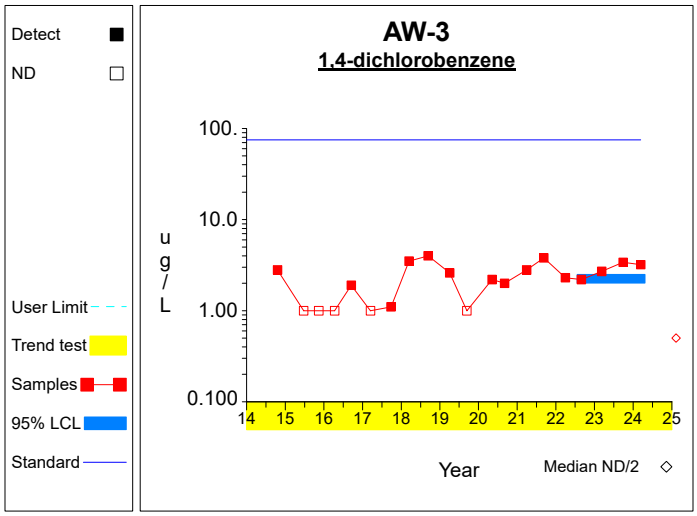
Table 1

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

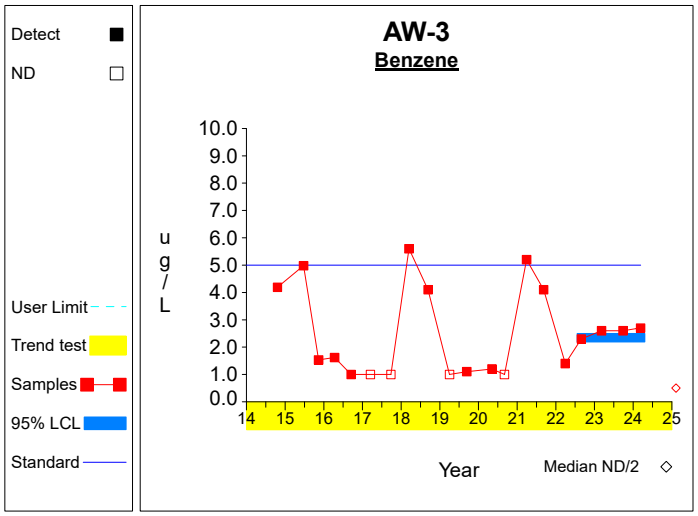
Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend
1,4-dichlorobenzene	ug/L	AW-3	4	2.875	0.538	1.176	2.242	3.508	75.000	
Benzene	ug/L	AW-3	4	2.550	0.173	1.176	2.346	2.754	5.000	
Chlorobenzene	ug/L	AW-3	4	0.500	0.000	1.176	0.500	0.500	100.000	
Chloroethane	ug/L	AW-3	4	3.625	0.506	1.176	3.030	4.220	2800.000	
Cis-1,2-dichloroethene	ug/L	AW-3	4	1.425	1.031	1.176	0.213	2.637	70.000	
Toluene	ug/L	AW-3	4	0.500	0.000	1.176	0.500	0.500	1000.000	
1,4-dichlorobenzene	ug/L	MW-20	4	2.900	0.346	1.176	2.493	3.307	75.000	
Benzene	ug/L	MW-20	4	2.675	0.640	1.176	1.923	3.427	5.000	
Chlorobenzene	ug/L	MW-20	4	2.950	0.387	1.176	2.494	3.406	100.000	
Chloroethane	ug/L	MW-20	4	0.500	0.000	1.176	0.500	0.500	2800.000	
Cis-1,2-dichloroethene	ug/L	MW-20	4	0.500	0.000	1.176	0.500	0.500	70.000	
Toluene	ug/L	MW-20	4	1.050	0.755	1.176	0.162	1.938	1000.000	

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

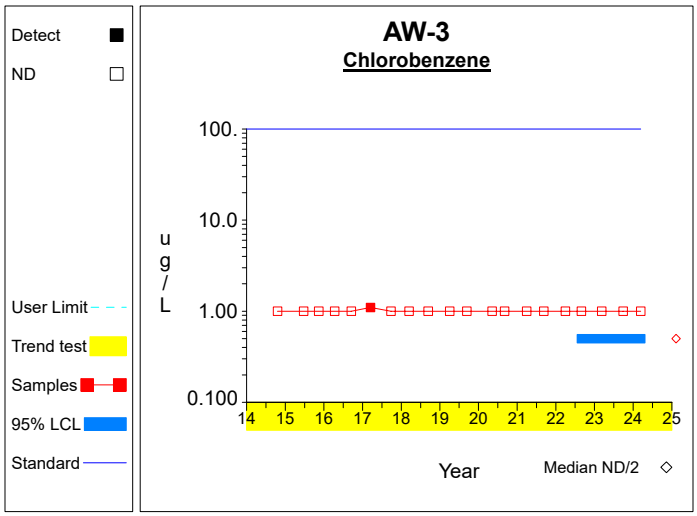
Confidence Limits (Assessment)



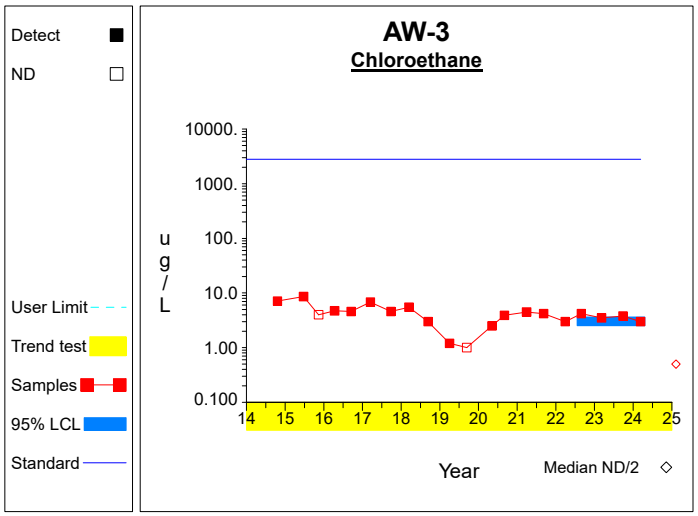
Graph 1



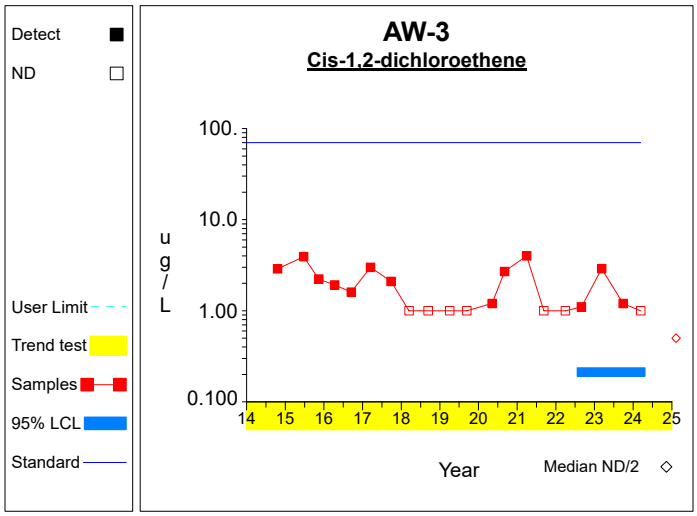
Graph 2



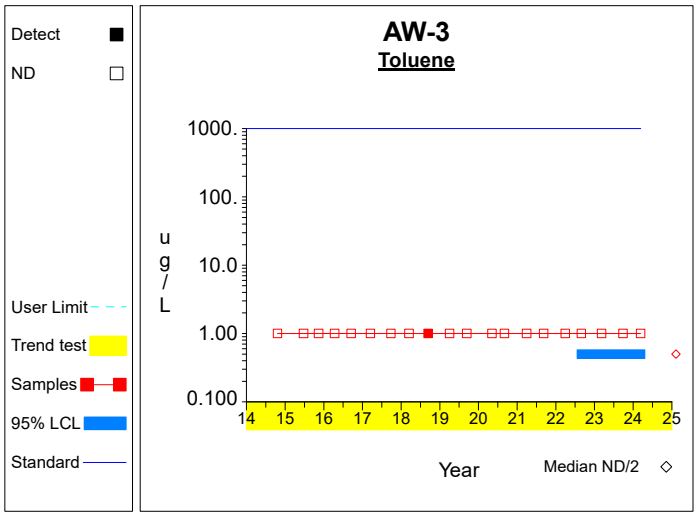
Graph 3



Graph 4



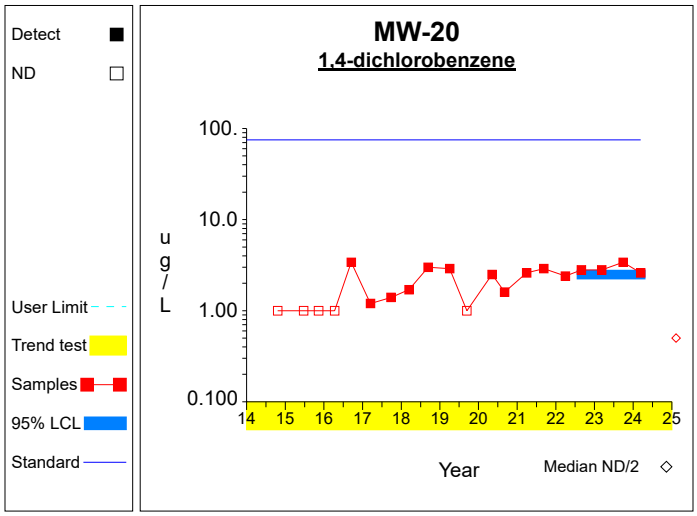
Graph 5



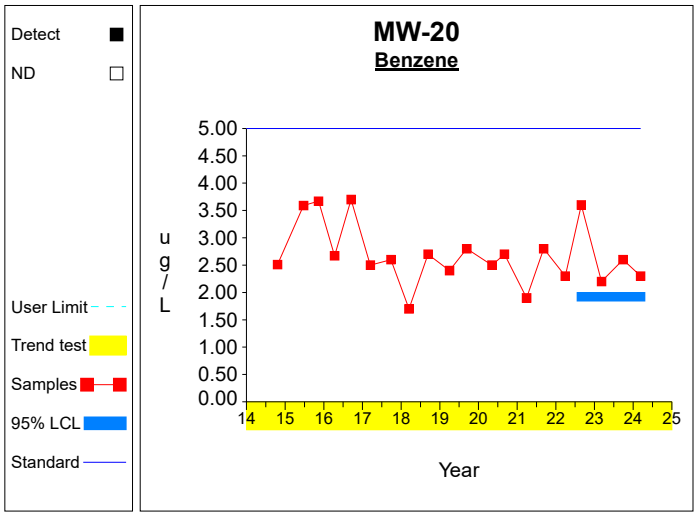
Graph 6

Prepared by: Otter Creek Environmental

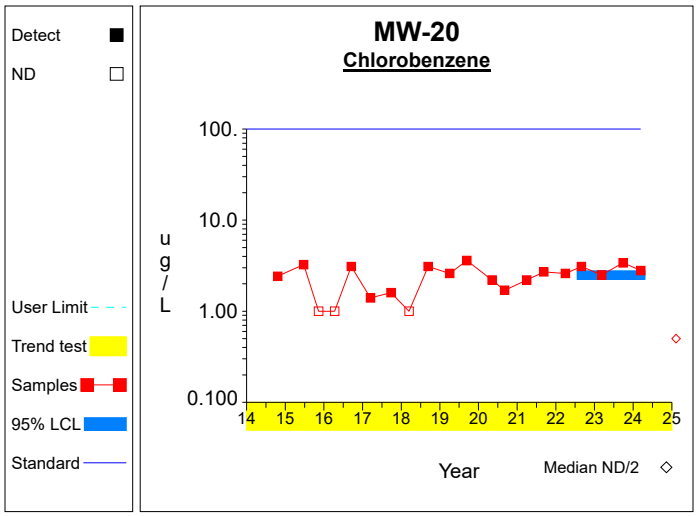
Confidence Limits (Assessment)



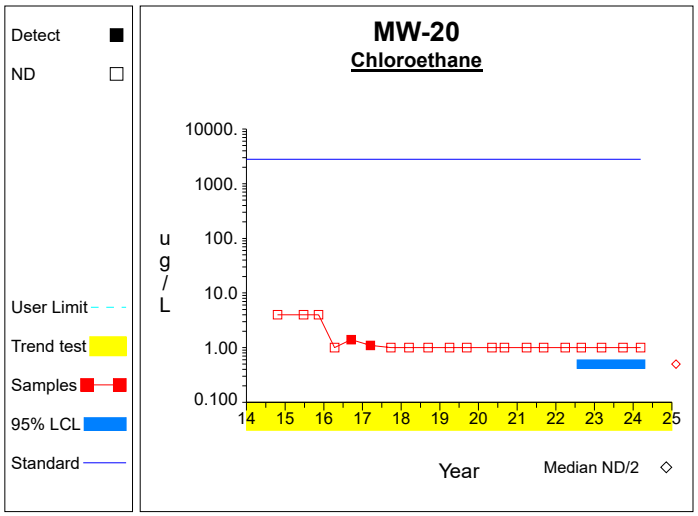
Graph 7



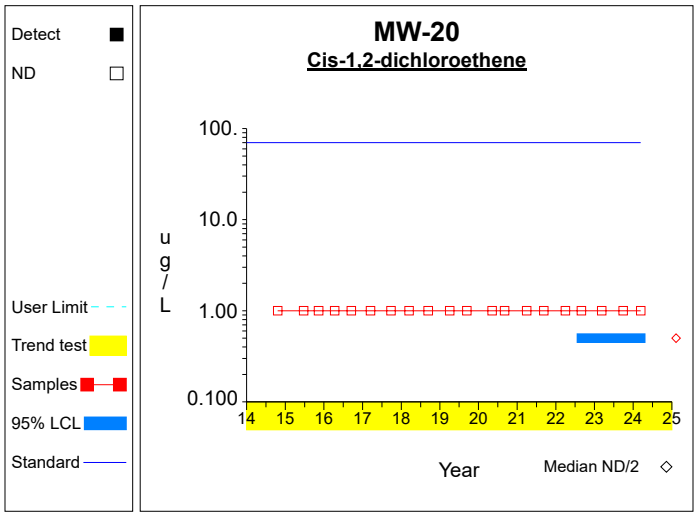
Graph 8



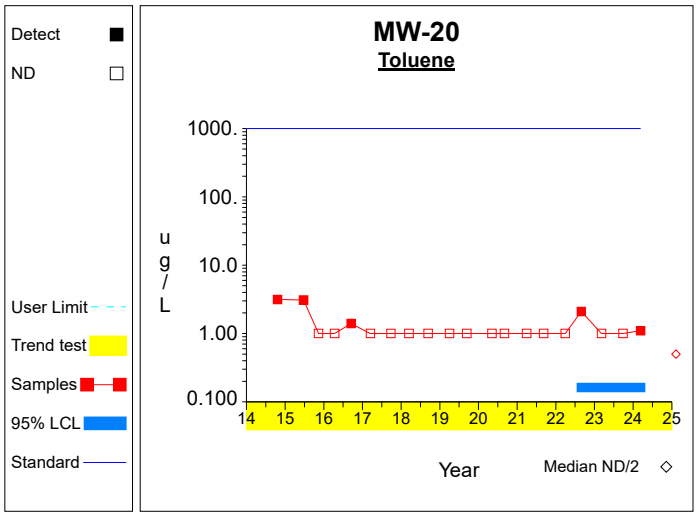
Graph 9



Graph 10



Graph 11



Graph 12

Prepared by: Otter Creek Environmental

APPENDIX D.2 –Fall Statistical Evaluation

Results of the Ground Water Statistics

for Benton County Sanitary Landfill

Second Semi-Annual Monitoring Event in 2024

Prepared for:
Benton County Solid Waste Disposal Commission
7904 20th Avenue
Blairstown, Iowa 52209

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

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INTRODUCTION

This report contains the results of the statistical analyses used to evaluate the ground water data obtained during the second semi-annual monitoring event in 2024 at Benton County Sanitary Landfill. The ground water at Benton County Sanitary Landfill is monitored by a network of wells including AW-2, AW-3, AW-4, AW-9, MW-12, MW-14, MW-19, MW-20, MW-24, MW-25, MW-26, MW-27, MW-28, MW-6, MW-7, and MW-9. Ground water well MW-23 was replaced with AW-4 in the HMSP. Monitoring wells AW-1, AW-2, AW-3, AW-9, MW-12, MW-14, MW-20, MW-24, MW-25, MW-26, MW-27, MW-41, MW-6, and MW-7 were sampled on October 2, 2024 and analyzed for the parameters required by permit. The statistical plan is designed to detect a release from the facility at the earliest indication so that it is protective of human health and the environment. The interwell methodology is described and then applied to the Benton County Sanitary Landfill data. The statistical plan conforms with IAC 567, Chapter 113.10, USEPA Guidance document ("*Statistical Analysis of Ground-Water Monitoring Data at RCRA Facilities, Unified Guidance"*, March 2009), and the American Society for Testing and Materials (ASTM) standard D6312-98, *Developing Appropriate Statistical Approaches for Ground-Water Detection Monitoring Programs*.

Ground Water Monitoring Program

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 below.

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

Organic Compounds:

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

Inorganic constituents:

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

The ground water data obtained during the second semi-annual monitoring event in 2024 are summarized in Attachment A.

STATISTICAL METHODOLOGIES FOR DETECTION MONITORING

IAC 567, Chapter 113.10(4) provides several options for statistically evaluating the ground water data at those wells that monitor the open cells or contiguous MSWLF units. The preferred methods for comparing ground water data are using either prediction limits or using control charts. The site prediction limit method was applied to the Benton County Sanitary Landfill data using the DUMPStat® statistical program. DUMPStat® is a program for the statistical analysis of groundwater monitoring data using methods described in "Statistical Methods for Groundwater Monitoring" by Dr. Robert D. Gibbons. The DUMPStat program is completely consistent with all USEPA regulations and guidance and the ASTM D6312-98 guidance.

Ground water statistics are to be done on the inorganic constituents listed. The organic constituents are compared to maximum contaminant levels (MCLs) or practical quantitation limits (PQLs), in lieu of statistical comparisons to historical concentrations.

Interwell Statistics: Upgradient versus Downgradient Comparisons

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

Results of the Interwell Statistics

The background data used in this statistical analysis includes the ground water data collected from ground water wells MW-6, MW-7, MW-26, MW-27, and MW-28 during the period from October 2014 through the current data. A summary of the background data from monitoring wells MW-6, MW-7, MW-26, MW-27, and MW-28 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 AW-1, AW-2, AW-3, AW-9, MW-12, MW-14, MW-20, MW-24, and MW-25, compared to the site prediction limits once sufficient data are available. Prediction limit exceedances are flagged with asterisks. For the most current data, the site prediction limit exceedances detected are summarized in the Table below.

Summary of Prediction Limit Exceedances for the Second Semi-Annual Monitoring Event in 2024

Well	Trace Metal	Result	Prediction Limit	Prediction Limit Type	Verified or Awaiting Verification
AW-2	Cobalt, µg/L	13.1	12.2000	Nonparametric	Verified
MW-12	Nickel, µg/L	41.6	29.5000	Nonparametric	Awaiting Verification
MW-24	Barium, µg/L	602	569.0000	Nonparametric	Awaiting Verification
	Cobalt, µg/L	12.9	12.2000	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 greater than or equal to 50% in the upgradient well so only this metal 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 4 standard deviation unit increases over background.

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

The 95% LCL for arsenic at AW-2 (28.176 µg/L) exceeds the USEPA MCL of 10 µg/L, though the current concentration (48.1 µg/L) does not exceed the site prediction limit of 51.3 µg/L.

The 95% LCL for cobalt at AW-2 (6.600 µg/L) exceeds the Iowa Statewide Standard of 2.1 µg/L.

The 95% LCL for arsenic at AW-3 (12.727 µg/L) exceeds the USEPA MCL of 10 µg/L, though the current concentration (25.1 µg/L) does not exceed the site prediction limit of 51.3 µg/L.

The 95% LCL for cobalt at MW-24 (3.971 µg/L) exceeds the Iowa Statewide Standard of 2.1 µg/L.

The calculated 95% LCLs for the remainder of the verified trace metal exceedances are below the respective GWPS.

Intrawell Comparisons

Intrawell statistics are appropriate for facilities where the upgradient wells do not accurately characterize the natural ground water conditions downgradient from the facility. This may be due to different hydrogeological conditions where the wells are screened, having too few upgradient wells to account for the spatial variability, or the site exhibiting no definable hydraulic gradient. Intrawell statistics compare new measurements to the historical data at each ground water monitoring well independently. It is recommended that at least eight background samples be obtained prior to performing the statistics to control the number of false assessments.

The most useful technique for intrawell comparisons is the combined Shewhart-CUSUM control chart. This control chart procedure is useful because it will detect releases both in terms of the constituent concentration and cumulative increases. This method is also extremely sensitive to sudden and gradual releases. A requirement for constructing these control charts is that the parameter is detected at a frequency greater than or equal to 25%, otherwise the data variance is not properly defined.

Many ground water monitoring parameters are not detected at a frequency great enough to generate the combined Shewhart-CUSUM control charts. For constituents that are detected less than 25% of the time monitored at a particular well, the data should be plotted as a time series until a sufficient number of data points are available to provide a 99% confidence nonparametric prediction limit. Nonparametric prediction limits are the largest value detected during background at that well for that parameter.

In developing the statistical background, the historical data must be thoroughly screened for anomalous data due to sampling error, analytical error, or simply by chance alone. An erroneous data point, if not removed prior to the mean and variance computations, would yield a larger control limit thus increasing the false negative rate. The DUMPStat® program screens for outliers using the Dixon test. Anomalous data will still be plotted on the graphs (with a unique symbol) but will not be included in the calculations.

The verification resample plan is an integral function of the statistical plan to reduce the probability that anomalous data obtained after the background has been established is indicative of a landfill release. The outliers have generally not been substantiated by either the resample events or the subsequent routine monitoring event.

The background data is tested for existing trends using Sen's slope test. If contamination exists prior to completing the background, the control limits could be potentially high and this control chart method would not be able to detect an increasing trend unless the increase is severe.

Results of the Intrawell Statistics

The trace metals data for monitoring well MW24 were evaluated using the combined Shewhart-CUSUM control chart method. The background data previously included ground water data obtained from October

2014 through 2020. As ground water monitoring at a municipal solid waste facility proceeds, it is recommended to update background data sets periodically with valid detection monitoring results that are representative of background groundwater quality not affected by leakage from a monitored unit. Failure to update background will exclude factors such as natural temporal variation, changes in field or laboratory methodologies, and changes in the water table due to meteorological conditions or other influences. Since there were no exceedances attributed to the landfill, the background was updated to include data collected from October 2014 through 2022.

A summary of the intrawell statistics is included in Attachment D, Table 1 "Summary Statistics and Intermediate Computations for Combined Shewhart-CUSUM Control Charts". The control charts or time series graphs follow the summary table. For the parameters compared using the combined Shewhart-CUSUM control chart, there were no control limit exceedances detected.

The background range was tested for increasing trends using Sen's Test. An increasing trend was detected in the background data for nickel at MW-24. For intrawell analysis, the site-wide false positive rate is 2% and the test becomes sensitive to 3 standard deviation unit increases over background.

Volatile Organic Compounds

Volatile Organic Compounds (VOCs) are generally man-made compounds not present in ambient ground water. If VOCs are detected above their statistical limit (i.e., the laboratory PQL or reporting limit), a verification resample will be conducted at the next scheduled sampling event. A statistical exceedance will be indicated if the VOC detection is confirmed by the subsequent monitoring. VOCs detected in the ground water at Benton County Sanitary Landfill during the second semi-annual monitoring event in 2024 are summarized below.

VOCs detected during the second semi-annual monitoring period in 2024

Well	VOC Detected	Result, µg/L	Reporting Limit, µg/L	Verified/ Awaiting verification	Water Quality Standard
AW-3	1,4-Dichlorobenzene	2.8	1	Verified	75[a]
	Chloroethane	3.0	1	Verified	2800[b]
MW-20	1,4-Dichlorobenzene	3.2	1	Verified	75[a]
	Benzene	2.8	1	Verified	5[a]
	Chlorobenzene	3.6	1	Verified	100[a]

a - USEPA MCL, b- Iowa Statewide Standard for a protected groundwater source

Historical detections from October 2014 to the present are summarized in Attachment E.

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

significant level above the GWPS). An exceedance is verified if the LCL is above the Regulatory GWPS. The calculated 95% LCLs for each of the verified VOCs are below the respective GWPS (Attachment F).

Attachment A

Ground Water Data obtained during the Second Semi-Annual Monitoring Event in 2024

Table 1

Analytical Data Summary for 10/2/2024

Constituents	Units	AW-1	AW-2	AW-3	AW-9	MW-12	MW-14	MW-20	MW-24	MW-25	MW-26	MW-27	MW-41	MW-6	MW-7
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethene	ug/L	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	ug/L	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L	<5	<5	<5		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2-dibromoethane	ug/L	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	ug/L	<1.0	<1.0	2.8		<1.0	<1.0	3.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2-butanone	ug/L	<10	<10	<10		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-hexanone	ug/L	<5	<5	<5		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone	ug/L	<5	<5	<5		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	ug/L	<10	<10	<10		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	ug/L	<5	<5	<5		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Antimony, total	ug/L	<2	<2	<2		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	ug/L	8.7	48.1	25.1	4.2	<4.0	<4.0	26.7	33.3	<4.0	<4.0	5.2	<4.0	<4.0	<4.0
Barium, total	ug/L	413.0	141.0	308.0		105.0	401.0	332.0	602.0	27.7	150.0	111.0	394.0	233.0	162.0
Benzene	ug/L	<1.0	<1.0	<1.0		<1.0	<1.0	2.8	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Beryllium, total	ug/L	<4	<4	<4		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bromochloromethane	ug/L	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	ug/L	<.8	<.8	<.8		<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	ug/L	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<1.0	<1.0	<1.0		<1.0	<1.0	3.6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroethane	ug/L	<1	<1	3		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	ug/L	<8	<8	<8		<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethene	ug/L	<1	<1	<1		<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	<1	<1	<1
Cobalt, total	ug/L	4.0	13.1	.8	9.6	2.6	<.4	.9	12.9	<.4	<.4	.4	1.0	1.5	<.4
Copper, total	ug/L	<4	<4	<4		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Dibromochloromethane	ug/L	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Iodomethane	ug/L	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	ug/L	<4	<4	<4		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Methylene chloride	ug/L	<5	<5	<5		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	ug/L	4.3	9.2	<4.0		41.6	9.5	<4.0	29.3	4.7	<4.0	<4.0	<4.0	14.6	4.1
Selenium, total	ug/L	<4	<4	<4		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	ug/L	<4	<4	<4		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	ug/L	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfide	mg/L							<.1							
Tetrachloroethene	ug/L	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<2	<2	<2		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Toluene	ug/L	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,2-dichloroethene	ug/L	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1

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

Table 1

Analytical Data Summary for 10/2/2024

Constituents	Units	AW-1	AW-2	AW-3	AW-9	MW-12	MW-14	MW-20	MW-24	MW-25	MW-26	MW-27	MW-41	MW-6	MW-7
Trans-1,3-dichloropropene	ug/L	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	ug/L	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	ug/L	<20	<20	<20		<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	ug/L	<5	<5	<5		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	ug/L	<2	<2	<2		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	<20	<20	<20		<20	<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-26	10/31/2016	ND	2.0000		
Antimony, total	ug/L	MW-26	03/16/2017	ND	2.0000		
Antimony, total	ug/L	MW-26	09/27/2017	ND	2.0000		
Antimony, total	ug/L	MW-26	03/14/2018	ND	2.0000		
Antimony, total	ug/L	MW-26	09/12/2018	ND	2.0000		
Antimony, total	ug/L	MW-26	04/01/2019	ND	2.0000		
Antimony, total	ug/L	MW-26	09/12/2019	ND	2.0000		
Antimony, total	ug/L	MW-26	05/06/2020	ND	2.0000		
Antimony, total	ug/L	MW-26	09/03/2020	ND	2.0000		
Antimony, total	ug/L	MW-26	03/30/2021	ND	2.0000		
Antimony, total	ug/L	MW-26	09/08/2021	ND	2.0000		
Antimony, total	ug/L	MW-26	03/31/2022	ND	2.0000		
Antimony, total	ug/L	MW-26	08/30/2022	ND	2.0000		
Antimony, total	ug/L	MW-26	03/07/2023	ND	2.0000		
Antimony, total	ug/L	MW-26	09/28/2023	ND	2.0000		
Antimony, total	ug/L	MW-26	03/11/2024	ND	2.0000		
Antimony, total	ug/L	MW-26	10/02/2024	ND	2.0000		
Arsenic, total	ug/L	MW-26	10/31/2016	ND	4.0000		
Arsenic, total	ug/L	MW-26	03/16/2017	ND	4.0000		
Arsenic, total	ug/L	MW-26	09/27/2017	ND	4.0000		
Arsenic, total	ug/L	MW-26	03/14/2018	ND	4.0000		
Arsenic, total	ug/L	MW-26	09/12/2018	ND	4.0000		
Arsenic, total	ug/L	MW-26	04/01/2019	ND	4.0000		
Arsenic, total	ug/L	MW-26	09/12/2019	ND	4.0000		
Arsenic, total	ug/L	MW-26	05/06/2020	ND	4.0000		
Arsenic, total	ug/L	MW-26	09/03/2020	ND	4.0000		
Arsenic, total	ug/L	MW-26	03/30/2021	ND	4.0000		
Arsenic, total	ug/L	MW-26	09/08/2021	ND	4.0000		
Arsenic, total	ug/L	MW-26	03/31/2022	ND	4.0000		
Arsenic, total	ug/L	MW-26	08/30/2022	ND	4.0000		
Arsenic, total	ug/L	MW-26	03/07/2023	ND	4.0000		
Arsenic, total	ug/L	MW-26	09/28/2023	ND	4.0000		
Arsenic, total	ug/L	MW-26	03/11/2024	ND	4.0000		
Arsenic, total	ug/L	MW-26	10/02/2024	ND	4.0000		
Barium, total	ug/L	MW-26	10/31/2016		155.0000		
Barium, total	ug/L	MW-26	03/16/2017		161.0000		
Barium, total	ug/L	MW-26	09/27/2017		155.0000		
Barium, total	ug/L	MW-26	03/14/2018		201.0000		
Barium, total	ug/L	MW-26	09/12/2018		170.0000		
Barium, total	ug/L	MW-26	04/01/2019		176.0000		
Barium, total	ug/L	MW-26	09/12/2019		158.0000		
Barium, total	ug/L	MW-26	05/06/2020		158.0000		
Barium, total	ug/L	MW-26	09/03/2020		148.0000		
Barium, total	ug/L	MW-26	03/30/2021		154.0000		
Barium, total	ug/L	MW-26	09/08/2021		141.0000		
Barium, total	ug/L	MW-26	03/31/2022		178.0000		
Barium, total	ug/L	MW-26	08/30/2022		156.0000		
Barium, total	ug/L	MW-26	03/07/2023		174.0000		
Barium, total	ug/L	MW-26	09/28/2023		170.0000		
Barium, total	ug/L	MW-26	03/11/2024		188.0000		
Barium, total	ug/L	MW-26	10/02/2024		150.0000		
Beryllium, total	ug/L	MW-26	10/31/2016	ND	4.0000		
Beryllium, total	ug/L	MW-26	03/16/2017	ND	4.0000		
Beryllium, total	ug/L	MW-26	09/27/2017	ND	4.0000		
Beryllium, total	ug/L	MW-26	03/14/2018	ND	4.0000		
Beryllium, total	ug/L	MW-26	09/12/2018	ND	4.0000		
Beryllium, total	ug/L	MW-26	04/01/2019	ND	4.0000		
Beryllium, total	ug/L	MW-26	09/12/2019	ND	4.0000		
Beryllium, total	ug/L	MW-26	05/06/2020	ND	4.0000		
Beryllium, total	ug/L	MW-26	09/03/2020	ND	4.0000		
Beryllium, total	ug/L	MW-26	03/30/2021	ND	4.0000		
Beryllium, total	ug/L	MW-26	09/08/2021	ND	4.0000		
Beryllium, total	ug/L	MW-26	03/31/2022	ND	4.0000		
Beryllium, total	ug/L	MW-26	08/30/2022	ND	4.0000		
Beryllium, total	ug/L	MW-26	03/07/2023	ND	4.0000		
Beryllium, total	ug/L	MW-26	09/28/2023	ND	4.0000		
Beryllium, total	ug/L	MW-26	03/11/2024	ND	4.0000		
Beryllium, total	ug/L	MW-26	10/02/2024	ND	4.0000		
Cadmium, total	ug/L	MW-26	10/31/2016	ND	0.8000		
Cadmium, total	ug/L	MW-26	03/16/2017	ND	0.8000		
Cadmium, total	ug/L	MW-26	09/27/2017	ND	0.8000		
Cadmium, total	ug/L	MW-26	03/14/2018	ND	0.8000		
Cadmium, total	ug/L	MW-26	09/12/2018	ND	0.8000		
Cadmium, total	ug/L	MW-26	04/01/2019	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-26	09/12/2019	ND	0.8000		
Cadmium, total	ug/L	MW-26	05/06/2020	ND	0.8000		
Cadmium, total	ug/L	MW-26	09/03/2020	ND	0.8000		
Cadmium, total	ug/L	MW-26	03/30/2021	ND	0.8000		
Cadmium, total	ug/L	MW-26	09/08/2021	ND	0.8000		
Cadmium, total	ug/L	MW-26	03/31/2022	ND	0.8000		
Cadmium, total	ug/L	MW-26	08/30/2022	ND	0.8000		
Cadmium, total	ug/L	MW-26	03/07/2023	ND	0.8000		
Cadmium, total	ug/L	MW-26	09/28/2023	ND	0.8000		
Cadmium, total	ug/L	MW-26	03/11/2024	ND	0.8000		
Cadmium, total	ug/L	MW-26	10/02/2024	ND	0.8000		
Chromium, total	ug/L	MW-26	10/31/2016	ND	8.0000		
Chromium, total	ug/L	MW-26	03/16/2017	ND	8.0000		
Chromium, total	ug/L	MW-26	09/27/2017	ND	8.0000		
Chromium, total	ug/L	MW-26	03/14/2018	ND	8.0000		
Chromium, total	ug/L	MW-26	09/12/2018	ND	8.0000		
Chromium, total	ug/L	MW-26	04/01/2019	ND	8.0000		
Chromium, total	ug/L	MW-26	09/12/2019	ND	8.0000		
Chromium, total	ug/L	MW-26	05/06/2020	ND	8.0000		
Chromium, total	ug/L	MW-26	09/03/2020	ND	8.0000		
Chromium, total	ug/L	MW-26	03/30/2021	ND	8.0000		
Chromium, total	ug/L	MW-26	09/08/2021	ND	8.0000		
Chromium, total	ug/L	MW-26	03/31/2022	ND	8.0000		
Chromium, total	ug/L	MW-26	08/30/2022	ND	8.0000		
Chromium, total	ug/L	MW-26	03/07/2023	ND	8.0000		
Chromium, total	ug/L	MW-26	09/28/2023	ND	8.0000		
Chromium, total	ug/L	MW-26	03/11/2024	ND	8.0000		
Chromium, total	ug/L	MW-26	10/02/2024	ND	8.0000		
Cobalt, total	ug/L	MW-26	10/31/2016	ND	0.8000		
Cobalt, total	ug/L	MW-26	03/16/2017	ND	0.8000		
Cobalt, total	ug/L	MW-26	09/27/2017	ND	0.8000		
Cobalt, total	ug/L	MW-26	03/14/2018	ND	2.0000		*
Cobalt, total	ug/L	MW-26	09/12/2018	ND	0.8000		
Cobalt, total	ug/L	MW-26	04/01/2019	ND	0.8000		
Cobalt, total	ug/L	MW-26	09/12/2019	ND	0.8000		
Cobalt, total	ug/L	MW-26	05/06/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-26	09/03/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-26	03/30/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-26	09/08/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-26	03/31/2022	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-26	08/30/2022	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-26	03/07/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-26	09/28/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-26	03/11/2024	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-26	10/02/2024	ND	0.4000	0.8000	**
Copper, total	ug/L	MW-26	10/31/2016	ND	4.0000		
Copper, total	ug/L	MW-26	03/16/2017	ND	4.0000		
Copper, total	ug/L	MW-26	09/27/2017	ND	4.0000		
Copper, total	ug/L	MW-26	03/14/2018	ND	4.0000		
Copper, total	ug/L	MW-26	09/12/2018	ND	4.0000		
Copper, total	ug/L	MW-26	04/01/2019	ND	4.0000		
Copper, total	ug/L	MW-26	09/12/2019	ND	4.0000		
Copper, total	ug/L	MW-26	05/06/2020	ND	4.0000		
Copper, total	ug/L	MW-26	09/03/2020	ND	4.0000		
Copper, total	ug/L	MW-26	03/30/2021	ND	4.0000		
Copper, total	ug/L	MW-26	09/08/2021	ND	4.0000		
Copper, total	ug/L	MW-26	03/31/2022	ND	4.0000		
Copper, total	ug/L	MW-26	08/30/2022	ND	4.0000		
Copper, total	ug/L	MW-26	03/07/2023	ND	4.0000		
Copper, total	ug/L	MW-26	09/28/2023	ND	4.0000		
Copper, total	ug/L	MW-26	03/11/2024	ND	4.0000		
Copper, total	ug/L	MW-26	10/02/2024	ND	4.0000		
Lead, total	ug/L	MW-26	10/31/2016	ND	4.0000		
Lead, total	ug/L	MW-26	03/16/2017	ND	4.0000		
Lead, total	ug/L	MW-26	09/27/2017	ND	4.0000		
Lead, total	ug/L	MW-26	03/14/2018	ND	4.0000		
Lead, total	ug/L	MW-26	09/12/2018	ND	4.0000		
Lead, total	ug/L	MW-26	04/01/2019	ND	4.0000		
Lead, total	ug/L	MW-26	09/12/2019	ND	4.0000		
Lead, total	ug/L	MW-26	05/06/2020	ND	4.0000		
Lead, total	ug/L	MW-26	09/03/2020	ND	4.0000		
Lead, total	ug/L	MW-26	03/30/2021	ND	4.0000		
Lead, total	ug/L	MW-26	09/08/2021	ND	4.0000		
Lead, total	ug/L	MW-26	03/31/2022	ND	4.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Lead, total	ug/L	MW-26	08/30/2022	ND	4.0000		
Lead, total	ug/L	MW-26	03/07/2023	ND	4.0000		
Lead, total	ug/L	MW-26	09/28/2023	ND	4.0000		
Lead, total	ug/L	MW-26	03/11/2024	ND	4.0000		
Lead, total	ug/L	MW-26	10/02/2024	ND	4.0000		
Nickel, total	ug/L	MW-26	10/31/2016	ND	4.0000		
Nickel, total	ug/L	MW-26	03/16/2017	ND	4.0000		
Nickel, total	ug/L	MW-26	09/27/2017	ND	4.0000		
Nickel, total	ug/L	MW-26	03/14/2018	ND	4.0000		
Nickel, total	ug/L	MW-26	09/12/2018	ND	4.0000		
Nickel, total	ug/L	MW-26	04/01/2019	ND	4.0000		
Nickel, total	ug/L	MW-26	09/12/2019	ND	4.0000		
Nickel, total	ug/L	MW-26	05/06/2020	ND	4.0000		
Nickel, total	ug/L	MW-26	09/03/2020	ND	4.0000		
Nickel, total	ug/L	MW-26	03/30/2021	ND	4.0000		
Nickel, total	ug/L	MW-26	09/08/2021	ND	4.0000		
Nickel, total	ug/L	MW-26	03/31/2022	ND	4.0000		
Nickel, total	ug/L	MW-26	08/30/2022	ND	4.0000		
Nickel, total	ug/L	MW-26	03/07/2023	ND	4.0000		
Nickel, total	ug/L	MW-26	09/28/2023	ND	4.0000		
Nickel, total	ug/L	MW-26	03/11/2024	ND	4.0000		
Nickel, total	ug/L	MW-26	10/02/2024	ND	4.0000		
Selenium, total	ug/L	MW-26	10/31/2016	ND	4.0000		
Selenium, total	ug/L	MW-26	03/16/2017	ND	4.0000		
Selenium, total	ug/L	MW-26	09/27/2017	ND	4.0000		
Selenium, total	ug/L	MW-26	03/14/2018	ND	4.0000		
Selenium, total	ug/L	MW-26	09/12/2018	ND	4.0000		
Selenium, total	ug/L	MW-26	04/01/2019	ND	4.0000		
Selenium, total	ug/L	MW-26	09/12/2019	ND	4.0000		
Selenium, total	ug/L	MW-26	05/06/2020	ND	4.0000		
Selenium, total	ug/L	MW-26	09/03/2020	ND	4.0000		
Selenium, total	ug/L	MW-26	03/30/2021	ND	4.0000		
Selenium, total	ug/L	MW-26	09/08/2021	ND	4.0000		
Selenium, total	ug/L	MW-26	03/31/2022	ND	4.0000		
Selenium, total	ug/L	MW-26	08/30/2022	ND	4.0000		
Selenium, total	ug/L	MW-26	03/07/2023	ND	4.0000		
Selenium, total	ug/L	MW-26	09/28/2023	ND	4.0000		
Selenium, total	ug/L	MW-26	03/11/2024	ND	4.0000		
Selenium, total	ug/L	MW-26	10/02/2024	ND	4.0000		
Silver, total	ug/L	MW-26	10/31/2016	ND	4.0000		
Silver, total	ug/L	MW-26	03/16/2017	ND	4.0000		
Silver, total	ug/L	MW-26	09/27/2017	ND	4.0000		
Silver, total	ug/L	MW-26	03/14/2018	ND	4.0000		
Silver, total	ug/L	MW-26	09/12/2018	ND	4.0000		
Silver, total	ug/L	MW-26	04/01/2019	ND	4.0000		
Silver, total	ug/L	MW-26	09/12/2019	ND	4.0000		
Silver, total	ug/L	MW-26	05/06/2020	ND	4.0000		
Silver, total	ug/L	MW-26	09/03/2020	ND	4.0000		
Silver, total	ug/L	MW-26	03/30/2021	ND	4.0000		
Silver, total	ug/L	MW-26	09/08/2021	ND	4.0000		
Silver, total	ug/L	MW-26	03/31/2022	ND	4.0000		
Silver, total	ug/L	MW-26	08/30/2022	ND	4.0000		
Silver, total	ug/L	MW-26	03/07/2023	ND	4.0000		
Silver, total	ug/L	MW-26	09/28/2023	ND	4.0000		
Silver, total	ug/L	MW-26	03/11/2024	ND	4.0000		
Silver, total	ug/L	MW-26	10/02/2024	ND	4.0000		
Thallium, total	ug/L	MW-26	10/31/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-26	03/16/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-26	09/27/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-26	03/14/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-26	09/12/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-26	04/01/2019	ND	2.0000		
Thallium, total	ug/L	MW-26	09/12/2019	ND	2.0000		
Thallium, total	ug/L	MW-26	05/06/2020	ND	2.0000		
Thallium, total	ug/L	MW-26	09/03/2020	ND	2.0000		
Thallium, total	ug/L	MW-26	03/30/2021	ND	2.0000		
Thallium, total	ug/L	MW-26	09/08/2021	ND	2.0000		
Thallium, total	ug/L	MW-26	03/31/2022	ND	2.0000		
Thallium, total	ug/L	MW-26	08/30/2022	ND	2.0000		
Thallium, total	ug/L	MW-26	03/07/2023	ND	2.0000		
Thallium, total	ug/L	MW-26	09/28/2023	ND	2.0000		
Thallium, total	ug/L	MW-26	03/11/2024	ND	2.0000		
Thallium, total	ug/L	MW-26	10/02/2024	ND	2.0000		
Vanadium, total	ug/L	MW-26	10/31/2016	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-26	03/16/2017	ND	20.0000		
Vanadium, total	ug/L	MW-26	09/27/2017	ND	20.0000		
Vanadium, total	ug/L	MW-26	03/14/2018	ND	20.0000		
Vanadium, total	ug/L	MW-26	09/12/2018	ND	20.0000		
Vanadium, total	ug/L	MW-26	04/01/2019	ND	20.0000		
Vanadium, total	ug/L	MW-26	09/12/2019	ND	20.0000		
Vanadium, total	ug/L	MW-26	05/06/2020	ND	20.0000		
Vanadium, total	ug/L	MW-26	09/03/2020	ND	20.0000		
Vanadium, total	ug/L	MW-26	03/30/2021	ND	20.0000		
Vanadium, total	ug/L	MW-26	09/08/2021	ND	20.0000		
Vanadium, total	ug/L	MW-26	03/31/2022	ND	20.0000		
Vanadium, total	ug/L	MW-26	08/30/2022	ND	20.0000		
Vanadium, total	ug/L	MW-26	03/07/2023	ND	20.0000		
Vanadium, total	ug/L	MW-26	09/28/2023	ND	20.0000		
Vanadium, total	ug/L	MW-26	03/11/2024	ND	20.0000		
Vanadium, total	ug/L	MW-26	10/02/2024	ND	20.0000		
Zinc, total	ug/L	MW-26	10/31/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-26	03/16/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-26	09/27/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-26	03/14/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-26	09/12/2018	ND	20.0000		
Zinc, total	ug/L	MW-26	04/01/2019	ND	20.0000		
Zinc, total	ug/L	MW-26	09/12/2019		12.5000		
Zinc, total	ug/L	MW-26	05/06/2020	ND	20.0000		
Zinc, total	ug/L	MW-26	09/03/2020	ND	20.0000		
Zinc, total	ug/L	MW-26	03/30/2021	ND	20.0000		
Zinc, total	ug/L	MW-26	09/08/2021	ND	20.0000		
Zinc, total	ug/L	MW-26	03/31/2022	ND	20.0000		
Zinc, total	ug/L	MW-26	08/30/2022	ND	20.0000		
Zinc, total	ug/L	MW-26	03/07/2023	ND	20.0000		
Zinc, total	ug/L	MW-26	09/28/2023	ND	20.0000		
Zinc, total	ug/L	MW-26	03/11/2024	ND	20.0000		
Zinc, total	ug/L	MW-26	10/02/2024	ND	20.0000		
Antimony, total	ug/L	MW-27	10/31/2016	ND	2.0000		
Antimony, total	ug/L	MW-27	03/16/2017	ND	2.0000		
Antimony, total	ug/L	MW-27	09/27/2017	ND	2.0000		
Antimony, total	ug/L	MW-27	03/14/2018	ND	2.0000		
Antimony, total	ug/L	MW-27	09/12/2018	ND	2.0000		
Antimony, total	ug/L	MW-27	04/01/2019	ND	2.0000		
Antimony, total	ug/L	MW-27	09/12/2019	ND	2.0000		
Antimony, total	ug/L	MW-27	05/06/2020	ND	2.0000		
Antimony, total	ug/L	MW-27	09/03/2020	ND	2.0000		
Antimony, total	ug/L	MW-27	03/30/2021	ND	2.0000		
Antimony, total	ug/L	MW-27	09/08/2021	ND	2.0000		
Antimony, total	ug/L	MW-27	03/31/2022	ND	2.0000		
Antimony, total	ug/L	MW-27	08/30/2022	ND	2.0000		
Antimony, total	ug/L	MW-27	03/07/2023	ND	2.0000		
Antimony, total	ug/L	MW-27	09/28/2023	ND	2.0000		
Antimony, total	ug/L	MW-27	03/11/2024	ND	2.0000		
Antimony, total	ug/L	MW-27	10/02/2024	ND	2.0000		
Arsenic, total	ug/L	MW-27	10/31/2016	ND	4.0000		
Arsenic, total	ug/L	MW-27	03/16/2017		9.3000		
Arsenic, total	ug/L	MW-27	09/27/2017		84.4000		*
Arsenic, total	ug/L	MW-27	12/13/2017		8.8000		
Arsenic, total	ug/L	MW-27	03/14/2018		43.9000		
Arsenic, total	ug/L	MW-27	09/12/2018		26.3000		
Arsenic, total	ug/L	MW-27	04/01/2019		51.3000		
Arsenic, total	ug/L	MW-27	09/12/2019		18.8000		
Arsenic, total	ug/L	MW-27	05/06/2020		9.2000		
Arsenic, total	ug/L	MW-27	09/03/2020	ND	4.0000		
Arsenic, total	ug/L	MW-27	03/30/2021		8.6000		
Arsenic, total	ug/L	MW-27	09/08/2021		5.6000		
Arsenic, total	ug/L	MW-27	03/31/2022	ND	4.0000		
Arsenic, total	ug/L	MW-27	08/30/2022		13.5000		
Arsenic, total	ug/L	MW-27	03/07/2023	ND	4.0000		
Arsenic, total	ug/L	MW-27	09/28/2023		5.3000		
Arsenic, total	ug/L	MW-27	03/11/2024		4.5000		
Arsenic, total	ug/L	MW-27	10/02/2024		5.2000		
Barium, total	ug/L	MW-27	10/31/2016		143.0000		
Barium, total	ug/L	MW-27	03/16/2017		113.0000		
Barium, total	ug/L	MW-27	09/27/2017		501.0000		
Barium, total	ug/L	MW-27	12/13/2017		134.0000		
Barium, total	ug/L	MW-27	03/14/2018		302.0000		
Barium, total	ug/L	MW-27	09/12/2018		189.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Barium, total	ug/L	MW-27	04/01/2019		289.0000		
Barium, total	ug/L	MW-27	09/12/2019		182.0000		
Barium, total	ug/L	MW-27	05/06/2020		138.0000		
Barium, total	ug/L	MW-27	09/03/2020		124.0000		
Barium, total	ug/L	MW-27	03/30/2021		127.0000		
Barium, total	ug/L	MW-27	09/08/2021		111.0000		
Barium, total	ug/L	MW-27	03/31/2022		106.0000		
Barium, total	ug/L	MW-27	08/30/2022		134.0000		
Barium, total	ug/L	MW-27	03/07/2023		107.0000		
Barium, total	ug/L	MW-27	09/28/2023		112.0000		
Barium, total	ug/L	MW-27	03/11/2024		104.0000		
Barium, total	ug/L	MW-27	10/02/2024		111.0000		
Beryllium, total	ug/L	MW-27	10/31/2016	ND	4.0000		
Beryllium, total	ug/L	MW-27	03/16/2017	ND	4.0000		
Beryllium, total	ug/L	MW-27	09/27/2017	ND	4.0000		
Beryllium, total	ug/L	MW-27	03/14/2018	ND	4.0000		
Beryllium, total	ug/L	MW-27	09/12/2018	ND	4.0000		
Beryllium, total	ug/L	MW-27	04/01/2019	ND	4.0000		
Beryllium, total	ug/L	MW-27	09/12/2019	ND	4.0000		
Beryllium, total	ug/L	MW-27	05/06/2020	ND	4.0000		
Beryllium, total	ug/L	MW-27	09/03/2020	ND	4.0000		
Beryllium, total	ug/L	MW-27	03/30/2021	ND	4.0000		
Beryllium, total	ug/L	MW-27	09/08/2021	ND	4.0000		
Beryllium, total	ug/L	MW-27	03/31/2022	ND	4.0000		
Beryllium, total	ug/L	MW-27	08/30/2022	ND	4.0000		
Beryllium, total	ug/L	MW-27	03/07/2023	ND	4.0000		
Beryllium, total	ug/L	MW-27	09/28/2023	ND	4.0000		
Beryllium, total	ug/L	MW-27	03/11/2024	ND	4.0000		
Beryllium, total	ug/L	MW-27	10/02/2024	ND	4.0000		
Cadmium, total	ug/L	MW-27	10/31/2016	ND	0.8000		
Cadmium, total	ug/L	MW-27	03/16/2017	ND	0.8000		
Cadmium, total	ug/L	MW-27	09/27/2017	ND	0.8000		
Cadmium, total	ug/L	MW-27	03/14/2018	ND	0.8000		
Cadmium, total	ug/L	MW-27	09/12/2018	ND	0.8000		
Cadmium, total	ug/L	MW-27	04/01/2019	ND	0.8000		
Cadmium, total	ug/L	MW-27	09/12/2019	ND	0.8000		
Cadmium, total	ug/L	MW-27	05/06/2020	ND	0.8000		
Cadmium, total	ug/L	MW-27	09/03/2020	ND	0.8000		
Cadmium, total	ug/L	MW-27	03/30/2021	ND	0.8000		
Cadmium, total	ug/L	MW-27	09/08/2021	ND	0.8000		
Cadmium, total	ug/L	MW-27	03/31/2022	ND	0.8000		
Cadmium, total	ug/L	MW-27	08/30/2022	ND	0.8000		
Cadmium, total	ug/L	MW-27	03/07/2023	ND	0.8000		
Cadmium, total	ug/L	MW-27	09/28/2023	ND	0.8000		
Cadmium, total	ug/L	MW-27	03/11/2024	ND	0.8000		
Cadmium, total	ug/L	MW-27	10/02/2024	ND	0.8000		
Chromium, total	ug/L	MW-27	10/31/2016	ND	8.0000		
Chromium, total	ug/L	MW-27	03/16/2017	ND	8.0000		
Chromium, total	ug/L	MW-27	09/27/2017	ND	8.0000		
Chromium, total	ug/L	MW-27	03/14/2018	ND	8.0000		
Chromium, total	ug/L	MW-27	09/12/2018	ND	8.0000		
Chromium, total	ug/L	MW-27	04/01/2019	ND	8.0000		
Chromium, total	ug/L	MW-27	09/12/2019	ND	8.0000		
Chromium, total	ug/L	MW-27	05/06/2020	ND	8.0000		
Chromium, total	ug/L	MW-27	09/03/2020	ND	8.0000		
Chromium, total	ug/L	MW-27	03/30/2021	ND	8.0000		
Chromium, total	ug/L	MW-27	09/08/2021	ND	8.0000		
Chromium, total	ug/L	MW-27	03/31/2022	ND	8.0000		
Chromium, total	ug/L	MW-27	08/30/2022	ND	8.0000		
Chromium, total	ug/L	MW-27	03/07/2023	ND	8.0000		
Chromium, total	ug/L	MW-27	09/28/2023	ND	8.0000		
Chromium, total	ug/L	MW-27	03/11/2024	ND	8.0000		
Chromium, total	ug/L	MW-27	10/02/2024	ND	8.0000		
Cobalt, total	ug/L	MW-27	10/31/2016	ND	0.8000		
Cobalt, total	ug/L	MW-27	03/16/2017	ND	0.8000		
Cobalt, total	ug/L	MW-27	09/27/2017		1.3000		
Cobalt, total	ug/L	MW-27	03/14/2018	ND	2.0000	0.8000	**
Cobalt, total	ug/L	MW-27	09/12/2018	ND	0.8000		
Cobalt, total	ug/L	MW-27	04/01/2019		0.8000		
Cobalt, total	ug/L	MW-27	09/12/2019	ND	0.8000		
Cobalt, total	ug/L	MW-27	05/06/2020		1.0000		
Cobalt, total	ug/L	MW-27	09/03/2020		0.8000		
Cobalt, total	ug/L	MW-27	03/30/2021		0.7000		
Cobalt, total	ug/L	MW-27	09/08/2021		0.6000		

* - 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	
Cobalt, total	ug/L	MW-27	03/31/2022		0.7000		
Cobalt, total	ug/L	MW-27	08/30/2022		0.6000		
Cobalt, total	ug/L	MW-27	03/07/2023		0.7000		
Cobalt, total	ug/L	MW-27	09/28/2023		0.6000		
Cobalt, total	ug/L	MW-27	03/11/2024		0.7000		
Cobalt, total	ug/L	MW-27	10/02/2024		0.4000		
Copper, total	ug/L	MW-27	10/31/2016	ND	4.0000		
Copper, total	ug/L	MW-27	03/16/2017	ND	4.0000		
Copper, total	ug/L	MW-27	09/27/2017		6.3000		
Copper, total	ug/L	MW-27	03/14/2018	ND	4.0000		
Copper, total	ug/L	MW-27	09/12/2018	ND	4.0000		
Copper, total	ug/L	MW-27	04/01/2019	ND	4.0000		
Copper, total	ug/L	MW-27	09/12/2019	ND	4.0000		
Copper, total	ug/L	MW-27	05/06/2020	ND	4.0000		
Copper, total	ug/L	MW-27	09/03/2020	ND	4.0000		
Copper, total	ug/L	MW-27	03/30/2021	ND	4.0000		
Copper, total	ug/L	MW-27	09/08/2021	ND	4.0000		
Copper, total	ug/L	MW-27	03/31/2022	ND	4.0000		
Copper, total	ug/L	MW-27	08/30/2022	ND	4.0000		
Copper, total	ug/L	MW-27	03/07/2023	ND	4.0000		
Copper, total	ug/L	MW-27	09/28/2023	ND	4.0000		
Copper, total	ug/L	MW-27	03/11/2024	ND	4.0000		
Copper, total	ug/L	MW-27	10/02/2024	ND	4.0000		
Lead, total	ug/L	MW-27	10/31/2016	ND	4.0000		
Lead, total	ug/L	MW-27	03/16/2017	ND	4.0000		
Lead, total	ug/L	MW-27	09/27/2017	ND	4.0000		
Lead, total	ug/L	MW-27	03/14/2018	ND	4.0000		
Lead, total	ug/L	MW-27	09/12/2018	ND	4.0000		
Lead, total	ug/L	MW-27	04/01/2019	ND	4.0000		
Lead, total	ug/L	MW-27	09/12/2019	ND	4.0000		
Lead, total	ug/L	MW-27	05/06/2020	ND	4.0000		
Lead, total	ug/L	MW-27	09/03/2020	ND	4.0000		
Lead, total	ug/L	MW-27	03/30/2021	ND	4.0000		
Lead, total	ug/L	MW-27	09/08/2021	ND	4.0000		
Lead, total	ug/L	MW-27	03/31/2022	ND	4.0000		
Lead, total	ug/L	MW-27	08/30/2022	ND	4.0000		
Lead, total	ug/L	MW-27	03/07/2023	ND	4.0000		
Lead, total	ug/L	MW-27	09/28/2023	ND	4.0000		
Lead, total	ug/L	MW-27	03/11/2024	ND	4.0000		
Lead, total	ug/L	MW-27	10/02/2024	ND	4.0000		
Nickel, total	ug/L	MW-27	10/31/2016	ND	4.0000		
Nickel, total	ug/L	MW-27	03/16/2017	ND	4.0000		
Nickel, total	ug/L	MW-27	09/27/2017	ND	4.0000		
Nickel, total	ug/L	MW-27	03/14/2018	ND	4.0000		
Nickel, total	ug/L	MW-27	09/12/2018	ND	4.0000		
Nickel, total	ug/L	MW-27	04/01/2019	ND	4.0000		
Nickel, total	ug/L	MW-27	09/12/2019	ND	4.0000		
Nickel, total	ug/L	MW-27	05/06/2020	ND	4.0000		
Nickel, total	ug/L	MW-27	09/03/2020	ND	4.0000		
Nickel, total	ug/L	MW-27	03/30/2021	ND	4.0000		
Nickel, total	ug/L	MW-27	09/08/2021	ND	4.0000		
Nickel, total	ug/L	MW-27	03/31/2022	ND	4.0000		
Nickel, total	ug/L	MW-27	08/30/2022	ND	4.0000		
Nickel, total	ug/L	MW-27	03/07/2023	ND	4.0000		
Nickel, total	ug/L	MW-27	09/28/2023	ND	4.0000		
Nickel, total	ug/L	MW-27	03/11/2024	ND	4.0000		
Nickel, total	ug/L	MW-27	10/02/2024	ND	4.0000		
Selenium, total	ug/L	MW-27	10/31/2016	ND	4.0000		
Selenium, total	ug/L	MW-27	03/16/2017	ND	4.0000		
Selenium, total	ug/L	MW-27	09/27/2017	ND	4.0000		
Selenium, total	ug/L	MW-27	03/14/2018	ND	4.0000		
Selenium, total	ug/L	MW-27	09/12/2018	ND	4.0000		
Selenium, total	ug/L	MW-27	04/01/2019	ND	4.0000		
Selenium, total	ug/L	MW-27	09/12/2019	ND	4.0000		
Selenium, total	ug/L	MW-27	05/06/2020	ND	4.0000		
Selenium, total	ug/L	MW-27	09/03/2020	ND	4.0000		
Selenium, total	ug/L	MW-27	03/30/2021	ND	4.0000		
Selenium, total	ug/L	MW-27	09/08/2021	ND	4.0000		
Selenium, total	ug/L	MW-27	03/31/2022	ND	4.0000		
Selenium, total	ug/L	MW-27	08/30/2022	ND	4.0000		
Selenium, total	ug/L	MW-27	03/07/2023	ND	4.0000		
Selenium, total	ug/L	MW-27	09/28/2023	ND	4.0000		
Selenium, total	ug/L	MW-27	03/11/2024	ND	4.0000		
Selenium, total	ug/L	MW-27	10/02/2024	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-27	10/31/2016	ND	4.0000		
Silver, total	ug/L	MW-27	03/16/2017	ND	4.0000		
Silver, total	ug/L	MW-27	09/27/2017	ND	4.0000		
Silver, total	ug/L	MW-27	03/14/2018	ND	4.0000		
Silver, total	ug/L	MW-27	09/12/2018	ND	4.0000		
Silver, total	ug/L	MW-27	04/01/2019	ND	4.0000		
Silver, total	ug/L	MW-27	09/12/2019	ND	4.0000		
Silver, total	ug/L	MW-27	05/06/2020	ND	4.0000		
Silver, total	ug/L	MW-27	09/03/2020	ND	4.0000		
Silver, total	ug/L	MW-27	03/30/2021	ND	4.0000		
Silver, total	ug/L	MW-27	09/08/2021	ND	4.0000		
Silver, total	ug/L	MW-27	03/31/2022	ND	4.0000		
Silver, total	ug/L	MW-27	08/30/2022	ND	4.0000		
Silver, total	ug/L	MW-27	03/07/2023	ND	4.0000		
Silver, total	ug/L	MW-27	09/28/2023	ND	4.0000		
Silver, total	ug/L	MW-27	03/11/2024	ND	4.0000		
Silver, total	ug/L	MW-27	10/02/2024	ND	4.0000		
Thallium, total	ug/L	MW-27	10/31/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-27	03/16/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-27	09/27/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-27	03/14/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-27	09/12/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-27	04/01/2019	ND	2.0000		
Thallium, total	ug/L	MW-27	09/12/2019	ND	2.0000		
Thallium, total	ug/L	MW-27	05/06/2020	ND	2.0000		
Thallium, total	ug/L	MW-27	09/03/2020	ND	2.0000		
Thallium, total	ug/L	MW-27	03/30/2021	ND	2.0000		
Thallium, total	ug/L	MW-27	09/08/2021	ND	2.0000		
Thallium, total	ug/L	MW-27	03/31/2022	ND	2.0000		
Thallium, total	ug/L	MW-27	08/30/2022	ND	2.0000		
Thallium, total	ug/L	MW-27	03/07/2023	ND	2.0000		
Thallium, total	ug/L	MW-27	09/28/2023	ND	2.0000		
Thallium, total	ug/L	MW-27	03/11/2024	ND	2.0000		
Thallium, total	ug/L	MW-27	10/02/2024	ND	2.0000		
Vanadium, total	ug/L	MW-27	10/31/2016	ND	20.0000		
Vanadium, total	ug/L	MW-27	03/16/2017	ND	20.0000		
Vanadium, total	ug/L	MW-27	09/27/2017	ND	20.0000		
Vanadium, total	ug/L	MW-27	03/14/2018	ND	20.0000		
Vanadium, total	ug/L	MW-27	09/12/2018	ND	20.0000		
Vanadium, total	ug/L	MW-27	04/01/2019	ND	20.0000		
Vanadium, total	ug/L	MW-27	09/12/2019	ND	20.0000		
Vanadium, total	ug/L	MW-27	05/06/2020	ND	20.0000		
Vanadium, total	ug/L	MW-27	09/03/2020	ND	20.0000		
Vanadium, total	ug/L	MW-27	03/30/2021	ND	20.0000		
Vanadium, total	ug/L	MW-27	09/08/2021	ND	20.0000		
Vanadium, total	ug/L	MW-27	03/31/2022	ND	20.0000		
Vanadium, total	ug/L	MW-27	08/30/2022	ND	20.0000		
Vanadium, total	ug/L	MW-27	03/07/2023	ND	20.0000		
Vanadium, total	ug/L	MW-27	09/28/2023	ND	20.0000		
Vanadium, total	ug/L	MW-27	03/11/2024	ND	20.0000		
Vanadium, total	ug/L	MW-27	10/02/2024	ND	20.0000		
Zinc, total	ug/L	MW-27	10/31/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-27	03/16/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-27	09/27/2017		24.2000		
Zinc, total	ug/L	MW-27	12/13/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-27	03/14/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-27	09/12/2018		31.9000		
Zinc, total	ug/L	MW-27	04/01/2019	ND	20.0000		
Zinc, total	ug/L	MW-27	09/12/2019		8.2000		
Zinc, total	ug/L	MW-27	05/06/2020	ND	20.0000		
Zinc, total	ug/L	MW-27	09/03/2020	ND	20.0000		
Zinc, total	ug/L	MW-27	03/30/2021	ND	20.0000		
Zinc, total	ug/L	MW-27	09/08/2021	ND	20.0000		
Zinc, total	ug/L	MW-27	03/31/2022	ND	20.0000		
Zinc, total	ug/L	MW-27	08/30/2022	ND	20.0000		
Zinc, total	ug/L	MW-27	03/07/2023	ND	20.0000		
Zinc, total	ug/L	MW-27	09/28/2023	ND	20.0000		
Zinc, total	ug/L	MW-27	03/11/2024	ND	20.0000		
Zinc, total	ug/L	MW-27	10/02/2024	ND	20.0000		
Antimony, total	ug/L	MW-28	10/31/2016	ND	2.0000		
Antimony, total	ug/L	MW-28	03/16/2017	ND	2.0000		
Antimony, total	ug/L	MW-28	03/14/2018	ND	2.0000		
Antimony, total	ug/L	MW-28	09/12/2018	ND	2.0000		
Antimony, total	ug/L	MW-28	04/01/2019	ND	2.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Antimony, total	ug/L	MW-28	05/06/2020	ND	2.0000		
Antimony, total	ug/L	MW-28	09/03/2020	ND	2.0000		
Antimony, total	ug/L	MW-28	03/30/2021	ND	2.0000		
Antimony, total	ug/L	MW-28	03/31/2022	ND	2.0000		
Antimony, total	ug/L	MW-28	03/07/2023	ND	2.0000		
Antimony, total	ug/L	MW-28	03/11/2024	ND	2.0000		
Arsenic, total	ug/L	MW-28	10/31/2016	ND	4.0000		
Arsenic, total	ug/L	MW-28	03/16/2017	ND	4.0000		
Arsenic, total	ug/L	MW-28	03/14/2018	ND	4.0000		
Arsenic, total	ug/L	MW-28	09/12/2018	ND	4.0000		
Arsenic, total	ug/L	MW-28	04/01/2019	ND	4.0000		
Arsenic, total	ug/L	MW-28	05/06/2020	ND	4.0000		
Arsenic, total	ug/L	MW-28	09/03/2020	ND	4.0000		
Arsenic, total	ug/L	MW-28	03/30/2021	ND	4.0000		
Arsenic, total	ug/L	MW-28	03/31/2022	ND	4.0000		
Arsenic, total	ug/L	MW-28	03/07/2023	ND	4.0000		
Arsenic, total	ug/L	MW-28	03/11/2024	ND	4.0000		
Barium, total	ug/L	MW-28	10/31/2016		37.1000		
Barium, total	ug/L	MW-28	03/16/2017		71.6000		
Barium, total	ug/L	MW-28	03/14/2018		50.3000		
Barium, total	ug/L	MW-28	09/12/2018		37.0000		
Barium, total	ug/L	MW-28	04/01/2019		35.1000		
Barium, total	ug/L	MW-28	05/06/2020		26.2000		
Barium, total	ug/L	MW-28	09/03/2020		24.6000		
Barium, total	ug/L	MW-28	03/30/2021		27.2000		
Barium, total	ug/L	MW-28	03/31/2022		31.1000		
Barium, total	ug/L	MW-28	03/07/2023		27.3000		
Barium, total	ug/L	MW-28	03/11/2024		26.5000		
Beryllium, total	ug/L	MW-28	10/31/2016	ND	4.0000		
Beryllium, total	ug/L	MW-28	03/16/2017	ND	4.0000		
Beryllium, total	ug/L	MW-28	03/14/2018	ND	4.0000		
Beryllium, total	ug/L	MW-28	09/12/2018	ND	4.0000		
Beryllium, total	ug/L	MW-28	04/01/2019	ND	4.0000		
Beryllium, total	ug/L	MW-28	05/06/2020	ND	4.0000		
Beryllium, total	ug/L	MW-28	09/03/2020	ND	4.0000		
Beryllium, total	ug/L	MW-28	03/30/2021	ND	4.0000		
Beryllium, total	ug/L	MW-28	03/31/2022	ND	4.0000		
Beryllium, total	ug/L	MW-28	03/07/2023	ND	4.0000		
Beryllium, total	ug/L	MW-28	03/11/2024	ND	4.0000		
Cadmium, total	ug/L	MW-28	10/31/2016	ND	0.8000		
Cadmium, total	ug/L	MW-28	03/16/2017	ND	0.8000		
Cadmium, total	ug/L	MW-28	03/14/2018	ND	0.8000		
Cadmium, total	ug/L	MW-28	09/12/2018	ND	0.8000		
Cadmium, total	ug/L	MW-28	04/01/2019	ND	0.8000		
Cadmium, total	ug/L	MW-28	05/06/2020	ND	0.8000		
Cadmium, total	ug/L	MW-28	09/03/2020	ND	0.8000		
Cadmium, total	ug/L	MW-28	03/30/2021	ND	0.8000		
Cadmium, total	ug/L	MW-28	03/31/2022	ND	0.8000		
Cadmium, total	ug/L	MW-28	03/07/2023	ND	0.8000		
Cadmium, total	ug/L	MW-28	03/11/2024	ND	0.8000		
Chromium, total	ug/L	MW-28	10/31/2016	ND	8.0000		
Chromium, total	ug/L	MW-28	03/16/2017	ND	8.0000		
Chromium, total	ug/L	MW-28	03/14/2018	ND	8.0000		
Chromium, total	ug/L	MW-28	09/12/2018	ND	8.0000		
Chromium, total	ug/L	MW-28	04/01/2019	ND	8.0000		
Chromium, total	ug/L	MW-28	05/06/2020	ND	8.0000		
Chromium, total	ug/L	MW-28	09/03/2020	ND	8.0000		
Chromium, total	ug/L	MW-28	03/30/2021	ND	8.0000		
Chromium, total	ug/L	MW-28	03/31/2022	ND	8.0000		
Chromium, total	ug/L	MW-28	03/07/2023	ND	8.0000		
Chromium, total	ug/L	MW-28	03/11/2024	ND	8.0000		
Cobalt, total	ug/L	MW-28	10/31/2016		0.9000		
Cobalt, total	ug/L	MW-28	03/16/2017		1.7000		
Cobalt, total	ug/L	MW-28	03/14/2018	ND	2.0000	0.8000	**
Cobalt, total	ug/L	MW-28	09/12/2018	ND	0.8000		
Cobalt, total	ug/L	MW-28	04/01/2019	ND	0.8000		
Cobalt, total	ug/L	MW-28	05/06/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-28	09/03/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-28	03/30/2021		0.6000		
Cobalt, total	ug/L	MW-28	03/31/2022		1.0000		
Cobalt, total	ug/L	MW-28	03/07/2023		0.4000		
Cobalt, total	ug/L	MW-28	03/11/2024	ND	0.4000	0.8000	**
Copper, total	ug/L	MW-28	10/31/2016	ND	4.0000		
Copper, total	ug/L	MW-28	03/16/2017	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	
Copper, total	ug/L	MW-28	03/14/2018	ND	4.0000		
Copper, total	ug/L	MW-28	09/12/2018	ND	4.0000		
Copper, total	ug/L	MW-28	04/01/2019	ND	4.0000		
Copper, total	ug/L	MW-28	05/06/2020	ND	4.0000		
Copper, total	ug/L	MW-28	09/03/2020	ND	4.0000		
Copper, total	ug/L	MW-28	03/30/2021	ND	4.0000		
Copper, total	ug/L	MW-28	03/31/2022	ND	4.0000		
Copper, total	ug/L	MW-28	03/07/2023	ND	4.0000		
Copper, total	ug/L	MW-28	03/11/2024	ND	4.0000		
Lead, total	ug/L	MW-28	10/31/2016	ND	4.0000		
Lead, total	ug/L	MW-28	03/16/2017	ND	4.0000		
Lead, total	ug/L	MW-28	03/14/2018	ND	4.0000		
Lead, total	ug/L	MW-28	09/12/2018	ND	4.0000		
Lead, total	ug/L	MW-28	04/01/2019	ND	4.0000		
Lead, total	ug/L	MW-28	05/06/2020	ND	4.0000		
Lead, total	ug/L	MW-28	09/03/2020	ND	4.0000		
Lead, total	ug/L	MW-28	03/30/2021	ND	4.0000		
Lead, total	ug/L	MW-28	03/31/2022	ND	4.0000		
Lead, total	ug/L	MW-28	03/07/2023	ND	4.0000		
Lead, total	ug/L	MW-28	03/11/2024	ND	4.0000		
Nickel, total	ug/L	MW-28	10/31/2016	ND	4.0000		
Nickel, total	ug/L	MW-28	03/16/2017	ND	4.0000		
Nickel, total	ug/L	MW-28	03/14/2018	ND	4.0000		
Nickel, total	ug/L	MW-28	09/12/2018	ND	4.0000		
Nickel, total	ug/L	MW-28	04/01/2019	ND	4.0000		
Nickel, total	ug/L	MW-28	05/06/2020	ND	4.0000		
Nickel, total	ug/L	MW-28	09/03/2020	ND	4.0000		
Nickel, total	ug/L	MW-28	03/30/2021		4.1000		
Nickel, total	ug/L	MW-28	03/31/2022	ND	4.0000		
Nickel, total	ug/L	MW-28	03/07/2023	ND	4.0000		
Nickel, total	ug/L	MW-28	03/11/2024	ND	4.0000		
Selenium, total	ug/L	MW-28	10/31/2016	ND	4.0000		
Selenium, total	ug/L	MW-28	03/16/2017	ND	4.0000		
Selenium, total	ug/L	MW-28	03/14/2018	ND	4.0000		
Selenium, total	ug/L	MW-28	09/12/2018	ND	4.0000		
Selenium, total	ug/L	MW-28	04/01/2019	ND	4.0000		
Selenium, total	ug/L	MW-28	05/06/2020	ND	4.0000		
Selenium, total	ug/L	MW-28	09/03/2020	ND	4.0000		
Selenium, total	ug/L	MW-28	03/30/2021	ND	4.0000		
Selenium, total	ug/L	MW-28	03/31/2022	ND	4.0000		
Selenium, total	ug/L	MW-28	03/07/2023	ND	4.0000		
Selenium, total	ug/L	MW-28	03/11/2024	ND	4.0000		
Silver, total	ug/L	MW-28	10/31/2016	ND	4.0000		
Silver, total	ug/L	MW-28	03/16/2017	ND	4.0000		
Silver, total	ug/L	MW-28	03/14/2018	ND	4.0000		
Silver, total	ug/L	MW-28	09/12/2018	ND	4.0000		
Silver, total	ug/L	MW-28	04/01/2019	ND	4.0000		
Silver, total	ug/L	MW-28	05/06/2020	ND	4.0000		
Silver, total	ug/L	MW-28	09/03/2020	ND	4.0000		
Silver, total	ug/L	MW-28	03/30/2021	ND	4.0000		
Silver, total	ug/L	MW-28	03/31/2022	ND	4.0000		
Silver, total	ug/L	MW-28	03/07/2023	ND	4.0000		
Silver, total	ug/L	MW-28	03/11/2024	ND	4.0000		
Thallium, total	ug/L	MW-28	10/31/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-28	03/16/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-28	03/14/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-28	09/12/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-28	04/01/2019	ND	2.0000		
Thallium, total	ug/L	MW-28	05/06/2020	ND	2.0000		
Thallium, total	ug/L	MW-28	09/03/2020	ND	2.0000		
Thallium, total	ug/L	MW-28	03/30/2021	ND	2.0000		
Thallium, total	ug/L	MW-28	03/31/2022	ND	2.0000		
Thallium, total	ug/L	MW-28	03/07/2023	ND	2.0000		
Thallium, total	ug/L	MW-28	03/11/2024	ND	2.0000		
Vanadium, total	ug/L	MW-28	10/31/2016	ND	20.0000		
Vanadium, total	ug/L	MW-28	03/16/2017	ND	20.0000		
Vanadium, total	ug/L	MW-28	03/14/2018	ND	20.0000		
Vanadium, total	ug/L	MW-28	09/12/2018	ND	20.0000		
Vanadium, total	ug/L	MW-28	04/01/2019	ND	20.0000		
Vanadium, total	ug/L	MW-28	05/06/2020	ND	20.0000		
Vanadium, total	ug/L	MW-28	09/03/2020	ND	20.0000		
Vanadium, total	ug/L	MW-28	03/30/2021	ND	20.0000		
Vanadium, total	ug/L	MW-28	03/31/2022	ND	20.0000		
Vanadium, total	ug/L	MW-28	03/07/2023	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-28	03/11/2024	ND	20.0000		
Zinc, total	ug/L	MW-28	10/31/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-28	03/16/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-28	03/14/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-28	09/12/2018		33.2000		
Zinc, total	ug/L	MW-28	04/01/2019	ND	20.0000		
Zinc, total	ug/L	MW-28	05/06/2020	ND	20.0000		
Zinc, total	ug/L	MW-28	09/03/2020	ND	20.0000		
Zinc, total	ug/L	MW-28	03/30/2021	ND	20.0000		
Zinc, total	ug/L	MW-28	03/31/2022	ND	20.0000		
Zinc, total	ug/L	MW-28	03/07/2023	ND	20.0000		
Zinc, total	ug/L	MW-28	03/11/2024	ND	20.0000		
Antimony, total	ug/L	MW-6	10/20/2014	ND	6.0000	2.0000	**
Antimony, total	ug/L	MW-6	06/23/2015	ND	6.0000	2.0000	**
Antimony, total	ug/L	MW-6	11/13/2015	ND	6.0000	2.0000	**
Antimony, total	ug/L	MW-6	04/11/2016	ND	6.0000	2.0000	**
Antimony, total	ug/L	MW-6	09/16/2016	ND	2.0000		
Antimony, total	ug/L	MW-6	03/15/2017	ND	2.0000		
Antimony, total	ug/L	MW-6	09/27/2017	ND	2.0000		
Antimony, total	ug/L	MW-6	09/12/2018	ND	2.0000		
Antimony, total	ug/L	MW-6	04/01/2019	ND	2.0000		
Antimony, total	ug/L	MW-6	09/12/2019	ND	2.0000		
Antimony, total	ug/L	MW-6	05/06/2020	ND	2.0000		
Antimony, total	ug/L	MW-6	09/03/2020	ND	2.0000		
Antimony, total	ug/L	MW-6	03/30/2021	ND	2.0000		
Antimony, total	ug/L	MW-6	09/08/2021	ND	2.0000		
Antimony, total	ug/L	MW-6	03/31/2022	ND	2.0000		
Antimony, total	ug/L	MW-6	08/30/2022	ND	2.0000		
Antimony, total	ug/L	MW-6	03/07/2023	ND	2.0000		
Antimony, total	ug/L	MW-6	09/28/2023	ND	2.0000		
Antimony, total	ug/L	MW-6	03/11/2024	ND	2.0000		
Antimony, total	ug/L	MW-6	10/02/2024	ND	2.0000		
Arsenic, total	ug/L	MW-6	10/20/2014		1.6900		
Arsenic, total	ug/L	MW-6	06/23/2015	ND	2.0000	4.0000	**
Arsenic, total	ug/L	MW-6	11/13/2015	ND	2.0000	4.0000	**
Arsenic, total	ug/L	MW-6	04/11/2016	ND	10.0000	4.0000	**
Arsenic, total	ug/L	MW-6	09/16/2016	ND	4.0000		
Arsenic, total	ug/L	MW-6	03/15/2017	ND	4.0000		
Arsenic, total	ug/L	MW-6	09/27/2017	ND	4.0000		
Arsenic, total	ug/L	MW-6	09/12/2018	ND	4.0000		
Arsenic, total	ug/L	MW-6	04/01/2019	ND	4.0000		
Arsenic, total	ug/L	MW-6	09/12/2019	ND	4.0000		
Arsenic, total	ug/L	MW-6	05/06/2020	ND	4.0000		
Arsenic, total	ug/L	MW-6	09/03/2020	ND	4.0000		
Arsenic, total	ug/L	MW-6	03/30/2021	ND	4.0000		
Arsenic, total	ug/L	MW-6	09/08/2021	ND	4.0000		
Arsenic, total	ug/L	MW-6	03/31/2022	ND	4.0000		
Arsenic, total	ug/L	MW-6	08/30/2022	ND	4.0000		
Arsenic, total	ug/L	MW-6	03/07/2023	ND	4.0000		
Arsenic, total	ug/L	MW-6	09/28/2023	ND	4.0000		
Arsenic, total	ug/L	MW-6	03/11/2024	ND	4.0000		
Arsenic, total	ug/L	MW-6	10/02/2024	ND	4.0000		
Barium, total	ug/L	MW-6	10/20/2014		346.0000		
Barium, total	ug/L	MW-6	06/23/2015		237.0000		
Barium, total	ug/L	MW-6	11/13/2015		294.0000		
Barium, total	ug/L	MW-6	04/11/2016		279.0000		
Barium, total	ug/L	MW-6	09/16/2016		316.0000		
Barium, total	ug/L	MW-6	03/15/2017		326.0000		
Barium, total	ug/L	MW-6	09/27/2017		193.0000		
Barium, total	ug/L	MW-6	09/12/2018		333.0000		
Barium, total	ug/L	MW-6	04/01/2019		409.0000		
Barium, total	ug/L	MW-6	09/12/2019		349.0000		
Barium, total	ug/L	MW-6	05/06/2020		477.0000		
Barium, total	ug/L	MW-6	09/03/2020		299.0000		
Barium, total	ug/L	MW-6	03/30/2021		264.0000		
Barium, total	ug/L	MW-6	09/08/2021		197.0000		
Barium, total	ug/L	MW-6	03/31/2022		227.0000		
Barium, total	ug/L	MW-6	08/30/2022		208.0000		
Barium, total	ug/L	MW-6	03/07/2023		253.0000		
Barium, total	ug/L	MW-6	09/28/2023		237.0000		
Barium, total	ug/L	MW-6	03/11/2024		285.0000		
Barium, total	ug/L	MW-6	10/02/2024		233.0000		
Beryllium, total	ug/L	MW-6	10/20/2014	ND	1.0000	4.0000	**
Beryllium, total	ug/L	MW-6	06/23/2015	ND	1.0000	4.0000	**

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Beryllium, total	ug/L	MW-6	11/13/2015	ND	1.0000	4.0000	**
Beryllium, total	ug/L	MW-6	04/11/2016	ND	1.0000	4.0000	**
Beryllium, total	ug/L	MW-6	09/16/2016	ND	4.0000		
Beryllium, total	ug/L	MW-6	03/15/2017	ND	4.0000		
Beryllium, total	ug/L	MW-6	09/27/2017	ND	4.0000		
Beryllium, total	ug/L	MW-6	09/12/2018	ND	4.0000		
Beryllium, total	ug/L	MW-6	04/01/2019	ND	4.0000		
Beryllium, total	ug/L	MW-6	09/12/2019	ND	4.0000		
Beryllium, total	ug/L	MW-6	05/06/2020	ND	4.0000		
Beryllium, total	ug/L	MW-6	09/03/2020	ND	4.0000		
Beryllium, total	ug/L	MW-6	03/30/2021	ND	4.0000		
Beryllium, total	ug/L	MW-6	09/08/2021	ND	4.0000		
Beryllium, total	ug/L	MW-6	03/31/2022	ND	4.0000		
Beryllium, total	ug/L	MW-6	08/30/2022	ND	4.0000		
Beryllium, total	ug/L	MW-6	03/07/2023	ND	4.0000		
Beryllium, total	ug/L	MW-6	09/28/2023	ND	4.0000		
Beryllium, total	ug/L	MW-6	03/11/2024	ND	4.0000		
Beryllium, total	ug/L	MW-6	10/02/2024	ND	4.0000		
Cadmium, total	ug/L	MW-6	10/20/2014	ND	0.5000	0.8000	**
Cadmium, total	ug/L	MW-6	06/23/2015	ND	0.5000	0.8000	**
Cadmium, total	ug/L	MW-6	11/13/2015	ND	0.5000	0.8000	**
Cadmium, total	ug/L	MW-6	04/11/2016	ND	0.5000	0.8000	**
Cadmium, total	ug/L	MW-6	09/16/2016	ND	0.8000		
Cadmium, total	ug/L	MW-6	03/15/2017	ND	0.8000		
Cadmium, total	ug/L	MW-6	09/27/2017	ND	0.8000		
Cadmium, total	ug/L	MW-6	09/12/2018	ND	0.8000		
Cadmium, total	ug/L	MW-6	04/01/2019	ND	0.8000		
Cadmium, total	ug/L	MW-6	09/12/2019	ND	0.8000		
Cadmium, total	ug/L	MW-6	05/06/2020	ND	0.8000		
Cadmium, total	ug/L	MW-6	09/03/2020	ND	0.8000		
Cadmium, total	ug/L	MW-6	03/30/2021	ND	0.8000		
Cadmium, total	ug/L	MW-6	09/08/2021	ND	0.8000		
Cadmium, total	ug/L	MW-6	03/31/2022	ND	0.8000		
Cadmium, total	ug/L	MW-6	08/30/2022	ND	0.8000		
Cadmium, total	ug/L	MW-6	03/07/2023	ND	0.8000		
Cadmium, total	ug/L	MW-6	09/28/2023	ND	0.8000		
Cadmium, total	ug/L	MW-6	03/11/2024	ND	0.8000		
Cadmium, total	ug/L	MW-6	10/02/2024	ND	0.8000		
Chromium, total	ug/L	MW-6	10/20/2014	ND	5.0000	8.0000	**
Chromium, total	ug/L	MW-6	06/23/2015	ND	5.0000	8.0000	**
Chromium, total	ug/L	MW-6	11/13/2015	ND	5.0000	8.0000	**
Chromium, total	ug/L	MW-6	04/11/2016	ND	5.0000	8.0000	**
Chromium, total	ug/L	MW-6	09/16/2016	ND	8.0000		
Chromium, total	ug/L	MW-6	03/15/2017	ND	8.0000		
Chromium, total	ug/L	MW-6	09/27/2017	ND	8.0000		
Chromium, total	ug/L	MW-6	09/12/2018	ND	8.0000		
Chromium, total	ug/L	MW-6	04/01/2019	ND	8.0000		
Chromium, total	ug/L	MW-6	09/12/2019	ND	8.0000		
Chromium, total	ug/L	MW-6	05/06/2020	ND	8.0000		
Chromium, total	ug/L	MW-6	09/03/2020	ND	8.0000		
Chromium, total	ug/L	MW-6	03/30/2021	ND	8.0000		
Chromium, total	ug/L	MW-6	09/08/2021	ND	8.0000		
Chromium, total	ug/L	MW-6	03/31/2022	ND	8.0000		
Chromium, total	ug/L	MW-6	08/30/2022	ND	8.0000		
Chromium, total	ug/L	MW-6	03/07/2023	ND	8.0000		
Chromium, total	ug/L	MW-6	09/28/2023	ND	8.0000		
Chromium, total	ug/L	MW-6	03/11/2024	ND	8.0000		
Chromium, total	ug/L	MW-6	10/02/2024	ND	8.0000		
Cobalt, total	ug/L	MW-6	10/20/2014		7.4300		*
Cobalt, total	ug/L	MW-6	06/23/2015	ND	0.8000		
Cobalt, total	ug/L	MW-6	11/13/2015	ND	0.8000		
Cobalt, total	ug/L	MW-6	04/11/2016	ND	0.8000		
Cobalt, total	ug/L	MW-6	09/16/2016	ND	0.8000		
Cobalt, total	ug/L	MW-6	03/15/2017	ND	0.8000		
Cobalt, total	ug/L	MW-6	09/27/2017	ND	0.8000		
Cobalt, total	ug/L	MW-6	09/12/2018	ND	0.8000		
Cobalt, total	ug/L	MW-6	04/01/2019	ND	0.8000		
Cobalt, total	ug/L	MW-6	09/12/2019	ND	0.8000		
Cobalt, total	ug/L	MW-6	05/06/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-6	09/03/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-6	03/30/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-6	09/08/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-6	03/31/2022		1.1000		
Cobalt, total	ug/L	MW-6	08/30/2022	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-6	03/07/2023		11.4000		*
Cobalt, total	ug/L	MW-6	09/28/2023		1.8000		
Cobalt, total	ug/L	MW-6	03/11/2024		2.3000		
Cobalt, total	ug/L	MW-6	10/02/2024		1.5000		
Copper, total	ug/L	MW-6	10/20/2014		25.7000		*
Copper, total	ug/L	MW-6	06/23/2015	ND	2.0000	4.0000	**
Copper, total	ug/L	MW-6	11/13/2015		2.6800		
Copper, total	ug/L	MW-6	04/11/2016	ND	2.0000	4.0000	**
Copper, total	ug/L	MW-6	09/16/2016	ND	4.0000		
Copper, total	ug/L	MW-6	03/15/2017	ND	4.0000		
Copper, total	ug/L	MW-6	09/27/2017	ND	4.0000		
Copper, total	ug/L	MW-6	09/12/2018	ND	4.0000		
Copper, total	ug/L	MW-6	04/01/2019	ND	4.0000		
Copper, total	ug/L	MW-6	09/12/2019	ND	4.0000		
Copper, total	ug/L	MW-6	05/06/2020	ND	4.0000		
Copper, total	ug/L	MW-6	09/03/2020	ND	4.0000		
Copper, total	ug/L	MW-6	03/30/2021	ND	4.0000		
Copper, total	ug/L	MW-6	09/08/2021	ND	4.0000		
Copper, total	ug/L	MW-6	03/31/2022	ND	4.0000		
Copper, total	ug/L	MW-6	08/30/2022	ND	4.0000		
Copper, total	ug/L	MW-6	03/07/2023	ND	4.0000		
Copper, total	ug/L	MW-6	09/28/2023	ND	4.0000		
Copper, total	ug/L	MW-6	03/11/2024		15.0000		*
Copper, total	ug/L	MW-6	10/02/2024	ND	4.0000		
Lead, total	ug/L	MW-6	10/20/2014		6.0300		
Lead, total	ug/L	MW-6	06/23/2015		0.6080		
Lead, total	ug/L	MW-6	11/13/2015		0.5030		*
Lead, total	ug/L	MW-6	04/11/2016	ND	0.5000		*
Lead, total	ug/L	MW-6	09/16/2016	ND	4.0000		
Lead, total	ug/L	MW-6	03/15/2017	ND	4.0000		
Lead, total	ug/L	MW-6	09/27/2017	ND	4.0000		
Lead, total	ug/L	MW-6	09/12/2018	ND	4.0000		
Lead, total	ug/L	MW-6	04/01/2019	ND	4.0000		
Lead, total	ug/L	MW-6	09/12/2019	ND	4.0000		
Lead, total	ug/L	MW-6	05/06/2020	ND	4.0000		
Lead, total	ug/L	MW-6	09/03/2020	ND	4.0000		
Lead, total	ug/L	MW-6	03/30/2021	ND	4.0000		
Lead, total	ug/L	MW-6	09/08/2021	ND	4.0000		
Lead, total	ug/L	MW-6	03/31/2022	ND	4.0000		
Lead, total	ug/L	MW-6	08/30/2022	ND	4.0000		
Lead, total	ug/L	MW-6	03/07/2023	ND	4.0000		
Lead, total	ug/L	MW-6	09/28/2023	ND	4.0000		
Lead, total	ug/L	MW-6	03/11/2024	ND	4.0000		
Lead, total	ug/L	MW-6	10/02/2024	ND	4.0000		
Nickel, total	ug/L	MW-6	10/20/2014	ND	30.0000	4.0000	**
Nickel, total	ug/L	MW-6	06/23/2015	ND	5.0000	4.0000	**
Nickel, total	ug/L	MW-6	11/13/2015	ND	5.0000	4.0000	**
Nickel, total	ug/L	MW-6	04/11/2016	ND	5.0000	4.0000	**
Nickel, total	ug/L	MW-6	09/16/2016	ND	4.0000		
Nickel, total	ug/L	MW-6	03/15/2017	ND	4.0000		
Nickel, total	ug/L	MW-6	09/27/2017	ND	4.0000		
Nickel, total	ug/L	MW-6	09/12/2018		7.8000		
Nickel, total	ug/L	MW-6	04/01/2019		8.4000		
Nickel, total	ug/L	MW-6	09/12/2019		7.3000		
Nickel, total	ug/L	MW-6	05/06/2020		6.9000		
Nickel, total	ug/L	MW-6	09/03/2020		5.5000		
Nickel, total	ug/L	MW-6	03/30/2021		5.0000		
Nickel, total	ug/L	MW-6	09/08/2021		5.7000		
Nickel, total	ug/L	MW-6	03/31/2022		9.9000		
Nickel, total	ug/L	MW-6	08/30/2022		11.3000		
Nickel, total	ug/L	MW-6	03/07/2023		29.5000		
Nickel, total	ug/L	MW-6	09/28/2023		25.3000		
Nickel, total	ug/L	MW-6	03/11/2024		16.4000		
Nickel, total	ug/L	MW-6	10/02/2024		14.6000		
Selenium, total	ug/L	MW-6	10/20/2014	ND	5.0000	4.0000	**
Selenium, total	ug/L	MW-6	06/23/2015	ND	5.0000	4.0000	**
Selenium, total	ug/L	MW-6	11/13/2015	ND	5.0000	4.0000	**
Selenium, total	ug/L	MW-6	04/11/2016	ND	5.0000	4.0000	**
Selenium, total	ug/L	MW-6	09/16/2016	ND	4.0000		
Selenium, total	ug/L	MW-6	03/15/2017	ND	4.0000		
Selenium, total	ug/L	MW-6	09/27/2017	ND	4.0000		
Selenium, total	ug/L	MW-6	09/12/2018	ND	4.0000		
Selenium, total	ug/L	MW-6	04/01/2019	ND	4.0000		
Selenium, total	ug/L	MW-6	09/12/2019	ND	4.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Selenium, total	ug/L	MW-6	05/06/2020	ND	4.0000		
Selenium, total	ug/L	MW-6	09/03/2020	ND	4.0000		
Selenium, total	ug/L	MW-6	03/30/2021	ND	4.0000		
Selenium, total	ug/L	MW-6	09/08/2021	ND	4.0000		
Selenium, total	ug/L	MW-6	03/31/2022	ND	4.0000		
Selenium, total	ug/L	MW-6	08/30/2022	ND	4.0000		
Selenium, total	ug/L	MW-6	03/07/2023	ND	4.0000		
Selenium, total	ug/L	MW-6	09/28/2023	ND	4.0000		
Selenium, total	ug/L	MW-6	03/11/2024	ND	4.0000		
Selenium, total	ug/L	MW-6	10/02/2024	ND	4.0000		
Silver, total	ug/L	MW-6	10/20/2014	ND	20.0000		*
Silver, total	ug/L	MW-6	06/23/2015	ND	1.0000		*
Silver, total	ug/L	MW-6	11/13/2015	ND	1.0000		*
Silver, total	ug/L	MW-6	04/11/2016	ND	1.0000		*
Silver, total	ug/L	MW-6	09/16/2016	ND	4.0000		
Silver, total	ug/L	MW-6	03/15/2017	ND	4.0000		
Silver, total	ug/L	MW-6	09/27/2017	ND	4.0000		
Silver, total	ug/L	MW-6	09/12/2018	ND	4.0000		
Silver, total	ug/L	MW-6	04/01/2019	ND	4.0000		
Silver, total	ug/L	MW-6	09/12/2019	ND	4.0000		
Silver, total	ug/L	MW-6	05/06/2020	ND	4.0000		
Silver, total	ug/L	MW-6	09/03/2020	ND	4.0000		
Silver, total	ug/L	MW-6	03/30/2021	ND	4.0000		
Silver, total	ug/L	MW-6	09/08/2021	ND	4.0000		
Silver, total	ug/L	MW-6	03/31/2022	ND	4.0000		
Silver, total	ug/L	MW-6	08/30/2022	ND	4.0000		
Silver, total	ug/L	MW-6	03/07/2023	ND	4.0000		
Silver, total	ug/L	MW-6	09/28/2023	ND	4.0000		
Silver, total	ug/L	MW-6	03/11/2024	ND	4.0000		
Silver, total	ug/L	MW-6	10/02/2024	ND	4.0000		
Thallium, total	ug/L	MW-6	10/20/2014	ND	2.0000		
Thallium, total	ug/L	MW-6	06/23/2015	ND	1.0000	2.0000	**
Thallium, total	ug/L	MW-6	11/13/2015	ND	1.0000	2.0000	**
Thallium, total	ug/L	MW-6	04/11/2016	ND	2.0000		
Thallium, total	ug/L	MW-6	09/16/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-6	03/15/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-6	09/27/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-6	09/12/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-6	04/01/2019	ND	2.0000		
Thallium, total	ug/L	MW-6	09/12/2019	ND	2.0000		
Thallium, total	ug/L	MW-6	05/06/2020	ND	2.0000		
Thallium, total	ug/L	MW-6	09/03/2020	ND	2.0000		
Thallium, total	ug/L	MW-6	03/30/2021	ND	2.0000		
Thallium, total	ug/L	MW-6	09/08/2021	ND	2.0000		
Thallium, total	ug/L	MW-6	03/31/2022	ND	2.0000		
Thallium, total	ug/L	MW-6	08/30/2022	ND	2.0000		
Thallium, total	ug/L	MW-6	03/07/2023	ND	2.0000		
Thallium, total	ug/L	MW-6	09/28/2023	ND	2.0000		
Thallium, total	ug/L	MW-6	03/11/2024	ND	2.0000		
Thallium, total	ug/L	MW-6	10/02/2024	ND	2.0000		
Vanadium, total	ug/L	MW-6	10/20/2014	ND	20.0000		
Vanadium, total	ug/L	MW-6	06/23/2015	ND	5.0000		*
Vanadium, total	ug/L	MW-6	11/13/2015	ND	5.0000		*
Vanadium, total	ug/L	MW-6	04/11/2016	ND	5.0000		*
Vanadium, total	ug/L	MW-6	09/16/2016	ND	20.0000		
Vanadium, total	ug/L	MW-6	03/15/2017	ND	20.0000		
Vanadium, total	ug/L	MW-6	09/27/2017	ND	20.0000		
Vanadium, total	ug/L	MW-6	09/12/2018	ND	20.0000		
Vanadium, total	ug/L	MW-6	04/01/2019	ND	20.0000		
Vanadium, total	ug/L	MW-6	09/12/2019	ND	20.0000		
Vanadium, total	ug/L	MW-6	05/06/2020	ND	20.0000		
Vanadium, total	ug/L	MW-6	09/03/2020	ND	20.0000		
Vanadium, total	ug/L	MW-6	03/30/2021	ND	20.0000		
Vanadium, total	ug/L	MW-6	09/08/2021	ND	20.0000		
Vanadium, total	ug/L	MW-6	03/31/2022	ND	20.0000		
Vanadium, total	ug/L	MW-6	08/30/2022	ND	20.0000		
Vanadium, total	ug/L	MW-6	03/07/2023	ND	20.0000		
Vanadium, total	ug/L	MW-6	09/28/2023	ND	20.0000		
Vanadium, total	ug/L	MW-6	03/11/2024	ND	20.0000		
Vanadium, total	ug/L	MW-6	10/02/2024	ND	20.0000		
Zinc, total	ug/L	MW-6	10/20/2014		22.6000		
Zinc, total	ug/L	MW-6	06/23/2015	ND	10.0000	20.0000	**
Zinc, total	ug/L	MW-6	11/13/2015	ND	10.0000	20.0000	**
Zinc, total	ug/L	MW-6	04/11/2016	ND	10.0000	20.0000	**

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Zinc, total	ug/L	MW-6	09/16/2016		21.7000		
Zinc, total	ug/L	MW-6	03/15/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-6	09/27/2017		10.1000		
Zinc, total	ug/L	MW-6	09/12/2018		21.6000		
Zinc, total	ug/L	MW-6	04/01/2019		44.1000		
Zinc, total	ug/L	MW-6	09/12/2019	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-6	05/06/2020	ND	20.0000		
Zinc, total	ug/L	MW-6	09/03/2020	ND	20.0000		
Zinc, total	ug/L	MW-6	03/30/2021	ND	20.0000		
Zinc, total	ug/L	MW-6	09/08/2021	ND	20.0000		
Zinc, total	ug/L	MW-6	03/31/2022	ND	20.0000		
Zinc, total	ug/L	MW-6	08/30/2022	ND	20.0000		
Zinc, total	ug/L	MW-6	03/07/2023	ND	20.0000		
Zinc, total	ug/L	MW-6	09/28/2023	ND	20.0000		
Zinc, total	ug/L	MW-6	03/11/2024	ND	20.0000		
Zinc, total	ug/L	MW-6	10/02/2024	ND	20.0000		
Antimony, total	ug/L	MW-7	03/15/2017	ND	2.0000		
Antimony, total	ug/L	MW-7	05/09/2017	ND	2.0000		
Antimony, total	ug/L	MW-7	09/27/2017	ND	2.0000		
Antimony, total	ug/L	MW-7	03/14/2018	ND	2.0000		
Antimony, total	ug/L	MW-7	09/12/2018	ND	2.0000		
Antimony, total	ug/L	MW-7	04/01/2019	ND	2.0000		
Antimony, total	ug/L	MW-7	09/12/2019	ND	2.0000		
Antimony, total	ug/L	MW-7	05/06/2020	ND	2.0000		
Antimony, total	ug/L	MW-7	09/03/2020	ND	2.0000		
Antimony, total	ug/L	MW-7	03/30/2021	ND	2.0000		*
Antimony, total	ug/L	MW-7	09/08/2021	ND	2.0000		
Antimony, total	ug/L	MW-7	03/31/2022	ND	2.0000		
Antimony, total	ug/L	MW-7	08/30/2022	ND	2.0000		
Antimony, total	ug/L	MW-7	03/07/2023	ND	2.0000		
Antimony, total	ug/L	MW-7	09/28/2023	ND	2.0000		
Antimony, total	ug/L	MW-7	03/11/2024	ND	2.0000		
Antimony, total	ug/L	MW-7	10/02/2024	ND	2.0000		
Arsenic, total	ug/L	MW-7	03/15/2017		6.5000		
Arsenic, total	ug/L	MW-7	05/09/2017	ND	4.0000		
Arsenic, total	ug/L	MW-7	09/27/2017	ND	4.0000		
Arsenic, total	ug/L	MW-7	03/14/2018	ND	4.0000		
Arsenic, total	ug/L	MW-7	09/12/2018		6.3000		
Arsenic, total	ug/L	MW-7	04/01/2019	ND	4.0000		
Arsenic, total	ug/L	MW-7	09/12/2019		13.9000		*
Arsenic, total	ug/L	MW-7	05/06/2020	ND	4.0000		
Arsenic, total	ug/L	MW-7	09/03/2020	ND	4.0000		
Arsenic, total	ug/L	MW-7	03/30/2021		35.8000		*
Arsenic, total	ug/L	MW-7	09/08/2021	ND	4.0000		
Arsenic, total	ug/L	MW-7	03/31/2022		18.6000		*
Arsenic, total	ug/L	MW-7	08/30/2022	ND	4.0000		
Arsenic, total	ug/L	MW-7	03/07/2023	ND	4.0000		
Arsenic, total	ug/L	MW-7	09/28/2023	ND	4.0000		
Arsenic, total	ug/L	MW-7	03/11/2024	ND	4.0000		
Arsenic, total	ug/L	MW-7	10/02/2024	ND	4.0000		
Barium, total	ug/L	MW-7	03/15/2017		331.0000		
Barium, total	ug/L	MW-7	05/09/2017		224.0000		
Barium, total	ug/L	MW-7	09/27/2017		380.0000		
Barium, total	ug/L	MW-7	03/14/2018		214.0000		
Barium, total	ug/L	MW-7	09/12/2018		325.0000		
Barium, total	ug/L	MW-7	04/01/2019		235.0000		
Barium, total	ug/L	MW-7	09/12/2019		386.0000		
Barium, total	ug/L	MW-7	05/06/2020		191.0000		
Barium, total	ug/L	MW-7	09/03/2020		172.0000		
Barium, total	ug/L	MW-7	03/30/2021		880.0000		*
Barium, total	ug/L	MW-7	09/08/2021		163.0000		
Barium, total	ug/L	MW-7	03/31/2022		569.0000		
Barium, total	ug/L	MW-7	08/30/2022		211.0000		
Barium, total	ug/L	MW-7	03/07/2023		166.0000		
Barium, total	ug/L	MW-7	09/28/2023		161.0000		
Barium, total	ug/L	MW-7	03/11/2024		168.0000		
Barium, total	ug/L	MW-7	10/02/2024		162.0000		
Beryllium, total	ug/L	MW-7	03/15/2017	ND	4.0000		
Beryllium, total	ug/L	MW-7	05/09/2017	ND	4.0000		
Beryllium, total	ug/L	MW-7	09/27/2017	ND	4.0000		
Beryllium, total	ug/L	MW-7	03/14/2018	ND	4.0000		
Beryllium, total	ug/L	MW-7	09/12/2018	ND	4.0000		
Beryllium, total	ug/L	MW-7	04/01/2019	ND	4.0000		
Beryllium, total	ug/L	MW-7	09/12/2019	ND	4.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Beryllium, total	ug/L	MW-7	05/06/2020	ND	4.0000		
Beryllium, total	ug/L	MW-7	09/03/2020	ND	4.0000		
Beryllium, total	ug/L	MW-7	03/30/2021	ND	4.0000		*
Beryllium, total	ug/L	MW-7	09/08/2021	ND	4.0000		
Beryllium, total	ug/L	MW-7	03/31/2022	ND	4.0000		
Beryllium, total	ug/L	MW-7	08/30/2022	ND	4.0000		
Beryllium, total	ug/L	MW-7	03/07/2023	ND	4.0000		
Beryllium, total	ug/L	MW-7	09/28/2023	ND	4.0000		
Beryllium, total	ug/L	MW-7	03/11/2024	ND	4.0000		
Beryllium, total	ug/L	MW-7	10/02/2024	ND	4.0000		
Cadmium, total	ug/L	MW-7	03/15/2017	ND	0.8000		
Cadmium, total	ug/L	MW-7	05/09/2017	ND	0.8000		
Cadmium, total	ug/L	MW-7	09/27/2017	ND	0.8000		
Cadmium, total	ug/L	MW-7	03/14/2018	ND	0.8000		
Cadmium, total	ug/L	MW-7	09/12/2018	ND	0.8000		
Cadmium, total	ug/L	MW-7	04/01/2019	ND	0.8000		
Cadmium, total	ug/L	MW-7	09/12/2019	ND	0.8000		
Cadmium, total	ug/L	MW-7	05/06/2020	ND	0.8000		
Cadmium, total	ug/L	MW-7	09/03/2020	ND	0.8000		
Cadmium, total	ug/L	MW-7	03/30/2021		1.7000		*
Cadmium, total	ug/L	MW-7	09/08/2021	ND	0.8000		
Cadmium, total	ug/L	MW-7	03/31/2022		1.0000		
Cadmium, total	ug/L	MW-7	08/30/2022	ND	0.8000		
Cadmium, total	ug/L	MW-7	03/07/2023	ND	0.8000		
Cadmium, total	ug/L	MW-7	09/28/2023	ND	0.8000		
Cadmium, total	ug/L	MW-7	03/11/2024	ND	0.8000		
Cadmium, total	ug/L	MW-7	10/02/2024	ND	0.8000		
Chromium, total	ug/L	MW-7	03/15/2017		16.5000		
Chromium, total	ug/L	MW-7	05/09/2017	ND	8.0000		
Chromium, total	ug/L	MW-7	09/27/2017	ND	8.0000		
Chromium, total	ug/L	MW-7	03/14/2018	ND	8.0000		
Chromium, total	ug/L	MW-7	09/12/2018		14.6000		
Chromium, total	ug/L	MW-7	04/01/2019	ND	8.0000		
Chromium, total	ug/L	MW-7	09/12/2019		31.6000		*
Chromium, total	ug/L	MW-7	05/06/2020	ND	8.0000		
Chromium, total	ug/L	MW-7	09/03/2020	ND	8.0000		
Chromium, total	ug/L	MW-7	03/30/2021		77.5000		*
Chromium, total	ug/L	MW-7	09/08/2021	ND	8.0000		
Chromium, total	ug/L	MW-7	03/31/2022		49.5000		*
Chromium, total	ug/L	MW-7	08/30/2022	ND	8.0000		
Chromium, total	ug/L	MW-7	03/07/2023	ND	8.0000		
Chromium, total	ug/L	MW-7	09/28/2023	ND	8.0000		
Chromium, total	ug/L	MW-7	03/11/2024	ND	8.0000		
Chromium, total	ug/L	MW-7	10/02/2024	ND	8.0000		
Cobalt, total	ug/L	MW-7	03/15/2017		5.9000		
Cobalt, total	ug/L	MW-7	05/09/2017	ND	0.8000		
Cobalt, total	ug/L	MW-7	09/27/2017		3.4000		
Cobalt, total	ug/L	MW-7	03/14/2018	ND	2.0000	0.8000	**
Cobalt, total	ug/L	MW-7	09/12/2018		5.8000		
Cobalt, total	ug/L	MW-7	04/01/2019		1.9000		
Cobalt, total	ug/L	MW-7	09/12/2019		12.2000		
Cobalt, total	ug/L	MW-7	05/06/2020		0.4000		
Cobalt, total	ug/L	MW-7	09/03/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-7	03/30/2021		39.3000		*
Cobalt, total	ug/L	MW-7	09/08/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-7	03/31/2022		22.9000		*
Cobalt, total	ug/L	MW-7	08/30/2022		2.1000		
Cobalt, total	ug/L	MW-7	03/07/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-7	09/28/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-7	03/11/2024	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-7	10/02/2024	ND	0.4000	0.8000	**
Copper, total	ug/L	MW-7	03/15/2017		13.7000		*
Copper, total	ug/L	MW-7	05/09/2017	ND	4.0000		
Copper, total	ug/L	MW-7	09/27/2017		10.6000		
Copper, total	ug/L	MW-7	03/14/2018	ND	4.0000		
Copper, total	ug/L	MW-7	09/12/2018		12.7000		*
Copper, total	ug/L	MW-7	04/01/2019	ND	4.0000		
Copper, total	ug/L	MW-7	09/12/2019		25.8000		*
Copper, total	ug/L	MW-7	05/06/2020	ND	4.0000		
Copper, total	ug/L	MW-7	09/03/2020	ND	4.0000		
Copper, total	ug/L	MW-7	03/30/2021		83.4000		*
Copper, total	ug/L	MW-7	09/08/2021	ND	4.0000		
Copper, total	ug/L	MW-7	03/31/2022		47.2000		*
Copper, total	ug/L	MW-7	08/30/2022		4.8000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Copper, total	ug/L	MW-7	03/07/2023	ND	4.0000		
Copper, total	ug/L	MW-7	09/28/2023		4.1000		
Copper, total	ug/L	MW-7	03/11/2024	ND	4.0000		
Copper, total	ug/L	MW-7	10/02/2024	ND	4.0000		
Lead, total	ug/L	MW-7	03/15/2017		6.8000		
Lead, total	ug/L	MW-7	05/09/2017	ND	4.0000		
Lead, total	ug/L	MW-7	09/27/2017	ND	4.0000		
Lead, total	ug/L	MW-7	03/14/2018	ND	4.0000		
Lead, total	ug/L	MW-7	09/12/2018		6.6000		
Lead, total	ug/L	MW-7	04/01/2019	ND	4.0000		
Lead, total	ug/L	MW-7	09/12/2019		13.1000		*
Lead, total	ug/L	MW-7	05/06/2020	ND	4.0000		
Lead, total	ug/L	MW-7	09/03/2020	ND	4.0000		
Lead, total	ug/L	MW-7	03/30/2021		43.4000		*
Lead, total	ug/L	MW-7	09/08/2021	ND	4.0000		
Lead, total	ug/L	MW-7	03/31/2022		25.8000		*
Lead, total	ug/L	MW-7	08/30/2022		5.5000		
Lead, total	ug/L	MW-7	03/07/2023	ND	4.0000		
Lead, total	ug/L	MW-7	09/28/2023	ND	4.0000		
Lead, total	ug/L	MW-7	03/11/2024	ND	4.0000		
Lead, total	ug/L	MW-7	10/02/2024	ND	4.0000		
Nickel, total	ug/L	MW-7	03/15/2017		19.0000		*
Nickel, total	ug/L	MW-7	05/09/2017	ND	4.0000		
Nickel, total	ug/L	MW-7	09/27/2017		11.4000		
Nickel, total	ug/L	MW-7	12/13/2017	ND	4.0000		
Nickel, total	ug/L	MW-7	03/14/2018	ND	4.0000		
Nickel, total	ug/L	MW-7	09/12/2018		17.4000		*
Nickel, total	ug/L	MW-7	04/01/2019		7.4000		
Nickel, total	ug/L	MW-7	09/12/2019		34.2000		*
Nickel, total	ug/L	MW-7	05/06/2020	ND	4.0000		
Nickel, total	ug/L	MW-7	09/03/2020	ND	4.0000		
Nickel, total	ug/L	MW-7	03/30/2021		105.0000		*
Nickel, total	ug/L	MW-7	09/08/2021	ND	4.0000		
Nickel, total	ug/L	MW-7	03/31/2022		61.9000		*
Nickel, total	ug/L	MW-7	08/30/2022		6.5000		
Nickel, total	ug/L	MW-7	03/07/2023	ND	4.0000		
Nickel, total	ug/L	MW-7	09/28/2023	ND	4.0000		
Nickel, total	ug/L	MW-7	03/11/2024	ND	4.0000		
Nickel, total	ug/L	MW-7	10/02/2024		4.1000		
Selenium, total	ug/L	MW-7	03/15/2017	ND	4.0000		
Selenium, total	ug/L	MW-7	05/09/2017	ND	4.0000		
Selenium, total	ug/L	MW-7	09/27/2017	ND	4.0000		
Selenium, total	ug/L	MW-7	03/14/2018	ND	4.0000		
Selenium, total	ug/L	MW-7	09/12/2018	ND	4.0000		
Selenium, total	ug/L	MW-7	04/01/2019	ND	4.0000		
Selenium, total	ug/L	MW-7	09/12/2019	ND	4.0000		
Selenium, total	ug/L	MW-7	05/06/2020	ND	4.0000		
Selenium, total	ug/L	MW-7	09/03/2020	ND	4.0000		
Selenium, total	ug/L	MW-7	03/30/2021		5.8000		*
Selenium, total	ug/L	MW-7	09/08/2021	ND	4.0000		
Selenium, total	ug/L	MW-7	03/31/2022		6.2000		*
Selenium, total	ug/L	MW-7	08/30/2022	ND	4.0000		
Selenium, total	ug/L	MW-7	03/07/2023	ND	4.0000		
Selenium, total	ug/L	MW-7	09/28/2023	ND	4.0000		
Selenium, total	ug/L	MW-7	03/11/2024	ND	4.0000		
Selenium, total	ug/L	MW-7	10/02/2024	ND	4.0000		
Silver, total	ug/L	MW-7	03/15/2017	ND	4.0000		
Silver, total	ug/L	MW-7	05/09/2017	ND	4.0000		
Silver, total	ug/L	MW-7	09/27/2017	ND	4.0000		
Silver, total	ug/L	MW-7	03/14/2018	ND	4.0000		
Silver, total	ug/L	MW-7	09/12/2018	ND	4.0000		
Silver, total	ug/L	MW-7	04/01/2019	ND	4.0000		
Silver, total	ug/L	MW-7	09/12/2019	ND	4.0000		
Silver, total	ug/L	MW-7	05/06/2020	ND	4.0000		
Silver, total	ug/L	MW-7	09/03/2020	ND	4.0000		
Silver, total	ug/L	MW-7	03/30/2021	ND	4.0000		*
Silver, total	ug/L	MW-7	09/08/2021	ND	4.0000		
Silver, total	ug/L	MW-7	03/31/2022	ND	4.0000		
Silver, total	ug/L	MW-7	08/30/2022	ND	4.0000		
Silver, total	ug/L	MW-7	03/07/2023	ND	4.0000		
Silver, total	ug/L	MW-7	09/28/2023	ND	4.0000		
Silver, total	ug/L	MW-7	03/11/2024	ND	4.0000		
Silver, total	ug/L	MW-7	10/02/2024	ND	4.0000		
Thallium, total	ug/L	MW-7	03/15/2017	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-7	05/09/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-7	09/27/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-7	03/14/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-7	09/12/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-7	04/01/2019	ND	2.0000		
Thallium, total	ug/L	MW-7	09/12/2019	ND	2.0000		
Thallium, total	ug/L	MW-7	05/06/2020	ND	2.0000		
Thallium, total	ug/L	MW-7	09/03/2020	ND	2.0000		
Thallium, total	ug/L	MW-7	03/30/2021	ND	2.0000		*
Thallium, total	ug/L	MW-7	09/08/2021	ND	2.0000		
Thallium, total	ug/L	MW-7	03/31/2022	ND	2.0000		
Thallium, total	ug/L	MW-7	08/30/2022	ND	2.0000		
Thallium, total	ug/L	MW-7	03/07/2023	ND	2.0000		
Thallium, total	ug/L	MW-7	09/28/2023	ND	2.0000		
Thallium, total	ug/L	MW-7	03/11/2024	ND	2.0000		
Thallium, total	ug/L	MW-7	10/02/2024	ND	2.0000		
Vanadium, total	ug/L	MW-7	03/15/2017		26.5000		
Vanadium, total	ug/L	MW-7	05/09/2017	ND	20.0000		
Vanadium, total	ug/L	MW-7	09/27/2017	ND	20.0000		
Vanadium, total	ug/L	MW-7	03/14/2018	ND	20.0000		
Vanadium, total	ug/L	MW-7	09/12/2018		23.0000		
Vanadium, total	ug/L	MW-7	04/01/2019	ND	20.0000		
Vanadium, total	ug/L	MW-7	09/12/2019		55.0000		*
Vanadium, total	ug/L	MW-7	05/06/2020	ND	20.0000		
Vanadium, total	ug/L	MW-7	09/03/2020	ND	20.0000		
Vanadium, total	ug/L	MW-7	03/30/2021		120.0000		*
Vanadium, total	ug/L	MW-7	09/08/2021	ND	20.0000		
Vanadium, total	ug/L	MW-7	03/31/2022		75.9000		*
Vanadium, total	ug/L	MW-7	08/30/2022	ND	20.0000		
Vanadium, total	ug/L	MW-7	03/07/2023	ND	20.0000		
Vanadium, total	ug/L	MW-7	09/28/2023	ND	20.0000		
Vanadium, total	ug/L	MW-7	03/11/2024	ND	20.0000		
Vanadium, total	ug/L	MW-7	10/02/2024	ND	20.0000		
Zinc, total	ug/L	MW-7	03/15/2017		34.2000		
Zinc, total	ug/L	MW-7	05/09/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-7	09/27/2017		26.9000		
Zinc, total	ug/L	MW-7	12/13/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-7	03/14/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-7	09/12/2018		63.4000		
Zinc, total	ug/L	MW-7	04/01/2019		28.5000		
Zinc, total	ug/L	MW-7	09/12/2019		69.0000		
Zinc, total	ug/L	MW-7	05/06/2020	ND	20.0000		
Zinc, total	ug/L	MW-7	09/03/2020	ND	20.0000		
Zinc, total	ug/L	MW-7	03/30/2021		615.0000		*
Zinc, total	ug/L	MW-7	09/08/2021	ND	20.0000		
Zinc, total	ug/L	MW-7	03/31/2022		116.0000		*
Zinc, total	ug/L	MW-7	08/30/2022	ND	20.0000		
Zinc, total	ug/L	MW-7	03/07/2023	ND	20.0000		
Zinc, total	ug/L	MW-7	09/28/2023	ND	20.0000		
Zinc, total	ug/L	MW-7	03/11/2024	ND	20.0000		
Zinc, total	ug/L	MW-7	10/02/2024	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	AW-1	10/02/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	AW-1	10/02/2024		8.7000		51.3000
Barium, total	ug/L	AW-1	10/02/2024		413.0000		569.0000
Beryllium, total	ug/L	AW-1	10/02/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	AW-1	10/02/2024	ND	0.8000		1.0000
Chromium, total	ug/L	AW-1	10/02/2024	ND	8.0000		16.5000
Cobalt, total	ug/L	AW-1	10/02/2024		4.0000		12.2000
Copper, total	ug/L	AW-1	10/02/2024	ND	4.0000		10.6000
Lead, total	ug/L	AW-1	10/02/2024	ND	4.0000		6.8000
Nickel, total	ug/L	AW-1	10/02/2024		4.3000		29.5000
Selenium, total	ug/L	AW-1	10/02/2024	ND	4.0000		4.0000
Silver, total	ug/L	AW-1	10/02/2024	ND	4.0000		4.0000
Thallium, total	ug/L	AW-1	10/02/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	AW-1	10/02/2024	ND	20.0000		26.5000
Zinc, total	ug/L	AW-1	10/02/2024	ND	20.0000		69.0000
Antimony, total	ug/L	AW-2	10/02/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	AW-2	10/02/2024		48.1000		51.3000
Barium, total	ug/L	AW-2	10/02/2024		141.0000		569.0000
Beryllium, total	ug/L	AW-2	10/02/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	AW-2	10/02/2024	ND	0.8000		1.0000
Chromium, total	ug/L	AW-2	10/02/2024	ND	8.0000		16.5000
Cobalt, total	ug/L	AW-2	10/02/2024		13.1000	***	12.2000
Copper, total	ug/L	AW-2	10/02/2024	ND	4.0000		10.6000
Lead, total	ug/L	AW-2	10/02/2024	ND	4.0000		6.8000
Nickel, total	ug/L	AW-2	10/02/2024		9.2000		29.5000
Selenium, total	ug/L	AW-2	10/02/2024	ND	4.0000		4.0000
Silver, total	ug/L	AW-2	10/02/2024	ND	4.0000		4.0000
Thallium, total	ug/L	AW-2	10/02/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	AW-2	10/02/2024	ND	20.0000		26.5000
Zinc, total	ug/L	AW-2	10/02/2024	ND	20.0000		69.0000
Antimony, total	ug/L	AW-3	10/02/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	AW-3	10/02/2024		25.1000		51.3000
Barium, total	ug/L	AW-3	10/02/2024		308.0000		569.0000
Beryllium, total	ug/L	AW-3	10/02/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	AW-3	10/02/2024	ND	0.8000		1.0000
Chromium, total	ug/L	AW-3	10/02/2024	ND	8.0000		16.5000
Cobalt, total	ug/L	AW-3	10/02/2024		0.8000		12.2000
Copper, total	ug/L	AW-3	10/02/2024	ND	4.0000		10.6000
Lead, total	ug/L	AW-3	10/02/2024	ND	4.0000		6.8000
Nickel, total	ug/L	AW-3	10/02/2024	ND	4.0000		29.5000
Selenium, total	ug/L	AW-3	10/02/2024	ND	4.0000		4.0000
Silver, total	ug/L	AW-3	10/02/2024	ND	4.0000		4.0000
Thallium, total	ug/L	AW-3	10/02/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	AW-3	10/02/2024	ND	20.0000		26.5000
Zinc, total	ug/L	AW-3	10/02/2024	ND	20.0000		69.0000
Antimony, total	ug/L	AW-9	09/28/2023	ND	2.0000		2.0000
Arsenic, total	ug/L	AW-9	10/02/2024		4.2000		51.3000
Barium, total	ug/L	AW-9	09/28/2023		447.0000		569.0000
Beryllium, total	ug/L	AW-9	09/28/2023	ND	4.0000		4.0000
Cadmium, total	ug/L	AW-9	09/28/2023	ND	0.8000		1.0000
Chromium, total	ug/L	AW-9	09/28/2023	ND	8.0000		16.5000
Cobalt, total	ug/L	AW-9	10/02/2024		9.6000		12.2000
Copper, total	ug/L	AW-9	09/28/2023	ND	4.0000		10.6000
Lead, total	ug/L	AW-9	09/28/2023	ND	4.0000		6.8000
Nickel, total	ug/L	AW-9	09/28/2023	ND	4.0000		29.5000
Selenium, total	ug/L	AW-9	09/28/2023	ND	4.0000		4.0000
Silver, total	ug/L	AW-9	09/28/2023	ND	4.0000		4.0000
Thallium, total	ug/L	AW-9	09/28/2023	ND	2.0000		2.0000
Vanadium, total	ug/L	AW-9	09/28/2023	ND	20.0000		26.5000
Zinc, total	ug/L	AW-9	09/28/2023	ND	20.0000		69.0000
Antimony, total	ug/L	MW-12	10/02/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-12	10/02/2024	ND	4.0000		51.3000
Barium, total	ug/L	MW-12	10/02/2024		105.0000		569.0000
Beryllium, total	ug/L	MW-12	10/02/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-12	10/02/2024	ND	0.8000		1.0000
Chromium, total	ug/L	MW-12	10/02/2024	ND	8.0000		16.5000
Cobalt, total	ug/L	MW-12	10/02/2024		2.6000		12.2000
Copper, total	ug/L	MW-12	10/02/2024	ND	4.0000		10.6000
Lead, total	ug/L	MW-12	10/02/2024	ND	4.0000		6.8000
Nickel, total	ug/L	MW-12	10/02/2024		41.6000	*	29.5000
Selenium, total	ug/L	MW-12	10/02/2024	ND	4.0000		4.0000
Silver, total	ug/L	MW-12	10/02/2024	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-12	10/02/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-12	10/02/2024	ND	20.0000		26.5000
Zinc, total	ug/L	MW-12	10/02/2024	ND	20.0000		69.0000
Antimony, total	ug/L	MW-14	10/02/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-14	10/02/2024	ND	4.0000		51.3000
Barium, total	ug/L	MW-14	10/02/2024		401.0000		569.0000
Beryllium, total	ug/L	MW-14	10/02/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-14	10/02/2024	ND	0.8000		1.0000
Chromium, total	ug/L	MW-14	10/02/2024	ND	8.0000		16.5000
Cobalt, total	ug/L	MW-14	10/02/2024	ND	0.4000		12.2000
Copper, total	ug/L	MW-14	10/02/2024	ND	4.0000		10.6000
Lead, total	ug/L	MW-14	10/02/2024	ND	4.0000		6.8000
Nickel, total	ug/L	MW-14	10/02/2024		9.5000		29.5000
Selenium, total	ug/L	MW-14	10/02/2024	ND	4.0000		4.0000
Silver, total	ug/L	MW-14	10/02/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW-14	10/02/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-14	10/02/2024	ND	20.0000		26.5000
Zinc, total	ug/L	MW-14	10/02/2024	ND	20.0000		69.0000
Antimony, total	ug/L	MW-20	10/02/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-20	10/02/2024		26.7000		51.3000
Barium, total	ug/L	MW-20	10/02/2024		332.0000		569.0000
Beryllium, total	ug/L	MW-20	10/02/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-20	10/02/2024	ND	0.8000		1.0000
Chromium, total	ug/L	MW-20	10/02/2024	ND	8.0000		16.5000
Cobalt, total	ug/L	MW-20	10/02/2024		0.9000		12.2000
Copper, total	ug/L	MW-20	10/02/2024	ND	4.0000		10.6000
Lead, total	ug/L	MW-20	10/02/2024	ND	4.0000		6.8000
Nickel, total	ug/L	MW-20	10/02/2024	ND	4.0000		29.5000
Selenium, total	ug/L	MW-20	10/02/2024	ND	4.0000		4.0000
Silver, total	ug/L	MW-20	10/02/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW-20	10/02/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-20	10/02/2024	ND	20.0000		26.5000
Zinc, total	ug/L	MW-20	10/02/2024	ND	20.0000		69.0000
Antimony, total	ug/L	MW-24	10/02/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-24	10/02/2024		33.3000		51.3000
Barium, total	ug/L	MW-24	10/02/2024		602.0000	*	569.0000
Beryllium, total	ug/L	MW-24	10/02/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-24	10/02/2024	ND	0.8000		1.0000
Chromium, total	ug/L	MW-24	10/02/2024	ND	8.0000		16.5000
Cobalt, total	ug/L	MW-24	10/02/2024		12.9000	*	12.2000
Copper, total	ug/L	MW-24	10/02/2024	ND	4.0000		10.6000
Lead, total	ug/L	MW-24	10/02/2024	ND	4.0000		6.8000
Nickel, total	ug/L	MW-24	10/02/2024		29.3000		29.5000
Selenium, total	ug/L	MW-24	10/02/2024	ND	4.0000		4.0000
Silver, total	ug/L	MW-24	10/02/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW-24	10/02/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-24	10/02/2024	ND	20.0000		26.5000
Zinc, total	ug/L	MW-24	10/02/2024	ND	20.0000		69.0000
Antimony, total	ug/L	MW-25	10/02/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-25	10/02/2024	ND	4.0000		51.3000
Barium, total	ug/L	MW-25	10/02/2024		27.7000		569.0000
Beryllium, total	ug/L	MW-25	10/02/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-25	10/02/2024	ND	0.8000		1.0000
Chromium, total	ug/L	MW-25	10/02/2024	ND	8.0000		16.5000
Cobalt, total	ug/L	MW-25	10/02/2024	ND	0.4000		12.2000
Copper, total	ug/L	MW-25	10/02/2024	ND	4.0000		10.6000
Lead, total	ug/L	MW-25	10/02/2024	ND	4.0000		6.8000
Nickel, total	ug/L	MW-25	10/02/2024		4.7000		29.5000
Selenium, total	ug/L	MW-25	10/02/2024	ND	4.0000		4.0000
Silver, total	ug/L	MW-25	10/02/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW-25	10/02/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-25	10/02/2024	ND	20.0000		26.5000
Zinc, total	ug/L	MW-25	10/02/2024	ND	20.0000		69.0000
Antimony, total	ug/L	MW-41	10/02/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-41	10/02/2024	ND	4.0000		51.3000
Barium, total	ug/L	MW-41	10/02/2024		394.0000		569.0000
Beryllium, total	ug/L	MW-41	10/02/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-41	10/02/2024	ND	0.8000		1.0000
Chromium, total	ug/L	MW-41	10/02/2024	ND	8.0000		16.5000
Cobalt, total	ug/L	MW-41	10/02/2024		1.0000		12.2000
Copper, total	ug/L	MW-41	10/02/2024	ND	4.0000		10.6000
Lead, total	ug/L	MW-41	10/02/2024	ND	4.0000		6.8000

* - 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-41	10/02/2024	ND	4.0000		29.5000
Selenium, total	ug/L	MW-41	10/02/2024	ND	4.0000		4.0000
Silver, total	ug/L	MW-41	10/02/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW-41	10/02/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-41	10/02/2024	ND	20.0000		26.5000
Zinc, total	ug/L	MW-41	10/02/2024	ND	20.0000		69.0000

* - 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 3

Detection Frequencies in Upgradient and Downgradient Wells

Constituent	Detect	Upgradient N	Proportion	Detect	Downgradient N	Proportion
Antimony, total	0	81	0.000	5	241	0.021
Arsenic, total	16	79	0.203	154	258	0.597
Barium, total	82	82	1.000	251	251	1.000
Beryllium, total	0	81	0.000	11	245	0.045
Cadmium, total	1	81	0.012	20	245	0.082
Chromium, total	2	79	0.025	4	242	0.017
Cobalt, total	28	77	0.364	155	256	0.605
Copper, total	5	75	0.067	29	245	0.118
Lead, total	5	77	0.065	36	246	0.146
Nickel, total	18	78	0.231	138	246	0.561
Selenium, total	0	80	0.000	1	240	0.004
Silver, total	0	77	0.000	0	240	0.000
Thallium, total	0	81	0.000	0	240	0.000
Vanadium, total	2	76	0.026	16	242	0.066
Zinc, total	15	82	0.183	96	250	0.384

N = Total number of measurements in all wells.
Detect = Total number of detections in all wells.
Proportion = Detect/N.

Table 4

Shapiro-Wilk Multiple Group Test of Normality

Constituent	Detect	N	Detect Freq	G raw	G log	G cbrt	G sqrt	G sqr	G cub	Crit Value	Dist Form	Model Type
Antimony, total	0	81	0.000									nonpar
Arsenic, total	16	79	0.203	3.063	1.084					2.326	lognor	nonpar
Barium, total	82	82	1.000	5.244	2.684					2.326	non-norm	nonpar
Beryllium, total	0	81	0.000									nonpar
Cadmium, total	1	81	0.012									nonpar
Chromium, total	2	79	0.025									nonpar
Cobalt, total	28	77	0.364	0.151	1.897					2.326	normal	nonpar
Copper, total	5	75	0.067	0.883	0.533					2.326	normal	nonpar
Lead, total	5	77	0.065	0.603	0.677					2.326	normal	nonpar
Nickel, total	18	78	0.231	1.165	0.597					2.326	normal	nonpar
Selenium, total	0	80	0.000									nonpar
Silver, total	0	77	0.000									nonpar
Thallium, total	0	81	0.000									nonpar
Vanadium, total	2	76	0.026									nonpar
Zinc, total	15	82	0.183	1.027	0.921					2.326	normal	nonpar

* - Distribution override for that constituent.
Fit to distribution is confirmed if G <= critical value.
Model type may not match distributional form when detection frequency < 50%.

Table 5

Summary Statistics and Prediction Limits

Constituent	Units	Detect	N	Mean	SD	alpha	Factor	Pred Limit	Type		Conf
Antimony, total	ug/L	0	81					2.0000	nonpar	***	0.99
Arsenic, total	ug/L	16	79					51.3000	nonpar		0.99
Barium, total	ug/L	82	82					569.0000	nonpar		0.99
Beryllium, total	ug/L	0	81					4.0000	nonpar	***	0.99
Cadmium, total	ug/L	1	81					1.0000	nonpar		0.99
Chromium, total	ug/L	2	79					16.5000	nonpar		0.99
Cobalt, total	ug/L	28	77					12.2000	nonpar		0.99
Copper, total	ug/L	5	75					10.6000	nonpar		0.99
Lead, total	ug/L	5	77					6.8000	nonpar		0.99
Nickel, total	ug/L	18	78					29.5000	nonpar		0.99
Selenium, total	ug/L	0	80					4.0000	nonpar	***	0.99
Silver, total	ug/L	0	77					4.0000	nonpar	***	0.99
Thallium, total	ug/L	0	81					2.0000	nonpar	***	0.99
Vanadium, total	ug/L	2	76					26.5000	nonpar		0.99
Zinc, total	ug/L	15	82					69.0000	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
5% Significance Level

Constituent	Units	Well	Date	Result	ND Qualifier	Date Range	N	Critical Value
Cobalt, total	ug/L	MW-26	03/14/2018	2.0000	< 2.0000	10/31/2016-10/02/2024	17	0.4891
Cobalt, total	ug/L	MW-6	10/20/2014	7.4300		10/20/2014-10/02/2024	20	0.4621
Cobalt, total	ug/L	MW-6	03/07/2023	11.4000		10/20/2014-10/02/2024	20	0.4621
Copper, total	ug/L	MW-6	03/11/2024	15.0000		10/20/2014-10/02/2024	19	0.4621
Lead, total	ug/L	MW-6	11/13/2015	0.5030		10/20/2014-10/02/2024	20	0.4621
Lead, total	ug/L	MW-6	04/11/2016	0.5000	< 0.5000	10/20/2014-10/02/2024	20	0.4621
Silver, total	ug/L	MW-6	10/20/2014	20.0000	< 20.0000	10/20/2014-10/02/2024	20	0.4501
Silver, total	ug/L	MW-6	06/23/2015	1.0000	< 1.0000	10/20/2014-10/02/2024	20	0.4621
Silver, total	ug/L	MW-6	11/13/2015	1.0000	< 1.0000	10/20/2014-10/02/2024	20	0.4621
Silver, total	ug/L	MW-6	04/11/2016	1.0000	< 1.0000	10/20/2014-10/02/2024	20	0.4621
Vanadium, total	ug/L	MW-6	06/23/2015	5.0000	< 5.0000	10/20/2014-10/02/2024	20	0.4621
Vanadium, total	ug/L	MW-6	11/13/2015	5.0000	< 5.0000	10/20/2014-10/02/2024	20	0.4621
Vanadium, total	ug/L	MW-6	04/11/2016	5.0000	< 5.0000	10/20/2014-10/02/2024	20	0.4621
Arsenic, total	ug/L	MW-7	09/12/2019	13.9000		03/15/2017-10/02/2024	16	0.5240
Arsenic, total	ug/L	MW-7	03/31/2022	18.6000		03/15/2017-10/02/2024	16	0.5240
Copper, total	ug/L	MW-7	03/15/2017	13.7000		03/15/2017-10/02/2024	14	0.5213
Copper, total	ug/L	MW-7	09/12/2018	12.7000		03/15/2017-10/02/2024	14	0.5213
Nickel, total	ug/L	MW-7	03/15/2017	19.0000		03/15/2017-10/02/2024	15	0.5457
Nickel, total	ug/L	MW-7	09/12/2018	17.4000		03/15/2017-10/02/2024	15	0.5457

N = Total number of independent measurements in background at each well.
Date Range = Dates of the first and last measurements included in background at each well.
Critical Value depends on the significance level and on N-1 when the two most extreme values are tested or N for the most extreme value.

Table 8

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

Constituent	Units	Well	Date		Result		Pred. Limit
Nickel, total	ug/L	MW-12	06/23/2008	ND	50.0000		29.5000
Nickel, total	ug/L	MW-12	08/21/2008	ND	50.0000		29.5000
Nickel, total	ug/L	MW-12	11/02/2008	ND	50.0000		29.5000
Nickel, total	ug/L	MW-12	04/23/2009	ND	50.0000		29.5000
Nickel, total	ug/L	MW-12	08/24/2009	ND	50.0000		29.5000
Nickel, total	ug/L	MW-12	04/27/2010	ND	50.0000		29.5000
Nickel, total	ug/L	MW-12	09/29/2010	ND	50.0000		29.5000
Nickel, total	ug/L	MW-12	03/24/2011	ND	50.0000		29.5000
Nickel, total	ug/L	MW-12	09/14/2011	ND	50.0000		29.5000
Nickel, total	ug/L	MW-12	03/20/2012	ND	50.0000		29.5000
Nickel, total	ug/L	MW-12	10/15/2012	ND	50.0000		29.5000
Nickel, total	ug/L	MW-12	03/15/2013	ND	50.0000		29.5000
Nickel, total	ug/L	MW-12	09/07/2013	ND	50.0000		29.5000
Nickel, total	ug/L	MW-12	03/17/2014	ND	50.0000		29.5000
Nickel, total	ug/L	MW-12	10/21/2014		53.9000	*	29.5000
Nickel, total	ug/L	MW-12	06/22/2015		22.4000		29.5000
Nickel, total	ug/L	MW-12	11/12/2015		24.5000		29.5000
Nickel, total	ug/L	MW-12	04/11/2016		12.0000		29.5000
Nickel, total	ug/L	MW-12	09/16/2016		11.0000		29.5000
Nickel, total	ug/L	MW-12	03/15/2017		15.8000		29.5000
Nickel, total	ug/L	MW-12	09/27/2017		11.7000		29.5000
Nickel, total	ug/L	MW-12	03/14/2018		29.7000	*	29.5000
Nickel, total	ug/L	MW-12	06/05/2018		12.7000		29.5000
Nickel, total	ug/L	MW-12	09/12/2018		8.4000		29.5000
Nickel, total	ug/L	MW-12	04/01/2019		7.6000		29.5000
Nickel, total	ug/L	MW-12	09/12/2019		7.9000		29.5000
Nickel, total	ug/L	MW-12	05/06/2020		8.9000		29.5000
Nickel, total	ug/L	MW-12	09/03/2020		11.1000		29.5000
Nickel, total	ug/L	MW-12	03/30/2021		7.6000		29.5000
Nickel, total	ug/L	MW-12	09/08/2021		6.6000		29.5000
Nickel, total	ug/L	MW-12	03/31/2022		6.4000		29.5000
Nickel, total	ug/L	MW-12	08/30/2022		26.8000		29.5000
Nickel, total	ug/L	MW-12	11/11/2022		14.2000		29.5000
Nickel, total	ug/L	MW-12	03/07/2023		5.7000		29.5000
Nickel, total	ug/L	MW-12	09/28/2023		8.1000		29.5000
Nickel, total	ug/L	MW-12	03/11/2024		13.1000		29.5000
Nickel, total	ug/L	MW-12	10/02/2024		41.6000	*	29.5000
Barium, total	ug/L	MW-24	03/24/2011		63.0000		569.0000
Barium, total	ug/L	MW-24	07/19/2011		72.3000		569.0000
Barium, total	ug/L	MW-24	09/14/2011		84.9000		569.0000
Barium, total	ug/L	MW-24	12/26/2011		88.8000		569.0000
Barium, total	ug/L	MW-24	03/20/2012		86.4000		569.0000
Barium, total	ug/L	MW-24	10/15/2012		82.2000		569.0000
Barium, total	ug/L	MW-24	03/15/2013		73.7000		569.0000
Barium, total	ug/L	MW-24	09/07/2013		86.4000		569.0000
Barium, total	ug/L	MW-24	03/17/2014		72.1000		569.0000
Barium, total	ug/L	MW-24	10/21/2014		130.0000		569.0000
Barium, total	ug/L	MW-24	06/23/2015		339.0000		569.0000
Barium, total	ug/L	MW-24	11/12/2015		393.0000		569.0000
Barium, total	ug/L	MW-24	04/12/2016		374.0000		569.0000
Barium, total	ug/L	MW-24	09/16/2016		333.0000		569.0000
Barium, total	ug/L	MW-24	03/15/2017		544.0000		569.0000
Barium, total	ug/L	MW-24	09/27/2017		567.0000		569.0000
Barium, total	ug/L	MW-24	03/14/2018		632.0000	*	569.0000
Barium, total	ug/L	MW-24	09/12/2018		382.0000		569.0000
Barium, total	ug/L	MW-24	04/01/2019		665.0000	*	569.0000
Barium, total	ug/L	MW-24	09/12/2019		310.0000		569.0000
Barium, total	ug/L	MW-24	05/06/2020		303.0000		569.0000
Barium, total	ug/L	MW-24	09/03/2020		149.0000		569.0000
Barium, total	ug/L	MW-24	03/30/2021		179.0000		569.0000
Barium, total	ug/L	MW-24	09/08/2021		302.0000		569.0000
Barium, total	ug/L	MW-24	03/31/2022		96.2000		569.0000
Barium, total	ug/L	MW-24	08/30/2022		82.7000		569.0000
Barium, total	ug/L	MW-24	03/07/2023		65.1000		569.0000
Barium, total	ug/L	MW-24	09/28/2023		298.0000		569.0000
Barium, total	ug/L	MW-24	03/11/2024		409.0000		569.0000
Barium, total	ug/L	MW-24	10/02/2024		602.0000	*	569.0000
Cobalt, total	ug/L	MW-24	03/24/2011	ND	20.0000		12.2000
Cobalt, total	ug/L	MW-24	07/19/2011		46.5000	*	12.2000
Cobalt, total	ug/L	MW-24	09/14/2011		44.5000	*	12.2000
Cobalt, total	ug/L	MW-24	12/26/2011	ND	20.0000		12.2000

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

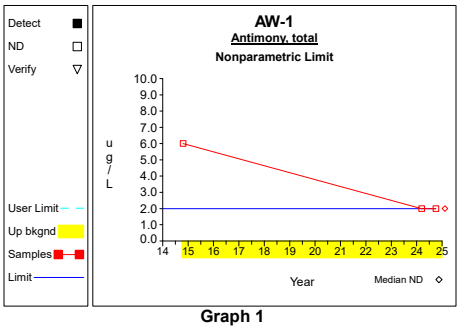
Table 8

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

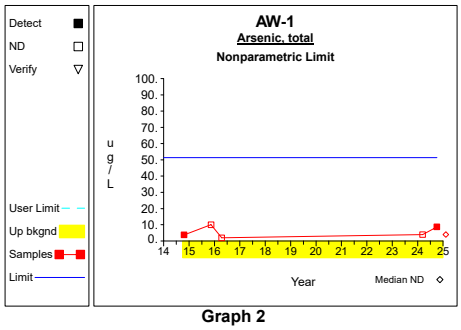
Constituent	Units	Well	Date		Result		Pred. Limit
Cobalt, total	ug/L	MW-24	03/20/2012		25.7000	*	12.2000
Cobalt, total	ug/L	MW-24	10/15/2012		26.4000	*	12.2000
Cobalt, total	ug/L	MW-24	03/15/2013		17.6000	*	12.2000
Cobalt, total	ug/L	MW-24	09/07/2013		15.2000	*	12.2000
Cobalt, total	ug/L	MW-24	03/17/2014		12.4000	*	12.2000
Cobalt, total	ug/L	MW-24	10/21/2014		6.8000		12.2000
Cobalt, total	ug/L	MW-24	06/23/2015		0.8340		12.2000
Cobalt, total	ug/L	MW-24	11/12/2015		11.7000		12.2000
Cobalt, total	ug/L	MW-24	04/12/2016		11.8000		12.2000
Cobalt, total	ug/L	MW-24	09/16/2016		1.0000		12.2000
Cobalt, total	ug/L	MW-24	03/15/2017		0.8000		12.2000
Cobalt, total	ug/L	MW-24	09/27/2017		1.0000		12.2000
Cobalt, total	ug/L	MW-24	03/14/2018		1.4000		12.2000
Cobalt, total	ug/L	MW-24	09/12/2018		3.5000		12.2000
Cobalt, total	ug/L	MW-24	04/01/2019		21.9000	*	12.2000
Cobalt, total	ug/L	MW-24	09/12/2019		19.0000	*	12.2000
Cobalt, total	ug/L	MW-24	05/06/2020		5.1000		12.2000
Cobalt, total	ug/L	MW-24	09/03/2020		16.1000	*	12.2000
Cobalt, total	ug/L	MW-24	03/30/2021		14.2000	*	12.2000
Cobalt, total	ug/L	MW-24	09/08/2021		3.5000		12.2000
Cobalt, total	ug/L	MW-24	03/31/2022		8.0000		12.2000
Cobalt, total	ug/L	MW-24	08/30/2022		12.0000		12.2000
Cobalt, total	ug/L	MW-24	03/07/2023		5.2000		12.2000
Cobalt, total	ug/L	MW-24	09/28/2023		7.4000		12.2000
Cobalt, total	ug/L	MW-24	03/11/2024		6.4000		12.2000
Cobalt, total	ug/L	MW-24	10/02/2024		12.9000	*	12.2000
Cobalt, total	ug/L	AW-2	08/05/2010		59.8000	*	12.2000
Cobalt, total	ug/L	AW-2	09/29/2010		41.3000	*	12.2000
Cobalt, total	ug/L	AW-2	03/24/2011		24.3000	*	12.2000
Cobalt, total	ug/L	AW-2	07/19/2011		23.1000	*	12.2000
Cobalt, total	ug/L	AW-2	09/14/2011		27.3000	*	12.2000
Cobalt, total	ug/L	AW-2	12/26/2011		23.7000	*	12.2000
Cobalt, total	ug/L	AW-2	03/20/2012		27.6000	*	12.2000
Cobalt, total	ug/L	AW-2	10/15/2012		25.5000	*	12.2000
Cobalt, total	ug/L	AW-2	03/15/2013		32.3000	*	12.2000
Cobalt, total	ug/L	AW-2	09/07/2013		44.0000	*	12.2000
Cobalt, total	ug/L	AW-2	03/17/2014		33.3000	*	12.2000
Cobalt, total	ug/L	AW-2	10/20/2014		99.8000	*	12.2000
Cobalt, total	ug/L	AW-2	06/23/2015		27.2000	*	12.2000
Cobalt, total	ug/L	AW-2	11/12/2015		27.2000	*	12.2000
Cobalt, total	ug/L	AW-2	04/11/2016		22.8000	*	12.2000
Cobalt, total	ug/L	AW-2	09/16/2016		18.4000	*	12.2000
Cobalt, total	ug/L	AW-2	03/15/2017		16.9000	*	12.2000
Cobalt, total	ug/L	AW-2	09/27/2017		15.2000	*	12.2000
Cobalt, total	ug/L	AW-2	03/14/2018		28.2000	*	12.2000
Cobalt, total	ug/L	AW-2	09/12/2018		10.1000		12.2000
Cobalt, total	ug/L	AW-2	04/01/2019		9.6000		12.2000
Cobalt, total	ug/L	AW-2	09/12/2019		10.1000		12.2000
Cobalt, total	ug/L	AW-2	05/06/2020		7.7000		12.2000
Cobalt, total	ug/L	AW-2	09/03/2020		10.6000		12.2000
Cobalt, total	ug/L	AW-2	03/30/2021		8.8000		12.2000
Cobalt, total	ug/L	AW-2	09/08/2021		10.0000		12.2000
Cobalt, total	ug/L	AW-2	03/31/2022		8.9000		12.2000
Cobalt, total	ug/L	AW-2	08/30/2022		12.0000		12.2000
Cobalt, total	ug/L	AW-2	03/07/2023		12.5000	*	12.2000
Cobalt, total	ug/L	AW-2	09/28/2023		5.4000		12.2000
Cobalt, total	ug/L	AW-2	03/11/2024		14.2000	*	12.2000
Cobalt, total	ug/L	AW-2	10/02/2024		13.1000	*	12.2000
Nickel, total	ug/L	MW-12	02/04/2008	ND	50.0000		29.5000
Nickel, total	ug/L	MW-12	04/04/2008	ND	50.0000		29.5000

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

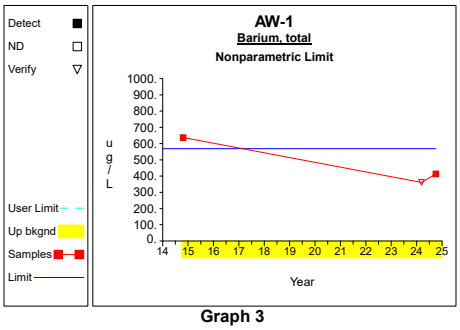
Up vs. Down Prediction Limits



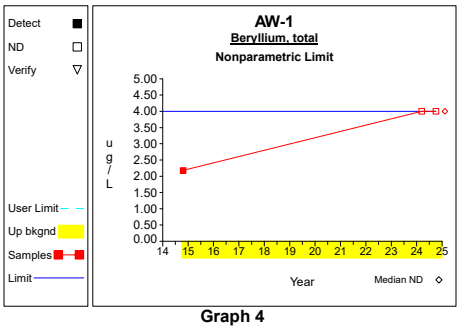
Graph 1



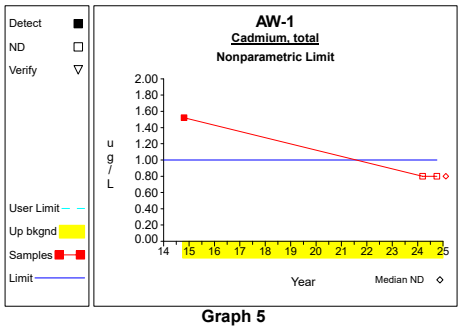
Graph 2



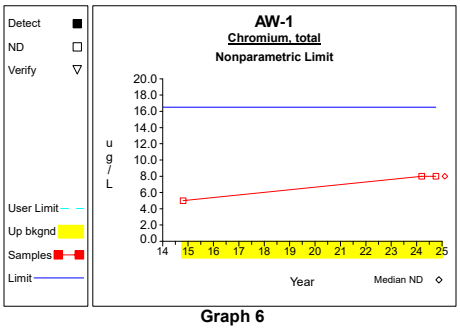
Graph 3



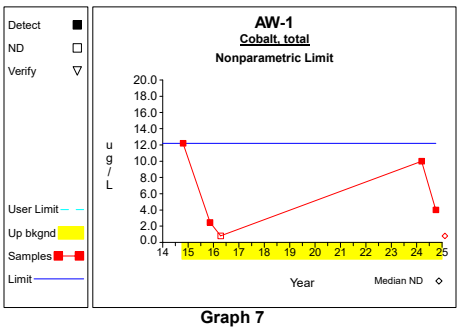
Graph 4



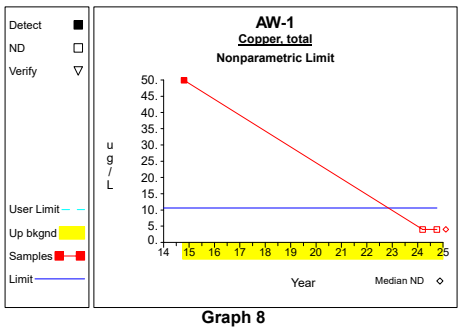
Graph 5



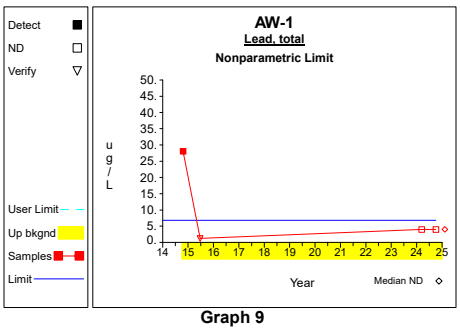
Graph 6



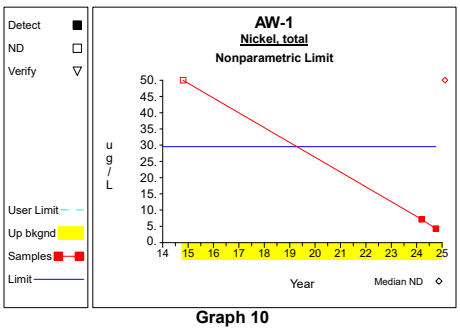
Graph 7



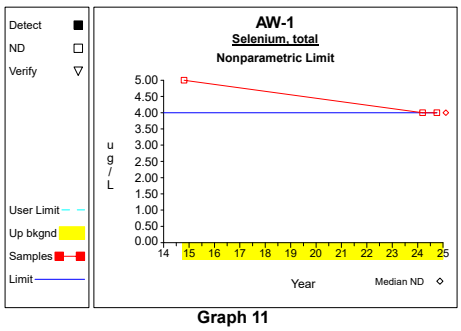
Graph 8



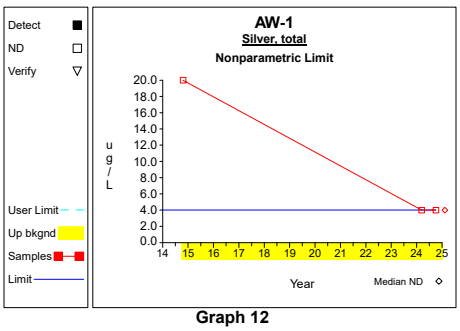
Graph 9



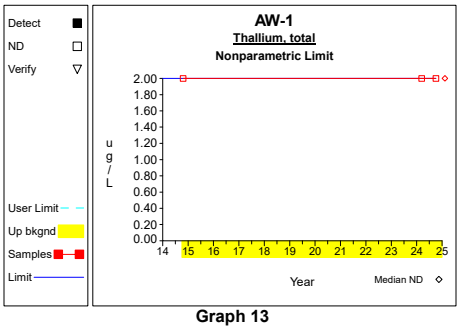
Graph 10



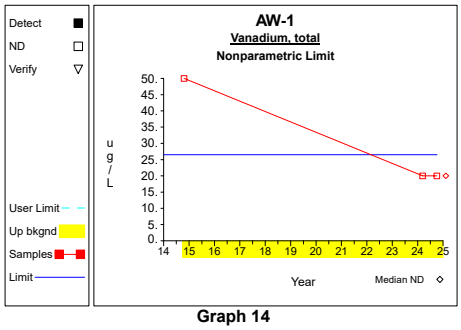
Graph 11



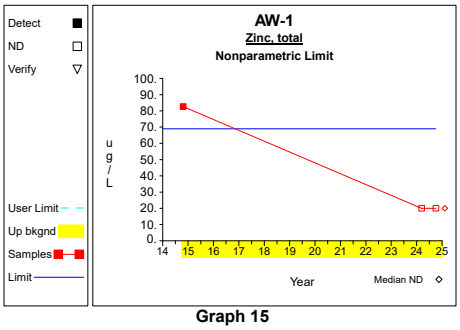
Graph 12



Graph 13



Graph 14



Graph 15

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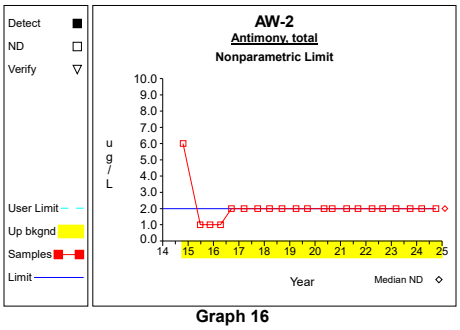
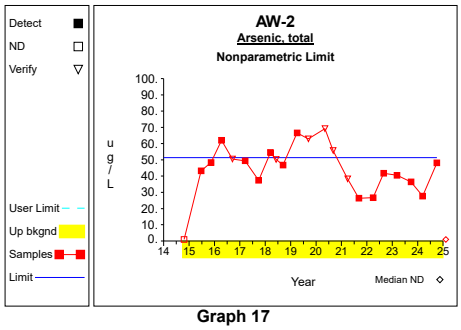
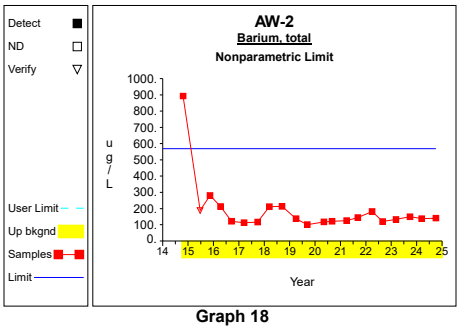
Up vs. Down Prediction Limits



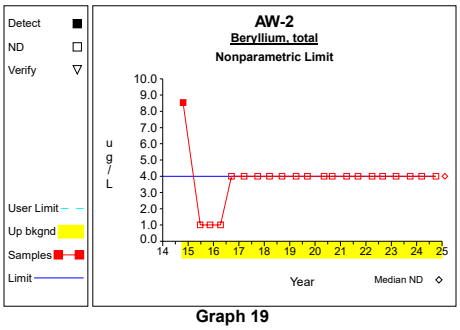
Graph 16



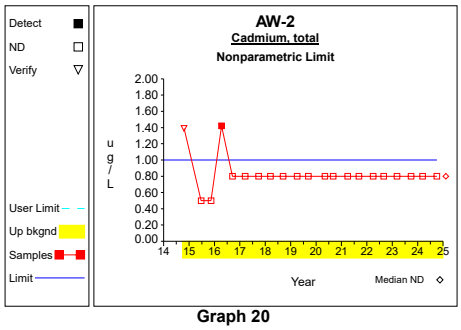
Graph 17



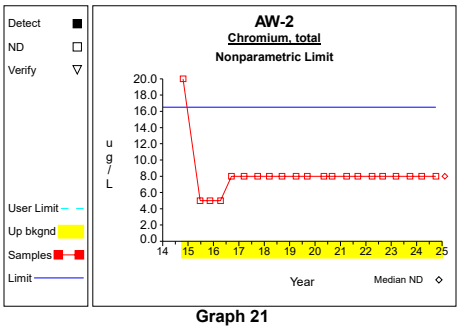
Graph 18



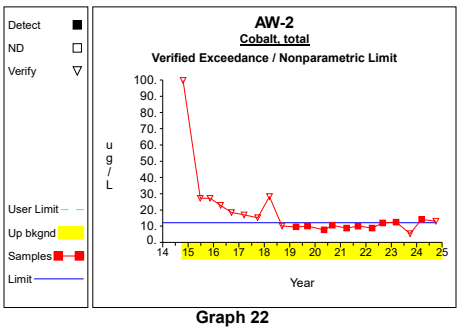
Graph 19



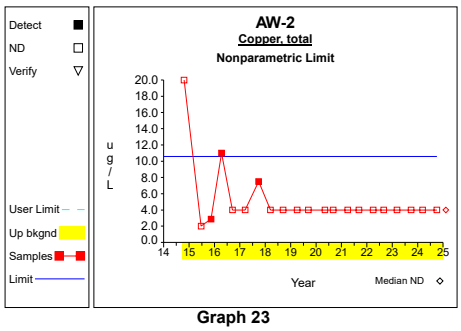
Graph 20



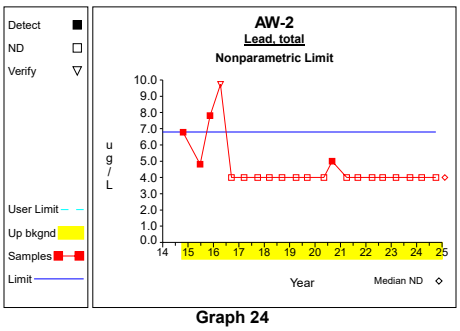
Graph 21



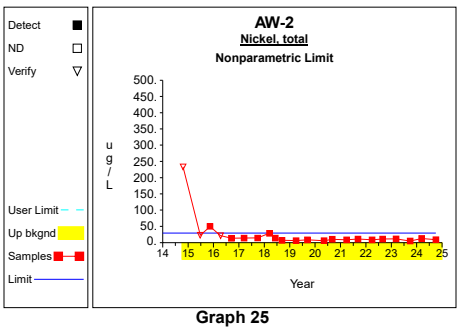
Graph 22



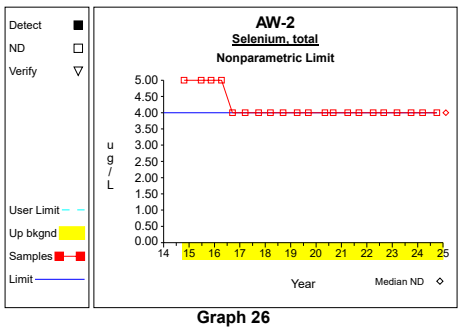
Graph 23



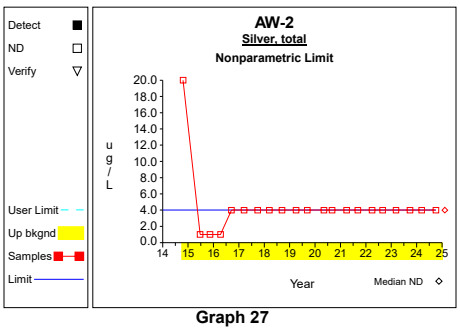
Graph 24



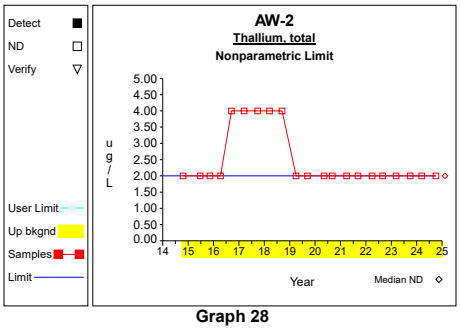
Graph 25



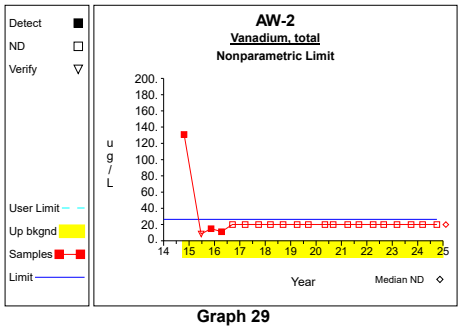
Graph 26



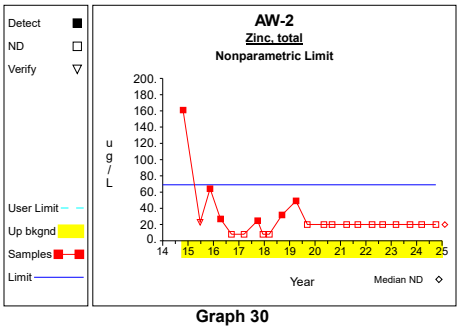
Graph 27



Graph 28



Graph 29



Graph 30

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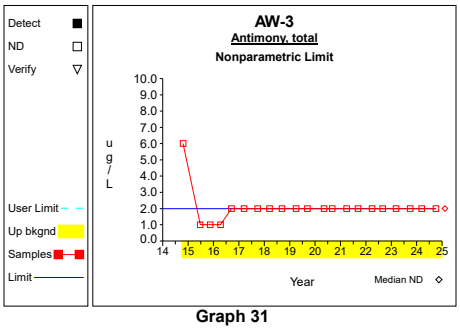
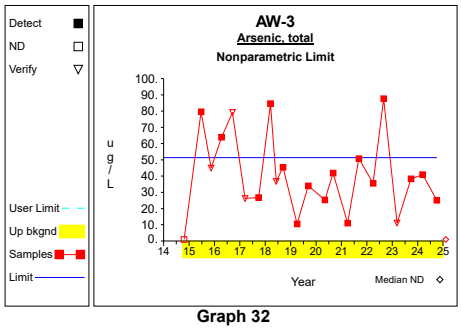
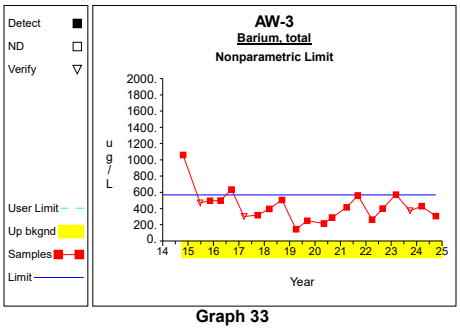
Up vs. Down Prediction Limits



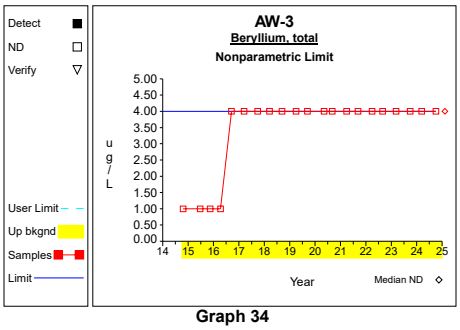
Graph 31



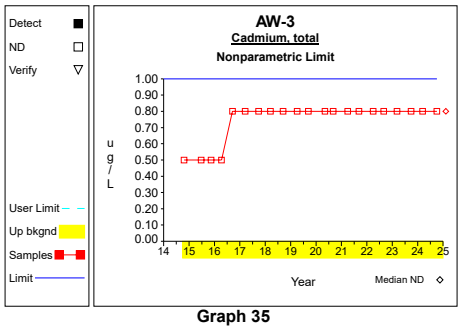
Graph 32



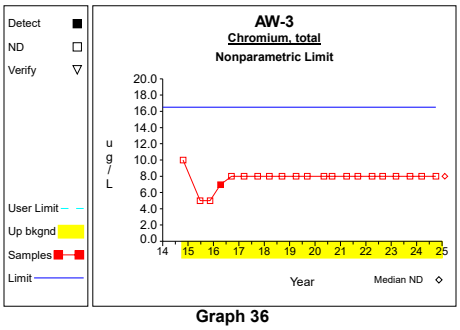
Graph 33



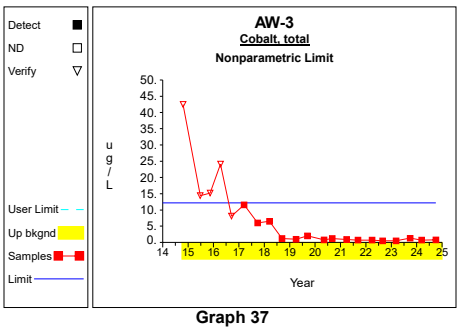
Graph 34



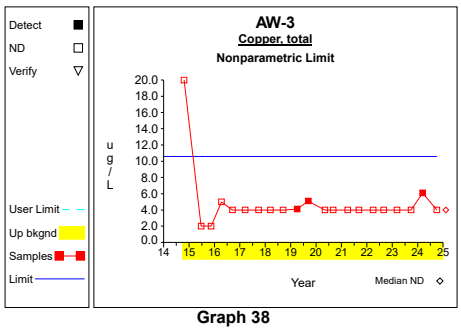
Graph 35



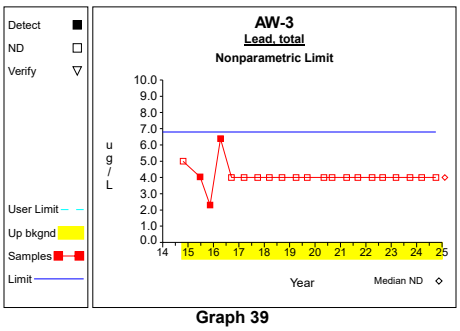
Graph 36



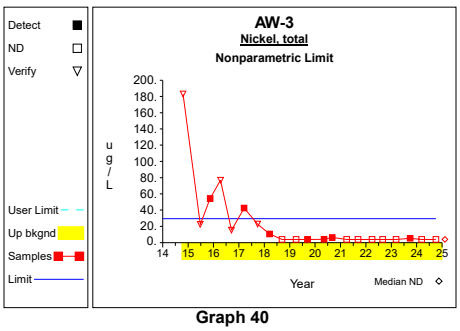
Graph 37



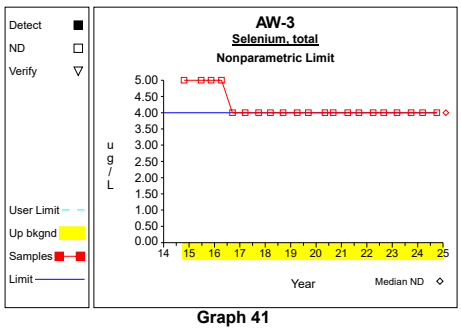
Graph 38



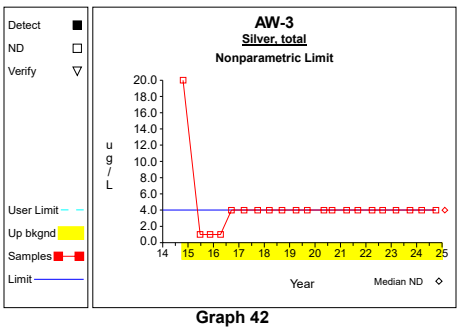
Graph 39



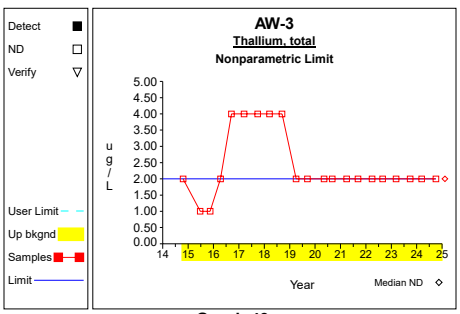
Graph 40



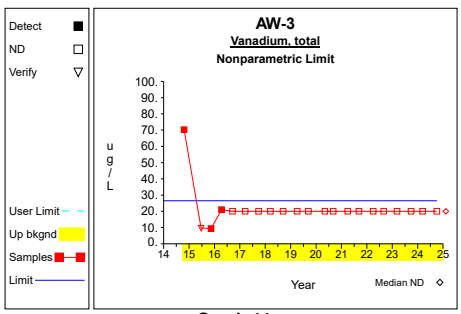
Graph 41



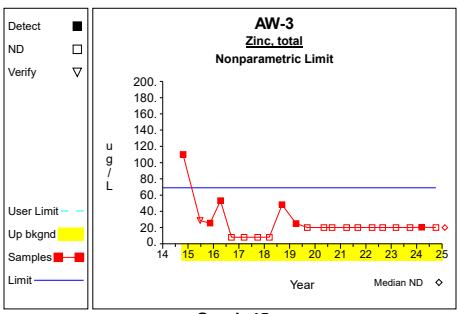
Graph 42



Graph 43



Graph 44



Graph 45

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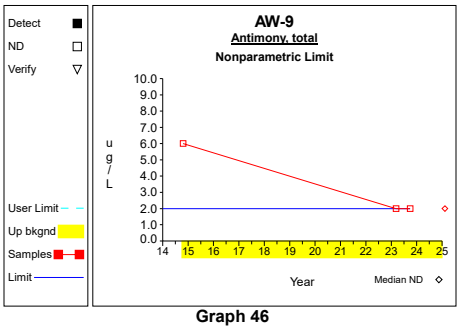
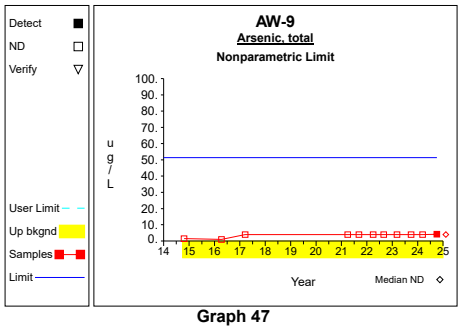
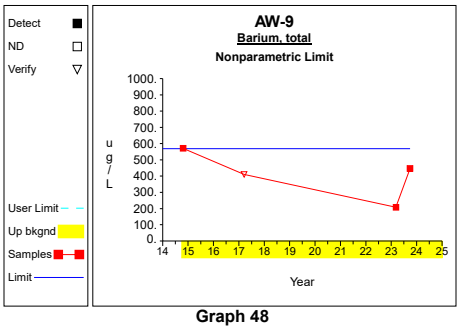
Up vs. Down Prediction Limits



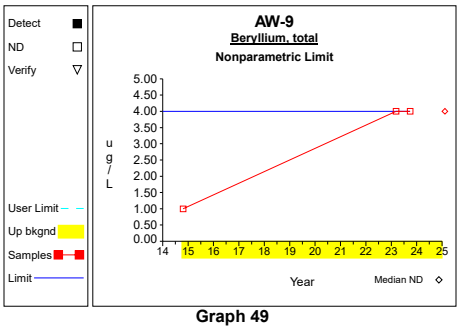
Graph 46



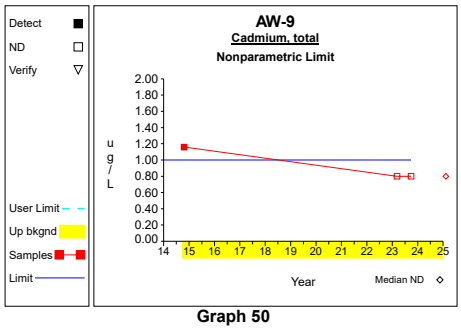
Graph 47



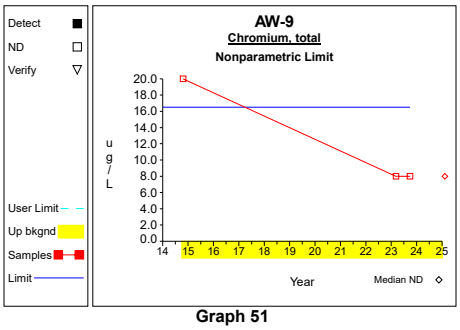
Graph 48



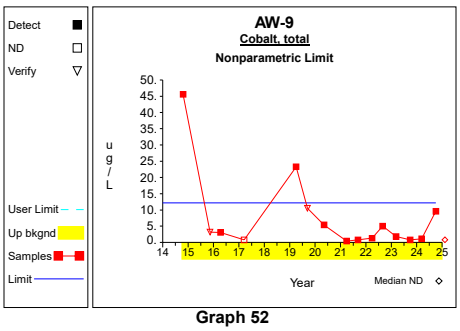
Graph 49



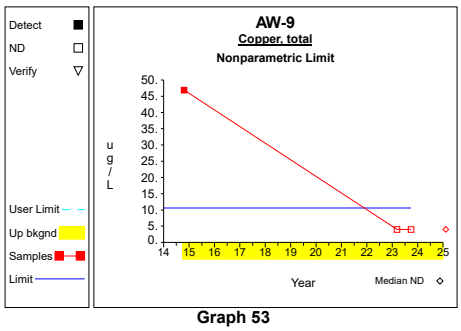
Graph 50



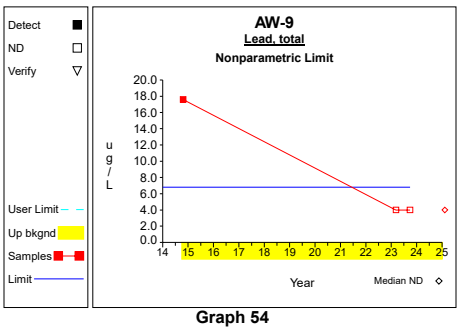
Graph 51



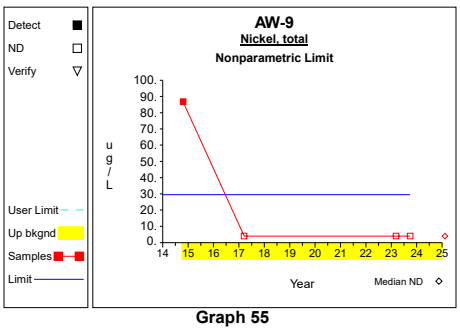
Graph 52



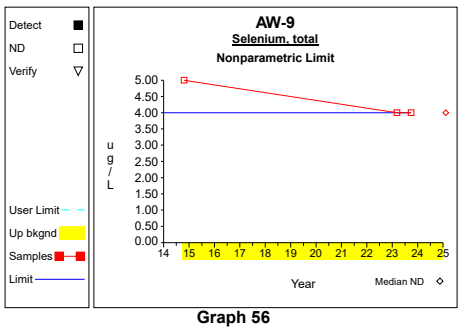
Graph 53



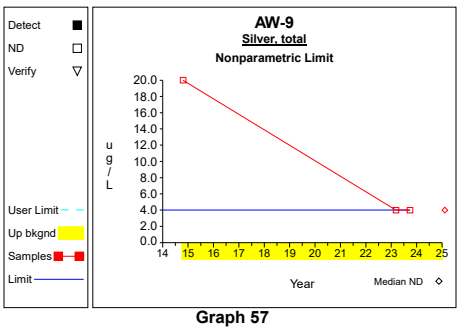
Graph 54



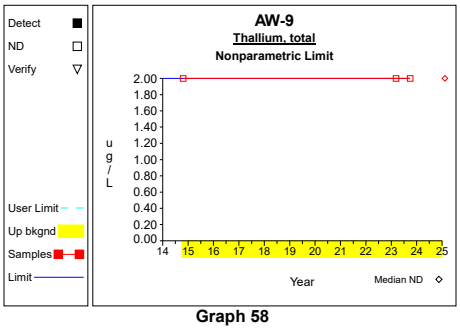
Graph 55



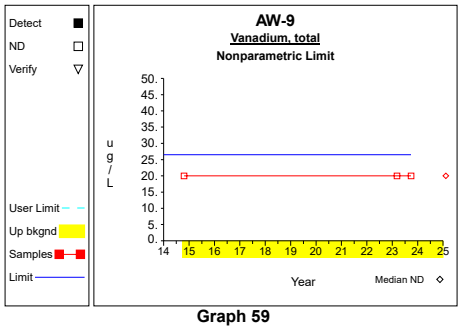
Graph 56



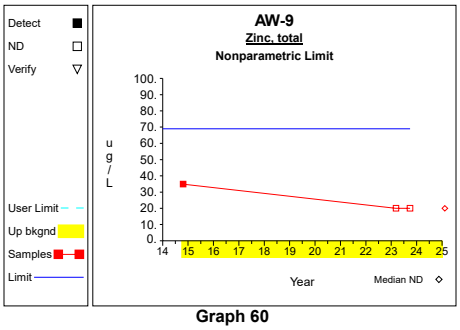
Graph 57



Graph 58



Graph 59



Graph 60

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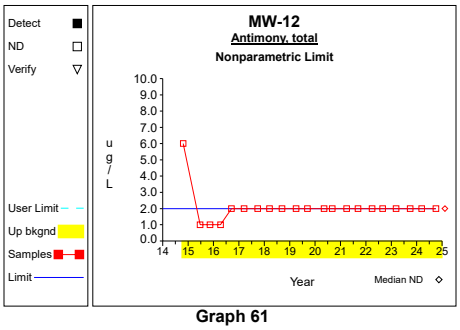
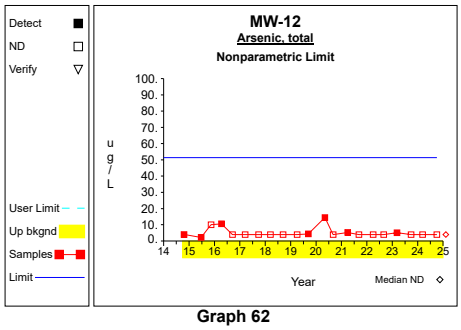
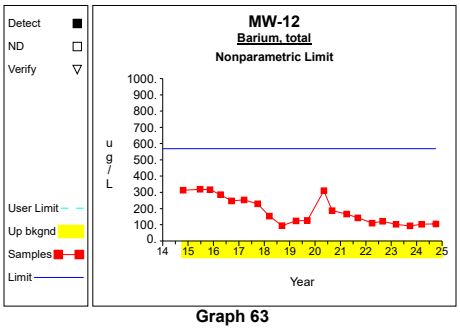
Up vs. Down Prediction Limits



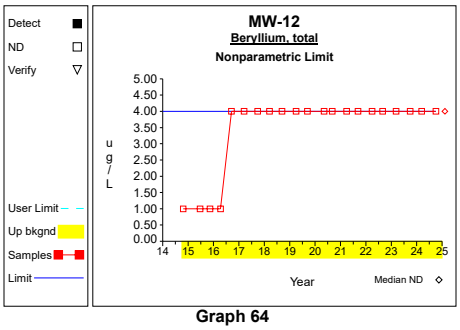
Graph 61



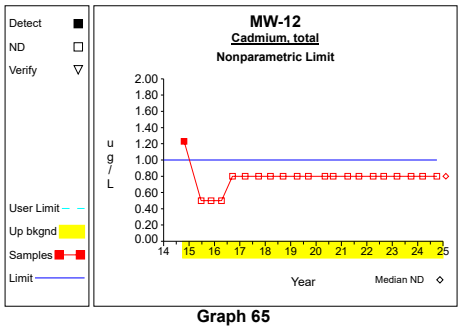
Graph 62



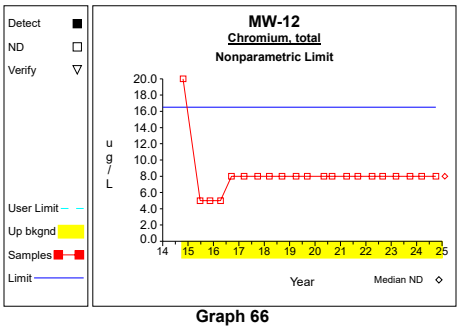
Graph 63



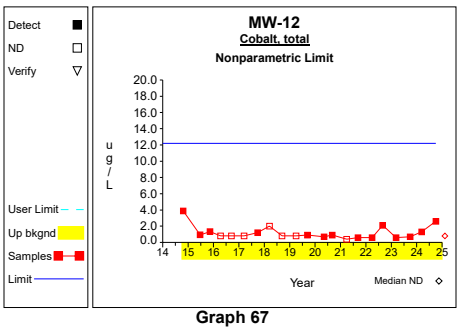
Graph 64



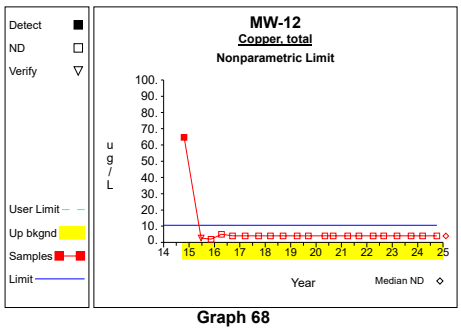
Graph 65



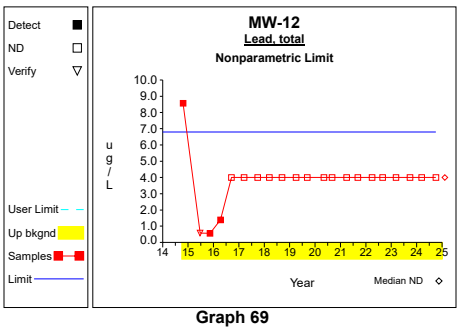
Graph 66



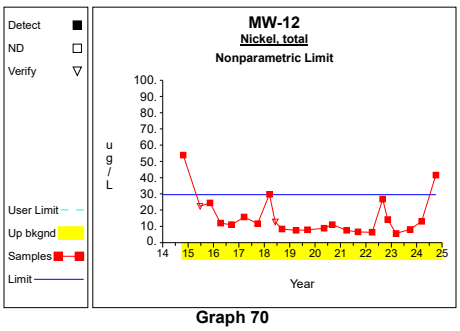
Graph 67



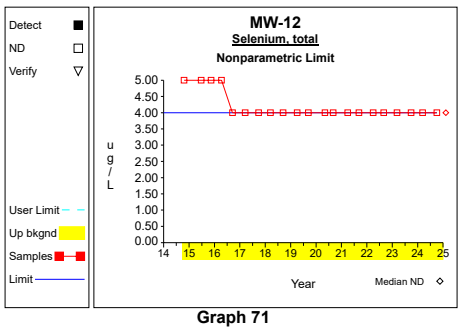
Graph 68



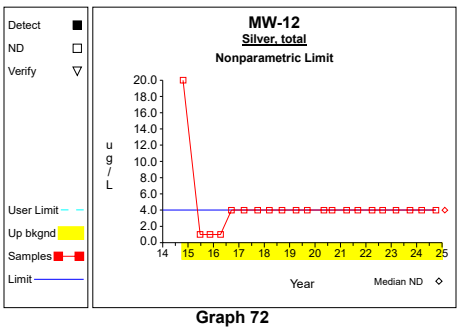
Graph 69



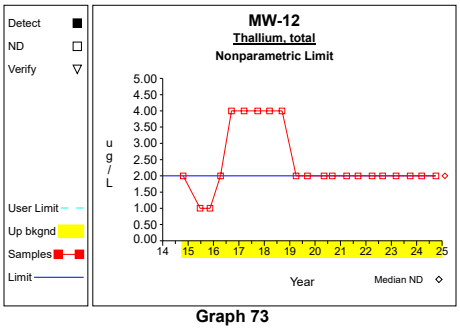
Graph 70



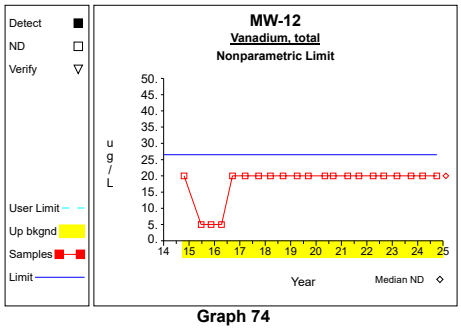
Graph 71



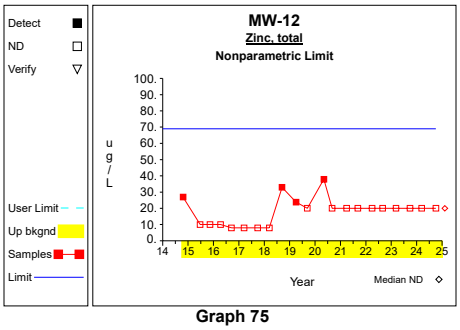
Graph 72



Graph 73



Graph 74



Graph 75

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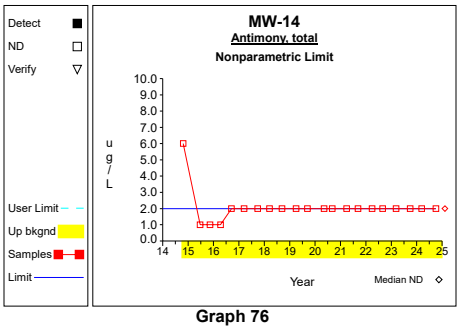
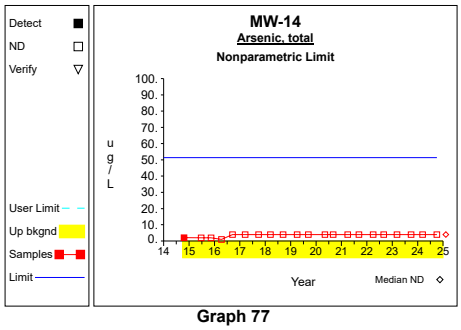
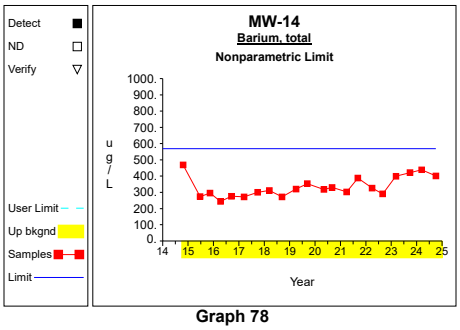
Up vs. Down Prediction Limits



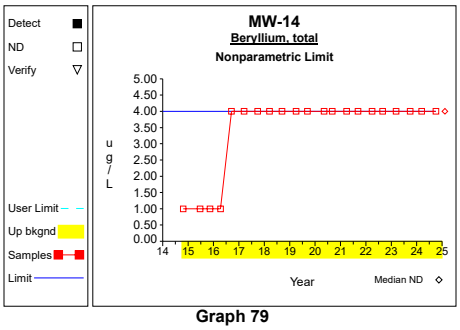
Graph 76



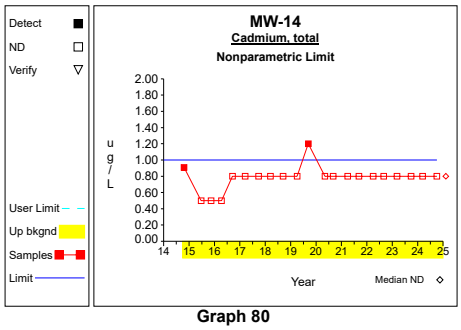
Graph 77



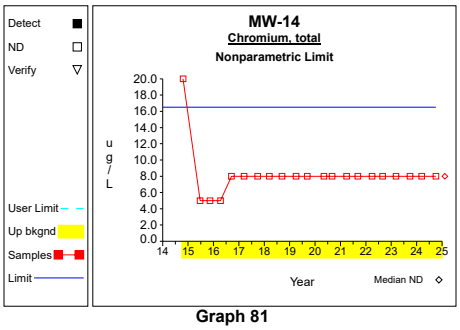
Graph 78



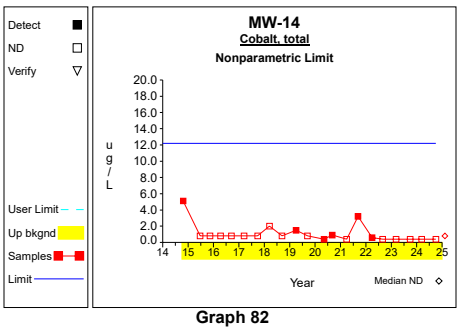
Graph 79



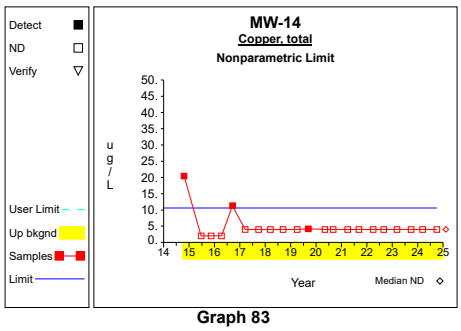
Graph 80



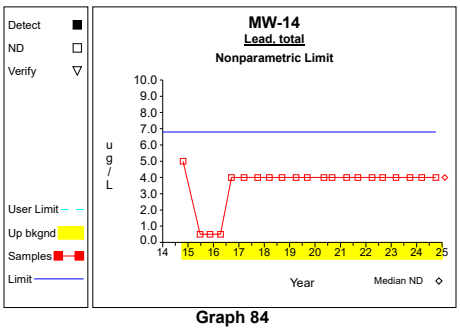
Graph 81



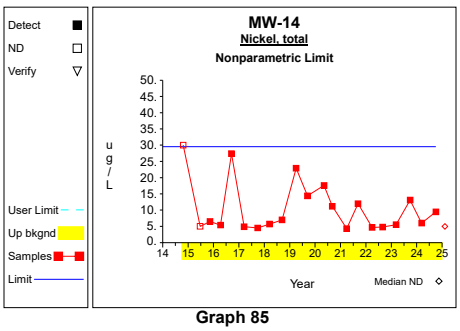
Graph 82



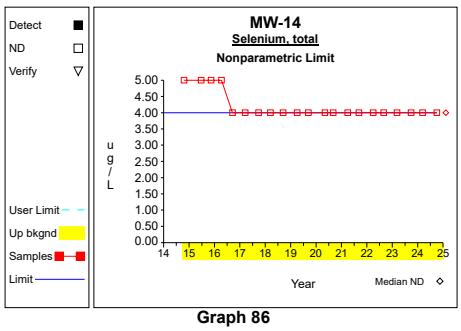
Graph 83



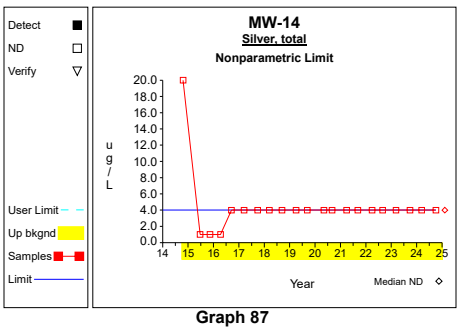
Graph 84



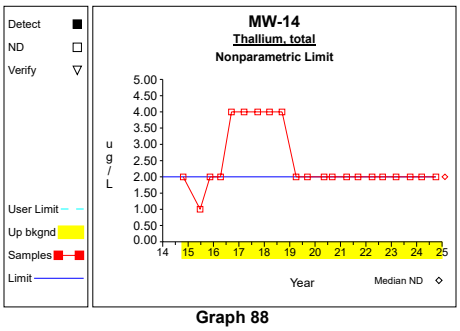
Graph 85



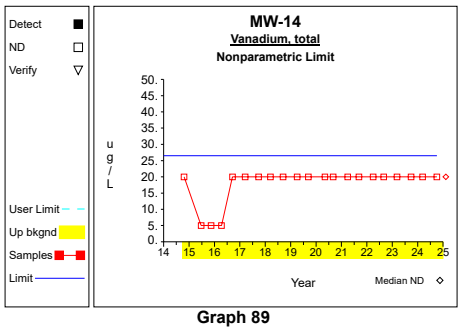
Graph 86



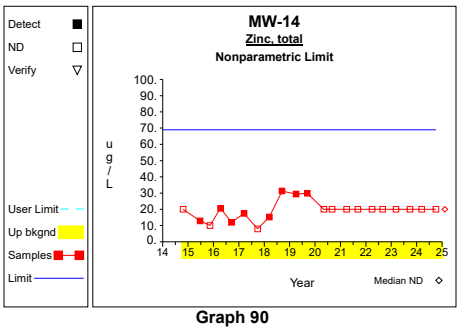
Graph 87



Graph 88



Graph 89



Graph 90

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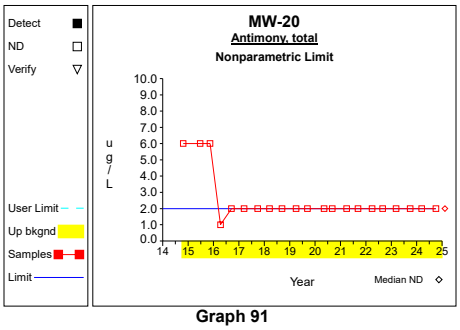
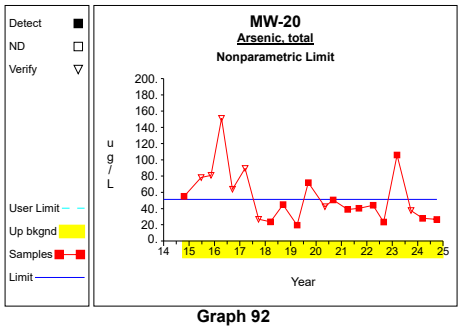
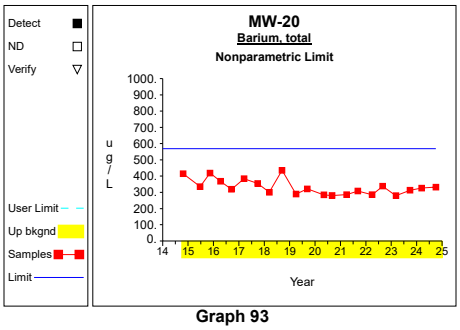
Up vs. Down Prediction Limits



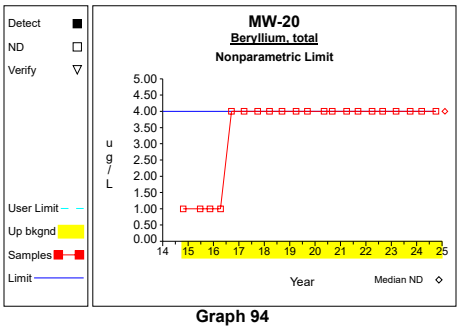
Graph 91



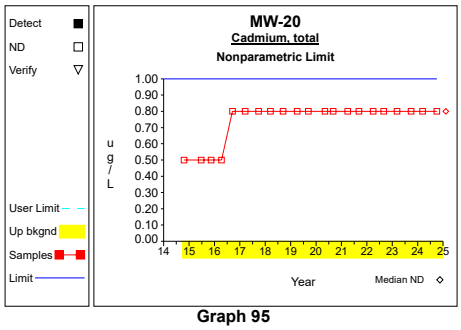
Graph 92



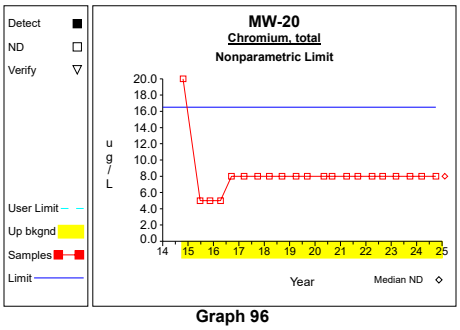
Graph 93



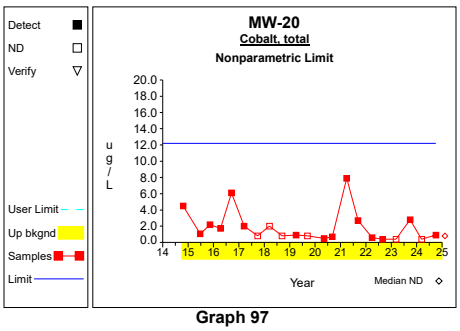
Graph 94



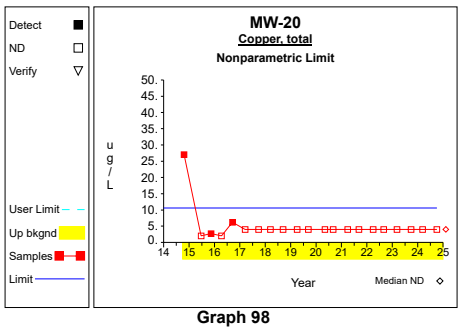
Graph 95



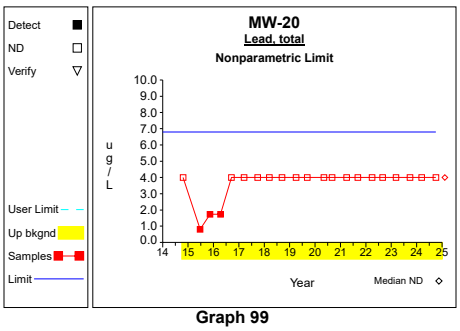
Graph 96



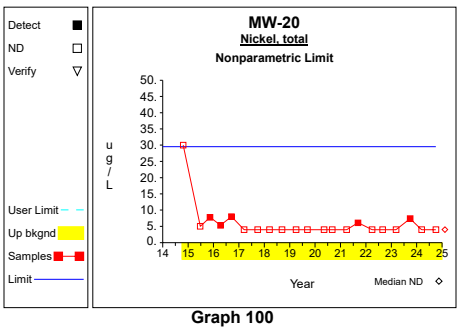
Graph 97



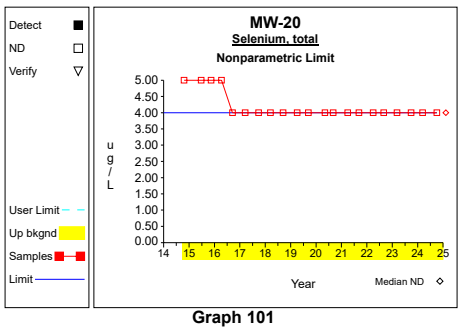
Graph 98



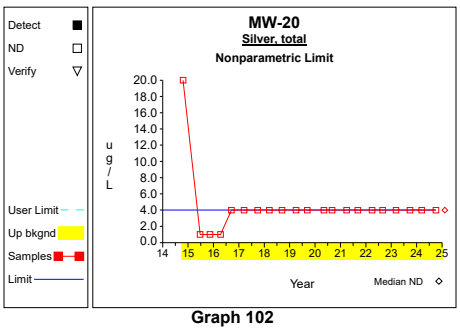
Graph 99



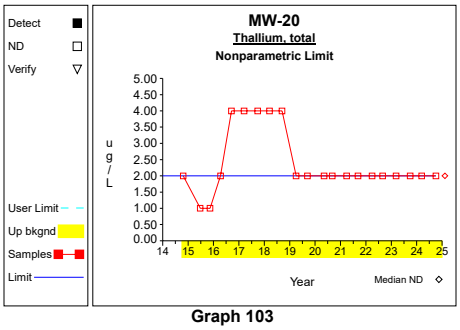
Graph 100



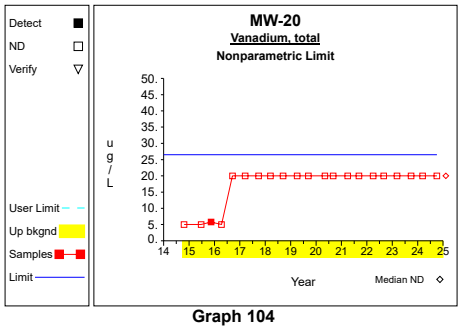
Graph 101



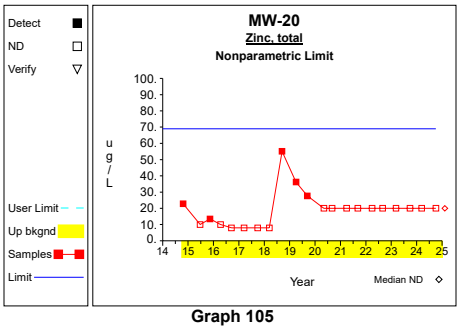
Graph 102



Graph 103



Graph 104



Graph 105

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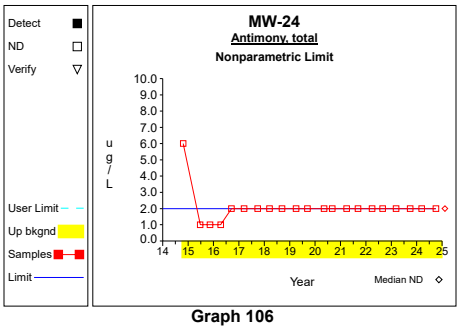
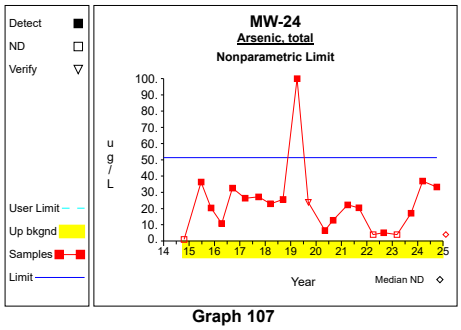
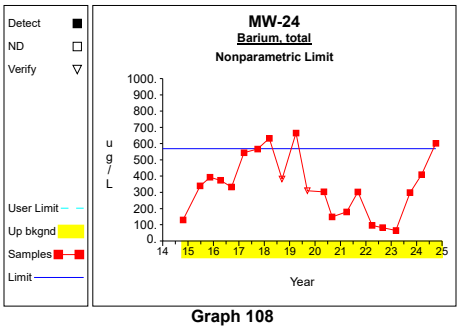
Up vs. Down Prediction Limits



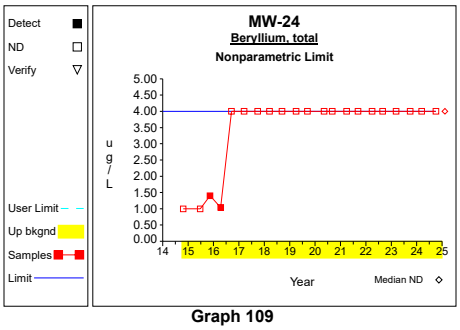
Graph 106



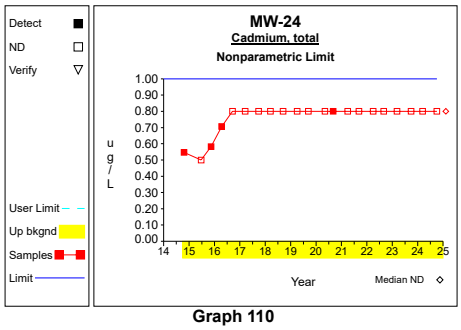
Graph 107



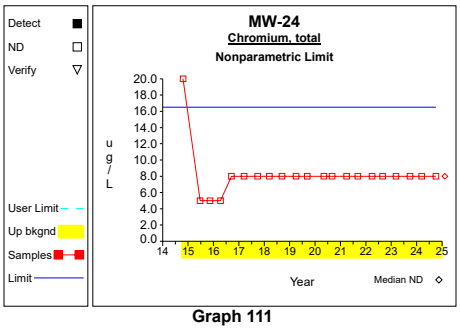
Graph 108



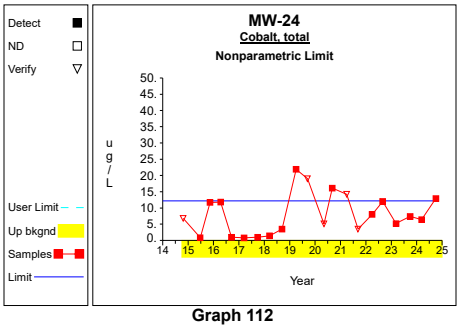
Graph 109



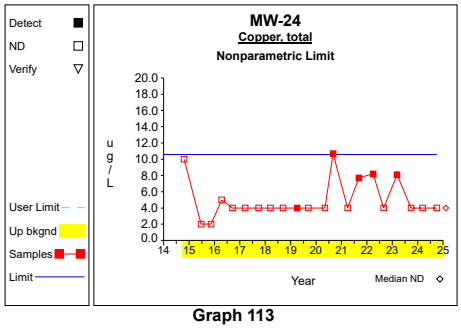
Graph 110



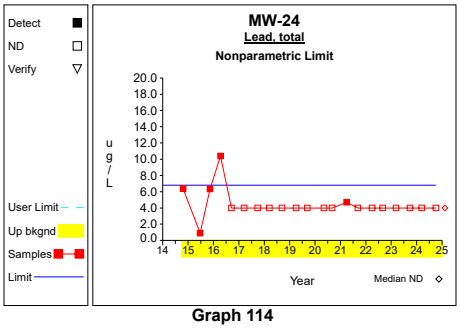
Graph 111



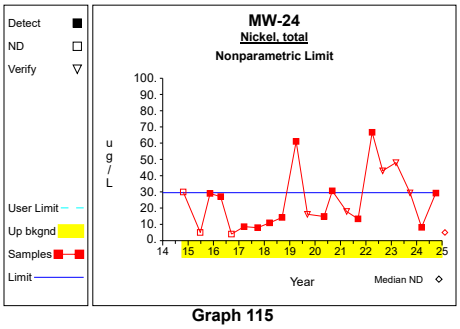
Graph 112



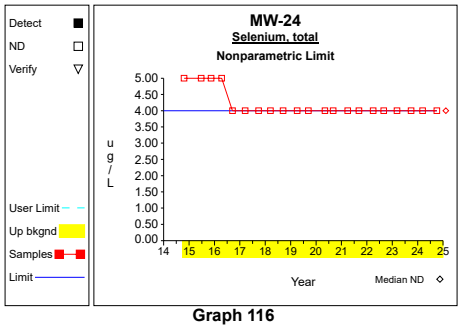
Graph 113



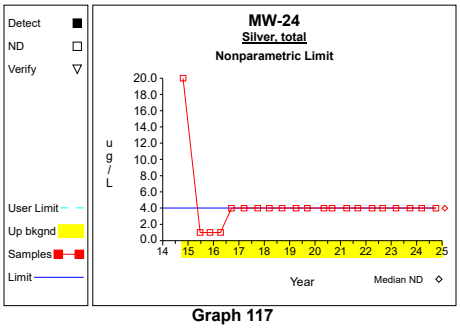
Graph 114



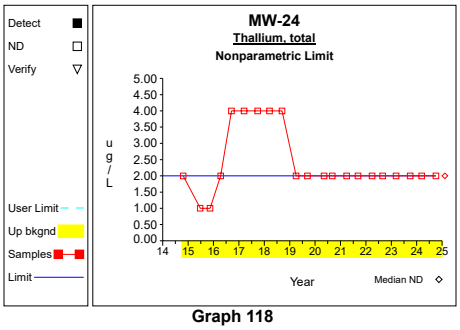
Graph 115



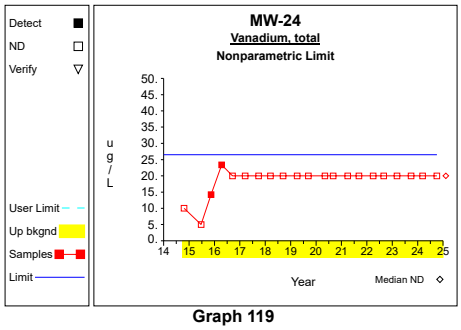
Graph 116



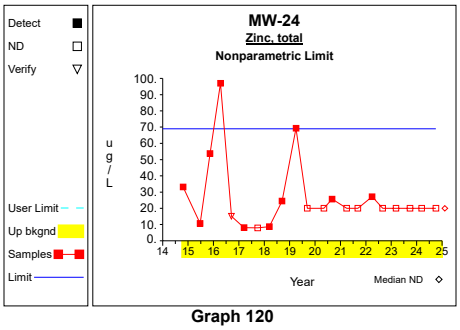
Graph 117



Graph 118



Graph 119



Graph 120

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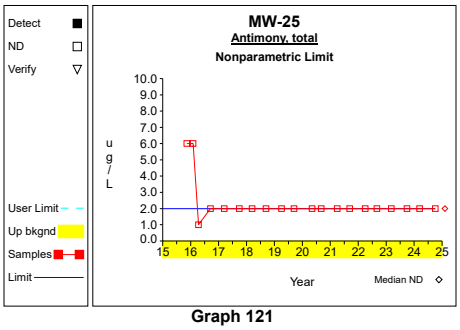
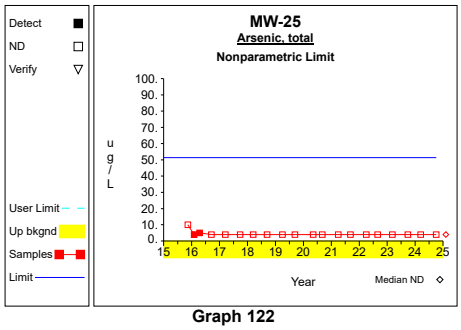
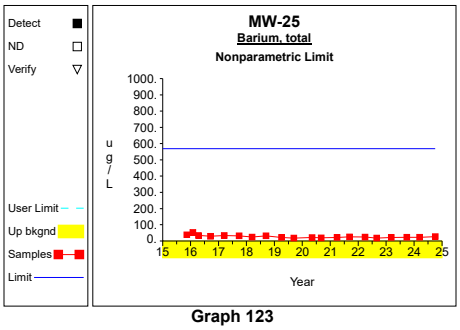
Up vs. Down Prediction Limits



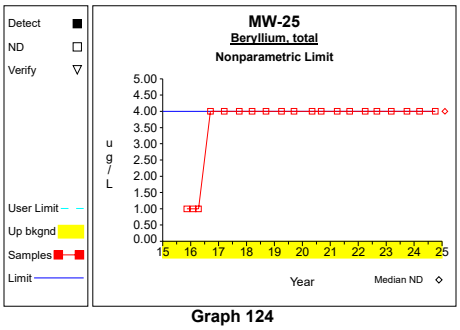
Graph 121



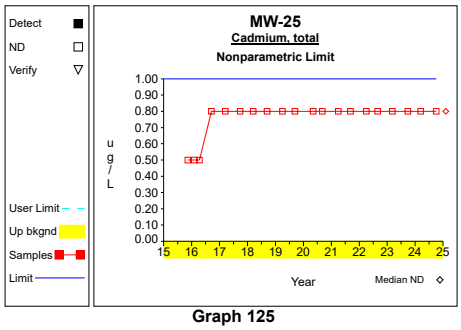
Graph 122



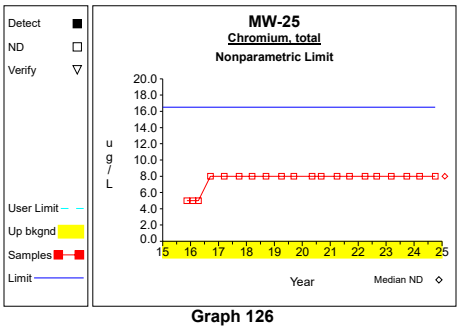
Graph 123



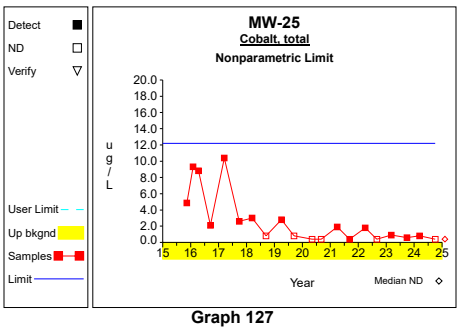
Graph 124



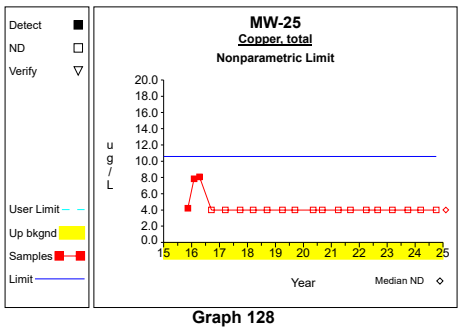
Graph 125



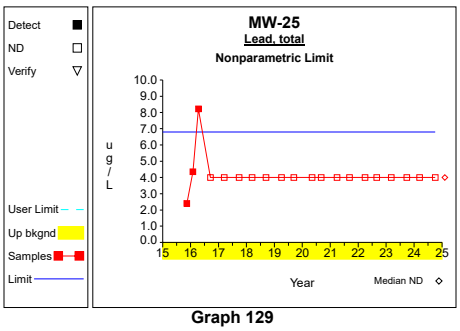
Graph 126



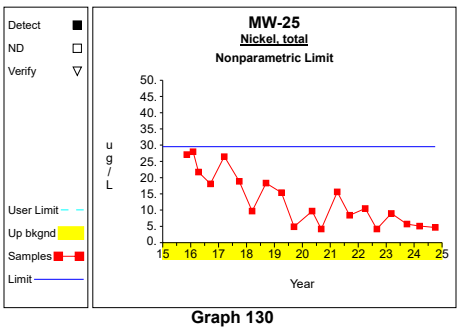
Graph 127



Graph 128



Graph 129



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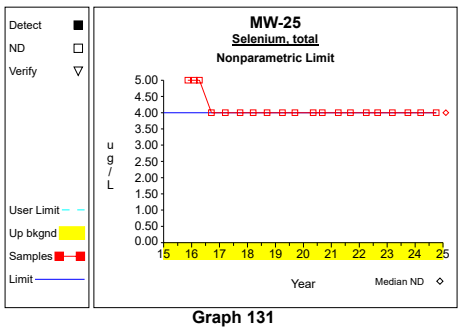
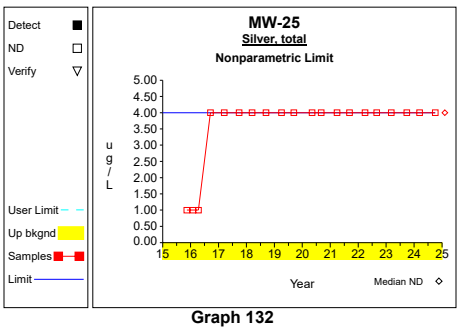
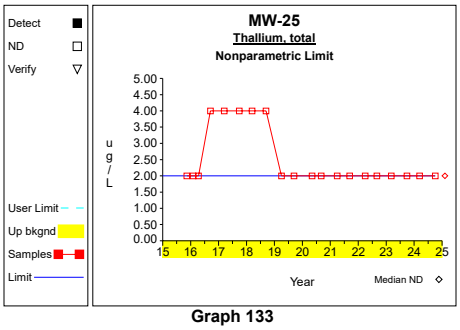


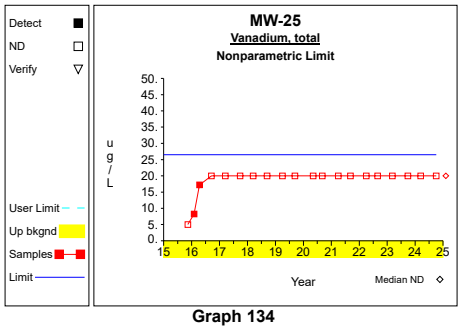
Graph 131



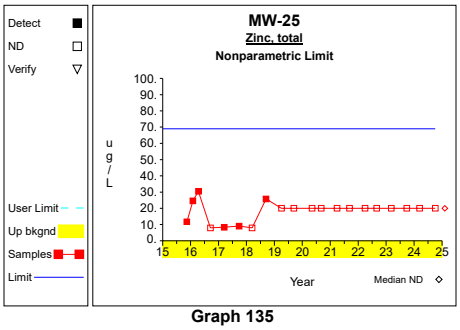
Graph 132



Graph 133



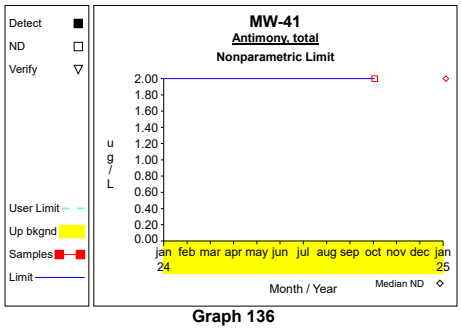
Graph 134



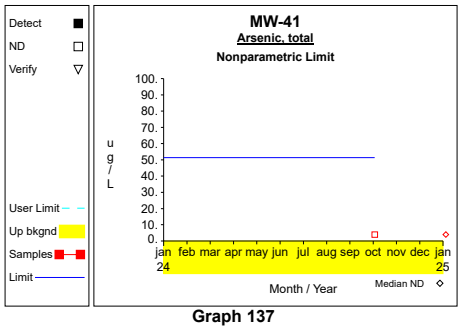
Graph 135

Prepared by: Otter Creek Environmental

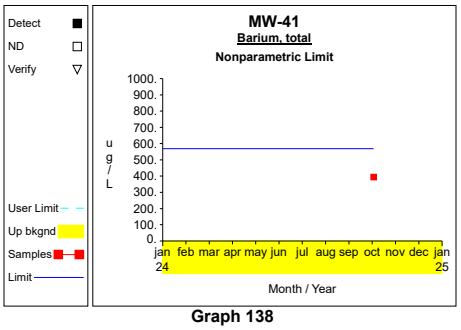
Up vs. Down Prediction Limits



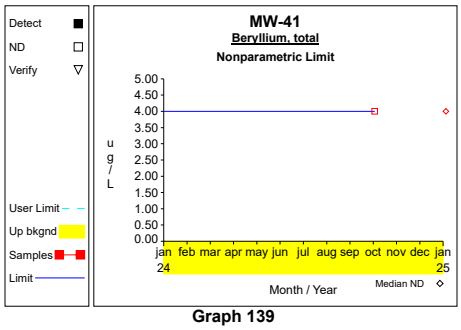
Graph 136



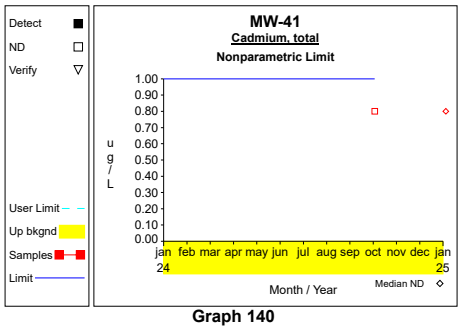
Graph 137



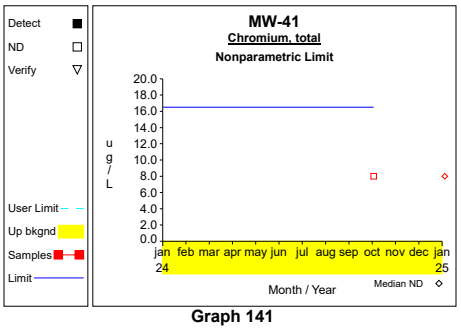
Graph 138



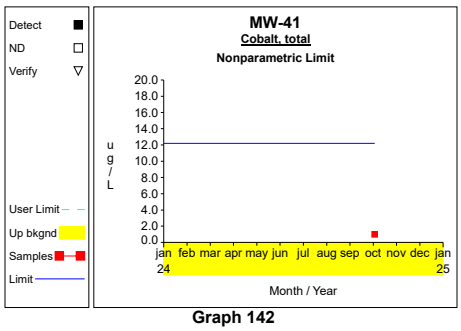
Graph 139



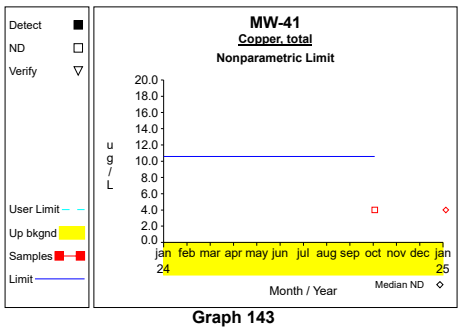
Graph 140



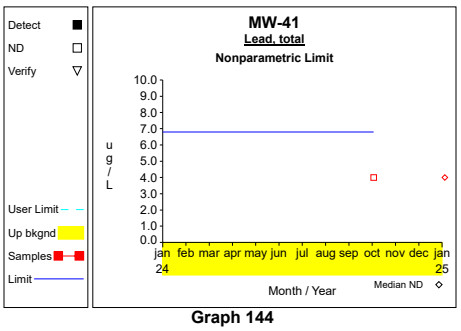
Graph 141



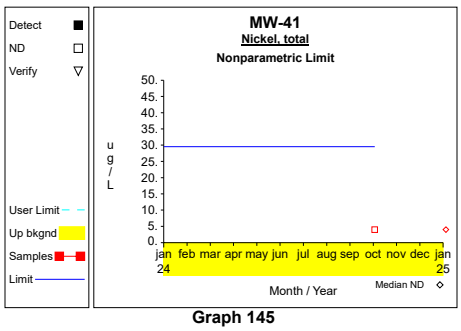
Graph 142



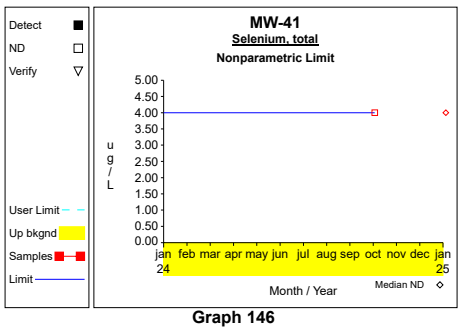
Graph 143



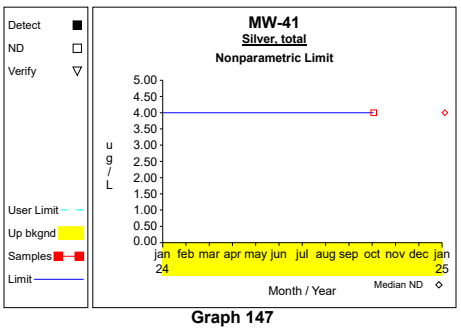
Graph 144



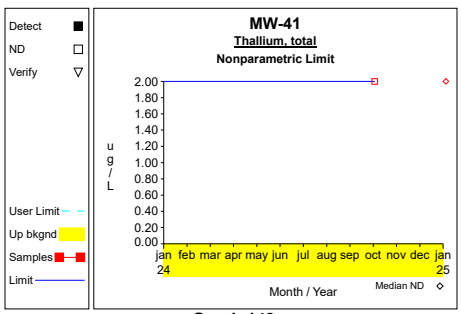
Graph 145



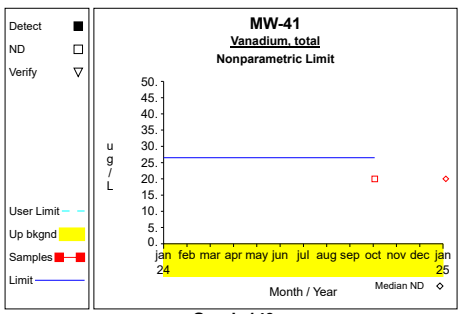
Graph 146



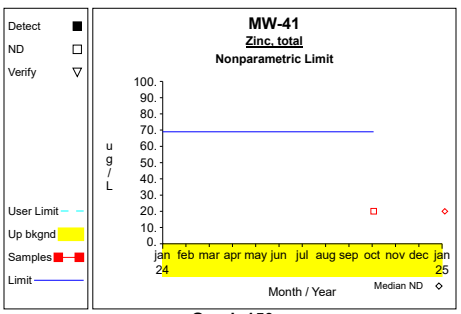
Graph 147



Graph 148



Graph 149

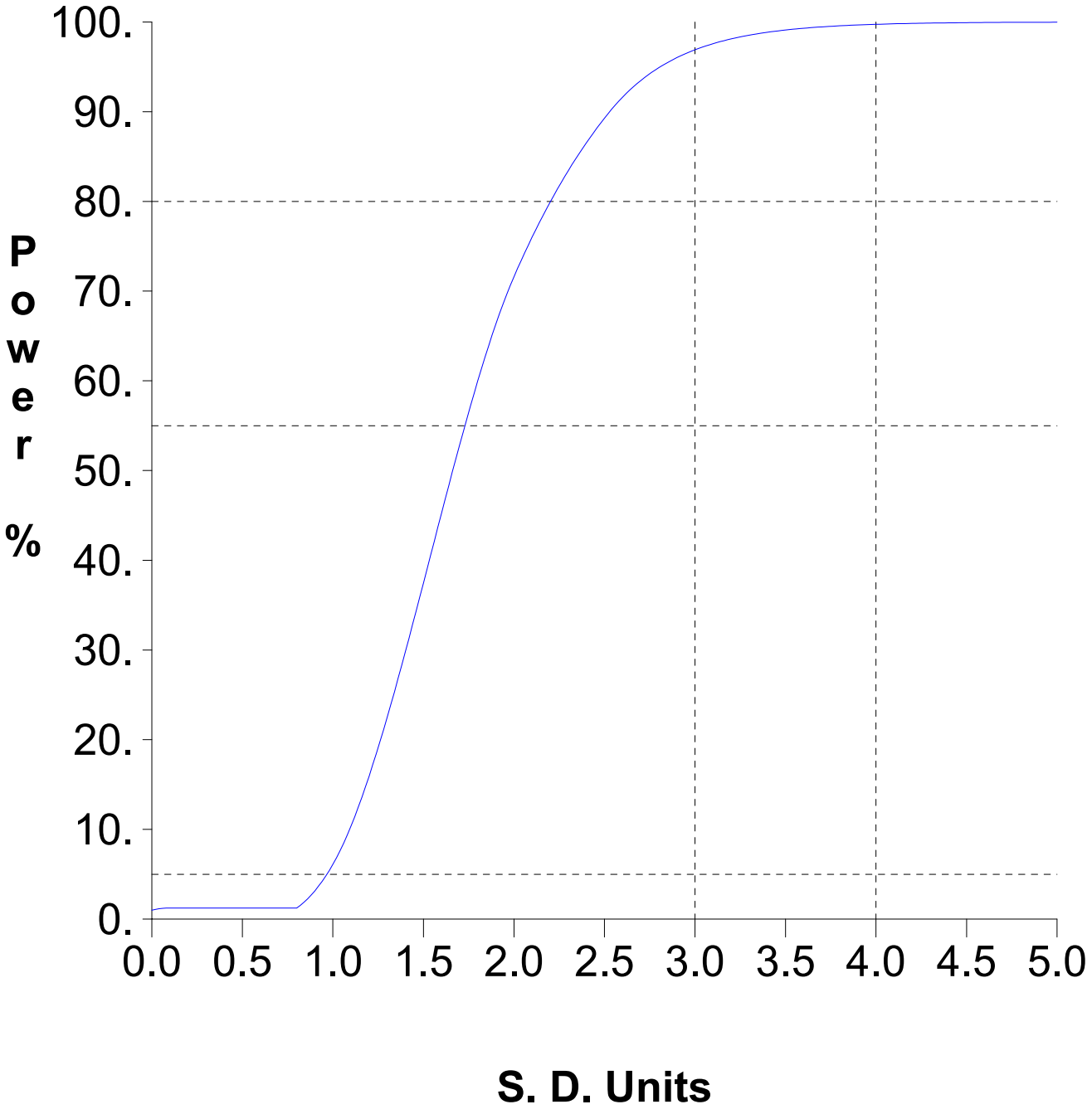


Graph 150

Prepared by: Otter Creek Environmental

False Positive and False Negative Rates for Current

Upgradient vs. Downgradient Monitoring Program



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

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

Step	Equation	Description
1	PL = max(X) = **51.3**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

Step	Equation	Description
1	PL = max(X) = **569.0**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

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

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

Step	Equation	Description
1	PL = max(X) = **1.0**	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
Chromium, total (ug/L)
Nonparametric Prediction Limit

Step	Equation	Description
1	PL = max(X) = **16.5**	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
Cobalt, total (ug/L)
Nonparametric Prediction Limit

Step	Equation	Description
1	PL = max(X) = **12.2**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

Step	Equation	Description
1	PL = max(X) = **10.6**	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

Step	Equation	Description
1	PL = max(X) = **6.8**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

Step	Equation	Description
1	PL = max(X) = **29.5**	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

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

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

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

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

Step	Equation	Description
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

Step	Equation	Description
1	PL = max(X) = **26.5**	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
Zinc, total (ug/L)
Nonparametric Prediction Limit

Step	Equation	Description
1	PL = max(X) = **69.0**	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).

Attachment C

Assessment Statistics for Trace Metals

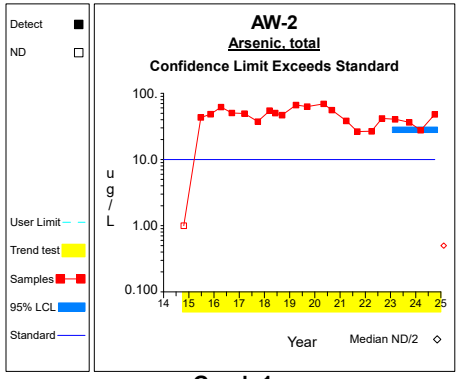
Table 1

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

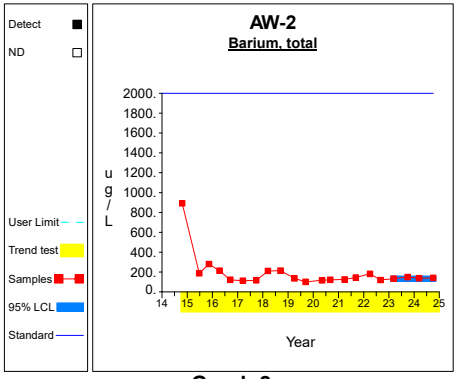
Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend	
Arsenic, total	ug/L	AW-2	4	38.175	8.501	1.176	28.176	48.174	10.000		**
Barium, total	ug/L	AW-2	4	140.500	7.141	1.176	132.100	148.900	2000.000		
Cobalt, total	ug/L	AW-2	4	11.300	3.996	1.176	6.600	16.000	2.100	dec	**
Nickel, total	ug/L	AW-2	4	9.650	3.442	1.176	5.601	13.699	100.000	dec	
Arsenic, total	ug/L	AW-3	4	28.850	13.707	1.176	12.727	44.973	10.000		**
Barium, total	ug/L	AW-3	4	420.500	112.453	1.176	288.223	552.777	2000.000		
Cobalt, total	ug/L	AW-3	4	0.825	0.340	1.176	0.425	1.225	2.100	dec	
Nickel, total	ug/L	AW-3	4	2.825	1.650	1.176	0.884	4.766	100.000	dec	
Arsenic, total	ug/L	AW-9	4	2.550	1.100	1.176	1.256	3.844	10.000		
Barium, total	ug/L	AW-9	4	409.000	150.654	1.176	231.787	586.213	2000.000		
Cobalt, total	ug/L	AW-9	4	3.325	4.204	1.176	0.000	8.270	2.100		
Nickel, total	ug/L	AW-9	4	23.200	42.400	1.176	0.000	73.075	100.000		
Arsenic, total	ug/L	MW-12	4	2.775	1.550	1.176	0.952	4.598	10.000		
Barium, total	ug/L	MW-12	4	101.200	5.659	1.176	94.543	107.857	2000.000	dec	
Cobalt, total	ug/L	MW-12	4	1.300	0.920	1.176	0.218	2.382	2.100		
Nickel, total	ug/L	MW-12	4	17.125	16.605	1.176	0.000	36.658	100.000		
Arsenic, total	ug/L	MW-14	4	2.000	0.000	1.176	2.000	2.000	10.000		
Barium, total	ug/L	MW-14	4	415.000	18.833	1.176	392.847	437.153	2000.000	inc	
Cobalt, total	ug/L	MW-14	4	0.400	0.000	1.176	0.400	0.400	2.100		
Nickel, total	ug/L	MW-14	4	8.525	3.531	1.176	4.371	12.679	100.000		
Arsenic, total	ug/L	MW-20	4	49.525	37.959	1.176	4.874	94.176	10.000		
Barium, total	ug/L	MW-20	4	312.500	23.700	1.176	284.623	340.377	2000.000		
Cobalt, total	ug/L	MW-20	4	1.125	1.141	1.176	0.000	2.467	2.100		
Nickel, total	ug/L	MW-20	4	3.350	2.700	1.176	0.174	6.526	100.000		
Arsenic, total	ug/L	MW-24	4	22.325	16.055	1.176	3.440	41.210	10.000		
Barium, total	ug/L	MW-24	4	343.525	224.120	1.176	79.895	607.155	2000.000		
Cobalt, total	ug/L	MW-24	4	7.975	3.404	1.176	3.971	11.979	2.100		**
Nickel, total	ug/L	MW-24	4	28.725	16.264	1.176	9.593	47.857	100.000		
Arsenic, total	ug/L	MW-25	4	2.000	0.000	1.176	2.000	2.000	10.000		
Barium, total	ug/L	MW-25	4	24.200	2.358	1.176	21.426	26.974	2000.000		
Cobalt, total	ug/L	MW-25	4	0.625	0.310	1.176	0.261	0.989	2.100		
Nickel, total	ug/L	MW-25	4	6.125	1.960	1.176	3.819	8.431	100.000	dec	

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

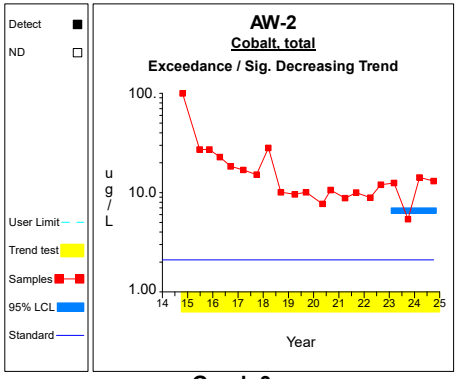
Confidence Limits (Assessment)



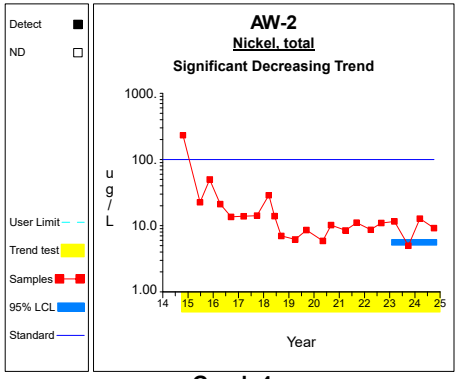
Graph 1



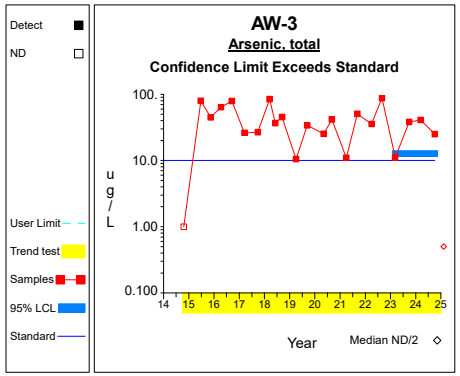
Graph 2



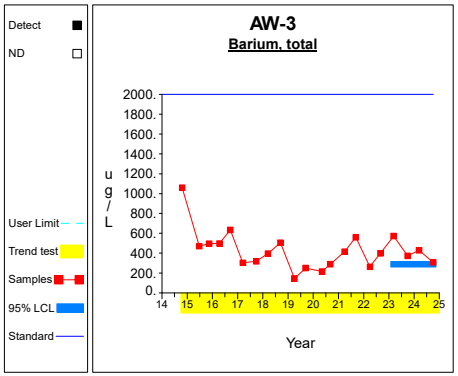
Graph 3



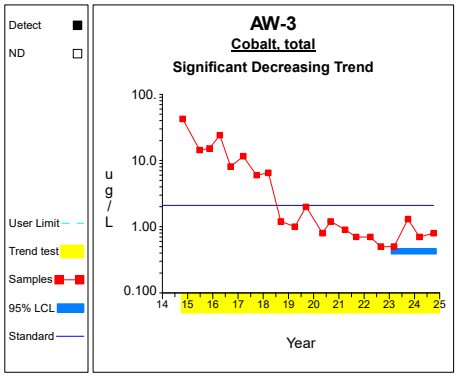
Graph 4



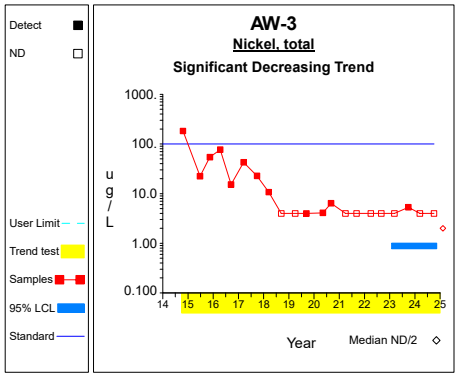
Graph 5



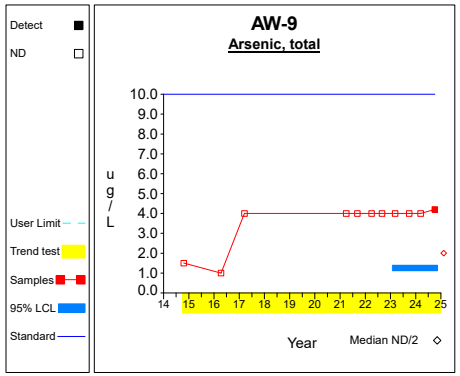
Graph 6



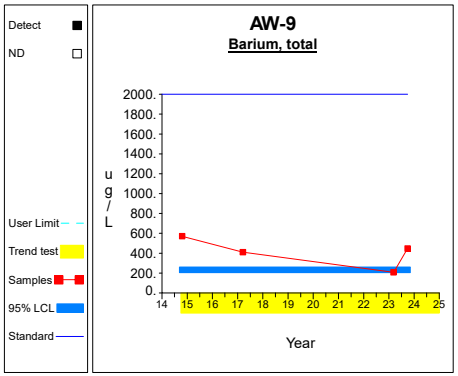
Graph 7



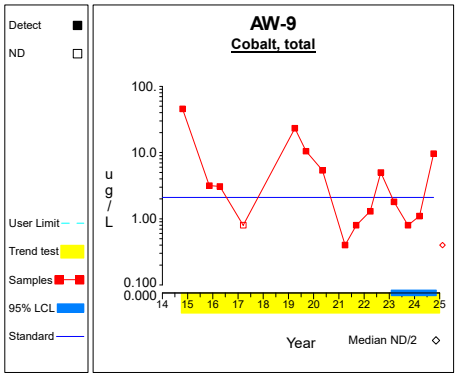
Graph 8



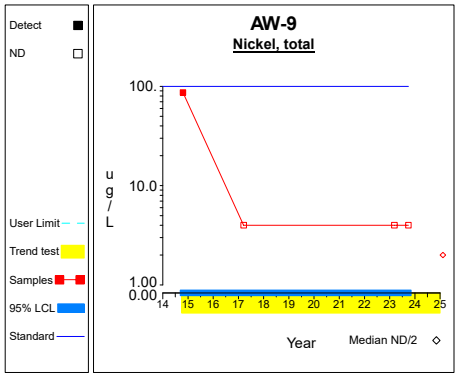
Graph 9



Graph 10



Graph 11



Graph 12

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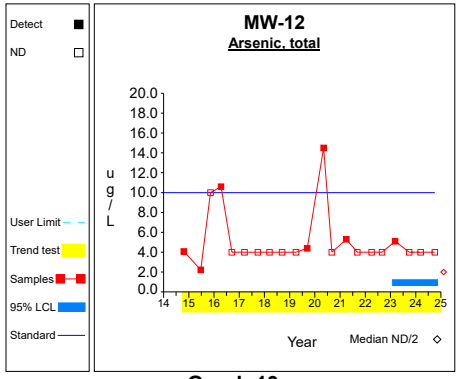
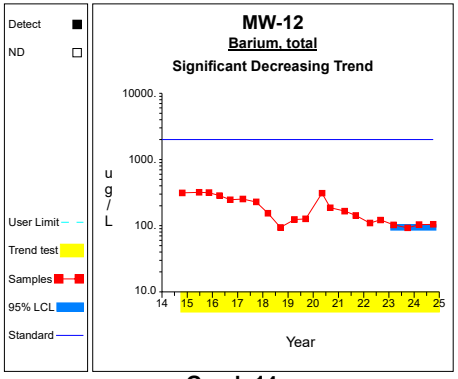
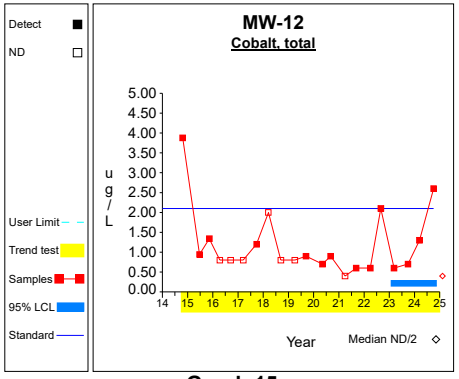
Confidence Limits (Assessment)



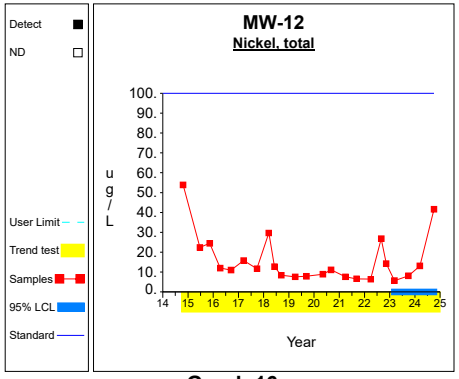
Graph 13



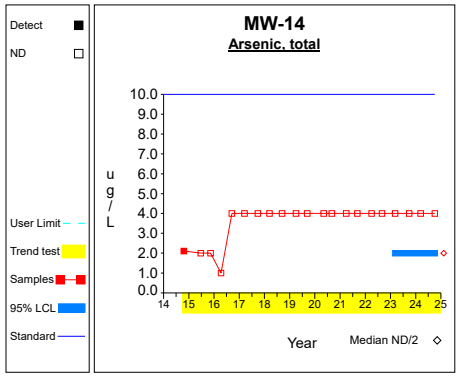
Graph 14



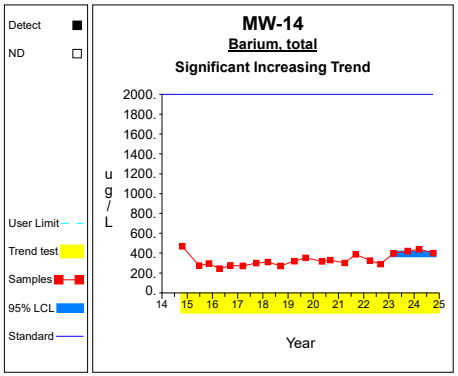
Graph 15



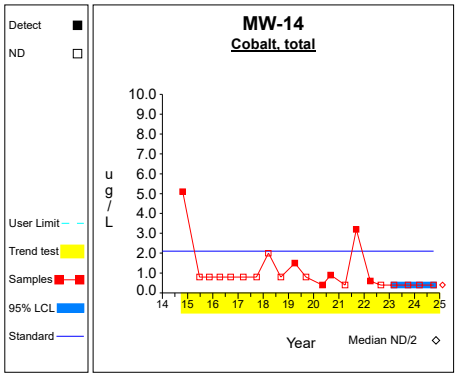
Graph 16



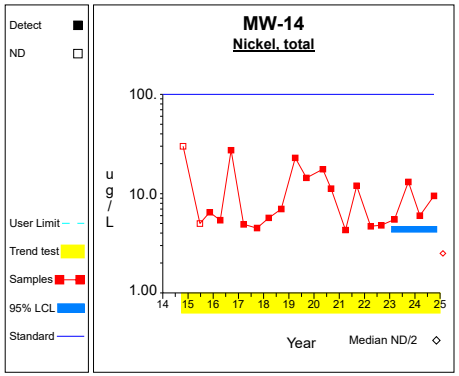
Graph 17



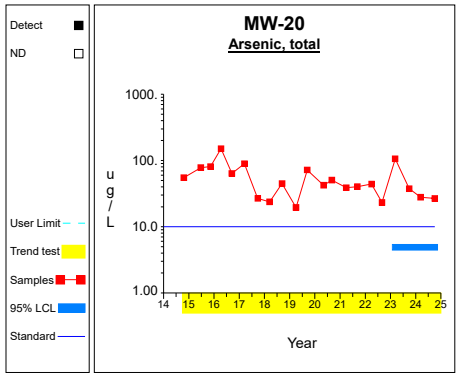
Graph 18



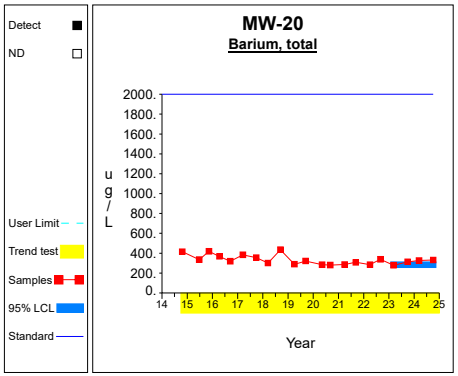
Graph 19



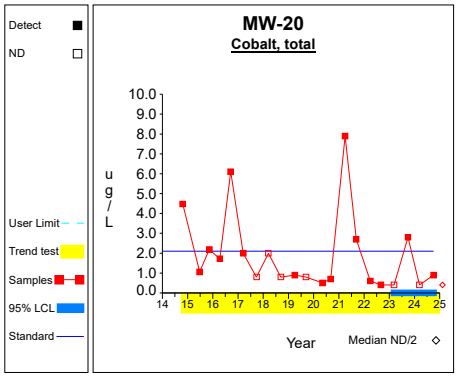
Graph 20



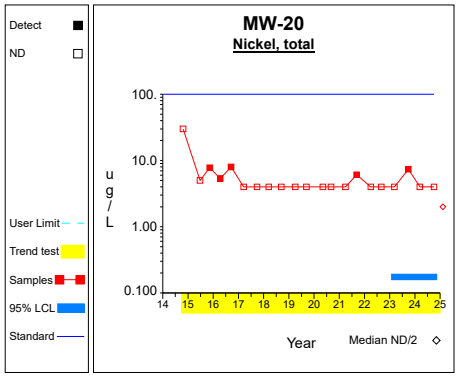
Graph 21



Graph 22



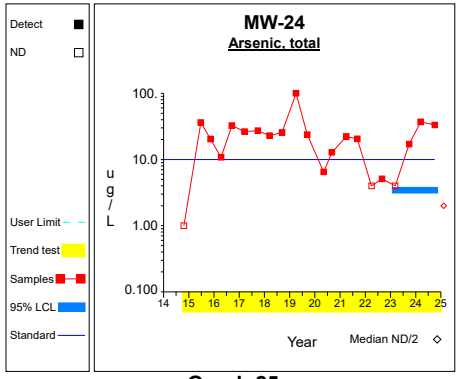
Graph 23



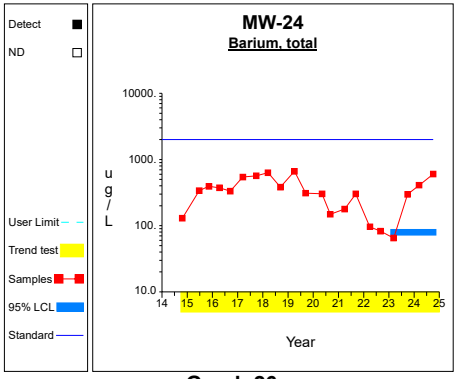
Graph 24

Prepared by: Otter Creek Environmental

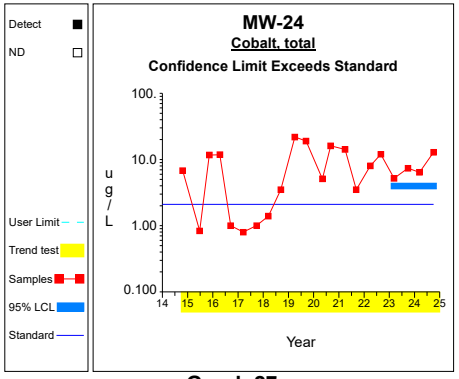
Confidence Limits (Assessment)



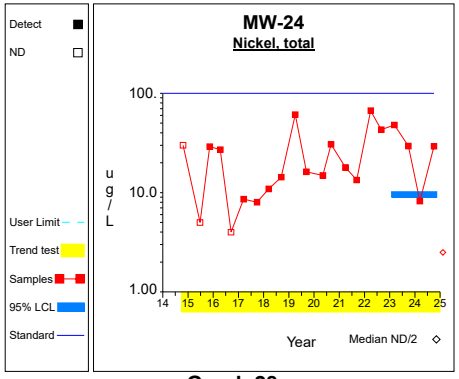
Graph 25



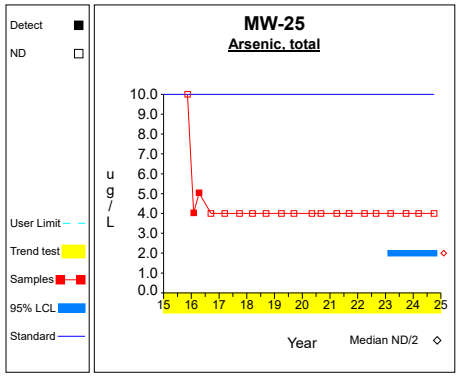
Graph 26



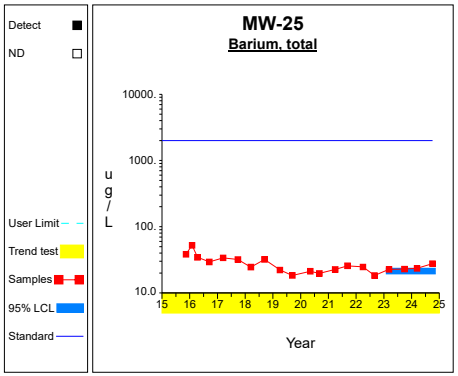
Graph 27



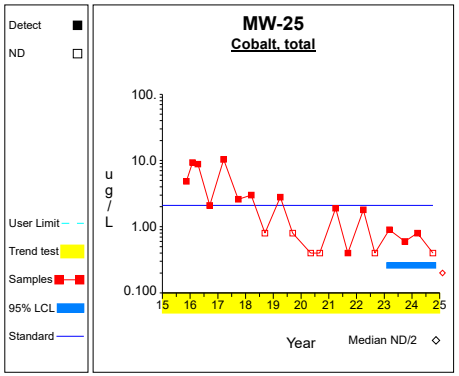
Graph 28



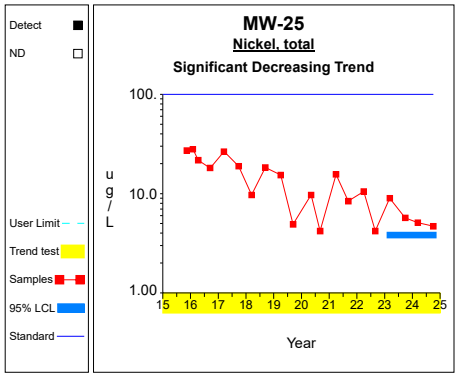
Graph 29



Graph 30



Graph 31



Graph 32

Worksheet 6 - Assessment Monitoring
Arsenic, total (ug/L) at AW-2

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **152.7** / **4** = **38.175**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**6046.11** - **23317.29**/**4**) / (**4**-1))^{½} = **8.501**	Compute sd of the last 4 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **38.175** - **2.353** * **8.501**/**4**^{½} = **28.176**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **38.175** + **2.353** * **8.501**/**4**^{½} = **48.174**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **22** * (**22**-1) / 2 = **231**	Number of sample pairs during trend detection period.
6	S = **-1.286**	Sen's estimator of trend.
7	var(S) = **1257.667**	Variance estimate for slope.
8	M(S) = (**N**' ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**231** ± **2.576** * **1257.667**^{½}) / 2 = [**69.823**, **161.177**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-3.902**, **2.81**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Barium, total (ug/L) at AW-2

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **562.0** / **4** = **140.5**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**79114.0** - **315844.0**/**4**) / (**4**-1))^{½} = **7.141**	Compute sd of the last 4 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **140.5** - **2.353** * **7.141**/**4**^{½} = **132.1**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **140.5** + **2.353** * **7.141**/**4**^{½} = **148.9**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **21** * (**21**-1) / 2 = **210**	Number of sample pairs during trend detection period.
6	S = **-5.13**	Sen's estimator of trend.
7	var(S) = **1095.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**210** ± **2.576** * **1095.667**^{½}) / 2 = [**62.366**, **147.634**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-20.666**, **4.036**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cobalt, total (ug/L) at AW-2

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **45.2** / **4** = **11.3**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**558.66** - **2043.04**/**4**) / (**4**-1))^{½} = **3.996**	Compute sd of the last 4 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **11.3** - **2.353** * **3.996**/**4**^{½} = **6.6**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **11.3** + **2.353** * **3.996**/**4**^{½} = **16.0**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **21** * (**21**-1) / 2 = **210**	Number of sample pairs during trend detection period.
6	S = **-1.745**	Sen's estimator of trend.
7	var(S) = **1094.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**210** ± **2.576** * **1094.667**^{½}) / 2 = [**62.386**, **147.614**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-3.461**, **-0.314**]	Two-sided confidence interval for slope.
10	UCL(S) < 0	**Significant decreasing trend.**

Worksheet 6 - Assessment Monitoring
Nickel, total (ug/L) at AW-2

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **38.6** / **4** = **9.65**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**408.04** - **1489.96**/**4**) / (**4**-1))^{½} = **3.442**	Compute sd of the last 4 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **9.65** - **2.353** * **3.442**/**4**^{½} = **5.601**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **9.65** + **2.353** * **3.442**/**4**^{½} = **13.699**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **22** * (**22**-1) / 2 = **231**	Number of sample pairs during trend detection period.
6	S = **-1.444**	Sen's estimator of trend.
7	var(S) = **1257.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**231** ± **2.576** * **1257.667**^{½}) / 2 = [**69.823**, **161.177**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-4.225**, **-0.215**]	Two-sided confidence interval for slope.
10	UCL(S) < 0	**Significant decreasing trend.**

Worksheet 6 - Assessment Monitoring
Arsenic, total (ug/L) at AW-3

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **115.4** / **4** = **28.85**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**3892.92** - **13317.16**/**4**) / (**4**-1))^{½} = **13.707**	Compute sd of the last 4 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **28.85** - **2.353** * **13.707**/**4**^{½} = **12.727**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **28.85** + **2.353** * **13.707**/**4**^{½} = **44.973**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **22** * (**22**-1) / 2 = **231**	Number of sample pairs during trend detection period.
6	S = **-0.838**	Sen's estimator of trend.
7	var(S) = **1257.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**231** ± **2.576** * **1257.667**^{½}) / 2 = [**69.823**, **161.177**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-7.646**, **3.733**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Barium, total (ug/L) at AW-3

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1682.0** / **4** = **420.5**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**745218.0** - **2.83**x**10^6**/**4**) / (**4**-1))^{½} = **112.453**	Compute sd of the last 4 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **420.5** - **2.353** * **112.453**/**4**^{½} = **288.223**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **420.5** + **2.353** * **112.453**/**4**^{½} = **552.777**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **21** * (**21**-1) / 2 = **210**	Number of sample pairs during trend detection period.
6	S = **-14.144**	Sen's estimator of trend.
7	var(S) = **1096.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**210** ± **2.576** * **1096.667**^{½}) / 2 = [**62.347**, **147.653**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-56.768**, **17.996**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cobalt, total (ug/L) at AW-3

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **3.3** / **4** = **0.825**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**3.07** - **10.89**/**4**) / (**4**-1))^{½} = **0.34**	Compute sd of the last 4 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.825** - **2.353** * **0.34**/**4**^{½} = **0.425**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.825** + **2.353** * **0.34**/**4**^{½} = **1.225**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **21** * (**21**-1) / 2 = **210**	Number of sample pairs during trend detection period.
6	S = **-1.476**	Sen's estimator of trend.
7	var(S) = **1090.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**210** ± **2.576** * **1090.0**^{½}) / 2 = [**62.476**, **147.524**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-2.907**, **-0.24**]	Two-sided confidence interval for slope.
10	UCL(S) < 0	**Significant decreasing trend.**

Worksheet 6 - Assessment Monitoring
Nickel, total (ug/L) at AW-3

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **11.3** / **4** = **2.825**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**40.09** - **127.69**/**4**) / (**4**-1))^{½} = **1.65**	Compute sd of the last 4 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **2.825** - **2.353** * **1.65**/**4**^{½} = **0.884**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **2.825** + **2.353** * **1.65**/**4**^{½} = **4.766**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **21** * (**21**-1) / 2 = **210**	Number of sample pairs during trend detection period.
6	S = **-2.95**	Sen's estimator of trend.
7	var(S) = **1004.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**210** ± **2.576** * **1004.667**^{½}) / 2 = [**64.175**, **145.825**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-8.174**, **-0.489**]	Two-sided confidence interval for slope.
10	UCL(S) < 0	**Significant decreasing trend.**

Worksheet 6 - Assessment Monitoring
Arsenic, total (ug/L) at AW-9

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **10.2** / **4** = **2.55**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**29.64** - **104.04**/**4**) / (**4**-1))^{½} = **1.1**	Compute sd of the last 4 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **2.55** - **2.353** * **1.1**/**4**^{½} = **1.256**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **2.55** + **2.353** * **1.1**/**4**^{½} = **3.844**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **11** * (**11**-1) / 2 = **55**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **40.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**55** ± **2.576** * **40.0**^{½}) / 2 = [**19.354**, **35.646**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Barium, total (ug/L) at AW-9

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1636.0** / **4** = **409.0**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**737214.0** - **2.68**x**10^6**/**4**) / (**4**-1))^{½} = **150.654**	Compute sd of the last 4 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **409.0** - **2.353** * **150.654**/**4**^{½} = **231.787**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **409.0** + **2.353** * **150.654**/**4**^{½} = **586.213**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **4** * (**4**-1) / 2 = **6**	Number of sample pairs during trend detection period.
6	S = **-23.838**	Sen's estimator of trend.
7	var(S) = **8.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**6** ± **2.576** * **8.667**^{½}) / 2 = [**-0.792**, **6.792**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-67.007**, **425.537**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cobalt, total (ug/L) at AW-9

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **13.3** / **4** = **3.325**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**97.25** - **176.89**/**4**) / (**4**-1))^{½} = **4.204**	Compute sd of the last 4 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **3.325** - **2.353** * **4.204**/**4**^{½} = **0.0**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **3.325** + **2.353** * **4.204**/**4**^{½} = **8.27**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **15** * (**15**-1) / 2 = **105**	Number of sample pairs during trend detection period.
6	S = **-0.298**	Sen's estimator of trend.
7	var(S) = **406.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**105** ± **2.576** * **406.333**^{½}) / 2 = [**26.537**, **78.463**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-4.605**, **0.667**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Nickel, total (ug/L) at AW-9

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **92.8** / **4** = **23.2**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**7546.24** - **8611.84**/**4**) / (**4**-1))^{½} = **42.4**	Compute sd of the last 4 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **23.2** - **2.353** * **42.4**/**4**^{½} = **0.0**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **23.2** + **2.353** * **42.4**/**4**^{½} = **73.075**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **4** * (**4**-1) / 2 = **6**	Number of sample pairs during trend detection period.
6	S = **-4.743**	Sen's estimator of trend.
7	var(S) = **5.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**6** ± **2.576** * **5.0**^{½}) / 2 = [**0.12**, **5.88**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-35.293**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Arsenic, total (ug/L) at MW-12

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **11.1** / **4** = **2.775**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**38.01** - **123.21**/**4**) / (**4**-1))^{½} = **1.55**	Compute sd of the last 4 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **2.775** - **2.353** * **1.55**/**4**^{½} = **0.952**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **2.775** + **2.353** * **1.55**/**4**^{½} = **4.598**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **21** * (**21**-1) / 2 = **210**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **763.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**210** ± **2.576** * **763.0**^{½}) / 2 = [**69.422**, **140.578**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.025**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Barium, total (ug/L) at MW-12

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **404.8** / **4** = **101.2**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**41061.84** - **163863.04**/**4**) / (**4**-1))^{½} = **5.659**	Compute sd of the last 4 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **101.2** - **2.353** * **5.659**/**4**^{½} = **94.543**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **101.2** + **2.353** * **5.659**/**4**^{½} = **107.857**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **21** * (**21**-1) / 2 = **210**	Number of sample pairs during trend detection period.
6	S = **-23.662**	Sen's estimator of trend.
7	var(S) = **1096.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**210** ± **2.576** * **1096.667**^{½}) / 2 = [**62.347**, **147.653**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-31.84**, **-10.932**]	Two-sided confidence interval for slope.
10	UCL(S) < 0	**Significant decreasing trend.**

Worksheet 6 - Assessment Monitoring
Cobalt, total (ug/L) at MW-12

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **5.2** / **4** = **1.3**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**9.3** - **27.04**/**4**) / (**4**-1))^{½} = **0.92**	Compute sd of the last 4 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **1.3** - **2.353** * **0.92**/**4**^{½} = **0.218**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **1.3** + **2.353** * **0.92**/**4**^{½} = **2.382**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **21** * (**21**-1) / 2 = **210**	Number of sample pairs during trend detection period.
6	S = **0.008**	Sen's estimator of trend.
7	var(S) = **1046.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**210** ± **2.576** * **1046.667**^{½}) / 2 = [**63.33**, **146.67**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.085**, **0.128**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Nickel, total (ug/L) at MW-12

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **68.5** / **4** = **17.125**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2000.27** - **4692.25**/**4**) / (**4**-1))^{½} = **16.605**	Compute sd of the last 4 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **17.125** - **2.353** * **16.605**/**4**^{½} = **0.0**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **17.125** + **2.353** * **16.605**/**4**^{½} = **36.658**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **-0.886**	Sen's estimator of trend.
7	var(S) = **1432.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **1432.667**^{½}) / 2 = [**77.748**, **175.252**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-2.534**, **0.338**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Arsenic, total (ug/L) at MW-14

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **8.0** / **4** = **2.0**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**16.0** - **64.0**/**4**) / (**4**-1))^{½} = **0.0**	Compute sd of the last 4 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **2.0** - **2.353** * **0.0**/**4**^{½} = **2.0**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **2.0** + **2.353** * **0.0**/**4**^{½} = **2.0**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **21** * (**21**-1) / 2 = **210**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **146.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**210** ± **2.576** * **146.667**^{½}) / 2 = [**89.402**, **120.598**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Barium, total (ug/L) at MW-14

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1660.0** / **4** = **415.0**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**689964.0** - **2.76**x**10^6**/**4**) / (**4**-1))^{½} = **18.833**	Compute sd of the last 4 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **415.0** - **2.353** * **18.833**/**4**^{½} = **392.847**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **415.0** + **2.353** * **18.833**/**4**^{½} = **437.153**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **21** * (**21**-1) / 2 = **210**	Number of sample pairs during trend detection period.
6	S = **13.91**	Sen's estimator of trend.
7	var(S) = **1095.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**210** ± **2.576** * **1095.667**^{½}) / 2 = [**62.366**, **147.634**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**2.272**, **22.396**]	Two-sided confidence interval for slope.
10	LCL(S) > 0	**Significant increasing trend.**

Worksheet 6 - Assessment Monitoring
Cobalt, total (ug/L) at MW-14

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.6** / **4** = **0.4**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.64** - **2.56**/**4**) / (**4**-1))^{½} = **4.21**x**10**$^{-9}$	Compute sd of the last 4 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.4** - **2.353** * **4.21**x**10**$^{-9}$/**4**^{½} = **0.4**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.4** + **2.353** * **4.21**x**10**$^{-9}$/**4**^{½} = **0.4**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **21** * (**21**-1) / 2 = **210**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **603.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**210** ± **2.576** * **603.333**^{½}) / 2 = [**73.363**, **136.637**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Nickel, total (ug/L) at MW-14

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **34.1** / **4** = **8.525**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**328.11** - **1162.81**/**4**) / (**4**-1))^{½} = **3.531**	Compute sd of the last 4 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **8.525** - **2.353** * **3.531**/**4**^{½} = **4.371**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **8.525** + **2.353** * **3.531**/**4**^{½} = **12.679**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **21** * (**21**-1) / 2 = **210**	Number of sample pairs during trend detection period.
6	S = **0.332**	Sen's estimator of trend.
7	var(S) = **1095.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**210** ± **2.576** * **1095.667**^{½}) / 2 = [**62.366**, **147.634**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.636**, **1.346**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Arsenic, total (ug/L) at MW-20

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **198.1** / **4** = **49.525**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**14133.55** - **39243.61**/**4**) / (**4**-1))^{½} = **37.959**	Compute sd of the last 4 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **49.525** - **2.353** * **37.959**/**4**^{½} = **4.874**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **49.525** + **2.353** * **37.959**/**4**^{½} = **94.176**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **21** * (**21**-1) / 2 = **210**	Number of sample pairs during trend detection period.
6	S = **-4.203**	Sen's estimator of trend.
7	var(S) = **1096.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**210** ± **2.576** * **1096.667**^{½}) / 2 = [**62.347**, **147.653**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-8.909**, **1.24**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Barium, total (ug/L) at MW-20

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1250.0** / **4** = **312.5**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**392310.0** - **1.56**x**10^6**/**4**) / (**4**-1))^{½} = **23.7**	Compute sd of the last 4 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **312.5** - **2.353** * **23.7**/**4**^{½} = **284.623**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **312.5** + **2.353** * **23.7**/**4**^{½} = **340.377**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **21** * (**21**-1) / 2 = **210**	Number of sample pairs during trend detection period.
6	S = **-7.377**	Sen's estimator of trend.
7	var(S) = **1096.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**210** ± **2.576** * **1096.667**^{½}) / 2 = [**62.347**, **147.653**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-17.236**, **1.872**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cobalt, total (ug/L) at MW-20

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.5** / **4** = **1.125**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**8.97** - **20.25**/**4**) / (**4**-1))^{½} = **1.141**	Compute sd of the last 4 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **1.125** - **2.353** * **1.141**/**4**^{½} = **0.0**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **1.125** + **2.353** * **1.141**/**4**^{½} = **2.467**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **21** * (**21**-1) / 2 = **210**	Number of sample pairs during trend detection period.
6	S = **-0.08**	Sen's estimator of trend.
7	var(S) = **1051.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**210** ± **2.576** * **1051.333**^{½}) / 2 = [**63.238**, **146.762**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.376**, **0.075**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Nickel, total (ug/L) at MW-20

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **13.4** / **4** = **3.35**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**66.76** - **179.56**/**4**) / (**4**-1))^{½} = **2.7**	Compute sd of the last 4 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **3.35** - **2.353** * **2.7**/**4**^{½} = **0.174**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **3.35** + **2.353** * **2.7**/**4**^{½} = **6.526**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **21** * (**21**-1) / 2 = **210**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **603.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**210** ± **2.576** * **603.333**^{½}) / 2 = [**73.363**, **136.637**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Arsenic, total (ug/L) at MW-24

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **89.3** / **4** = **22.325**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2766.91** - **7974.49**/**4**) / (**4**-1))^{½} = **16.055**	Compute sd of the last 4 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **22.325** - **2.353** * **16.055**/**4**^{½} = **3.44**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **22.325** + **2.353** * **16.055**/**4**^{½} = **41.21**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **21** * (**21**-1) / 2 = **210**	Number of sample pairs during trend detection period.
6	S = **-1.052**	Sen's estimator of trend.
7	var(S) = **1093.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**210** ± **2.576** * **1093.0**^{½}) / 2 = [**62.418**, **147.582**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-4.07**, **2.208**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Barium, total (ug/L) at MW-24

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1374.1** / **4** = **343.525**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**622727.01** - **1.89**x**10^6**/**4**) / (**4**-1))^{½} = **224.12**	Compute sd of the last 4 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **343.525** - **2.353** * **224.12**/**4**^{½} = **79.895**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **343.525** + **2.353** * **224.12**/**4**^{½} = **607.155**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **21** * (**21**-1) / 2 = **210**	Number of sample pairs during trend detection period.
6	S = **-11.12**	Sen's estimator of trend.
7	var(S) = **1096.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**210** ± **2.576** * **1096.667**^{½}) / 2 = [**62.347**, **147.653**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-51.579**, **31.369**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cobalt, total (ug/L) at MW-24

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **31.9** / **4** = **7.975**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**289.17** - **1017.61**/**4**) / (**4**-1))^{½} = **3.404**	Compute sd of the last 4 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **7.975** - **2.353** * **3.404**/**4**^{½} = **3.971**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **7.975** + **2.353** * **3.404**/**4**^{½} = **11.979**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **21** * (**21**-1) / 2 = **210**	Number of sample pairs during trend detection period.
6	S = **0.608**	Sen's estimator of trend.
7	var(S) = **1094.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**210** ± **2.576** * **1094.667**^{½}) / 2 = [**62.386**, **147.614**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.838**, **1.565**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Nickel, total (ug/L) at MW-24

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **114.9** / **4** = **28.725**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**4094.09** - **13202.01**/**4**) / (**4**-1))^{½} = **16.264**	Compute sd of the last 4 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **28.725** - **2.353** * **16.264**/**4**^{½} = **9.593**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **28.725** + **2.353** * **16.264**/**4**^{½} = **47.857**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **21** * (**21**-1) / 2 = **210**	Number of sample pairs during trend detection period.
6	S = **2.682**	Sen's estimator of trend.
7	var(S) = **1093.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**210** ± **2.576** * **1093.0**^{½}) / 2 = [**62.418**, **147.582**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.033**, **5.787**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Arsenic, total (ug/L) at MW-25

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **8.0** / **4** = **2.0**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**16.0** - **64.0**/**4**) / (**4**-1))^{½} = **0.0**	Compute sd of the last 4 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **2.0** - **2.353** * **0.0**/**4**^{½} = **2.0**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **2.0** + **2.353** * **0.0**/**4**^{½} = **2.0**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **20** * (**20**-1) / 2 = **190**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **253.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**190** ± **2.576** * **253.0**^{½}) / 2 = [**74.513**, **115.487**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Barium, total (ug/L) at MW-25

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **96.8** / **4** = **24.2**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2359.24** - **9370.24**/**4**) / (**4**-1))^{½} = **2.358**	Compute sd of the last 4 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **24.2** - **2.353** * **2.358**/**4**^{½} = **21.426**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **24.2** + **2.353** * **2.358**/**4**^{½} = **26.974**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **20** * (**20**-1) / 2 = **190**	Number of sample pairs during trend detection period.
6	S = **-1.624**	Sen's estimator of trend.
7	var(S) = **950.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**190** ± **2.576** * **950.0**^{½}) / 2 = [**55.301**, **134.699**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-3.284**, **0.051**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cobalt, total (ug/L) at MW-25

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **2.5** / **4** = **0.625**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**1.85** - **6.25**/**4**) / (**4**-1))^{½} = **0.31**	Compute sd of the last 4 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.625** - **2.353** * **0.31**/**4**^{½} = **0.261**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.625** + **2.353** * **0.31**/**4**^{½} = **0.989**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **20** * (**20**-1) / 2 = **190**	Number of sample pairs during trend detection period.
6	S = **-0.486**	Sen's estimator of trend.
7	var(S) = **921.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**190** ± **2.576** * **921.667**^{½}) / 2 = [**55.898**, **134.102**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-1.178**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Nickel, total (ug/L) at MW-25

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **24.5** / **4** = **6.125**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**161.59** - **600.25**/**4**) / (**4**-1))^{½} = **1.96**	Compute sd of the last 4 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **6.125** - **2.353** * **1.96**/**4**^{½} = **3.819**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **6.125** + **2.353** * **1.96**/**4**^{½} = **8.431**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **20** * (**20**-1) / 2 = **190**	Number of sample pairs during trend detection period.
6	S = **-2.327**	Sen's estimator of trend.
7	var(S) = **948.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**190** ± **2.576** * **948.0**^{½}) / 2 = [**55.343**, **134.657**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-3.504**, **-1.214**]	Two-sided confidence interval for slope.
10	UCL(S) < 0	**Significant decreasing trend.**

Attachment D

Summary Tables and Graphs for the Intrawell Comparisons

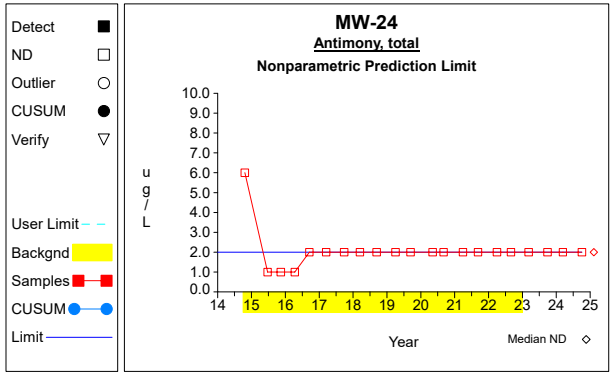
Table 1

Summary Statistics and Intermediate Computations for Combined Shewhart-CUSUM Control Charts

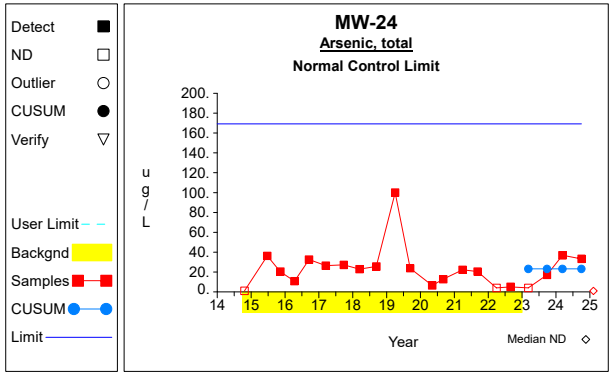
Constituent	Units	Well	N(back)	N(mon)	N(tot)	Mean	SD	R(i-1)	R(i)	S(i-1)	S(i)	Limit	Type	Conf	
Antimony, total	ug/L	MW-24	17	4	30			2.0000	2.0000			2.0000	nonpar	.99	**
Arsenic, total	ug/L	MW-24	17	4	30	23.2471	22.4453	36.9000	33.3000	23.2471	23.2471	169.1415	normal		
Barium, total	ug/L	MW-24	17	4	30	340.0529	181.2577	409.0000	602.0000	340.0529	466.0567	1518.2280	normal		
Beryllium, total	ug/L	MW-24	17	4	30			4.0000	4.0000			4.0000	nonpar	.99	**
Cadmium, total	ug/L	MW-24	17	4	30			0.8000	0.8000			0.8000	nonpar	.99	**
Chromium, total	ug/L	MW-24	17	4	30			8.0000	8.0000			8.0000	nonpar	.99	**
Cobalt, total	ug/L	MW-24	17	4	30	8.1549	6.8788	6.4000	12.9000	8.1549	8.1549	52.8671	normal		
Copper, total	ug/L	MW-24	17	4	30			4.0000	4.0000			10.7000	nonpar	.99	**
Lead, total	ug/L	MW-24	16	4	30	4.7394	1.7106	4.0000	4.0000	4.7394	4.7394	15.8581	normal		
Nickel, total	ug/L	MW-24	17	4	30	22.1647	18.9039	8.2000	29.3000	22.1647	22.1647	145.0398	normal		
Selenium, total	ug/L	MW-24	17	4	30			4.0000	4.0000			4.0000	nonpar	.99	**
Silver, total	ug/L	MW-24	13	4	30			4.0000	4.0000			4.0000	nonpar	.99	**
Thallium, total	ug/L	MW-24	17	4	30			2.0000	2.0000			2.0000	nonpar	.99	**
Vanadium, total	ug/L	MW-24	16	4	30			20.0000	20.0000			23.4000	nonpar	.99	**
Zinc, total	ug/L	MW-24	17	4	30	29.0176	23.4229	20.0000	20.0000	29.0176	29.0176	181.2667	normal		

N(back) and N(mon) = Non-outlier measurements in the background and monitoring periods.
N(tot) = All independent measurements for that constituent and well.
For transformed data, mean and SD in transformed units and control limit in original units.
Conf = confidence level for passing initial test or one verification resample (nonparametric test only).
* - Insufficient Data.
** - Detection Frequency < 25%.
*** - Zero Variance.

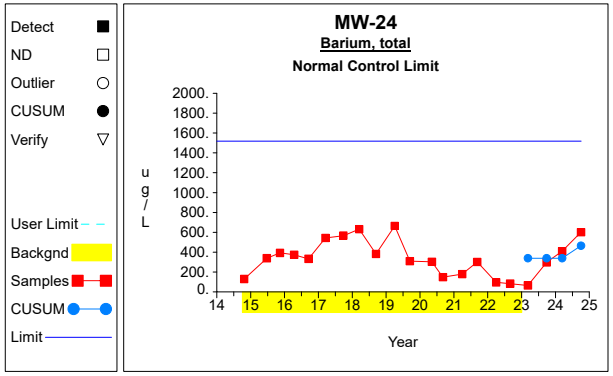
Intra-Well Control Charts / Prediction Limits



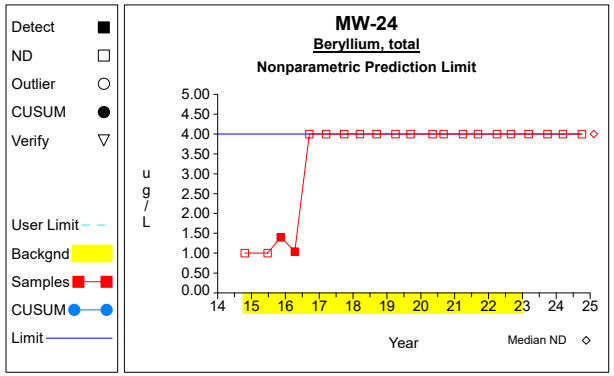
Graph 1



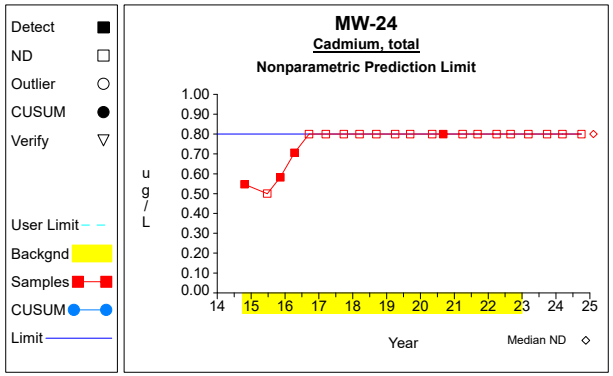
Graph 2



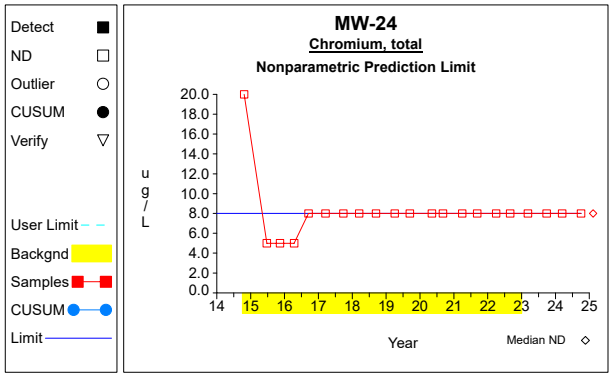
Graph 3



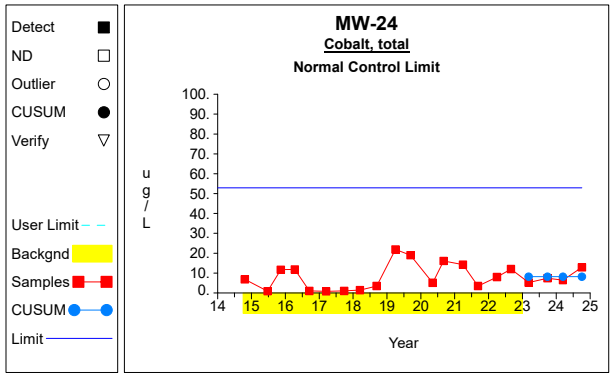
Graph 4



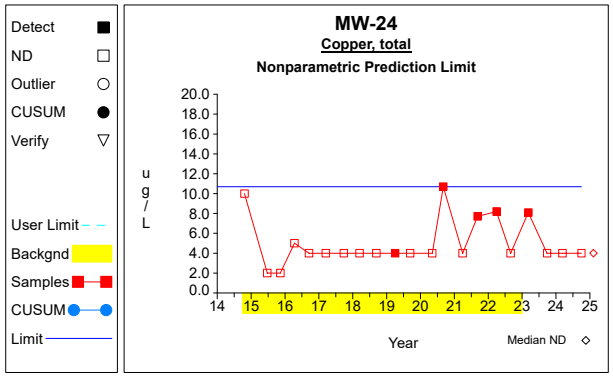
Graph 5



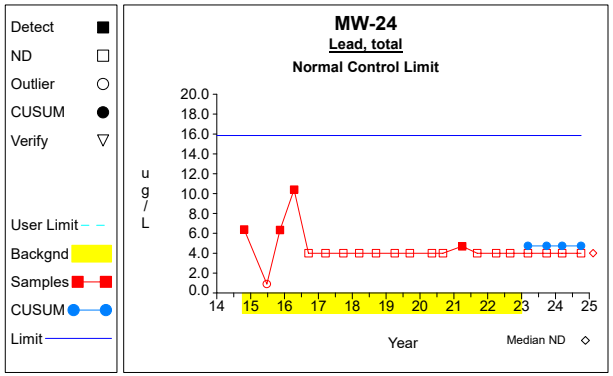
Graph 6



Graph 7



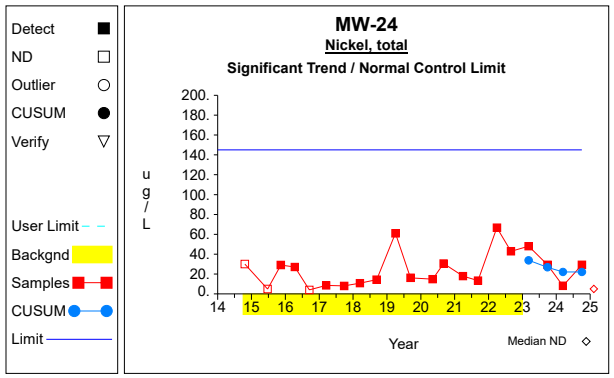
Graph 8



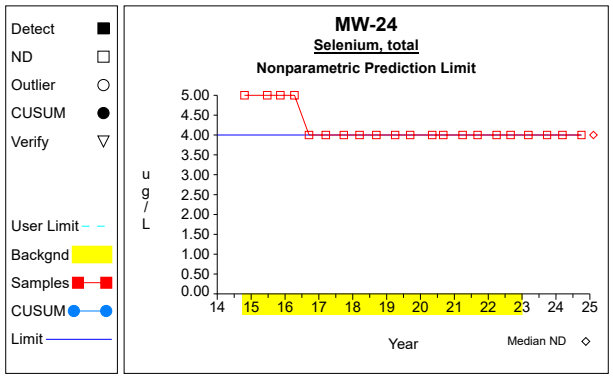
Graph 9

Prepared by: Otter Creek Environmental

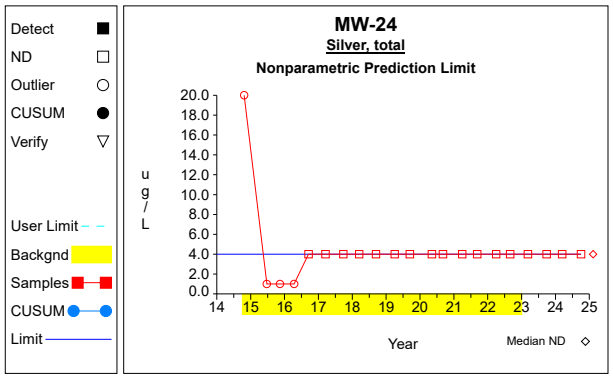
Intra-Well Control Charts / Prediction Limits



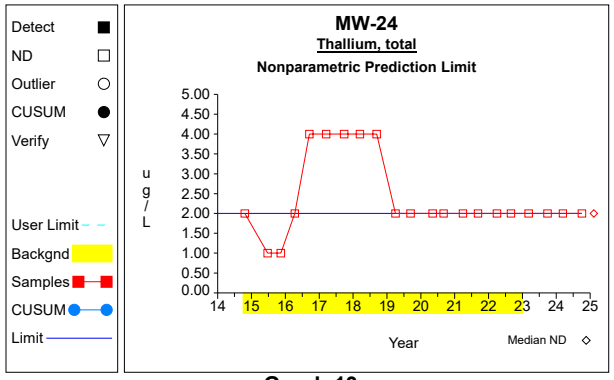
Graph 10



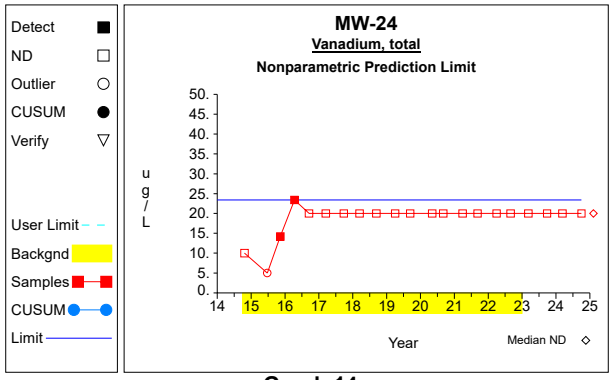
Graph 11



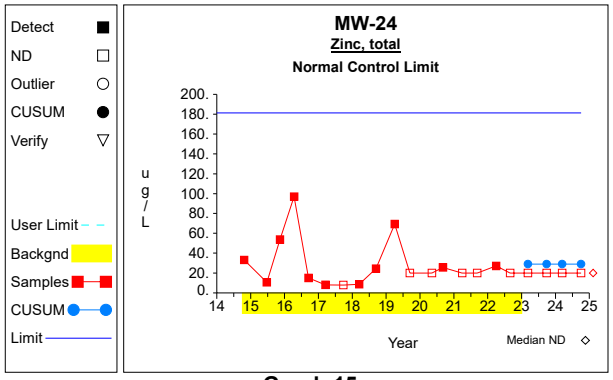
Graph 12



Graph 13



Graph 14



Graph 15

False Positive and False Negative Rates for Current Intra-Well Control Charts Monitoring Program

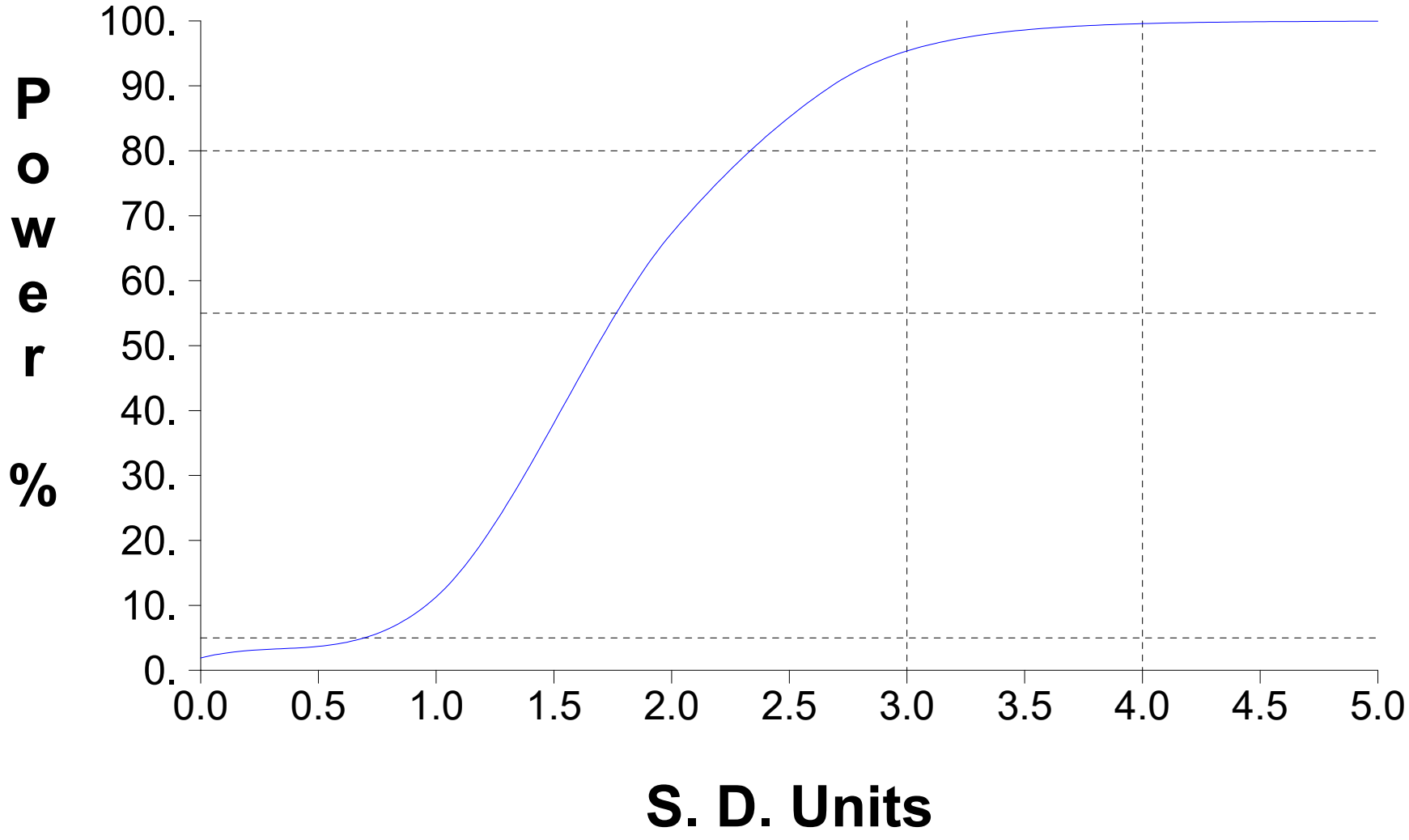


Table 2

Analytical Data and CUSUM Summary

Constituent	Units	Well	Date	Background	Result		Outlier	CUSUM	Adjusted	
Antimony, total	ug/L	MW-24	10/21/2014	yes	6.0000	ND			2.0000	***
Antimony, total	ug/L	MW-24	06/23/2015	yes	1.0000	ND			2.0000	***
Antimony, total	ug/L	MW-24	11/12/2015	yes	1.0000	ND			2.0000	***
Antimony, total	ug/L	MW-24	04/12/2016	yes	1.0000	ND			2.0000	***
Antimony, total	ug/L	MW-24	09/16/2016	yes	2.0000	ND				
Antimony, total	ug/L	MW-24	03/15/2017	yes	2.0000	ND				
Antimony, total	ug/L	MW-24	09/27/2017	yes	2.0000	ND				
Antimony, total	ug/L	MW-24	03/14/2018	yes	2.0000	ND				
Antimony, total	ug/L	MW-24	09/12/2018	yes	2.0000	ND				
Antimony, total	ug/L	MW-24	04/01/2019	yes	2.0000	ND				
Antimony, total	ug/L	MW-24	09/12/2019	yes	2.0000	ND				
Antimony, total	ug/L	MW-24	05/06/2020	yes	2.0000	ND				
Antimony, total	ug/L	MW-24	09/03/2020	yes	2.0000	ND				
Antimony, total	ug/L	MW-24	03/30/2021	yes	2.0000	ND				
Antimony, total	ug/L	MW-24	09/08/2021	yes	2.0000	ND				
Antimony, total	ug/L	MW-24	03/31/2022	yes	2.0000	ND				
Antimony, total	ug/L	MW-24	08/30/2022	yes	2.0000	ND				
Antimony, total	ug/L	MW-24	03/07/2023		2.0000	ND				
Antimony, total	ug/L	MW-24	09/28/2023		2.0000	ND				
Antimony, total	ug/L	MW-24	03/11/2024		2.0000	ND				
Antimony, total	ug/L	MW-24	10/02/2024		2.0000	ND				
Arsenic, total	ug/L	MW-24	10/21/2014	yes	1.0000	ND				
Arsenic, total	ug/L	MW-24	06/23/2015	yes	36.3000					
Arsenic, total	ug/L	MW-24	11/12/2015	yes	20.4000					
Arsenic, total	ug/L	MW-24	04/12/2016	yes	10.8000					
Arsenic, total	ug/L	MW-24	09/16/2016	yes	32.6000					
Arsenic, total	ug/L	MW-24	03/15/2017	yes	26.4000					
Arsenic, total	ug/L	MW-24	09/27/2017	yes	27.2000					
Arsenic, total	ug/L	MW-24	03/14/2018	yes	22.9000					
Arsenic, total	ug/L	MW-24	09/12/2018	yes	25.6000					
Arsenic, total	ug/L	MW-24	04/01/2019	yes	100.0000					
Arsenic, total	ug/L	MW-24	09/12/2019	yes	23.8000					
Arsenic, total	ug/L	MW-24	05/06/2020	yes	6.5000					
Arsenic, total	ug/L	MW-24	09/03/2020	yes	12.8000					
Arsenic, total	ug/L	MW-24	03/30/2021	yes	22.3000					
Arsenic, total	ug/L	MW-24	09/08/2021	yes	20.5000					
Arsenic, total	ug/L	MW-24	03/31/2022	yes	4.0000	ND			1.0000	***
Arsenic, total	ug/L	MW-24	08/30/2022	yes	5.1000					
Arsenic, total	ug/L	MW-24	03/07/2023		4.0000	ND		23.2471		
Arsenic, total	ug/L	MW-24	09/28/2023		17.1000			23.2471		
Arsenic, total	ug/L	MW-24	03/11/2024		36.9000			23.2471		
Arsenic, total	ug/L	MW-24	10/02/2024		33.3000			23.2471		
Barium, total	ug/L	MW-24	10/21/2014	yes	130.0000					
Barium, total	ug/L	MW-24	06/23/2015	yes	339.0000					
Barium, total	ug/L	MW-24	11/12/2015	yes	393.0000					
Barium, total	ug/L	MW-24	04/12/2016	yes	374.0000					
Barium, total	ug/L	MW-24	09/16/2016	yes	333.0000					
Barium, total	ug/L	MW-24	03/15/2017	yes	544.0000					
Barium, total	ug/L	MW-24	09/27/2017	yes	567.0000					
Barium, total	ug/L	MW-24	03/14/2018	yes	632.0000					

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Table 2

Analytical Data and CUSUM Summary

Constituent	Units	Well	Date	Background	Result		Outlier	CUSUM	Adjusted	
Barium, total	ug/L	MW-24	09/12/2018	yes	382.0000					
Barium, total	ug/L	MW-24	04/01/2019	yes	665.0000					
Barium, total	ug/L	MW-24	09/12/2019	yes	310.0000					
Barium, total	ug/L	MW-24	05/06/2020	yes	303.0000					
Barium, total	ug/L	MW-24	09/03/2020	yes	149.0000					
Barium, total	ug/L	MW-24	03/30/2021	yes	179.0000					
Barium, total	ug/L	MW-24	09/08/2021	yes	302.0000					
Barium, total	ug/L	MW-24	03/31/2022	yes	96.2000					
Barium, total	ug/L	MW-24	08/30/2022	yes	82.7000					
Barium, total	ug/L	MW-24	03/07/2023		65.1000			340.0529		
Barium, total	ug/L	MW-24	09/28/2023		298.0000			340.0529		
Barium, total	ug/L	MW-24	03/11/2024		409.0000			340.0529		
Barium, total	ug/L	MW-24	10/02/2024		602.0000			466.0567		
Beryllium, total	ug/L	MW-24	10/21/2014	yes	1.0000	ND			4.0000	***
Beryllium, total	ug/L	MW-24	06/23/2015	yes	1.0000	ND			4.0000	***
Beryllium, total	ug/L	MW-24	11/12/2015	yes	1.4000					
Beryllium, total	ug/L	MW-24	04/12/2016	yes	1.0400					
Beryllium, total	ug/L	MW-24	09/16/2016	yes	4.0000	ND				
Beryllium, total	ug/L	MW-24	03/15/2017	yes	4.0000	ND				
Beryllium, total	ug/L	MW-24	09/27/2017	yes	4.0000	ND				
Beryllium, total	ug/L	MW-24	03/14/2018	yes	4.0000	ND				
Beryllium, total	ug/L	MW-24	09/12/2018	yes	4.0000	ND				
Beryllium, total	ug/L	MW-24	04/01/2019	yes	4.0000	ND				
Beryllium, total	ug/L	MW-24	09/12/2019	yes	4.0000	ND				
Beryllium, total	ug/L	MW-24	05/06/2020	yes	4.0000	ND				
Beryllium, total	ug/L	MW-24	09/03/2020	yes	4.0000	ND				
Beryllium, total	ug/L	MW-24	03/30/2021	yes	4.0000	ND				
Beryllium, total	ug/L	MW-24	09/08/2021	yes	4.0000	ND				
Beryllium, total	ug/L	MW-24	03/31/2022	yes	4.0000	ND				
Beryllium, total	ug/L	MW-24	08/30/2022	yes	4.0000	ND				
Beryllium, total	ug/L	MW-24	03/07/2023		4.0000	ND				
Beryllium, total	ug/L	MW-24	09/28/2023		4.0000	ND				
Beryllium, total	ug/L	MW-24	03/11/2024		4.0000	ND				
Beryllium, total	ug/L	MW-24	10/02/2024		4.0000	ND				
Cadmium, total	ug/L	MW-24	10/21/2014	yes	0.5470					
Cadmium, total	ug/L	MW-24	06/23/2015	yes	0.5000	ND			0.8000	***
Cadmium, total	ug/L	MW-24	11/12/2015	yes	0.5820					
Cadmium, total	ug/L	MW-24	04/12/2016	yes	0.7060					
Cadmium, total	ug/L	MW-24	09/16/2016	yes	0.8000	ND				
Cadmium, total	ug/L	MW-24	03/15/2017	yes	0.8000	ND				
Cadmium, total	ug/L	MW-24	09/27/2017	yes	0.8000	ND				
Cadmium, total	ug/L	MW-24	03/14/2018	yes	0.8000	ND				
Cadmium, total	ug/L	MW-24	09/12/2018	yes	0.8000	ND				
Cadmium, total	ug/L	MW-24	04/01/2019	yes	0.8000	ND				
Cadmium, total	ug/L	MW-24	09/12/2019	yes	0.8000	ND				
Cadmium, total	ug/L	MW-24	05/06/2020	yes	0.8000	ND				
Cadmium, total	ug/L	MW-24	09/03/2020	yes	0.8000					
Cadmium, total	ug/L	MW-24	03/30/2021	yes	0.8000	ND				
Cadmium, total	ug/L	MW-24	09/08/2021	yes	0.8000	ND				
Cadmium, total	ug/L	MW-24	03/31/2022	yes	0.8000	ND				

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Table 2

Analytical Data and CUSUM Summary

Constituent	Units	Well	Date	Background	Result		Outlier	CUSUM	Adjusted	
Cadmium, total	ug/L	MW-24	08/30/2022	yes	0.8000	ND				
Cadmium, total	ug/L	MW-24	03/07/2023		0.8000	ND				
Cadmium, total	ug/L	MW-24	09/28/2023		0.8000	ND				
Cadmium, total	ug/L	MW-24	03/11/2024		0.8000	ND				
Cadmium, total	ug/L	MW-24	10/02/2024		0.8000	ND				
Chromium, total	ug/L	MW-24	10/21/2014	yes	20.0000	ND			8.0000	***
Chromium, total	ug/L	MW-24	06/23/2015	yes	5.0000	ND			8.0000	***
Chromium, total	ug/L	MW-24	11/12/2015	yes	5.0000	ND			8.0000	***
Chromium, total	ug/L	MW-24	04/12/2016	yes	5.0000	ND			8.0000	***
Chromium, total	ug/L	MW-24	09/16/2016	yes	8.0000	ND				
Chromium, total	ug/L	MW-24	03/15/2017	yes	8.0000	ND				
Chromium, total	ug/L	MW-24	09/27/2017	yes	8.0000	ND				
Chromium, total	ug/L	MW-24	03/14/2018	yes	8.0000	ND				
Chromium, total	ug/L	MW-24	09/12/2018	yes	8.0000	ND				
Chromium, total	ug/L	MW-24	04/01/2019	yes	8.0000	ND				
Chromium, total	ug/L	MW-24	09/12/2019	yes	8.0000	ND				
Chromium, total	ug/L	MW-24	05/06/2020	yes	8.0000	ND				
Chromium, total	ug/L	MW-24	09/03/2020	yes	8.0000	ND				
Chromium, total	ug/L	MW-24	03/30/2021	yes	8.0000	ND				
Chromium, total	ug/L	MW-24	09/08/2021	yes	8.0000	ND				
Chromium, total	ug/L	MW-24	03/31/2022	yes	8.0000	ND				
Chromium, total	ug/L	MW-24	08/30/2022	yes	8.0000	ND				
Chromium, total	ug/L	MW-24	03/07/2023		8.0000	ND				
Chromium, total	ug/L	MW-24	09/28/2023		8.0000	ND				
Chromium, total	ug/L	MW-24	03/11/2024		8.0000	ND				
Chromium, total	ug/L	MW-24	10/02/2024		8.0000	ND				
Cobalt, total	ug/L	MW-24	10/21/2014	yes	6.8000					
Cobalt, total	ug/L	MW-24	06/23/2015	yes	0.8340					
Cobalt, total	ug/L	MW-24	11/12/2015	yes	11.7000					
Cobalt, total	ug/L	MW-24	04/12/2016	yes	11.8000					
Cobalt, total	ug/L	MW-24	09/16/2016	yes	1.0000					
Cobalt, total	ug/L	MW-24	03/15/2017	yes	0.8000					
Cobalt, total	ug/L	MW-24	09/27/2017	yes	1.0000					
Cobalt, total	ug/L	MW-24	03/14/2018	yes	1.4000					
Cobalt, total	ug/L	MW-24	09/12/2018	yes	3.5000					
Cobalt, total	ug/L	MW-24	04/01/2019	yes	21.9000					
Cobalt, total	ug/L	MW-24	09/12/2019	yes	19.0000					
Cobalt, total	ug/L	MW-24	05/06/2020	yes	5.1000					
Cobalt, total	ug/L	MW-24	09/03/2020	yes	16.1000					
Cobalt, total	ug/L	MW-24	03/30/2021	yes	14.2000					
Cobalt, total	ug/L	MW-24	09/08/2021	yes	3.5000					
Cobalt, total	ug/L	MW-24	03/31/2022	yes	8.0000					
Cobalt, total	ug/L	MW-24	08/30/2022	yes	12.0000					
Cobalt, total	ug/L	MW-24	03/07/2023		5.2000			8.1549		
Cobalt, total	ug/L	MW-24	09/28/2023		7.4000			8.1549		
Cobalt, total	ug/L	MW-24	03/11/2024		6.4000			8.1549		
Cobalt, total	ug/L	MW-24	10/02/2024		12.9000			8.1549		
Copper, total	ug/L	MW-24	10/21/2014	yes	10.0000	ND			4.0000	***
Copper, total	ug/L	MW-24	06/23/2015	yes	2.0000	ND			4.0000	***
Copper, total	ug/L	MW-24	11/12/2015	yes	2.0000	ND			4.0000	***

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Table 2

Analytical Data and CUSUM Summary

Constituent	Units	Well	Date	Background	Result		Outlier	CUSUM	Adjusted	
Copper, total	ug/L	MW-24	04/12/2016	yes	5.0000	ND			4.0000	***
Copper, total	ug/L	MW-24	09/16/2016	yes	4.0000	ND				
Copper, total	ug/L	MW-24	03/15/2017	yes	4.0000	ND				
Copper, total	ug/L	MW-24	09/27/2017	yes	4.0000	ND				
Copper, total	ug/L	MW-24	03/14/2018	yes	4.0000	ND				
Copper, total	ug/L	MW-24	09/12/2018	yes	4.0000	ND				
Copper, total	ug/L	MW-24	04/01/2019	yes	4.0000					
Copper, total	ug/L	MW-24	09/12/2019	yes	4.0000	ND				
Copper, total	ug/L	MW-24	05/06/2020	yes	4.0000	ND				
Copper, total	ug/L	MW-24	09/03/2020	yes	10.7000					
Copper, total	ug/L	MW-24	03/30/2021	yes	4.0000	ND				
Copper, total	ug/L	MW-24	09/08/2021	yes	7.7000					
Copper, total	ug/L	MW-24	03/31/2022	yes	8.2000					
Copper, total	ug/L	MW-24	08/30/2022	yes	4.0000	ND				
Copper, total	ug/L	MW-24	03/07/2023		8.1000					
Copper, total	ug/L	MW-24	09/28/2023		4.0000	ND				
Copper, total	ug/L	MW-24	03/11/2024		4.0000	ND				
Copper, total	ug/L	MW-24	10/02/2024		4.0000	ND				
Lead, total	ug/L	MW-24	10/21/2014	yes	6.3900					
Lead, total	ug/L	MW-24	06/23/2015	yes	0.9010		yes			*
Lead, total	ug/L	MW-24	11/12/2015	yes	6.3400					
Lead, total	ug/L	MW-24	04/12/2016	yes	10.4000					
Lead, total	ug/L	MW-24	09/16/2016	yes	4.0000	ND				
Lead, total	ug/L	MW-24	03/15/2017	yes	4.0000	ND				
Lead, total	ug/L	MW-24	09/27/2017	yes	4.0000	ND				
Lead, total	ug/L	MW-24	03/14/2018	yes	4.0000	ND				
Lead, total	ug/L	MW-24	09/12/2018	yes	4.0000	ND				
Lead, total	ug/L	MW-24	04/01/2019	yes	4.0000	ND				
Lead, total	ug/L	MW-24	09/12/2019	yes	4.0000	ND				
Lead, total	ug/L	MW-24	05/06/2020	yes	4.0000	ND				
Lead, total	ug/L	MW-24	09/03/2020	yes	4.0000	ND				
Lead, total	ug/L	MW-24	03/30/2021	yes	4.7000					
Lead, total	ug/L	MW-24	09/08/2021	yes	4.0000	ND				
Lead, total	ug/L	MW-24	03/31/2022	yes	4.0000	ND				
Lead, total	ug/L	MW-24	08/30/2022	yes	4.0000	ND				
Lead, total	ug/L	MW-24	03/07/2023		4.0000	ND		4.7394		
Lead, total	ug/L	MW-24	09/28/2023		4.0000	ND		4.7394		
Lead, total	ug/L	MW-24	03/11/2024		4.0000	ND		4.7394		
Lead, total	ug/L	MW-24	10/02/2024		4.0000	ND		4.7394		
Nickel, total	ug/L	MW-24	10/21/2014	yes	30.0000	ND			5.0000	***
Nickel, total	ug/L	MW-24	06/23/2015	yes	5.0000	ND				
Nickel, total	ug/L	MW-24	11/12/2015	yes	29.1000					
Nickel, total	ug/L	MW-24	04/12/2016	yes	27.1000					
Nickel, total	ug/L	MW-24	09/16/2016	yes	4.0000	ND			5.0000	***
Nickel, total	ug/L	MW-24	03/15/2017	yes	8.6000					
Nickel, total	ug/L	MW-24	09/27/2017	yes	8.0000					
Nickel, total	ug/L	MW-24	03/14/2018	yes	10.9000					
Nickel, total	ug/L	MW-24	09/12/2018	yes	14.3000					
Nickel, total	ug/L	MW-24	04/01/2019	yes	61.1000					
Nickel, total	ug/L	MW-24	09/12/2019	yes	16.2000					

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Table 2

Analytical Data and CUSUM Summary

Constituent	Units	Well	Date	Background	Result		Outlier	CUSUM	Adjusted	
Nickel, total	ug/L	MW-24	05/06/2020	yes	14.9000					
Nickel, total	ug/L	MW-24	09/03/2020	yes	30.6000					
Nickel, total	ug/L	MW-24	03/30/2021	yes	17.9000					
Nickel, total	ug/L	MW-24	09/08/2021	yes	13.4000					
Nickel, total	ug/L	MW-24	03/31/2022	yes	66.7000					
Nickel, total	ug/L	MW-24	08/30/2022	yes	43.0000					
Nickel, total	ug/L	MW-24	03/07/2023		48.0000			33.8221		
Nickel, total	ug/L	MW-24	09/28/2023		29.4000			26.8795		
Nickel, total	ug/L	MW-24	03/11/2024		8.2000			22.1647		
Nickel, total	ug/L	MW-24	10/02/2024		29.3000			22.1647		
Selenium, total	ug/L	MW-24	10/21/2014	yes	5.0000	ND			4.0000	***
Selenium, total	ug/L	MW-24	06/23/2015	yes	5.0000	ND			4.0000	***
Selenium, total	ug/L	MW-24	11/12/2015	yes	5.0000	ND			4.0000	***
Selenium, total	ug/L	MW-24	04/12/2016	yes	5.0000	ND			4.0000	***
Selenium, total	ug/L	MW-24	09/16/2016	yes	4.0000	ND				
Selenium, total	ug/L	MW-24	03/15/2017	yes	4.0000	ND				
Selenium, total	ug/L	MW-24	09/27/2017	yes	4.0000	ND				
Selenium, total	ug/L	MW-24	03/14/2018	yes	4.0000	ND				
Selenium, total	ug/L	MW-24	09/12/2018	yes	4.0000	ND				
Selenium, total	ug/L	MW-24	04/01/2019	yes	4.0000	ND				
Selenium, total	ug/L	MW-24	09/12/2019	yes	4.0000	ND				
Selenium, total	ug/L	MW-24	05/06/2020	yes	4.0000	ND				
Selenium, total	ug/L	MW-24	09/03/2020	yes	4.0000	ND				
Selenium, total	ug/L	MW-24	03/30/2021	yes	4.0000	ND				
Selenium, total	ug/L	MW-24	09/08/2021	yes	4.0000	ND				
Selenium, total	ug/L	MW-24	03/31/2022	yes	4.0000	ND				
Selenium, total	ug/L	MW-24	08/30/2022	yes	4.0000	ND				
Selenium, total	ug/L	MW-24	03/07/2023		4.0000	ND				
Selenium, total	ug/L	MW-24	09/28/2023		4.0000	ND				
Selenium, total	ug/L	MW-24	03/11/2024		4.0000	ND				
Selenium, total	ug/L	MW-24	10/02/2024		4.0000	ND				
Silver, total	ug/L	MW-24	10/21/2014	yes	20.0000	ND	yes			*
Silver, total	ug/L	MW-24	06/23/2015	yes	1.0000	ND	yes			*
Silver, total	ug/L	MW-24	11/12/2015	yes	1.0000	ND	yes			*
Silver, total	ug/L	MW-24	04/12/2016	yes	1.0000	ND	yes			*
Silver, total	ug/L	MW-24	09/16/2016	yes	4.0000	ND				
Silver, total	ug/L	MW-24	03/15/2017	yes	4.0000	ND				
Silver, total	ug/L	MW-24	09/27/2017	yes	4.0000	ND				
Silver, total	ug/L	MW-24	03/14/2018	yes	4.0000	ND				
Silver, total	ug/L	MW-24	09/12/2018	yes	4.0000	ND				
Silver, total	ug/L	MW-24	04/01/2019	yes	4.0000	ND				
Silver, total	ug/L	MW-24	09/12/2019	yes	4.0000	ND				
Silver, total	ug/L	MW-24	05/06/2020	yes	4.0000	ND				
Silver, total	ug/L	MW-24	09/03/2020	yes	4.0000	ND				
Silver, total	ug/L	MW-24	03/30/2021	yes	4.0000	ND				
Silver, total	ug/L	MW-24	09/08/2021	yes	4.0000	ND				
Silver, total	ug/L	MW-24	03/31/2022	yes	4.0000	ND				
Silver, total	ug/L	MW-24	08/30/2022	yes	4.0000	ND				
Silver, total	ug/L	MW-24	03/07/2023		4.0000	ND				
Silver, total	ug/L	MW-24	09/28/2023		4.0000	ND				

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Table 2

Analytical Data and CUSUM Summary

Constituent	Units	Well	Date	Background	Result		Outlier	CUSUM	Adjusted	
Silver, total	ug/L	MW-24	03/11/2024		4.0000	ND				
Silver, total	ug/L	MW-24	10/02/2024		4.0000	ND				
Thallium, total	ug/L	MW-24	10/21/2014	yes	2.0000	ND				
Thallium, total	ug/L	MW-24	06/23/2015	yes	1.0000	ND			2.0000	***
Thallium, total	ug/L	MW-24	11/12/2015	yes	1.0000	ND			2.0000	***
Thallium, total	ug/L	MW-24	04/12/2016	yes	2.0000	ND				
Thallium, total	ug/L	MW-24	09/16/2016	yes	4.0000	ND			2.0000	***
Thallium, total	ug/L	MW-24	03/15/2017	yes	4.0000	ND			2.0000	***
Thallium, total	ug/L	MW-24	09/27/2017	yes	4.0000	ND			2.0000	***
Thallium, total	ug/L	MW-24	03/14/2018	yes	4.0000	ND			2.0000	***
Thallium, total	ug/L	MW-24	09/12/2018	yes	4.0000	ND			2.0000	***
Thallium, total	ug/L	MW-24	04/01/2019	yes	2.0000	ND				
Thallium, total	ug/L	MW-24	09/12/2019	yes	2.0000	ND				
Thallium, total	ug/L	MW-24	05/06/2020	yes	2.0000	ND				
Thallium, total	ug/L	MW-24	09/03/2020	yes	2.0000	ND				
Thallium, total	ug/L	MW-24	03/30/2021	yes	2.0000	ND				
Thallium, total	ug/L	MW-24	09/08/2021	yes	2.0000	ND				
Thallium, total	ug/L	MW-24	03/31/2022	yes	2.0000	ND				
Thallium, total	ug/L	MW-24	08/30/2022	yes	2.0000	ND				
Thallium, total	ug/L	MW-24	03/07/2023		2.0000	ND				
Thallium, total	ug/L	MW-24	09/28/2023		2.0000	ND				
Thallium, total	ug/L	MW-24	03/11/2024		2.0000	ND				
Thallium, total	ug/L	MW-24	10/02/2024		2.0000	ND				
Vanadium, total	ug/L	MW-24	10/21/2014	yes	10.0000	ND			20.0000	***
Vanadium, total	ug/L	MW-24	06/23/2015	yes	5.0000	ND	yes			*
Vanadium, total	ug/L	MW-24	11/12/2015	yes	14.2000					
Vanadium, total	ug/L	MW-24	04/12/2016	yes	23.4000					
Vanadium, total	ug/L	MW-24	09/16/2016	yes	20.0000	ND				
Vanadium, total	ug/L	MW-24	03/15/2017	yes	20.0000	ND				
Vanadium, total	ug/L	MW-24	09/27/2017	yes	20.0000	ND				
Vanadium, total	ug/L	MW-24	03/14/2018	yes	20.0000	ND				
Vanadium, total	ug/L	MW-24	09/12/2018	yes	20.0000	ND				
Vanadium, total	ug/L	MW-24	04/01/2019	yes	20.0000	ND				
Vanadium, total	ug/L	MW-24	09/12/2019	yes	20.0000	ND				
Vanadium, total	ug/L	MW-24	05/06/2020	yes	20.0000	ND				
Vanadium, total	ug/L	MW-24	09/03/2020	yes	20.0000	ND				
Vanadium, total	ug/L	MW-24	03/30/2021	yes	20.0000	ND				
Vanadium, total	ug/L	MW-24	09/08/2021	yes	20.0000	ND				
Vanadium, total	ug/L	MW-24	03/31/2022	yes	20.0000	ND				
Vanadium, total	ug/L	MW-24	08/30/2022	yes	20.0000	ND				
Vanadium, total	ug/L	MW-24	03/07/2023		20.0000	ND				
Vanadium, total	ug/L	MW-24	09/28/2023		20.0000	ND				
Vanadium, total	ug/L	MW-24	03/11/2024		20.0000	ND				
Vanadium, total	ug/L	MW-24	10/02/2024		20.0000	ND				
Zinc, total	ug/L	MW-24	10/21/2014	yes	33.2000					
Zinc, total	ug/L	MW-24	06/23/2015	yes	10.7000					
Zinc, total	ug/L	MW-24	11/12/2015	yes	53.8000					
Zinc, total	ug/L	MW-24	04/12/2016	yes	97.0000					
Zinc, total	ug/L	MW-24	09/16/2016	yes	15.1000					
Zinc, total	ug/L	MW-24	03/15/2017	yes	8.1000					

* - Outlier for that well and constituent.
** - Non-outlier detected sample Result and / or CUSUM value exceeds limit.
*** - ND value replaced with median RL.
**** - ND value replaced with manual RL.
ND = Not detected, Result = detection limit.

Table 2

Analytical Data and CUSUM Summary

Constituent	Units	Well	Date	Background	Result		Outlier	CUSUM	Adjusted	
Zinc, total	ug/L	MW-24	09/27/2017	yes	8.0000	ND			20.0000	***
Zinc, total	ug/L	MW-24	03/14/2018	yes	8.7000					
Zinc, total	ug/L	MW-24	09/12/2018	yes	24.5000					
Zinc, total	ug/L	MW-24	04/01/2019	yes	69.3000					
Zinc, total	ug/L	MW-24	09/12/2019	yes	20.0000	ND				
Zinc, total	ug/L	MW-24	05/06/2020	yes	20.0000	ND				
Zinc, total	ug/L	MW-24	09/03/2020	yes	25.7000					
Zinc, total	ug/L	MW-24	03/30/2021	yes	20.0000	ND				
Zinc, total	ug/L	MW-24	09/08/2021	yes	20.0000	ND				
Zinc, total	ug/L	MW-24	03/31/2022	yes	27.2000					
Zinc, total	ug/L	MW-24	08/30/2022	yes	20.0000	ND				
Zinc, total	ug/L	MW-24	03/07/2023		20.0000	ND		29.0176		
Zinc, total	ug/L	MW-24	09/28/2023		20.0000	ND		29.0176		
Zinc, total	ug/L	MW-24	03/11/2024		20.0000	ND		29.0176		
Zinc, total	ug/L	MW-24	10/02/2024		20.0000	ND		29.0176		

* - Outlier for that well and constituent.
** - Non-outlier detected sample Result and / or CUSUM value exceeds limit.
*** - ND value replaced with median RL.
**** - ND value replaced with manual RL.
ND = Not detected, Result = detection limit.

Table 4

Dixon's Test Outliers
5% Significance Level

Constituent	Units	Well	Date	Result	ND Qualifier	Date Range	N	Critical Value
Lead, total	ug/L	MW-24	06/23/2015	0.9010		10/21/2014-08/30/2022	17	0.4891
Silver, total	ug/L	MW-24	10/21/2014	20.0000	< 20.0000	10/21/2014-08/30/2022	17	0.4891
Silver, total	ug/L	MW-24	06/23/2015	1.0000	< 1.0000	10/21/2014-08/30/2022	17	0.5054
Silver, total	ug/L	MW-24	11/12/2015	1.0000	< 1.0000	10/21/2014-08/30/2022	17	0.5054
Silver, total	ug/L	MW-24	04/12/2016	1.0000	< 1.0000	10/21/2014-08/30/2022	17	0.5054
Vanadium, total	ug/L	MW-24	06/23/2015	5.0000	< 5.0000	10/21/2014-08/30/2022	17	0.4891

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.

Worksheet 2 - Intra-Well Control Charts / Prediction Limits
Antimony, total (ug/L) at MW-24
Nonparametric Prediction Limit

Step	Equation	Description
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 2 - Intra-Well Control Charts / Prediction Limits
Arsenic, total (ug/L) at MW-24
Normal Control Limit

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **395.2** / **17** = **23.247**	Compute background mean.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**17247.9** - **156183.04**/**17**) / (**17**-1))^{½} = **22.445**	Compute background sd.
3	SCL = $\overline{\mathbf{X}}$ + **F** * **S** = **23.247** + **6.5** * **22.445** = **169.141**	Compute combined Shewhart-CUSUM normal control limit.
4	N' = **N** * (**N**-1) / 2 = **17** * (**17**-1) / 2 = **136**	Number of sample pairs during trend detection period.
5	S = **-1.721**	Sen's estimator of trend.
6	var(S) = **588.333**	Variance estimate for slope.
7	M_1(S) = (**N'** - **Z**$_{.99}$ * **var(S)**^{½}) / 2 = (**136** - **2.326** * **588.333**^{½}) / 2 = **39.791**	Ordinal position for one-sided lower confidence limit for slope. The LCL is the M_1^{th} largest slope estimate. When M_1 is not an integer, interpolation is used.
8	LCL(S) = **-4.936**	One-sided lower confidence limit for slope.

Worksheet 2 - Intra-Well Control Charts / Prediction Limits
Barium, total (ug/L) at MW-24
Normal Control Limit

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **5780.9** / **17** = **340.053**	Compute background mean.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.49**x**10^6** - **3.34**x**10^7**/**17**) / (**17**-1))^{½} = **181.258**	Compute background sd.
3	SCL = $\overline{\mathbf{X}}$ + **F** * **S** = **340.053** + **6.5** * **181.258** = **1518.228**	Compute combined Shewhart-CUSUM normal control limit.
4	N' = **N** * (**N**-1) / 2 = **17** * (**17**-1) / 2 = **136**	Number of sample pairs during trend detection period.
5	S = **-33.471**	Sen's estimator of trend.
6	var(S) = **589.333**	Variance estimate for slope.
7	M_1(S) = (**N'** - **Z**$_{.99}$ * **var(S)**^{½}) / 2 = (**136** - **2.326** * **589.333**^{½}) / 2 = **39.767**	Ordinal position for one-sided lower confidence limit for slope. The LCL is the M_1^{th} largest slope estimate. When M_1 is not an integer, interpolation is used.
8	LCL(S) = **-82.886**	One-sided lower confidence limit for slope.

Worksheet 2 - Intra-Well Control Charts / Prediction Limits
Beryllium, total (ug/L) at MW-24
Nonparametric Prediction Limit

Step	Equation	Description
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 2 - Intra-Well Control Charts / Prediction Limits
Cadmium, total (ug/L) at MW-24
Nonparametric Prediction Limit

Step	Equation	Description
1	PL = max(X) = **0.8**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

Worksheet 2 - Intra-Well Control Charts / Prediction Limits
Chromium, total (ug/L) at MW-24
Nonparametric Prediction Limit

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

Worksheet 2 - Intra-Well Control Charts / Prediction Limits
Cobalt, total (ug/L) at MW-24
Normal Control Limit

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **138.634** / **17** = **8.155**	Compute background mean.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**1887.636** - **19219.386**/**17**) / (**17**-1))^{½} = **6.879**	Compute background sd.
3	SCL = $\overline{\mathbf{X}}$ + **F** * **S** = **8.155** + **6.5** * **6.879** = **52.867**	Compute combined Shewhart-CUSUM normal control limit.
4	N' = **N** * (**N**-1) / 2 = **17** * (**17**-1) / 2 = **136**	Number of sample pairs during trend detection period.
5	S = **0.848**	Sen's estimator of trend.
6	var(S) = **587.333**	Variance estimate for slope.
7	M_1(S) = (**N'** - **Z**$_{.99}$ * **var(S)**^{½}) / 2 = (**136** - **2.326** * **587.333**^{½}) / 2 = **39.815**	Ordinal position for one-sided lower confidence limit for slope. The LCL is the M_1^{th} largest slope estimate. When M_1 is not an integer, interpolation is used.
8	LCL(S) = **-1.233**	One-sided lower confidence limit for slope.

Worksheet 2 - Intra-Well Control Charts / Prediction Limits
Copper, total (ug/L) at MW-24
Nonparametric Prediction Limit

Step	Equation	Description
1	PL = max(X) = **10.7**	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 2 - Intra-Well Control Charts / Prediction Limits
Lead, total (ug/L) at MW-24
Normal Control Limit

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **75.83** / **16** = **4.739**	Compute background mean.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**403.278** - **5750.189/16**) / (**16**-1))^{½} = **1.711**	Compute background sd.
3	SCL = $\overline{\mathbf{X}}$ + **F** * **S** = **4.739** + **6.5** * **1.711** = **15.858**	Compute combined Shewhart-CUSUM normal control limit.
4	N' = **N** * (**N**-1) / 2 = **16** * (**16**-1) / 2 = **120**	Number of sample pairs during trend detection period.
5	S = **0.0**	Sen's estimator of trend.
6	var(S) = **280.667**	Variance estimate for slope.
7	M_1(S) = (**N'** - **Z**$_{.99}$ * **var(S)**^{½}) / 2 = (**120** - **2.326** * **280.667**^{½}) / 2 = **40.516**	Ordinal position for one-sided lower confidence limit for slope. The LCL is the M_1^{th} largest slope estimate. When M_1 is not an integer, interpolation is used.
8	LCL(S) = **-0.305**	One-sided lower confidence limit for slope.

Worksheet 2 - Intra-Well Control Charts / Prediction Limits
Nickel, total (ug/L) at MW-24
Normal Control Limit

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **376.8** / **17** = **22.165**	Compute background mean.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**14069.36** - **141978.24**/**17**) / (**17**-1))^{½} = **18.904**	Compute background sd.
3	SCL = $\overline{\mathbf{X}}$ + **F** * **S** = **22.165** + **6.5** * **18.904** = **145.04**	Compute combined Shewhart-CUSUM normal control limit.
4	N' = **N** * (**N**-1) / 2 = **17** * (**17**-1) / 2 = **136**	Number of sample pairs during trend detection period.
5	S = **2.44**	Sen's estimator of trend.
6	var(S) = **585.667**	Variance estimate for slope.
7	M_1(S) = (**N'** - **Z**$_{.99}$ * **var(S)**^{½}) / 2 = (**136** - **2.326** * **585.667**^{½}) / 2 = **39.855**	Ordinal position for one-sided lower confidence limit for slope. The LCL is the M_1^{th} largest slope estimate. When M_1 is not an integer, interpolation is used.
8	LCL(S) = **0.666**	One-sided lower confidence limit for slope.
9	LCL(S) > 0	**Significant increasing trend.**

Worksheet 2 - Intra-Well Control Charts / Prediction Limits
Selenium, total (ug/L) at MW-24
Nonparametric Prediction Limit

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

Worksheet 2 - Intra-Well Control Charts / Prediction Limits
Silver, total (ug/L) at MW-24
Nonparametric Prediction Limit

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

Worksheet 2 - Intra-Well Control Charts / Prediction Limits
Thallium, total (ug/L) at MW-24
Nonparametric Prediction Limit

Step	Equation	Description
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 2 - Intra-Well Control Charts / Prediction Limits
Vanadium, total (ug/L) at MW-24
Nonparametric Prediction Limit

Step	Equation	Description
1	PL = max(X) = **23.4**	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 2 - Intra-Well Control Charts / Prediction Limits
Zinc, total (ug/L) at MW-24
Normal Control Limit

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **493.3** / **17** = **29.018**	Compute background mean.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**23092.55** - **243344.89**/**17**) / (**17**-1))^{½} = **23.423**	Compute background sd.
3	SCL = $\overline{\mathbf{X}}$ + **F** * **S** = **29.018** + **6.5** * **23.423** = **181.267**	Compute combined Shewhart-CUSUM normal control limit.
4	N' = **N** * (**N**-1) / 2 = **17** * (**17**-1) / 2 = **136**	Number of sample pairs during trend detection period.
5	S = **0.0**	Sen's estimator of trend.
6	var(S) = **561.0**	Variance estimate for slope.
7	M_1(S) = (**N'** - **Z**$_{.99}$ * **var(S)**^{½}) / 2 = (**136** - **2.326** * **561.0**^{½}) / 2 = **40.454**	Ordinal position for one-sided lower confidence limit for slope. The LCL is the M_1^{th} largest slope estimate. When M_1 is not an integer, interpolation is used.
8	LCL(S) = **-4.758**	One-sided lower confidence limit for slope.

Attachment E

Historical VOC Detections

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
2-butanone	AW-2	9/08/2021		8.5	5.0	ug/L
Acetone	AW-2	9/27/2017		14.4	10.0	ug/L
Acetone	AW-2	9/08/2021		138.0	10.0	ug/L
Benzene	AW-2	10/20/2014		1.870	.500	ug/L
Benzene	AW-2	6/23/2015		1.950	.500	ug/L
Benzene	AW-2	11/12/2015		.961	.500	ug/L
Benzene	AW-2	4/11/2016		1.020	.500	ug/L
Benzene	AW-2	9/12/2018		1.000	1.000	ug/L
Benzene	AW-2	9/08/2021		1.400	1.000	ug/L
Chloroethane	AW-2	9/08/2021		1	1	ug/L
1,1-dichloroethane	AW-3	4/11/2016		1.02	1.00	ug/L
1,1-dichloroethane	AW-3	9/16/2016		1.20	1.00	ug/L
1,1-dichloroethane	AW-3	3/15/2017		2.50	1.00	ug/L
1,1-dichloroethane	AW-3	9/27/2017		1.60	1.00	ug/L
1,4-dichlorobenzene	AW-3	10/20/2014		2.8	1.0	ug/L
1,4-dichlorobenzene	AW-3	9/16/2016		1.9	1.0	ug/L
1,4-dichlorobenzene	AW-3	9/27/2017		1.1	1.0	ug/L
1,4-dichlorobenzene	AW-3	3/14/2018		3.5	1.0	ug/L
1,4-dichlorobenzene	AW-3	9/12/2018		4.0	1.0	ug/L
1,4-dichlorobenzene	AW-3	4/01/2019		2.6	1.0	ug/L
1,4-dichlorobenzene	AW-3	5/06/2020		2.2	1.0	ug/L
1,4-dichlorobenzene	AW-3	9/03/2020		2.0	1.0	ug/L
1,4-dichlorobenzene	AW-3	3/30/2021		2.8	1.0	ug/L
1,4-dichlorobenzene	AW-3	9/08/2021		3.8	1.0	ug/L
1,4-dichlorobenzene	AW-3	3/31/2022		2.3	1.0	ug/L
1,4-dichlorobenzene	AW-3	8/30/2022		2.2	1.0	ug/L
1,4-dichlorobenzene	AW-3	3/07/2023		2.7	1.0	ug/L
1,4-dichlorobenzene	AW-3	9/28/2023		3.4	1.0	ug/L
1,4-dichlorobenzene	AW-3	3/11/2024		3.2	1.0	ug/L
1,4-dichlorobenzene	AW-3	10/02/2024		2.8	1.0	ug/L
2-butanone	AW-3	9/12/2018		6	5	ug/L
Acetone	AW-3	9/12/2019		11.4	10.0	ug/L
Acetone	AW-3	3/31/2022		24.4	10.0	ug/L
Benzene	AW-3	10/20/2014		4.19	.50	ug/L
Benzene	AW-3	6/23/2015		4.98	.50	ug/L
Benzene	AW-3	11/13/2015		1.53	.50	ug/L
Benzene	AW-3	4/11/2016		1.62	.50	ug/L
Benzene	AW-3	9/16/2016		1.00	1.00	ug/L
Benzene	AW-3	3/14/2018		5.60	1.00	ug/L
Benzene	AW-3	9/12/2018		4.10	1.00	ug/L
Benzene	AW-3	9/12/2019		1.10	1.00	ug/L
Benzene	AW-3	5/06/2020		1.20	1.00	ug/L
Benzene	AW-3	3/30/2021		5.20	1.00	ug/L
Benzene	AW-3	9/08/2021		4.10	1.00	ug/L
Benzene	AW-3	3/31/2022		1.40	1.00	ug/L
Benzene	AW-3	8/30/2022		2.30	1.00	ug/L
Benzene	AW-3	3/07/2023		2.60	1.00	ug/L
Benzene	AW-3	9/28/2023		2.60	1.00	ug/L
Benzene	AW-3	3/11/2024		2.70	1.00	ug/L
Bis(2-ethylhexyl) phthalate	AW-3	3/15/2017		16	8	ug/L
Chlorobenzene	AW-3	3/15/2017		1.1	1.0	ug/L
Chloroethane	AW-3	10/20/2014		7.13	1.00	ug/L
Chloroethane	AW-3	6/23/2015		8.62	1.00	ug/L
Chloroethane	AW-3	4/11/2016		4.73	1.00	ug/L
Chloroethane	AW-3	9/16/2016		4.60	1.00	ug/L
Chloroethane	AW-3	3/15/2017		6.80	1.00	ug/L
Chloroethane	AW-3	9/27/2017		4.60	1.00	ug/L
Chloroethane	AW-3	3/14/2018		5.50	1.00	ug/L
Chloroethane	AW-3	9/12/2018		3.00	1.00	ug/L
Chloroethane	AW-3	4/01/2019		1.20	1.00	ug/L
Chloroethane	AW-3	5/06/2020		2.50	1.00	ug/L
Chloroethane	AW-3	9/03/2020		3.90	1.00	ug/L
Chloroethane	AW-3	3/30/2021		4.50	1.00	ug/L
Chloroethane	AW-3	9/08/2021		4.20	1.00	ug/L
Chloroethane	AW-3	3/31/2022		3.00	1.00	ug/L
Chloroethane	AW-3	8/30/2022		4.20	1.00	ug/L
Chloroethane	AW-3	3/07/2023		3.50	1.00	ug/L
Chloroethane	AW-3	9/28/2023		3.80	1.00	ug/L
Chloroethane	AW-3	3/11/2024		3.00	1.00	ug/L
Chloroethane	AW-3	10/02/2024		3.00	1.00	ug/L
Cis-1,2-dichloroethene	AW-3	10/20/2014		2.89	1.00	ug/L
Cis-1,2-dichloroethene	AW-3	6/23/2015		3.92	1.00	ug/L
Cis-1,2-dichloroethene	AW-3	11/13/2015		2.23	1.00	ug/L
Cis-1,2-dichloroethene	AW-3	4/11/2016		1.92	1.00	ug/L
Cis-1,2-dichloroethene	AW-3	9/16/2016		1.60	1.00	ug/L
Cis-1,2-dichloroethene	AW-3	3/15/2017		3.00	1.00	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Cis-1,2-dichloroethene	AW-3	9/27/2017		2.10	1.00	ug/L
Cis-1,2-dichloroethene	AW-3	5/06/2020		1.20	1.00	ug/L
Cis-1,2-dichloroethene	AW-3	9/03/2020		2.70	1.00	ug/L
Cis-1,2-dichloroethene	AW-3	3/30/2021		4.00	1.00	ug/L
Cis-1,2-dichloroethene	AW-3	8/30/2022		1.10	1.00	ug/L
Cis-1,2-dichloroethene	AW-3	3/07/2023		2.90	1.00	ug/L
Cis-1,2-dichloroethene	AW-3	9/28/2023		1.20	1.00	ug/L
Ethylbenzene	AW-3	6/23/2015		2.1	1.0	ug/L
Toluene	AW-3	9/12/2018		1	1	ug/L
Vinyl chloride	AW-3	3/30/2021		2.1	1.0	ug/L
1,1-dichloroethane	MW-14	10/21/2014		2.46	1.00	ug/L
1,1-dichloroethane	MW-14	6/22/2015		1.52	1.00	ug/L
1,1-dichloroethane	MW-14	3/15/2017		1.30	1.00	ug/L
1,1-dichloroethane	MW-14	9/27/2017		1.10	1.00	ug/L
1,1-dichloroethane	MW-14	4/01/2019		1.00	1.00	ug/L
Acetone	MW-14	9/27/2017		12.9	10.0	ug/L
Acetone	MW-19	9/27/2017		20.8	10.0	ug/L
1,4-dichlorobenzene	MW-20	9/16/2016		3.4	1.0	ug/L
1,4-dichlorobenzene	MW-20	3/15/2017		1.2	1.0	ug/L
1,4-dichlorobenzene	MW-20	9/27/2017		1.4	1.0	ug/L
1,4-dichlorobenzene	MW-20	3/14/2018		1.7	1.0	ug/L
1,4-dichlorobenzene	MW-20	9/12/2018		3.0	1.0	ug/L
1,4-dichlorobenzene	MW-20	4/01/2019		2.9	1.0	ug/L
1,4-dichlorobenzene	MW-20	5/06/2020		2.5	1.0	ug/L
1,4-dichlorobenzene	MW-20	9/03/2020		1.6	1.0	ug/L
1,4-dichlorobenzene	MW-20	3/30/2021		2.6	1.0	ug/L
1,4-dichlorobenzene	MW-20	9/08/2021		2.9	1.0	ug/L
1,4-dichlorobenzene	MW-20	3/31/2022		2.4	1.0	ug/L
1,4-dichlorobenzene	MW-20	8/30/2022		2.8	1.0	ug/L
1,4-dichlorobenzene	MW-20	3/07/2023		2.8	1.0	ug/L
1,4-dichlorobenzene	MW-20	9/28/2023		3.4	1.0	ug/L
1,4-dichlorobenzene	MW-20	3/11/2024		2.6	1.0	ug/L
1,4-dichlorobenzene	MW-20	10/02/2024		3.2	1.0	ug/L
Acetone	MW-20	6/23/2015		14.8	10.0	ug/L
Acetone	MW-20	4/11/2016		467.0	10.0	ug/L
Acetone	MW-20	9/16/2016		33.3	10.0	ug/L
Benzene	MW-20	10/21/2014		2.51	.50	ug/L
Benzene	MW-20	6/23/2015		3.59	.50	ug/L
Benzene	MW-20	11/12/2015		3.67	.50	ug/L
Benzene	MW-20	4/11/2016		2.67	.50	ug/L
Benzene	MW-20	9/16/2016		3.70	1.00	ug/L
Benzene	MW-20	3/15/2017		2.50	1.00	ug/L
Benzene	MW-20	9/27/2017		2.60	1.00	ug/L
Benzene	MW-20	3/14/2018		1.70	1.00	ug/L
Benzene	MW-20	9/12/2018		2.70	1.00	ug/L
Benzene	MW-20	4/01/2019		2.40	1.00	ug/L
Benzene	MW-20	9/12/2019		2.80	1.00	ug/L
Benzene	MW-20	5/06/2020		2.50	1.00	ug/L
Benzene	MW-20	9/03/2020		2.70	1.00	ug/L
Benzene	MW-20	3/30/2021		1.90	1.00	ug/L
Benzene	MW-20	9/08/2021		2.80	1.00	ug/L
Benzene	MW-20	3/31/2022		2.30	1.00	ug/L
Benzene	MW-20	8/30/2022		3.60	1.00	ug/L
Benzene	MW-20	3/07/2023		2.20	1.00	ug/L
Benzene	MW-20	9/28/2023		2.60	1.00	ug/L
Benzene	MW-20	3/11/2024		2.30	1.00	ug/L
Benzene	MW-20	10/02/2024		2.80	1.00	ug/L
Chlorobenzene	MW-20	10/21/2014		2.42	1.00	ug/L
Chlorobenzene	MW-20	6/23/2015		3.25	1.00	ug/L
Chlorobenzene	MW-20	9/16/2016		3.10	1.00	ug/L
Chlorobenzene	MW-20	3/15/2017		1.40	1.00	ug/L
Chlorobenzene	MW-20	9/27/2017		1.60	1.00	ug/L
Chlorobenzene	MW-20	9/12/2018		3.10	1.00	ug/L
Chlorobenzene	MW-20	4/01/2019		2.60	1.00	ug/L
Chlorobenzene	MW-20	9/12/2019		3.60	1.00	ug/L
Chlorobenzene	MW-20	5/06/2020		2.20	1.00	ug/L
Chlorobenzene	MW-20	9/03/2020		1.70	1.00	ug/L
Chlorobenzene	MW-20	3/30/2021		2.20	1.00	ug/L
Chlorobenzene	MW-20	9/08/2021		2.70	1.00	ug/L
Chlorobenzene	MW-20	3/31/2022		2.60	1.00	ug/L
Chlorobenzene	MW-20	8/30/2022		3.10	1.00	ug/L
Chlorobenzene	MW-20	3/07/2023		2.50	1.00	ug/L
Chlorobenzene	MW-20	9/28/2023		3.40	1.00	ug/L
Chlorobenzene	MW-20	3/11/2024		2.80	1.00	ug/L
Chlorobenzene	MW-20	10/02/2024		3.60	1.00	ug/L
Chloroethane	MW-20	9/16/2016		1.4	1.0	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Chloroethane	MW-20	3/15/2017		1.1	1.0	ug/L
Toluene	MW-20	10/21/2014		3.15	1.00	ug/L
Toluene	MW-20	6/23/2015		3.09	1.00	ug/L
Toluene	MW-20	9/16/2016		1.40	1.00	ug/L
Toluene	MW-20	8/30/2022		2.10	1.00	ug/L
Toluene	MW-20	3/11/2024		1.10	1.00	ug/L
Acetone	MW-24	9/27/2017		13.6	10.0	ug/L
Acetone	MW-24	4/01/2019		25.0	10.0	ug/L
Benzene	MW-24	3/15/2017		1.3	1.0	ug/L
Benzene	MW-24	4/01/2019		2.1	1.0	ug/L
Chloroethane	MW-24	4/01/2019		1.6	1.0	ug/L
Ethylbenzene	MW-24	9/16/2016		1.2	1.0	ug/L
Ethylbenzene	MW-24	3/15/2017		1.9	1.0	ug/L
Ethylbenzene	MW-24	4/01/2019		4.8	1.0	ug/L
Toluene	MW-24	9/16/2016		5.5	1.0	ug/L
Xylenes, total	MW-24	9/16/2016		2.2	2.0	ug/L
Xylenes, total	MW-24	3/15/2017		2.3	2.0	ug/L
Xylenes, total	MW-24	4/01/2019		6.2	2.0	ug/L
Acetone	MW-25	9/27/2017		13.1	10.0	ug/L
Bis(2-ethylhexyl) phthalate	MW-25	3/15/2017		17	8	ug/L
Bis(2-ethylhexyl) phthalate	MW-25	9/27/2017		8	6	ug/L
Bis(2-ethylhexyl) phthalate	MW-25	3/14/2018		7	6	ug/L
Acetone	MW-9	9/27/2017		17.4	10.0	ug/L
Toluene	MW-9	8/30/2022		1.8	1.0	ug/L
Vinyl chloride	South Underdrain	8/30/2022		2	1	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 F

Assessment Statistics for Historical VOC Detections

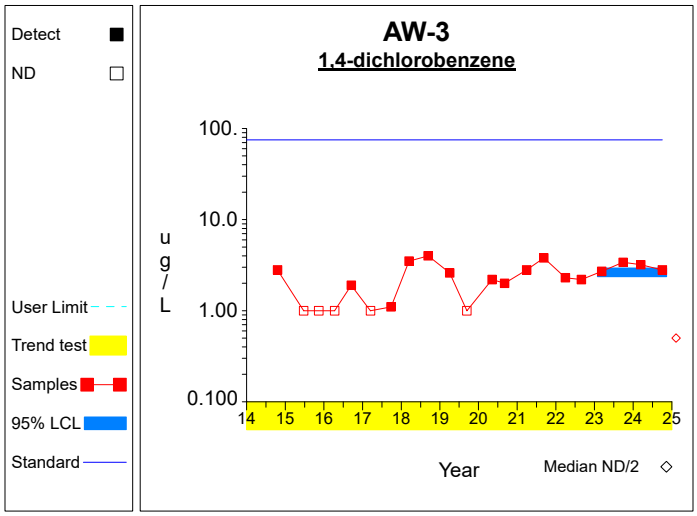
Table 1

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

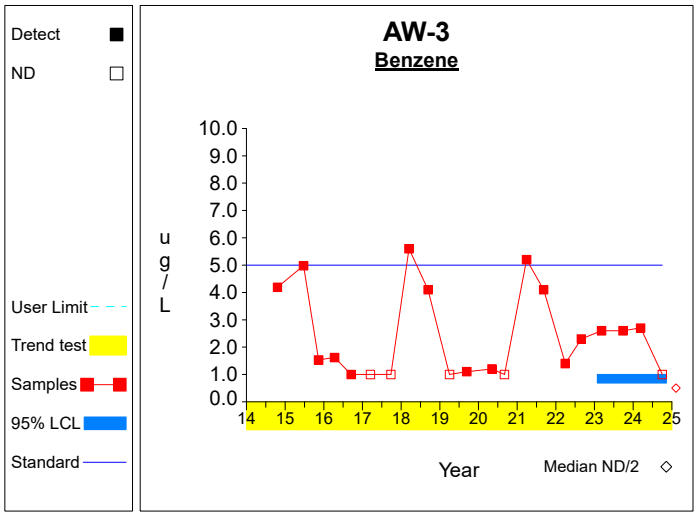
Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend
1,4-dichlorobenzene	ug/L	AW-3	4	3.025	0.330	1.176	2.636	3.414	75.000	
Benzene	ug/L	AW-3	4	2.100	1.068	1.176	0.844	3.356	5.000	
Chlorobenzene	ug/L	AW-3	4	0.500	0.000	1.176	0.500	0.500	100.000	
Chloroethane	ug/L	AW-3	4	3.325	0.395	1.176	2.861	3.789	2800.000	
Cis-1,2-dichloroethene	ug/L	AW-3	4	1.275	1.132	1.176	0.000	2.607	70.000	
Toluene	ug/L	AW-3	4	0.500	0.000	1.176	0.500	0.500	1000.000	
1,4-dichlorobenzene	ug/L	MW-20	4	3.000	0.365	1.176	2.570	3.430	75.000	inc
Benzene	ug/L	MW-20	4	2.475	0.275	1.176	2.151	2.799	5.000	
Chlorobenzene	ug/L	MW-20	4	3.075	0.512	1.176	2.472	3.678	100.000	
Chloroethane	ug/L	MW-20	4	0.500	0.000	1.176	0.500	0.500	2800.000	
Cis-1,2-dichloroethene	ug/L	MW-20	4	0.500	0.000	1.176	0.500	0.500	70.000	
Toluene	ug/L	MW-20	4	0.650	0.300	1.176	0.297	1.003	1000.000	

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

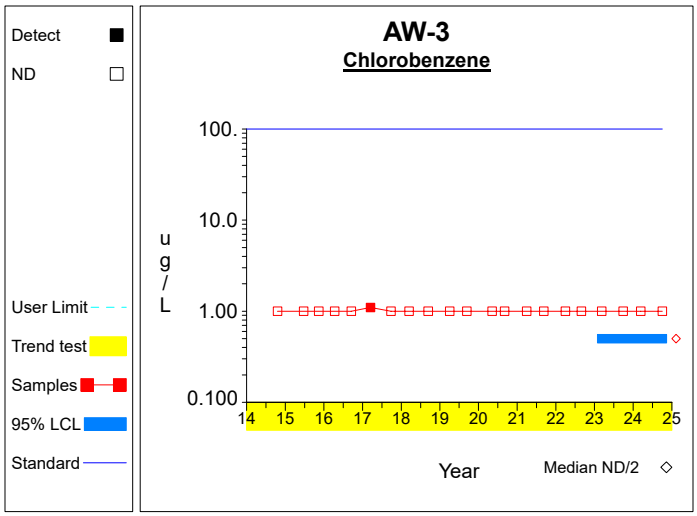
Confidence Limits (Assessment)



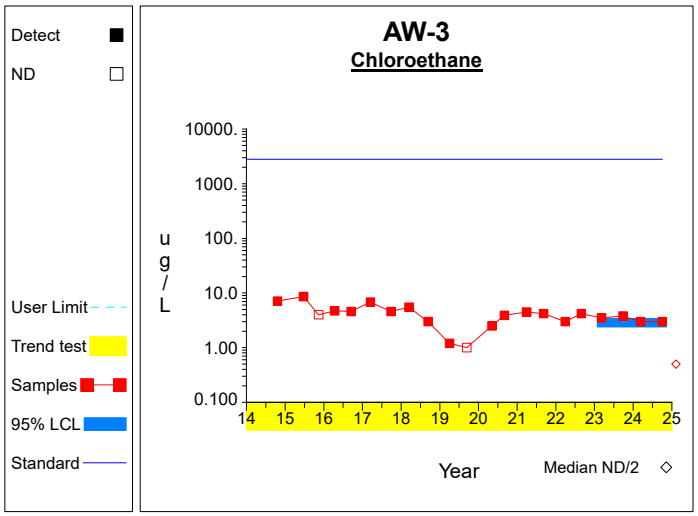
Graph 1



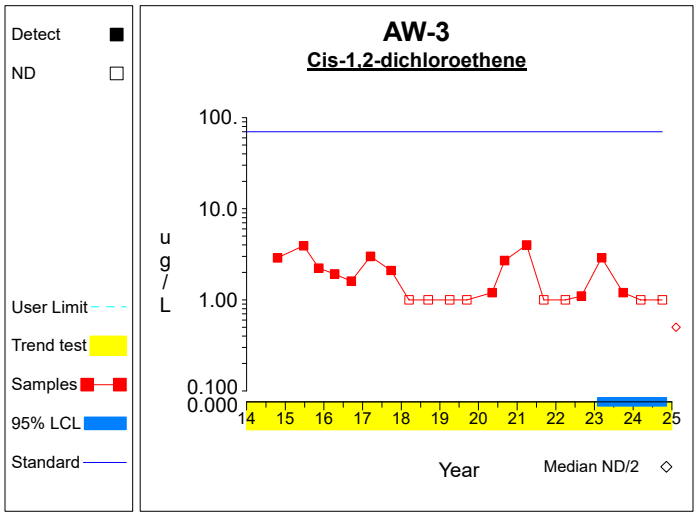
Graph 2



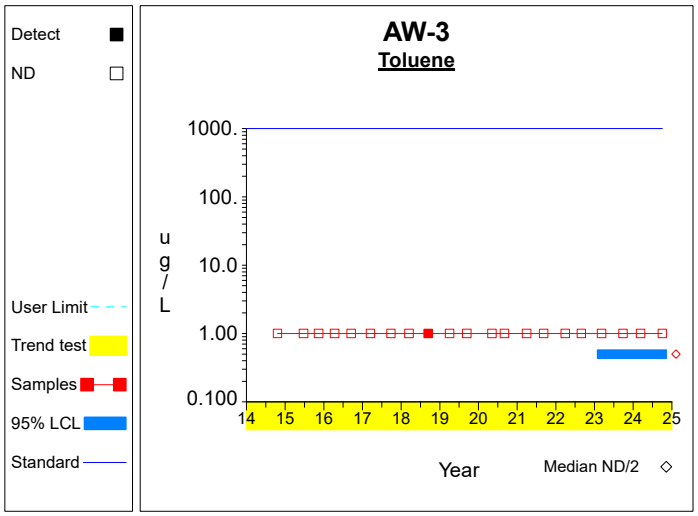
Graph 3



Graph 4



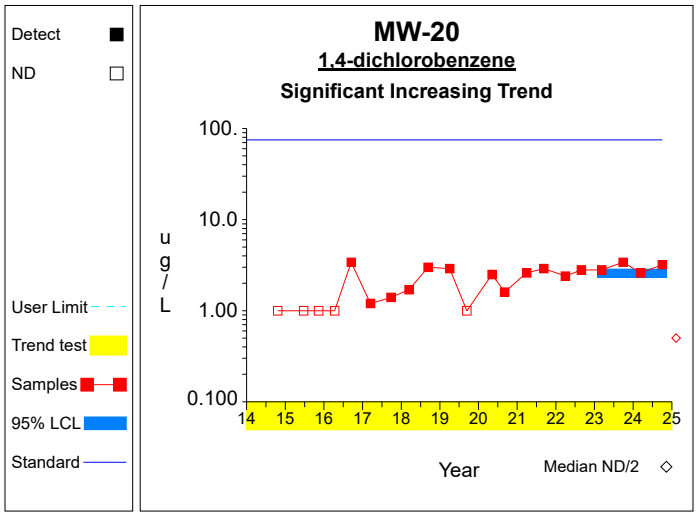
Graph 5



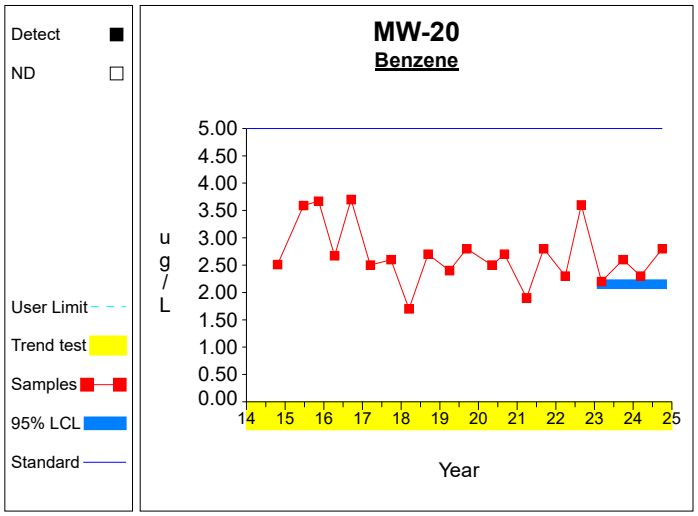
Graph 6

Prepared by: Otter Creek Environmental

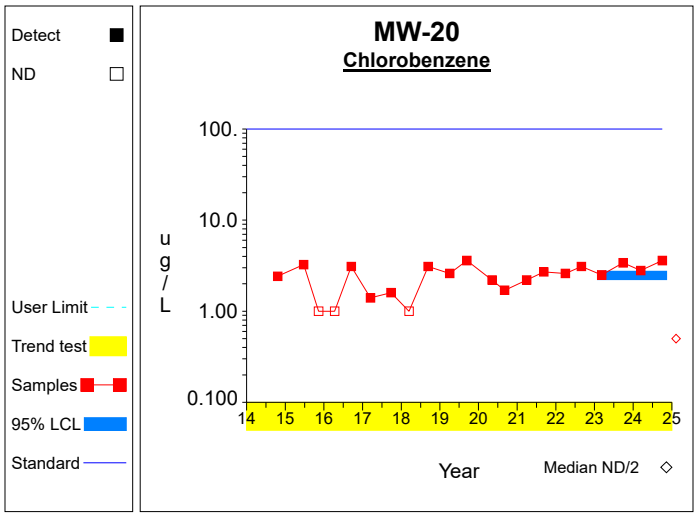
Confidence Limits (Assessment)



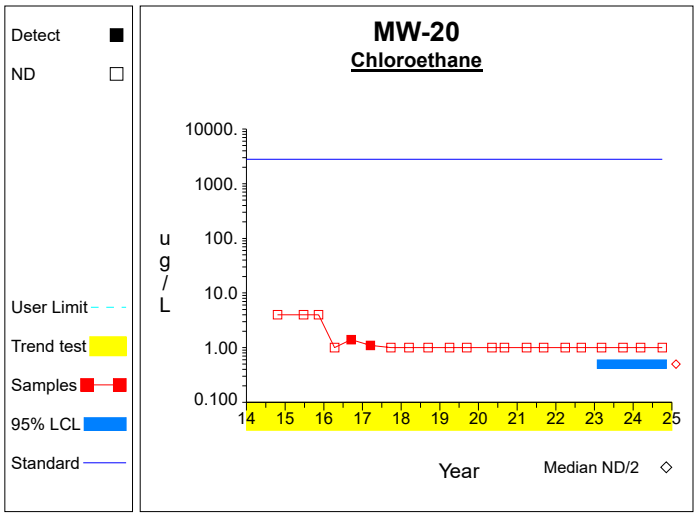
Graph 7



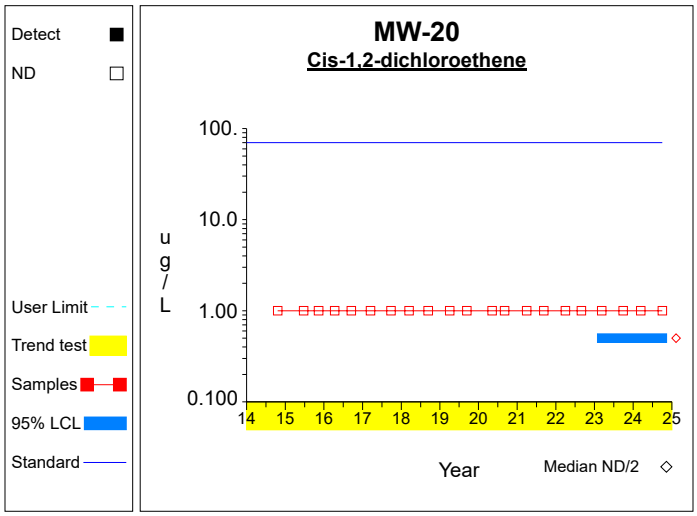
Graph 8



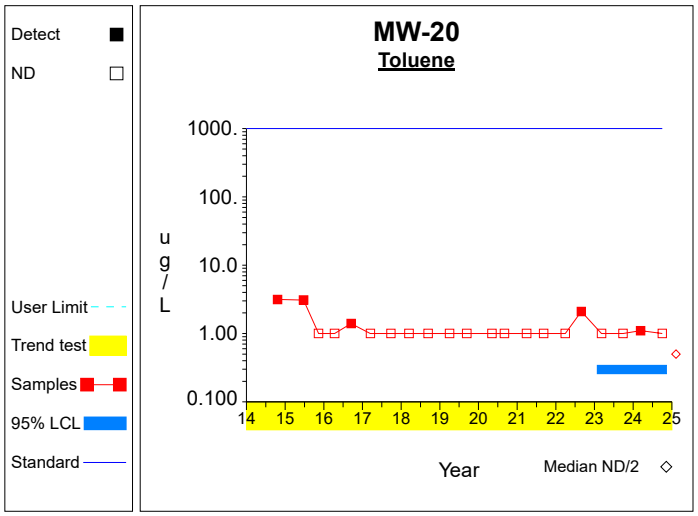
Graph 9



Graph 10



Graph 11



Graph 12

Prepared by: Otter Creek Environmental

Worksheet 6 - Assessment Monitoring
1,4-dichlorobenzene (ug/L) at AW-3

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **12.1** / **4** = **3.025**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**36.93** - **146.41**/**4**) / (**4**-1))^{½} = **0.33**	Compute sd of the last 4 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **3.025** - **2.353** * **0.33**/**4**^{½} = **2.636**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **3.025** + **2.353** * **0.33**/**4**^{½} = **3.414**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **21** * (**21**-1) / 2 = **210**	Number of sample pairs during trend detection period.
6	S = **0.245**	Sen's estimator of trend.
7	var(S) = **1075.333**	Variance estimate for slope.
8	M(S) = (**N**' ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**210** ± **2.576** * **1075.333**^{½}) / 2 = [**62.764**, **147.236**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.391**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Benzene (ug/L) at AW-3

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **8.4** / **4** = **2.1**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**21.06** - **70.56**/**4**) / (**4**-1))^{½} = **1.068**	Compute sd of the last 4 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **2.1** - **2.353** * **1.068**/**4**^{½} = **0.844**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **2.1** + **2.353** * **1.068**/**4**^{½} = **3.356**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **21** * (**21**-1) / 2 = **210**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **1078.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**210** ± **2.576** * **1078.0**^{½}) / 2 = [**62.711**, **147.289**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.484**, **0.309**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Chlorobenzene (ug/L) at AW-3

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **2.0** / **4** = **0.5**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**1.0** - **4.0**/**4**) / (**4**-1))^{½} = **0.0**	Compute sd of the last 4 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.5** - **2.353** * **0.0**/**4**^{½} = **0.5**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.5** + **2.353** * **0.0**/**4**^{½} = **0.5**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **21** * (**21**-1) / 2 = **210**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **146.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**210** ± **2.576** * **146.667**^{½}) / 2 = [**89.402**, **120.598**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Chloroethane (ug/L) at AW-3

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **13.3** / **4** = **3.325**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**44.69** - **176.89**/**4**) / (**4**-1))^{½} = **0.395**	Compute sd of the last 4 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **3.325** - **2.353** * **0.395**/**4**^{½} = **2.861**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **3.325** + **2.353** * **0.395**/**4**^{½} = **3.789**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **21** * (**21**-1) / 2 = **210**	Number of sample pairs during trend detection period.
6	S = **-0.252**	Sen's estimator of trend.
7	var(S) = **1085.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**210** ± **2.576** * **1085.0**^{½}) / 2 = [**62.574**, **147.426**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.578**, **0.12**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cis-1,2-dichloroethene (ug/L) at AW-3

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **5.1** / **4** = **1.275**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**10.35** - **26.01**/**4**) / (**4**-1))^{½} = **1.132**	Compute sd of the last 4 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **1.275** - **2.353** * **1.132**/**4**^{½} = **0.0**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **1.275** + **2.353** * **1.132**/**4**^{½} = **2.607**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **21** * (**21**-1) / 2 = **210**	Number of sample pairs during trend detection period.
6	S = **-0.163**	Sen's estimator of trend.
7	var(S) = **1030.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**210** ± **2.576** * **1030.333**^{½}) / 2 = [**63.657**, **146.343**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.421**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Toluene (ug/L) at AW-3

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **2.0** / **4** = **0.5**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**1.0** - **4.0**/**4**) / (**4**-1))^{½} = **0.0**	Compute sd of the last 4 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.5** - **2.353** * **0.0**/**4**^{½} = **0.5**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.5** + **2.353** * **0.0**/**4**^{½} = **0.5**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **21** * (**21**-1) / 2 = **210**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **146.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**210** ± **2.576** * **146.667**^{½}) / 2 = [**89.402**, **120.598**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
1,4-dichlorobenzene (ug/L) at MW-20

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **12.0** / **4** = **3.0**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**36.4** - **144.0**/**4**) / (**4**-1))^{½} = **0.365**	Compute sd of the last 4 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **3.0** - **2.353** * **0.365**/**4**^{½} = **2.57**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **3.0** + **2.353** * **0.365**/**4**^{½} = **3.43**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **21** * (**21**-1) / 2 = **210**	Number of sample pairs during trend detection period.
6	S = **0.273**	Sen's estimator of trend.
7	var(S) = **1076.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**210** ± **2.576** * **1076.0**^{½}) / 2 = [**62.75**, **147.25**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.02**, **0.387**]	Two-sided confidence interval for slope.
10	LCL(S) > 0	**Significant increasing trend.**

Worksheet 6 - Assessment Monitoring
Benzene (ug/L) at MW-20

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **9.9** / **4** = **2.475**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**24.73** - **98.01**/**4**) / (**4**-1))^{½} = **0.275**	Compute sd of the last 4 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **2.475** - **2.353** * **0.275**/**4**^{½} = **2.151**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **2.475** + **2.353** * **0.275**/**4**^{½} = **2.799**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **21** * (**21**-1) / 2 = **210**	Number of sample pairs during trend detection period.
6	S = **-0.033**	Sen's estimator of trend.
7	var(S) = **1089.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**210** ± **2.576** * **1089.0**^{½}) / 2 = [**62.496**, **147.504**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.168**, **0.054**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Chlorobenzene (ug/L) at MW-20

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **12.3** / **4** = **3.075**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**38.61** - **151.29**/**4**) / (**4**-1))^{½} = **0.512**	Compute sd of the last 4 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **3.075** - **2.353** * **0.512**/**4**^{½} = **2.472**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **3.075** + **2.353** * **0.512**/**4**^{½} = **3.678**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **21** * (**21**-1) / 2 = **210**	Number of sample pairs during trend detection period.
6	S = **0.183**	Sen's estimator of trend.
7	var(S) = **1086.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**210** ± **2.576** * **1086.333**^{½}) / 2 = [**62.548**, **147.452**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.037**, **0.367**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Chloroethane (ug/L) at MW-20

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **2.0** / **4** = **0.5**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**1.0** - **4.0**/**4**) / (**4**-1))^{½} = **0.0**	Compute sd of the last 4 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.5** - **2.353** * **0.0**/**4**^{½} = **0.5**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.5** + **2.353** * **0.0**/**4**^{½} = **0.5**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **21** * (**21**-1) / 2 = **210**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **279.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**210** ± **2.576** * **279.667**^{½}) / 2 = [**83.46**, **126.54**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cis-1,2-dichloroethene (ug/L) at MW-20

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **2.0** / **4** = **0.5**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**1.0** - **4.0**/**4**) / (**4**-1))^{½} = **0.0**	Compute sd of the last 4 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.5** - **2.353** * **0.0**/**4**^{½} = **0.5**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.5** + **2.353** * **0.0**/**4**^{½} = **0.5**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **21** * (**21**-1) / 2 = **210**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**210** ± **2.576** * **0.0**^{½}) / 2 = [**105.0**, **105.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Toluene (ug/L) at MW-20

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **2.6** / **4** = **0.65**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**1.96** - **6.76**/**4**) / (**4**-1))^{½} = **0.3**	Compute sd of the last 4 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.65** - **2.353** * **0.3**/**4**^{½} = **0.297**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.65** + **2.353** * **0.3**/**4**^{½} = **1.003**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **21** * (**21**-1) / 2 = **210**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **603.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**210** ± **2.576** * **603.333**^{½}) / 2 = [**73.363**, **136.637**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

APPENDIX D.3 –Summary of Field Turbidity Measurements

Benton County Sanitary Landfill

Field Turbidity Over Time

No-Purge Sampling

Date	Well																		
	6	12	14	20	24	25	AW2	AW3	26	27	28	7	AW-9	AW-1	MW-41	Max	Min	Median	Average
9/15/16	0.51	19.16	0.46	26.01	4.68	2.44	33.51	1.97								**49.66**	**0.46**	**6.85**	**13.89**
10/31/16									1.01	2.59	7.38					**7.38**	**1.01**	**2.59**	**3.66**
3/15/17	5.72	73.1	1.76	5.42	10.71	8.7	3.6	4.26	1.08	18.3	5.65		2.35			**138.00**	**1.08**	**5.72**	**20.30**
5/9/17												7.25				**7.25**	**7.25**	**7.25**	**7.25**
9/27/17	0.86	7.64	1.14	1.5	6.62	0.96	3.9	3.17	2.73	304		529				**529.00**	**0.86**	**4.20**	**68.99**
12/13/17							1.17			15.50		41.24				**41.24**	**1.17**	**15.42**	**18.31**
3/14/18		9.55	2.05	7.9	8.38	1.05	1.19	0.94	0.22	20.68	6.64	3.85				**46.77**	**0.22**	**5.00**	**8.27**
6/5/18		18.8					1.28	5.09								**18.80**	**1.28**	**5.09**	**8.39**
9/12/18	0.59	3.59	3.05	6.17	4.75	2.40	7.53	10.80	8.66	70.60	43.50	386.00				**386.00**	**0.51**	**7.53**	**39.95**
4/1/19	0.58	4.01	1.42	6.94	12.00	0.55	8.41	3.88	0.91	114.00	7.67	60.90	15.50			**114.00**	**0.55**	**6.18**	**17.80**
9/12/19	1.53	1.07	30.94	4.30	4.55	0.90	1.48	7.52	1.36	44.63		631.80	20.28			**631.80**	**0.90**	**4.30**	**52.64**
5/6/20	0.34	275.00	2.05	6.14	77.40	1.53	3.22	6.02	1.28	32.10	1.29	14.10	38.70			**275.00**	**0.34**	**6.98**	**36.19**
9/3/20	0.32	8.19	1.51	3.07	19.60	1.73	6.49	3.55	0.67	5.29	5.48	8.74				**19.60**	**0.32**	**3.55**	**5.60**
3/30/21	0.53	189	2.56	3.87	20.1	0.97	3.34	2.91	1.15	113	2.02	1000	11.2			**1000.00**	**0.53**	**3.61**	**92.00**
9/8/21	0.98	4.09	13.36	7.48	4.72	1.28	2.26	2.68	1.55	7.84		6.70	51.48			**51.48**	**0.98**	**4.09**	**10.61**
3/31/22	3.32	2.26	1.72	4.38	7.62	1.54	6.25	5.35	0.78	2.81	3.20	1000	5.46			**1000.00**	**0.78**	**3.85**	**68.15**
8/30/22	1.09	4.23	1.41	7.73	3.05	2.81	1.4	1.4	2.91	37.94		76.83	3.76			**109.00**	**1.09**	**3.05**	**21.45**
11/11/22		20.30														**20.30**	**20.30**	**20.30**	**20.30**
3/7/23	1.15	197.10	1.20	2.22	2.52	1.14	1.32	4.01	1.73	195.80	6.16	7.80	7.24			**197.10**	**1.14**	**3.27**	**31.00**
6/6/23																**15.51**	**15.51**	**15.51**	**15.51**
9/28/23	1.69	24.03	2.44	3.29	6.31	2.22	4.13	2.97	3.48	15.35		1.62	20.17			**24.03**	**1.62**	**3.48**	**7.23**
3/11/24	2.48	2.62	4.51	6.11	14.51	5.11	2.37	2.18	4.73	9.99	3.81	2	191.60	4.72		**191.60**	**2.12**	**4.62**	**19.07**
10/2/24		80.94														**80.94**	**80.94**	**80.94**	**80.94**
12/11/24	2.50	4.14	1.91	3.55	9.88	2.36	2.45	2.24	2.12	8.28		3.45	23.51	82.46	5.37	**23.51**	**1.91**	**2.98**	**5.53**
Max	**5.72**	**275.00**	**30.94**	**26.01**	**77.40**	**8.70**	**33.51**	**10.80**	**8.66**	**304.00**	**43.50**	**1000.00**	**191.60**	**82.46**	**5.37**				
Min	**0.32**	**1.07**	**0.46**	**1.50**	**2.52**	**0.55**	**1.17**	**0.94**	**0.22**	**2.59**	**1.29**	**1.62**	**2.35**	**4.72**	**5.37**				
Ave	**1.51**	**47.44**	**4.32**	**6.24**	**12.79**	**2.22**	**5.02**	**3.94**	**2.14**	**56.59**	**8.44**	**222.44**	**32.60**	**43.59**	**5.37**				
Std Dev	**1.42**	**79.17**	**7.45**	**5.45**	**17.47**	**1.99**	**7.25**	**2.39**	**2.04**	**80.38**	**11.82**	**353.44**	**52.17**	**54.97**	**#DIV/0!**				

APPENDIX D.4 –Running Summary of Prediction Limit Exceedances

Fall, 2016*	
AW-3	1,1-dichloroethane
	1,4-dichlorobenzene
	Benzene
	Chloroethane
	cis-1,2-dichloroethene
MW-20	1,4-dichlorobenzene
	Acetone
	Benzene
	Chlorobenzene
	Chloroethane
	Toluene
MW-24	Ethylbenzene
	Toluene
	Xylenes

Spring, 2017*		**Fall, 2017***	
AW-3	1,1-dichloroethane	AW-3	1,1-dichloroethane
	Bis(2-ethylhexyl)phthalate		1,4-dichlorobenzene
	Chlorobenzene		Chloroethane
	Chloroethane		cis-1,2-dichloroethene
	cis-1,2-dichloroethene		
MW-14	1,1-dichloroethane	MW-14	1,1-dichloroethane
MW-20	1,4-dichlorobenzene	MW-20	1,4-dichlorobenzene
	Benzene		Benzene
	Chlorobenzene		Chlorobenzene
	Chloroethane		
MW-24	Benzene	MW-24	None
	Ethylbenzene		
	Xylenes		
MW-25	Bis(2-ethylhexyl)phthalate	MW-25	Bis(2-ethylhexyl)phthalate

**** -*** ***insufficient number of background episodes available to calculate the prediction limits.***
Prediction Limit exceedances for metals are not reported.

Spring, 2018*		**Fall, 2018**	
AW-2	None	AW-2	Arsenic
			Cobalt
			Benzene
AW-3	1,4-dichlorobenzene	AW-3	Arsenic
	Benzene		1,4-dichlorobenzene
	Chloroethane		2-butanone
			Benzene
			Chloroethane
			Toluene
MW-20	1,4-dichlorobenzene	MW-20	Arsenic
	Benzene		1,4-dichlorobenzene
			Benzene
			Chlorobenzene
MW-23		MW-23	Cobalt
			Zinc
MW-25	Bis(2-ethylhexyl)phthalate	MW-25	None

**** -*** ***insufficient number of background episodes available to calculate the prediction limits.***
Prediction Limit exceedances for metals are not reported.

Spring, 2019		**Fall, 2019**	
AW-2	Arsenic	AW-2	Arsenic
	Cobalt		Cobalt
AW-3	1,4-dichlorobenzene	AW-3	Acetone
	Chloroethane		Benzene
MW-9	None	MW-9	Barium
			Nickel
MW-14	Nickel	MW-14	Cadmium
	1,1-dichloroethane		
MW-20	1,4-dichlorobenzene	MW-20	Arsenic
	Benzene		Benzene
	Chlorobenzene		Chlorobenzene
MW-23	Arsenic	MW-23	Arsenic
	Cobalt		Cobalt
MW-24	Arsenic	MW-24	Cobalt
	Barium		
	Cobalt		
	Nickel		
	Zinc		
	Acetone		
	Benzene		
	Chloroethane		
	Ethylbenzene		
	Xylenes		

Spring, 2020		**Fall, 2020**	
AW-2	Arsenic	AW-2	Arsenic
	Cobalt		Cobalt
AW-3	1,4-dichlorobenzene	AW-3	1,4-dichlorobenzene
	Benzene		Chloroethane
	Chloroethane		cis-1,2-dichloroethene
	cis-1,2-dichloroethene		
MW-9	Barium	MW-9	None
MW-14	None	MW-14	None
MW-20	1,4-dichlorobenzene	MW-20	1,4-dichlorobenzene
	Benzene		Benzene
	Chlorobenzene		Chlorobenzene
MW-23	Arsenic	MW-23	Arsenic
	Barium		Barium
	Cobalt		Cobalt
MW-24	None	MW-24	Cadmium
			Cobalt
			Nickel

Spring, 2021		**Fall, 2021**	
AW-2	None	AW-2	2-butanone
			Acetone
			Benzene
			Chloroethane
AW-3	1,4-dichlorobenzene	AW-3	1,4-dichlorobenzene
	Benzene		Benzene
	Chloroethane		Chloroethane
	cis-1,2-dichloroethene		
	Vinyl chloride		
MW-19	None	MW-19	Zinc
MW-20	1,4-dichlorobenzene	MW-20	1,4-dichlorobenzene
	Benzene		Benzene
	Chlorobenzene		Chlorobenzene
MW-24	Cobalt	MW-24	None

Spring, 2022		**Fall, 2022**	
AW-2	None	AW-2	None
AW-3	1,4-dichlorobenzene	AW-3	Arsenic
	Acetone		1,4-dichlorobenzene
	Benzene		Benzene
	Chloroethane		Chloroethane
			cis-1,2-dichloroethylene
MW-19	None	MW-19	None
MW-20	1,4-dichlorobenzene	MW-20	1,4-dichlorobenzene
	Benzene		Benzene
	Chlorobenzene		Chlorobenzene
			Toluene
MW-24	Nickel	MW-24	Nickel

Spring, 2023		**Fall, 2023**	
AW-2	Cobalt	AW-2	None
	Nickel		
AW-3	1,4-dichlorobenzene	AW-3	1,4-dichlorobenzene
	Benzene		Benzene
	Chloroethane		Chloroethane
	cis-1,2-dichloroethylene		cis-1,2-dichloroethylene
MW-9	Nickel	MW-9	None
MW-20	Arsenic	MW-20	1,4-dichlorobenzene
	1,4-dichlorobenzene		Benzene
	Benzene		Chlorobenzene
	Chlorobenzene		
MW-24	Nickel	MW-24	None

Spring, 2024		**Fall, 2024**	
AW-2	Cobalt	AW-2	Cobalt
AW-3	1,4-dichlorobenzene	AW-3	1,4-dichlorobenzene
	Benzene		Chloroethane
	Chloroethane		
MW-20	1,4-dichlorobenzene	MW-20	1,4-dichlorobenzene
	Benzene		Benzene
	Chlorobenzene		Chlorobenzene
	Toluene		
MW-24	None	MW-24	Barium
			Cobalt

Appendix E

Laboratory Reports for Reporting Period

With Chain of Custody

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HC1002

Project Description

Benton County - New Regs

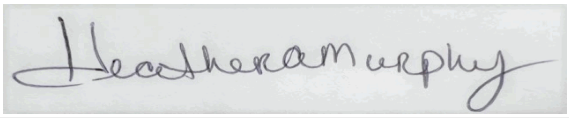
For:

Todd Whipple

HLW Engineering

PO Box 314

Story City, IA 50248



Heather Murphy

Customer Relationship Specialist

Wednesday, March 20, 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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CERTIFICATE OF ANALYSIS

1HC1002

HLW Engineering

Todd Whipple
PO Box 314
Story City, IA 50248

Project Name: Benton County - New Regs

Project / PO Number: Benton County - New Regs
Received: 03/12/2024
Reported: 03/20/2024

Sample Summary Report

Sample Name	Laboratory ID	Client Matrix	Sample Type	Sample Begin	Sample Taken	Lab Received
MW-6 (b)	1HC1002-01	Water	GRAB		03/11/24 08:12	03/12/24 10:55
MW-26 (b)	1HC1002-02	Water	GRAB		03/11/24 09:42	03/12/24 10:55
MW-27 (b)	1HC1002-03	Water	GRAB		03/11/24 08:55	03/12/24 10:55
MW-28 (b)	1HC1002-04	Water	GRAB		03/11/24 09:19	03/12/24 10:55
MW-7 (b)	1HC1002-05	Water	GRAB		03/11/24 08:19	03/12/24 10:55
MW-9	1HC1002-06	Water	GRAB		03/11/24 12:15	03/12/24 10:55
MW-12	1HC1002-07	Water	GRAB		03/11/24 12:50	03/12/24 10:55
MW-14	1HC1002-08	Water	GRAB		03/11/24 13:11	03/12/24 10:55
MW-20	1HC1002-09	Water	GRAB		03/11/24 13:33	03/12/24 10:55
AW-1	1HC1002-10	Water	GRAB		03/11/24 10:32	03/12/24 10:55
MW-24	1HC1002-11	Water	GRAB		03/11/24 12:29	03/12/24 10:55
MW-25	1HC1002-12	Water	GRAB		03/11/24 10:50	03/12/24 10:55
AW-2	1HC1002-13	Water	GRAB		03/11/24 13:53	03/12/24 10:55
AW-9	1HC1002-14	Water	GRAB		03/11/24 14:09	03/12/24 10:55
AW-3	1HC1002-15	Water	GRAB		03/11/24 14:27	03/12/24 10:55
Duplicate	1HC1002-16	Water	GRAB		03/11/24 00:00	03/12/24 10:55

Analytical Testing Parameters

Client Sample ID: MW-6 (b)
Sample Matrix: Water
Lab Sample ID: 1HC1002-01 **Collection Date:** 03/11/2024 8:12

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		03/15/24 0000	03/15/24 1258	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1258	CSM
Bromomethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1258	CSM
Chloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1258	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1258	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1258	CSM
Acetone	<10.0	10.0	ug/L	1		03/15/24 0000	03/15/24 1258	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1258	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1258	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1258	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1258	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1258	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1258	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1258	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1258	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/15/24 0000	03/15/24 1258	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1258	CSM
Chloroform	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1258	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1258	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1258	CSM
Benzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1258	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1258	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1258	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1258	CSM
Dibromomethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1258	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1258	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1258	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1258	CSM
Toluene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1258	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1258	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1258	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1258	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1258	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1258	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1258	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1258	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1258	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1258	CSM
Xylenes, total	<2.0	2.0	ug/L	1		03/15/24 0000	03/15/24 1258	CSM
Styrene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1258	CSM

Client Sample ID: MW-6 (b)
Sample Matrix: Water
Lab Sample ID: 1HC1002-01 **Collection Date:** 03/11/2024 8:12

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Bromoform	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1258	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1258	CSM
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1258	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1258	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1258	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1258	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1258	CSM
Surrogate: Dibromofluoromethane	56.7	Limit: 75-136	% Rec	1	**S-GC**	03/15/24 0000	03/15/24 1258	CSM
Surrogate: Dibromofluoromethane	56.7	Limit: 80-126	% Rec	1	**S-GC**	03/15/24 0000	03/15/24 1258	CSM
Surrogate: 1,2-Dichloroethane-d4	53.6	Limit: 61-142	% Rec	1	**S-GC**	03/15/24 0000	03/15/24 1258	CSM
Surrogate: 1,2-Dichloroethane-d4	53.6	Limit: 63-138	% Rec	1	**S-GC**	03/15/24 0000	03/15/24 1258	CSM
Surrogate: Toluene-d8	105	Limit: 82-121	% Rec	1		03/15/24 0000	03/15/24 1258	CSM
Surrogate: Toluene-d8	105	Limit: 87-116	% Rec	1		03/15/24 0000	03/15/24 1258	CSM
Surrogate: 4-Bromofluorobenzene	86.1	Limit: 80-116	% Rec	1		03/15/24 0000	03/15/24 1258	CSM
Surrogate: 4-Bromofluorobenzene	86.1	Limit: 85-111	% Rec	1		03/15/24 0000	03/15/24 1258	CSM

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		03/18/24 0844	03/18/24 2048	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2048	RVV
Barium, total	**0.285**	0.0040	mg/L	4		03/18/24 0844	03/18/24 2048	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2048	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		03/18/24 0844	03/18/24 2048	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/18/24 0844	03/18/24 2048	RVV
Cobalt, total	**0.0023**	0.0004	mg/L	4		03/18/24 0844	03/18/24 2048	RVV
Copper, total	**0.0150**	0.0040	mg/L	4		03/18/24 0844	03/18/24 2048	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2048	RVV
Nickel, total	**0.0164**	0.0040	mg/L	4		03/18/24 0844	03/18/24 2048	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2048	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2048	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/18/24 0844	03/18/24 2048	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/18/24 0844	03/18/24 2048	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		03/18/24 0844	03/18/24 2048	RVV

Client Sample ID:	MW-26 (b)
Sample Matrix:	Water
Lab Sample ID:	1HC1002-02
Collection Date:	03/11/2024 9:42

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1325	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1325	CSM
Bromomethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1325	CSM
Chloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1325	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1325	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1325	CSM
Acetone	<10.0	10.0	ug/L	1		03/15/24 0000	03/15/24 1325	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1325	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1325	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1325	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1325	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1325	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1325	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1325	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1325	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/15/24 0000	03/15/24 1325	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1325	CSM
Chloroform	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1325	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1325	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1325	CSM
Benzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1325	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1325	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1325	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1325	CSM
Dibromomethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1325	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1325	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1325	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1325	CSM
Toluene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1325	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1325	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1325	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1325	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1325	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1325	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1325	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1325	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1325	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1325	CSM
Xylenes, total	<2.0	2.0	ug/L	1		03/15/24 0000	03/15/24 1325	CSM
Styrene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1325	CSM
Bromoform	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1325	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1325	CSM

Client Sample ID: MW-26 (b)
Sample Matrix: Water
Lab Sample ID: 1HC1002-02 **Collection Date:** 03/11/2024 9:42

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1325	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1325	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1325	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1325	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1325	CSM
Surrogate: Dibromofluoromethane	70.2	Limit: 80-126	% Rec	1	S-GC	03/15/24 0000	03/15/24 1325	CSM
Surrogate: Dibromofluoromethane	70.2	Limit: 75-136	% Rec	1	S-GC	03/15/24 0000	03/15/24 1325	CSM
Surrogate: 1,2-Dichloroethane-d4	64.8	Limit: 61-142	% Rec	1		03/15/24 0000	03/15/24 1325	CSM
Surrogate: 1,2-Dichloroethane-d4	64.8	Limit: 63-138	% Rec	1		03/15/24 0000	03/15/24 1325	CSM
Surrogate: Toluene-d8	105	Limit: 87-116	% Rec	1		03/15/24 0000	03/15/24 1325	CSM
Surrogate: Toluene-d8	105	Limit: 82-121	% Rec	1		03/15/24 0000	03/15/24 1325	CSM
Surrogate: 4-Bromofluorobenzene	88.0	Limit: 85-111	% Rec	1		03/15/24 0000	03/15/24 1325	CSM
Surrogate: 4-Bromofluorobenzene	88.0	Limit: 80-116	% Rec	1		03/15/24 0000	03/15/24 1325	CSM

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		03/18/24 0844	03/18/24 2112	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2112	RVV
Barium, total	**0.188**	0.0040	mg/L	4		03/18/24 0844	03/18/24 2112	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2112	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		03/18/24 0844	03/18/24 2112	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/18/24 0844	03/18/24 2112	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		03/18/24 0844	03/18/24 2112	RVV
Copper, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2112	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2112	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2112	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2112	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2112	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/18/24 0844	03/18/24 2112	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/18/24 0844	03/18/24 2112	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		03/18/24 0844	03/18/24 2112	RVV

Client Sample ID:	MW-27 (b)
Sample Matrix:	Water
Lab Sample ID:	1HC1002-03
Collection Date:	03/11/2024 8:55

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1351	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1351	CSM
Bromomethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1351	CSM
Chloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1351	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1351	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1351	CSM
Acetone	<10.0	10.0	ug/L	1		03/15/24 0000	03/15/24 1351	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1351	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1351	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1351	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1351	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1351	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1351	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1351	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1351	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/15/24 0000	03/15/24 1351	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1351	CSM
Chloroform	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1351	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1351	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1351	CSM
Benzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1351	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1351	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1351	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1351	CSM
Dibromomethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1351	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1351	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1351	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1351	CSM
Toluene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1351	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1351	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1351	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1351	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1351	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1351	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1351	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1351	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1351	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1351	CSM
Xylenes, total	<2.0	2.0	ug/L	1		03/15/24 0000	03/15/24 1351	CSM
Styrene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1351	CSM
Bromoform	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1351	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1351	CSM

Client Sample ID: MW-27 (b)
Sample Matrix: Water
Lab Sample ID: 1HC1002-03 **Collection Date:** 03/11/2024 8:55

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1351	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1351	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1351	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1351	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1351	CSM
Surrogate: Dibromofluoromethane	76.7	Limit: 75-136	% Rec	1		03/15/24 0000	03/15/24 1351	CSM
Surrogate: Dibromofluoromethane	76.7	Limit: 80-126	% Rec	1	S-GC	03/15/24 0000	03/15/24 1351	CSM
Surrogate: 1,2-Dichloroethane-d4	71.5	Limit: 63-138	% Rec	1		03/15/24 0000	03/15/24 1351	CSM
Surrogate: 1,2-Dichloroethane-d4	71.5	Limit: 61-142	% Rec	1		03/15/24 0000	03/15/24 1351	CSM
Surrogate: Toluene-d8	104	Limit: 82-121	% Rec	1		03/15/24 0000	03/15/24 1351	CSM
Surrogate: Toluene-d8	104	Limit: 87-116	% Rec	1		03/15/24 0000	03/15/24 1351	CSM
Surrogate: 4-Bromofluorobenzene	88.6	Limit: 85-111	% Rec	1		03/15/24 0000	03/15/24 1351	CSM
Surrogate: 4-Bromofluorobenzene	88.6	Limit: 80-116	% Rec	1		03/15/24 0000	03/15/24 1351	CSM

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		03/18/24 0844	03/18/24 2118	RVV
Arsenic, total	**0.0045**	0.0040	mg/L	4		03/18/24 0844	03/18/24 2118	RVV
Barium, total	**0.104**	0.0040	mg/L	4		03/18/24 0844	03/18/24 2118	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2118	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		03/18/24 0844	03/18/24 2118	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/18/24 0844	03/18/24 2118	RVV
Cobalt, total	**0.0007**	0.0004	mg/L	4		03/18/24 0844	03/18/24 2118	RVV
Copper, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2118	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2118	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2118	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2118	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2118	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/18/24 0844	03/18/24 2118	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/18/24 0844	03/18/24 2118	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		03/18/24 0844	03/18/24 2118	RVV

Client Sample ID:	MW-28 (b)
Sample Matrix:	Water
Lab Sample ID:	1HC1002-04
Collection Date:	03/11/2024 9:19

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1417	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1417	CSM
Bromomethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1417	CSM
Chloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1417	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1417	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1417	CSM
Acetone	<10.0	10.0	ug/L	1		03/15/24 0000	03/15/24 1417	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1417	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1417	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1417	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1417	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1417	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1417	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1417	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1417	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/15/24 0000	03/15/24 1417	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1417	CSM
Chloroform	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1417	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1417	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1417	CSM
Benzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1417	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1417	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1417	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1417	CSM
Dibromomethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1417	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1417	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1417	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1417	CSM
Toluene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1417	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1417	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1417	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1417	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1417	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1417	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1417	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1417	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1417	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1417	CSM
Xylenes, total	<2.0	2.0	ug/L	1		03/15/24 0000	03/15/24 1417	CSM
Styrene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1417	CSM
Bromoform	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1417	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1417	CSM

Client Sample ID: MW-28 (b)
Sample Matrix: Water
Lab Sample ID: 1HC1002-04 **Collection Date:** 03/11/2024 9:19

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1417	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1417	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1417	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1417	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1417	CSM
Surrogate: Dibromofluoromethane	72.4	Limit: 80-126	% Rec	1	S-GC	03/15/24 0000	03/15/24 1417	CSM
Surrogate: Dibromofluoromethane	72.4	Limit: 75-136	% Rec	1	S-GC	03/15/24 0000	03/15/24 1417	CSM
Surrogate: 1,2-Dichloroethane-d4	69.3	Limit: 61-142	% Rec	1		03/15/24 0000	03/15/24 1417	CSM
Surrogate: 1,2-Dichloroethane-d4	69.3	Limit: 63-138	% Rec	1		03/15/24 0000	03/15/24 1417	CSM
Surrogate: Toluene-d8	102	Limit: 87-116	% Rec	1		03/15/24 0000	03/15/24 1417	CSM
Surrogate: Toluene-d8	102	Limit: 82-121	% Rec	1		03/15/24 0000	03/15/24 1417	CSM
Surrogate: 4-Bromofluorobenzene	86.9	Limit: 80-116	% Rec	1		03/15/24 0000	03/15/24 1417	CSM
Surrogate: 4-Bromofluorobenzene	86.9	Limit: 85-111	% Rec	1		03/15/24 0000	03/15/24 1417	CSM

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		03/18/24 0844	03/18/24 2124	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2124	RVV
Barium, total	**0.0265**	0.0040	mg/L	4		03/18/24 0844	03/18/24 2124	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2124	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		03/18/24 0844	03/18/24 2124	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/18/24 0844	03/18/24 2124	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		03/18/24 0844	03/18/24 2124	RVV
Copper, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2124	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2124	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2124	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2124	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2124	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/18/24 0844	03/18/24 2124	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/18/24 0844	03/18/24 2124	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		03/18/24 0844	03/18/24 2124	RVV

Client Sample ID:	MW-7 (b)
Sample Matrix:	Water
Lab Sample ID:	1HC1002-05
Collection Date:	03/11/2024 8:19

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1444	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1444	CSM
Bromomethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1444	CSM
Chloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1444	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1444	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1444	CSM
Acetone	<10.0	10.0	ug/L	1		03/15/24 0000	03/15/24 1444	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1444	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1444	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1444	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1444	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1444	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1444	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1444	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1444	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/15/24 0000	03/15/24 1444	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1444	CSM
Chloroform	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1444	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1444	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1444	CSM
Benzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1444	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1444	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1444	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1444	CSM
Dibromomethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1444	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1444	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1444	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1444	CSM
Toluene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1444	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1444	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1444	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1444	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1444	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1444	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1444	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1444	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1444	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1444	CSM
Xylenes, total	<2.0	2.0	ug/L	1		03/15/24 0000	03/15/24 1444	CSM
Styrene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1444	CSM
Bromoform	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1444	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1444	CSM

Client Sample ID: MW-7 (b)
Sample Matrix: Water
Lab Sample ID: 1HC1002-05 **Collection Date:** 03/11/2024 8:19

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1444	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1444	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1444	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1444	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1444	CSM
Surrogate: Dibromofluoromethane	71.2	Limit: 80-126	% Rec	1	S-GC	03/15/24 0000	03/15/24 1444	CSM
Surrogate: Dibromofluoromethane	71.2	Limit: 75-136	% Rec	1	S-GC	03/15/24 0000	03/15/24 1444	CSM
Surrogate: 1,2-Dichloroethane-d4	68.7	Limit: 61-142	% Rec	1		03/15/24 0000	03/15/24 1444	CSM
Surrogate: 1,2-Dichloroethane-d4	68.7	Limit: 63-138	% Rec	1		03/15/24 0000	03/15/24 1444	CSM
Surrogate: Toluene-d8	104	Limit: 82-121	% Rec	1		03/15/24 0000	03/15/24 1444	CSM
Surrogate: Toluene-d8	104	Limit: 87-116	% Rec	1		03/15/24 0000	03/15/24 1444	CSM
Surrogate: 4-Bromofluorobenzene	87.7	Limit: 80-116	% Rec	1		03/15/24 0000	03/15/24 1444	CSM
Surrogate: 4-Bromofluorobenzene	87.7	Limit: 85-111	% Rec	1		03/15/24 0000	03/15/24 1444	CSM

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		03/18/24 0844	03/18/24 2143	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2143	RVV
Barium, total	**0.168**	0.0040	mg/L	4		03/18/24 0844	03/18/24 2143	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2143	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		03/18/24 0844	03/18/24 2143	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/18/24 0844	03/18/24 2143	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		03/18/24 0844	03/18/24 2143	RVV
Copper, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2143	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2143	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2143	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2143	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2143	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/18/24 0844	03/18/24 2143	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/18/24 0844	03/18/24 2143	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		03/18/24 0844	03/18/24 2143	RVV

Client Sample ID:	MW-9		
Sample Matrix:	Water		
Lab Sample ID:	1HC1002-06	**Collection Date:**	03/11/2024 12:15

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1510	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1510	CSM
Bromomethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1510	CSM
Chloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1510	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1510	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1510	CSM
Acetone	<10.0	10.0	ug/L	1		03/15/24 0000	03/15/24 1510	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1510	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1510	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1510	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1510	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1510	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1510	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1510	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1510	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/15/24 0000	03/15/24 1510	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1510	CSM
Chloroform	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1510	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1510	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1510	CSM
Benzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1510	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1510	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1510	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1510	CSM
Dibromomethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1510	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1510	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1510	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1510	CSM
Toluene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1510	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1510	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1510	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1510	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1510	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1510	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1510	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1510	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1510	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1510	CSM
Xylenes, total	<2.0	2.0	ug/L	1		03/15/24 0000	03/15/24 1510	CSM
Styrene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1510	CSM
Bromoform	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1510	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1510	CSM

Client Sample ID: MW-9
Sample Matrix: Water
Lab Sample ID: 1HC1002-06 **Collection Date:** 03/11/2024 12:15

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1510	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1510	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1510	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1510	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1510	CSM
Surrogate: Dibromofluoromethane	75.0	Limit: 75-136	% Rec	1		03/15/24 0000	03/15/24 1510	CSM
Surrogate: Dibromofluoromethane	75.0	Limit: 80-126	% Rec	1	S-GC	03/15/24 0000	03/15/24 1510	CSM
Surrogate: 1,2-Dichloroethane-d4	72.0	Limit: 61-142	% Rec	1		03/15/24 0000	03/15/24 1510	CSM
Surrogate: 1,2-Dichloroethane-d4	72.0	Limit: 63-138	% Rec	1		03/15/24 0000	03/15/24 1510	CSM
Surrogate: Toluene-d8	102	Limit: 87-116	% Rec	1		03/15/24 0000	03/15/24 1510	CSM
Surrogate: Toluene-d8	102	Limit: 82-121	% Rec	1		03/15/24 0000	03/15/24 1510	CSM
Surrogate: 4-Bromofluorobenzene	86.6	Limit: 80-116	% Rec	1		03/15/24 0000	03/15/24 1510	CSM
Surrogate: 4-Bromofluorobenzene	86.6	Limit: 85-111	% Rec	1		03/15/24 0000	03/15/24 1510	CSM

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		03/18/24 0844	03/18/24 2149	RVV
Arsenic, total	**0.0040**	0.0040	mg/L	4		03/18/24 0844	03/18/24 2149	RVV
Barium, total	**0.517**	0.0040	mg/L	4		03/18/24 0844	03/18/24 2149	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2149	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		03/18/24 0844	03/18/24 2149	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/18/24 0844	03/18/24 2149	RVV
Cobalt, total	**0.0022**	0.0004	mg/L	4		03/18/24 0844	03/18/24 2149	RVV
Copper, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2149	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2149	RVV
Nickel, total	**0.0146**	0.0040	mg/L	4		03/18/24 0844	03/18/24 2149	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2149	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2149	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/18/24 0844	03/18/24 2149	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/18/24 0844	03/18/24 2149	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		03/18/24 0844	03/18/24 2149	RVV

Client Sample ID: MW-12
Sample Matrix: Water
Lab Sample ID: 1HC1002-07
Collection Date: 03/11/2024 12:50

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1536	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1536	CSM
Bromomethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1536	CSM
Chloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1536	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1536	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1536	CSM
Acetone	<10.0	10.0	ug/L	1		03/15/24 0000	03/15/24 1536	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1536	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1536	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1536	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1536	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1536	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1536	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1536	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1536	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/15/24 0000	03/15/24 1536	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1536	CSM
Chloroform	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1536	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1536	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1536	CSM
Benzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1536	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1536	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1536	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1536	CSM
Dibromomethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1536	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1536	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1536	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1536	CSM
Toluene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1536	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1536	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1536	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1536	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1536	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1536	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1536	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1536	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1536	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1536	CSM
Xylenes, total	<2.0	2.0	ug/L	1		03/15/24 0000	03/15/24 1536	CSM
Styrene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1536	CSM
Bromoform	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1536	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1536	CSM

Client Sample ID: MW-12
Sample Matrix: Water
Lab Sample ID: 1HC1002-07
Collection Date: 03/11/2024 12:50

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1536	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1536	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1536	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1536	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1536	CSM
Surrogate: Dibromofluoromethane	74.6	Limit: 80-126	% Rec	1	S-GC	03/15/24 0000	03/15/24 1536	CSM
Surrogate: Dibromofluoromethane	74.6	Limit: 75-136	% Rec	1	S-GC	03/15/24 0000	03/15/24 1536	CSM
Surrogate: 1,2-Dichloroethane-d4	72.9	Limit: 63-138	% Rec	1		03/15/24 0000	03/15/24 1536	CSM
Surrogate: 1,2-Dichloroethane-d4	72.9	Limit: 61-142	% Rec	1		03/15/24 0000	03/15/24 1536	CSM
Surrogate: Toluene-d8	102	Limit: 87-116	% Rec	1		03/15/24 0000	03/15/24 1536	CSM
Surrogate: Toluene-d8	102	Limit: 82-121	% Rec	1		03/15/24 0000	03/15/24 1536	CSM
Surrogate: 4-Bromofluorobenzene	86.3	Limit: 85-111	% Rec	1		03/15/24 0000	03/15/24 1536	CSM
Surrogate: 4-Bromofluorobenzene	86.3	Limit: 80-116	% Rec	1		03/15/24 0000	03/15/24 1536	CSM

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		03/18/24 0844	03/18/24 2155	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2155	RVV
Barium, total	**0.104**	0.0040	mg/L	4		03/18/24 0844	03/18/24 2155	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2155	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		03/18/24 0844	03/18/24 2155	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/18/24 0844	03/18/24 2155	RVV
Cobalt, total	**0.0013**	0.0004	mg/L	4		03/18/24 0844	03/18/24 2155	RVV
Copper, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2155	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2155	RVV
Nickel, total	**0.0131**	0.0040	mg/L	4		03/18/24 0844	03/18/24 2155	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2155	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2155	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/18/24 0844	03/18/24 2155	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/18/24 0844	03/18/24 2155	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		03/18/24 0844	03/18/24 2155	RVV

Client Sample ID:	MW-14		
Sample Matrix:	Water		
Lab Sample ID:	1HC1002-08	**Collection Date:**	03/11/2024 13:11

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		03/15/24 0000	03/15/24 1602	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1602	CSM
Bromomethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1602	CSM
Chloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1602	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1602	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1602	CSM
Acetone	<10.0	10.0	ug/L	1		03/15/24 0000	03/15/24 1602	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1602	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1602	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1602	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1602	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1602	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1602	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1602	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1602	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/15/24 0000	03/15/24 1602	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1602	CSM
Chloroform	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1602	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1602	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1602	CSM
Benzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1602	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1602	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1602	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1602	CSM
Dibromomethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1602	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1602	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1602	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1602	CSM
Toluene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1602	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1602	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1602	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1602	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1602	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1602	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1602	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1602	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1602	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1602	CSM
Xylenes, total	<2.0	2.0	ug/L	1		03/15/24 0000	03/15/24 1602	CSM
Styrene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1602	CSM
Bromoform	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1602	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1602	CSM

Client Sample ID: MW-14
Sample Matrix: Water
Lab Sample ID: 1HC1002-08 **Collection Date:** 03/11/2024 13:11

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		03/15/24 0000	03/15/24 1602	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1602	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1602	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1602	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1602	CSM
Surrogate: Dibromofluoromethane	74.7	Limit: 80-126	% Rec	1	S-GC	03/15/24 0000	03/15/24 1602	CSM
Surrogate: Dibromofluoromethane	74.7	Limit: 75-136	% Rec	1	S-GC	03/15/24 0000	03/15/24 1602	CSM
Surrogate: 1,2-Dichloroethane-d4	71.6	Limit: 61-142	% Rec	1		03/15/24 0000	03/15/24 1602	CSM
Surrogate: 1,2-Dichloroethane-d4	71.6	Limit: 63-138	% Rec	1		03/15/24 0000	03/15/24 1602	CSM
Surrogate: Toluene-d8	103	Limit: 87-116	% Rec	1		03/15/24 0000	03/15/24 1602	CSM
Surrogate: Toluene-d8	103	Limit: 82-121	% Rec	1		03/15/24 0000	03/15/24 1602	CSM
Surrogate: 4-Bromofluorobenzene	86.8	Limit: 80-116	% Rec	1		03/15/24 0000	03/15/24 1602	CSM
Surrogate: 4-Bromofluorobenzene	86.8	Limit: 85-111	% Rec	1		03/15/24 0000	03/15/24 1602	CSM

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		03/18/24 0844	03/18/24 2201	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2201	RVV
Barium, total	**0.439**	0.0040	mg/L	4		03/18/24 0844	03/18/24 2201	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2201	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		03/18/24 0844	03/18/24 2201	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/18/24 0844	03/18/24 2201	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		03/18/24 0844	03/18/24 2201	RVV
Copper, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2201	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2201	RVV
Nickel, total	**0.0060**	0.0040	mg/L	4		03/18/24 0844	03/18/24 2201	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2201	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2201	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/18/24 0844	03/18/24 2201	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/18/24 0844	03/18/24 2201	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		03/18/24 0844	03/18/24 2201	RVV

Client Sample ID:	MW-20		
Sample Matrix:	Water		
Lab Sample ID:	1HC1002-09	**Collection Date:**	03/11/2024 13:33

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1629	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1629	CSM
Bromomethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1629	CSM
Chloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1629	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1629	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1629	CSM
Acetone	<10.0	10.0	ug/L	1		03/15/24 0000	03/15/24 1629	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1629	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1629	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1629	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1629	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1629	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1629	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1629	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1629	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/15/24 0000	03/15/24 1629	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1629	CSM
Chloroform	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1629	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1629	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1629	CSM
Benzene	**2.3**	1.0	ug/L	1		03/15/24 0000	03/15/24 1629	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1629	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1629	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1629	CSM
Dibromomethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1629	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1629	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1629	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1629	CSM
Toluene	**1.1**	1.0	ug/L	1		03/15/24 0000	03/15/24 1629	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1629	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1629	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1629	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1629	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1629	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1629	CSM
Chlorobenzene	**2.8**	1.0	ug/L	1		03/15/24 0000	03/15/24 1629	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1629	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1629	CSM
Xylenes, total	<2.0	2.0	ug/L	1		03/15/24 0000	03/15/24 1629	CSM
Styrene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1629	CSM
Bromoform	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1629	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1629	CSM

Client Sample ID: MW-20
Sample Matrix: Water
Lab Sample ID: 1HC1002-09 **Collection Date:** 03/11/2024 13:33

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1629	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1629	CSM
1,4-Dichlorobenzene	**2.6**	1.0	ug/L	1		03/15/24 0000	03/15/24 1629	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1629	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1629	CSM
Surrogate: Dibromofluoromethane	72.2	Limit: 80-126	% Rec	1	**S-GC**	03/15/24 0000	03/15/24 1629	CSM
Surrogate: Dibromofluoromethane	72.2	Limit: 75-136	% Rec	1	**S-GC**	03/15/24 0000	03/15/24 1629	CSM
Surrogate: 1,2-Dichloroethane-d4	69.7	Limit: 61-142	% Rec	1		03/15/24 0000	03/15/24 1629	CSM
Surrogate: 1,2-Dichloroethane-d4	69.7	Limit: 63-138	% Rec	1		03/15/24 0000	03/15/24 1629	CSM
Surrogate: Toluene-d8	103	Limit: 87-116	% Rec	1		03/15/24 0000	03/15/24 1629	CSM
Surrogate: Toluene-d8	103	Limit: 82-121	% Rec	1		03/15/24 0000	03/15/24 1629	CSM
Surrogate: 4-Bromofluorobenzene	85.9	Limit: 80-116	% Rec	1		03/15/24 0000	03/15/24 1629	CSM
Surrogate: 4-Bromofluorobenzene	85.9	Limit: 85-111	% Rec	1		03/15/24 0000	03/15/24 1629	CSM

Determination of Conventional Chemistry Parameters	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 376.2								
Sulfide, total	<0.15	0.15	mg/L	1		03/15/24 1329	03/15/24 1457	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		03/18/24 0844	03/18/24 2207	RVV
Arsenic, total	**0.0279**	0.0040	mg/L	4		03/18/24 0844	03/18/24 2207	RVV
Barium, total	**0.326**	0.0040	mg/L	4		03/18/24 0844	03/18/24 2207	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2207	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		03/18/24 0844	03/18/24 2207	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/18/24 0844	03/18/24 2207	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		03/18/24 0844	03/18/24 2207	RVV
Copper, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2207	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2207	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2207	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2207	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2207	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/18/24 0844	03/18/24 2207	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/18/24 0844	03/18/24 2207	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		03/18/24 0844	03/18/24 2207	RVV

Client Sample ID:	AW-1		
Sample Matrix:	Water		
Lab Sample ID:	1HC1002-10	**Collection Date:**	03/11/2024 10:32

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1655	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1655	CSM
Bromomethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1655	CSM
Chloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1655	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1655	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1655	CSM
Acetone	<10.0	10.0	ug/L	1		03/15/24 0000	03/15/24 1655	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1655	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1655	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1655	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1655	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1655	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1655	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1655	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1655	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/15/24 0000	03/15/24 1655	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1655	CSM
Chloroform	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1655	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1655	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1655	CSM
Benzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1655	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1655	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1655	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1655	CSM
Dibromomethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1655	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1655	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1655	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1655	CSM
Toluene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1655	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1655	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1655	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1655	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1655	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1655	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1655	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1655	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1655	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1655	CSM
Xylenes, total	<2.0	2.0	ug/L	1		03/15/24 0000	03/15/24 1655	CSM
Styrene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1655	CSM
Bromoform	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1655	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1655	CSM

Client Sample ID: AW-1
Sample Matrix: Water
Lab Sample ID: 1HC1002-10 **Collection Date:** 03/11/2024 10:32

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1655	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1655	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1655	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1655	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1655	CSM
Surrogate: Dibromofluoromethane	74.5	Limit: 75-136	% Rec	1	S-GC	03/15/24 0000	03/15/24 1655	CSM
Surrogate: Dibromofluoromethane	74.5	Limit: 80-126	% Rec	1	S-GC	03/15/24 0000	03/15/24 1655	CSM
Surrogate: 1,2-Dichloroethane-d4	71.0	Limit: 61-142	% Rec	1		03/15/24 0000	03/15/24 1655	CSM
Surrogate: 1,2-Dichloroethane-d4	71.0	Limit: 63-138	% Rec	1		03/15/24 0000	03/15/24 1655	CSM
Surrogate: Toluene-d8	103	Limit: 82-121	% Rec	1		03/15/24 0000	03/15/24 1655	CSM
Surrogate: Toluene-d8	103	Limit: 87-116	% Rec	1		03/15/24 0000	03/15/24 1655	CSM
Surrogate: 4-Bromofluorobenzene	84.7	Limit: 80-116	% Rec	1		03/15/24 0000	03/15/24 1655	CSM
Surrogate: 4-Bromofluorobenzene	84.7	Limit: 85-111	% Rec	1	S-GC	03/15/24 0000	03/15/24 1655	CSM

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		03/18/24 0844	03/18/24 2213	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2213	RVV
Barium, total	**0.361**	0.0040	mg/L	4		03/18/24 0844	03/18/24 2213	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2213	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		03/18/24 0844	03/18/24 2213	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/18/24 0844	03/18/24 2213	RVV
Cobalt, total	**0.0100**	0.0004	mg/L	4		03/18/24 0844	03/18/24 2213	RVV
Copper, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2213	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2213	RVV
Nickel, total	**0.0072**	0.0040	mg/L	4		03/18/24 0844	03/18/24 2213	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2213	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2213	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/18/24 0844	03/18/24 2213	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/18/24 0844	03/18/24 2213	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		03/18/24 0844	03/18/24 2213	RVV

Client Sample ID:	MW-24
Sample Matrix:	Water
Lab Sample ID:	1HC1002-11
Collection Date:	03/11/2024 12:29

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1721	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1721	CSM
Bromomethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1721	CSM
Chloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1721	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1721	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1721	CSM
Acetone	<10.0	10.0	ug/L	1		03/15/24 0000	03/15/24 1721	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1721	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1721	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1721	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1721	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1721	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1721	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1721	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1721	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/15/24 0000	03/15/24 1721	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1721	CSM
Chloroform	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1721	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1721	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1721	CSM
Benzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1721	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1721	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1721	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1721	CSM
Dibromomethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1721	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1721	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1721	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1721	CSM
Toluene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1721	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1721	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1721	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1721	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1721	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1721	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1721	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1721	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1721	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1721	CSM
Xylenes, total	<2.0	2.0	ug/L	1		03/15/24 0000	03/15/24 1721	CSM
Styrene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1721	CSM
Bromoform	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1721	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1721	CSM

Client Sample ID: MW-24
Sample Matrix: Water
Lab Sample ID: 1HC1002-11 **Collection Date:** 03/11/2024 12:29

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1721	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1721	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1721	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1721	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1721	CSM
Surrogate: Dibromofluoromethane	77.7	Limit: 80-126	% Rec	1	S-GC	03/15/24 0000	03/15/24 1721	CSM
Surrogate: Dibromofluoromethane	77.7	Limit: 75-136	% Rec	1		03/15/24 0000	03/15/24 1721	CSM
Surrogate: 1,2-Dichloroethane-d4	73.6	Limit: 63-138	% Rec	1		03/15/24 0000	03/15/24 1721	CSM
Surrogate: 1,2-Dichloroethane-d4	73.6	Limit: 61-142	% Rec	1		03/15/24 0000	03/15/24 1721	CSM
Surrogate: Toluene-d8	103	Limit: 87-116	% Rec	1		03/15/24 0000	03/15/24 1721	CSM
Surrogate: Toluene-d8	103	Limit: 82-121	% Rec	1		03/15/24 0000	03/15/24 1721	CSM
Surrogate: 4-Bromofluorobenzene	85.9	Limit: 85-111	% Rec	1		03/15/24 0000	03/15/24 1721	CSM
Surrogate: 4-Bromofluorobenzene	85.9	Limit: 80-116	% Rec	1		03/15/24 0000	03/15/24 1721	CSM

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		03/18/24 0844	03/18/24 2219	RVV
Arsenic, total	**0.0369**	0.0040	mg/L	4		03/18/24 0844	03/18/24 2219	RVV
Barium, total	**0.409**	0.0040	mg/L	4		03/18/24 0844	03/18/24 2219	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2219	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		03/18/24 0844	03/18/24 2219	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/18/24 0844	03/18/24 2219	RVV
Cobalt, total	**0.0064**	0.0004	mg/L	4		03/18/24 0844	03/18/24 2219	RVV
Copper, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2219	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2219	RVV
Nickel, total	**0.0082**	0.0040	mg/L	4		03/18/24 0844	03/18/24 2219	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2219	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2219	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/18/24 0844	03/18/24 2219	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/18/24 0844	03/18/24 2219	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		03/18/24 0844	03/18/24 2219	RVV

Client Sample ID: MW-25
Sample Matrix: Water
Lab Sample ID: 1HC1002-12 **Collection Date:** 03/11/2024 10:50

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1748	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1748	CSM
Bromomethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1748	CSM
Chloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1748	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1748	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1748	CSM
Acetone	<10.0	10.0	ug/L	1		03/15/24 0000	03/15/24 1748	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1748	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1748	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1748	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1748	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1748	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1748	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1748	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1748	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/15/24 0000	03/15/24 1748	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1748	CSM
Chloroform	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1748	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1748	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1748	CSM
Benzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1748	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1748	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1748	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1748	CSM
Dibromomethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1748	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1748	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1748	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1748	CSM
Toluene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1748	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1748	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1748	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1748	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1748	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1748	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1748	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1748	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1748	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1748	CSM
Xylenes, total	<2.0	2.0	ug/L	1		03/15/24 0000	03/15/24 1748	CSM
Styrene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1748	CSM
Bromoform	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1748	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1748	CSM

Client Sample ID: MW-25
Sample Matrix: Water
Lab Sample ID: 1HC1002-12 **Collection Date:** 03/11/2024 10:50

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1748	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1748	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1748	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1748	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1748	CSM
Surrogate: Dibromofluoromethane	78.2	Limit: 80-126	% Rec	1	S-GC	03/15/24 0000	03/15/24 1748	CSM
Surrogate: Dibromofluoromethane	78.2	Limit: 75-136	% Rec	1		03/15/24 0000	03/15/24 1748	CSM
Surrogate: 1,2-Dichloroethane-d4	75.1	Limit: 61-142	% Rec	1		03/15/24 0000	03/15/24 1748	CSM
Surrogate: 1,2-Dichloroethane-d4	75.1	Limit: 63-138	% Rec	1		03/15/24 0000	03/15/24 1748	CSM
Surrogate: Toluene-d8	104	Limit: 82-121	% Rec	1		03/15/24 0000	03/15/24 1748	CSM
Surrogate: Toluene-d8	104	Limit: 87-116	% Rec	1		03/15/24 0000	03/15/24 1748	CSM
Surrogate: 4-Bromofluorobenzene	87.1	Limit: 80-116	% Rec	1		03/15/24 0000	03/15/24 1748	CSM
Surrogate: 4-Bromofluorobenzene	87.1	Limit: 85-111	% Rec	1		03/15/24 0000	03/15/24 1748	CSM

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		03/18/24 0844	03/18/24 2226	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2226	RVV
Barium, total	**0.0235**	0.0040	mg/L	4		03/18/24 0844	03/18/24 2226	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2226	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		03/18/24 0844	03/18/24 2226	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/18/24 0844	03/18/24 2226	RVV
Cobalt, total	**0.0008**	0.0004	mg/L	4		03/18/24 0844	03/18/24 2226	RVV
Copper, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2226	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2226	RVV
Nickel, total	**0.0051**	0.0040	mg/L	4		03/18/24 0844	03/18/24 2226	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2226	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2226	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/18/24 0844	03/18/24 2226	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/18/24 0844	03/18/24 2226	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		03/18/24 0844	03/18/24 2226	RVV

Client Sample ID:	AW-2		
Sample Matrix:	Water		
Lab Sample ID:	1HC1002-13	**Collection Date:**	03/11/2024 13:53

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1814	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1814	CSM
Bromomethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1814	CSM
Chloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1814	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1814	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1814	CSM
Acetone	<10.0	10.0	ug/L	1		03/15/24 0000	03/15/24 1814	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1814	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1814	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1814	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1814	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1814	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1814	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1814	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1814	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/15/24 0000	03/15/24 1814	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1814	CSM
Chloroform	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1814	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1814	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1814	CSM
Benzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1814	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1814	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1814	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1814	CSM
Dibromomethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1814	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1814	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1814	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1814	CSM
Toluene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1814	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1814	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1814	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1814	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1814	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1814	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1814	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1814	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1814	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1814	CSM
Xylenes, total	<2.0	2.0	ug/L	1		03/15/24 0000	03/15/24 1814	CSM
Styrene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1814	CSM
Bromoform	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1814	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1814	CSM

Client Sample ID: AW-2
Sample Matrix: Water
Lab Sample ID: 1HC1002-13 **Collection Date:** 03/11/2024 13:53

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1814	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1814	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1814	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1814	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1814	CSM
Surrogate: Dibromofluoromethane	68.8	Limit: 80-126	% Rec	1	S-GC	03/15/24 0000	03/15/24 1814	CSM
Surrogate: Dibromofluoromethane	68.8	Limit: 75-136	% Rec	1	S-GC	03/15/24 0000	03/15/24 1814	CSM
Surrogate: 1,2-Dichloroethane-d4	66.2	Limit: 63-138	% Rec	1		03/15/24 0000	03/15/24 1814	CSM
Surrogate: 1,2-Dichloroethane-d4	66.2	Limit: 61-142	% Rec	1		03/15/24 0000	03/15/24 1814	CSM
Surrogate: Toluene-d8	105	Limit: 87-116	% Rec	1		03/15/24 0000	03/15/24 1814	CSM
Surrogate: Toluene-d8	105	Limit: 82-121	% Rec	1		03/15/24 0000	03/15/24 1814	CSM
Surrogate: 4-Bromofluorobenzene	85.9	Limit: 85-111	% Rec	1		03/15/24 0000	03/15/24 1814	CSM
Surrogate: 4-Bromofluorobenzene	85.9	Limit: 80-116	% Rec	1		03/15/24 0000	03/15/24 1814	CSM

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		03/18/24 0844	03/18/24 2232	RVV
Arsenic, total	**0.0277**	0.0040	mg/L	4		03/18/24 0844	03/18/24 2232	RVV
Barium, total	**0.138**	0.0040	mg/L	4		03/18/24 0844	03/18/24 2232	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2232	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		03/18/24 0844	03/18/24 2232	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/18/24 0844	03/18/24 2232	RVV
Cobalt, total	**0.0142**	0.0004	mg/L	4		03/18/24 0844	03/18/24 2232	RVV
Copper, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2232	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2232	RVV
Nickel, total	**0.0128**	0.0040	mg/L	4		03/18/24 0844	03/18/24 2232	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2232	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2232	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/18/24 0844	03/18/24 2232	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/18/24 0844	03/18/24 2232	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		03/18/24 0844	03/18/24 2232	RVV

Client Sample ID: AW-9
Sample Matrix: Water
Lab Sample ID: 1HC1002-14 **Collection Date:** 03/11/2024 14:09

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Arsenic, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2238	RVV
Cobalt, total	**0.0011**	0.0004	mg/L	4		03/18/24 0844	03/18/24 2238	RVV

Client Sample ID: AW-3
Sample Matrix: Water
Lab Sample ID: 1HC1002-15 **Collection Date:** 03/11/2024 14:27

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1841	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1841	CSM
Bromomethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1841	CSM
Chloroethane	**3.0**	1.0	ug/L	1		03/15/24 0000	03/15/24 1841	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1841	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1841	CSM
Acetone	<10.0	10.0	ug/L	1		03/15/24 0000	03/15/24 1841	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1841	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1841	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1841	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1841	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1841	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1841	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1841	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1841	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/15/24 0000	03/15/24 1841	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1841	CSM
Chloroform	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1841	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1841	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1841	CSM
Benzene	**2.7**	1.0	ug/L	1		03/15/24 0000	03/15/24 1841	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1841	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1841	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1841	CSM
Dibromomethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1841	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1841	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1841	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1841	CSM
Toluene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1841	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1841	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1841	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1841	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1841	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1841	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1841	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1841	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1841	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1841	CSM
Xylenes, total	<2.0	2.0	ug/L	1		03/15/24 0000	03/15/24 1841	CSM
Styrene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1841	CSM
Bromoform	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1841	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1841	CSM

Client Sample ID: AW-3
Sample Matrix: Water
Lab Sample ID: 1HC1002-15 **Collection Date:** 03/11/2024 14:27

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1841	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1841	CSM
1,4-Dichlorobenzene	**3.2**	1.0	ug/L	1		03/15/24 0000	03/15/24 1841	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1841	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1841	CSM
Surrogate: Dibromofluoromethane	75.3	Limit: 75-136	% Rec	1		03/15/24 0000	03/15/24 1841	CSM
Surrogate: Dibromofluoromethane	75.3	Limit: 80-126	% Rec	1	S-GC	03/15/24 0000	03/15/24 1841	CSM
Surrogate: 1,2-Dichloroethane-d4	73.5	Limit: 61-142	% Rec	1		03/15/24 0000	03/15/24 1841	CSM
Surrogate: 1,2-Dichloroethane-d4	73.5	Limit: 63-138	% Rec	1		03/15/24 0000	03/15/24 1841	CSM
Surrogate: Toluene-d8	104	Limit: 82-121	% Rec	1		03/15/24 0000	03/15/24 1841	CSM
Surrogate: Toluene-d8	104	Limit: 87-116	% Rec	1		03/15/24 0000	03/15/24 1841	CSM
Surrogate: 4-Bromofluorobenzene	85.4	Limit: 80-116	% Rec	1		03/15/24 0000	03/15/24 1841	CSM
Surrogate: 4-Bromofluorobenzene	85.4	Limit: 85-111	% Rec	1		03/15/24 0000	03/15/24 1841	CSM

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		03/18/24 0844	03/18/24 2256	RVV
Arsenic, total	**0.0409**	0.0040	mg/L	4		03/18/24 0844	03/18/24 2256	RVV
Barium, total	**0.429**	0.0040	mg/L	4		03/18/24 0844	03/18/24 2256	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2256	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		03/18/24 0844	03/18/24 2256	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/18/24 0844	03/18/24 2256	RVV
Cobalt, total	**0.0007**	0.0004	mg/L	4		03/18/24 0844	03/18/24 2256	RVV
Copper, total	**0.0061**	0.0040	mg/L	4		03/18/24 0844	03/18/24 2256	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2256	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2256	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2256	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2256	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/18/24 0844	03/18/24 2256	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/18/24 0844	03/18/24 2256	RVV
Zinc, total	**0.0204**	0.0200	mg/L	4		03/18/24 0844	03/18/24 2256	RVV

Client Sample ID: Duplicate
Sample Matrix: Water
Lab Sample ID: 1HC1002-16 **Collection Date:** 03/11/2024

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		03/18/24 0844	03/18/24 2302	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2302	RVV
Barium, total	**0.376**	0.0040	mg/L	4		03/18/24 0844	03/18/24 2302	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2302	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		03/18/24 0844	03/18/24 2302	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/18/24 0844	03/18/24 2302	RVV
Cobalt, total	**0.0106**	0.0004	mg/L	4		03/18/24 0844	03/18/24 2302	RVV
Copper, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2302	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2302	RVV
Nickel, total	**0.0078**	0.0040	mg/L	4		03/18/24 0844	03/18/24 2302	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2302	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/18/24 0844	03/18/24 2302	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/18/24 0844	03/18/24 2302	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/18/24 0844	03/18/24 2302	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		03/18/24 0844	03/18/24 2302	RVV

Batch Log Summary

Method	Batch	Laboratory ID	Client / Source ID
EPA 376.2	1HC0886	1HC0886-BS1	
		1HC0886-MS1	1HC0966-03
		1HC0886-MSD1	1HC0966-03
		1HC1002-09	MW-20
		1HC0886-BLK1	

Method	Batch	Laboratory ID	Client / Source ID
EPA 8260B	1HC0910	1HC0910-BS1	
		1HC0910-BSD1	
		1HC0910-BLK1	
		1HC1002-01	MW-6 (b)
		1HC1002-02	MW-26 (b)
		1HC1002-03	MW-27 (b)
		1HC1002-04	MW-28 (b)
		1HC1002-05	MW-7 (b)
		1HC1002-06	MW-9
		1HC1002-07	MW-12
		1HC1002-08	MW-14
		1HC1002-09	MW-20
		1HC1002-10	AW-1
		1HC1002-11	MW-24
		1HC1002-12	MW-25
		1HC1002-13	AW-2
		1HC1002-15	AW-3
		1HC0910-MS1	1HC1002-01
		1HC0910-MSD1	1HC1002-01

Method	Batch	Laboratory ID	Client / Source ID
EPA 6020A	1HC0915	1HC0915-BLK1	
		1HC0915-BS1	
		1HC1002-01	MW-6 (b)
		1HC0915-MS1	1HC1002-01
		1HC0915-MSD1	1HC1002-01
		1HC0915-PS1	1HC1002-01
		1HC1002-02	MW-26 (b)
		1HC1002-03	MW-27 (b)
		1HC1002-04	MW-28 (b)
		1HC1002-05	MW-7 (b)
		1HC1002-06	MW-9
		1HC1002-07	MW-12

EPA 6020A	1HC0915	1HC1002-08	MW-14
		1HC1002-09	MW-20
		1HC1002-10	AW-1
		1HC1002-11	MW-24
		1HC1002-12	MW-25
		1HC1002-13	AW-2
		1HC1002-14	AW-9
		1HC1002-15	AW-3
		1HC1002-16	Duplicate

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 1HC0910 - EPA 5030B - EPA 8260B										
Blank (1HC0910-BLK1)			Prepared: 03/15/24 00:00 Analyzed: 03/15/24 10:54							
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							

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0910 - EPA 5030B - EPA 8260B										
Blank (1HC0910-BLK1)			Prepared: 03/15/24 00:00 Analyzed: 03/15/24 10:54							
Tetrachloroethylene	<1.0	1.0	ug/L							
2-Hexanone (MBK)	<5.0	5.0	ug/L							
Dibromochloromethane	<1.0	1.0	ug/L							
1,2-Dibromoethane	<1.0	1.0	ug/L							
Chlorobenzene	<1.0	1.0	ug/L							
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L							
Ethylbenzene	<1.0	1.0	ug/L							
Xylenes, total	<2.0	2.0	ug/L							
Styrene	<1.0	1.0	ug/L							
Bromoform	<1.0	1.0	ug/L							
1,2,3-Trichloropropane	<1.0	1.0	ug/L							
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L							
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L							
1,4-Dichlorobenzene	<1.0	1.0	ug/L							
1,2-Dichlorobenzene	<1.0	1.0	ug/L							
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L							
Surrogate: Dibromofluoromethane	*36.3*		ug/L	*50.2*		*72.3*	*80-126*			*S-GC*
Surrogate: Dibromofluoromethane	*36.3*		ug/L	*50.2*		*72.3*	*75-136*			*S-GC*
Surrogate: 1,2-Dichloroethane-d4	*34.1*		ug/L	*50.1*		*68.1*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*34.1*		ug/L	*50.1*		*68.1*	*61-142*			
Surrogate: Toluene-d8	*52.9*		ug/L	*50.4*		*105*	*87-116*			
Surrogate: Toluene-d8	*52.9*		ug/L	*50.4*		*105*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*46.2*		ug/L	*50.1*		*92.1*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*46.2*		ug/L	*50.1*		*92.1*	*80-116*			
LCS (1HC0910-BS1)			Prepared: 03/15/24 00:00 Analyzed: 03/15/24 09:35							
Chloromethane	32.01	1.0	ug/L	30.6		104	63-155			
Vinyl Chloride	28.39	1.0	ug/L	30.2		93.9	70-154			
Bromomethane	28.10	1.0	ug/L	28.8		97.6	52-176			
Chloroethane	32.15	1.0	ug/L	31.6		102	72-148			
Trichlorofluoromethane	28.03	1.0	ug/L	32.6		86.0	70-152			
1,1-Dichloroethylene	48.44	1.0	ug/L	50.0		96.9	70-148			
Acetone	94.40	10.0	ug/L	102		92.5	43-172			
Methyl Iodide	105.2	1.0	ug/L	99.7		105	69-170			
Carbon Disulfide	93.92	1.0	ug/L	101		93.0	72-162			
Methylene Chloride	46.14	5.0	ug/L	50.0		92.3	68-142			
Acrylonitrile	78.93	5.0	ug/L	100		78.7	67-144			
trans-1,2-Dichloroethylene	48.22	1.0	ug/L	50.0		96.4	66-148			
1,1-Dichloroethane	47.35	1.0	ug/L	50.0		94.7	66-143			
Vinyl Acetate	70.70	5.0	ug/L	102		69.4	43-153			
cis-1,2-Dichloroethylene	47.81	1.0	ug/L	49.5		96.6	71-149			
2-Butanone (MEK)	90.57	10.0	ug/L	103		87.7	52-159			
Bromochloromethane	49.59	1.0	ug/L	50.0		99.2	69-143			
Chloroform	47.50	1.0	ug/L	50.0		95.0	69-144			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0910 - EPA 5030B - EPA 8260B										
LCS (1HC0910-BS1)				Prepared: 03/15/24 00:00 Analyzed: 03/15/24 09:35						
1,1,1-Trichloroethane	42.71	1.0	ug/L	50.0		85.5	62-129			
Carbon Tetrachloride	45.27	1.0	ug/L	50.0		90.5	63-141			
Benzene	52.00	1.0	ug/L	50.0		104	71-134			
1,2-Dichloroethane	48.94	1.0	ug/L	50.0		97.9	72-132			
Trichloroethylene	48.68	1.0	ug/L	50.0		97.4	71-135			
1,2-Dichloropropane	50.09	1.0	ug/L	50.0		100	69-136			
Dibromomethane	51.57	1.0	ug/L	50.0		103	73-147			
Bromodichloromethane	47.84	1.0	ug/L	50.0		95.7	68-129			
cis-1,3-Dichloropropene	47.05	1.0	ug/L	50.3		93.5	65-134			
4-Methyl-2-pentanone (MIBK)	97.95	5.0	ug/L	101		96.6	58-147			
Toluene	50.74	1.0	ug/L	50.0		101	72-133			
trans-1,3-Dichloropropene	46.33	1.0	ug/L	50.4		91.9	67-130			
1,1,2-Trichloroethane	49.48	1.0	ug/L	50.0		99.0	69-135			
Tetrachloroethylene	49.12	1.0	ug/L	50.0		98.2	69-130			
2-Hexanone (MBK)	100.3	5.0	ug/L	103		97.1	55-144			
Dibromochloromethane	50.12	1.0	ug/L	49.5		101	73-127			
1,2-Dibromoethane	49.50	1.0	ug/L	50.0		99.0	67-132			
Chlorobenzene	51.56	1.0	ug/L	50.0		103	72-123			
1,1,1,2-Tetrachloroethane	51.90	1.0	ug/L	50.0		104	73-127			
Ethylbenzene	48.39	1.0	ug/L	50.0		96.8	71-127			
Xylenes, total	148.5	2.0	ug/L	150		99.0	74-127			
Styrene	49.66	1.0	ug/L	50.0		99.3	66-126			
Bromoform	55.68	1.0	ug/L	50.0		111	68-130			
1,2,3-Trichloropropane	51.26	1.0	ug/L	50.0		103	63-136			
trans-1,4-Dichloro-2-butene	93.01	5.0	ug/L	104		89.5	54-134			
1,1,2,2-Tetrachloroethane	49.35	1.0	ug/L	49.8		99.0	61-131			
1,4-Dichlorobenzene	48.48	1.0	ug/L	50.0		97.0	70-129			
1,2-Dichlorobenzene	49.14	1.0	ug/L	50.0		98.3	69-126			
1,2-Dibromo-3-chloropropane	50.39	5.0	ug/L	50.0		101	50-143			
Surrogate: Dibromofluoromethane	*50.3*		ug/L	*50.2*		*100*	*80-126*			
Surrogate: Dibromofluoromethane	*50.3*		ug/L	*50.2*		*100*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*51.2*		ug/L	*50.1*		*102*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*51.2*		ug/L	*50.1*		*102*	*61-142*			
Surrogate: Toluene-d8	*50.5*		ug/L	*50.4*		*100*	*87-116*			
Surrogate: Toluene-d8	*50.5*		ug/L	*50.4*		*100*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*52.5*		ug/L	*50.1*		*105*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*52.5*		ug/L	*50.1*		*105*	*80-116*			
LCS Dup (1HC0910-BSD1)				Prepared: 03/15/24 00:00 Analyzed: 03/15/24 10:02						
Chloromethane	27.87	1.0	ug/L	30.6		90.9	63-155	13.8	24	
Vinyl Chloride	24.63	1.0	ug/L	30.2		81.5	70-154	14.2	25	
Bromomethane	25.26	1.0	ug/L	28.8		87.7	52-176	10.6	27	
Chloroethane	28.21	1.0	ug/L	31.6		89.2	72-148	13.1	25	
Trichlorofluoromethane	24.49	1.0	ug/L	32.6		75.1	70-152	13.5	26	

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0910 - EPA 5030B - EPA 8260B										
LCS Dup (1HC0910-BSD1)			Prepared: 03/15/24 00:00 Analyzed: 03/15/24 10:02							
1,1-Dichloroethylene	43.14	1.0	ug/L	50.0		86.3	70-148	11.6	24	
Acetone	86.67	10.0	ug/L	102		85.0	43-172	8.54	30	
Methyl Iodide	92.63	1.0	ug/L	99.7		92.9	69-170	12.7	30	
Carbon Disulfide	81.88	1.0	ug/L	101		81.1	72-162	13.7	24	
Methylene Chloride	41.25	5.0	ug/L	50.0		82.5	68-142	11.2	21	
Acrylonitrile	73.54	5.0	ug/L	100		73.3	67-144	7.07	24	
trans-1,2-Dichloroethylene	42.98	1.0	ug/L	50.0		86.0	66-148	11.5	27	
1,1-Dichloroethane	42.63	1.0	ug/L	50.0		85.3	66-143	10.5	24	
Vinyl Acetate	86.86	5.0	ug/L	102		85.2	43-153	20.5	30	
cis-1,2-Dichloroethylene	43.46	1.0	ug/L	49.5		87.8	71-149	9.53	26	
2-Butanone (MEK)	81.63	10.0	ug/L	103		79.0	52-159	10.4	27	
Bromochloromethane	45.04	1.0	ug/L	50.0		90.1	69-143	9.62	23	
Chloroform	43.08	1.0	ug/L	50.0		86.2	69-144	9.76	23	
1,1,1-Trichloroethane	37.68	1.0	ug/L	50.0		75.4	62-129	12.5	24	
Carbon Tetrachloride	39.84	1.0	ug/L	50.0		79.7	63-141	12.8	25	
Benzene	46.26	1.0	ug/L	50.0		92.5	71-134	11.7	24	
1,2-Dichloroethane	45.46	1.0	ug/L	50.0		90.9	72-132	7.37	24	
Trichloroethylene	43.27	1.0	ug/L	50.0		86.5	71-135	11.8	24	
1,2-Dichloropropane	45.56	1.0	ug/L	50.0		91.1	69-136	9.47	24	
Dibromomethane	47.28	1.0	ug/L	50.0		94.6	73-147	8.68	25	
Bromodichloromethane	43.18	1.0	ug/L	50.0		86.4	68-129	10.2	22	
cis-1,3-Dichloropropene	43.10	1.0	ug/L	50.3		85.6	65-134	8.76	23	
4-Methyl-2-pentanone (MIBK)	87.91	5.0	ug/L	101		86.7	58-147	10.8	27	
Toluene	44.42	1.0	ug/L	50.0		88.8	72-133	13.3	24	
trans-1,3-Dichloropropene	42.20	1.0	ug/L	50.4		83.7	67-130	9.33	24	
1,1,2-Trichloroethane	45.08	1.0	ug/L	50.0		90.2	69-135	9.31	23	
Tetrachloroethylene	43.11	1.0	ug/L	50.0		86.2	69-130	13.0	25	
2-Hexanone (MBK)	90.38	5.0	ug/L	103		87.5	55-144	10.4	25	
Dibromochloromethane	45.64	1.0	ug/L	49.5		92.2	73-127	9.36	22	
1,2-Dibromoethane	44.73	1.0	ug/L	50.0		89.5	67-132	10.1	24	
Chlorobenzene	46.06	1.0	ug/L	50.0		92.1	72-123	11.3	23	
1,1,1,2-Tetrachloroethane	46.47	1.0	ug/L	50.0		92.9	73-127	11.0	24	
Ethylbenzene	42.66	1.0	ug/L	50.0		85.3	71-127	12.6	26	
Xylenes, total	131.0	2.0	ug/L	150		87.3	74-127	12.6	25	
Styrene	43.98	1.0	ug/L	50.0		88.0	66-126	12.1	23	
Bromoform	48.95	1.0	ug/L	50.0		97.9	68-130	12.9	23	
1,2,3-Trichloropropane	46.24	1.0	ug/L	50.0		92.5	63-136	10.3	24	
trans-1,4-Dichloro-2-butene	83.02	5.0	ug/L	104		79.9	54-134	11.4	27	
1,1,2,2-Tetrachloroethane	44.34	1.0	ug/L	49.8		88.9	61-131	10.7	29	
1,4-Dichlorobenzene	43.95	1.0	ug/L	50.0		87.9	70-129	9.80	24	
1,2-Dichlorobenzene	44.48	1.0	ug/L	50.0		89.0	69-126	9.96	26	
1,2-Dibromo-3-chloropropane	44.13	5.0	ug/L	50.0		88.3	50-143	13.2	30	

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0910 - EPA 5030B - EPA 8260B										
LCS Dup (1HC0910-BSD1)			Prepared: 03/15/24 00:00 Analyzed: 03/15/24 10:02							
Surrogate: Dibromofluoromethane	*50.3*		ug/L	*50.2*		*100*	*80-126*			
Surrogate: Dibromofluoromethane	*50.3*		ug/L	*50.2*		*100*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*51.3*		ug/L	*50.1*		*103*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*51.3*		ug/L	*50.1*		*103*	*61-142*			
Surrogate: Toluene-d8	*50.2*		ug/L	*50.4*		*99.6*	*87-116*			
Surrogate: Toluene-d8	*50.2*		ug/L	*50.4*		*99.6*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*51.8*		ug/L	*50.1*		*103*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*51.8*		ug/L	*50.1*		*103*	*80-116*			
Matrix Spike (1HC0910-MS1)	**Source: 1HC1002-01**		Prepared: 03/15/24 00:00 Analyzed: 03/15/24 21:45							
Chloromethane	304.7	10.0	ug/L	306	ND	99.4	61-152			
Vinyl Chloride	282.6	10.0	ug/L	302	ND	93.5	66-149			
Bromomethane	248.8	10.0	ug/L	288	ND	86.4	43-171			
Chloroethane	311.2	10.0	ug/L	316	ND	98.4	69-148			
Trichlorofluoromethane	283.0	10.0	ug/L	326	ND	86.8	62-163			
1,1-Dichloroethylene	466.9	10.0	ug/L	500	ND	93.4	70-148			
Acetone	905.6	100	ug/L	1020	ND	88.8	45-173			
Methyl Iodide	1009	10.0	ug/L	997	ND	101	62-167			
Carbon Disulfide	919.1	10.0	ug/L	1010	ND	91.0	71-163			
Methylene Chloride	419.8	50.0	ug/L	500	ND	84.0	69-140			
Acrylonitrile	715.4	50.0	ug/L	1000	ND	71.3	58-151			
trans-1,2-Dichloroethylene	464.2	10.0	ug/L	500	ND	92.8	69-144			
1,1-Dichloroethane	451.1	10.0	ug/L	500	ND	90.2	70-138			
Vinyl Acetate	745.2	50.0	ug/L	1020	ND	73.1	58-142			
cis-1,2-Dichloroethylene	437.7	10.0	ug/L	495	ND	88.5	68-151			
2-Butanone (MEK)	922.8	100	ug/L	1030	ND	89.3	50-160			
Bromochloromethane	441.9	10.0	ug/L	500	ND	88.4	65-143			
Chloroform	452.1	10.0	ug/L	500	ND	90.4	71-143			
1,1,1-Trichloroethane	422.7	10.0	ug/L	500	ND	84.6	63-133			
Carbon Tetrachloride	459.9	10.0	ug/L	500	ND	92.0	63-142			
Benzene	500.9	10.0	ug/L	500	ND	100	69-133			
1,2-Dichloroethane	461.0	10.0	ug/L	500	ND	92.2	63-138			
Trichloroethylene	475.3	10.0	ug/L	500	ND	95.1	71-133			
1,2-Dichloropropane	469.5	10.0	ug/L	500	ND	93.9	69-132			
Dibromomethane	476.3	10.0	ug/L	500	ND	95.3	70-147			
Bromodichloromethane	447.0	10.0	ug/L	500	ND	89.4	67-130			
cis-1,3-Dichloropropene	415.6	10.0	ug/L	503	ND	82.6	61-126			
4-Methyl-2-pentanone (MIBK)	834.8	50.0	ug/L	1010	ND	82.3	55-147			
Toluene	480.2	10.0	ug/L	500	ND	96.0	71-133			
trans-1,3-Dichloropropene	395.8	10.0	ug/L	504	ND	78.5	63-124			
1,1,2-Trichloroethane	463.5	10.0	ug/L	500	ND	92.7	69-133			
Tetrachloroethylene	500.7	10.0	ug/L	500	ND	100	70-124			
2-Hexanone (MBK)	861.7	50.0	ug/L	1030	ND	83.4	53-141			
Dibromochloromethane	466.9	10.0	ug/L	495	ND	94.3	74-122			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0910 - EPA 5030B - EPA 8260B										
Matrix Spike (1HC0910-MS1)	**Source: 1HC1002-01**		Prepared: 03/15/24 00:00 Analyzed: 03/15/24 21:45							
1,2-Dibromoethane	453.3	10.0	ug/L	500	ND	90.7	66-127			
Chlorobenzene	486.5	10.0	ug/L	500	ND	97.3	76-116			
1,1,1,2-Tetrachloroethane	499.0	10.0	ug/L	500	ND	99.8	77-121			
Ethylbenzene	467.9	10.0	ug/L	500	ND	93.6	73-124			
Xylenes, total	1410	20.0	ug/L	1500	ND	94.0	75-123			
Styrene	461.1	10.0	ug/L	500	ND	92.2	70-120			
Bromoform	495.8	10.0	ug/L	500	ND	99.2	70-124			
1,2,3-Trichloropropane	466.3	10.0	ug/L	500	ND	93.3	62-135			
trans-1,4-Dichloro-2-butene	764.7	50.0	ug/L	1040	ND	73.6	50-120			
1,1,2,2-Tetrachloroethane	443.4	10.0	ug/L	498	ND	88.9	63-126			
1,4-Dichlorobenzene	445.7	10.0	ug/L	500	ND	89.1	72-119			
1,2-Dichlorobenzene	444.1	10.0	ug/L	500	ND	88.8	71-117			
1,2-Dibromo-3-chloropropane	397.2	50.0	ug/L	500	ND	79.4	49-134			
Surrogate: Dibromofluoromethane	*502*		ug/L	*502*		*100*	*80-126*			
Surrogate: Dibromofluoromethane	*502*		ug/L	*502*		*100*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*514*		ug/L	*501*		*103*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*514*		ug/L	*501*		*103*	*61-142*			
Surrogate: Toluene-d8	*506*		ug/L	*504*		*100*	*87-116*			
Surrogate: Toluene-d8	*506*		ug/L	*504*		*100*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*509*		ug/L	*501*		*101*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*509*		ug/L	*501*		*101*	*80-116*			
Matrix Spike Dup (1HC0910-MSD1)	**Source: 1HC1002-01**		Prepared: 03/15/24 00:00 Analyzed: 03/15/24 22:11							
Chloromethane	288.9	10.0	ug/L	306	ND	94.3	61-152	5.32	26	
Vinyl Chloride	264.2	10.0	ug/L	302	ND	87.4	66-149	6.73	23	
Bromomethane	253.1	10.0	ug/L	288	ND	87.9	43-171	1.71	29	
Chloroethane	293.4	10.0	ug/L	316	ND	92.7	69-148	5.89	25	
Trichlorofluoromethane	271.8	10.0	ug/L	326	ND	83.3	62-163	4.04	25	
1,1-Dichloroethylene	462.1	10.0	ug/L	500	ND	92.4	70-148	1.03	22	
Acetone	923.5	100	ug/L	1020	ND	90.5	45-173	1.96	30	
Methyl Iodide	962.6	10.0	ug/L	997	ND	96.6	62-167	4.75	24	
Carbon Disulfide	875.8	10.0	ug/L	1010	ND	86.7	71-163	4.82	22	
Methylene Chloride	407.5	50.0	ug/L	500	ND	81.5	69-140	2.97	19	
Acrylonitrile	730.2	50.0	ug/L	1000	ND	72.8	58-151	2.05	15	
trans-1,2-Dichloroethylene	459.0	10.0	ug/L	500	ND	91.8	69-144	1.13	22	
1,1-Dichloroethane	443.1	10.0	ug/L	500	ND	88.6	70-138	1.79	20	
Vinyl Acetate	819.5	50.0	ug/L	1020	ND	80.4	58-142	9.50	24	
cis-1,2-Dichloroethylene	437.8	10.0	ug/L	495	ND	88.5	68-151	0.0228	22	
2-Butanone (MEK)	860.5	100	ug/L	1030	ND	83.3	50-160	6.99	23	
Bromochloromethane	440.8	10.0	ug/L	500	ND	88.2	65-143	0.249	22	
Chloroform	447.0	10.0	ug/L	500	ND	89.4	71-143	1.13	21	
1,1,1-Trichloroethane	412.8	10.0	ug/L	500	ND	82.6	63-133	2.37	23	
Carbon Tetrachloride	449.6	10.0	ug/L	500	ND	89.9	63-142	2.26	22	
Benzene	488.5	10.0	ug/L	500	ND	97.7	69-133	2.51	18	

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0910 - EPA 5030B - EPA 8260B										
Matrix Spike Dup (1HC0910-MSD1)	**Source: 1HC1002-01**		Prepared: 03/15/24 00:00 Analyzed: 03/15/24 22:11							
1,2-Dichloroethane	453.6	10.0	ug/L	500	ND	90.7	63-138	1.62	20	
Trichloroethylene	466.1	10.0	ug/L	500	ND	93.2	71-133	1.95	23	
1,2-Dichloropropane	463.9	10.0	ug/L	500	ND	92.8	69-132	1.20	20	
Dibromomethane	473.3	10.0	ug/L	500	ND	94.7	70-147	0.632	22	
Bromodichloromethane	440.9	10.0	ug/L	500	ND	88.2	67-130	1.37	21	
cis-1,3-Dichloropropene	419.8	10.0	ug/L	503	ND	83.4	61-126	1.01	21	
4-Methyl-2-pentanone (MIBK)	864.9	50.0	ug/L	1010	ND	85.3	55-147	3.54	23	
Toluene	461.1	10.0	ug/L	500	ND	92.2	71-133	4.06	19	
trans-1,3-Dichloropropene	403.4	10.0	ug/L	504	ND	80.0	63-124	1.90	21	
1,1,2-Trichloroethane	451.5	10.0	ug/L	500	ND	90.3	69-133	2.62	19	
Tetrachloroethylene	487.8	10.0	ug/L	500	ND	97.6	70-124	2.61	24	
2-Hexanone (MBK)	899.4	50.0	ug/L	1030	ND	87.1	53-141	4.28	24	
Dibromochloromethane	465.7	10.0	ug/L	495	ND	94.1	74-122	0.257	21	
1,2-Dibromoethane	455.9	10.0	ug/L	500	ND	91.2	66-127	0.572	23	
Chlorobenzene	479.2	10.0	ug/L	500	ND	95.8	76-116	1.51	21	
1,1,1,2-Tetrachloroethane	492.8	10.0	ug/L	500	ND	98.6	77-121	1.25	25	
Ethylbenzene	457.9	10.0	ug/L	500	ND	91.6	73-124	2.16	20	
Xylenes, total	1380	20.0	ug/L	1500	ND	92.0	75-123	2.14	20	
Styrene	450.8	10.0	ug/L	500	ND	90.2	70-120	2.26	23	
Bromoform	485.2	10.0	ug/L	500	ND	97.0	70-124	2.16	22	
1,2,3-Trichloropropane	458.7	10.0	ug/L	500	ND	91.7	62-135	1.64	28	
trans-1,4-Dichloro-2-butene	765.1	50.0	ug/L	1040	ND	73.6	50-120	0.0523	26	
1,1,2,2-Tetrachloroethane	450.1	10.0	ug/L	498	ND	90.3	63-126	1.50	24	
1,4-Dichlorobenzene	441.5	10.0	ug/L	500	ND	88.3	72-119	0.947	24	
1,2-Dichlorobenzene	444.0	10.0	ug/L	500	ND	88.8	71-117	0.0225	24	
1,2-Dibromo-3-chloropropane	406.6	50.0	ug/L	500	ND	81.3	49-134	2.34	28	
Surrogate: Dibromofluoromethane	*502*		ug/L	*502*		*100*	*80-126*			
Surrogate: Dibromofluoromethane	*502*		ug/L	*502*		*100*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*524*		ug/L	*501*		*105*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*524*		ug/L	*501*		*105*	*61-142*			
Surrogate: Toluene-d8	*496*		ug/L	*504*		*98.4*	*87-116*			
Surrogate: Toluene-d8	*496*		ug/L	*504*		*98.4*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*506*		ug/L	*501*		*101*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*506*		ug/L	*501*		*101*	*80-116*			

Determination of Conventional Chemistry Parameters	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0886 - Wet Chem Preparation - EPA 376.2										
Blank (1HC0886-BLK1)			Prepared: 03/15/24 13:29 Analyzed: 03/15/24 14:57							
Sulfide, total	<0.10	0.10	mg/L							
LCS (1HC0886-BS1)			Prepared: 03/15/24 13:29 Analyzed: 03/15/24 14:57							

Determination of Conventional Chemistry Parameters	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0886 - Wet Chem Preparation - EPA 376.2										
Sulfide, total	0.164	0.10	mg/L	0.19		85.0	59-110			
Matrix Spike (1HC0886-MS1)	**Source: 1HC0966-03**		Prepared: 03/15/24 13:29 Analyzed: 03/15/24 14:57							
Sulfide, total	0.157	0.10	mg/L	0.19	0.0326	64.4	50-150			
Matrix Spike Dup (1HC0886-MSD1)	**Source: 1HC0966-03**		Prepared: 03/15/24 13:29 Analyzed: 03/15/24 14:57							
Sulfide, total	0.173	0.10	mg/L	0.19	0.0326	72.7	50-150	9.67	30	

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0915 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Blank (1HC0915-BLK1)			Prepared: 03/18/24 08:44 Analyzed: 03/18/24 20:35							
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 (1HC0915-BS1)			Prepared: 03/18/24 08:44 Analyzed: 03/18/24 20:41							
Antimony, total	0.0957	0.0020	mg/L	0.100		95.7	80-120			
Arsenic, total	0.0952	0.0040	mg/L	0.100		95.2	80-120			
Barium, total	0.109	0.0040	mg/L	0.100		109	80-120			
Beryllium, total	0.0961	0.0040	mg/L	0.100		96.1	80-120			
Cadmium, total	0.0972	0.0008	mg/L	0.100		97.2	80-120			
Chromium, total	0.0968	0.0080	mg/L	0.100		96.8	80-120			
Cobalt, total	0.0978	0.0004	mg/L	0.100		97.8	80-120			
Copper, total	0.0983	0.0040	mg/L	0.100		98.3	80-120			
Lead, total	0.0977	0.0040	mg/L	0.100		97.7	80-120			
Nickel, total	0.0959	0.0040	mg/L	0.100		95.9	80-120			
Selenium, total	0.0967	0.0040	mg/L	0.100		96.7	80-120			
Silver, total	0.102	0.0040	mg/L	0.100		102	80-120			
Thallium, total	0.0983	0.0020	mg/L	0.100		98.3	80-120			
Vanadium, total	0.0991	0.0200	mg/L	0.100		99.1	80-120			
Zinc, total	0.0975	0.0200	mg/L	0.100		97.5	80-120			
Matrix Spike (1HC0915-MS1)	**Source: 1HC1002-01**		Prepared: 03/18/24 08:44 Analyzed: 03/18/24 20:54							

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0915 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Matrix Spike (1HC0915-MS1)		**Source: 1HC1002-01**		Prepared: 03/18/24 08:44 Analyzed: 03/18/24 20:54						
Antimony, total	0.0949	0.0020	mg/L	0.100	ND	94.9	75-125			
Arsenic, total	0.100	0.0040	mg/L	0.100	0.0025	97.7	75-125			
Barium, total	0.392	0.0040	mg/L	0.100	0.285	106	75-125			
Beryllium, total	0.0919	0.0040	mg/L	0.100	ND	91.9	75-125			
Cadmium, total	0.0935	0.0008	mg/L	0.100	ND	93.5	75-125			
Chromium, total	0.0899	0.0080	mg/L	0.100	0.0008	89.1	75-125			
Cobalt, total	0.102	0.0004	mg/L	0.100	0.0023	100	75-125			
Copper, total	0.0947	0.0040	mg/L	0.100	0.0150	79.7	75-125			
Lead, total	0.0918	0.0040	mg/L	0.100	ND	91.8	75-125			
Nickel, total	0.112	0.0040	mg/L	0.100	0.0164	96.0	75-125			
Selenium, total	0.0925	0.0040	mg/L	0.100	ND	92.5	75-125			
Silver, total	0.0961	0.0040	mg/L	0.100	ND	96.1	75-125			
Thallium, total	0.0938	0.0020	mg/L	0.100	0.0002	93.5	75-125			
Vanadium, total	0.102	0.0200	mg/L	0.100	ND	102	75-125			
Zinc, total	0.102	0.0200	mg/L	0.100	0.0155	86.3	75-125			
Matrix Spike Dup (1HC0915-MSD1)		**Source: 1HC1002-01**		Prepared: 03/18/24 08:44 Analyzed: 03/18/24 21:00						
Antimony, total	0.0945	0.0020	mg/L	0.100	ND	94.5	75-125	0.476	20	
Arsenic, total	0.0996	0.0040	mg/L	0.100	0.0025	97.1	75-125	0.589	20	
Barium, total	0.401	0.0040	mg/L	0.100	0.285	115	75-125	2.28	20	
Beryllium, total	0.0914	0.0040	mg/L	0.100	ND	91.4	75-125	0.598	20	
Cadmium, total	0.0925	0.0008	mg/L	0.100	ND	92.5	75-125	1.15	20	
Chromium, total	0.0901	0.0080	mg/L	0.100	0.0008	89.3	75-125	0.210	20	
Cobalt, total	0.103	0.0004	mg/L	0.100	0.0023	101	75-125	0.954	20	
Copper, total	0.0953	0.0040	mg/L	0.100	0.0150	80.3	75-125	0.570	20	
Lead, total	0.0916	0.0040	mg/L	0.100	ND	91.6	75-125	0.236	20	
Nickel, total	0.113	0.0040	mg/L	0.100	0.0164	96.9	75-125	0.806	20	
Selenium, total	0.0950	0.0040	mg/L	0.100	ND	95.0	75-125	2.64	20	
Silver, total	0.0965	0.0040	mg/L	0.100	ND	96.5	75-125	0.344	20	
Thallium, total	0.0940	0.0020	mg/L	0.100	0.0002	93.8	75-125	0.303	20	
Vanadium, total	0.101	0.0200	mg/L	0.100	ND	101	75-125	1.15	20	
Zinc, total	0.103	0.0200	mg/L	0.100	0.0155	87.1	75-125	0.738	20	
Post Spike (1HC0915-PS1)		**Source: 1HC1002-01**		Prepared: 03/18/24 08:44 Analyzed: 03/18/24 21:06						
Antimony, total	0.0760		mg/L	0.0800	0.00008	94.9	80-120			
Arsenic, total	0.0798		mg/L	0.0800	0.0024	96.7	80-120			
Barium, total	0.370		mg/L	0.0800	0.280	112	80-120			
Beryllium, total	0.0742		mg/L	0.0800	0.00001	92.8	80-120			
Cadmium, total	0.0756		mg/L	0.0800	0.00004	94.5	80-120			
Chromium, total	0.0731		mg/L	0.0800	0.0008	90.4	80-120			
Cobalt, total	0.0832		mg/L	0.0800	0.0022	101	80-120			
Copper, total	0.0909		mg/L	0.0800	0.0147	95.3	80-120			
Lead, total	0.0742		mg/L	0.0800	0.00005	92.6	80-120			
Nickel, total	0.0940		mg/L	0.0800	0.0161	97.4	80-120			
Selenium, total	0.0746		mg/L	0.0800	-0.00009	93.2	80-120			

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0915 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Post Spike (1HC0915-PS1)	**Source: 1HC1002-01**		Prepared: 03/18/24 08:44 Analyzed: 03/18/24 21:06							
Silver, total	0.0778		mg/L	0.0800	0.0002	97.0	80-120			
Thallium, total	0.0763		mg/L	0.0800	0.0002	95.2	80-120			
Vanadium, total	0.0853		mg/L	0.0800	0.0084	96.1	80-120			
Zinc, total	0.0847		mg/L	0.0800	0.0151	87.0	80-120			

Definitions

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

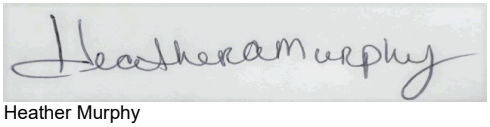
Cooler ID: Default Cooler Temp: 0.4°C

Cooler Inspection Checklist

Custody Seals	No	Containers Intact	Yes
COC/Labels Agree	Yes	Preservation Confirmed	No
Received On Ice	Yes		

Report Comments

Reviewed and Approved By:



Heather Murphy
Customer Relationship Specialist
heather.murphy@microbac.com
03/20/24 16:47

CHAIN OF CUSTODY RECORD

Keystone LABORATORIES
A Microbac Company

600 East 17th Street South
Newton, IA 50208
~~641-792-9451~~

SITE INFORMATION

Sampler: TODD WHIPPLE

Project: Benton County - New Regs

REPORT TO

Todd Whipple
HLW Engineering
PO Box 314
Story City, IA 50248

INVOICE TO

Eric Werner
Benton County Sanitary Landfill
7904 20th Ave
Blairstown, IA 52209

SPECIAL INSTRUCTIONS

None

Turn Around Time
☐ Standard ☐ RUSH, need by ___/___/___

LAB USE ONLY

Work Order 1HC1002
Temperature 0.4
Turn-Cooler: No

- ☐ Custody Seal
- ☒ Containers Intact
- ☒ COC/Labels Agree
- ☐ Preservation Confirmed
- ☒ Received on Ice

Number	Sample Identification / Client ID	Matrix	Sample Type	Date	Time	Number of Containers	Analyses	Lab Sample Number
-001	MW-6 (b)	Water	GRAB	3/11/24	8:12	7	lndfill-app1-voc-group lndfll-app1-metals-6020 lndfll-app1-voc	01
-001	MW-26 (b)	Water	GRAB	3/11/24	9:42	7	lndfill-app1-voc-group lndfll-app1-metals-6020 lndfll-app1-voc	02
-001	MW-27 (b)	Water	GRAB	3/11/24	8:55	7	lndfill-app1-voc-group lndfll-app1-metals-6020 lndfll-app1-voc	03
-001	MW-28 (b)	Water	GRAB	3/11/24	9:19	7	lndfill-app1-voc-group lndfll-app1-metals-6020	04
-001	MW-7 (b)	Water	GRAB	3/11/24	8:19	7	lndfill-app1-voc-group lndfll-app1-metals-6020	05
-001	MW-9	Water	GRAB	3/11/24	12:15	7	lndfill-app1-voc-group lndfll-app1-metals-6020	06
-001	MW-12	Water	GRAB	3/11/24	12:50	7	lndfill-app1-voc-group lndfll-app1-metals-6020	07

Relinquished By Todd Whipple 3/12/24 Date/Time

Relinquished By ___ Date/Time

Received By ___ Date/Time

Received for Lab By Lucy Wood 3/12/24 1055 Date/Time

Remarks:

1HC1002
HLW Engineering
PM: Heather Murphy

Original - Lab Copy Yellow - Sampler Copy

CHAIN OF CUSTODY RECORD

Keystone LABORATORIES
A Microbac Company

600 East 17th Street South
Newton, IA 50208
~~641-792-8451~~

SITE INFORMATION

Sampler: Todd Whipple

Project: Benton County - New Regs

REPORT TO

Todd Whipple
HLW Engineering
PO Box 314
Story City, IA 50248

INVOICE TO

Eric Werner
Benton County Sanitary Landfill
7904 20th Ave
Blairstown, IA 52209

SPECIAL INSTRUCTIONS

None

Turn Around Time

☐ Standard ☐ RUSH, need by ___/___/___

LAB USE ONLY

Work Order 1HC1002
Temperature 0.4
Turn-Cooler: No

- ☐ Custody Seal
- ☒ Containers Intact
- ☒ COC/Labels Agree
- ☐ Preservation Confirmed
- ☒ Received on Ice

Number	Sample Identification / Client ID	Matrix	Sample Type	Date	Time	Number of Containers	Analyses		Lab Sample Number
-001	MW-14	Water	GRAB	3/11/24	13:11	7	lndfill-app1-voc-group	lndfll-app1-metals-6020	08
-001	MW-20	Water	GRAB	3/11/24	13:33	8	lndfill-app1-voc-group sulf-t-376.2-regen	lndfll-app1-metals-6020	09
-001	~~AW-1~~ AW-1	Water	GRAB	3/11/24	10:32	7	lndfill-app1-voc-group	lndfll-app1-metals-6020	10
-001	MW-24	Water	GRAB	3/11/24	12:29	7	lndfill-app1-voc-group	lndfll-app1-metals-6020	11
-001	MW-25	Water	GRAB	3/11/24	10:50	7	lndfill-app1-voc-group	lndfll-app1-metals-6020	12
-001	AW-2	Water	GRAB	3/11/24	13:53	7	lndfill-app1-voc-group	lndfll-app1-metals-6020	13
-001	AW-9	Water	GRAB	3/11/24	14:09	1	as-t-6020	co-t-6020	14

Relinquished By: Todd Whipple Date/Time: 3/12/24

Received By: ___ Date/Time: ___

Relinquished By: ___ Date/Time: ___

Received for Lab By: Lacy Word Date/Time: 3/12/24 1055

Remarks:

1HC1002
HLW Engineering
PM: Heather Murphy

Original - Lab Copy Yellow - Sampler Copy

CHAIN OF CUSTODY RECORD

Keystone LABORATORIES
A Microbac Company

600 East 17th Street South
Newton, IA 50208
641-792-9451

SITE INFORMATION

Sampler: TODD WHIPPLE

Project: Benton County - New Regs

REPORT TO

Todd Whipple
HLW Engineering
PO Box 314
Story City, IA 50248

INVOICE TO

Eric Werner
Benton County Sanitary Landfill
7904 20th Ave
Blairstown, IA 52209

SPECIAL INSTRUCTIONS

None

Turn Around Time

☐ Standard ☐ RUSH, need by ___/___/___

LAB USE ONLY

Work Order 1HC1002
Temperature 0.4
Turn-Cooler: No

- ☐ Custody Seal
- ☒ Containers Intact
- ☒ COC/Labels Agree
- ☐ Preservation Confirmed
- ☑ Received on Ice

Number	Sample Identification / Client ID	Matrix	Sample Type	Date	Time	Number of Containers	Analyses	Lab Sample Number
-001	AW-3	Water	GRAB	3/11/24	14:27	7	lndfill-app1-voc-group lndfll-app1-metals-6020	15
-001	Duplicate	Water	GRAB	3/11/24	✓	1	~~lndfill-app1-voc-group~~ lndfll-app1-metals-6020	16

Relinquished By: [signature] Date/Time: 3/12/24

Received By: Date/Time:

Relinquished By: Date/Time:

Received for Lab By: Randy Wood Date/Time: 3/12/24 1055

Remark:

1 H C 1 0 0 2
HLW Engineering
PM: Heather Murphy

Original - Lab Copy Yellow - Sampler Copy

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HJ0396

Project Description

Benton County - New Regs

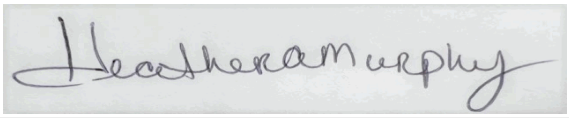
For:

Todd Whipple

HLW Engineering

204 West Broad St

Story City, IA 50248



Heather Murphy

Customer Relationship Specialist

Thursday, October 17, 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

1HJ0396

HLW Engineering

Todd Whipple
204 West Broad St
Story City, IA 50248

Project Name: Benton County - New Regs

Project / PO Number: N/A
Received: 10/03/2024
Reported: 10/17/2024

Sample Summary Report

Sample Name	Laboratory ID	Client Matrix	Sample Type	Sample Begin	Sample Taken	Lab Received
MW-6 (b)	1HJ0396-01	Aqueous	GRAB		10/02/24 08:05	10/03/24 08:57
MW-26 (b)	1HJ0396-02	Aqueous	GRAB		10/02/24 07:43	10/03/24 08:57
MW-27 (b)	1HJ0396-03	Aqueous	GRAB		10/02/24 07:28	10/03/24 08:57
MW-7 (b)	1HJ0396-04	Aqueous	GRAB		10/02/24 08:16	10/03/24 08:57
MW-12	1HJ0396-05	Aqueous	GRAB		10/02/24 10:46	10/03/24 08:57
MW-14	1HJ0396-06	Aqueous	GRAB		10/02/24 10:27	10/03/24 08:57
MW-20	1HJ0396-07	Aqueous	GRAB		10/02/24 10:03	10/03/24 08:57
AW-1	1HJ0396-08	Aqueous	GRAB		10/02/24 11:29	10/03/24 08:57
MW-24	1HJ0396-09	Aqueous	GRAB		10/02/24 11:05	10/03/24 08:57
MW-25	1HJ0396-10	Aqueous	GRAB		10/02/24 09:50	10/03/24 08:57
AW-2	1HJ0396-11	Aqueous	GRAB		10/02/24 09:50	10/03/24 08:57
AW-9	1HJ0396-12	Aqueous	GRAB		10/02/24 09:40	10/03/24 08:57
AW-3	1HJ0396-13	Aqueous	GRAB		10/02/24 09:25	10/03/24 08:57
Duplicate	1HJ0396-14	Aqueous	GRAB		10/02/24 00:00	10/03/24 08:57
MW-41	1HJ0396-15	Aqueous	GRAB		10/02/24 11:49	10/03/24 08:57

Analytical Testing Parameters

Client Sample ID:	MW-6 (b)		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0396-01	**Collection Date:**	10/02/2024 8:05

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		10/07/24 0000	10/08/24 0646	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0646	CSM
Bromomethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0646	CSM
Chloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0646	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0646	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0646	CSM
Acetone	<10.0	10.0	ug/L	1		10/07/24 0000	10/08/24 0646	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0646	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0646	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 0646	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 0646	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0646	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0646	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 0646	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0646	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/07/24 0000	10/08/24 0646	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0646	CSM
Chloroform	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0646	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0646	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0646	CSM
Benzene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0646	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0646	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0646	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0646	CSM
Dibromomethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0646	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0646	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0646	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 0646	CSM
Toluene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0646	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0646	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0646	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0646	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 0646	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0646	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0646	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0646	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0646	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0646	CSM
Xylenes, total	<2.0	2.0	ug/L	1		10/07/24 0000	10/08/24 0646	CSM
Styrene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0646	CSM

Client Sample ID:	MW-6 (b)		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0396-01	**Collection Date:**	10/02/2024 8:05

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Bromoform	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0646	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0646	CSM
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 0646	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0646	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0646	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0646	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 0646	CSM
Surrogate: Dibromofluoromethane	106	Limit: 75-136	% Rec	1		10/07/24 0000	10/08/24 0646	CSM
Surrogate: Dibromofluoromethane	106	Limit: 57-134	% Rec	1		10/07/24 0000	10/08/24 0646	CSM
Surrogate: 1,2-Dichloroethane-d4	110	Limit: 61-142	% Rec	1		10/07/24 0000	10/08/24 0646	CSM
Surrogate: 1,2-Dichloroethane-d4	110	Limit: 53-140	% Rec	1		10/07/24 0000	10/08/24 0646	CSM
Surrogate: Toluene-d8	101	Limit: 82-121	% Rec	1		10/07/24 0000	10/08/24 0646	CSM
Surrogate: Toluene-d8	101	Limit: 86-114	% Rec	1		10/07/24 0000	10/08/24 0646	CSM
Surrogate: 4-Bromofluorobenzene	99.2	Limit: 80-116	% Rec	1		10/07/24 0000	10/08/24 0646	CSM
Surrogate: 4-Bromofluorobenzene	99.2	Limit: 78-121	% Rec	1		10/07/24 0000	10/08/24 0646	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		10/08/24 1510	10/10/24 2029	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2029	RVV
Barium, total	**0.233**	0.0040	mg/L	4		10/08/24 1510	10/10/24 2029	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2029	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/08/24 1510	10/10/24 2029	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/08/24 1510	10/10/24 2029	RVV
Cobalt, total	**0.0015**	0.0004	mg/L	4		10/08/24 1510	10/10/24 2029	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2029	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2029	RVV
Nickel, total	**0.0146**	0.0040	mg/L	4		10/08/24 1510	10/10/24 2029	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2029	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2029	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/08/24 1510	10/10/24 2029	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/08/24 1510	10/10/24 2029	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/08/24 1510	10/10/24 2029	RVV

CERTIFICATE OF ANALYSIS

1HJ0396

Client Sample ID:	MW-26 (b)		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0396-02	**Collection Date:**	10/02/2024 7:43

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		10/07/24 0000	10/08/24 0708	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0708	CSM
Bromomethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0708	CSM
Chloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0708	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0708	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0708	CSM
Acetone	<10.0	10.0	ug/L	1		10/07/24 0000	10/08/24 0708	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0708	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0708	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 0708	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 0708	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0708	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0708	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 0708	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0708	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/07/24 0000	10/08/24 0708	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0708	CSM
Chloroform	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0708	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0708	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0708	CSM
Benzene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0708	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0708	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0708	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0708	CSM
Dibromomethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0708	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0708	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0708	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 0708	CSM
Toluene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0708	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0708	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0708	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0708	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 0708	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0708	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0708	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0708	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0708	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0708	CSM
Xylenes, total	<2.0	2.0	ug/L	1		10/07/24 0000	10/08/24 0708	CSM
Styrene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0708	CSM
Bromoform	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0708	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0708	CSM

Client Sample ID:	MW-26 (b)		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0396-02	**Collection Date:**	10/02/2024 7:43

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		10/07/24 0000	10/08/24 0708	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0708	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0708	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0708	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 0708	CSM
Surrogate: Dibromofluoromethane	105	Limit: 75-136	% Rec	1		10/07/24 0000	10/08/24 0708	CSM
Surrogate: Dibromofluoromethane	105	Limit: 57-134	% Rec	1		10/07/24 0000	10/08/24 0708	CSM
Surrogate: 1,2-Dichloroethane-d4	110	Limit: 53-140	% Rec	1		10/07/24 0000	10/08/24 0708	CSM
Surrogate: 1,2-Dichloroethane-d4	110	Limit: 61-142	% Rec	1		10/07/24 0000	10/08/24 0708	CSM
Surrogate: Toluene-d8	101	Limit: 82-121	% Rec	1		10/07/24 0000	10/08/24 0708	CSM
Surrogate: Toluene-d8	101	Limit: 86-114	% Rec	1		10/07/24 0000	10/08/24 0708	CSM
Surrogate: 4-Bromofluorobenzene	102	Limit: 78-121	% Rec	1		10/07/24 0000	10/08/24 0708	CSM
Surrogate: 4-Bromofluorobenzene	102	Limit: 80-116	% Rec	1		10/07/24 0000	10/08/24 0708	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		10/08/24 1510	10/10/24 2054	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2054	RVV
Barium, total	**0.150**	0.0040	mg/L	4		10/08/24 1510	10/10/24 2054	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2054	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/08/24 1510	10/10/24 2054	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/08/24 1510	10/10/24 2054	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		10/08/24 1510	10/10/24 2054	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2054	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2054	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2054	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2054	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2054	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/08/24 1510	10/10/24 2054	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/08/24 1510	10/10/24 2054	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/08/24 1510	10/10/24 2054	RVV

Client Sample ID:	MW-27 (b)		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0396-03	**Collection Date:**	10/02/2024 7:28

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0731	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0731	CSM
Bromomethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0731	CSM
Chloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0731	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0731	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0731	CSM
Acetone	<10.0	10.0	ug/L	1		10/07/24 0000	10/08/24 0731	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0731	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0731	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 0731	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 0731	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0731	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0731	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 0731	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0731	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/07/24 0000	10/08/24 0731	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0731	CSM
Chloroform	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0731	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0731	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0731	CSM
Benzene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0731	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0731	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0731	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0731	CSM
Dibromomethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0731	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0731	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0731	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 0731	CSM
Toluene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0731	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0731	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0731	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0731	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 0731	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0731	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0731	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0731	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0731	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0731	CSM
Xylenes, total	<2.0	2.0	ug/L	1		10/07/24 0000	10/08/24 0731	CSM
Styrene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0731	CSM
Bromoform	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0731	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0731	CSM

Client Sample ID:	MW-27 (b)		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0396-03	**Collection Date:**	10/02/2024 7:28

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 0731	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0731	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0731	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0731	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 0731	CSM
Surrogate: Dibromofluoromethane	104	Limit: 57-134	% Rec	1		10/07/24 0000	10/08/24 0731	CSM
Surrogate: Dibromofluoromethane	104	Limit: 75-136	% Rec	1		10/07/24 0000	10/08/24 0731	CSM
Surrogate: 1,2-Dichloroethane-d4	110	Limit: 53-140	% Rec	1		10/07/24 0000	10/08/24 0731	CSM
Surrogate: 1,2-Dichloroethane-d4	110	Limit: 61-142	% Rec	1		10/07/24 0000	10/08/24 0731	CSM
Surrogate: Toluene-d8	102	Limit: 86-114	% Rec	1		10/07/24 0000	10/08/24 0731	CSM
Surrogate: Toluene-d8	102	Limit: 82-121	% Rec	1		10/07/24 0000	10/08/24 0731	CSM
Surrogate: 4-Bromofluorobenzene	114	Limit: 80-116	% Rec	1		10/07/24 0000	10/08/24 0731	CSM
Surrogate: 4-Bromofluorobenzene	114	Limit: 78-121	% Rec	1		10/07/24 0000	10/08/24 0731	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		10/08/24 1510	10/10/24 2100	RVV
Arsenic, total	**0.0052**	0.0040	mg/L	4		10/08/24 1510	10/10/24 2100	RVV
Barium, total	**0.111**	0.0040	mg/L	4		10/08/24 1510	10/10/24 2100	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2100	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/08/24 1510	10/10/24 2100	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/08/24 1510	10/10/24 2100	RVV
Cobalt, total	**0.0004**	0.0004	mg/L	4		10/08/24 1510	10/10/24 2100	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2100	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2100	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2100	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2100	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2100	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/08/24 1510	10/10/24 2100	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/08/24 1510	10/10/24 2100	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/08/24 1510	10/10/24 2100	RVV

Client Sample ID:	MW-7 (b)		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0396-04	**Collection Date:**	10/02/2024 8:16

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0753	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0753	CSM
Bromomethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0753	CSM
Chloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0753	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0753	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0753	CSM
Acetone	<10.0	10.0	ug/L	1		10/07/24 0000	10/08/24 0753	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0753	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0753	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 0753	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 0753	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0753	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0753	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 0753	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0753	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/07/24 0000	10/08/24 0753	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0753	CSM
Chloroform	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0753	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0753	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0753	CSM
Benzene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0753	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0753	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0753	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0753	CSM
Dibromomethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0753	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0753	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0753	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 0753	CSM
Toluene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0753	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0753	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0753	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0753	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 0753	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0753	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0753	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0753	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0753	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0753	CSM
Xylenes, total	<2.0	2.0	ug/L	1		10/07/24 0000	10/08/24 0753	CSM
Styrene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0753	CSM
Bromoform	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0753	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0753	CSM

Client Sample ID:	MW-7 (b)		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0396-04	**Collection Date:**	10/02/2024 8:16

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 0753	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0753	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0753	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0753	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 0753	CSM
Surrogate: Dibromofluoromethane	104	Limit: 75-136	% Rec	1		10/07/24 0000	10/08/24 0753	CSM
Surrogate: Dibromofluoromethane	104	Limit: 57-134	% Rec	1		10/07/24 0000	10/08/24 0753	CSM
Surrogate: 1,2-Dichloroethane-d4	110	Limit: 53-140	% Rec	1		10/07/24 0000	10/08/24 0753	CSM
Surrogate: 1,2-Dichloroethane-d4	110	Limit: 61-142	% Rec	1		10/07/24 0000	10/08/24 0753	CSM
Surrogate: Toluene-d8	102	Limit: 86-114	% Rec	1		10/07/24 0000	10/08/24 0753	CSM
Surrogate: Toluene-d8	102	Limit: 82-121	% Rec	1		10/07/24 0000	10/08/24 0753	CSM
Surrogate: 4-Bromofluorobenzene	93.5	Limit: 80-116	% Rec	1		10/07/24 0000	10/08/24 0753	CSM
Surrogate: 4-Bromofluorobenzene	93.5	Limit: 78-121	% Rec	1		10/07/24 0000	10/08/24 0753	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		10/08/24 1510	10/10/24 2106	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2106	RVV
Barium, total	**0.162**	0.0040	mg/L	4		10/08/24 1510	10/10/24 2106	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2106	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/08/24 1510	10/10/24 2106	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/08/24 1510	10/10/24 2106	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		10/08/24 1510	10/10/24 2106	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2106	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2106	RVV
Nickel, total	**0.0041**	0.0040	mg/L	4		10/08/24 1510	10/10/24 2106	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2106	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2106	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/08/24 1510	10/10/24 2106	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/08/24 1510	10/10/24 2106	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/08/24 1510	10/10/24 2106	RVV

Client Sample ID:	MW-12		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0396-05	**Collection Date:**	10/02/2024 10:46

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		10/07/24 0000	10/08/24 0816	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0816	CSM
Bromomethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0816	CSM
Chloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0816	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0816	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0816	CSM
Acetone	<10.0	10.0	ug/L	1		10/07/24 0000	10/08/24 0816	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0816	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0816	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 0816	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 0816	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0816	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0816	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 0816	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0816	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/07/24 0000	10/08/24 0816	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0816	CSM
Chloroform	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0816	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0816	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0816	CSM
Benzene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0816	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0816	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0816	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0816	CSM
Dibromomethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0816	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0816	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0816	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 0816	CSM
Toluene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0816	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0816	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0816	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0816	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 0816	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0816	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0816	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0816	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0816	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0816	CSM
Xylenes, total	<2.0	2.0	ug/L	1		10/07/24 0000	10/08/24 0816	CSM
Styrene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0816	CSM
Bromoform	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0816	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0816	CSM

Client Sample ID:	MW-12		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0396-05	**Collection Date:**	10/02/2024 10:46

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		10/07/24 0000	10/08/24 0816	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0816	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0816	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0816	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 0816	CSM
Surrogate: Dibromofluoromethane	104	Limit: 75-136	% Rec	1		10/07/24 0000	10/08/24 0816	CSM
Surrogate: Dibromofluoromethane	104	Limit: 57-134	% Rec	1		10/07/24 0000	10/08/24 0816	CSM
Surrogate: 1,2-Dichloroethane-d4	110	Limit: 61-142	% Rec	1		10/07/24 0000	10/08/24 0816	CSM
Surrogate: 1,2-Dichloroethane-d4	110	Limit: 53-140	% Rec	1		10/07/24 0000	10/08/24 0816	CSM
Surrogate: Toluene-d8	101	Limit: 82-121	% Rec	1		10/07/24 0000	10/08/24 0816	CSM
Surrogate: Toluene-d8	101	Limit: 86-114	% Rec	1		10/07/24 0000	10/08/24 0816	CSM
Surrogate: 4-Bromofluorobenzene	102	Limit: 78-121	% Rec	1		10/07/24 0000	10/08/24 0816	CSM
Surrogate: 4-Bromofluorobenzene	102	Limit: 80-116	% Rec	1		10/07/24 0000	10/08/24 0816	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		10/08/24 1510	10/10/24 2112	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2112	RVV
Barium, total	**0.105**	0.0040	mg/L	4		10/08/24 1510	10/10/24 2112	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2112	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/08/24 1510	10/10/24 2112	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/08/24 1510	10/10/24 2112	RVV
Cobalt, total	**0.0026**	0.0004	mg/L	4		10/08/24 1510	10/10/24 2112	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2112	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2112	RVV
Nickel, total	**0.0416**	0.0040	mg/L	4		10/08/24 1510	10/10/24 2112	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2112	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2112	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/08/24 1510	10/10/24 2112	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/08/24 1510	10/10/24 2112	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/08/24 1510	10/10/24 2112	RVV

Client Sample ID:	MW-14		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0396-06	**Collection Date:**	10/02/2024 10:27

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0838	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0838	CSM
Bromomethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0838	CSM
Chloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0838	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0838	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0838	CSM
Acetone	<10.0	10.0	ug/L	1		10/07/24 0000	10/08/24 0838	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0838	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0838	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 0838	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 0838	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0838	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0838	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 0838	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0838	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/07/24 0000	10/08/24 0838	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0838	CSM
Chloroform	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0838	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0838	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0838	CSM
Benzene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0838	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0838	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0838	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0838	CSM
Dibromomethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0838	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0838	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0838	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 0838	CSM
Toluene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0838	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0838	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0838	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0838	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 0838	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0838	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0838	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0838	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0838	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0838	CSM
Xylenes, total	<2.0	2.0	ug/L	1		10/07/24 0000	10/08/24 0838	CSM
Styrene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0838	CSM
Bromoform	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0838	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0838	CSM

Client Sample ID:	MW-14		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0396-06	**Collection Date:**	10/02/2024 10:27

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 0838	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0838	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0838	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0838	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 0838	CSM
Surrogate: Dibromofluoromethane	103	Limit: 57-134	% Rec	1		10/07/24 0000	10/08/24 0838	CSM
Surrogate: Dibromofluoromethane	103	Limit: 75-136	% Rec	1		10/07/24 0000	10/08/24 0838	CSM
Surrogate: 1,2-Dichloroethane-d4	109	Limit: 61-142	% Rec	1		10/07/24 0000	10/08/24 0838	CSM
Surrogate: 1,2-Dichloroethane-d4	109	Limit: 53-140	% Rec	1		10/07/24 0000	10/08/24 0838	CSM
Surrogate: Toluene-d8	101	Limit: 82-121	% Rec	1		10/07/24 0000	10/08/24 0838	CSM
Surrogate: Toluene-d8	101	Limit: 86-114	% Rec	1		10/07/24 0000	10/08/24 0838	CSM
Surrogate: 4-Bromofluorobenzene	92.3	Limit: 80-116	% Rec	1		10/07/24 0000	10/08/24 0838	CSM
Surrogate: 4-Bromofluorobenzene	92.3	Limit: 78-121	% Rec	1		10/07/24 0000	10/08/24 0838	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		10/08/24 1510	10/10/24 2119	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2119	RVV
Barium, total	**0.401**	0.0040	mg/L	4		10/08/24 1510	10/10/24 2119	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2119	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/08/24 1510	10/10/24 2119	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/08/24 1510	10/10/24 2119	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		10/08/24 1510	10/10/24 2119	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2119	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2119	RVV
Nickel, total	**0.0095**	0.0040	mg/L	4		10/08/24 1510	10/10/24 2119	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2119	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2119	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/08/24 1510	10/10/24 2119	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/08/24 1510	10/10/24 2119	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/08/24 1510	10/10/24 2119	RVV

Client Sample ID:	MW-20		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0396-07	**Collection Date:**	10/02/2024 10:03

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		10/07/24 0000	10/08/24 0901	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0901	CSM
Bromomethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0901	CSM
Chloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0901	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0901	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0901	CSM
Acetone	<10.0	10.0	ug/L	1		10/07/24 0000	10/08/24 0901	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0901	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0901	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 0901	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 0901	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0901	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0901	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 0901	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0901	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/07/24 0000	10/08/24 0901	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0901	CSM
Chloroform	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0901	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0901	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0901	CSM
Benzene	**2.8**	1.0	ug/L	1		10/07/24 0000	10/08/24 0901	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0901	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0901	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0901	CSM
Dibromomethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0901	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0901	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0901	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 0901	CSM
Toluene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0901	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0901	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0901	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0901	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 0901	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0901	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0901	CSM
Chlorobenzene	**3.6**	1.0	ug/L	1		10/07/24 0000	10/08/24 0901	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0901	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0901	CSM
Xylenes, total	<2.0	2.0	ug/L	1		10/07/24 0000	10/08/24 0901	CSM
Styrene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0901	CSM
Bromoform	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0901	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0901	CSM

Client Sample ID:	MW-20		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0396-07	**Collection Date:**	10/02/2024 10:03

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		10/07/24 0000	10/08/24 0901	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0901	CSM
1,4-Dichlorobenzene	**3.2**	1.0	ug/L	1		10/07/24 0000	10/08/24 0901	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0901	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 0901	CSM
Surrogate: Dibromofluoromethane	102	Limit: 75-136	% Rec	1		10/07/24 0000	10/08/24 0901	CSM
Surrogate: Dibromofluoromethane	102	Limit: 57-134	% Rec	1		10/07/24 0000	10/08/24 0901	CSM
Surrogate: 1,2-Dichloroethane-d4	109	Limit: 61-142	% Rec	1		10/07/24 0000	10/08/24 0901	CSM
Surrogate: 1,2-Dichloroethane-d4	109	Limit: 53-140	% Rec	1		10/07/24 0000	10/08/24 0901	CSM
Surrogate: Toluene-d8	101	Limit: 82-121	% Rec	1		10/07/24 0000	10/08/24 0901	CSM
Surrogate: Toluene-d8	101	Limit: 86-114	% Rec	1		10/07/24 0000	10/08/24 0901	CSM
Surrogate: 4-Bromofluorobenzene	115	Limit: 80-116	% Rec	1		10/07/24 0000	10/08/24 0901	CSM
Surrogate: 4-Bromofluorobenzene	115	Limit: 78-121	% Rec	1		10/07/24 0000	10/08/24 0901	CSM

Determination of Conventional Chemistry Parameters	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 376.2								
Sulfide, total	<0.10	0.10	mg/L	1		10/07/24 1426	10/08/24 0911	AKK

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		10/08/24 1510	10/10/24 2125	RVV
Arsenic, total	**0.0267**	0.0040	mg/L	4		10/08/24 1510	10/10/24 2125	RVV
Barium, total	**0.332**	0.0040	mg/L	4		10/08/24 1510	10/10/24 2125	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2125	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/08/24 1510	10/10/24 2125	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/08/24 1510	10/10/24 2125	RVV
Cobalt, total	**0.0009**	0.0004	mg/L	4		10/08/24 1510	10/10/24 2125	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2125	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2125	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2125	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2125	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2125	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/08/24 1510	10/10/24 2125	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/08/24 1510	10/10/24 2125	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/08/24 1510	10/10/24 2125	RVV

CERTIFICATE OF ANALYSIS

1HJ0396

Client Sample ID:	AW-1		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0396-08	**Collection Date:**	10/02/2024 11:29

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0923	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0923	CSM
Bromomethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0923	CSM
Chloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0923	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0923	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0923	CSM
Acetone	<10.0	10.0	ug/L	1		10/07/24 0000	10/08/24 0923	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0923	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0923	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 0923	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 0923	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0923	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0923	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 0923	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0923	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/07/24 0000	10/08/24 0923	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0923	CSM
Chloroform	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0923	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0923	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0923	CSM
Benzene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0923	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0923	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0923	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0923	CSM
Dibromomethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0923	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0923	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0923	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 0923	CSM
Toluene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0923	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0923	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0923	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0923	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 0923	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0923	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0923	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0923	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0923	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0923	CSM
Xylenes, total	<2.0	2.0	ug/L	1		10/07/24 0000	10/08/24 0923	CSM
Styrene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0923	CSM
Bromoform	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0923	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0923	CSM

Client Sample ID:	AW-1		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0396-08	**Collection Date:**	10/02/2024 11:29

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 0923	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0923	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0923	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0923	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 0923	CSM
Surrogate: Dibromofluoromethane	102	Limit: 57-134	% Rec	1		10/07/24 0000	10/08/24 0923	CSM
Surrogate: Dibromofluoromethane	102	Limit: 75-136	% Rec	1		10/07/24 0000	10/08/24 0923	CSM
Surrogate: 1,2-Dichloroethane-d4	109	Limit: 53-140	% Rec	1		10/07/24 0000	10/08/24 0923	CSM
Surrogate: 1,2-Dichloroethane-d4	109	Limit: 61-142	% Rec	1		10/07/24 0000	10/08/24 0923	CSM
Surrogate: Toluene-d8	101	Limit: 86-114	% Rec	1		10/07/24 0000	10/08/24 0923	CSM
Surrogate: Toluene-d8	101	Limit: 82-121	% Rec	1		10/07/24 0000	10/08/24 0923	CSM
Surrogate: 4-Bromofluorobenzene	102	Limit: 80-116	% Rec	1		10/07/24 0000	10/08/24 0923	CSM
Surrogate: 4-Bromofluorobenzene	102	Limit: 78-121	% Rec	1		10/07/24 0000	10/08/24 0923	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		10/08/24 1510	10/10/24 2143	RVV
Arsenic, total	**0.0087**	0.0040	mg/L	4		10/08/24 1510	10/10/24 2143	RVV
Barium, total	**0.413**	0.0040	mg/L	4		10/08/24 1510	10/10/24 2143	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2143	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/08/24 1510	10/10/24 2143	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/08/24 1510	10/10/24 2143	RVV
Cobalt, total	**0.0040**	0.0004	mg/L	4		10/08/24 1510	10/10/24 2143	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2143	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2143	RVV
Nickel, total	**0.0043**	0.0040	mg/L	4		10/08/24 1510	10/10/24 2143	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2143	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2143	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/08/24 1510	10/10/24 2143	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/08/24 1510	10/10/24 2143	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/08/24 1510	10/10/24 2143	RVV

Client Sample ID:	MW-24		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0396-09	**Collection Date:**	10/02/2024 11:05

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		10/07/24 0000	10/08/24 0946	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0946	CSM
Bromomethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0946	CSM
Chloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0946	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0946	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0946	CSM
Acetone	<10.0	10.0	ug/L	1		10/07/24 0000	10/08/24 0946	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0946	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0946	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 0946	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 0946	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0946	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0946	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 0946	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0946	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/07/24 0000	10/08/24 0946	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0946	CSM
Chloroform	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0946	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0946	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0946	CSM
Benzene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0946	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0946	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0946	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0946	CSM
Dibromomethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0946	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0946	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0946	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 0946	CSM
Toluene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0946	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0946	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0946	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0946	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 0946	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0946	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0946	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0946	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0946	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0946	CSM
Xylenes, total	<2.0	2.0	ug/L	1		10/07/24 0000	10/08/24 0946	CSM
Styrene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0946	CSM
Bromoform	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0946	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0946	CSM

Client Sample ID:	MW-24		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0396-09	**Collection Date:**	10/02/2024 11:05

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		10/07/24 0000	10/08/24 0946	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0946	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0946	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 0946	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 0946	CSM
Surrogate: Dibromofluoromethane	100	Limit: 57-134	% Rec	1		10/07/24 0000	10/08/24 0946	CSM
Surrogate: Dibromofluoromethane	100	Limit: 75-136	% Rec	1		10/07/24 0000	10/08/24 0946	CSM
Surrogate: 1,2-Dichloroethane-d4	108	Limit: 61-142	% Rec	1		10/07/24 0000	10/08/24 0946	CSM
Surrogate: 1,2-Dichloroethane-d4	108	Limit: 53-140	% Rec	1		10/07/24 0000	10/08/24 0946	CSM
Surrogate: Toluene-d8	101	Limit: 86-114	% Rec	1		10/07/24 0000	10/08/24 0946	CSM
Surrogate: Toluene-d8	101	Limit: 82-121	% Rec	1		10/07/24 0000	10/08/24 0946	CSM
Surrogate: 4-Bromofluorobenzene	115	Limit: 80-116	% Rec	1		10/07/24 0000	10/08/24 0946	CSM
Surrogate: 4-Bromofluorobenzene	115	Limit: 78-121	% Rec	1		10/07/24 0000	10/08/24 0946	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		10/08/24 1510	10/10/24 2149	RVV
Arsenic, total	**0.0333**	0.0040	mg/L	4		10/08/24 1510	10/10/24 2149	RVV
Barium, total	**0.602**	0.0040	mg/L	4		10/08/24 1510	10/10/24 2149	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2149	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/08/24 1510	10/10/24 2149	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/08/24 1510	10/10/24 2149	RVV
Cobalt, total	**0.0129**	0.0004	mg/L	4		10/08/24 1510	10/10/24 2149	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2149	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2149	RVV
Nickel, total	**0.0293**	0.0040	mg/L	4		10/08/24 1510	10/10/24 2149	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2149	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2149	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/08/24 1510	10/10/24 2149	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/08/24 1510	10/10/24 2149	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/08/24 1510	10/10/24 2149	RVV

Client Sample ID:	MW-25		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0396-10	**Collection Date:**	10/02/2024 9:50

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		10/07/24 0000	10/08/24 1009	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1009	CSM
Bromomethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1009	CSM
Chloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1009	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1009	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1009	CSM
Acetone	<10.0	10.0	ug/L	1		10/07/24 0000	10/08/24 1009	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1009	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1009	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 1009	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 1009	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1009	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1009	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 1009	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1009	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/07/24 0000	10/08/24 1009	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1009	CSM
Chloroform	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1009	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1009	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1009	CSM
Benzene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1009	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1009	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1009	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1009	CSM
Dibromomethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1009	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1009	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1009	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 1009	CSM
Toluene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1009	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1009	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1009	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1009	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 1009	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1009	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1009	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1009	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1009	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1009	CSM
Xylenes, total	<2.0	2.0	ug/L	1		10/07/24 0000	10/08/24 1009	CSM
Styrene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1009	CSM
Bromoform	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1009	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1009	CSM

Client Sample ID:	MW-25		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0396-10	**Collection Date:**	10/02/2024 9:50

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		10/07/24 0000	10/08/24 1009	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1009	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1009	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1009	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 1009	CSM
Surrogate: Dibromofluoromethane	102	Limit: 75-136	% Rec	1		10/07/24 0000	10/08/24 1009	CSM
Surrogate: Dibromofluoromethane	102	Limit: 57-134	% Rec	1		10/07/24 0000	10/08/24 1009	CSM
Surrogate: 1,2-Dichloroethane-d4	108	Limit: 61-142	% Rec	1		10/07/24 0000	10/08/24 1009	CSM
Surrogate: 1,2-Dichloroethane-d4	108	Limit: 53-140	% Rec	1		10/07/24 0000	10/08/24 1009	CSM
Surrogate: Toluene-d8	101	Limit: 86-114	% Rec	1		10/07/24 0000	10/08/24 1009	CSM
Surrogate: Toluene-d8	101	Limit: 82-121	% Rec	1		10/07/24 0000	10/08/24 1009	CSM
Surrogate: 4-Bromofluorobenzene	116	Limit: 78-121	% Rec	1		10/07/24 0000	10/08/24 1009	CSM
Surrogate: 4-Bromofluorobenzene	116	Limit: 80-116	% Rec	1		10/07/24 0000	10/08/24 1009	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		10/08/24 1510	10/10/24 2155	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2155	RVV
Barium, total	**0.0277**	0.0040	mg/L	4		10/08/24 1510	10/10/24 2155	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2155	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/08/24 1510	10/10/24 2155	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/08/24 1510	10/10/24 2155	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		10/08/24 1510	10/10/24 2155	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2155	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2155	RVV
Nickel, total	**0.0047**	0.0040	mg/L	4		10/08/24 1510	10/10/24 2155	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2155	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2155	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/08/24 1510	10/10/24 2155	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/08/24 1510	10/10/24 2155	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/08/24 1510	10/10/24 2155	RVV

Client Sample ID:	AW-2		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0396-11	**Collection Date:**	10/02/2024 9:50

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		10/07/24 0000	10/08/24 1031	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1031	CSM
Bromomethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1031	CSM
Chloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1031	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1031	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1031	CSM
Acetone	<10.0	10.0	ug/L	1		10/07/24 0000	10/08/24 1031	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1031	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1031	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 1031	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 1031	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1031	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1031	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 1031	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1031	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/07/24 0000	10/08/24 1031	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1031	CSM
Chloroform	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1031	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1031	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1031	CSM
Benzene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1031	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1031	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1031	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1031	CSM
Dibromomethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1031	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1031	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1031	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 1031	CSM
Toluene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1031	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1031	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1031	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1031	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 1031	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1031	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1031	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1031	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1031	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1031	CSM
Xylenes, total	<2.0	2.0	ug/L	1		10/07/24 0000	10/08/24 1031	CSM
Styrene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1031	CSM
Bromoform	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1031	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1031	CSM

Client Sample ID: AW-2
Sample Matrix: Aqueous
Lab Sample ID: 1HJ0396-11
Collected By: Whipple, Todd
Collection Date: 10/02/2024 9:50

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		10/07/24 0000	10/08/24 1031	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1031	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1031	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1031	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 1031	CSM
Surrogate: Dibromofluoromethane	101	Limit: 57-134	% Rec	1		10/07/24 0000	10/08/24 1031	CSM
Surrogate: Dibromofluoromethane	101	Limit: 75-136	% Rec	1		10/07/24 0000	10/08/24 1031	CSM
Surrogate: 1,2-Dichloroethane-d4	108	Limit: 53-140	% Rec	1		10/07/24 0000	10/08/24 1031	CSM
Surrogate: 1,2-Dichloroethane-d4	108	Limit: 61-142	% Rec	1		10/07/24 0000	10/08/24 1031	CSM
Surrogate: Toluene-d8	100	Limit: 82-121	% Rec	1		10/07/24 0000	10/08/24 1031	CSM
Surrogate: Toluene-d8	100	Limit: 86-114	% Rec	1		10/07/24 0000	10/08/24 1031	CSM
Surrogate: 4-Bromofluorobenzene	106	Limit: 78-121	% Rec	1		10/07/24 0000	10/08/24 1031	CSM
Surrogate: 4-Bromofluorobenzene	106	Limit: 80-116	% Rec	1		10/07/24 0000	10/08/24 1031	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		10/08/24 1510	10/10/24 2201	RVV
Arsenic, total	**0.0481**	0.0040	mg/L	4		10/08/24 1510	10/10/24 2201	RVV
Barium, total	**0.141**	0.0040	mg/L	4		10/08/24 1510	10/10/24 2201	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2201	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/08/24 1510	10/10/24 2201	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/08/24 1510	10/10/24 2201	RVV
Cobalt, total	**0.0131**	0.0004	mg/L	4		10/08/24 1510	10/10/24 2201	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2201	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2201	RVV
Nickel, total	**0.0092**	0.0040	mg/L	4		10/08/24 1510	10/10/24 2201	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2201	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2201	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/08/24 1510	10/10/24 2201	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/08/24 1510	10/10/24 2201	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/08/24 1510	10/10/24 2201	RVV

Client Sample ID: AW-9
Sample Matrix: Aqueous
Lab Sample ID: 1HJ0396-12
Collected By: Whipple, Todd
Collection Date: 10/02/2024 9:40

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Arsenic, total	**0.0042**	0.0040	mg/L	4		10/08/24 1510	10/10/24 2207	RVV
Cobalt, total	**0.0096**	0.0004	mg/L	4		10/08/24 1510	10/10/24 2207	RVV

Client Sample ID:	AW-3		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0396-13	**Collection Date:**	10/02/2024 9:25

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1054	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1054	CSM
Bromomethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1054	CSM
Chloroethane	**3.0**	1.0	ug/L	1		10/11/24 0000	10/11/24 1848	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1054	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1054	CSM
Acetone	<10.0	10.0	ug/L	1		10/07/24 0000	10/08/24 1054	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1054	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1054	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 1054	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 1054	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1054	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1054	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 1054	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1054	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/07/24 0000	10/08/24 1054	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1054	CSM
Chloroform	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1054	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1054	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1054	CSM
Benzene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1054	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1054	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1054	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1054	CSM
Dibromomethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1054	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1054	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1054	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 1054	CSM
Toluene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1054	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1054	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1054	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1054	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 1054	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1054	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1054	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1054	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1054	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1054	CSM
Xylenes, total	<2.0	2.0	ug/L	1		10/07/24 0000	10/08/24 1054	CSM
Styrene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1054	CSM
Bromoform	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1054	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1054	CSM

Client Sample ID:	AW-3		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0396-13	**Collection Date:**	10/02/2024 9:25

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 1054	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1054	CSM
1,4-Dichlorobenzene	**2.8**	1.0	ug/L	1		10/07/24 0000	10/08/24 1054	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1054	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 1054	CSM
Surrogate: Dibromofluoromethane	101	Limit: 57-134	% Rec	1		10/07/24 0000	10/08/24 1054	CSM
Surrogate: Dibromofluoromethane	101	Limit: 75-136	% Rec	1		10/07/24 0000	10/08/24 1054	CSM
Surrogate: Dibromofluoromethane	95.7	Limit: 75-136	% Rec	1		10/11/24 0000	10/11/24 1848	CSM
Surrogate: 1,2-Dichloroethane-d4	108	Limit: 53-140	% Rec	1		10/07/24 0000	10/08/24 1054	CSM
Surrogate: 1,2-Dichloroethane-d4	108	Limit: 61-142	% Rec	1		10/07/24 0000	10/08/24 1054	CSM
Surrogate: 1,2-Dichloroethane-d4	100	Limit: 61-142	% Rec	1		10/11/24 0000	10/11/24 1848	CSM
Surrogate: Toluene-d8	100	Limit: 86-114	% Rec	1		10/07/24 0000	10/08/24 1054	CSM
Surrogate: Toluene-d8	100	Limit: 82-121	% Rec	1		10/07/24 0000	10/08/24 1054	CSM
Surrogate: Toluene-d8	102	Limit: 82-121	% Rec	1		10/11/24 0000	10/11/24 1848	CSM
Surrogate: 4-Bromofluorobenzene	111	Limit: 78-121	% Rec	1		10/07/24 0000	10/08/24 1054	CSM
Surrogate: 4-Bromofluorobenzene	111	Limit: 80-116	% Rec	1		10/07/24 0000	10/08/24 1054	CSM
Surrogate: 4-Bromofluorobenzene	105	Limit: 80-116	% Rec	1		10/11/24 0000	10/11/24 1848	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		10/08/24 1510	10/10/24 2214	RVV
Arsenic, total	**0.0251**	0.0040	mg/L	4		10/08/24 1510	10/10/24 2214	RVV
Barium, total	**0.308**	0.0040	mg/L	4		10/08/24 1510	10/10/24 2214	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2214	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/08/24 1510	10/10/24 2214	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/08/24 1510	10/10/24 2214	RVV
Cobalt, total	**0.0008**	0.0004	mg/L	4		10/08/24 1510	10/10/24 2214	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2214	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2214	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2214	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2214	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2214	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/08/24 1510	10/10/24 2214	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/08/24 1510	10/10/24 2214	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/08/24 1510	10/10/24 2214	RVV

Client Sample ID:	Duplicate		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0396-14	**Collection Date:**	10/02/2024

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		10/08/24 1510	10/10/24 2220	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2220	RVV
Barium, total	**0.435**	0.0040	mg/L	4		10/08/24 1510	10/10/24 2220	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2220	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/08/24 1510	10/10/24 2220	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/08/24 1510	10/10/24 2220	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		10/08/24 1510	10/10/24 2220	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2220	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2220	RVV
Nickel, total	**0.0106**	0.0040	mg/L	4		10/08/24 1510	10/10/24 2220	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2220	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/10/24 2220	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/08/24 1510	10/10/24 2220	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/08/24 1510	10/10/24 2220	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/08/24 1510	10/10/24 2220	RVV

Client Sample ID:	MW-41		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0396-15	**Collection Date:**	10/02/2024 11:49

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1116	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1116	CSM
Bromomethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1116	CSM
Chloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1116	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1116	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1116	CSM
Acetone	<10.0	10.0	ug/L	1		10/07/24 0000	10/08/24 1116	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1116	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1116	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 1116	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 1116	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1116	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1116	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 1116	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1116	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/07/24 0000	10/08/24 1116	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1116	CSM
Chloroform	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1116	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1116	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1116	CSM
Benzene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1116	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1116	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1116	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1116	CSM
Dibromomethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1116	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1116	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1116	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 1116	CSM
Toluene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1116	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1116	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1116	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1116	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 1116	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1116	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1116	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1116	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1116	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1116	CSM
Xylenes, total	<2.0	2.0	ug/L	1		10/07/24 0000	10/08/24 1116	CSM
Styrene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1116	CSM
Bromoform	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1116	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1116	CSM

Client Sample ID:	MW-41		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0396-15	**Collection Date:**	10/02/2024 11:49

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 1116	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1116	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1116	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/07/24 0000	10/08/24 1116	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/07/24 0000	10/08/24 1116	CSM
Surrogate: Dibromofluoromethane	98.7	Limit: 75-136	% Rec	1		10/07/24 0000	10/08/24 1116	CSM
Surrogate: Dibromofluoromethane	98.7	Limit: 57-134	% Rec	1		10/07/24 0000	10/08/24 1116	CSM
Surrogate: 1,2-Dichloroethane-d4	106	Limit: 53-140	% Rec	1		10/07/24 0000	10/08/24 1116	CSM
Surrogate: 1,2-Dichloroethane-d4	106	Limit: 61-142	% Rec	1		10/07/24 0000	10/08/24 1116	CSM
Surrogate: Toluene-d8	100	Limit: 82-121	% Rec	1		10/07/24 0000	10/08/24 1116	CSM
Surrogate: Toluene-d8	100	Limit: 86-114	% Rec	1		10/07/24 0000	10/08/24 1116	CSM
Surrogate: 4-Bromofluorobenzene	103	Limit: 78-121	% Rec	1		10/07/24 0000	10/08/24 1116	CSM
Surrogate: 4-Bromofluorobenzene	103	Limit: 80-116	% Rec	1		10/07/24 0000	10/08/24 1116	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		10/08/24 1510	10/11/24 1153	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/11/24 1153	RVV
Barium, total	**0.394**	0.0040	mg/L	4		10/08/24 1510	10/11/24 1153	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/11/24 1153	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/08/24 1510	10/11/24 1153	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/08/24 1510	10/11/24 1153	RVV
Cobalt, total	**0.0010**	0.0004	mg/L	4		10/08/24 1510	10/11/24 1153	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/11/24 1153	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/11/24 1153	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/11/24 1153	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/11/24 1153	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/08/24 1510	10/11/24 1153	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/08/24 1510	10/11/24 1153	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/08/24 1510	10/11/24 1153	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/08/24 1510	10/11/24 1153	RVV

Batch Log Summary

Method	Batch	Laboratory ID	Client / Source ID
EPA 376.2	1HJ0409	1HJ0409-BS1	
		1HJ0409-MSD1	1HJ0469-01
		1HJ0409-BLK1	
		1HJ0409-MS1	1HJ0469-01
		1HJ0396-07	MW-20

Method	Batch	Laboratory ID	Client / Source ID
EPA 8260B	1HJ0487	1HJ0487-BS1	
		1HJ0487-BSD1	
		1HJ0487-MS1	1HJ0396-03
		1HJ0487-MSD1	1HJ0396-03
		1HJ0487-BLK1	
		1HJ0396-01	MW-6 (b)
		1HJ0396-02	MW-26 (b)
		1HJ0396-03	MW-27 (b)
		1HJ0396-04	MW-7 (b)
		1HJ0396-05	MW-12
		1HJ0396-06	MW-14
		1HJ0396-07	MW-20
		1HJ0396-08	AW-1
		1HJ0396-09	MW-24
		1HJ0396-10	MW-25
		1HJ0396-11	AW-2
		1HJ0396-13	AW-3
		1HJ0396-15	MW-41

Method	Batch	Laboratory ID	Client / Source ID
EPA 6020A	1HJ0501	1HJ0501-BLK1	
		1HJ0501-BS1	
		1HJ0396-01	MW-6 (b)
		1HJ0501-MS1	1HJ0396-01
		1HJ0501-MSD1	1HJ0396-01
		1HJ0396-02	MW-26 (b)
		1HJ0396-03	MW-27 (b)
		1HJ0396-04	MW-7 (b)
		1HJ0396-05	MW-12
		1HJ0396-06	MW-14
		1HJ0396-07	MW-20
		1HJ0396-08	AW-1
		1HJ0396-09	MW-24

EPA 6020A	1HJ0501	1HJ0396-10	MW-25
		1HJ0396-11	AW-2
		1HJ0396-12	AW-9
		1HJ0396-13	AW-3
		1HJ0396-14	Duplicate
		1HJ0501-PS1	1HJ0396-01
		1HJ0396-15	MW-41

Method	Batch	Laboratory ID	Client / Source ID
EPA 8260B	1HJ0786	1HJ0786-BS1	
		1HJ0786-BSD1	
		1HJ0786-BLK1	
		1HJ0396-13RE1	AW-3
		1HJ0786-MS1	1HJ0396-13RE1
		1HJ0786-MSD1	1HJ0396-13RE1

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 1HJ0487 - EPA 5030B - EPA 8260B										
Blank (1HJ0487-BLK1)			Prepared: 10/07/24 00:00 Analyzed: 10/08/24 06:23							
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							

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ0487 - EPA 5030B - EPA 8260B										
Blank (1HJ0487-BLK1)				Prepared: 10/07/24 00:00 Analyzed: 10/08/24 06:23						
Dibromomethane	<1.0	1.0	ug/L							
Bromodichloromethane	<1.0	1.0	ug/L							
cis-1,3-Dichloropropene	<1.0	1.0	ug/L							
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L							
Toluene	<1.0	1.0	ug/L							
trans-1,3-Dichloropropene	<1.0	1.0	ug/L							
1,1,2-Trichloroethane	<1.0	1.0	ug/L							
Tetrachloroethylene	<1.0	1.0	ug/L							
2-Hexanone (MBK)	<5.0	5.0	ug/L							
Dibromochloromethane	<1.0	1.0	ug/L							
1,2-Dibromoethane	<1.0	1.0	ug/L							
Chlorobenzene	<1.0	1.0	ug/L							
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L							
Ethylbenzene	<1.0	1.0	ug/L							
Xylenes, total	<2.0	2.0	ug/L							
Styrene	<1.0	1.0	ug/L							
Bromoform	<1.0	1.0	ug/L							
1,2,3-Trichloropropane	<1.0	1.0	ug/L							
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L							
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L							
1,4-Dichlorobenzene	<1.0	1.0	ug/L							
1,2-Dichlorobenzene	<1.0	1.0	ug/L							
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L							
Surrogate: Dibromofluoromethane	*51.9*		ug/L	*50.2*		*103*	*57-134*			
Surrogate: Dibromofluoromethane	*51.9*		ug/L	*50.2*		*103*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*55.1*		ug/L	*50.4*		*109*	*53-140*			
Surrogate: 1,2-Dichloroethane-d4	*55.1*		ug/L	*50.4*		*109*	*61-142*			
Surrogate: Toluene-d8	*51.1*		ug/L	*50.5*		*101*	*86-114*			
Surrogate: Toluene-d8	*51.1*		ug/L	*50.5*		*101*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*53.4*		ug/L	*50.2*		*106*	*78-121*			
Surrogate: 4-Bromofluorobenzene	*53.4*		ug/L	*50.2*		*106*	*80-116*			
LCS (1HJ0487-BS1)				Prepared: 10/07/24 00:00 Analyzed: 10/08/24 04:31						
Chloromethane	35.57	1.0	ug/L	30.0		119	63-155			
Vinyl Chloride	32.86	1.0	ug/L	30.0		110	70-154			
Bromomethane	27.48	1.0	ug/L	30.0		91.6	52-176			
Chloroethane	36.43	1.0	ug/L	30.0		121	72-148			
Trichlorofluoromethane	34.96	1.0	ug/L	30.0		117	70-152			
1,1-Dichloroethylene	112.1	1.0	ug/L	100		112	70-148			
Acetone	133.1	10.0	ug/L	101		132	43-172			
Methyl Iodide	108.9	1.0	ug/L	102		107	69-170			
Carbon Disulfide	110.8	1.0	ug/L	103		108	72-162			
Methylene Chloride	107.5	5.0	ug/L	100		108	68-142			
Acrylonitrile	114.0	5.0	ug/L	100		114	56-135			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ0487 - EPA 5030B - EPA 8260B										
LCS (1HJ0487-BS1)			Prepared: 10/07/24 00:00 Analyzed: 10/08/24 04:31							
trans-1,2-Dichloroethylene	111.4	1.0	ug/L	100		111	66-148			
1,1-Dichloroethane	112.3	1.0	ug/L	100		112	66-143			
Vinyl Acetate	108.8	5.0	ug/L	100		109	43-153			
cis-1,2-Dichloroethylene	102.0	1.0	ug/L	100		102	71-149			
2-Butanone (MEK)	121.3	10.0	ug/L	102		119	52-159			
Bromochloromethane	114.2	1.0	ug/L	100		114	69-143			
Chloroform	105.2	1.0	ug/L	100		105	69-144			
1,1,1-Trichloroethane	99.42	1.0	ug/L	100		99.4	62-129			
Carbon Tetrachloride	105.7	1.0	ug/L	100		106	63-141			
Benzene	112.1	1.0	ug/L	100		112	71-134			
1,2-Dichloroethane	113.0	1.0	ug/L	100		113	72-132			
Trichloroethylene	104.5	1.0	ug/L	100		104	71-135			
1,2-Dichloropropane	102.2	1.0	ug/L	100		102	69-136			
Dibromomethane	106.5	1.0	ug/L	100		107	73-147			
Bromodichloromethane	104.6	1.0	ug/L	100		105	68-129			
cis-1,3-Dichloropropene	101.2	1.0	ug/L	100		101	65-134			
4-Methyl-2-pentanone (MIBK)	125.4	5.0	ug/L	100		125	58-147			
Toluene	106.7	1.0	ug/L	100		107	72-133			
trans-1,3-Dichloropropene	103.2	1.0	ug/L	100		103	67-130			
1,1,2-Trichloroethane	112.4	1.0	ug/L	100		112	69-135			
Tetrachloroethylene	111.8	1.0	ug/L	100		112	69-130			
2-Hexanone (MBK)	132.9	5.0	ug/L	99.3		134	55-144			
Dibromochloromethane	109.0	1.0	ug/L	100		109	73-127			
1,2-Dibromoethane	109.4	1.0	ug/L	100		109	67-132			
Chlorobenzene	102.7	1.0	ug/L	100		103	72-123			
1,1,1,2-Tetrachloroethane	100.1	1.0	ug/L	100		100	73-127			
Ethylbenzene	101.9	1.0	ug/L	100		102	71-127			
Xylenes, total	319.9	2.0	ug/L	300		107	74-127			
Styrene	104.1	1.0	ug/L	100		104	66-126			
Bromoform	100.1	1.0	ug/L	100		100	68-130			
1,2,3-Trichloropropane	110.8	1.0	ug/L	100		111	63-136			
trans-1,4-Dichloro-2-butene	97.18	5.0	ug/L	103		94.5	54-134			
1,1,2,2-Tetrachloroethane	135.3	1.0	ug/L	100		135	61-131			Q2
1,4-Dichlorobenzene	99.84	1.0	ug/L	100		99.8	70-129			
1,2-Dichlorobenzene	99.99	1.0	ug/L	100		100	69-126			
1,2-Dibromo-3-chloropropane	100.9	5.0	ug/L	100		101	50-143			
Surrogate: Dibromofluoromethane	*51.4*		ug/L	*50.2*		*102*	*57-134*			
Surrogate: Dibromofluoromethane	*51.4*		ug/L	*50.2*		*102*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*53.2*		ug/L	*50.4*		*106*	*53-140*			
Surrogate: 1,2-Dichloroethane-d4	*53.2*		ug/L	*50.4*		*106*	*61-142*			
Surrogate: Toluene-d8	*53.8*		ug/L	*50.5*		*107*	*86-114*			
Surrogate: Toluene-d8	*53.8*		ug/L	*50.5*		*107*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*50.3*		ug/L	*50.2*		*100*	*78-121*			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ0487 - EPA 5030B - EPA 8260B										
LCS (1HJ0487-BS1)				Prepared: 10/07/24 00:00 Analyzed: 10/08/24 04:31						
Surrogate: 4-Bromofluorobenzene	*50.3*		ug/L	*50.2*		*100*	*80-116*			
LCS Dup (1HJ0487-BSD1)				Prepared: 10/07/24 00:00 Analyzed: 10/08/24 04:53						
Chloromethane	33.30	1.0	ug/L	30.0		111	63-155	6.59	24	
Vinyl Chloride	30.91	1.0	ug/L	30.0		103	70-154	6.12	25	
Bromomethane	27.92	1.0	ug/L	30.0		93.1	52-176	1.59	27	
Chloroethane	34.93	1.0	ug/L	30.0		116	72-148	4.20	25	
Trichlorofluoromethane	33.24	1.0	ug/L	30.0		111	70-152	5.04	26	
1,1-Dichloroethylene	106.1	1.0	ug/L	100		106	70-148	5.48	24	
Acetone	131.2	10.0	ug/L	101		130	43-172	1.46	30	
Methyl Iodide	106.3	1.0	ug/L	102		104	69-170	2.41	30	
Carbon Disulfide	106.2	1.0	ug/L	103		103	72-162	4.23	24	
Methylene Chloride	104.3	5.0	ug/L	100		104	68-142	3.05	21	
Acrylonitrile	113.3	5.0	ug/L	100		113	56-135	0.616	16	
trans-1,2-Dichloroethylene	107.7	1.0	ug/L	100		108	66-148	3.38	27	
1,1-Dichloroethane	109.5	1.0	ug/L	100		110	66-143	2.52	24	
Vinyl Acetate	107.9	5.0	ug/L	100		108	43-153	0.858	30	
cis-1,2-Dichloroethylene	99.48	1.0	ug/L	100		99.5	71-149	2.49	26	
2-Butanone (MEK)	120.6	10.0	ug/L	102		119	52-159	0.562	27	
Bromochloromethane	113.1	1.0	ug/L	100		113	69-143	0.985	23	
Chloroform	102.6	1.0	ug/L	100		103	69-144	2.45	23	
1,1,1-Trichloroethane	96.54	1.0	ug/L	100		96.5	62-129	2.94	24	
Carbon Tetrachloride	102.4	1.0	ug/L	100		102	63-141	3.19	25	
Benzene	108.4	1.0	ug/L	100		108	71-134	3.35	24	
1,2-Dichloroethane	110.9	1.0	ug/L	100		111	72-132	1.89	24	
Trichloroethylene	101.5	1.0	ug/L	100		101	71-135	2.91	24	
1,2-Dichloropropane	99.74	1.0	ug/L	100		99.7	69-136	2.47	24	
Dibromomethane	104.3	1.0	ug/L	100		104	73-147	2.13	25	
Bromodichloromethane	102.3	1.0	ug/L	100		102	68-129	2.18	22	
cis-1,3-Dichloropropene	99.07	1.0	ug/L	100		99.1	65-134	2.09	23	
4-Methyl-2-pentanone (MIBK)	126.3	5.0	ug/L	100		126	58-147	0.723	27	
Toluene	104.6	1.0	ug/L	100		105	72-133	1.95	24	
trans-1,3-Dichloropropene	101.7	1.0	ug/L	100		102	67-130	1.45	24	
1,1,2-Trichloroethane	104.5	1.0	ug/L	100		104	69-135	7.31	23	
Tetrachloroethylene	99.82	1.0	ug/L	100		99.8	69-130	11.3	25	
2-Hexanone (MBK)	120.6	5.0	ug/L	99.3		121	55-144	9.71	25	
Dibromochloromethane	100.7	1.0	ug/L	100		101	73-127	7.93	22	
1,2-Dibromoethane	100.0	1.0	ug/L	100		100	67-132	8.90	24	
Chlorobenzene	100.0	1.0	ug/L	100		100	72-123	2.67	23	
1,1,1,2-Tetrachloroethane	98.25	1.0	ug/L	100		98.2	73-127	1.89	24	
Ethylbenzene	100.4	1.0	ug/L	100		100	71-127	1.46	26	
Xylenes, total	323.9	2.0	ug/L	300		108	74-127	1.23	25	
Styrene	107.0	1.0	ug/L	100		107	66-126	2.81	23	

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ0487 - EPA 5030B - EPA 8260B										
LCS Dup (1HJ0487-BSD1)			Prepared: 10/07/24 00:00 Analyzed: 10/08/24 04:53							
Bromoform	103.5	1.0	ug/L	100		104	68-130	3.40	23	
1,2,3-Trichloropropane	109.2	1.0	ug/L	100		109	63-136	1.48	24	
trans-1,4-Dichloro-2-butene	95.44	5.0	ug/L	103		92.8	54-134	1.81	27	
1,1,2,2-Tetrachloroethane	133.7	1.0	ug/L	100		134	61-131	1.18	29	Q2
1,4-Dichlorobenzene	98.93	1.0	ug/L	100		98.9	70-129	0.916	24	
1,2-Dichlorobenzene	97.53	1.0	ug/L	100		97.5	69-126	2.49	26	
1,2-Dibromo-3-chloropropane	100.7	5.0	ug/L	100		101	50-143	0.179	30	
Surrogate: Dibromofluoromethane	*51.8*		ug/L	*50.2*		*103*	*57-134*			
Surrogate: Dibromofluoromethane	*51.8*		ug/L	*50.2*		*103*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*54.1*		ug/L	*50.4*		*107*	*53-140*			
Surrogate: 1,2-Dichloroethane-d4	*54.1*		ug/L	*50.4*		*107*	*61-142*			
Surrogate: Toluene-d8	*53.7*		ug/L	*50.5*		*106*	*86-114*			
Surrogate: Toluene-d8	*53.7*		ug/L	*50.5*		*106*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*54.4*		ug/L	*50.2*		*108*	*78-121*			
Surrogate: 4-Bromofluorobenzene	*54.4*		ug/L	*50.2*		*108*	*80-116*			
Matrix Spike (1HJ0487-MS1)	**Source: 1HJ0396-03**		Prepared: 10/07/24 00:00 Analyzed: 10/08/24 05:16							
Chloromethane	35.21	1.0	ug/L	30.0	ND	117	61-152			
Vinyl Chloride	32.98	1.0	ug/L	30.0	ND	110	66-149			
Bromomethane	29.20	1.0	ug/L	30.0	ND	97.3	43-171			
Chloroethane	36.94	1.0	ug/L	30.0	ND	123	69-148			
Trichlorofluoromethane	34.90	1.0	ug/L	30.0	ND	116	62-163			
1,1-Dichloroethylene	111.8	1.0	ug/L	100	ND	112	70-148			
Acetone	133.1	10.0	ug/L	101	ND	132	45-173			
Methyl Iodide	111.2	1.0	ug/L	102	ND	109	62-167			
Carbon Disulfide	110.5	1.0	ug/L	103	ND	108	71-163			
Methylene Chloride	107.8	5.0	ug/L	100	ND	108	69-140			
Acrylonitrile	115.7	5.0	ug/L	100	ND	115	38-147			
trans-1,2-Dichloroethylene	112.6	1.0	ug/L	100	ND	113	69-144			
1,1-Dichloroethane	112.6	1.0	ug/L	100	ND	113	70-138			
Vinyl Acetate	107.9	5.0	ug/L	100	ND	108	58-142			
cis-1,2-Dichloroethylene	103.4	1.0	ug/L	100	ND	103	68-151			
2-Butanone (MEK)	123.4	10.0	ug/L	102	ND	121	50-160			
Bromochloromethane	114.5	1.0	ug/L	100	ND	114	65-143			
Chloroform	105.7	1.0	ug/L	100	ND	106	71-143			
1,1,1-Trichloroethane	100.4	1.0	ug/L	100	ND	100	63-133			
Carbon Tetrachloride	106.2	1.0	ug/L	100	ND	106	63-142			
Benzene	111.7	1.0	ug/L	100	ND	112	69-133			
1,2-Dichloroethane	114.7	1.0	ug/L	100	ND	115	63-138			
Trichloroethylene	104.1	1.0	ug/L	100	ND	104	71-133			
1,2-Dichloropropane	101.9	1.0	ug/L	100	ND	102	69-132			
Dibromomethane	107.2	1.0	ug/L	100	ND	107	70-147			
Bromodichloromethane	103.8	1.0	ug/L	100	ND	104	67-130			
cis-1,3-Dichloropropene	101.7	1.0	ug/L	100	ND	102	61-126			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ0487 - EPA 5030B - EPA 8260B										
Matrix Spike (1HJ0487-MS1)	**Source: 1HJ0396-03**		Prepared: 10/07/24 00:00 Analyzed: 10/08/24 05:16							
4-Methyl-2-pentanone (MIBK)	126.4	5.0	ug/L	100	ND	126	55-147			
Toluene	106.2	1.0	ug/L	100	ND	106	71-133			
trans-1,3-Dichloropropene	110.6	1.0	ug/L	100	ND	111	63-124			
1,1,2-Trichloroethane	115.8	1.0	ug/L	100	ND	116	69-133			
Tetrachloroethylene	111.2	1.0	ug/L	100	ND	111	70-124			
2-Hexanone (MBK)	133.9	5.0	ug/L	99.3	ND	135	53-141			
Dibromochloromethane	102.6	1.0	ug/L	100	ND	103	74-122			
1,2-Dibromoethane	101.8	1.0	ug/L	100	ND	102	66-127			
Chlorobenzene	103.2	1.0	ug/L	100	ND	103	76-116			
1,1,1,2-Tetrachloroethane	100.0	1.0	ug/L	100	ND	100	77-121			
Ethylbenzene	102.3	1.0	ug/L	100	ND	102	73-124			
Xylenes, total	320.8	2.0	ug/L	300	ND	107	75-123			
Styrene	104.7	1.0	ug/L	100	ND	105	70-120			
Bromoform	101.7	1.0	ug/L	100	ND	102	70-124			
1,2,3-Trichloropropane	109.7	1.0	ug/L	100	ND	110	62-135			
trans-1,4-Dichloro-2-butene	97.30	5.0	ug/L	103	ND	94.6	50-120			
1,1,2,2-Tetrachloroethane	135.8	1.0	ug/L	100	ND	136	63-126			Q2
1,4-Dichlorobenzene	102.0	1.0	ug/L	100	ND	102	72-119			
1,2-Dichlorobenzene	101.4	1.0	ug/L	100	ND	101	71-117			
1,2-Dibromo-3-chloropropane	108.8	5.0	ug/L	100	ND	109	49-134			
Surrogate: Dibromofluoromethane	*51.8*		ug/L	*50.2*		*103*	*57-134*			
Surrogate: Dibromofluoromethane	*51.8*		ug/L	*50.2*		*103*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*53.9*		ug/L	*50.4*		*107*	*53-140*			
Surrogate: 1,2-Dichloroethane-d4	*53.9*		ug/L	*50.4*		*107*	*61-142*			
Surrogate: Toluene-d8	*53.4*		ug/L	*50.5*		*106*	*86-114*			
Surrogate: Toluene-d8	*53.4*		ug/L	*50.5*		*106*	*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 Dup (1HJ0487-MSD1)	**Source: 1HJ0396-03**		Prepared: 10/07/24 00:00 Analyzed: 10/08/24 05:38							
Chloromethane	32.96	1.0	ug/L	30.0	ND	110	61-152	6.60	26	
Vinyl Chloride	31.30	1.0	ug/L	30.0	ND	104	66-149	5.23	23	
Bromomethane	26.24	1.0	ug/L	30.0	ND	87.5	43-171	10.7	29	
Chloroethane	34.45	1.0	ug/L	30.0	ND	115	69-148	6.98	25	
Trichlorofluoromethane	33.46	1.0	ug/L	30.0	ND	112	62-163	4.21	25	
1,1-Dichloroethylene	106.5	1.0	ug/L	100	ND	107	70-148	4.85	22	
Acetone	134.9	10.0	ug/L	101	ND	133	45-173	1.34	30	
Methyl Iodide	106.1	1.0	ug/L	102	ND	104	62-167	4.69	24	
Carbon Disulfide	104.7	1.0	ug/L	103	ND	102	71-163	5.45	22	
Methylene Chloride	103.8	5.0	ug/L	100	ND	104	69-140	3.70	19	
Acrylonitrile	114.7	5.0	ug/L	100	ND	114	38-147	0.859	30	
trans-1,2-Dichloroethylene	107.0	1.0	ug/L	100	ND	107	69-144	5.07	22	
1,1-Dichloroethane	108.2	1.0	ug/L	100	ND	108	70-138	3.96	20	
Vinyl Acetate	106.6	5.0	ug/L	100	ND	107	58-142	1.24	24	

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ0487 - EPA 5030B - EPA 8260B										
Matrix Spike Dup (1HJ0487-MSD1)	**Source: 1HJ0396-03**	Prepared: 10/07/24 00:00 Analyzed: 10/08/24 05:38								
cis-1,2-Dichloroethylene	97.69	1.0	ug/L	100	ND	97.7	68-151	5.67	22	
2-Butanone (MEK)	122.0	10.0	ug/L	102	ND	120	50-160	1.17	23	
Bromochloromethane	112.9	1.0	ug/L	100	ND	113	65-143	1.40	22	
Chloroform	101.9	1.0	ug/L	100	ND	102	71-143	3.63	21	
1,1,1-Trichloroethane	96.37	1.0	ug/L	100	ND	96.4	63-133	4.07	23	
Carbon Tetrachloride	101.9	1.0	ug/L	100	ND	102	63-142	4.09	22	
Benzene	107.0	1.0	ug/L	100	ND	107	69-133	4.33	18	
1,2-Dichloroethane	112.1	1.0	ug/L	100	ND	112	63-138	2.32	20	
Trichloroethylene	99.98	1.0	ug/L	100	ND	100	71-133	4.06	23	
1,2-Dichloropropane	100.0	1.0	ug/L	100	ND	100	69-132	1.89	20	
Dibromomethane	104.3	1.0	ug/L	100	ND	104	70-147	2.68	22	
Bromodichloromethane	101.5	1.0	ug/L	100	ND	102	67-130	2.19	21	
cis-1,3-Dichloropropene	98.63	1.0	ug/L	100	ND	98.6	61-126	3.06	21	
4-Methyl-2-pentanone (MIBK)	125.6	5.0	ug/L	100	ND	126	55-147	0.579	23	
Toluene	101.3	1.0	ug/L	100	ND	101	71-133	4.78	19	
trans-1,3-Dichloropropene	105.6	1.0	ug/L	100	ND	106	63-124	4.66	21	
1,1,2-Trichloroethane	104.0	1.0	ug/L	100	ND	104	69-133	10.7	19	
Tetrachloroethylene	91.04	1.0	ug/L	100	ND	91.0	70-124	20.0	24	
2-Hexanone (MBK)	112.4	5.0	ug/L	99.3	ND	113	53-141	17.5	24	
Dibromochloromethane	92.48	1.0	ug/L	100	ND	92.5	74-122	10.4	21	
1,2-Dibromoethane	91.61	1.0	ug/L	100	ND	91.6	66-127	10.5	23	
Chlorobenzene	98.28	1.0	ug/L	100	ND	98.3	76-116	4.91	21	
1,1,1,2-Tetrachloroethane	95.17	1.0	ug/L	100	ND	95.2	77-121	4.96	25	
Ethylbenzene	97.39	1.0	ug/L	100	ND	97.4	73-124	4.95	20	
Xylenes, total	286.5	2.0	ug/L	300	ND	95.5	75-123	11.3	20	
Styrene	92.49	1.0	ug/L	100	ND	92.5	70-120	12.4	23	
Bromoform	91.82	1.0	ug/L	100	ND	91.8	70-124	10.2	22	
1,2,3-Trichloropropane	101.8	1.0	ug/L	100	ND	102	62-135	7.50	28	
trans-1,4-Dichloro-2-butene	89.16	5.0	ug/L	103	ND	86.7	50-120	8.73	26	
1,1,2,2-Tetrachloroethane	135.5	1.0	ug/L	100	ND	135	63-126	0.265	24	Q2
1,4-Dichlorobenzene	97.89	1.0	ug/L	100	ND	97.9	72-119	4.06	24	
1,2-Dichlorobenzene	97.65	1.0	ug/L	100	ND	97.6	71-117	3.80	24	
1,2-Dibromo-3-chloropropane	102.7	5.0	ug/L	100	ND	103	49-134	5.78	28	
Surrogate: Dibromofluoromethane	*51.8*		ug/L	*50.2*		*103*	*57-134*			
Surrogate: Dibromofluoromethane	*51.8*		ug/L	*50.2*		*103*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*54.2*		ug/L	*50.4*		*108*	*53-140*			
Surrogate: 1,2-Dichloroethane-d4	*54.2*		ug/L	*50.4*		*108*	*61-142*			
Surrogate: Toluene-d8	*53.3*		ug/L	*50.5*		*106*	*86-114*			
Surrogate: Toluene-d8	*53.3*		ug/L	*50.5*		*106*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*46.3*		ug/L	*50.2*		*92.3*	*78-121*			
Surrogate: 4-Bromofluorobenzene	*46.3*		ug/L	*50.2*		*92.3*	*80-116*			
Batch 1HJ0786 - EPA 5030B - EPA 8260B										

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ0786 - EPA 5030B - EPA 8260B										
Blank (1HJ0786-BLK1)				Prepared: 10/11/24 00:00 Analyzed: 10/11/24 09:39						
Chloromethane	<1.0	1.0	ug/L							
Vinyl Chloride	<1.0	1.0	ug/L							
Bromomethane	<1.0	1.0	ug/L							
Chloroethane	<1.0	1.0	ug/L							
Trichlorofluoromethane	<1.0	1.0	ug/L							
1,1-Dichloroethylene	<1.0	1.0	ug/L							
Acetone	<10.0	10.0	ug/L							
Methyl Iodide	<1.0	1.0	ug/L							
Carbon Disulfide	<1.0	1.0	ug/L							
Methylene Chloride	<5.0	5.0	ug/L							
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L							
1,1-Dichloroethane	<1.0	1.0	ug/L							
Vinyl Acetate	<5.0	5.0	ug/L							
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L							
2-Butanone (MEK)	<10.0	10.0	ug/L							
Bromochloromethane	<1.0	1.0	ug/L							
Chloroform	<1.0	1.0	ug/L							
1,1,1-Trichloroethane	<1.0	1.0	ug/L							
Carbon Tetrachloride	<1.0	1.0	ug/L							
Benzene	<1.0	1.0	ug/L							
1,2-Dichloroethane	<1.0	1.0	ug/L							
Trichloroethylene	<1.0	1.0	ug/L							
1,2-Dichloropropane	<1.0	1.0	ug/L							
Dibromomethane	<1.0	1.0	ug/L							
Bromodichloromethane	<1.0	1.0	ug/L							
cis-1,3-Dichloropropene	<1.0	1.0	ug/L							
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L							
Toluene	<1.0	1.0	ug/L							
trans-1,3-Dichloropropene	<1.0	1.0	ug/L							
1,1,2-Trichloroethane	<1.0	1.0	ug/L							
Tetrachloroethylene	<1.0	1.0	ug/L							
2-Hexanone (MBK)	<5.0	5.0	ug/L							
Dibromochloromethane	<1.0	1.0	ug/L							
1,2-Dibromoethane	<1.0	1.0	ug/L							
Chlorobenzene	<1.0	1.0	ug/L							
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L							
Ethylbenzene	<1.0	1.0	ug/L							
Xylenes, total	<2.0	2.0	ug/L							
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							

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ0786 - EPA 5030B - EPA 8260B										
Blank (1HJ0786-BLK1)				Prepared: 10/11/24 00:00 Analyzed: 10/11/24 09:39						
1,4-Dichlorobenzene	<1.0	1.0	ug/L							
1,2-Dichlorobenzene	<1.0	1.0	ug/L							
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L							
Surrogate: Dibromofluoromethane	*48.4*		ug/L	*50.2*		*96.5*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*50.4*		ug/L	*50.4*		*100*	*61-142*			
Surrogate: Toluene-d8	*50.4*		ug/L	*50.5*		*99.9*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*53.0*		ug/L	*50.2*		*106*	*80-116*			
LCS (1HJ0786-BS1)				Prepared: 10/11/24 00:00 Analyzed: 10/11/24 08:31						
Chloromethane	29.85	1.0	ug/L	30.3		98.4	63-155			
Vinyl Chloride	26.29	1.0	ug/L	30.2		86.9	70-154			
Bromomethane	18.67	1.0	ug/L	30.1		62.0	52-176			
Chloroethane	32.73	1.0	ug/L	30.3		108	72-148			
Trichlorofluoromethane	31.44	1.0	ug/L	30.3		104	70-152			
1,1-Dichloroethylene	52.73	1.0	ug/L	50.1		105	70-148			
Acetone	105.9	10.0	ug/L	100		106	43-172			
Methyl Iodide	86.33	1.0	ug/L	100		86.2	69-170			
Carbon Disulfide	118.0	1.0	ug/L	100		118	72-162			
Methylene Chloride	52.49	5.0	ug/L	50.2		105	68-142			
trans-1,2-Dichloroethylene	52.82	1.0	ug/L	50.3		105	66-148			
1,1-Dichloroethane	54.04	1.0	ug/L	50.3		108	66-143			
Vinyl Acetate	174.5	5.0	ug/L	156		112	43-153			
cis-1,2-Dichloroethylene	47.65	1.0	ug/L	50.5		94.4	71-149			
2-Butanone (MEK)	111.3	10.0	ug/L	100		111	52-159			
Bromochloromethane	54.49	1.0	ug/L	50.4		108	69-143			
Chloroform	50.02	1.0	ug/L	50.2		99.7	69-144			
1,1,1-Trichloroethane	48.58	1.0	ug/L	50.3		96.6	62-129			
Carbon Tetrachloride	49.77	1.0	ug/L	50.2		99.1	63-141			
Benzene	56.26	1.0	ug/L	50.4		112	71-134			
1,2-Dichloroethane	52.74	1.0	ug/L	50.2		105	72-132			
Trichloroethylene	52.01	1.0	ug/L	50.3		103	71-135			
1,2-Dichloropropane	52.60	1.0	ug/L	50.2		105	69-136			
Dibromomethane	50.64	1.0	ug/L	50.5		100	73-147			
Bromodichloromethane	51.77	1.0	ug/L	50.3		103	68-129			
cis-1,3-Dichloropropene	53.91	1.0	ug/L	50.2		107	65-134			
4-Methyl-2-pentanone (MIBK)	122.6	5.0	ug/L	100		122	58-147			
Toluene	52.97	1.0	ug/L	50.5		105	72-133			
trans-1,3-Dichloropropene	52.64	1.0	ug/L	50.3		105	67-130			
1,1,2-Trichloroethane	52.86	1.0	ug/L	50.2		105	69-135			
Tetrachloroethylene	52.51	1.0	ug/L	50.2		105	69-130			
2-Hexanone (MBK)	119.9	5.0	ug/L	100		120	55-144			
Dibromochloromethane	50.60	1.0	ug/L	50.3		101	73-127			
1,2-Dibromoethane	50.88	1.0	ug/L	50.4		101	67-132			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ0786 - EPA 5030B - EPA 8260B										
LCS (1HJ0786-BS1)				Prepared: 10/11/24 00:00 Analyzed: 10/11/24 08:31						
Chlorobenzene	52.24	1.0	ug/L	50.2		104	72-123			
1,1,1,2-Tetrachloroethane	50.17	1.0	ug/L	50.4		99.5	73-127			
Ethylbenzene	52.31	1.0	ug/L	50.5		104	71-127			
Xylenes, total	163.6	2.0	ug/L	151		108	74-127			
Styrene	53.31	1.0	ug/L	50.4		106	66-126			
Bromoform	50.82	1.0	ug/L	50.2		101	68-130			
1,2,3-Trichloropropane	55.74	1.0	ug/L	50.4		111	63-136			
trans-1,4-Dichloro-2-butene	101.2	5.0	ug/L	100		101	54-134			
1,1,2,2-Tetrachloroethane	56.88	1.0	ug/L	50.2		113	61-131			
1,4-Dichlorobenzene	51.92	1.0	ug/L	50.2		103	70-129			
1,2-Dichlorobenzene	50.23	1.0	ug/L	50.2		100	69-126			
1,2-Dibromo-3-chloropropane	53.75	5.0	ug/L	50.5		106	50-143			
Surrogate: Dibromofluoromethane	*47.7*		ug/L	*50.2*		*95.1*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*48.6*		ug/L	*50.4*		*96.6*	*61-142*			
Surrogate: Toluene-d8	*52.7*		ug/L	*50.5*		*104*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*52.2*		ug/L	*50.2*		*104*	*80-116*			
LCS Dup (1HJ0786-BSD1)				Prepared: 10/11/24 00:00 Analyzed: 10/11/24 08:54						
Chloromethane	28.92	1.0	ug/L	30.3		95.4	63-155	3.16	24	
Vinyl Chloride	26.55	1.0	ug/L	30.2		87.8	70-154	0.984	25	
Bromomethane	18.58	1.0	ug/L	30.1		61.7	52-176	0.483	27	
Chloroethane	32.67	1.0	ug/L	30.3		108	72-148	0.183	25	
Trichlorofluoromethane	31.36	1.0	ug/L	30.3		103	70-152	0.255	26	
1,1-Dichloroethylene	52.65	1.0	ug/L	50.1		105	70-148	0.152	24	
Acetone	103.5	10.0	ug/L	100		103	43-172	2.33	30	
Methyl Iodide	86.45	1.0	ug/L	100		86.3	69-170	0.139	30	
Carbon Disulfide	117.7	1.0	ug/L	100		118	72-162	0.289	24	
Methylene Chloride	52.45	5.0	ug/L	50.2		105	68-142	0.0762	21	
trans-1,2-Dichloroethylene	52.93	1.0	ug/L	50.3		105	66-148	0.208	27	
1,1-Dichloroethane	54.07	1.0	ug/L	50.3		108	66-143	0.0555	24	
Vinyl Acetate	173.2	5.0	ug/L	156		111	43-153	0.713	30	
cis-1,2-Dichloroethylene	47.50	1.0	ug/L	50.5		94.1	71-149	0.315	26	
2-Butanone (MEK)	108.0	10.0	ug/L	100		108	52-159	3.01	27	
Bromochloromethane	54.45	1.0	ug/L	50.4		108	69-143	0.0734	23	
Chloroform	49.65	1.0	ug/L	50.2		99.0	69-144	0.742	23	
1,1,1-Trichloroethane	49.11	1.0	ug/L	50.3		97.6	62-129	1.09	24	
Carbon Tetrachloride	49.67	1.0	ug/L	50.2		98.9	63-141	0.201	25	
Benzene	55.70	1.0	ug/L	50.4		110	71-134	1.00	24	
1,2-Dichloroethane	51.88	1.0	ug/L	50.2		103	72-132	1.64	24	
Trichloroethylene	51.07	1.0	ug/L	50.3		101	71-135	1.82	24	
1,2-Dichloropropane	51.63	1.0	ug/L	50.2		103	69-136	1.86	24	
Dibromomethane	50.19	1.0	ug/L	50.5		99.4	73-147	0.893	25	
Bromodichloromethane	50.71	1.0	ug/L	50.3		101	68-129	2.07	22	

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ0786 - EPA 5030B - EPA 8260B										
LCS Dup (1HJ0786-BSD1)			Prepared: 10/11/24 00:00 Analyzed: 10/11/24 08:54							
cis-1,3-Dichloropropene	52.92	1.0	ug/L	50.2		105	65-134	1.85	23	
4-Methyl-2-pentanone (MIBK)	121.1	5.0	ug/L	100		121	58-147	1.21	27	
Toluene	52.64	1.0	ug/L	50.5		104	72-133	0.625	24	
trans-1,3-Dichloropropene	51.75	1.0	ug/L	50.3		103	67-130	1.71	24	
1,1,2-Trichloroethane	51.50	1.0	ug/L	50.2		103	69-135	2.61	23	
Tetrachloroethylene	52.61	1.0	ug/L	50.2		105	69-130	0.190	25	
2-Hexanone (MBK)	118.4	5.0	ug/L	100		118	55-144	1.24	25	
Dibromochloromethane	50.01	1.0	ug/L	50.3		99.3	73-127	1.17	22	
1,2-Dibromoethane	50.35	1.0	ug/L	50.4		99.8	67-132	1.05	24	
Chlorobenzene	52.20	1.0	ug/L	50.2		104	72-123	0.0766	23	
1,1,1,2-Tetrachloroethane	49.24	1.0	ug/L	50.4		97.6	73-127	1.87	24	
Ethylbenzene	52.10	1.0	ug/L	50.5		103	71-127	0.402	26	
Xylenes, total	163.4	2.0	ug/L	151		108	74-127	0.141	25	
Styrene	52.98	1.0	ug/L	50.4		105	66-126	0.621	23	
Bromoform	49.53	1.0	ug/L	50.2		98.6	68-130	2.57	23	
1,2,3-Trichloropropane	55.27	1.0	ug/L	50.4		110	63-136	0.847	24	
trans-1,4-Dichloro-2-butene	100.2	5.0	ug/L	100		100	54-134	0.973	27	
1,1,2,2-Tetrachloroethane	57.30	1.0	ug/L	50.2		114	61-131	0.736	29	
1,4-Dichlorobenzene	52.53	1.0	ug/L	50.2		105	70-129	1.17	24	
1,2-Dichlorobenzene	49.89	1.0	ug/L	50.2		99.4	69-126	0.679	26	
1,2-Dibromo-3-chloropropane	54.56	5.0	ug/L	50.5		108	50-143	1.50	30	
Surrogate: Dibromofluoromethane	*48.2*		ug/L	*50.2*		*96.1*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*49.1*		ug/L	*50.4*		*97.6*	*61-142*			
Surrogate: Toluene-d8	*52.3*		ug/L	*50.5*		*104*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*52.4*		ug/L	*50.2*		*105*	*80-116*			
Matrix Spike (1HJ0786-MS1)	**Source: 1HJ0396-13RE1**		Prepared: 10/11/24 00:00 Analyzed: 10/11/24 19:10							
Chloromethane	290.2	10.0	ug/L	303	ND	95.7	61-152			
Vinyl Chloride	269.9	10.0	ug/L	302	ND	89.2	66-149			
Bromomethane	160.1	10.0	ug/L	301	ND	53.2	43-171			
Chloroethane	336.8	10.0	ug/L	303	ND	111	69-148			
Trichlorofluoromethane	329.9	10.0	ug/L	303	ND	109	62-163			
1,1-Dichloroethylene	547.4	10.0	ug/L	501	ND	109	70-148			
Acetone	1009	100	ug/L	1000	ND	101	45-173			
Methyl Iodide	767.9	10.0	ug/L	1000	ND	76.6	62-167			
Carbon Disulfide	1198	10.0	ug/L	1000	ND	120	71-163			
Methylene Chloride	536.6	50.0	ug/L	502	ND	107	69-140			
trans-1,2-Dichloroethylene	533.0	10.0	ug/L	503	ND	106	69-144			
1,1-Dichloroethane	544.7	10.0	ug/L	503	ND	108	70-138			
Vinyl Acetate	1704	50.0	ug/L	1560	ND	109	58-142			
cis-1,2-Dichloroethylene	471.6	10.0	ug/L	505	ND	93.4	68-151			
2-Butanone (MEK)	1012	100	ug/L	1000	ND	101	50-160			
Bromochloromethane	544.1	10.0	ug/L	504	ND	108	65-143			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ0786 - EPA 5030B - EPA 8260B										
Matrix Spike (1HJ0786-MS1)	**Source: 1HJ0396-13RE1** Prepared: 10/11/24 00:00 Analyzed: 10/11/24 19:10									
Chloroform	494.1	10.0	ug/L	502	ND	98.5	71-143			
1,1,1-Trichloroethane	489.6	10.0	ug/L	503	ND	97.3	63-133			
Carbon Tetrachloride	497.9	10.0	ug/L	502	ND	99.2	63-142			
Benzene	557.2	10.0	ug/L	504	ND	110	69-133			
1,2-Dichloroethane	518.5	10.0	ug/L	502	ND	103	63-138			
Trichloroethylene	513.5	10.0	ug/L	503	ND	102	71-133			
1,2-Dichloropropane	513.0	10.0	ug/L	502	ND	102	69-132			
Dibromomethane	497.1	10.0	ug/L	505	ND	98.5	70-147			
Bromodichloromethane	504.5	10.0	ug/L	503	ND	100	67-130			
cis-1,3-Dichloropropene	516.6	10.0	ug/L	502	ND	103	61-126			
4-Methyl-2-pentanone (MIBK)	1141	50.0	ug/L	1000	ND	114	55-147			
Toluene	529.3	10.0	ug/L	505	ND	105	71-133			
trans-1,3-Dichloropropene	508.6	10.0	ug/L	503	ND	101	63-124			
1,1,2-Trichloroethane	509.7	10.0	ug/L	502	ND	102	69-133			
Tetrachloroethylene	522.6	10.0	ug/L	502	ND	104	70-124			
2-Hexanone (MBK)	1110	50.0	ug/L	1000	ND	111	53-141			
Dibromochloromethane	494.6	10.0	ug/L	503	ND	98.3	74-122			
1,2-Dibromoethane	483.4	10.0	ug/L	504	ND	95.8	66-127			
Chlorobenzene	515.8	10.0	ug/L	502	ND	103	76-116			
1,1,1,2-Tetrachloroethane	492.0	10.0	ug/L	504	ND	97.6	77-121			
Ethylbenzene	512.6	10.0	ug/L	505	ND	102	73-124			
Xylenes, total	1625	20.0	ug/L	1510	ND	107	75-123			
Styrene	522.2	10.0	ug/L	504	ND	104	70-120			
Bromoform	473.8	10.0	ug/L	502	ND	94.3	70-124			
1,2,3-Trichloropropane	515.4	10.0	ug/L	504	ND	102	62-135			
trans-1,4-Dichloro-2-butene	820.2	50.0	ug/L	1000	ND	81.8	50-120			
1,1,2,2-Tetrachloroethane	529.0	10.0	ug/L	502	ND	105	63-126			
1,4-Dichlorobenzene	505.2	10.0	ug/L	502	ND	101	72-119			
1,2-Dichlorobenzene	481.6	10.0	ug/L	502	ND	96.0	71-117			
1,2-Dibromo-3-chloropropane	482.4	50.0	ug/L	505	ND	95.6	49-134			
Surrogate: Dibromofluoromethane	*485*		ug/L	*502*		*96.7*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*492*		ug/L	*504*		*97.6*	*61-142*			
Surrogate: Toluene-d8	*529*		ug/L	*505*		*105*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*521*		ug/L	*502*		*104*	*80-116*			
Matrix Spike Dup (1HJ0786-MSD1)	**Source: 1HJ0396-13RE1** Prepared: 10/11/24 00:00 Analyzed: 10/12/24 15:14									
Chloromethane	289.4	10.0	ug/L	303	ND	95.4	61-152	0.276	26	
Vinyl Chloride	156.8	10.0	ug/L	302	ND	51.8	66-149	53.0	23	M2
Bromomethane	107.5	10.0	ug/L	301	ND	35.7	43-171	39.3	29	
Chloroethane	227.8	10.0	ug/L	303	ND	75.1	69-148	38.6	25	R1
Trichlorofluoromethane	323.2	10.0	ug/L	303	ND	107	62-163	2.05	25	
1,1-Dichloroethylene	525.4	10.0	ug/L	501	ND	105	70-148	4.10	22	
Acetone	959.1	100	ug/L	1000	ND	95.8	45-173	5.08	30	

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ0786 - EPA 5030B - EPA 8260B										
Matrix Spike Dup (1HJ0786-MSD1)	**Source: 1HJ0396-13RE1** Prepared: 10/11/24 00:00 Analyzed: 10/12/24 15:14									
Methyl Iodide	310.1	10.0	ug/L	1000	ND	30.9	62-167	84.9	24	R1
Carbon Disulfide	1129	10.0	ug/L	1000	ND	113	71-163	5.91	22	
Methylene Chloride	517.5	50.0	ug/L	502	ND	103	69-140	3.62	19	
trans-1,2-Dichloroethylene	509.9	10.0	ug/L	503	ND	101	69-144	4.43	22	
1,1-Dichloroethane	516.1	10.0	ug/L	503	ND	103	70-138	5.39	20	
Vinyl Acetate	1664	50.0	ug/L	1560	ND	107	58-142	2.35	24	
cis-1,2-Dichloroethylene	440.5	10.0	ug/L	505	ND	87.2	68-151	6.82	22	
2-Butanone (MEK)	1030	100	ug/L	1000	ND	103	50-160	1.82	23	
Bromochloromethane	481.8	10.0	ug/L	504	ND	95.5	65-143	12.1	22	
Chloroform	463.2	10.0	ug/L	502	ND	92.3	71-143	6.46	21	
1,1,1-Trichloroethane	451.0	10.0	ug/L	503	ND	89.6	63-133	8.21	23	
Carbon Tetrachloride	461.8	10.0	ug/L	502	ND	92.0	63-142	7.52	22	
Benzene	533.3	10.0	ug/L	504	ND	106	69-133	4.38	18	
1,2-Dichloroethane	495.4	10.0	ug/L	502	ND	98.7	63-138	4.56	20	
Trichloroethylene	491.1	10.0	ug/L	503	ND	97.5	71-133	4.46	23	
1,2-Dichloropropane	485.0	10.0	ug/L	502	ND	96.6	69-132	5.61	20	
Dibromomethane	470.6	10.0	ug/L	505	ND	93.2	70-147	5.48	22	
Bromodichloromethane	479.8	10.0	ug/L	503	ND	95.5	67-130	5.02	21	
cis-1,3-Dichloropropene	484.8	10.0	ug/L	502	ND	96.6	61-126	6.35	21	
4-Methyl-2-pentanone (MIBK)	1234	50.0	ug/L	1000	ND	123	55-147	7.86	23	
Toluene	518.9	10.0	ug/L	505	ND	103	71-133	1.98	19	
trans-1,3-Dichloropropene	478.1	10.0	ug/L	503	ND	95.1	63-124	6.18	21	
1,1,2-Trichloroethane	485.0	10.0	ug/L	502	ND	96.6	69-133	4.97	19	
Tetrachloroethylene	506.9	10.0	ug/L	502	ND	101	70-124	3.05	24	
2-Hexanone (MBK)	1234	50.0	ug/L	1000	ND	123	53-141	10.6	24	
Dibromochloromethane	478.2	10.0	ug/L	503	ND	95.0	74-122	3.37	21	
1,2-Dibromoethane	478.0	10.0	ug/L	504	ND	94.8	66-127	1.12	23	
Chlorobenzene	503.2	10.0	ug/L	502	ND	100	76-116	2.47	21	
1,1,1,2-Tetrachloroethane	469.1	10.0	ug/L	504	ND	93.0	77-121	4.77	25	
Ethylbenzene	495.1	10.0	ug/L	505	ND	98.1	73-124	3.47	20	
Xylenes, total	1516	20.0	ug/L	1510	ND	100	75-123	6.93	20	
Styrene	490.9	10.0	ug/L	504	ND	97.4	70-120	6.18	23	
Bromoform	480.5	10.0	ug/L	502	ND	95.7	70-124	1.40	22	
1,2,3-Trichloropropane	529.6	10.0	ug/L	504	ND	105	62-135	2.72	28	
trans-1,4-Dichloro-2-butene	816.5	50.0	ug/L	1000	ND	81.4	50-120	0.452	26	
1,1,2,2-Tetrachloroethane	572.3	10.0	ug/L	502	ND	114	63-126	7.86	24	
1,4-Dichlorobenzene	507.1	10.0	ug/L	502	ND	101	72-119	0.375	24	
1,2-Dichlorobenzene	488.7	10.0	ug/L	502	ND	97.4	71-117	1.46	24	
1,2-Dibromo-3-chloropropane	537.4	50.0	ug/L	505	ND	106	49-134	10.8	28	
Surrogate: Dibromofluoromethane	*459*		ug/L	*502*		*91.4*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*453*		ug/L	*504*		*90.0*	*61-142*			
Surrogate: Toluene-d8	*530*		ug/L	*505*		*105*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*507*		ug/L	*502*		*101*	*80-116*			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Determination of Conventional Chemistry Parameters	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ0409 - Wet Chem Preparation - EPA 376.2										
Blank (1HJ0409-BLK1)				Prepared: 10/07/24 14:26 Analyzed: 10/08/24 09:11						
Sulfide, total	<0.10	0.10	mg/L							
LCS (1HJ0409-BS1)				Prepared: 10/07/24 14:26 Analyzed: 10/08/24 09:11						
Sulfide, total	0.239	0.10	mg/L	0.31		76.0	56-118			
Matrix Spike (1HJ0409-MS1)		**Source: 1HJ0469-01**		Prepared: 10/07/24 14:26 Analyzed: 10/08/24 09:11						
Sulfide, total	0.230	0.10	mg/L	0.31	ND	73.2	50-150			
Matrix Spike Dup (1HJ0409-MSD1)		**Source: 1HJ0469-01**		Prepared: 10/07/24 14:26 Analyzed: 10/08/24 09:11						
Sulfide, total	0.227	0.10	mg/L	0.31	ND	72.2	50-150	1.28	30	

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ0501 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Blank (1HJ0501-BLK1)				Prepared: 10/08/24 15:10 Analyzed: 10/10/24 20:05						
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 (1HJ0501-BS1)				Prepared: 10/08/24 15:10 Analyzed: 10/10/24 20:11						
Antimony, total	0.0917	0.0020	mg/L	0.100		91.7	80-120			
Arsenic, total	0.0933	0.0040	mg/L	0.100		93.3	80-120			
Barium, total	0.101	0.0040	mg/L	0.100		101	80-120			
Beryllium, total	0.0922	0.0040	mg/L	0.100		92.2	80-120			
Cadmium, total	0.0940	0.0008	mg/L	0.100		94.0	80-120			
Chromium, total	0.0910	0.0080	mg/L	0.100		91.0	80-120			
Cobalt, total	0.0997	0.0004	mg/L	0.100		99.7	80-120			
Copper, total	0.0963	0.0040	mg/L	0.100		96.3	80-120			
Lead, total	0.0957	0.0040	mg/L	0.100		95.7	80-120			

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ0501 - EPA 3005A Total Recoverable Metals - EPA 6020A										
LCS (1HJ0501-BS1)			Prepared: 10/08/24 15:10 Analyzed: 10/10/24 20:11							
Nickel, total	0.0975	0.0040	mg/L	0.100		97.5	80-120			
Selenium, total	0.0970	0.0040	mg/L	0.100		97.0	80-120			
Silver, total	0.0949	0.0040	mg/L	0.100		94.9	80-120			
Thallium, total	0.0831	0.0020	mg/L	0.100		83.1	80-120			
Vanadium, total	0.0946	0.0200	mg/L	0.100		94.6	80-120			
Zinc, total	0.0952	0.0200	mg/L	0.100		95.2	80-120			
Matrix Spike (1HJ0501-MS1)	**Source: 1HJ0396-01**		Prepared: 10/08/24 15:10 Analyzed: 10/10/24 20:36							
Antimony, total	0.0956	0.0020	mg/L	0.100	ND	95.6	75-125			
Arsenic, total	0.0987	0.0040	mg/L	0.100	0.0015	97.2	75-125			
Barium, total	0.334	0.0040	mg/L	0.100	0.233	101	75-125			
Beryllium, total	0.0919	0.0040	mg/L	0.100	ND	91.9	75-125			
Cadmium, total	0.0960	0.0008	mg/L	0.100	0.0002	95.8	75-125			
Chromium, total	0.0878	0.0080	mg/L	0.100	0.0008	87.1	75-125			
Cobalt, total	0.0992	0.0004	mg/L	0.100	0.0015	97.7	75-125			
Copper, total	0.0906	0.0040	mg/L	0.100	ND	90.6	75-125			
Lead, total	0.0913	0.0040	mg/L	0.100	ND	91.3	75-125			
Nickel, total	0.108	0.0040	mg/L	0.100	0.0146	93.8	75-125			
Selenium, total	0.1033	0.0040	mg/L	0.100	ND	103	75-125			
Silver, total	0.0923	0.0040	mg/L	0.100	ND	92.3	75-125			
Thallium, total	0.0800	0.0020	mg/L	0.100	ND	80.0	75-125			
Vanadium, total	0.0979	0.0200	mg/L	0.100	ND	97.9	75-125			
Zinc, total	0.0969	0.0200	mg/L	0.100	ND	96.9	75-125			
Matrix Spike Dup (1HJ0501-MSD1)	**Source: 1HJ0396-01**		Prepared: 10/08/24 15:10 Analyzed: 10/10/24 20:42							
Antimony, total	0.0955	0.0020	mg/L	0.100	ND	95.5	75-125	0.136	20	
Arsenic, total	0.0995	0.0040	mg/L	0.100	0.0015	98.0	75-125	0.839	20	
Barium, total	0.340	0.0040	mg/L	0.100	0.233	107	75-125	1.76	20	
Beryllium, total	0.0956	0.0040	mg/L	0.100	ND	95.6	75-125	3.95	20	
Cadmium, total	0.0943	0.0008	mg/L	0.100	0.0002	94.1	75-125	1.81	20	
Chromium, total	0.0917	0.0080	mg/L	0.100	0.0008	90.9	75-125	4.27	20	
Cobalt, total	0.102	0.0004	mg/L	0.100	0.0015	101	75-125	3.12	20	
Copper, total	0.0908	0.0040	mg/L	0.100	ND	90.8	75-125	0.302	20	
Lead, total	0.0924	0.0040	mg/L	0.100	ND	92.4	75-125	1.18	20	
Nickel, total	0.111	0.0040	mg/L	0.100	0.0146	96.4	75-125	2.39	20	
Selenium, total	0.0972	0.0040	mg/L	0.100	ND	97.2	75-125	6.06	20	
Silver, total	0.0929	0.0040	mg/L	0.100	ND	92.9	75-125	0.680	20	
Thallium, total	0.0825	0.0020	mg/L	0.100	ND	82.5	75-125	3.10	20	
Vanadium, total	0.100	0.0200	mg/L	0.100	ND	100	75-125	2.21	20	
Zinc, total	0.0971	0.0200	mg/L	0.100	ND	97.1	75-125	0.165	20	
Post Spike (1HJ0501-PS1)	**Source: 1HJ0396-01**		Prepared: 10/08/24 15:10 Analyzed: 10/11/24 11:46							
Antimony, total	0.0844		mg/L	0.0800	0.0002	105	80-120			
Arsenic, total	0.0848		mg/L	0.0800	0.0015	104	80-120			
Barium, total	0.331		mg/L	0.0800	0.228	128	80-120			M6
Beryllium, total	0.0819		mg/L	0.0800	0.00005	102	80-120			

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ0501 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Post Spike (1HJ0501-PS1)	**Source: 1HJ0396-01**		Prepared: 10/08/24 15:10 Analyzed: 10/11/24 11:46							
Cadmium, total	0.0794		mg/L	0.0800	0.0002	99.0	80-120			
Chromium, total	0.0787		mg/L	0.0800	0.0008	97.5	80-120			
Cobalt, total	0.0818		mg/L	0.0800	0.0015	100	80-120			
Copper, total	0.0782		mg/L	0.0800	0.0007	96.8	80-120			
Lead, total	0.0756		mg/L	0.0800	0.00006	94.4	80-120			
Nickel, total	0.0941		mg/L	0.0800	0.0143	99.8	80-120			
Selenium, total	0.0799		mg/L	0.0800	-0.0006	99.9	80-120			
Silver, total	0.0773		mg/L	0.0800	0.0001	96.4	80-120			
Thallium, total	0.0741		mg/L	0.0800	0.00008	92.5	80-120			
Vanadium, total	0.0877		mg/L	0.0800	0.0053	103	80-120			
Zinc, total	0.0811		mg/L	0.0800	0.0090	90.1	80-120			

Definitions

M2:	Matrix spike recovery is below acceptance limits.
M6:	Matrix spike recovery is outside of acceptance limits. The analyte concentration is greater than 4X the spiking level.
Q2:	LCS recovery is above acceptance limits.
R1:	Duplicate RPD is outside acceptance criteria.
RL:	Reporting Limit
RPD:	Relative Percent Difference

Cooler Receipt Log

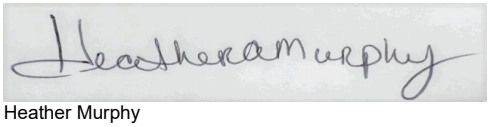
Cooler ID: Default Cooler Temp: 5.4°C

Cooler Inspection Checklist

Custody Seals	No	Containers Intact	Yes
COC/Labels Agree	Yes	Preservation Confirmed	No
Received On Ice	Yes		

Report Comments

Reviewed and Approved By:



Heather Murphy
Customer Relationship Specialist
heather.murphy@microbac.com
10/17/24 11:56

CHAIN OF CUSTODY RECORD

MICROBAC®
600 East 17th Street Sout
Newton, IA 50208
641-792-9451

1HJ0396

HLW Engineering
PM: Heather Murphy

Printed: 8/26/2024 10:36:24A
www.keystonelabs.com

SITE INFORMATION
Sampler: Todd Whipple
Project: Benton County - New Regs

REPORT TO
Todd Whipple
HLW Engineering
PO Box 314
Story City, IA 50248

INVOICE TO
Eric Werner
Benton County Sanitary Landfill
7904 20th Ave
Blairstown, IA 52209

SPECIAL INSTRUCTIONS
None

Turn Around Time
☐ Standard ☐ RUSH, need by ___/___/___

LAB USE ONLY
Work Order 1HJ0396
Temperature 5.4
Turn-Cooler: No

☐ Custody Seal
☒ Containers Intact
☒ COC/Labels Agree
☐ Preservation Confirmed
☒ Received on Ice

Number	Sample Identification / Client ID	Matrix	Sample Type	Date	Time	Number of Containers	Analyses	Lab Sample Number
-001	MW-6 (b)	Aqueous	GRAB	10/2/24	8:05	7	lndfill-app1-voc-group lndfll-app1-metals-6020	01
-001	MW-26 (b)	Aqueous	GRAB	10/2/24	7:43	7	lndfill-app1-voc-group lndfll-app1-metals-6020	02
-001	MW-27 (b)	Aqueous	GRAB	10/2/24	7:28	7	lndfill-app1-voc-group lndfll-app1-metals-6020	03
-001	MW-28 (b) No Sample	Aqueous	GRAB	10/2/24	—	0	lndfill-app1-voc-group lndfll-app1-metals-6020	~~04~~
-001	MW-7 (b)	Aqueous	GRAB	10/2/24	8:16	7	lndfill-app1-voc-group lndfll-app1-metals-6020	~~05~~ 04
-001	MW-12	Aqueous	GRAB	10/2/24	10:46	7	lndfill-app1-voc-group lndfll-app1-metals-6020	~~06~~ 05
-001	MW-14	Aqueous	GRAB	10/2/24	10:27	7	lndfill-app1-voc-group lndfll-app1-metals-6020	~~07~~ 06

Todd Whipple 10/3/24
Relinquished By Date/Time

Relinquished By Date/Time

Received By Date/Time

Received for Lab By 10/3/2024 8:57AM
Date/Time

Remarks:

Original - Lab Copy Yellow - Sampler Copy

CHAIN OF CUSTODY RECORD

MICROBAC®
600 East 17th Street South
Newton, IA 50208
~~641-792-9451~~

1HJ0396
HLW Engineering
PM: Heather Murphy

www.keystonelabs.com

SITE INFORMATION
Sampler: Todd Whipple
Project: Benton County - New Regs

REPORT TO
Todd Whipple
HLW Engineering
PO Box 314
Story City, IA 50248

Eric Werner
Benton County Sanitary Landfill
7904 20th Ave
Blairstown, IA 52209

SPECIAL INSTRUCTIONS
None

Turn Around Time
☐ Standard ☐ RUSH, need by ___/___/___

LAB USE ONLY
Work Order 1HJ0396
Temperature 5.4
Turn-Cooler: No

- ☐ Custody Seal
- ☒ Containers Intact
- ☒ COC/Labels Agree
- ☐ Preservation Confirmed
- ☒ Received on Ice

Number	Sample Identification / Client ID	Matrix	Sample Type	Date	Time	Number of Containers	Analyses		Lab Sample Number
-001	MW-20	Aqueous	GRAB	10/2/24	10:03	7	lndfill-app1-voc-group sulf-t-376.2-regen	lndfll-app1-metals-6020	07
-001	AW-1	Aqueous	GRAB	10/2/24	11:29	7	lndfill-app1-voc-group	lndfll-app1-metals-6020	08
-001	MW-24	Aqueous	GRAB	10/2/24	11:05	7	lndfill-app1-voc-group	lndfll-app1-metals-6020	09
-001	MW-25	Aqueous	GRAB	10/2/24	12:10	7	lndfill-app1-voc-group	lndfll-app1-metals-6020	10
-001	AW-2	Aqueous	GRAB	10/2/24	9:50	7	lndfill-app1-voc-group	lndfll-app1-metals-6020	11
-001	AW-9	Aqueous	GRAB	10/2/24	9:40	1	as-t-6020	co-t-6020	12
-001	AW-3	Aqueous	GRAB	10/2/24	9:25	7	lndfill-app1-voc-group	lndfll-app1-metals-6020	13

Todd Whipple 10/3/24
Relinquished By Date/Time

Relinquished By Date/Time

Received By Date/Time

Received for Lab By 10/3/2024 8:57 AM
Date/Time

Remarks:

Original - Lab Copy Yellow - Sampler Copy

CHAIN OF CUSTODY RECORD

MICROBAC®
600 East 17th Street South
Newton, IA 50208
~~641-792-9451~~

1HJ0396

HLW Engineering
PM: Heather Murphy

ed: 8/26/2024 10:36:24A
www.keystonelabs.com

SITE INFORMATION
Sampler:
Project: Benton County - New Regs

REPORT TO
Todd Whipple
HLW Engineering
PO Box 314
Story City, IA 50248

INVOICE TO
Eric Werner
Benton County Sanitary Landfill
7904 20th Ave
Blairstown, IA 52209

SPECIAL INSTRUCTIONS
None

Turn Around Time
☐ Standard ☐ RUSH, need by ___/___/___

LAB USE ONLY
Work Order 1HJ0396
Temperature 5.4
Turn-Cooler: No

- ☐ Custody Seal
- ☒ Containers Intact
- ☒ COC/Labels Agree
- ☐ Preservation Confirmed
- ☒ Received on Ice

Number	Sample Identification / Client ID	Matrix	Sample Type	Date	Time	Number of Containers	Analyses	Lab Sample Number
-001	Duplicate	Aqueous	GRAB	10/2/24	✓	1	lndfill-app1-voc-group lndfill-app1-metals-6020	14
-001	MW-41	Aqueous	GRAB	10/2/24	11:49	7	lndfill-app1-voc-group lndfill-app1-metals-6020	15

Relinquished By — Date/Time 10/3/24

Received By — Date/Time

Relinquished By — Date/Time

Received for Lab By — Date/Time 10/3/2024 8:57 AM

Remarks:

Original - Lab Copy Yellow - Sampler Copy

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HL1070

Project Description

Leachate

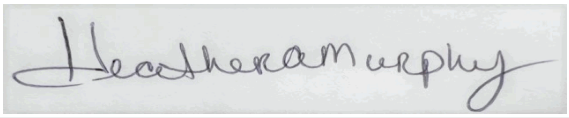
For:

Todd Whipple

HLW Engineering

204 West Broad St

Story City, IA 50248



Heather Murphy

Customer Relationship Specialist

Friday, December 20, 2024

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

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

MICROBAC®

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HL1070

HLW Engineering

Todd Whipple
204 West Broad St
Story City, IA 50248

Project Name: Leachate

Project / PO Number: N/A
Received: 12/13/2024
Reported: 12/20/2024

Sample Summary Report

Sample Name	Laboratory ID	Client Matrix	Sample Type	Sample Begin	Sample Taken	Lab Received
MW-12	1HL1070-01	Aqueous	GRAB		12/11/24 15:15	12/13/24 10:51

Analytical Testing Parameters

Client Sample ID:	MW-12		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HL1070-01	**Collection Date:**	12/11/2024 15:15

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 200.8, Rv. 5.4 (1994)								
Nickel, total	**0.0113**	0.0040	mg/L	4		12/16/24 1541	12/18/24 2009	RVV

Batch Log Summary

Method	Batch	Laboratory ID	Client / Source ID
EPA 200.8, Rv. 5.4 (1994)	1HL0903	1HL0903-BLK1	
		1HL0903-BS1	
		1HL1070-01	MW-12
		1HL0903-MS1	1HL1122-01
		1HL0903-MSD1	1HL1122-01
		1HL0903-PS1	1HL1122-01

Batch Quality Control Summary: Microbac Laboratories, Inc., Newton

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HL0903 - EPA 200.2 Total ICP-MS - EPA 200.8, Rv. 5.4 (1994)										
Blank (1HL0903-BLK1)			Prepared: 12/16/24 15:41 Analyzed: 12/18/24 19:56							
Nickel, total	<0.0040	0.0040	mg/L							
LCS (1HL0903-BS1)			Prepared: 12/16/24 15:41 Analyzed: 12/18/24 20:03							
Nickel, total	0.0969	0.0040	mg/L	0.100		96.9	85-115			
Matrix Spike (1HL0903-MS1)		**Source: 1HL1122-01**	Prepared: 12/16/24 15:41 Analyzed: 12/18/24 20:21							
Nickel, total	0.165	0.0040	mg/L	0.100	0.0639	101	70-130			
Matrix Spike Dup (1HL0903-MSD1)		**Source: 1HL1122-01**	Prepared: 12/16/24 15:41 Analyzed: 12/18/24 20:39							
Nickel, total	0.160	0.0040	mg/L	0.100	0.0639	96.6	70-130	2.74	20	
Post Spike (1HL0903-PS1)		**Source: 1HL1122-01**	Prepared: 12/16/24 15:41 Analyzed: 12/18/24 20:45							
Nickel, total	0.144		mg/L	0.0800	0.0626	102	70-130			

Definitions

RL: Reporting Limit
RPD: Relative Percent Difference

Cooler Receipt Log

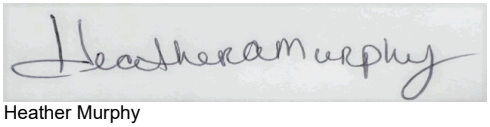
Cooler ID: Default Cooler Temp: 3.4°C

Cooler Inspection Checklist

Custody Seals	No	Containers Intact	Yes
COC/Labels Agree	Yes	Preservation Confirmed	No
Received On Ice	Yes		

Report Comments

Reviewed and Approved By:



Heather Murphy
Customer Relationship Specialist
heather.murphy@microbac.com
12/20/24 15:47

CHAIN OF CUS

Keystone LABORATORIES, INC.

☐ 600 E. 17th St. S.
Newton, IA 50208
Phone: 641-792-8451
Fax: 641-792-7989

☐ 3012 Ansb
Waterloo,
Phone: 31
Fax: 31

☐ 05 E VanBuren St
enterville, IA 52544
hone: 641-437-7023
ax: 641-437-7040

1HL1070
HLW Engineering
PM: Heather Murphy

PAGE 1 OF 1

PRINT OR TYPE INFORMATION BELOW
SAMPLER: Todd Whipple
SITE NAME; Benton Co SLF
ADDRESS:
CITY/ST/ZIP: Blairstown, IA
PHONE:

REPORT TO:
NAME: Todd Whipple
COMPANY NAME: HLW Group
ADDRESS: P.O. Box 314
CITY/ST/ZIP: Story City, IA 50248
PHONE: 515 733 4144
FAX: 4146

BILL TO:
NAME: Eric Werner, Director
COMPANY NAME: Benton Co SLF
ADDRESS: 7904 20th Ave
CITY/ST/ZIP: Blairstown, IA 52209
PHONE:
Keystone Quote No: (If Applicable)

CLIENT SAMPLE NUMBER	DATE	TIME	SAMPLE LOCATION	NO. OF CONTAINERS	MATRIX	GRAB/COMPOSITE	ANALYSES REQUIRED: Nickle, total	LAB USE ONLY: SAMPLE CONDITION/COMMENTS	LABORATORY SAMPLE NUMBER
MW-12	12-11-24		MW-12	1	W	G	X		

LABORATORY WORK ORDER NO.: 1HL1070
SAMPLE TEMPERATURE UPON RECEIPT: 3.4 °C

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Date / Time	Turn-Around: ☐ Standard ☐ Rush (Contact Lab Prior to Submission)
Relinquished by: (Signature)	Date / Time	Received for Lab by: (Signature)	Date: 12/12/24 Time: 10:51	Remarks:

Original - Lab Copy • Yellow - Sampler Copy

FORM: CCR 7-97

1 H L 1 0 7 0

HLW Engineering
PM: Heather Murphy

CHAIN OF CUSTODY RECOR

Keystone LABORATORIES, INC.

☐ 600 E. 17th St. S.
Newton, IA 50208
Phone: 641-792-8451
Fax: 641-792-7989

☐ 3012 Ansborough Ave.
Waterloo, IA 50701
Phone: 319-235-4440
Fax: 319-235-2480

☐ 835 S
Kansas City, KS 66105
Phone: 913-321-7856
Fax: 913-831-6778

☐ 205 E VanBuren St
Centerville, IA 52544
Phone: 641-437-7023
Fax: 641-437-7040

PAGE 1 OF 1

T OR TYPE INFORMATION BELOW

'PLER: Todd Whipple
NAME; Benton Co SLF
RESS:
/ST/ZIP: Blairstown, IA
NE:

REPORT TO:
NAME: Todd Whipple
COMPANY NAME: HLW Group
ADDRESS: P.O. Box 314
CITY/ST/ZIP: Story City, IA 50248
PHONE: 515 733 4144
FAX: 4146

BILL TO:
NAME: Eric Werner, Director
COMPANY NAME: Benton Co SLF
ADDRESS: 7904 20th Ave
CITY/ST/ZIP: Blairstown, IA 52209
PHONE:

Keystone Quote No: (If Applicable)

CLIENT MPLE NUMBER	DATE	TIME	SAMPLE LOCATION	NO. OF CONTAINERS	MATRIX	GRAB/COMPOSITE	ANALYSES REQUIRED: Nickle, total	LAB USE ONLY: LABORATORY WORK ORDER NO. / SAMPLE TEMPERATURE UPON RECEIPT / SAMPLE CONDITION/COMMENTS	LABORATORY SAMPLE NUMBER
LW-12	12-11-24	1515pm	MW-12	1	W	G	X	3 4 °C	

ed by: (Signature) Date Time | Received by: (Signature) Date Time | Turn-Around: ☐ Standard ☐ Rush

ed by: (Signature) Date | Received for Lab by:

Appendix F

SSI & SSL Tables

Well	Date	Compound	Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	95% UCL (ug/L)	GWPS (ug/L) Bold = Site
AW-2	9/12/2018	Arsenic	46.8	43.9	38.675	55.775	**51.3**
AW-2	4/1/2019	Arsenic	66.6	51.3	44.356	64.694	**51.3**
AW-2	9/12/2019	Arsenic	62.9	51.3	45.328	67.922	**51.3**
AW-2	5/6/2020	Arsenic	69.2	51.3	49.548	73.202	**51.3**
AW-2	9/3/2020	Arsenic	55.7	51.3	56.699	70.501	**51.3**
AW-2	3/30/21	Arsenic	38.3	51.3	40.829	72.221	**51.3**
AW-2	9/8/2021	Arsenic	26.4	51.3	25.206	69.594	**51.3**
AW-2	3/31/2022	Arsenic	26.7	51.3	20.566	52.984	**51.3**
AW-2	8/30/2022	Arsenic	41.7	51.3	23.995	42.555	**51.3**
AW-2	3/7/2023	Arsenic	40.5	51.3	23.926	43.724	**51.3**
AW-2	9/28/2023	Arsenic	36.4	51.3	28.319	44.331	**51.3**
AW-2	3/11/2024	Arsenic	27.7	51.3	29.121	44.029	**51.3**
AW-2	10/2/2024	Arsenic	48.1	51.3	28.176	48.174	**51.3**
AW-2	9/12/2018	Cobalt	10.1	7.43	8.620	26.580	**12.2**
AW-2	4/1/2019	Cobalt	9.6	7.43	5.587	25.963	**12.2**
AW-2	9/12/2019	Cobalt	10.1	7.43	3.753	25.247	**12.2**
AW-2	5/6/2020	Cobalt	7.7	5.90	8.003	10.717	**12.2**
AW-2	9/3/2020	Cobalt	10.6	5.90	8.009	10.991	**12.2**
AW-2	3/30/21	Cobalt	8.8	12.2	7.760	10.840	**12.2**
AW-2	9/8/2021	Cobalt	<4.0	12.2	7.758	10.792	**12.2**
AW-2	3/31/2022	Cobalt	8.9	12.2	8.548	10.602	**12.2**
AW-2	8/30/2022	Cobalt	12.0	12.2	8.177	11.673	**12.2**
AW-2	3/7/2023	Cobalt	12.5	12.2	8.862	12.838	**12.2**
AW-2	9/28/2023	Cobalt	5.4	12.2	5.834	13.557	**12.2**
AW-2	3/11/2024	Cobalt	14.2	12.2	6.477	15.573	**12.2**
AW-2	10/2/2024	Cobalt	13.1	12.2	6.600	16.000	**12.2**
AW-2	9/12/2018	2-Butanone	<5	5.0	2.5	2.5	6,300
AW-2	4/1/2019	2-Butanone	<5	5.0	2.5	2.5	6,300
AW-2	9/12/2019	2-Butanone	<5	5.0	2.5	2.5	6,300
AW-2	5/6/2020	2-Butanone	<5	5.0	2.5	2.5	6,300
AW-2	9/3/2020	2-Butanone	<5	5.0	2.5	2.5	6,300
AW-2	3/30/21	2-Butanone	<5	5.0	2.5	2.5	6,300
AW-2	9/8/2021	2-Butanone	8.5	5.0	0.471	7.529	6,300
AW-2	3/31/2022	2-Butanone	<5	5.0	0.471	7.529	6,300
AW-2	8/30/2022	2-Butanone	<5	5.0	0.471	7.529	6,300
AW-2	3/7/2023	2-Butanone	<5	5.0	0.471	7.529	6,300
AW-2	9/28/2023	2-Butanone	<5	5.0	2.500	2.500	6,300
AW-2	3/11/2024	2-Butanone	<5	5.0	2.500	2.500	6,300
AW-2	10/2/2024	2-Butanone	<5	5.0	2.500	2.500	6,300
AW-2	9/12/2018	Acetone	<1.0	10.0	5.0	5.0	6,300
AW-2	4/1/2019	Acetone	<1.0	10.0	5.0	5.0	6,300

AW-2	9/12/2019	Acetone	<1.0	10.0	5.0	5.0	6,300
AW-2	5/6/2020	Acetone	<1.0	10.0	5.0	5.0	6,300
AW-2	9/3/2020	Acetone	<1.0	10.0	5.0	5.0	6,300
AW-2	3/30/21	Acetone	<1.0	10.0	5.0	5.0	6,300
AW-2	9/8/2021	Acetone	138	10.0	0.000	116.473	6,300
AW-2	3/31/2022	Acetone	<1.0	10.0	0.000	116.473	6,300
AW-2	8/30/2022	Acetone	<1.0	10.0	0.000	116.473	6,300
AW-2	3/7/2023	Acetone	<1.0	10.0	0.000	116.473	6,300
AW-2	9/28/2023	Acetone	<1.0	10.0	5.000	5.000	6,300
AW-2	3/11/2024	Acetone	<1.0	10.0	5.000	5.000	6,300
AW-2	10/2/2024	Acetone	<1.0	10.0	5.000	5.000	6,300
AW-2	9/16/2016	Benzene	<1.0	1.0	0.500	0.500	5.0
AW-2	3/15/2017	Benzene	<1.0	1.0	0.500	0.500	5.0
AW-2	9/27/2017	Benzene	<1.0	1.0	0.500	0.500	5.0
AW-2	3/14/2018	Benzene	<1.0	1.0	0.500	0.500	5.0
AW-2	9/12/2018	Benzene	1.0	1.0	0.331	0.919	5.0
AW-2	4/1/2019	Benzene	<1.0	1.0	0.331	0.919	5.0
AW-2	9/12/2019	Benzene	<1.0	1.0	0.331	0.919	5.0
AW-2	5/6/2020	Benzene	<1.0	1.0	0.331	0.919	5.0
AW-2	9/3/2020	Benzene	<1.0	1.0	0.500	0.500	5.0
AW-2	3/30/21	Benzene	<1.0	1.0	0.500	0.500	5.0
AW-2	9/8/2021	Benzene	1.4	1.0	0.196	1.254	5.0
AW-2	3/31/2022	Benzene	<1.0	1.0	0.196	1.254	5.0
AW-2	8/30/2022	Benzene	<1.0	1.0	0.196	1.254	5.0
AW-2	3/7/2023	Benzene	<1.0	1.0	0.196	1.254	5.0
AW-2	9/28/2023	Benzene	<1.0	1.0	0.500	0.500	5.0
AW-2	3/11/2024	Benzene	<1.0	1.0	0.500	0.500	5.0
AW-2	10/2/2024	Benzene	<1.0	1.0	0.500	0.500	5.0
AW-2	9/12/2018	Chloroethane	<1.0	1.0	0.500	0.500	2,800
AW-2	4/1/2019	Chloroethane	<1.0	1.0	0.500	0.500	2,800
AW-2	9/12/2019	Chloroethane	<1.0	1.0	0.500	0.500	2,800
AW-2	5/6/2020	Chloroethane	<1.0	1.0	0.500	0.500	2,800
AW-2	9/3/2020	Chloroethane	<1.0	1.0	0.500	0.500	2,800
AW-2	3/30/21	Chloroethane	<1.0	1.0	0.500	0.500	2,800
AW-2	9/8/2021	Chloroethane	1.0	1.0	0.331	0.919	2,800
AW-2	3/31/2022	Chloroethane	<1.0	1.0	0.331	0.919	2,800
AW-2	8/30/2022	Chloroethane	<1.0	1.0	0.331	0.919	2,800
AW-2	3/7/2023	Chloroethane	<1.0	1.0	0.331	0.919	2,800
AW-2	9/28/2023	Chloroethane	<1.0	1.0	0.500	0.500	2,800
AW-2	3/11/2024	Chloroethane	<1.0	1.0	0.500	0.500	2,800
AW-2	10/2/2024	Chloroethane	<1.0	1.0	0.500	0.500	2,800

Well	Date	Compound	Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	95% UCL (ug/L)	GWPS (ug/L) Bold = Site
AW-3	9/12/2018	Arsenic	45.4	43.9	18.595	78.155	**51.3**
AW-3	4/1/2019	Arsenic	10.5	51.3	8.201	80.399	**51.3**
AW-3	9/12/2019	Arsenic	34.0	51.3	14.105	49.195	**51.3**
AW-3	5/6/2020	Arsenic	25.3	51.3	11.489	46.111	**51.3**
AW-3	9/3/2020	Arsenic	41.8	51.3	12.119	43.681	**51.3**
AW-3	3/30/21	Arsenic	11.0	51.3	12.498	43.552	**51.3**
AW-3	9/8/2021	Arsenic	50.8	51.3	11.457	52.993	**51.3**
AW-3	3/31/2022	Arsenic	35.6	51.3	14.745	54.855	**51.3**
AW-3	8/30/2022	Arsenic	87.6	51.3	8.520	83.980	**51.3**
AW-3	3/7/2023	Arsenic	11.1	51.3	8.588	83.962	**51.3**
AW-3	9/28/2023	Arsenic	38.3	51.3	5.438	80.862	**51.3**
AW-3	3/11/2024	Arsenic	40.9	51.3	7.125	81.825	**51.3**
AW-3	10/2/2024	Arsenic	25.1	51.3	12.727	44.973	**51.3**
AW-3	9/16/2016	1,1-dichloroethane	1.2	1.0	0.382	1.228	140.0
AW-3	3/15/2017	1,1-dichloroethane	2.5	1.0	0.305	2.305	140.0
AW-3	9/27/2017	1,1-dichloroethane	1.6	1.0	0.804	2.356	140.0
AW-3	3/14/2018	1,1-dichloroethane	<1.0	1.0	0.468	2.432	140.0
AW-3	9/12/2018	1,1-dichloroethane	<1.0	1.0	0.137	2.413	140.0
AW-3	4/1/2019	1,1-dichloroethane	<1.0	1.0	0.128	1.422	140.0
AW-3	9/12/2019	1,1-dichloroethane	<1.0	1.0	0.500	0.500	140.0
AW-3	5/6/2020	1,1-dichloroethane	<1.0	1.0	0.500	0.500	140.0
AW-3	9/3/2020	1,1-dichloroethane	<1.0	1.0	0.500	0.500	140.0
AW-3	3/30/21	1,1-dichloroethane	<1.0	1.0	0.500	0.500	140.0
AW-3	9/8/2021	1,1-dichloroethane	<1.0	1.0	0.500	0.500	140.0
AW-3	3/31/2022	1,1-dichloroethane	<1.0	1.0	0.500	0.500	140.0
AW-3	8/30/2022	1,1-dichloroethane	<1.0	1.0	0.500	0.500	140.0
AW-3	3/7/2023	1,1-dichloroethane	<1.0	1.0	0.500	0.500	140.0
AW-3	9/28/2023	1,1-dichloroethane	<1.0	1.0	0.500	0.500	140.0
AW-3	3/11/2024	1,1-dichloroethane	<1.0	1.0	0.500	0.500	140.0
AW-3	10/2/2024	1,1-dichloroethane	<1.0	1.0	0.500	0.500	140.0
AW-3	9/16/2016	1,4-dichlorobenzene	1.9	1.0	0.027	1.673	75.0
AW-3	3/15/2017	1,4-dichlorobenzene	<1.0	1.0	0.027	1.673	75.0
AW-3	9/27/2017	1,4-dichlorobenzene	1.1	1.0	0.220	1.780	75.0
AW-3	3/14/2018	1,4-dichlorobenzene	3.5	1.0	0.221	3.279	75.0
AW-3	9/12/2018	1,4-dichlorobenzene	4.0	1.0	0.237	4.313	75.0
AW-3	4/1/2019	1,4-dichlorobenzene	2.6	1.0	1.303	4.297	75.0
AW-3	9/12/2019	1,4-dichlorobenzene	<1.0	1.0	0.832	4.468	75.0
AW-3	5/6/2020	1,4-dichlorobenzene	2.2	1.0	0.630	4.020	75.0
AW-3	9/3/2020	1,4-dichlorobenzene	2.0	1.0	0.745	2.905	75.0
AW-3	3/30/21	1,4-dichlorobenzene	2.8	1.0	0.725	3.205	75.0
AW-3	9/8/2021	1,4-dichlorobenzene	3.8	1.0	1.749	3.651	75.0
AW-3	3/31/2022	1,4-dichlorobenzene	2.3	1.0	1.797	3.653	75.0

AW-3	8/30/2022	1,4-dichlorobenzene	2.2	1.0	1.914	3.636	75.0
AW-3	3/7/2023	1,4-dichlorobenzene	2.7	1.0	1.888	3.612	75.0
AW-3	9/28/2023	1,4-dichlorobenzene	3.4	1.0	2.009	3.291	75.0
AW-3	3/11/2024	1,4-dichlorobenzene	3.2	1.0	2.242	3.508	75.0
AW-3	10/2/2024	1,4-dichlorobenzene	2.8	1.0	2.636	3.414	75.0
AW-3	9/16/2016	2-butanone (MEK)	<5.0	5.0	0.500	0.500	4,000.0
AW-3	3/15/2017	2-butanone (MEK)	<5.0	5.0	0.500	0.500	4,000.0
AW-3	9/27/2017	2-butanone (MEK)	<5.0	5.0	0.500	0.500	4,000.0
AW-3	3/14/2018	2-butanone (MEK)	<5.0	5.0	0.500	0.500	4,000.0
AW-3	9/12/2018	2-butanone (MEK)	6.0	5.0	1.316	5.434	4,000.0
AW-3	4/1/2019	2-butanone (MEK)	<5.0	5.0	1.316	5.434	4,000.0
AW-3	9/12/2019	2-butanone (MEK)	<5.0	5.0	1.316	5.434	4,000.0
AW-3	5/6/2020	2-butanone (MEK)	<5.0	5.0	1.316	5.434	4,000.0
AW-3	9/3/2020	2-butanone (MEK)	<5.0	5.0	2.500	2.500	4,000.0
AW-3	3/30/21	2-butanone (MEK)	<5.0	5.0	2.500	2.500	4,000.0
AW-3	9/8/2021	2-butanone (MEK)	<5.0	5.0	2.500	2.500	4,000.0
AW-3	3/31/2022	2-butanone (MEK)	<5.0	5.0	2.500	2.500	4,000.0
AW-3	8/30/2022	2-butanone (MEK)	<5.0	5.0	2.500	2.500	4,000.0
AW-3	3/7/2023	2-butanone (MEK)	<5.0	5.0	2.500	2.500	4,000.0
AW-3	9/28/2023	2-butanone (MEK)	<5.0	5.0	2.500	2.500	4,000.0
AW-3	3/11/2024	2-butanone (MEK)	<5.0	5.0	2.500	2.500	4,000.0
AW-3	10/2/2024	2-butanone (MEK)	<5.0	5.0	2.500	2.500	4,000.0
AW-3	9/16/2016	Acetone	<10.0	10.0	5.0	5.0	6,300.0
AW-3	3/15/2017	Acetone	<10.0	10.0	5.0	5.0	6,300.0
AW-3	9/27/2017	Acetone	<10.0	10.0	5.0	5.0	6,300.0
AW-3	3/14/2018	Acetone	<10.0	10.0	5.0	5.0	6,300.0
AW-3	9/12/2018	Acetone	<10.0	10.0	5.0	5.0	6,300.0
AW-3	4/1/2019	Acetone	<10.0	10.0	5.0	5.0	6,300.0
AW-3	9/12/2019	Acetone	11.4	10.0	2.836	10.364	6,300.0
AW-3	5/6/2020	Acetone	<10.0	10.0	2.836	10.364	6,300.0
AW-3	9/3/2020	Acetone	<10.0	10.0	2.836	10.364	6,300.0
AW-3	3/30/21	Acetone	<10.0	10.0	2.836	10.364	6,300.0
AW-3	9/8/2021	Acetone	<10.0	10.0	5.000	5.000	6,300.0
AW-3	3/31/2022	Acetone	<10.0	10.0	5.000	5.000	6,300.0
AW-3	8/30/2022	Acetone	<10.0	10.0	5.000	5.000	6,300.0
AW-3	3/7/2023	Acetone	<10.0	10.0	5.000	5.000	6,300.0
AW-3	9/28/2023	Acetone	<10.0	10.0	5.000	5.000	6,300.0
AW-3	3/11/2024	Acetone	<10.0	10.0	5.000	5.000	6,300.0
AW-3	10/2/2024	Acetone	<10.0	10.0	5.000	5.000	6,300.0
AW-3	9/16/2016	Benzene	1.0	1.0	0.143	4.422	5.0
AW-3	3/15/2017	Benzene	<1.0	1.0	0.551	1.774	5.0
AW-3	9/27/2017	Benzene	<1.0	1.0	0.279	1.531	5.0
AW-3	3/14/2018	Benzene	5.6	1.0	0.000	4.815	5.0
AW-3	9/12/2018	Benzene	4.1	1.0	0.000	5.716	5.0

AW-3	4/1/2019	Benzene	<1.0	1.0	0.000	5.716	5.0
AW-3	9/12/2019	Benzene	1.1	1.0	0.000	5.683	5.0
AW-3	5/6/2020	Benzene	1.2	1.0	0.000	3.623	5.0
AW-3	9/3/2020	Benzene	<1.0	1.0	0.381	1.269	5.0
AW-3	3/30/21	Benzene	5.2	1.0	0.000	4.536	5.0
AW-3	9/8/2021	Benzene	4.1	1.0	0.094	5.406	5.0
AW-3	3/31/2022	Benzene	1.4	1.0	0.196	5.404	5.0
AW-3	8/30/2022	Benzene	2.3	1.0	1.230	5.270	5.0
AW-3	3/7/2023	Benzene	2.6	1.0	1.280	3.920	5.0
AW-3	9/28/2023	Benzene	2.6	1.0	1.557	2.893	5.0
AW-3	3/11/2024	Benzene	2.7	1.0	2.346	2.754	5.0
AW-3	10/2/2024	Benzene	<1.0	1.0	0.844	3.356	5.0
AW-3	9/16/2016	Bis(2-ethylhexyl)phthalate	<8.0	6.0	---	---	6.0
AW-3	3/15/2017	Bis(2-ethylhexyl)phthalate	16.0	6.0	---	---	6.0
AW-3	9/27/2017	Bis(2-ethylhexyl)phthalate	<6.0	6.0	---	---	6.0
AW-3	3/14/2018	Bis(2-ethylhexyl)phthalate	<6.0	6.0	---	---	6.0
AW-3	9/12/2018	Bis(2-ethylhexyl)phthalate	<6.0	6.0	0.000	13.896	6.0
AW-3	4/1/2019	Bis(2-ethylhexyl)phthalate	<6.0	6.0	3.000	3.000	6.0
AW-3	9/12/2019	Bis(2-ethylhexyl)phthalate	<6.0	6.0	3.000	3.000	6.0
AW-3	5/6/2020	Bis(2-ethylhexyl)phthalate	<6.0	6.0	3.000	3.000	6.0
AW-3	9/3/2020	Bis(2-ethylhexyl)phthalate	NT	6.0	3.000	3.000	6.0
AW-3	3/30/21	Bis(2-ethylhexyl)phthalate	NT	6.0	3.000	3.000	6.0
AW-3	9/8/2021	Bis(2-ethylhexyl)phthalate	NT	6.0	3.000	3.000	6.0
AW-3	3/31/2022	Bis(2-ethylhexyl)phthalate	<6.0	6.0	3.000	3.000	6.0
AW-3	8/30/2022	Bis(2-ethylhexyl)phthalate	NT	6.0	3.000	3.000	6.0
AW-3	3/7/2023	Bis(2-ethylhexyl)phthalate	NT	6.0	3.000	3.000	6.0
AW-3	9/28/2023	Bis(2-ethylhexyl)phthalate	NT	6.0	3.000	3.000	6.0
AW-3	3/11/2024	Bis(2-ethylhexyl)phthalate	NT	6.0	3.000	3.000	6.0
AW-3	10/2/2024	Bis(2-ethylhexyl)phthalate	NT	6.0	3.000	3.000	6.0
AW-3	9/16/2016	Chlorobenzene	<1.0	1.0	0.500	0.500	100.0
AW-3	3/15/2017	Chlorobenzene	1.1	1.0	0.297	1.003	100.0
AW-3	9/27/2017	Chlorobenzene	<1.0	1.0	0.297	1.003	100.0
AW-3	3/14/2018	Chlorobenzene	<1.0	1.0	0.297	1.003	100.0
AW-3	9/12/2018	Chlorobenzene	<1.0	1.0	0.297	1.003	100.0
AW-3	4/1/2019	Chlorobenzene	<1.0	1.0	0.500	0.500	100.0
AW-3	9/12/2019	Chlorobenzene	<1.0	1.0	0.500	0.500	100.0
AW-3	5/6/2020	Chlorobenzene	<1.0	1.0	0.500	0.500	100.0
AW-3	9/3/2020	Chlorobenzene	<1.0	1.0	0.500	0.500	100.0
AW-3	3/30/21	Chlorobenzene	<1.0	1.0	0.500	0.500	100.0
AW-3	9/8/21	Chlorobenzene	<1.0	1.0	0.500	0.500	100.0
AW-3	3/31/2022	Chlorobenzene	<1.0	1.0	0.500	0.500	100.0
AW-3	8/30/2022	Chlorobenzene	<1.0	1.0	0.500	0.500	100.0
AW-3	3/7/2023	Chlorobenzene	<1.0	1.0	0.500	0.500	100.0
AW-3	9/28/2023	Chlorobenzene	<1.0	1.0	0.500	0.500	100.0

AW-3	3/11/2024	Chlorobenzene	<1.0	1.0	0.500	0.500	100.0
AW-3	10/2/2024	Chlorobenzene	<1.0	1.0	0.500	0.500	100.0
AW-3	9/16/2016	Chloroethane	4.6	1.0	1.778	8.197	2,800.0
AW-3	3/15/2017	Chloroethane	6.8	1.0	2.22	6.845	2,800.0
AW-3	9/27/2017	Chloroethane	4.6	1.0	3.912	6.453	2,800.0
AW-3	3/14/2018	Chloroethane	5.5	1.0	4.151	6.599	2,800.0
AW-3	9/12/2018	Chloroethane	3.0	1.0	3.097	6.853	2,800.0
AW-3	4/1/2019	Chloroethane	1.2	1.0	1.351	5.799	2,800.0
AW-3	9/12/2019	Chloroethane	<1.0	1.0	0.000	5.174	2,800.0
AW-3	5/6/2020	Chloroethane	2.5	1.0	0.445	3.155	2,800.0
AW-3	9/3/2020	Chloroethane	3.9	1.0	0.261	3.789	2,800.0
AW-3	3/30/21	Chloroethane	4.5	1.0	0.760	4.940	2,800.0
AW-3	9/8/2021	Chloroethane	4.2	1.0	3.193	4.757	2,800.0
AW-3	3/31/2022	Chloroethane	3.0	1.0	3.138	4.662	2,800.0
AW-3	8/30/2022	Chloroethane	4.2	1.0	3.138	4.662	2,800.0
AW-3	3/7/2023	Chloroethane	3.5	1.0	3.037	4.413	2,800.0
AW-3	9/28/2023	Chloroethane	3.8	1.0	3.030	4.220	2,800.0
AW-3	3/11/2024	Chloroethane	3.0	1.0	3.030	4.220	2,800.0
AW-3	10/2/2024	Chloroethane	3.0	1.0	2.861	3.789	2,800.0
AW-3	9/16/2016	cis-1,2-dichloroethene	1.6	1.0	1.201	3.634	70.0
AW-3	3/15/2017	cis-1,2-dichloroethene	3.0	1.0	1.482	2.893	70.0
AW-3	9/27/2017	cis-1,2-dichloroethene	2.1	1.0	1.449	2.861	70.0
AW-3	3/14/2018	cis-1,2-dichloroethene	<1.0	1.0	0.574	3.026	70.0
AW-3	9/12/2018	cis-1,2-dichloroethene	<1.0	1.0	0.067	2.983	70.0
AW-3	4/1/2019	cis-1,2-dichloroethene	<1.0	1.0	0.000	1.841	70.0
AW-3	9/12/2019	cis-1,2-dichloroethene	<1.0	1.0	0.500	0.500	70.0
AW-3	5/6/2020	cis-1,2-dichloroethene	1.2	1.0	0.263	1.087	70.0
AW-3	9/3/2020	cis-1,2-dichloroethene	2.7	1.0	0.005	2.445	70.0
AW-3	3/30/21	cis-1,2-dichloroethene	4.0	1.0	0.260	3.940	70.0
AW-3	9/8/2021	cis-1,2-dichloroethene	<1.0	1.0	0.260	3.940	70.0
AW-3	3/31/2022	cis-1,2-dichloroethene	<1.0	1.0	0.000	3.959	70.0
AW-3	8/30/2022	cis-1,2-dichloroethene	1.1	1.0	0.000	3.494	70.0
AW-3	3/7/2023	cis-1,2-dichloroethene	2.9	1.0	0.000	2.586	70.0
AW-3	9/28/2023	cis-1,2-dichloroethene	1.2	1.0	0.213	2.637	70.0
AW-3	3/11/2024	cis-1,2-dichloroethene	<1.0	1.0	0.213	2.637	70.0
AW-3	10/2/2024	cis-1,2-dichloroethene	<1.0	1.0	0.000	2.607	70.0
AW-3	9/16/2016	Toluene	<1.0	1.0	0.500	0.500	1,000.0
AW-3	3/15/2017	Toluene	<1.0	1.0	0.500	0.500	1,000.0
AW-3	9/27/2017	Toluene	<1.0	1.0	0.500	0.500	1,000.0
AW-3	3/14/2018	Toluene	<1.0	1.0	0.500	0.500	1,000.0
AW-3	9/12/2018	Toluene	1.0	1.0	0.331	0.919	1,000.0
AW-3	4/1/2019	Toluene	<1.0	1.0	0.331	0.919	1,000.0
AW-3	9/12/2019	Toluene	<1.0	1.0	0.331	0.919	1,000.0
AW-3	5/6/2020	Toluene	<1.0	1.0	0.331	0.919	1,000.0

AW-3	9/3/2020	Toluene	<1.0	1.0	0.500	0.500	1,000.0
AW-3	3/30/21	Toluene	<1.0	1.0	0.500	0.500	1,000.0
AW-3	9/8/2021	Toluene	<1.0	1.0	0.500	0.500	1,000.0
AW-3	3/31/2022	Toluene	<1.0	1.0	0.500	0.500	1,000.0
AW-3	8/30/2022	Toluene	<1.0	1.0	0.500	0.500	1,000.0
AW-3	3/7/2023	Toluene	<1.0	1.0	0.500	0.500	1,000.0
AW-3	9/28/2023	Toluene	<1.0	1.0	0.500	0.500	1,000.0
AW-3	3/11/2024	Toluene	<1.0	1.0	0.500	0.500	1,000.0
AW-3	10/2/2024	Toluene	<1.0	1.0	0.500	0.500	1,000.0
AW-3	9/16/2016	Vinyl Chloride	<1.0	1.0	0.500	0.500	2.0
AW-3	3/15/2017	Vinyl Chloride	<1.0	1.0	0.500	0.500	2.0
AW-3	9/27/2017	Vinyl Chloride	<1.0	1.0	0.500	0.500	2.0
AW-3	3/14/2018	Vinyl Chloride	<1.0	1.0	0.500	0.500	2.0
AW-3	9/12/2018	Vinyl Chloride	<1.0	1.0	0.500	0.500	2.0
AW-3	4/1/2019	Vinyl Chloride	<1.0	1.0	0.500	0.500	2.0
AW-3	9/12/2019	Vinyl Chloride	<1.0	1.0	0.500	0.500	2.0
AW-3	5/6/2020	Vinyl Chloride	<1.0	1.0	0.500	0.500	2.0
AW-3	9/3/2020	Vinyl Chloride	<1.0	1.0	0.500	0.500	2.0
AW-3	3/30/21	Vinyl Chloride	2.1	1.0	0.000	1.841	2.0
AW-3	9/8/2021	Vinyl Chloride	<1.0	1.0	0.000	1.841	2.0
AW-3	3/31/2022	Vinyl Chloride	<1.0	1.0	0.000	1.841	2.0
AW-3	8/30/2022	Vinyl Chloride	<1.0	1.0	0.000	1.841	2.0
AW-3	3/7/2023	Vinyl Chloride	<1.0	1.0	0.500	0.500	2.0
AW-3	9/28/2023	Vinyl Chloride	<1.0	1.0	0.500	0.500	2.0
AW-3	3/11/2024	Vinyl Chloride	<1.0	1.0	0.500	0.500	2.0
AW-3	10/2/2024	Vinyl Chloride	<1.0	1.0	0.500	0.500	2.0

Well	Date	Compound	Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	95% UCL (ug/L)	GWPS (ug/L) Bold = Site
MW-14	9/12/2018	Cadmium	<0.8	0.8	0.400	0.400	5.0
MW-14	4/1/2019	Cadmium	<0.8	0.8	0.400	0.400	5.0
MW-14	9/12/2019	Cadmium	1.2	0.8	0.129	1.071	5.0
MW-14	5/6/2020	Cadmium	<0.8	0.8	0.129	1.071	5.0
MW-14	9/3/2020	Cadmium	<0.8	0.8	0.129	1.071	5.0
MW-14	3/30/21	Cadmium	<0.8	0.8	0.129	1.071	5.0
MW-14	9/8/2021	Cadmium	<0.8	0.8	0.400	0.400	5.0
MW-14	3/31/2022	Cadmium	<0.8	1.0	0.400	0.400	5.0
MW-14	8/30/2022	Cadmium	<0.8	1.0	0.400	0.400	5.0
MW-14	3/7/2023	Cadmium	<0.8	1.0	0.400	0.400	5.0
MW-14	9/28/2023	Cadmium	<0.8	1.0	0.400	0.400	5.0
MW-14	3/11/2024	Cadmium	<0.8	1.0	0.400	0.400	5.0
MW-14	10/2/2024	Cadmium	<0.8	1.0	0.400	0.400	5.0
MW-14	9/12/2018	Nickel	7.0	19.0	0.000	20.193	100.0
MW-14	4/1/2019	Nickel	22.9	19.0	0.000	20.193	100.0
MW-14	9/12/2019	Nickel	14.4	19.0	3.182	21.818	100.0
MW-14	5/6/2020	Nickel	17.6	19.0	9.717	21.233	100.0
MW-14	9/3/2020	Nickel	11.2	19.0	12.205	20.846	100.0
MW-14	3/30/21	Nickel	4.3	19.0	5.817	18.563	100.0
MW-14	9/8/2021	Nickel	12.0	19.0	4.861	17.689	100.0
MW-14	3/31/2022	Nickel	4.7	19.0	3.209	12.891	100.0
MW-14	8/30/2022	Nickel	4.8	19.0	2.090	10.810	100.0
MW-14	3/7/2023	Nickel	5.5	11.4	2.612	10.888	100.0
MW-14	9/28/2023	Nickel	13.1	29.5	2.243	11.807	100.0
MW-14	3/11/2024	Nickel	6.0	29.5	2.804	11.896	100.0
MW-14	10/2/2024	Nickel	9.5	29.5	4.371	12.679	100.0
MW-14	9/16/2016	1,1-dichloroethane	<1.0	1.0	0.155	1.355	140.0
MW-14	3/15/2017	1,1-dichloroethane	1.3	1.0	0.229	1.171	140.0
MW-14	9/27/2017	1,1-dichloroethane	1.1	1.0	0.365	1.335	140.0
MW-14	3/14/2018	1,1-dichloroethane	<1.0	1.0	0.365	1.335	140.0
MW-14	9/12/2018	1,1-dichloroethane	<1.0	1.0	0.365	1.335	140.0
MW-14	4/1/2019	1,1-dichloroethane	1.0	1.0	0.398	1.152	140.0
MW-14	9/12/2019	1,1-dichloroethane	<1.0	1.0	0.331	0.919	140.0
MW-14	5/6/2020	1,1-dichloroethane	<1.0	1.0	0.331	0.919	140.0
MW-14	9/3/2020	1,1-dichloroethane	<1.0	1.0	0.331	0.919	140.0
MW-14	3/30/21	1,1-dichloroethane	<1.0	1.0	0.500	0.500	140.0
MW-14	9/8/2021	1,1-dichloroethane	<1.0	1.0	0.500	0.500	140.0
MW-14	3/31/2022	1,1-dichloroethane	<1.0	1.0	0.500	0.500	140.0
MW-14	8/30/2022	1,1-dichloroethane	<1.0	1.0	0.500	0.500	140.0
MW-14	3/7/2023	1,1-dichloroethane	<1.0	1.0	0.500	0.500	140.0
MW-14	9/28/2023	1,1-dichloroethane	<1.0	1.0	0.500	0.500	140.0
MW-14	3/11/2024	1,1-dichloroethane	<1.0	1.0	0.500	0.500	140.0
MW-14	10/2/2024	1,1-dichloroethane	<1.0	1.0	0.500	0.500	140.0

Well	Date	Compound	Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	95% UCL (ug/L)	GWPS (ug/L) Bold = Site
MW-20	9/12/2018	Arsenic	44.9	43.9	10.552	81.898	**43.9**
MW-20	4/1/2019	Arsenic	19.5	51.3	15.562	41.888	**51.3**
MW-20	9/12/2019	Arsenic	72.0	51.3	11.746	68.304	**51.3**
MW-20	5/6/2020	Arsenic	42.3	51.3	19.390	69.960	**51.3**
MW-20	9/3/2020	Arsenic	50.6	51.3	20.571	71.629	**51.3**
MW-20	3/30/21	Arsenic	38.9	51.3	33.460	68.440	**51.3**
MW-20	9/8/2021	Arsenic	40.2	51.3	36.817	49.183	**51.3**
MW-20	3/31/2022	Arsenic	44.1	51.3	37.270	49.630	**51.3**
MW-20	8/30/2022	Arsenic	23.3	51.3	25.857	47.393	**51.3**
MW-20	3/7/2023	Arsenic	106.0	51.3	10.807	95.993	**51.3**
MW-20	9/28/2023	Arsenic	37.5	51.3	9.718	95.732	**51.3**
MW-20	3/11/2024	Arsenic	27.9	51.3	3.186	94.164	**51.3**
MW-20	10/2/2024	Arsenic	26.7	51.3	4.874	94.176	**51.3**
MW-20	9/16/2016	1,4-dichlorobenzene	3.4	1.0	0.000	2.931	75.0
MW-20	3/15/2017	1,4-dichlorobenzene	1.2	1.0	0.000	3.016	75.0
MW-20	9/27/2017	1,4-dichlorobenzene	1.4	1.0	0.161	3.089	75.0
MW-20	3/14/2018	1,4-dichlorobenzene	1.7	1.0	0.743	3.107	75.0
MW-20	9/12/2018	1,4-dichlorobenzene	3.0	1.0	0.872	2.778	75.0
MW-20	4/1/2019	1,4-dichlorobenzene	2.9	1.0	1.287	3.213	75.0
MW-20	9/12/2019	1,4-dichlorobenzene	<1.0	1.0	0.642	3.408	75.0
MW-20	5/6/2020	1,4-dichlorobenzene	2.5	1.0	0.849	3.601	75.0
MW-20	9/3/2020	1,4-dichlorobenzene	1.6	1.0	0.621	3.129	75.0
MW-20	3/30/21	1,4-dichlorobenzene	2.6	1.0	0.651	2.949	75.0
MW-20	9/8/2021	1,4-dichlorobenzene	2.9	1.0	1.742	3.058	75.0
MW-20	3/31/2022	1,4-dichlorobenzene	2.4	1.0	1.721	3.029	75.0
MW-20	8/30/2022	1,4-dichlorobenzene	2.8	1.0	2.414	2.936	75.0
MW-20	3/7/2023	1,4-dichlorobenzene	2.8	1.0	2.464	2.986	75.0
MW-20	9/28/2023	1,4-dichlorobenzene	3.4	1.0	2.365	3.335	75.0
MW-20	3/11/2024	1,4-dichlorobenzene	2.6	1.0	2.493	3.307	75.0
MW-20	10/2/2024	1,4-dichlorobenzene	3.2	1.0	2.570	3.430	75.0
MW-20	9/16/2016	Acetone	33.3	10.0	0.000	394.638	6,300.0
MW-20	3/15/2017	Acetone	<10.0	10.0	0.000	394.212	6,300.0
MW-20	9/27/2017	Acetone	<10.0	10.0	0.000	394.212	6,300.0
MW-20	3/14/2018	Acetone	<10.0	10.0	0.000	28.719	6,300.0
MW-20	9/12/2018	Acetone	<10.0	10.0	5.000	5.000	6,300.0
MW-20	4/1/2019	Acetone	<10.0	10.0	5.000	5.000	6,300.0
MW-20	9/12/2019	Acetone	<10.0	10.0	5.000	5.000	6,300.0
MW-20	5/6/2020	Acetone	<10.0	10.0	5.000	5.000	6,300.0
MW-20	9/3/2020	Acetone	<10.0	10.0	5.000	5.000	6,300.0
MW-20	3/30/21	Acetone	<10.0	10.0	5.000	5.000	6,300.0
MW-20	9/8/2021	Acetone	<10.0	10.0	5.000	5.000	6,300.0

MW-20	3/31/2022	Acetone	<10.0	10.0	5.000	5.000	6,300.0
MW-20	8/30/2022	Acetone	<10.0	10.0	5.000	5.000	6,300.0
MW-20	3/7/2023	Acetone	<10.0	10.0	5.000	5.000	6,300.0
MW-20	9/28/2023	Acetone	<10.0	10.0	5.000	5.000	6,300.0
MW-20	3/11/2024	Acetone	<10.0	10.0	5.000	5.000	6,300.0
MW-20	10/2/2024	Acetone	<10.0	10.0	5.000	5.000	6,300.0
MW-20	9/16/2016	Benzene	3.7	1.0	2.827	3.988	5.0
MW-20	3/15/2017	Benzene	2.5	1.0	2.383	3.887	5.0
MW-20	9/27/2017	Benzene	2.6	1.0	2.210	3.525	5.0
MW-20	3/14/2018	Benzene	1.7	1.0	1.658	3.592	5.0
MW-20	9/12/2018	Benzene	2.7	1.0	1.837	2.913	5.0
MW-20	4/1/2019	Benzene	2.4	1.0	1.820	2.880	5.0
MW-20	9/12/2019	Benzene	2.8	1.0	1.816	2.984	5.0
MW-20	5/6/2020	Benzene	2.5	1.0	2.385	2.815	5.0
MW-20	9/3/2020	Benzene	2.7	1.0	2.385	2.815	5.0
MW-20	3/30/21	Benzene	1.9	1.0	2.001	2.949	5.0
MW-20	9/8/2021	Benzene	2.8	1.0	2.001	2.949	5.0
MW-20	3/31/2022	Benzene	2.3	1.0	1.941	2.909	5.0
MW-20	8/30/2022	Benzene	3.6	1.0	1.788	3.512	5.0
MW-20	3/7/2023	Benzene	2.2	1.0	1.973	3.477	5.0
MW-20	9/28/2023	Benzene	2.6	1.0	1.973	3.427	5.0
MW-20	3/11/2024	Benzene	2.3	1.0	1.973	3.427	5.0
MW-20	10/2/2024	Benzene	2.8	1.0	2.151	2.799	5.0
MW-20	9/16/2016	Chlorobenzene	3.1	1.0	0.019	3.656	100.0
MW-20	3/15/2017	Chlorobenzene	1.4	1.0	0.000	2.817	100.0
MW-20	9/27/2017	Chlorobenzene	1.6	1.0	0.381	2.919	100.0
MW-20	3/14/2018	Chlorobenzene	<1.0	1.0	0.381	2.919	100.0
MW-20	9/12/2018	Chlorobenzene	3.1	1.0	0.381	2.919	100.0
MW-20	4/1/2019	Chlorobenzene	2.6	1.0	0.597	3.303	100.0
MW-20	9/12/2019	Chlorobenzene	3.6	1.0	0.847	4.053	100.0
MW-20	5/6/2020	Chlorobenzene	2.2	1.0	2.160	3.590	100.0
MW-20	9/3/2020	Chlorobenzene	1.7	1.0	1.577	3.473	100.0
MW-20	3/30/21	Chlorobenzene	2.2	1.0	1.463	3.387	100.0
MW-20	9/8/2021	Chlorobenzene	2.7	1.0	1.720	2.680	100.0
MW-20	3/31/2022	Chlorobenzene	2.6	1.0	1.765	2.835	100.0
MW-20	8/30/2022	Chlorobenzene	3.1	1.0	2.215	3.085	100.0
MW-20	3/7/2023	Chlorobenzene	2.5	1.0	2.416	3.034	100.0
MW-20	9/28/2023	Chlorobenzene	3.4	1.0	2.401	3.399	100.0
MW-20	3/11/2024	Chlorobenzene	2.8	1.0	2.494	3.406	100.0
MW-20	10/2/2024	Chlorobenzene	3.6	1.0	2.472	3.678	100.0
MW-20	9/16/2016	Chloroethane	1.4	1.0	1.497	2.203	2,800.0
MW-20	3/15/2017	Chloroethane	1.1	1.0	1.096	2.154	2,800.0
MW-20	9/27/2017	Chloroethane	<1.0	1.0	1.096	2.154	2,800.0
MW-20	3/14/2018	Chloroethane	<1.0	1.0	0.346	1.404	2,800.0

MW-20	9/12/2018	Chloroethane	<1.0	1.0	0.297	1.003	2,800.0
MW-20	4/1/2019	Chloroethane	<1.0	1.0	0.500	0.500	2,800.0
MW-20	9/12/2019	Chloroethane	<1.0	1.0	0.500	0.500	2,800.0
MW-20	5/6/2020	Chloroethane	<1.0	1.0	0.500	0.500	2,800.0
MW-20	9/3/2020	Chloroethane	<1.0	1.0	0.500	0.500	2,800.0
MW-20	3/30/21	Chloroethane	<1.0	1.0	0.500	0.500	2,800.0
MW-20	9/8/2021	Chloroethane	<1.0	1.0	0.500	0.500	2,800.0
MW-20	3/31/2022	Chloroethane	<1.0	1.0	0.500	0.500	2,800.0
MW-20	8/30/2022	Chloroethane	<1.0	1.0	0.500	0.500	2,800.0
MW-20	3/7/2023	Chloroethane	<1.0	1.0	0.500	0.500	2,800.0
MW-20	9/28/2023	Chloroethane	<1.0	1.0	0.500	0.500	2,800.0
MW-20	3/11/2024	Chloroethane	<1.0	1.0	0.500	0.500	2,800.0
MW-20	10/2/2024	Chloroethane	<1.0	1.0	0.500	0.500	2,800.0
MW-20	9/16/2016	Toluene	1.4	1.0	0.000	2.809	1,000.0
MW-20	3/15/2017	Toluene	<1.0	1.0	0.196	1.254	1,000.0
MW-20	9/27/2017	Toluene	<1.0	1.0	0.196	1.254	1,000.0
MW-20	3/14/2018	Toluene	<1.0	1.0	0.196	1.254	1,000.0
MW-20	9/12/2018	Toluene	<1.0	1.0	0.500	0.500	1,000.0
MW-20	4/1/2019	Toluene	<1.0	1.0	0.500	0.500	1,000.0
MW-20	9/12/2019	Toluene	<1.0	1.0	0.500	0.500	1,000.0
MW-20	5/6/2020	Toluene	<1.0	1.0	0.500	0.500	1,000.0
MW-20	9/3/2020	Toluene	<1.0	1.0	0.500	0.500	1,000.0
MW-20	3/30/21	Toluene	<1.0	1.0	0.500	0.500	1,000.0
MW-20	9/8/2021	Toluene	<1.0	1.0	0.500	0.500	1,000.0
MW-20	3/31/2022	Toluene	<1.0	1.0	0.500	0.500	1,000.0
MW-20	8/30/2022	Toluene	2.1	1.0	0.000	1.841	1,000.0
MW-20	3/7/2023	Toluene	<1.0	1.0	0.000	1.841	1,000.0
MW-20	9/28/2023	Toluene	<1.0	1.0	0.000	1.841	1,000.0
MW-20	3/11/2024	Toluene	1.1	1.0	0.162	1.938	1,000.0
MW-20	10/2/2024	Toluene	<1.0	1.0	0.297	1.003	1,000.0

Well	Date	Compound	Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	95% UCL (ug/L)	GWPS (ug/L) Bold = Site
MW-24	9/12/2018	Arsenic	25.6	43.9	23.328	27.722	43.9
MW-24	4/1/2019	Arsenic	100.0	51.3	0.000	87.948	51.3
MW-24	9/12/2019	Arsenic	23.8	51.3	0.000	87.735	51.3
MW-24	5/6/2020	Arsenic	6.5	51.3	0.000	87.891	51.3
MW-24	9/3/2020	Arsenic	12.8	51.3	0.000	86.837	51.3
MW-24	3/30/21	Arsenic	22.3	51.3	6.733	25.967	51.3
MW-24	9/8/2021	Arsenic	20.5	51.3	6.947	24.103	51.3
MW-24	3/31/2022	Arsenic	<4.0	51.3	2.364	25.686	51.3
MW-24	8/30/2022	Arsenic	5.1	51.3	0.000	24.953	51.3
MW-24	3/7/2023	Arsenic	<4.0	51.3	0.000	17.816	51.3
MW-24	9/28/2023	Arsenic	17.1	51.3	0.000	15.000	51.3
MW-24	3/11/2024	Arsenic	36.9	51.3	0.000	33.883	51.3
MW-24	10/2/2024	Arsenic	33.3	51.3	3.440	41.210	51.3
MW-24	9/12/2018	Barium	382.0	510.70	406.270	656.230	2,000.0
MW-24	4/1/2019	Barium	665.0	510.70	412.814	710.186	2,000.0
MW-24	9/12/2019	Barium	310.0	510.70	288.322	706.178	2,000.0
MW-24	5/6/2020	Barium	303.0	518.9	214.503	615.497	2,000.0
MW-24	9/3/2020	Barium	149.0	507.3	99.708	613.792	2,000.0
MW-24	3/30/21	Barium	179.0	1107.9	137.350	333.150	2,000.0
MW-24	9/8/2021	Barium	302.0	1024.2	138.092	328.408	2,000.0
MW-24	3/31/2022	Barium	96.2	1059.6	78.871	284.229	2,000.0
MW-24	8/30/2022	Barium	82.7	1001.0172	46.425	283.525	2,000.0
MW-24	3/7/2023	Barium	65.1	989.7889	5.855	267.145	2,000.0
MW-24	9/28/2023	Barium	298.0	944.4466	7.192	263.808	2,000.0
MW-24	3/11/2024	Barium	409.0	944.5267	16.249	411.106	2,000.0
MW-24	10/2/2024	Barium	602.0	569.0000	79.895	607.155	2,000.0
MW-24	9/12/2018	Cobalt	3.5	7.43	0.214	3.136	**7.43**
MW-24	4/1/2019	Cobalt	21.9	7.43	0.000	18.744	**7.43**
MW-24	9/12/2019	Cobalt	19.0	7.43	0.000	23.795	**7.43**
MW-24	5/6/2020	Cobalt	5.1	5.90	1.292	23.458	**7.43**
MW-24	9/3/2020	Cobalt	16.1	5.90	6.888	24.162	**7.43**
MW-24	3/30/21	Cobalt	14.2	12.2	6.542	20.658	**12.2**
MW-24	9/8/2021	Cobalt	3.5	12.2	2.261	17.189	**12.2**
MW-24	3/31/2022	Cobalt	8.0	12.2	3.649	17.251	**12.2**
MW-24	8/30/2022	Cobalt	12.0	12.2	3.884	14.966	**12.2**
MW-24	3/7/2023	Cobalt	5.2	12.2	2.807	11.543	**12.2**
MW-24	9/28/2023	Cobalt	7.4	12.2	4.815	11.485	**12.2**
MW-24	3/11/2024	Cobalt	6.4	12.2	4.253	11.247	**12.2**
MW-24	10/2/2024	Cobalt	12.9	12.2	3.971	11.979	**12.2**
MW-24	9/12/2018	Nickel	14.3	19.0	7.092	13.808	100.0
MW-24	4/1/2019	Nickel	61.1	19.0	0.000	53.157	100.0

MW-24	9/12/2019	Nickel	16.2	19.0	0.000	53.564	100.0
MW-24	5/6/2020	Nickel	14.9	19.0	12.099	49.301	100.0
MW-24	9/3/2020	Nickel	30.6	19.0	5.434	55.966	100.0
MW-24	3/30/21	Nickel	17.9	19.0	11.386	28.414	100.0
MW-24	9/8/2021	Nickel	13.4	19.0	9.993	28.407	100.0
MW-24	3/31/2022	Nickel	66.7	19.0	3.734	60.556	100.0
MW-24	8/30/2022	Nickel	43.0	19.0	6.217	64.283	100.0
MW-24	3/7/2023	Nickel	48.0	11.4	16.802	68.748	100.0
MW-24	9/28/2023	Nickel	29.4	29.5	28.620	64.930	100.0
MW-24	3/11/2024	Nickel	8.2	29.5	11.217	53.083	100.0
MW-24	10/2/2024	Nickel	29.3	29.5	9.593	47.857	100.0
MW-24	9/12/2018	Zinc	24.5	69.0	0.705	21.945	2,000.0
MW-24	4/1/2019	Zinc	69.3	69.0	0.000	61.644	2,000.0
MW-24	9/12/2019	Zinc	<20.0	69.0	0.000	61.495	2,000.0
MW-24	5/6/2020	Zinc	<20.0	69.0	4.134	52.766	2,000.0
MW-24	9/3/2020	Zinc	25.7	69.0	4.477	53.023	2,000.0
MW-24	3/30/21	Zinc	<20.0	69.0	4.691	23.159	2,000.0
MW-24	9/8/2021	Zinc	<20.0	69.0	4.691	23.159	2,000.0
MW-24	3/31/2022	Zinc	27.2	69.0	7.030	29.420	2,000.0
MW-24	8/30/2022	Zinc	<20.0	69.0	4.184	24.416	2,000.0
MW-24	3/7/2023	Zinc	<20.0	69.0	4.184	24.416	2,000.0
MW-24	9/28/2023	Zinc	<20.0	69.0	4.184	24.416	2,000.0
MW-24	3/11/2024	Zinc	<20.0	69.0	10.000	10.000	2,000.0
MW-24	10/2/2024	Zinc	<20.0	69.0	10.000	10.000	2,000.0
MW-24	9/16/2016	Acetone	<10.	10.0	5.0	5.0	6,300.
MW-24	3/15/2017	Acetone	<10.	10.0	5.0	5.0	6,300.
MW-24	9/27/2017	Acetone	13.6	10.0	2.092	12.208	6,300.
MW-24	3/14/2018	Acetone	<10.	10.0	2.092	12.208	6,300.
MW-24	9/12/2018	Acetone	<10.	10.0	2.092	12.208	6,300.
MW-24	4/1/2019	Acetone	25.0	10.0	1.002	23.298	6,300.
MW-24	9/12/2019	Acetone	<10.	10.0	0.000	21.763	6,300.
MW-24	5/6/2020	Acetone	<10.	10.0	0.000	21.763	6,300.
MW-24	9/3/2020	Acetone	<10.	10.0	0.000	21.763	6,300.
MW-24	3/30/21	Acetone	<10.	10.0	5.000	5.000	6,300.
MW-24	9/8/2021	Acetone	<10.	10.0	5.000	5.000	6,300.
MW-24	3/31/2022	Acetone	<10.	10.0	5.000	5.000	6,300.
MW-24	8/30/2022	Acetone	<10.	10.0	5.000	5.000	6,300.
MW-24	3/7/2023	Acetone	<10.	10.0	5.000	5.000	6,300.
MW-24	9/28/2023	Acetone	<10.	10.0	5.000	5.000	6,300.
MW-24	3/11/2024	Acetone	<10.	10.0	5.000	5.000	6,300.
MW-24	10/2/2024	Acetone	<10.	10.0	5.000	5.000	6,300.
MW-24	9/16/2016	Benzene	<1.0	1.0	0.250	0.250	5.0
MW-24	3/15/2017	Benzene	1.3	1.0	0.000	1.130	5.0
MW-24	9/27/2017	Benzene	<1.0	1.0	0.000	1.130	5.0

MW-24	3/14/2018	Benzene	<1.0	1.0	0.000	1.130	5.0
MW-24	9/12/2018	Benzene	<1.0	1.0	0.000	1.130	5.0
MW-24	4/1/2019	Benzene	2.1	1.0	0.000	1.801	5.0
MW-24	9/12/2019	Benzene	<1.0	1.0	0.000	1.841	5.0
MW-24	5/6/2020	Benzene	<1.0	1.0	0.000	1.841	5.0
MW-24	9/3/2020	Benzene	<1.0	1.0	0.000	1.841	5.0
MW-24	3/30/21	Benzene	<1.0	1.0	0.500	0.500	5.0
MW-24	9/8/2021	Benzene	<1.0	1.0	0.500	0.500	5.0
MW-24	3/31/2022	Benzene	<1.0	1.0	0.500	0.500	5.0
MW-24	8/30/2022	Benzene	<1.0	1.0	0.500	0.500	5.0
MW-24	3/7/2023	Benzene	<1.0	1.0	0.500	0.500	5.0
MW-24	9/28/2023	Benzene	<1.0	1.0	0.500	0.500	5.0
MW-24	3/11/2024	Benzene	<1.0	1.0	0.500	0.500	5.0
MW-24	10/2/2024	Benzene	<1.0	1.0	0.500	0.500	5.0
MW-24	9/16/2016	Chloroethane	<1.0	1.0	0.500	0.500	2,800.
MW-24	3/15/2017	Chloroethane	<1.0	1.0	0.500	0.500	2,800.
MW-24	9/27/2017	Chloroethane	<1.0	1.0	0.500	0.500	2,800.
MW-24	3/14/2018	Chloroethane	<1.0	1.0	0.500	0.500	2,800.
MW-24	9/12/2018	Chloroethane	<1.0	1.0	0.500	0.500	2,800.
MW-24	4/1/2019	Chloroethane	1.6	1.0	0.128	1.422	2,800.
MW-24	9/12/2019	Chloroethane	<1.0	1.0	0.128	1.422	2,800.
MW-24	5/6/2020	Chloroethane	<1.0	1.0	0.128	1.422	2,800.
MW-24	9/3/2020	Chloroethane	<1.0	1.0	0.128	1.422	2,800.
MW-24	3/30/21	Chloroethane	<1.0	1.0	0.500	0.500	2,800.
MW-24	9/8/2021	Chloroethane	<1.0	1.0	0.500	0.500	2,800.
MW-24	3/31/2022	Chloroethane	<1.0	1.0	0.500	0.500	2,800.
MW-24	8/30/2022	Chloroethane	<1.0	1.0	0.500	0.500	2,800.
MW-24	3/7/2023	Chloroethane	<1.0	1.0	0.500	0.500	2,800.
MW-24	9/28/2023	Chloroethane	<1.0	1.0	0.500	0.500	2,800.
MW-24	3/11/2024	Chloroethane	<1.0	1.0	0.500	0.500	2,800.
MW-24	10/2/2024	Chloroethane	<1.0	1.0	0.500	0.500	2,800.
MW-24	9/16/2016	Ethylbenzene	1.2	1.0	0.263	1.087	700.0
MW-24	3/15/2017	Ethylbenzene	1.9	1.0	0.237	1.813	700.0
MW-24	9/27/2017	Ethylbenzene	<1.0	1.0	0.237	1.813	700.0
MW-24	3/14/2018	Ethylbenzene	<1.0	1.0	0.237	1.813	700.0
MW-24	9/12/2018	Ethylbenzene	<1.0	1.0	0.027	1.673	700.0
MW-24	4/1/2019	Ethylbenzene	4.8	1.0	0.000	4.104	700.0
MW-24	9/12/2019	Ethylbenzene	<1.0	1.0	0.000	4.104	700.0
MW-24	5/6/2020	Ethylbenzene	<1.0	1.0	0.000	4.104	700.0
MW-24	9/3/2020	Ethylbenzene	<1.0	1.0	0.000	4.104	700.0
MW-24	3/30/21	Ethylbenzene	<1.0	1.0	0.500	0.500	700.0
MW-24	9/8/2021	Ethylbenzene	<1.0	1.0	0.500	0.500	700.0
MW-24	3/31/2022	Ethylbenzene	<1.0	1.0	0.500	0.500	700.0
MW-24	8/30/2022	Ethylbenzene	<1.0	1.0	0.500	0.500	700.0

MW-24	3/7/2023	Ethylbenzene	<1.0	1.0	0.500	0.500	700.0
MW-24	9/28/2023	Ethylbenzene	<1.0	1.0	0.500	0.500	700.0
MW-24	3/11/2024	Ethylbenzene	<1.0	1.0	0.500	0.500	700.0
MW-24	10/2/2024	Ethylbenzene	<1.0	1.0	0.500	0.500	700.0
MW-24	9/16/2016	Toluene	5.5	1.0	0.000	4.691	1,000.0
MW-24	3/15/2017	Toluene	<1.0	1.0	0.000	4.691	1,000.0
MW-24	9/27/2017	Toluene	<1.0	1.0	0.000	4.691	1,000.0
MW-24	3/14/2018	Toluene	<1.0	1.0	0.000	4.691	1,000.0
MW-24	9/12/2018	Toluene	<1.0	1.0	0.500	0.500	1,000.0
MW-24	4/1/2019	Toluene	<1.0	1.0	0.500	0.500	1,000.0
MW-24	9/12/2019	Toluene	<1.0	1.0	0.500	0.500	1,000.0
MW-24	5/6/2020	Toluene	<1.0	1.0	0.500	0.500	1,000.0
MW-24	9/3/2020	Toluene	<1.0	1.0	0.500	0.500	1,000.0
MW-24	3/30/21	Toluene	<1.0	1.0	0.500	0.500	1,000.0
MW-24	9/8/2021	Toluene	<1.0	1.0	0.500	0.500	1,000.0
MW-24	3/31/2022	Toluene	<1.0	1.0	0.500	0.500	1,000.0
MW-24	8/30/2022	Toluene	<1.0	1.0	0.500	0.500	1,000.0
MW-24	3/7/2023	Toluene	<1.0	1.0	0.500	0.500	1,000.0
MW-24	9/28/2023	Toluene	<1.0	1.0	0.500	0.500	1,000.0
MW-24	3/11/2024	Toluene	<1.0	1.0	0.500	0.500	1,000.0
MW-24	10/2/2024	Toluene	<1.0	1.0	0.500	0.500	1,000.0
MW-24	9/16/2016	Xylenes	2.2	2.0	1.263	2.087	10,000.0
MW-24	3/15/2017	Xylenes	2.3	2.0	1.363	2.387	10,000.0
MW-24	9/27/2017	Xylenes	<2.0	2.0	1.363	2.387	10,000.0
MW-24	3/14/2018	Xylenes	<2.0	2.0	1.363	2.387	10,000.0
MW-24	9/12/2018	Xylenes	<2.0	2.0	1.229	2.171	10,000.0
MW-24	4/1/2019	Xylenes	6.2	2.0	0.000	5.439	10,000.0
MW-24	9/12/2019	Xylenes	<2.0	2.0	0.000	5.358	10,000.0
MW-24	5/6/2020	Xylenes	<2.0	2.0	0.000	5.358	10,000.0
MW-24	9/3/2020	Xylenes	<2.0	2.0	0.000	5.358	10,000.0
MW-24	3/30/21	Xylenes	<2.0	2.0	1.000	1.000	10,000.0
MW-24	9/8/2021	Xylenes	<2.0	2.0	1.000	1.000	10,000.0
MW-24	3/31/2022	Xylenes	<2.0	2.0	1.000	1.000	10,000.0
MW-24	8/30/2022	Xylenes	<2.0	2.0	1.000	1.000	10,000.0
MW-24	3/7/2023	Xylenes	<2.0	2.0	1.000	1.000	10,000.0
MW-24	9/28/2023	Xylenes	<2.0	2.0	1.000	1.000	10,000.0
MW-24	3/11/2024	Xylenes	<2.0	2.0	1.000	1.000	10,000.0
MW-24	10/2/2024	Xylenes	<2.0	2.0	1.000	1.000	10,000.0

Well	Date	Compound	Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	95% UCL (ug/L)	GWPS (ug/L) Bold = Site
MW-25	3/15/2017	Bis(2-ethylhexyl)phthalate	17.0	6.0	---	---	6.0
MW-25	9/27/2017	Bis(2-ethylhexyl)phthalate	8.0	6.0	---	---	6.0
MW-25	3/14/2018	Bis(2-ethylhexyl)phthalate	7.0	6.0	---	---	6.0
MW-25	9/12/2018	Bis(2-ethylhexyl)phthalate	<6.0	6.0	1.799	15.701	6.0
MW-25	4/1/2019	Bis(2-ethylhexyl)phthalate	<6.0	6.0	2.156	8.344	6.0
MW-25	9/12/2019	Bis(2-ethylhexyl)phthalate	<6.0	6.0	1.647	6.353	6.0
MW-25	5/6/2020	Bis(2-ethylhexyl)phthalate	<6.0	6.0	3.000	3.000	6.0
MW-25	9/3/2020	Bis(2-ethylhexyl)phthalate	NT	6.0	3.000	3.000	6.0
MW-25	3/30/21	Bis(2-ethylhexyl)phthalate	NT	6.0	3.000	3.000	6.0
MW-25	9/8/2021	Bis(2-ethylhexyl)phthalate	NT	6.0	3.000	3.000	6.0
MW-25	3/31/2022	Bis(2-ethylhexyl)phthalate	NT	6.0	3.000	3.000	6.0
MW-25	8/30/2022	Bis(2-ethylhexyl)phthalate	NT	6.0	3.000	3.000	6.0
MW-25	3/7/2023	Bis(2-ethylhexyl)phthalate	NT	6.0	3.000	3.000	6.0
MW-25	9/28/2023	Bis(2-ethylhexyl)phthalate	NT	6.0	3.000	3.000	6.0
MW-25	3/11/2024	Bis(2-ethylhexyl)phthalate	NT	6.0	3.000	3.000	6.0
MW-25	10/2/2024	Bis(2-ethylhexyl)phthalate	NT	6.0	3.000	3.000	6.0

Appendix G

Leachate Collection System Performance Evaluation Report

Leachate Collection System Performance Evaluation Report

Leachate accumulating in the existing leachate storage facilities on-site is recirculated in the Subtitle D composite lined disposal areas in accordance with Permit Amendment #10 dated January 29, 2016 or is hauled to the City of Van Horne Publicly Owned Treatment Works (POTW) for treatment and disposal in accordance with the treatment agreement with Van Horne (Appendix G.1). Approximately 1,289,902 gallons of leachate were hauled to the Van Horne POTW in 2024 in accordance with the leachate treatment agreement. The facility also has a leachate treatment agreement with the Vinton Wastewater Treatment Facility (Appendix G.2). No leachate was hauled to Vinton in 2024.

The laboratory testing results on the leachate for 2024 in accordance with the leachate treatment agreement with Van Horne are included in Appendix G.3.

The facility has permission to recirculate leachate; however, no leachate was recirculated in 2024.

Leachate System Performance

Leachate collection piping has been installed in the Closed Original Landfill as well as the Operating Landfill. Leachate is stored in an FML lined storage lagoon with a capacity of approximately 455,000 gallons.

Closed Original Landfill – The original landfill (Closed) is exempt from installing a leachate collection system based on the completed and certified site Risk Assessment as per the September 26, 1995 letter from IDNR.

Leachate piezometer LPZ-2 was removed during the Phase III Cell H expansion project in 2023. Leachate piezometers LPZ-3 through LPZ-7 are located in the unlined landfilling areas. Figure 2 and 3 in the body of the report illustrate the locations of the leachate piezometers. Leachate head levels were measured monthly in 2024. The historic leachate piezometer measurements are included in Appendix G.4. The data shows that the leachate piezometer measurements in the unlined areas have remained fairly consistent over time.

Operating Landfill – Phase II Cell C, Phase II Cell D, Phase II Cell E/F Stage 1, Phase II Cell E/F Stage 2, Phase III Cell G, and Phase III Cell H are the operating areas of the landfill. Phase II Cell C and Phase II Cell D were constructed with Subtitle D compliant alternative liner systems. Phase II Cell E/F Stage 1, Phase II Cell E/F Stage 2, Phase III Cell G, and Phase III Cell H were constructed with Subtitle D composite liners.

Two leachate head monitoring points were installed in Phase II Cell E/F Stage 1 (LPZ-8 and LPZ-9). One leachate head monitoring point was installed in Phase III Cell G (LPZ-10) near the lowest point in Phase III Cell G. LPZ-10 is also located downgradient of the Phase III Cell H disposal area. Figure 2 in the body of the report illustrates the locations of LPZ-8, LPZ-9, and LPZ-10.

Leachate head measurements in the Subtitle D lined areas are required monthly in accordance with the SDP Permit. Leachate head measurements are summarized as:

Date/Location	LPZ-8	LPZ-9	LPZ-10
1/5/24	0	0	0
2/15/24	0	0	0
3/14/24	0	0	0
4/10/24	0	0	0
5/1/24	0	0	0
6/6/24	0	0	0
7/17/24	0	0	0
8/8/24	0	0	0
9/18/24	0	0	0
10/16/24	0	0	0
11/21/24	0	0	0
12/18/24	0	0	0

Based on the leachate head data, the leachate collection system is performing as designed. No changes are recommended.

Leachate Line Cleaning

The leachate collection lines were cleaned October 29, 2024. As per IDNR regulations, the lines should be cleaned every 3 years (next cleaning will be scheduled in 2027).

Performance Evaluation

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

Appendix G.1-
Leachate Treatment Agreement with Van Horne

IOWA DEPARTMENT OF NATURAL RESOURCES

National Pollutant Discharge Elimination System (NPDES) Permit

OWNER NAME & ADDRESS

CITY OF VAN HORNE
PO BOX 359
VAN HORNE, IA 52346-0359

FACILITY NAME & ADDRESS

VAN HORNE CITY OF STP
NORTH OF 1ST AVENUE ON 11TH STREET
VAN HORNE, IA 52346

Section 11, T83N, R11W
Benton County

IOWA NPDES PERMIT NUMBER: 0685001
DATE OF ISSUANCE: 05/01/2023
DATE OF EXPIRATION: 04/30/2028

YOU ARE REQUIRED TO FILE FOR RENEWAL OF THIS PERMIT BY: 11/02/2027
EPA NUMBER: IA0033341

This permit is issued pursuant to the authority of section 402(b) of the Clean Water Act (33 U.S.C. 1342(b)), Iowa Code section 455B.174, and rule 567-64.3, Iowa Administrative Code. You are authorized to operate the disposal system and to discharge the pollutants specified in this permit in accordance with the effluent limitations, monitoring requirements and other terms set forth in this permit.

Pursuant to rule 561-7.4, Iowa Administrative Code, you may appeal any condition of this permit by filing a written notice of appeal and request for administrative hearing with the director of the department within 60 days of permit issuance.

Any existing, unexpired Iowa operation permit or Iowa NPDES permit previously issued by the department for the facility identified above is revoked by the issuance of this permit. This provision does not apply to any authorization to discharge under the terms and conditions of a general permit issued by the department or to any permit issued exclusively for the discharge of stormwater.

FOR THE DEPARTMENT OF NATURAL RESOURCES

By _____

Ryan Olive
NPDES Section, Environmental Services Division

Facility Name: VAN HORNE CITY OF STP

Permit Number: 0685001

Outfall No.: 001 DISCHARGE FROM AN ACTIVATED SLUDGE-EXTENDED AERATION TREATMENT FACILITY

Receiving Stream: UNNAMED CREEK

Route of Flow: UNNAMED CREEK TO PRAIRIE CREEK

Class A2 waters are secondary contact recreational use waters in which recreational or other uses may result in contact with the water that is either incidental or accidental. During the recreational use, the probability of ingesting appreciable quantities of water is minimal. Class A2 uses include fishing, commercial and recreational boating, any limited contact incidental to shoreline activities and activities in which users do not swim or float in the water body while on a boating activity.

Waters designated Class B(WW2) are those in which flow or other physical characteristics are capable of supporting a resident aquatic community that includes a variety of native nongame fish and invertebrate species. The flow and other physical characteristics limit the maintenance of warm water game fish populations. These waters generally consist of small perennially flowing streams.

Bypasses from any portion of a treatment facility or from a sanitary sewer collection system designed to carry only sewage are prohibited.

Facility Name: VAN HORNE CITY OF STP

Permit Number: 0685001

Effluent Limitations:

You are prohibited from discharging pollutants except in compliance with the following effluent limitations:

001 DISCHARGE FROM AN ACTIVATED SLUDGE-EXTENDED AERATION TREATMENT FACILITY

Outfall: 001 Effective Dates: 05/01/2023 to 04/30/2028				
Parameter	**Season**	**Limit Type**	**Limits**	
CBOD5			**85% Removal Required**	
	Yearly	7 Day Average	40 MG/L	129 LBS/DAY
	Yearly	30 Day Average	25 MG/L	80 LBS/DAY
TOTAL SUSPENDED SOLIDS			**85% Removal Required**	
	Yearly	7 Day Average	45 MG/L	145 LBS/DAY
	Yearly	30 Day Average	30 MG/L	97 LBS/DAY
DISSOLVED OXYGEN				
	Yearly	Daily Minimum	5.0 MG/L	
PH				
	Yearly	Daily Maximum	9.0 STD UNITS	
	Yearly	Daily Minimum	6.5 STD UNITS	

Facility Name: VAN HORNE CITY OF STP

Permit Number: 0685001

Outfall: 001 Effective Dates: 05/01/2023 to 04/30/2028				
Parameter	**Season**	**Limit Type**	**Limits**	
AMMONIA NITROGEN (N)				
	JAN	30 Day Average	3.4 MG/L	11.0 LBS/DAY
	JAN	Daily Maximum	15.2 MG/L	47.0 LBS/DAY
	FEB	30 Day Average	4.0 MG/L	12.8 LBS/DAY
	FEB	Daily Maximum	14.2 MG/L	45.8 LBS/DAY
	MAR	30 Day Average	3.4 MG/L	11.0 LBS/DAY
	MAR	Daily Maximum	14.0 MG/L	31.0 LBS/DAY
	APR	30 Day Average	1.5 MG/L	4.9 LBS/DAY
	APR	Daily Maximum	14.0 MG/L	31.0 LBS/DAY
	MAY	30 Day Average	1.7 MG/L	5.6 LBS/DAY
	MAY	Daily Maximum	14.0 MG/L	31.0 LBS/DAY
	JUN	30 Day Average	1.3 MG/L	4.2 LBS/DAY
	JUN	Daily Maximum	10.8 MG/L	31.0 LBS/DAY
	JUL	30 Day Average	1.0 MG/L	3.2 LBS/DAY
	JUL	Daily Maximum	8.6 MG/L	25.2 LBS/DAY
	AUG	30 Day Average	1.0 MG/L	3.1 LBS/DAY
	AUG	Daily Maximum	8.4 MG/L	24.2 LBS/DAY
	SEP	30 Day Average	1.1 MG/L	3.4 LBS/DAY
	SEP	Daily Maximum	10.0 MG/L	29.0 LBS/DAY
	OCT	30 Day Average	1.6 MG/L	5.0 LBS/DAY
	OCT	Daily Maximum	14.0 MG/L	31.0 LBS/DAY
	NOV	30 Day Average	2.3 MG/L	7.5 LBS/DAY
	NOV	Daily Maximum	14.0 MG/L	31.0 LBS/DAY
	DEC	30 Day Average	2.5 MG/L	8.0 LBS/DAY
	DEC	Daily Maximum	14.0 MG/L	31.0 LBS/DAY

Facility Name: VAN HORNE CITY OF STP

Permit Number: 0685001

Outfall: 001 Effective Dates: 05/01/2023 to 04/30/2028			
Parameter	**Season**	**Limit Type**	**Limits**
E. COLI			
	MAR	Geometric Mean	126 #/100 ML
	APR	Geometric Mean	126 #/100 ML
	MAY	Geometric Mean	126 #/100 ML
	JUN	Geometric Mean	126 #/100 ML
	JUL	Geometric Mean	126 #/100 ML
	AUG	Geometric Mean	126 #/100 ML
	SEP	Geometric Mean	126 #/100 ML
	OCT	Geometric Mean	126 #/100 ML
	NOV	Geometric Mean	126 #/100 ML

Facility Name: VAN HORNE CITY OF STP

Permit Number: 0685001

Monitoring and Reporting Requirements

(a) Samples and measurements taken shall be representative of the volume and nature of the monitored wastewater.

(b) Analytical and sampling methods specified in 40 CFR Part 136 or other methods approved in writing by the department shall be utilized. All effluent samples for which a limit applies must be analyzed using sufficiently sensitive methods (i.e. testing procedures) approved under 567 IAC Chapter 63 and 40 CFR Part 136 for the analysis of pollutants or pollutant parameters or as required under 40 CFR chapter I, subchapter N or O.

For the purposes of this paragraph, an approved method is sufficiently sensitive when:
(1) the method minimum level (ML) is at or below the level of the effluent limit established in the permit for the measured pollutant or pollutant parameter; or
(2) the method has the lowest ML of the approved analytical methods for the measured pollutant or pollutant parameter.

Samples collected for operational testing need not be analyzed by approved analytical methods; however, commonly accepted test methods should be used.

(c) You are required to report all data including calculated results needed to determine compliance with the limitations contained in this permit. The results of any monitoring not specified in this permit performed at the compliance monitoring point and analyzed according to 40 CFR Part 136 shall be included in the calculation and reporting of any data submitted in accordance with this permit. This includes daily maximums and minimums, 30-day averages and 7-day averages for all parameters that have concentration (mg/l) and mass (lbs/day) limits. In addition, flow data shall be reported in million gallons per day (MGD).

(d) Records of monitoring activities and results shall include for all samples: the date, exact place and time of the sampling; the dates the analyses were performed; who performed the analyses; the analytical techniques or methods used; and the results of such analyses.

(e) Results of all monitoring shall be recorded on forms provided by, or approved by, the department, and shall be submitted to the appropriate regional field office of the department by the fifteenth day following the close of the reporting period. Your reporting period is on a MONTHLY basis, ending on the last day of each reporting period.

(f) Operational performance monitoring for treatment unit process control shall be conducted to ensure that the facility is properly operated in accordance with its design. The results of any operational performance monitoring need not be reported to the department, but shall be maintained in accordance with rule 567 IAC 63.2 (455B). The results of any operational performance monitoring specified in this permit shall be submitted to the department in accordance with these reporting requirements.

(g) Chapter 63 of the rules provides you with further explanation of your monitoring requirements.

Facility Name: VAN HORNE CITY OF STP
Permit Number: 0685001

Outfall	Wastewater Parameter	Sample Frequency	Sample Type	Monitoring Location
The following monitoring requirements shall be in effect from 05/01/2023 to 04/30/2028				
001	FLOW	7/WEEK OR DAILY	CALCULATED	RAW WASTE - TOTAL
001	FLOW	7/WEEK OR DAILY	24 HOUR TOTAL	RAW WASTE - STORM WATER BASIN RETURN
001	FLOW	7/WEEK OR DAILY	24 HOUR TOTAL	RAW WASTE - STORM WATER BASIN INFLUENT
001	FLOW	7/WEEK OR DAILY	24 HOUR TOTAL	RAW WASTE - MECHANICAL PLANT INFLUENT
001	BIOCHEMICAL OXYGEN DEMAND (BOD5)	1 TIME PER WEEK	24 HOUR COMPOSITE	RAW WASTE
001	PH	1 TIME PER WEEK	GRAB	RAW WASTE
001	TEMPERATURE	1 TIME PER WEEK	GRAB	RAW WASTE
001	TOTAL SUSPENDED SOLIDS	1 EVERY 2 WEEKS	24 HOUR COMPOSITE	RAW WASTE
001	AMMONIA NITROGEN (N)	1 TIME PER WEEK	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION
001	CBOD5	1 TIME PER WEEK	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION
001	DISSOLVED OXYGEN	1 TIME PER WEEK	GRAB	EFFLUENT AFTER DISINFECTION
001	E. COLI	GEO. MEAN 1/3 MONTHS	GRAB	EFFLUENT AFTER DISINFECTION
001	PH	1 TIME PER WEEK	GRAB	EFFLUENT AFTER DISINFECTION
001	TEMPERATURE	1 TIME PER WEEK	GRAB	EFFLUENT AFTER DISINFECTION
001	TOTAL SUSPENDED SOLIDS	1 EVERY 2 WEEKS	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION

Facility Name: VAN HORNE CITY OF STP

Permit Number: 0685001

Special Monitoring Requirements

Outfall # **Description**

001 **FLOW**

To calculate the total raw waste flow: (TOTAL RAW WASTE FLOW = MECHANICAL PLANT INFLUENT + INFLUENT TO STORM WATER RETENTION BASIN - STORM WATER BASIN RETURN).

Mass calculations for BOD5, TSS, and TKN raw waste samples shall use the calculated total raw waste flow.

E. COLI

The limit for E. coli specified in the limit pages of this permit is a geometric mean. The disinfection season is established in the Iowa Administrative Code, Subparagraph 567 IAC 61.3(3)“a”(1), and is in effect from March 15 to November 15. Any disinfection system (chlorine, UV light, etc.) shall be operated to comply with the limit during the entire disinfection season.

The facility must collect and analyze a minimum of five samples in one calendar month during each 3-month period from March 15 to November 15. The 3-month periods are March – May, June – August, and September – November. The collection of five samples in each 3-month period will result in a minimum of 15 samples being collected during a calendar year. For example, for the first 3-month period, the operator may choose April as the calendar month to collect the 5 individual E. coli samples to determine compliance with the limits. The operator may also choose the months of March or May as well, as long as each of the 5 samples is collected during a single calendar month. The same principle applies to the other two 3-month periods during the disinfection season. The following requirements apply to the individual samples collected in one calendar month:

Samples must be spaced over one calendar month.
No more than one sample can be collected on any one day.
There must be a minimum of two days between each sample.
No more than two samples may be collected in a period of seven consecutive days.

If the effluent has been disinfected using chlorine, ultraviolet light (UV), or any other process intended to disrupt the biological integrity of the E. coli, the samples shall be analyzed using the Most Probable Number method found in Standard Method 9223B (Colilert® or Colilert-18® made by IDEXX Laboratories, Inc.). If the effluent has not been disinfected the samples may be analyzed using either the MPN method above or EPA Method 1603: Escherichia coli (E. coli) in water by membrane filtration using modified membrane-thermotolerant E. coli agar (modified mTEC) or mColiBlue-24® made by the Hach Company.

The geometric mean must be calculated using all valid sample results collected during a month. The geometric mean formula is as follows: Geometric Mean = (Sample one * Sample two * Sample three * Sample four *Sample five…Sample N)^(1/N), which is the Nth root of the result of the multiplication of all of the sample results where N = the number of samples. If a sample result is a less than value, the value reported by the lab without the less than sign should be used in the geometric mean calculation.

Facility Name: VAN HORNE CITY OF STP
Permit Number: 0685001

Significant Industrial User Discharges:

Significant Industrial User: BENTON COUNTY SWDC

Outfall # **Outfall Description**

001 **PRIOR TO DISCHARGE TO CITY SEWER**

Significant Industrial User Effluent Limitations

You are prohibited from discharging pollutants except in compliance with the following effluent limitations:

BENTON COUNTY SWDC ***Outfall: 001 Effective Dates: 05/01/2023 to 04/30/2028***			
Parameter	**Season**	**Limit Type**	**Limit Values**
FLOW			
	Yearly	30 Day Average	0.006 MGD
	Yearly	DAILY MAXIMUM	0.012 MGD
BIOCHEMICAL OXYGEN DEMAND (BOD5)			
	Yearly	30 Day Average	10.0 LBS/DAY
	Yearly	DAILY MAXIMUM	20.0 LBS/DAY
TOTAL SUSPENDED SOLIDS			
	Yearly	30 Day Average	10.0 LBS/DAY
	Yearly	DAILY MAXIMUM	20.0 LBS/DAY
AMMONIA NITROGEN (N)			
	Yearly	30 Day Average	10.0 LBS/DAY
	Yearly	DAILY MAXIMUM	20.0 LBS/DAY
NITROGEN, TOTAL KJELDAHL (AS N)			
	Yearly	30 Day Average	10.0 LBS/DAY
	Yearly	DAILY MAXIMUM	20.0 LBS/DAY
OIL AND GREASE			
	Yearly	30 Day Average	10.0 MG/L
	Yearly	DAILY MAXIMUM	15.0 MG/L

Facility Name: VAN HORNE CITY OF STP

Permit Number: 0685001

BENTON COUNTY SWDC ***Outfall: 001 Effective Dates: 05/01/2023 to 04/30/2028***			
Parameter	**Season**	**Limit Type**	**Limit Values**
PH			
	Yearly	DAILY MAXIMUM	10.0 STD UNITS
	Yearly	DAILY MINIMUM	6.0 STD UNITS

Facility Name: VAN HORNE CITY OF STP

Permit Number: 0685001

Monitoring and Reporting Requirements

(a) Samples and measurements taken shall be representative of the volume and nature of the monitored wastewater.

(b) Analytical and sampling methods specified in 40 CFR Part 136 or other methods approved in writing by the department shall be utilized. All effluent samples for which a limit applies must be analyzed using sufficiently sensitive methods (i.e. testing procedures) approved under 567 IAC Chapter 63 and 40 CFR Part 136 for the analysis of pollutants or pollutant parameters or as required under 40 CFR chapter I, subchapter N or O.

For the purposes of this paragraph, an approved method is sufficiently sensitive when:
(1) the method minimum level (ML) is at or below the level of the effluent limit established in the permit for the measured pollutant or pollutant parameter; or
(2) the method has the lowest ML of the approved analytical methods for the measured pollutant or pollutant parameter.

Samples collected for operational testing need not be analyzed by approved analytical methods; however, commonly accepted test methods should be used.

(c) You are required to report all data including calculated results needed to determine compliance with the limitations contained in this permit. The results of any monitoring not specified in this permit performed at the compliance monitoring point and analyzed according to 40 CFR Part 136 shall be included in the calculation and reporting of any data submitted in accordance with this permit. This includes daily maximums and minimums, 30-day averages and 7-day averages for all parameters that have concentration (mg/l) and mass (lbs/day) limits. In addition, flow data shall be reported in million gallons per day (MGD).

(d) Records of monitoring activities and results shall include for all samples: the date, exact place and time of the sampling; the dates the analyses were performed; who performed the analyses; the analytical techniques or methods used; and the results of such analyses.

(e) Results of all monitoring shall be recorded on forms provided by, or approved by, the department, and shall be submitted to the appropriate regional field office of the department by the fifteenth day following the close of the reporting period. Your reporting period is on a MONTHLY basis, ending on the last day of each reporting period.

(f) Operational performance monitoring for treatment unit process control shall be conducted to ensure that the facility is properly operated in accordance with its design. The results of any operational performance monitoring need not be reported to the department, but shall be maintained in accordance with rule 567 IAC 63.2 (455B). The results of any operational performance monitoring specified in this permit shall be submitted to the department in accordance with these reporting requirements.

(g) Chapter 63 of the rules provides you with further explanation of your monitoring requirements.

Facility Name: VAN HORNE CITY OF STP
Permit Number: 0685001

BENTON COUNTY SWDC				
Outfall	**Wastewater Parameter**	**Sample Frequency**	**Sample Type**	**Monitoring Location**
001	AMMONIA NITROGEN (N)	1 TIME PER WEEK	24 HOUR COMPOSITE	PRIOR TO DISCHARGE TO CITY SEWER
001	BIOCHEMICAL OXYGEN DEMAND (BOD5)	1 TIME PER WEEK	24 HOUR COMPOSITE	PRIOR TO DISCHARGE TO CITY SEWER
001	FLOW	7/WEEK OR DAILY	24 HOUR TOTAL	PRIOR TO DISCHARGE TO CITY SEWER
001	NITROGEN, TOTAL KJELDAHL (AS N)	1 EVERY MONTH	24 HOUR COMPOSITE	PRIOR TO DISCHARGE TO CITY SEWER
001	OIL AND GREASE	1 EVERY MONTH	GRAB	PRIOR TO DISCHARGE TO CITY SEWER
001	PH	1 TIME PER WEEK	GRAB	PRIOR TO DISCHARGE TO CITY SEWER
001	SANITARY LANDFILL LEACHATE	1 EVERY 12 MONTHS	GRAB	PRIOR TO DISCHARGE TO CITY SEWER
001	TOTAL SUSPENDED SOLIDS	1 EVERY 2 WEEKS	24 HOUR TOTAL	PRIOR TO DISCHARGE TO CITY SEWER

Facility Name: VAN HORNE CITY OF STP
Permit Number: 0685001

ADDITIONAL MONITORING REQUIREMENTS

BENTON COUNTY SOLID WASTE DISPOSAL COMMISSION

The permittee shall analyze a representative sample of the landfill leachate discharge from Benton County SWDC at least annually for each of the pollutants listed below. In addition, the permittee shall monitor the volume of waste discharged and BOD5, TSS, TKN, Ammonia Nitrogen, Oil and Grease at the frequencies specified on page 12 of this permit.

Pollutant
Biochemical Oxygen Demand (BOD5)
Total Suspended Solids
Ammonia Nitrogen (NH3-N)
Oil and Grease (O&G)
pH
Chloride (as Cl)
Sulfate (as SO4)
Arsenic, Total (as As)
Chromium, Total (as Cr)
Copper, Total (as Cu)
Iron, Total (as Fe)
Lead, Total (as Pb)
Nickel, Total (as Ni)
Selenium, Total (as Se)
Zinc, Total (as Zn)
Benzoic Acid
Chlorobenzene
Ethylbenzene
p-Cresol
Phenol
Toluene

The permittee will indicate completion of the annual leachate monitoring by entering a “1” in the “LEACHAT” column on the Discharge Monitoring Report (DMR) spreadsheet on the day that the samples are collected. Select the No Discharge Indicator “NOT REQUIRED/MP” on the DMR spreadsheet during the months that the monitoring is not required.

Results of annual monitoring shall be submitted to the addresses below:

NPDES.mail@dnr.iowa.gov
Subject: Landfill Leachate Scan (0685001)

Iowa DNR Field Office 1
1101 Commercial Ct, Suite 10
Manchester, IA 52057

Facility Name: VAN HORNE CITY OF STP

Permit Number: 0685001

Design Capacity

Design: 1

The design capacity for the treatment works is specified in Construction Permit Number 2002-109-S, issued January 14, 2002. The treatment plant is designed to treat:

* An average dry weather (ADW) flow of 0.12 Million Gallons Per Day (MGD).
* An average wet weather (AWW) flow of 0.387 Million Gallons Per Day (MGD).
* A maximum wet weather (MWW) flow of 1.36 Million Gallons Per Day (MGD).
* A design 5-day biochemical oxygen demand (BOD5) load of 204 lbs/day.
* A design Total Kjeldahl Nitrogen (TKN) load of 63 lbs/day.

Operator Certification Type/Grade: WW/II

Wastes in such volumes or quantities as to exceed the design capacity of the treatment works or reduce the effluent quality below that specified in the operation permit of the treatment works are considered to be a waste which interferes with the operation or performance of the treatment works and are prohibited by subrule IAC 567-62.1(7).

Facility Name: VAN HORNE CITY OF STP

Permit Number: 0685001

SEWAGE SLUDGE HANDLING AND DISPOSAL REQUIREMENTS

"Sewage sludge" is solid, semisolid, or liquid residue generated during the treatment of domestic sewage in a treatment works. Sewage sludge does not include the grit and screenings generated during preliminary treatment.

1. The permittee shall comply with all existing Federal and State laws and regulations that apply to the use and disposal of sewage sludge and with technical standards developed pursuant to Section 405(d) of the Clean Water Act when such standards are promulgated. If an applicable numerical limit or management practice for pollutants in sewage sludge is promulgated after issuance of this permit that is more stringent than a sludge pollutant limit or management practice specified in existing Federal or State laws or regulations, this permit shall be modified, or revoked and reissued, to conform to the regulations promulgated under Section 405(d) of the Clean Water Act. The permittee shall comply with the limitation no later than the compliance deadline specified in the applicable regulations.

2. The permittee shall provide written notice to the Department of Natural Resources prior to any planned changes in sludge disposal practices.

3. Land application of sewage sludge shall be conducted in accordance with criteria established in rule IAC 567 67.1 through 67.11 (455B).

SIGNIFICANT INDUSTRIAL USER LIMITATIONS, MONITORING AND REPORTING REQUIREMENTS

1. You must enforce the pollutant limits for each significant industrial user that are listed elsewhere in this permit. Violation of a treatment agreement limit is prohibited by subrule 567 IAC 62.1(6). Monitoring of each significant industrial user is required elsewhere in this permit.

2. Monitoring of each significant industrial user is required elsewhere in this permit. Results of the required monitoring shall be included on your discharge monitoring report, which must be submitted by the fifteenth of the following month.

3. You are required to notify the department, in writing, of any of the following:

   (a) 180 days prior to the introduction of pollutants to your facility from a significant industrial user. A significant industrial user means an industrial user of a treatment works that:
      (1) Discharges an average of 25,000 gallons per day or more of process wastewater excluding sanitary, noncontact cooling and boiler blowdown wastewater;
      (2) Contributes a process waste stream which makes up five percent or more of the average dry weather hydraulic or organic capacity of the publicly-owned treatment works;
      (3) Is subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N; or
      (4) Is designated by the department as a significant industrial user on the basis that the contributing industry, either singly or in combination with other contributing industries, has a reasonable potential for adversely affecting the operation of or effluent quality from the publicly-owned treatment works or for violating any pretreatment standards or requirements.

   (b) 60 days prior to a proposed expansion, production increase or process modification that may result in the discharge of a new pollutant or a discharge in excess of limitations stated in the existing treatment agreement.

   (c) 10 days prior to any commitment by you to accept waste from any new significant industrial user. Your written notification must include a new or revised treatment agreement in accordance with rule 64.3(5)(455B).

4. You shall require all users of your facility to comply with Sections 204(b), 307, and 308 of the Clean Water Act.

   (a) Section 204(b) requires that all users of the treatment works constructed with funds provided under Sections 201(g) or 601 of the Act to pay their proportionate share of the costs of operation, maintenance and replacement of the treatment works.

   (b) Section 307 of the Act requires users to comply with pretreatment standards promulgated by EPA for pollutants that would cause interference with the treatment process or would pass through the treatment works.

   (c) Section 308 of the Act requires users to allow access at reasonable times to state and EPA inspectors for the purpose of sampling the discharge and reviewing and copying records.

STANDARD CONDITIONS

1. **ADMINISTRATIVE RULES -** Rules of the Iowa Department of Natural Resources (department) that govern the operation of a facility in connection with this permit are published in Part 567 of the Iowa Administrative Code (IAC) in Chapters 60-65, 67, and 121. Reference to the term "rule" in this permit means the designated provision of Part 567 of the IAC. Reference to the term "CFR" means the Code of Federal Regulations.

2. **LIMIT DEFINITIONS -**
   (a) 7 day average means the arithmetic mean (average) of pollutant parameter values for samples collected in a period of seven consecutive days. The first 7-day period shall begin with the first day of the month. ***{567 IAC 60.2}***
   (b) 30 day average means the arithmetic mean of pollutant parameter values for samples collected in a period of 30 consecutive days. ***{567 IAC 60.2}***
   (c) Daily maximum means the total discharge by mass, volume, or concentration during a twenty-four hour period. ***{567 IAC 60.2}***

3. **MONITORING AND RECORDS OF OPERATION -**
   (a) Electronic reporting. Records of operation required by this permit shall be electronically submitted to the department within 15 days following the close of the monthly reporting period, in accordance with the monitoring requirements incorporated in this permit, unless an approval for paper submittal of records of operation has been obtained in accordance with 567 IAC 63.7(2).
   (b) Maintenance of records. You shall retain for a minimum of three years all paper and electronic records of monitoring activities and results including all original strip chart recordings for continuous monitoring instrumentation and calibration and maintenance records. ***{567 IAC 63.2(3)}***
   (c) Any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000 or by imprisonment for not more than two years, or both. ***{40 CFR 122.41(j)(5)}***

4. **USE OF CERTIFIED LABORATORIES -** Analyses of wastewater, groundwater or sewage sludge that are required to be submitted as a result of this permit must be performed by a laboratory certified by the State of Iowa. Routine, on-site monitoring for pH, temperature, dissolved oxygen, total residual chlorine and other pollutants that must be analyzed immediately upon sample collection, physical measurements, and operational performance monitoring specified in 567 IAC 63.3(4) are excluded from this requirement. ***{567 IAC 63.1}***

5. **DUTY TO PROVIDE INFORMATION -** You must furnish to the director, within a reasonable time, any information the director may request to determine compliance with this permit or determine whether cause exists for amending, revoking and reissuing, or terminating this permit, in accordance with 567 IAC 64.3(11)"*c*". You must also furnish to the director, upon request, copies of any records required to be kept by this permit. If you become aware that you failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application, you must promptly submit such facts or information. If you become aware that you failed to submit any relevant facts in any report to the director, including records of operation, you shall promptly submit such facts or information. ***{567 IAC 60.4(2)"a", 567 IAC 63.7(6), 40 CFR 122.41(h)}***

6. **DUTY TO REAPPLY AND PERMIT CONTINUATION -** If you wish to continue to discharge after the expiration date of this permit, you must file a complete application for reissuance at least 180 days prior to the expiration date of this permit. If a timely and sufficient application is submitted, this permit will remain in effect until the department makes a final determination on the permit application. ***{567 IAC 64.8(1), Iowa Code 17A.18}***

7. **DUTY TO COMPLY -** You must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Iowa Code and the Clean Water Act and is grounds for enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. Issuance of this permit does not relieve you of the responsibility to comply with all local, state and federal laws, ordinances, regulations or other legal requirements applying to the operation of your facility. ***{567 IAC 64.7(4)"E", 40 CFR 122.41(a)}***

8. **DUTY TO MITIGATE -** You shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment. ***{567 IAC 64.7(7)"i", 40 CFR 122.41(d)}***

9. **PROPER OPERATION AND MAINTENANCE -** All facilities and control systems shall be operated as efficiently as possible and maintained in good working order. A sufficient number of staff, adequately trained and knowledgeable in the operation of your facility, shall be retained at all times. Adequate laboratory controls and appropriate quality assurance procedures shall be provided to maintain compliance with the conditions of this permit. ***{567 IAC 64.7(7)"f", 40 CFR 122.41(e)}***

10. **SIGNATORY REQUIREMENTS -** Applications, discharge monitoring reports, or other information submitted to the department in connection with this permit must be signed and certified in accordance with 567 IAC 64.3(8).

11. **TRANSFER OF TITLE OR OWNER ADDRESS CHANGE -** If title to your facility, or any part of it, is transferred, the new owner shall be subject to this permit. You are required to notify the new owner of the requirements of this permit in writing prior to any transfer of title. The department shall be notified in writing within 30 days of the occurrence. No transfer of the authorization to discharge from the facility represented by the permit shall take place prior to notifying the department of the transfer of title. Whenever the address of the owner is changed, the department shall be notified in writing within 30 days of the address change. ***{567 IAC 64.14}***

STANDARD CONDITIONS

12. **PERMIT MODIFICATION, SUSPENSION OR REVOCATION -** This permit may be amended, revoked and reissued, or terminated in whole or in part for cause including, but not limited to, those specified in 567 IAC 64.3(11)*"b"*. This permit may be modified due to conditions or information on which this permit is based, including any new standard the department may adopt that would change the required effluent limits. If a toxic pollutant is present in your discharge and more stringent standards for toxic pollutants are established under Section 307(a) of the Clean Water Act, this permit will be modified in accordance with the new standards. The filing of a request for a permit amendment, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. ***{567 IAC 64.3(11)"d", 64.7(7)"b" and "g", 40 CFR 122.62(a)(6)}***

13. **TWENTY-FOUR HOUR REPORTING -** You shall report any noncompliance that may endanger human health or the environment, including, but not limited to, violations of maximum daily limits for any toxic pollutant (listed as toxic in Section 307(a)(1) of the Clean Water Act) or hazardous substance (as designated in 40 CFR Part 116 pursuant to 311 of the Act). Information shall be provided orally to the appropriate regional field office of the department within 24 hours from the time you become aware of the circumstances. A written submission that includes a description of noncompliance and its cause; the period of noncompliance including exact dates and times; whether the noncompliance has been corrected or the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent a reoccurrence of the noncompliance must be provided to the appropriate field office within 5 days of the occurrence. ***{567 IAC 63.12, 40 CFR 122.41(l)(6)}***

14. **OTHER NONCOMPLIANCE -** You shall report all instances of noncompliance not reported under Condition #13 at the time discharge monitoring reports are submitted. The report shall contain the information listed in Condition #13. You shall give advance notice to the appropriate regional field office of the department of any planned activity which may result in noncompliance with permit requirements. Notice is required only when previous notice has not been given to any other section of the department. ***{567 IAC 63.7(5), 63.14 and 63.15, 40 CFR 122.41(l)(7)}***

15. **INSPECTION OF PREMISES, RECORDS, EQUIPMENT, METHODS AND DISCHARGES -** You are required to permit authorized personnel to:
    (a) Enter upon the premises where a regulated facility or activity is located or conducted or where records are kept under conditions of this permit;
    (b) Provide access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
    (c) Inspect, at reasonable times, any facilities, equipment, practices or operations regulated or required under this permit; and
    (d) Sample or monitor, at reasonable times, to assure compliance or as otherwise authorized by the Clean Water Act.
    {567 IAC 64.7(7)"c", 40 CFR 122.41(i)}

16. **NOTICE OF CHANGED CONDITIONS -** You are required to notify the director of any changes in existing conditions or information on which this permit is based, including, but not limited to, the following:
    (a) If your facility is a publicly owned treatment works (POTW) or otherwise accepts waste for treatment from an indirect discharger or industrial contributor, you must notify the director if there is any substantial change in the volume or character of pollutants being introduced to the POTW by an indirect discharger or industrial contributor. See 567 IAC 64.3(5) and 64.7(7)"*d*" for further requirements. ***{40 CFR 122.42(b)}***
    (b) If your facility has a manufacturing, commercial, mining, or silviculture discharge, you must notify the director as soon as you know or have reason to believe that any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in this permit. ***{40 CFR 122.42(a)}***
    (c) You must notify the director if you have begun or will begin to use or manufacture, as an intermediate or final product or byproduct, any toxic pollutant which was not reported in the permit application. *{**40 CFR 122.21(g)(9)}***

17. **PLANNED CHANGES -** You shall give notice to the appropriate regional field office of the department 30 days prior to any planned physical alterations or additions to the permitted facility. Facility expansions, production increases, or process modifications which result in new or increased discharges of pollutants must be reported by submission of a new permit application. If any modification of, addition to, or construction of a disposal system is to be made, you must first obtain a written construction permit from this department. In addition, no construction activity that will result in disturbance of one acre or more shall be initiated without first obtaining coverage under NPDES General Permit No. 2.
    Notice is required only when:
    (a) Notice has not been given to any other section of the department:
    (b) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source as defined in 567 IAC 60.2;
    (c) The alteration or addition results in a significant change in sludge use or disposal practices; or
    (d) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are not subject to effluent limitations in the permit.
    {567 IAC 63.13, 567 IAC 64.2 and 64.7(7)"a"}

18. **FAILURE TO SUBMIT FEES -** This permit may be revoked, in whole or in part, if the appropriate permit fees are not submitted within thirty (30) days of the date of notification that such fees are due. ***{567 IAC 64.16(1)}***

STANDARD CONDITIONS

19. BYPASSES - "Bypass" means the diversion of waste streams from any portion of a treatment facility or collection system. A bypass does not include internal operational waste stream diversions that are part of the design of the treatment facility, maintenance diversions where redundancy is provided, diversions of wastewater from one point in a collection system to another point in a collection system, or wastewater backups into buildings that are caused in the building lateral or private sewer line. ***{567 IAC 60.2)}***

(a) Prohibition. Bypasses from any portion of a treatment facility or from a sanitary sewer collection system designed to carry only sewage are prohibited, in accordance with 567 IAC 63.6(1). The department may not assess a civil penalty against a permittee for a bypass if the permittee has complied with all of the following:

i. The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

ii. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

iii. The permittee submitted notices as required by 567 IAC 63.6.

(b) Anticipated bypass. Except for bypasses that occur as a result of mechanical failure or acts beyond the control of the owner or operator of a waste disposal system (unanticipated bypasses), the owner or operator shall obtain written permission from the department prior to any discharge of sewage or wastes from a waste disposal system not authorized by this permit. The Director may approve an anticipated bypass after considering its adverse effects if the Director determines that it will meet the three conditions listed above and a request for bypass has been submitted to the appropriate regional field office of the department at least ten days prior to the expected event, in accordance with the requirements listed in 567 IAC 63.6(2).

(c) Unanticipated bypass. In the event that a bypass or upset occurs without prior notice having been provided pursuant to 567 IAC 63.6(2) or as a result of mechanical failure or acts beyond the control of the owner or operator, the owner or operator of the treatment facility or collection system shall notify the department by telephone as soon as possible but not later than 24 hours after the onset or discovery in accordance with the requirements in 567 IAC 63.6(3). A written submission describing the bypass shall also be provided within five days of the time the permittee becomes aware of the bypass, in accordance with the requirements in 567 IAC 63.6(3)"*d*".

(d) Reporting. Bypasses shall be reported in accordance with 567 IAC 63.6.

{567 IAC 63.6}

20. UPSETS - "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

(a) Effect of an upset. An upset constitutes an affirmative defense to the assessment of a civil penalty for noncompliance with technology-based permit effluent limitations if the requirements of paragraph (b) of this condition are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

(b) Conditions necessary for demonstration of an upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed operating logs or other relevant evidence, that;

i. An upset occurred and that the permittee can identify the cause(s) of the upset;

ii. The permitted facility was at the time being properly operated;

iii. The permittee submitted notice of the upset to the department in accordance with 567 IAC 63.6(3); and

iv. The permittee complied with any remedial measures required by the department in accordance with 567 IAC 63.6(6)"*b*"(4).

(c) Burden of Proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

{567 IAC 63.6}

21. NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE - It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. ***{567 IAC 64.7(7)"j", 40 CFR 122.41(c)}***

22. PROPERTY RIGHTS - This permit does not convey any property rights of any sort or any exclusive privilege. ***{567 IAC 64.4(3)"b", 40 CFR 122.41(g)}***

23. EFFECT OF A PERMIT - Compliance with a permit during its term constitutes compliance, for purposes of enforcement, with Sections 301, 302, 306, 307, 318, 403 and 405(a)-(b) of the Clean Water Act, and equivalent limitations and standards set out in 567 IAC Chapters 61 and 62. ***{567 IAC 64.4(3)"a"}***

24. SEVERABILITY - The provisions of this permit are severable. If any provision or application of any provision to any circumstance is found to be invalid by this department or a court of law, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected by such finding.

Appendix G.2-
Leachate Treatment Agreement with Vinton

IOWA DEPARTMENT OF NATURAL RESOURCES

National Pollutant Discharge Elimination System (NPDES) Permit

OWNER NAME & ADDRESS

CITY OF VINTON
CITY HALL, PO BOX 529
VINTON, IA 52349-0529

FACILITY NAME & ADDRESS

VINTON CITY OF STP
0.7 MILES S OF THE 25TH AVE DR &
10TH AVE INTERSECTION
VINTON, IA 52349

Section 28, T85N, R10W
Benton County

IOWA NPDES PERMIT NUMBER: 0688001
DATE OF ISSUANCE: 07/01/2020
DATE OF EXPIRATION: 06/30/2025

YOU ARE REQUIRED TO FILE FOR RENEWAL OF THIS PERMIT BY: 01/01/2025
EPA NUMBER: IA0035891

This permit is issued pursuant to the authority of section 402(b) of the Clean Water Act (33 U.S.C. 1342(b)), Iowa Code section 455B.174, and rule 567-64.3, Iowa Administrative Code. You are authorized to operate the disposal system and to discharge the pollutants specified in this permit in accordance with the effluent limitations, monitoring requirements and other terms set forth in this permit.

You may appeal any condition of this permit by filing a written notice of appeal and request for administrative hearing with the director of the department within 30 days of permit issuance.

Any existing, unexpired Iowa operation permit or Iowa NPDES permit previously issued by the department for the facility identified above is revoked by the issuance of this permit. This provision does not apply to any authorization to discharge under the terms and conditions of a general permit issued by the department or to any permit issued exclusively for the discharge of stormwater.

FOR THE DEPARTMENT OF NATURAL RESOURCES

By _____

Ann Seda
NPDES Section, Environmental Services Division

Facility Name: VINTON CITY OF STP

Permit Number: 0688001

Outfall No.: 001 DISCHARGE FROM AN ACTIVATED SLUDGE WASTEWATER TREATMENT FACILITY.

Receiving Stream: MUD CREEK

Route of Flow: MUD CREEK

Class A2 waters are secondary contact recreational use waters in which recreational or other uses may result in contact with the water that is either incidental or accidental. During the recreational use, the probability of ingesting appreciable quantities of water is minimal. Class A2 uses include fishing, commercial and recreational boating, any limited contact incidental to shoreline activities and activities in which users do not swim or float in the water body while on a boating activity.

Waters designated Class B(WW2) are those in which flow or other physical characteristics are capable of supporting a resident aquatic community that includes a variety of native nongame fish and invertebrate species. The flow and other physical characteristics limit the maintenance of warm water game fish populations. These waters generally consist of small perennially flowing streams.

Outfall No.: 002 BYPASS FROM THE BUDD'S ADDITION LIFT STATION OVERFLOW

Receiving Stream: MUD CREEK

Route of Flow: MUD CREEK

Class A2 waters are secondary contact recreational use waters in which recreational or other uses may result in contact with the water that is either incidental or accidental. During the recreational use, the probability of ingesting appreciable quantities of water is minimal. Class A2 uses include fishing, commercial and recreational boating, any limited contact incidental to shoreline activities and activities in which users do not swim or float in the water body while on a boating activity.

Waters designated Class B(WW2) are those in which flow or other physical characteristics are capable of supporting a resident aquatic community that includes a variety of native nongame fish and invertebrate species. The flow and other physical characteristics limit the maintenance of warm water game fish populations. These waters generally consist of small perennially flowing streams.

Outfall No.: 003 BYPASS FROM THE MANHOLE LOCATED SOUTH OF THE BALL PARK ON 25TH AVENUE DRIVE

Receiving Stream: UNNAMED CREEK TO MUD CREEK

Route of Flow: UNNAMED CREEK TO MUD CREEK

Class A1 waters are primary contact recreational use waters in which recreational or other uses may result in prolonged and direct contact with the water, involving considerable risks of ingesting water in quantities sufficient to pose a health hazard. Such activities would include, but not be limited to, swimming, diving, water skiing, and water contact recreational canoeing.

Waters designated Class B(WW1) are those in which temperature, flow and other habitat characteristics are suitable to maintain warm water game fish populations along with a resident aquatic community that includes a variety of native nongame fish and invertebrates species. These waters generally include border rivers, large interior rivers, and the lower segments of medium-size tributary streams.

Bypasses from any portion of a treatment facility or from a sanitary sewer collection system designed to carry only sewage are prohibited.

Facility Name: VINTON CITY OF STP

Permit Number: 0688001

Effluent Limitations:

You are prohibited from discharging pollutants except in compliance with the following effluent limitations:

001 DISCHARGE FROM AN ACTIVATED SLUDGE WASTEWATER TREATMENT FACILITY.

Outfall: 001 Effective Dates: 07/01/2020 to 06/30/2025			
Parameter	**Season**	**Limit Type**	**Limits**
CBOD5			**85% Removal Required**
	Yearly	7 Day Average	40 MG/L 597 LBS/DAY
	Yearly	30 Day Average	25 MG/L 373 LBS/DAY
TOTAL SUSPENDED SOLIDS			**85% Removal Required**
	Yearly	7 Day Average	45 MG/L 672 LBS/DAY
	Yearly	30 Day Average	30 MG/L 448 LBS/DAY
NITROGEN, TOTAL (AS N)			
	Yearly	30 Day Average	210.9 LBS/DAY
	Yearly	Daily Maximum	345.2 LBS/DAY
COPPER, TOTAL (AS CU)			
	Yearly	30 Day Average	0.01757 MG/L 0.2605 LBS/DAY
	Yearly	Daily Maximum	0.02700 MG/L 0.4028 LBS/DAY
ACUTE TOXICITY, CERIODAPHNIA			
	Yearly	Daily Maximum	1 NO TOXICITY
ACUTE TOXICITY, PIMEPHALES			
	Yearly	Daily Maximum	1 NO TOXICITY
DISSOLVED OXYGEN			
	Yearly	Daily Minimum	5.0 MG/L
PH			
	Yearly	Daily Maximum	9.0 STD UNITS
	Yearly	Daily Minimum	6.5 STD UNITS

Facility Name: VINTON CITY OF STP

Permit Number: 0688001

Outfall: 001 Effective Dates: 07/01/2020 to 06/30/2025			
Parameter	**Season**	**Limit Type**	**Limits**
AMMONIA NITROGEN (N)			
	JAN	30 Day Average	4.1 MG/L 59.2 LBS/DAY
	JAN	Daily Maximum	15.2 MG/L 227.5 LBS/DAY
	FEB	30 Day Average	4.7 MG/L 68.6 LBS/DAY
	FEB	Daily Maximum	14.3 MG/L 212.8 LBS/DAY
	MAR	30 Day Average	4.1 MG/L 59.0 LBS/DAY
	MAR	Daily Maximum	14.7 MG/L 220.0 LBS/DAY
	APR	30 Day Average	1.8 MG/L 26.5 LBS/DAY
	APR	Daily Maximum	15.8 MG/L 235.0 LBS/DAY
	MAY	30 Day Average	2.1 MG/L 30.2 LBS/DAY
	MAY	Daily Maximum	15.2 MG/L 215.0 LBS/DAY
	JUN	30 Day Average	1.6 MG/L 22.7 LBS/DAY
	JUN	Daily Maximum	10.8 MG/L 152.3 LBS/DAY
	JUL	30 Day Average	1.2 MG/L 17.4 LBS/DAY
	JUL	Daily Maximum	8.5 MG/L 119.4 LBS/DAY
	AUG	30 Day Average	1.1 MG/L 16.6 LBS/DAY
	AUG	Daily Maximum	8.5 MG/L 119.4 LBS/DAY
	SEP	30 Day Average	1.3 MG/L 18.3 LBS/DAY
	SEP	Daily Maximum	10.0 MG/L 140.3 LBS/DAY
	OCT	30 Day Average	1.9 MG/L 27.0 LBS/DAY
	OCT	Daily Maximum	15.6 MG/L 215.0 LBS/DAY
	NOV	30 Day Average	2.8 MG/L 40.3 LBS/DAY
	NOV	Daily Maximum	14.7 MG/L 219.9 LBS/DAY
	DEC	30 Day Average	3.0 MG/L 43.0 LBS/DAY
	DEC	Daily Maximum	16.0 MG/L 238.9 LBS/DAY

Facility Name: VINTON CITY OF STP

Permit Number: 0688001

Outfall: 001 Effective Dates: 07/01/2020 to 06/30/2025			
Parameter	**Season**	**Limit Type**	**Limits**
E. COLI			
	MAR	Geometric Mean	126 #/100 ML
	APR	Geometric Mean	126 #/100 ML
	MAY	Geometric Mean	126 #/100 ML
	JUN	Geometric Mean	126 #/100 ML
	JUL	Geometric Mean	126 #/100 ML
	AUG	Geometric Mean	126 #/100 ML
	SEP	Geometric Mean	126 #/100 ML
	OCT	Geometric Mean	126 #/100 ML
	NOV	Geometric Mean	126 #/100 ML

Facility Name: VINTON CITY OF STP

Permit Number: 0688001

Monitoring and Reporting Requirements

(a) Samples and measurements taken shall be representative of the volume and nature of the monitored wastewater.

(b) Analytical and sampling methods specified in 40 CFR Part 136 or other methods approved in writing by the department shall be utilized. All effluent samples for which a limit applies must be analyzed using sufficiently sensitive methods (i.e. testing procedures) approved under 567 IAC Chapter 63 and 40 CFR Part 136 for the analysis of pollutants or pollutant parameters or as required under 40 CFR chapter I, subchapter N or O.

For the purposes of this paragraph, an approved method is sufficiently sensitive when:
(1) the method minimum level (ML) is at or below the level of the effluent limit established in the permit for the measured pollutant or pollutant parameter; or
(2) the method has the lowest ML of the approved analytical methods for the measured pollutant or pollutant parameter.

Samples collected for operational testing need not be analyzed by approved analytical methods; however, commonly accepted test methods should be used.

(c) You are required to report all data including calculated results needed to determine compliance with the limitations contained in this permit. The results of any monitoring not specified in this permit performed at the compliance monitoring point and analyzed according to 40 CFR Part 136 shall be included in the calculation and reporting of any data submitted in accordance with this permit. This includes daily maximums and minimums, 30-day averages and 7-day averages for all parameters that have concentration (mg/l) and mass (lbs/day) limits. In addition, flow data shall be reported in million gallons per day (MGD).

(d) Records of monitoring activities and results shall include for all samples: the date, exact place and time of the sampling; the dates the analyses were performed; who performed the analyses; the analytical techniques or methods used; and the results of such analyses.

(f) Results of all monitoring shall be recorded on forms provided by, or approved by, the department, and shall be submitted to the appropriate regional field office of the department by the fifteenth day following the close of the reporting period. Your reporting period is on a MONTHLY basis, ending on the last day of each reporting period.

(f) Operational performance monitoring for treatment unit process control shall be conducted to ensure that the facility is properly operated in accordance with its design. The results of any operational performance monitoring need not be reported to the department, but shall be maintained in accordance with rule 567 IAC 63.2 (455B). The results of any operational performance monitoring specified in this permit shall be submitted to the department in accordance with these reporting requirements.

(g) Chapter 63 of the rules provides you with further explanation of your monitoring requirements.

Facility Name: VINTON CITY OF STP
Permit Number: 0688001

Outfall	Wastewater Parameter	Sample Frequency	Sample Type	Monitoring Location
The following monitoring requirements shall be in effect from 07/01/2020 to 06/30/2025				
001	BIOCHEMICAL OXYGEN DEMAND (BOD5)	2 TIMES PER WEEK	24 HOUR COMPOSITE	RAW WASTE
001	FLOW	7/WEEK OR DAILY	24 HOUR TOTAL	RAW WASTE
001	NITROGEN, TOTAL (AS N)	1 TIME PER WEEK	24 HOUR COMPOSITE	RAW WASTE
001	NITROGEN, TOTAL KJELDAHL (AS N)	1 EVERY MONTH	24 HOUR COMPOSITE	RAW WASTE
001	PH	2 TIMES PER WEEK	GRAB	RAW WASTE
001	PHOSPHORUS, TOTAL (AS P)	1 TIME PER WEEK	24 HOUR COMPOSITE	RAW WASTE
001	TEMPERATURE	2 TIMES PER WEEK	GRAB	RAW WASTE
001	TOTAL SUSPENDED SOLIDS	1 TIME PER WEEK	24 HOUR COMPOSITE	RAW WASTE
001	ACUTE TOXICITY, CERIODAPHNIA	1 EVERY 12 MONTHS	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION
001	ACUTE TOXICITY, PIMEPHALES	1 EVERY 12 MONTHS	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION
001	AMMONIA NITROGEN (N)	2 TIMES PER WEEK	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION
001	CBOD5	2 TIMES PER WEEK	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION
001	COPPER, TOTAL (AS CU)	3 TIMES PER WEEK	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION
001	DISSOLVED OXYGEN	2 TIMES PER WEEK	GRAB	EFFLUENT AFTER DISINFECTION
001	E. COLI	1 EVERY 3 MONTHS	GRAB	EFFLUENT AFTER DISINFECTION
001	NITROGEN, TOTAL (AS N)	1 TIME PER WEEK	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION
001	PH	2 TIMES PER WEEK	GRAB	EFFLUENT AFTER DISINFECTION
001	PHOSPHORUS, TOTAL (AS P)	1 TIME PER WEEK	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION
001	TEMPERATURE	2 TIMES PER WEEK	GRAB	EFFLUENT AFTER DISINFECTION
001	TOTAL SUSPENDED SOLIDS	1 TIME PER WEEK	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION

Facility Name: VINTON CITY OF STP

Permit Number: 0688001

Special Monitoring Requirements

Outfall # **Description**

001 **NITROGEN, TOTAL (AS N)**

Total nitrogen shall be determined by testing for Total Kjeldahl Nitrogen (TKN) and nitrate + nitrite nitrogen and reporting the sum of the TKN and nitrate + nitrite results (reported as N). Nitrate + nitrite can be analyzed together or separately.

E. COLI

The limit for E. coli specified in the limit pages of this permit is a geometric mean. The disinfection season is established in the Iowa Administrative Code, Subparagraph 567 IAC 61.3(3)"a"(1), and is in effect from March 15 to November 15. Any disinfection system (chlorine, UV light, etc.) shall be operated to comply with the limit during the entire disinfection season.

The facility must collect and analyze a minimum of five samples in one calendar month during each 3-month period from March 15 to November 15. The 3-month periods are March – May, June – August, and September – November. The collection of five samples in each 3-month period will result in a minimum of 15 samples being collected during a calendar year. For example, for the first 3-month period, the operator may choose April as the calendar month to collect the 5 individual E. coli samples to determine compliance with the limits. The operator may also choose the months of March or May as well, as long as each of the 5 samples is collected during a single calendar month. The same principle applies to the other two 3-month periods during the disinfection season. The following requirements apply to the individual samples collected in one calendar month:
Samples must be spaced over one calendar month.
No more than one sample can be collected on any one day.
There must be a minimum of two days between each sample.
No more than two samples may be collected in a period of seven consecutive days.

If the effluent has been disinfected using chlorine, ultraviolet light (UV), or any other process intended to disrupt the biological integrity of the E. coli, the samples shall be analyzed using the Most Probable Number method found in Standard Method 9223B (Colilert® or Colilert-18® made by IDEXX Laboratories, Inc.). If the effluent has not been disinfected the samples may be analyzed using either the MPN method above or EPA Method 1603: Escherichia coli (E. coli) in water by membrane filtration using modified membrane-thermotolerant E. coli agar (modified mTEC) or mColiBlue-24® made by the Hach Company.

The geometric mean must be calculated using all valid sample results collected during a month. The geometric mean formula is as follows: Geometric Mean = (Sample one * Sample two * Sample three * Sample four *Sample five…Sample N)^(1/N), which is the Nth root of the result of the multiplication of all of the sample results where N = the number of samples. If a sample result is a less than value, the value reported by the lab without the less than sign should be used in the geometric mean calculation.

The geometric mean can be calculated in one of the following ways:
Use a scientific calculator that can calculate the powers of numbers.
Enter the samples in Microsoft Excel and use the function "GEOMEAN" to perform the calculation.
Use the geometric mean calculator on the Iowa DNR webpage at: http://www.iowadnr.gov/Environmental-Protection/Water-Quality/NPDES-Wastewater-Permitting/NPDES-Operator-Information/Bacteria-Sampling

Special Monitoring Requirements (con't)

COPPER, TOTAL (AS CU)

EPA approved test methods shall be used to test at or below the limits of this permit. If a sample result is not at a detection level which is low enough to demonstrate compliance with the limit in the permit, the facility will be considered non-compliant with that limit.

Facility Name: VINTON CITY OF STP
Permit Number: 0688001

Significant Industrial User Discharges:

Significant Industrial User: BENTON COUNTY LANDFILL

Outfall #	**Outfall Description**
001	BATCH DISCHARGE OF LANDFILL LEACHATE PRIOR TO MIXING WITH OTHER WASTE STREAMS.

Significant Industrial User Effluent Limitations

You are prohibited from discharging pollutants except in compliance with the following effluent limitations:

BENTON COUNTY LANDFILL
Outfall: 001 Effective Dates: 07/01/2020 to 06/30/2025

Parameter	Season	Limit Type	Limit Values
FLOW			
	Yearly	30 Day Average	0.030 MGD
	Yearly	DAILY MAXIMUM	0.050 MGD
BIOCHEMICAL OXYGEN DEMAND (BOD5)			
	Yearly	30 Day Average	75.0 LBS/DAY
	Yearly	DAILY MAXIMUM	210.0 LBS/DAY
TOTAL SUSPENDED SOLIDS			
	Yearly	30 Day Average	75.0 LBS/DAY
	Yearly	DAILY MAXIMUM	210.0 LBS/DAY
AMMONIA NITROGEN (N)			
	Yearly	30 Day Average	50.0 LBS/DAY
	Yearly	DAILY MAXIMUM	105.0 LBS/DAY
NITROGEN, TOTAL KJELDAHL (AS N)			
	Yearly	30 Day Average	50.0 LBS/DAY
	Yearly	DAILY MAXIMUM	105.0 LBS/DAY
PH			
	Yearly	DAILY MAXIMUM	8.9 STD UNITS
	Yearly	DAILY MINIMUM	6.7 STD UNITS

Facility Name: VINTON CITY OF STP

Permit Number: 0688001

BENTON COUNTY LANDFILL
Outfall: 001 Effective Dates: 07/01/2020 to 06/30/2025

Parameter	Season	Limit Type	Limit Values
OIL AND GREASE			
	Yearly	30 Day Average	12 LBS/DAY
	Yearly	DAILY MAXIMUM	42 LBS/DAY

Facility Name: VINTON CITY OF STP

Permit Number: 0688001

Monitoring and Reporting Requirements

(a) Samples and measurements taken shall be representative of the volume and nature of the monitored wastewater.

(b) Analytical and sampling methods specified in 40 CFR Part 136 or other methods approved in writing by the department shall be utilized. All effluent samples for which a limit applies must be analyzed using sufficiently sensitive methods (i.e. testing procedures) approved under 567 IAC Chapter 63 and 40 CFR Part 136 for the analysis of pollutants or pollutant parameters or as required under 40 CFR chapter I, subchapter N or O.

For the purposes of this paragraph, an approved method is sufficiently sensitive when:
(1) the method minimum level (ML) is at or below the level of the effluent limit established in the permit for the measured pollutant or pollutant parameter; or
(2) the method has the lowest ML of the approved analytical methods for the measured pollutant or pollutant parameter.

Samples collected for operational testing need not be analyzed by approved analytical methods; however, commonly accepted test methods should be used.

(c) You are required to report all data including calculated results needed to determine compliance with the limitations contained in this permit. The results of any monitoring not specified in this permit performed at the compliance monitoring point and analyzed according to 40 CFR Part 136 shall be included in the calculation and reporting of any data submitted in accordance with this permit. This includes daily maximums and minimums, 30-day averages and 7-day averages for all parameters that have concentration (mg/l) and mass (lbs/day) limits. In addition, flow data shall be reported in million gallons per day (MGD).

(d) Records of monitoring activities and results shall include for all samples: the date, exact place and time of the sampling; the dates the analyses were performed; who performed the analyses; the analytical techniques or methods used; and the results of such analyses.

(f) Results of all monitoring shall be recorded on forms provided by, or approved by, the department, and shall be submitted to the appropriate regional field office of the department by the fifteenth day following the close of the reporting period. Your reporting period is on a MONTHLY basis, ending on the last day of each reporting period.

(f) Operational performance monitoring for treatment unit process control shall be conducted to ensure that the facility is properly operated in accordance with its design. The results of any operational performance monitoring need not be reported to the department, but shall be maintained in accordance with rule 567 IAC 63.2 (455B). The results of any operational performance monitoring specified in this permit shall be submitted to the department in accordance with these reporting requirements.

(g) Chapter 63 of the rules provides you with further explanation of your monitoring requirements.

Facility Name: VINTON CITY OF STP
Permit Number: 0688001

BENTON COUNTY LANDFILL				
Outfall	**Wastewater Parameter**	**Sample Frequency**	**Sample Type**	**Monitoring Location**
001	AMMONIA NITROGEN (N)	1 TIME PER WEEK	GRAB	PRIOR TO DISCHARGE TO CITY SEWER
001	BIOCHEMICAL OXYGEN DEMAND (BOD5)	1 TIME PER WEEK	GRAB	PRIOR TO DISCHARGE TO CITY SEWER
001	FLOW	7/WEEK OR DAILY	24 HOUR COMPOSITE	PRIOR TO DISCHARGE TO CITY SEWER
001	NITROGEN, TOTAL KJELDAHL (AS N)	1 TIME PER WEEK	GRAB	PRIOR TO DISCHARGE TO CITY SEWER
001	OIL AND GREASE	1 TIME PER WEEK	GRAB	PRIOR TO DISCHARGE TO CITY SEWER
001	PH	1 TIME PER WEEK	GRAB	PRIOR TO DISCHARGE TO CITY SEWER
001	SANITARY LANDFILL LEACHATE	1 EVERY 12 MONTHS	GRAB	PRIOR TO DISCHARGE TO CITY SEWER
001	TOTAL SUSPENDED SOLIDS	1 TIME PER WEEK	GRAB	PRIOR TO DISCHARGE TO CITY SEWER

Facility Name: VINTON CITY OF STP
Permit Number: 0688001

BENTON COUNTY LANDFILL Special Monitoring Requirements

Outfall #	Description
001	SANITARY LANDFILL LEACHATE
	Please refer to pages 15 and 16 listing additional leachate monitoring requirements.

ADDITIONAL MONITORING REQUIREMENTS – BENTON COUNTY SANITARY LANDFILL

The permittee shall analyze a representative sample of the leachate discharge from the Benton County Sanitary Landfill at least annually for each of the pollutants listed below. Also, the permittee shall monitor the volume of waste discharged, pH, BOD5, TSS, Total Kjeldahl Nitrogen, ammonia nitrogen and oil and grase at the frequencies specified on page 13 of this permit.

Conventional Pollutants and Metals	**Volatile Compounds**	**Acid Extractable Compounds**
Biochemical Oxygen Demand (BOD_5)	Method of Analysis: EPA Methods 624 or 1624	Method of Analysis: EPA Methods 625 or 1625
Total Organic Carbon		
Total Dissolved Solids	Chloromethane (methyl chloride)	2-Chlorophenol
Total Suspended Solids	Bromomethane (methyl bromide)	2-Nitrophenol
Ammonia Nitrogen	Vinyl chloride	2,4-Dimethylphenol
pH	Chloroethane (ethyl chloride)	Benzoic acid
Arsenic, Total (as As)	Methylene chloride (dichloromethane)	2,4-Dichlorophenol
Barium, Total (as Ba)	1,1-Dichloroethene (1,1-dichloroethylene)	4-Chloro-3-methylphenol
Cadmium, Total (as Cd)	1,1-Dichloroethane	2,4,6-Trichlorophenol
Chromium, Total (as Cr)	1,2-Dichloroethene (1,2-dichloroethylene)	2,4,5-Trichlorophenol
Copper, Total (as Cu)	Chloroform	2,4-Dinitrophenol
Iron, Total (as Fe)	1,2-Dichloroethane	4-Nitrophenol
Lead, Total (as Pb)	1,1,1-Trichloroethane (methyl chloroform)	4,6-Dinitro-2-methylphenol
Mercury, Total (as Hg)	Carbon tetrachloride	Pentachlorophenol
Nickel, Total (as Ni)	Bromodichloromethane	
Selenium, Total (as Se)	1,1,2,2-Tetrachloroethane	
Silver, Total (as Ag)	1,2-Dichloropropane	
Zinc, Total (as Zn)	1,3-Dichloropropene	
	Trichloroethene	
	Dibromochloromethane	
	1,1,2-Trichloroethane	
	Benzene	
	2-Chloroethyl vinyl ether	
	Bromoform	
	Tetrachloroethene	
	Toluene	
	Chlorobenzene	
	Ethylbenzene	

Chlorinated Hydrocarbon Insecticides	**Base/Neutral Compounds**	**Base/Neutral Compounds - continued**
Methods of Analysis: EPA Methods 608 or 625	Methods of Analysis: EPA Methods 625 or 1625	
Beta BHC	bis (2-chloroethyl) ether	Di-n-butyl phthalate
Delta BHC	1,3-Dichlorobenzene	Fluoranthene
Gamma BHC	1,4-Dichlorobenzene	Pyrene
Heptachlor	Benzyl alcohol	Butyl benzyl phthalate
Aldrin	1,2-Dichlorobenzene	3,3'-Dichlorobenzidine
Heptachlor epoxide	bis (2-chloroisopropyl) ether	Benzo (a) anthracene
Endosulfan	N-Nitroso-dipropylamine	bis (2-ethylhexyl) phthalate
Dieldrin	Hexachloroethane	Chrysene
4,4'-DDE	Nitrobenzene	Di-n-octyl phthalate
Endrin	Isophorone	Benzo (b) fluoranthene
Endosulfan II	bis (2-chloroethoxy) methane	Benzo (k) fluoranthene
4,4'-DDD	1,2,4-Trichlorobenzene	Benzo (a) pyrene
Endosulfan sulfate	Naphthalene	Indeno (1,2,3-cd) pyrene
4,4'-DDT	Hexachlorobutadiene	Dibenz (a,h) anthracene
Endrin aldehyde	Hexachlorocyclopentadiene	Benzo (g,h,i) perylene
Chlordane	2-Chloronaphthalene	
Toxaphene	Dimethyl phthalate	
	Acenaphthylene	
Polychlorinated Biphenyls	Acenaphthene	
Methods of Analysis: EPA Methods 608 or 625	Dibenzofuran	
	2,4-Dinitrotoluene	
Arochlor-1016	2,6-Dinitrotoluene	
Arochlor-1221	Diethyl phthalate	
Arochlor-1232	4-Chlorophenyl phenyl ether	
Arochlor-1242	Fluorene	
Arochlor-1248	N-Nitrosodiphenylamine	
Arochlor-1254	4-Bromophenyl phenyl ether	
Arochlor-1260	Hexachlorobenzene	
	Phenanthrene	
	Anthracene	

Facility Name: VINTON CITY OF STP

Permit Number: 0688001

Outfall Number: 001

Ceriodaphnia and Pimephales Toxicity Effluent Testing

1. For facilities that have not been required to conduct toxicity testing by a previous NPDES permit, the initial annual toxicity test shall be conducted within three (3) months of permit issuance. For facilities that have been required to conduct toxicity testing by a previous NPDES permit, the initial annual toxicity test shall be conducted within twelve months (12) of the last toxicity test.

2. The test organisms that are to be used for acute toxicity testing shall be Ceriodaphnia dubia and Pimephales promelas. The acute toxicity testing procedures used to demonstrate compliance with permit limits shall be those listed in 40 CFR Part 136 and adopted by reference in rule 567 IAC 63.1(1). The method for measuring acute toxicity is specified in USEPA, October 2002, Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition. USEPA, Office of Water, Washington, D.C., EPA 821-R-02-012.

3. The diluted effluent sample must contain a minimum of 99.60 % effluent and no more than 0.40 % of culture water.

4. One valid positive toxicity result will require, at a minimum, quarterly testing for effluent toxicity until three successive tests are determined not to be positive.

5. Two successive valid positive toxicity results or three positive results out of five successive valid effluent toxicity tests will require a toxicity reduction evaluation to be completed to eliminate the toxicity.

6. A non-toxic test result shall be indicated as a "1" on the monthly operation report. A toxic test result shall be indicated as a "2" on the monthly operation report. DNR Form 542-1381 shall also be submitted to the DNR field office along with the monthly operation report.

Ceriodaphnia and Pimephales Toxicity Effluent Limits

The maximum limit of "1" for the parameters Acute Toxicity, Ceriodaphnia and Acute Toxicity, Pimephales means no positive toxicity results.

Definition: "Positive toxicity result" means a statistical difference of mortality rate between the control and the diluted effluent sample. For more information, see USEPA, October 2002, Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition, USEPA, Office of Water, Washington, D.C., EPA 821-R-02-012.

Facility Name: VINTON CITY OF STP

Permit Number: 0688001

Design Capacity

Design: 1

The design capacity for the treatment works is specified in Construction Permit Number 80-312-S, issued Saturday, November 29, 1980. The treatment plant is designed to treat:

* An average dry weather (ADW) flow of 1.4800 Million Gallons Per Day (MGD).
* An average wet weather (AWW) flow of 1.7900 Million Gallons Per Day (MGD).
* A maximum wet weather (MWW) flow of 2.5300 Million Gallons Per Day (MGD).
* A design 5-day biochemical oxygen demand (BOD5) load of 2168 lbs/day.
* A design Total Kjeldahl Nitrogen (TKN) load of 199.00 lbs/day.

Operator Certification Type/Grade: WW/III

Wastes in such volumes or quantities as to exceed the design capacity of the treatment works or reduce the effluent quality below that specified in the operation permit of the treatment works are considered to be a waste which interferes with the operation or performance of the treatment works and are prohibited by subrule IAC 567-62.1(7).

Facility Name: VINTON CITY OF STP

Permit Number: 0688001

SEWAGE SLUDGE HANDLING AND DISPOSAL REQUIREMENTS

"Sewage sludge" is solid, semisolid, or liquid residue generated during the treatment of domestic sewage in a treatment works. Sewage sludge does not include the grit and screenings generated during preliminary treatment.

1. The permittee shall comply with all existing Federal and State laws and regulations that apply to the use and disposal of sewage sludge and with technical standards developed pursuant to Section 405(d) of the Clean Water Act when such standards are promulgated. If an applicable numerical limit or management practice for pollutants in sewage sludge is promulgated after issuance of this permit that is more stringent than a sludge pollutant limit or management practice specified in existing Federal or State laws or regulations, this permit shall be modified, or revoked and reissued, to conform to the regulations promulgated under Section 405(d) of the Clean Water Act. The permittee shall comply with the limitation no later than the compliance deadline specified in the applicable regulations.

2. The permittee shall provide written notice to the Department of Natural Resources prior to any planned changes in sludge disposal practices.

3. Land application of sewage sludge shall be conducted in accordance with criteria established in rule IAC 567 67.1 through 67.11 (455B).

Facility Name: VINTON CITY OF STP

Permit Number: 0688001

MAJOR CONTRIBUTING INDUSTRIES LIMITATIONS, MONITORING AND REPORTING REQUIREMENTS

1. You are required to notify the department, in writing, of any of the following:

(a) 180 days prior to the introduction of pollutants to your facility from a significant industrial user. A significant industrial user means an industrial user of a treatment works that:
(1) Discharges an average of 25,000 gallons per day or more of process wastewater excluding sanitary, noncontact cooling and boiler blowdown wastewater;
(2) Contributes a process waste stream which makes up five percent or more of the average dry weather hydraulic or organic capacity of the publicly-owned treatment works:
(3) Is subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N; or
(4) Is designated by the department as a significant industrial user on the basis that the contributing industry, either singly or in combination with other contributing industries, has a reasonable potential for adversely affecting the operation of or effluent quality from the publicly-owned treatment works or for violating any pretreatment standards or requirements.

(b) 60 days prior to a proposed expansion, production increase or process modification that may result in the discharge of a new pollutant or a discharge in excess of limitations stated in the existing treatment agreement.

(c) 10 days prior to any commitment by you to accept waste from any new significant industrial user. Your written notification must include a new or revised treatment agreement in accordance with rule 64.3(5)(455B).

2. You shall require all users of your facility to comply with Sections 204(b), 307 and 308 of the Clean Water Act.

Section 204(b) requires that all users of the treatment works constructed with funds provided under Sections 201(g) or 601 of the Act to pay their proportionate share of the costs of operation, maintenance and replacement of the treatment works.

Section 307 of the Act requires users to comply with pretreatment standards promulgated by EPA for pollutants that would cause interference with the treatment process or would pass through the treatment works.

Section 308 of the Act requires users to allow access at reasonable times to state and EPA inspectors for the purpose of sampling the discharge and reviewing and copying records.

3. You shall limit and monitor pollutants for each significant industrial user as required elsewhere in this permit, and submit sample results to the department monthly. Your report shall be submitted by the fifteenth day of the following month.

Revised: June 16, 2009 CAC

Facility Name: VINTON CITY OF STP
Permit Number: 0688001

Nutrient Reduction Strategy Construction Schedule

Total Nitrogen and Total Phosphorus – Outfall 001

The City of Vinton shall implement the strategy recommended in the Nutrient Reduction Strategy Feasibility Study report approved by the Department on August 9, 2017, for reducing total nitrogen and total phosphorus in the final effluent. Construction of improvements shall be implemented according to the following schedule:

- The City shall submit progress reports annually on **September 1st** with the next report being due by **September 1, 2020**. Progress reports must include status updates on the activities identified in the Feasibility Study report's recommended schedule.
- Complete construction of improvements by **January 1, 2027.**
- Complete 6 months of treatment plant optimization for nutrient reduction by **July 1, 2027.**
- Submit one year of at least weekly total nitrogen and total phosphorus sampling data from the raw waste and final effluent by **August 1, 2028**. The report must include the results of all monitoring for total nitrogen and total phosphorus in the raw waste and final effluent between July 1, 2027 and June 30, 2028.

Progress reports shall be submitted by the required due dates. Within fourteen (14) days following all dates of construction completion, optimization completion, and one year of monitoring, the permittee shall provide written notice of compliance with the scheduled event along with any applicable data. All written notices and progress reports shall be sent to the following addresses:

Ann Seda
Iowa Department of Natural Resources
502 East 9th Street
Des Moines, IA 50319

Iowa Department of Natural Resources
Environmental Services Division
Regional Office #1
909 West Main Street, Suite 4
Manchester, IA 52057

STANDARD CONDITIONS

1. ADMINISTRATIVE RULES

Rules of this Department that govern the operation of your facility in connection with this permit are published in Part 567 of the Iowa Administrative Code (IAC) in Chapters 60-65, 67, and 121. Reference to the term "rule" in this permit means the designated provision of Part 567 of the IAC. Reference to the term "CFR" means the Code of Federal Regulations.

2. DEFINITIONS

(a) 7 day average means the sum of the total daily discharges by mass, volume, or concentration during a 7 consecutive day period, divided by the total number of days during the period that measurements were made. Four 7 consecutive day periods shall be used each month to calculate the 7-day average. The first 7-day period shall begin with the first day of the month.

(b) 30 day average means the sum of the total daily discharges by mass, volume, or concentration during a calendar month, divided by the total number of days during the month that measurements were made.

(c) Daily maximum means the total discharge by mass, volume, or concentration during a twenty-four hour period.

3. DUTY TO PROVIDE INFORMATION

You must furnish to the Director, within a reasonable time, any information the Director may request to determine compliance with this permit or determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, in accordance with 567 IAC 64.3(11)"*c*". You must also furnish to the Director, upon request, copies of any records required to be kept by this permit.

4. MONITORING AND RECORDS OF OPERATION

(a) Maintenance of records. You shall retain for a minimum of three years all paper and electronic records of monitoring activities and results including all original strip chart recordings for continuous monitoring instrumentation and calibration and maintenance records. ***{See 567 IAC 63.2(3)}***

(b) Any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000 or by imprisonment for not more than two years, or both. ***{See 40 CFR 122.41(j)(5)}***

5. SIGNATORY REQUIREMENTS

Applications, reports or other information submitted to the Department in connection with this permit must be signed and certified in accordance with 567 IAC 64.3(8).

6. OTHER INFORMATION

Where you become aware that you failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application, you must promptly submit such facts or information. Where you become aware that you failed to submit any relevant facts in the submission of in any report to the director, including records of operation, you shall promptly submit such facts or information. ***{See 567 IAC 60.4(2)"a" and 567 IAC 63.7}***

7. TRANSFER OF TITLE OR OWNER ADDRESS CHANGE

If title to your facility, or any part of it, is transferred the new owner shall be subject to this permit. You are required to notify the new owner of the requirements of this permit in writing prior to any transfer of title. The Director shall be notified in writing within 30 days of the transfer. No transfer of the authorization to discharge from the facility represented by the permit shall take place prior to notifying the department of the transfer of title. Whenever the address of the owner is changed, the department shall be notified in writing within 30 days of the address change. Electronic notification is not sufficient; all title transfers or address changes must be reported to the department by mail. ***{See 567 IAC 64.14}***

8. PROPER OPERATION AND MAINTENANCE

All facilities and control systems shall be operated as efficiently as possible and maintained in good working order. A sufficient number of staff, adequately trained and knowledgeable in the operation of your facility shall be retained at all times and adequate laboratory controls and appropriate quality assurance procedures shall be provided to maintain compliance with the conditions of this permit. ***{See 40 CFR 122.41(e) and 567 IAC 64.7(7)"f"}***

9. PERMIT MODIFICATION, SUSPENSION OR REVOCATION

(a) This permit may be modified, suspended, or revoked and reissued for cause including but not limited to those specified in 567 IAC 64.3(11).

(b) This permit may be modified due to conditions or information on which this permit is based, including any new standard the department may adopt that would change the required effluent limits. ***{See 567 IAC 64.3(11)}***

(c) If a toxic pollutant is present in your discharge and more stringent standards for toxic pollutants are established under Section 307(a) of the Clean Water Act, this permit will be modified in accordance with the new standards. ***{See 40 CFR 122.62(a)(6) and 567 IAC 64.7(7)"g"}***

The filing of a request for a permit modification, revocation or suspension, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

10. DUTY TO REAPPLY AND PERMIT CONTINUATION

If you wish to continue to discharge after the expiration date of this permit, you must file a complete application for reissuance at least 180 days prior to the expiration date of this permit. If a timely and sufficient application is submitted, this permit will remain in effect until the Department makes a final determination on the permit application. ***{See 567 IAC 64.8(1) and Iowa Code 17A.18}***

11. DUTY TO COMPLY

You must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. Issuance of this permit does not relieve you of the responsibility to comply with all local, state and federal laws, ordinances, regulations or other legal requirements applying to the operation of your facility. ***{See 40 CFR 122.41(a) and 567 IAC 64.7(4)"e"}***

STANDARD CONDITIONS

12. DUTY TO MITIGATE

You shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment. ***{See 40 CFR 122.41(d) and 567 IAC 64.7(7)"i"}***

13. TWENTY-FOUR HOUR REPORTING

You shall report any noncompliance that may endanger human health or the environment, including, but not limited to, violations of maximum daily limits for any toxic pollutant (listed as toxic under 307(a)(1) of the Clean Water Act) or hazardous substance (as designated in 40 CFR Part 116 pursuant to 311 of the Clean Water Act). Information shall be provided orally within 24 hours from the time you become aware of the circumstances. A written submission that includes a description of noncompliance and its cause; the period of noncompliance including exact dates and times, whether the noncompliance has been corrected or the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent a reoccurrence of the noncompliance must be provided within 5 days of the occurrence. ***{See 567 IAC 63.12}***

14. OTHER NONCOMPLIANCE

You shall report all instances of noncompliance not reported under Condition #13 at the time monitoring reports are submitted. You shall give advance notice to the appropriate regional field office of the department of any planned activity which may result in noncompliance with permit requirements. ***{See 567 IAC 63.14}***

15. INSPECTION OF PREMISES, RECORDS, EQUIPMENT, METHODS AND DISCHARGES

You are required to permit authorized personnel to:

(a) Enter upon the premises where a regulated facility or activity is located or conducted or where records are kept under conditions of this permit;

(b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

(c) Inspect, at reasonable times, any facilities, equipment, practices or operations regulated or required under this permit; and

(d) Sample or monitor, at reasonable times, to assure compliance or as otherwise authorized by the Clean Water Act.

16. FAILURE TO SUBMIT FEES

This permit may be revoked, in whole or in part, if the appropriate permit fees are not submitted within thirty (30) days of the date of notification that such fees are due. ***{See 567 IAC 64.16(1)}***

17. NEED TO HALT OR REDUCE ACTIVITY

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. ***{See 40 CFR 122.41(c) and 567 IAC 64.7(7)"j"}***

18. NOTICE OF CHANGED CONDITIONS

You are required to notify the director of any changes in existing conditions or information on which this permit is based. This includes, but is not limited to, the following:

(a) If your facility is a publicly owned treatment works (POTW) or otherwise may accept waste for treatment from an indirect discharger or industrial contributor (See 567 IAC 64.3(5) for further notice requirements).

(b) If your facility is a POTW and there is any substantial change in the volume or character of pollutants being introduced to the POTW by a source introducing pollutants into the POTW at the time of issuance of the permit. ***{See 40 CFR 122.42(b)}***

(c) As soon as you know or have reason to believe that any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in this permit. ***{See 40 CFR 122.42(a)}***

(d) If you have begun or will begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant which was not reported in the permit application.

19. PLANNED CHANGES

The permittee shall give notice to the appropriate regional field office of the department 30 days prior to any planned physical alterations or additions to the permitted facility. Notice is required only when:

(a) Notice has not been given to any other section of the department. (Note: Facility expansions, production increases, or process modifications which may result in new or increased discharges of pollutants must be reported to the Director in advance. If such discharges will exceed effluent limitations, your report must include an application for a new permit. If any modification of, addition to, or construction of a disposal system is to be made, you must first obtain a written permit from this Department. In addition, no construction activity that will result in disturbance of one acre or more shall be initiated without first obtaining coverage under NPDES General Permit No. 2 for "Storm water discharge associated with construction activity.") ***{See 567 IAC 64.7(7)"a" and 64.2}***

(b) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source as defined in 567 IAC 60.2;

(c) The alteration or addition results in a significant change in the permittee's sludge use or disposal practices; or

(d) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are not subject to effluent limitations in the permit. ***{See 567 IAC 63.13 and 63.14}***

20. USE OF CERTIFIED LABORATORIES

Analyses of wastewater, groundwater or sewage sludge that are required to be submitted to the department as a result of this permit must be performed by a laboratory certified by the State of Iowa. Routine, on-site monitoring for pH, temperature, dissolved oxygen, total residual chlorine and other pollutants that must be analyzed immediately upon sample collection, settleable solids, physical measurements, and operational monitoring tests specified in 567 IAC 63.3(4) are excluded from this requirement.

STANDARD CONDITIONS

21. BYPASSES

(a) Definition. "Bypass" means the diversion of waste streams from any portion of a treatment facility or collection system. A bypass does not include internal operational waste stream diversions that are part of the design of the treatment facility, maintenance diversions where redundancy is provided, diversions of wastewater from one point in a collection system to another point in a collection system, or wastewater backups into buildings that are caused in the building lateral or private sewer line.

(b) Prohibitions.

i. Bypasses from any portion of a treatment facility or from a sanitary sewer collection system designed to carry only sewage are prohibited.

ii. Bypass is prohibited and the department may not assess a civil penalty against a permittee for bypass if the permittee has complied with all of the following:

(1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; and

(2) There were no feasible alternatives to the bypass such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

(3) The permittee submitted notices as required by paragraph (d) of this section.

(c) The Director may approve an anticipated bypass after considering its adverse effects if the Director determines that it will meet the three conditions listed above and a request for bypass has been submitted to the Department in accordance with 567 IAC 63.6(2).

(d) Reporting bypasses. Bypasses shall be reported in accordance with 567 IAC 63.6.

22. UPSET PROVISION

(a) Definition. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

(b) Effect of an upset. An upset constitutes an affirmative defense in an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph *"c"* of this condition are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

(c) Conditions necessary for demonstration of an upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate through properly signed operating logs or other relevant evidence that;

i. An upset occurred and that the permittee can identify the cause(s) of the upset;

ii. The permitted facility was at the time being properly operated;

iii. The permittee submitted notice of the upset to the Department in accordance with 567 IAC 63.6(3); and

iv. The permittee complied with any remedial measures required in accordance with 567 IAC 63.6(6)"*b*".

(d) Burden of Proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

23. PROPERTY RIGHTS

This permit does not convey any property rights of any sort or any exclusive privilege. ***{See 567 IAC 64.4(3)"b"}***

24. EFFECT OF A PERMIT

Compliance with a permit during its term constitutes compliance, for purposes of enforcement, with Sections 301, 302, 306, 307, 318, 403 and 405(a)-(b) of the Clean Water Act, and equivalent limitations and standards set out in 567 IAC Chapters 61 and 62. ***{See 567 IAC 64.4(3)"a"}***

25. SEVERABILITY

The provisions of this permit are severable and if any provision or application of any provision to any circumstance is found to be invalid by this department or a court of law, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected by such finding.

Appendix G.3 –
Laboratory Testing

Truck

Landfill Leachate Lab Bench Sheet 2024

Influent BOD-5 Date In: 2-7 Date Out: 2/12
Time In: 2:00 Time Out: 7:45

Bottle No:	ML. Sample	IDO:	FDO:	CBOD-5
5	12	9.22	0.21	
6	15	9.16	—	
7	20	9.11	—	

7175
~~175~~ Est

Avg. CBOD-5 _____ Mg/l

Inf. TSS ML of Sample: 100 Date: 2-7 Time In: 11:00 Time Out: 8:00

Sample #	I.W.	F.W.	Mg/l
A-1	.4990	.15187	197
A-2	.14945	.15864	919

Avg. 197 Mg/l

Nitrogen Ammonia Date: 2-7
ML of Sample: 280
N-Titration: 0 TO 159
Eff N. 159 Mg/l

Temp,P.H., D.O.and S.S. are Grab samples. Date: Time:
Temp. Raw 5° C P.H. Raw 7.15 Raw S.S._____

D.O. Raw 6.73

P.H. Meter Calibration 4.0,7.0,10.0 Buffer [—] Check if Completed

Analyst responsible for above information: J. Vaylor

Keystone LABORATORIES
A Microbac Company

Keystone Laboratories - Waterloo

CERTIFICATE OF ANALYSIS

2HB0101

City of Van Horne

Jared Vogeler
114 Main St
Van Horne, IA 52346

Project Name: WL Wastewater

Project / PO Number: / [none]
Received: 02/07/2024
Reported: 02/22/2024

Work Order Special Information

Vogeler, Jared

Analytical Testing Parameters

Client Sample ID:	Truck Leachate		
Sample Matrix:	Water	**Collected By:**	Vogeler, Jared
Lab Sample ID:	2HB0101-01	**Collection Date:**	02/07/2024 8:00

Analyses Performed by: Keystone Laboratories - Newton

Determination of Conventional Chemistry Parameters	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 1664A								
Oil and Grease	**5**	4	mg/L	1		02/09/24 1352	02/12/24 1500	CCB
EPA 351.2								
Nitrogen, Kjeldahl, total	**192**	2.50	mg/L	1			02/19/24 0903	AKK

Definitions

RL: Reporting Limit

Report Comments

Reviewed and Approved By:

Tammy Thome

Tammy Thome
Lab Supervisor
02/22/24 08:15

Truch

Landfill Leachate Lab Bench Sheet 2024

Influent BOD-5 Date In: 2-14 Date Out: 2-19
Time In: 12:00 Time Out: 8:00

Bottle No:	ML. Sample	IDO:	FDO:	CBOD-5
5	4	9.22	3.43	434
6	6	9.18	1.76	
7	8	9.14	—	

Avg. CBOD-5 434 Mg/l

Inf. TSS ML of Sample: 100 Date: 2-14 Time In: 8:30 Time Out: 7:30

Sample #	I.W.	F.W.	Mg/l
A-1	.4916	.5028	112
A-2	.4965	.5074	109

Avg. 110 Mg/l

Nitrogen Ammonia Date: 2-14
ML of Sample: 280
N-Titration: 0 TO 176.5
Eff N. 176.5 Mg/l

Temp,P.H., D.O.and S.S. are Grab samples. Date: Time:
Temp. Raw 8° C P.H. Raw 7.12 Raw S.S.

D.O. Raw 4.03

P.H. Meter Calibration 4.0,7.0,10.0 Buffer [✓] Check if Completed

Analyst responsible for above information: G Voyn

Truck

Landfill Leachate Lab Bench Sheet 2024

Influent BOD-5 Date In: 2-21 Date Out: 2-26
Time In: 11:15 Time Out: 8:00

Bottle No:	ML. Sample	IDO:	FDO:	CBOD-5
5	4	9.22	4.65	343
6	6	9.13	2.21	346
7	8	9.10	6.24	—

Avg. CBOD-5 345 Mg/l

Inf. TSS ML of Sample: 100 Date: 2-21 Time In: 8:30 Time Out: 7:45

Sample #	I.W.	F.W.	Mg/l
A-1	.4907	.5017	110
A-2	.4933	.5090	157

Avg. 134 Mg/l

Nitrogen Ammonia Date: 2-21
ML of Sample: 28c
N-Titration: 0 TO 174.4
Eff N. 174.4 Mg/l

Temp,P.H., D.O.and S.S. are Grab samples. Date: Time:
Temp. Raw _____C P.H. Raw 7.08 Raw S.S._____

D.O. Raw 1.22

P.H. Meter Calibration 4.0,7.0,10.0 Buffer [✓] Check if Completed

Analyst responsible for above information: A Vega

Truck

Landfill Leachate Lab Bench Sheet 2024

Influent BOD-5 Date In: 2-28 Date Out: 3-4
Time In: 12:30 Time Out: 8:00

Bottle No:	ML. Sample	IDO:	FDO:	CBOD-5
7	4	8.89	4.92	298
14	6	8.72	2.47	313
	8			

Avg. CBOD-5 306 Mg/l

Inf. TSS ML of Sample: 100 Date: 2-28 Time In: 10:00 Time Out: 8:30

Sample #	I.W.	F.W.	Mg/l
A-1	.4944	.5015	71
A-2	.5038	.5123	85

Avg. 78 Mg/l

Nitrogen Ammonia Date: 2-28
ML of Sample: 280
N-Titration: 0 TO 182.1
Eff N. 182.1 Mg/l

Temp,P.H., D.O.and S.S. are Grab samples. Date: Time:
Temp. Raw _____C P.H. Raw 7.00 Raw S.S._____

D.O. Raw 0.87

P.H. Meter Calibration 4.0,7.0,10.0 Buffer [✓] Check if Completed

A. Vogan

Analyst responsible for above information:

Truck

Landfill Leachate Lab Bench Sheet 2024

Influent BOD-5 Date In: 3-6 Date Out: 3-4
Time In: 10:30 Time Out: 7:30

Bottle No:	ML. Sample	IDO:	FDO:	CBOD-5
5	4	9.11	6.47	198
6	6	9.04	5.48	178
7	8	9.01	3.80	195

Avg. CBOD-5 190 Mg/l

Inf. TSS ML of Sample: 100 Date: 3-6 Time In: 8:30 Time Out: 7:30

Sample #	I.W.	F.W.	Mg/l
A-1	.4986	.5102	116
A-2	.4914	.5073	159

Avg. 138 Mg/l

Nitrogen Ammonia Date: 3-6
ML of Sample: 25
N-Titration: — TO 210.6
Eff N. 210.6 Mg/l

Temp,P.H., D.O.and S.S. are Grab samples. Date: Time:
Temp. Raw 80 C P.H. Raw 7.31 Raw S.S.

D.O. Raw 6.43

P.H. Meter Calibration 4.0,7.0,10.0 Buffer ✓ Check if Completed

Analyst responsible for above information:

Truck

Landfill Leachate Lab Bench Sheet 2024

Influent BOD-5 Date In: 3-13 Date Out: 3-18
Time In: 10:30 Time Out: 10:30

Bottle No:	ML. Sample	IDO:	FDO:	CBOD-5
14	4	9.02	6.43	194
15	6	8.95	5.06	195
16	8	8.94	3.75	195

Avg. CBOD-5 195 Mg/l

Inf. TSS ML of Sample: 100 Date: 3-17 Time In: 9:36 Time Out:

Sample #	I.W.	F.W.	Mg/l
A-1	.5034	.5165	131
A-2	.5026	.5184	158

Avg. 145 Mg/l

Nitrogen Ammonia Date: 3-13
ML of Sample: 25c
N-Titration: 8 TO 169
Eff N. 169 Mg/l

Temp,P.H., D.O.and S.S. are Grab samples. Date: Time:
Temp. Raw 90 C P.H. Raw 7.40 Raw S.S.

D.O. Raw 7.10

P.H. Meter Calibration 4.0,7.0,10.0 Buffer ✓ Check if Completed

Analyst responsible for above information: J Voyles

50
50
50
19

MICROBAC®

Microbac Laboratories, Inc., Waterloo

CERTIFICATE OF ANALYSIS

2HC0259

City of Van Horne

Jared Vogeler
114 Main St
Van Horne, IA 52346

Project Name: WL Wastewater

Project / PO Number: N/A
Received: 03/13/2024
Reported: 03/26/2024

Work Order Special Information

Jared

Analytical Testing Parameters

Client Sample ID:	Truck Leachate		
Sample Matrix:	Water	**Collected By:**	Vogeler, Jared
Lab Sample ID:	2HC0259-01	**Collection Date:**	03/13/2024 8:00

Analyses Performed by: Microbac Laboratories, Inc., Newton

Determination of Conventional Chemistry Parameters	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 1664A								
Oil and Grease	<4	4	mg/L	1	**PH-3**	03/19/24 0839	03/20/24 1500	CCB
EPA 351.2								
Nitrogen, Kjeldahl, total	**107**	5.00	mg/L	10		03/15/24 1430	03/25/24 1528	AKK

Definitions

PH-3: Insufficient preservative to adjust the sample pH to less than 2, value measured at 6 pH units.
RL: Reporting Limit

Report Comments

Reviewed and Approved By:

Olivia Weber

Olivia Weber
Customer Service Assoc.
03/26/24 09:24

Truck

Landfill Leachate Lab Bench Sheet 2024

Influent BOD-5 Date In: 4-3 Date Out: 4-8
Time In: 11:05 Time Out: 7:30

Bottle No:	ML. Sample	IDO:	FDO:	CBOD-5
5	4	8.72	7.30	107
6	6	8.66	6.62	102
7	8	8.61	5.80	105

Avg. CBOD-5 104 Mg/l

Inf. TSS ML of Sample: 100 Date: 4-3 Time In: 9:00 Time Out:

Sample #	I.W.	F.W.	Mg/l
A-1	.5029	.5103	74
A-2	.4963	.5039	76

Avg. 75 Mg/l

Nitrogen Ammonia Date: 4-3
ML of Sample: 28c
N-Titration: 0 TO 129
Eff N. 129 Mg/l

Temp,P.H., D.O.and S.S. are Grab samples. Date: Time:
Temp. Raw 3° C P.H. Raw 7.53 Raw S.S.

D.O. Raw 7.82

P.H. Meter Calibration 4.0,7.0,10.0 Buffer ☑ Check if Completed

Analyst responsible for above information: C Vaughn

Truth

Landfill Leachate Lab Bench Sheet 2024

Influent BOD-5 Date In: 5-8 Date Out: _____
Time In: 11:01 Time Out: 7:30

Bottle No:	ML. Sample	IDO:	FDO:	CBOD-5
5	4	8.70	1.79	518
6	6	8.60		
7	8	8.50		

Avg. CBOD-5 518 Mg/l

Inf. TSS ML of Sample: 100 Date: 5-8 Time In: 1:10 Time Out: 7:30

Sample #	I.W.	F.W.	Mg/l
A-1	.5037	.5124	87
A-2	.4998	.5101	103

Avg. 95 Mg/l

Nitrogen Ammonia Date: 5-8
ML of Sample: 250
N-Titration: 0 TO 167
Eff N. 167 Mg/l

Temp,P.H., D.O.and S.S. are Grab samples. Date: Time:
Temp. Raw _____C P.H. Raw_____ Raw S.S._____

D.O. Raw

P.H. Meter Calibration 4.0,7.0,10.0 Buffer [/] Check if Completed

Analyst responsible for above information:

Truck

Landfill Leachate Lab Bench Sheet 2024

Influent BOD-5 Date In: 5-15 Date Out: 5-20
Time In: 1:06 Time Out: 7:30

Bottle No:	ML. Sample	IDO:	FDO:	CBOD-5
14	2	8.85	—	
15	4	8.76	—	
16	6	8.68	—	

EST. 7,600

Avg. CBOD-5 _____ Mg/l

Inf. TSS ML of Sample: 100 Date: 5-15 Time In: 10:45 Time Out: 8:00

Sample #	I.W.	F.W.	Mg/l
A-1	.4935	.5152	217
A-2	.4962	.5184	222

Avg. 220 Mg/l

Nitrogen Ammonia Date: 5-15
ML of Sample: 280
N-Titration: 0 TO 184.6
Eff N. 184.6 Mg/l

Temp,P.H., D.O.and S.S. are Grab samples. Date: Time:
Temp. Raw _____C P.H. Raw_____ Raw S.S._____

D.O. Raw

P.H. Meter Calibration 4.0,7.0,10.0 Buffer [✓] Check if Completed

Analyst responsible for above information:

Truck

Landfill Leachate Lab Bench Sheet 2024

Influent BOD-5 Date In: 6-19 Date Out: 6-24
Time In: 1030 Time Out: 2:60

Bottle No:	ML. Sample	IDO:	FDO:	CBOD-5
14	2	9.16	6.30	429
15	4	9.07	2.12	521
16	6	9.06	~	

Avg. CBOD-5 475 Mg/l

Inf. TSS ML of Sample 100 Date: 6-19 Time In: 8:15 Time Out:

Sample #	I.W.	F.W.	Mg/l
A-1	.5047	.5279	232
A-2	.5018	.5280	262

Avg. 247 Mg/l

Nitrogen Ammonia Date: 6-19
ML of Sample: 280
N-Titration: 0 TO 155.4
Eff N. 155.4 Mg/l

Temp,P.H., D.O.and S.S. are Grab samples. Date: Time:
Temp. Raw 18C C P.H. Raw 6.92 Raw S.S.

D.O. Raw 1,39

P.H. Meter Calibration 4.0,7.0,10.0 Buffer ☑ Check if Completed

Analyst responsible for above information:

Truck

Landfill Leachate Lab Bench Sheet 2024

Influent BOD-5 Date In: 6-26 Date Out: 7-1
Time In: 11:30 Time Out: 7:30

Bottle No:	ML. Sample	IDO:	FDO:	CBOD-5
5	2	8.96	7.97	149
6	4	8.94	7.01	145
7	6	8.91	6.18	137

Avg. CBOD-5 137 Mg/l

Inf. TSS ML of Sample: 100 Date: 6-26 Time In: 9:30 Time Out: 7:30

Sample #	I.W.	F.W.	Mg/l
A-1	.5023	.5128	105
A-2	.5034	.5145	111

Avg. 108 Mg/l

Nitrogen Ammonia Date: 6-26
ML of Sample: 280
N-Titration: 0 TO 53.9
Eff N. 53.9 Mg/l

Temp,P.H., D.O.and S.S. are Grab samples. Date: Time:
Temp. Raw 22° C P.H. Raw 7.31 Raw S.S.

D.O. Raw 5.99

P.H. Meter Calibration 4.0,7.0,10.0 Buffer [✓] Check if Completed

Analyst responsible for above information:

Truk

Landfill Leachate Lab Bench Sheet 2024

Influent BOD-5 Date In: 7-3 Date Out: 7-8
Time In: 10:30 Time Out: 8:00

Bottle No:	ML. Sample	IDO:	FDO:	CBOD-5
14	4	8.99	5.58	256
15	6	8.94	3.80	257
16	8	8.90	2.11	255

Avg. CBOD-5 256 Mg/l

Inf. TSS ML of Sample: 100 Date: 7-2 Time In: Time Out:

Sample #	I.W.	F.W.	Mg/l
A-1	.4987	.5156	169
A-2	.4974	.5153	179

Avg. 174 Mg/l

Nitrogen Ammonia Date: 7-2
ML of Sample: 280
N-Titration: 0 TO 219
Eff N. 219 Mg/l

Temp,P.H., D.O.and S.S. are Grab samples. Date: Time:
Temp. Raw _____C P.H. Raw_____ Raw S.S._____

D.O. Raw

P.H. Meter Calibration 4.0,7.0,10.0 Buffer ✓ Check if Completed

Analyst responsible for above information:

Truth

Landfill Leachate Lab Bench Sheet 2024

Influent BOD-5 Date In: 7-10 Date Out: 7-15
Time In: 10:30 Time Out: 7:30

Bottle No:	ML. Sample	IDO:	FDO:	CBOD-5

Avg. CBOD-5 _____ Mg/l

Inf. TSS ML of Sample: 100 Date: 7-10 Time In: 11:30 Time Out: 9:00

Sample #	I.W.	F.W.	Mg/l
A-1	.4975	.5157	182
A-2	.4926	.5074	148

Avg. 165 Mg/l

Nitrogen Ammonia Date: 7-10
ML of Sample: 280
N-Titration: 0 TO 102
Eff N. 102 Mg/l

Temp,P.H., D.O.and S.S. are Grab samples. Date: Time:
Temp. Raw _____C P.H. Raw_____ Raw S.S._____

D.O. Raw

P.H. Meter Calibration 4.0,7.0,10.0 Buffer [✓] Check if Completed

Analyst responsible for above information:

Truck

Landfill Leachate Lab Bench Sheet 2024

Influent BOD-5 Date In: 7-24 Date Out: 7-29
Time In: 11:30 Time Out: 8:00

Bottle No:	ML. Sample	IDO:	FDO:	CBOD-5
5	4	9.05	8.05	
6	6	9.03	7.68	68
7	8	9.00	7.19	68

Avg. CBOD-5 68 Mg/l

Inf. TSS ML of Sample: 100 Date: 7-24 Time In: 10:26 Time Out: 8:00

Sample #	I.W.	F.W.	Mg/l
A-1	.4952	.5068	116
A-2	.5030	.5129	99

Avg. 108 Mg/l

Nitrogen Ammonia Date: 7-24
ML of Sample: 280
N-Titration: _____ TO _____
Eff N. <50 Mg/l

Temp,P.H., D.O.and S.S. are Grab samples. Date: Time:
Temp. Raw 21° C P.H. Raw 7.35 Raw S.S. _____

D.O. Raw 6.25

P.H. Meter Calibration 4.0,7.0,10.0 Buffer [/] Check if Completed

Analyst responsible for above information: [signature]

Truck

Landfill Leachate Lab Bench Sheet 2024

Influent BOD-5 Date In: 8-21 Date Out: 8-26
Time In: 11:00 Time Out: 4:00

Bottle No:	ML. Sample	IDO:	FDO:	CBOD-5
5	4	8.88	3.79	382
6	8	8.71	—	
7	12	8.57		

Avg. CBOD-5 382 Mg/l

Inf. TSS ML of Sample: 100 Date: 8-21 Time In: 8:36 Time Out: 8:40

Sample #	I.W.	F.W.	Mg/l
A-1	.5017	.5222	205
A2	.4977	.5177	200

Avg. 203 Mg/l

Nitrogen Ammonia Date: 8-21
ML of Sample: 280
N-Titration: 0 TO 232
Eff N. 232 Mg/l

Temp,P.H., D.O.and S.S. are Grab samples. Date: Time:
Temp. Raw 18° C P.H. Raw 6.96 Raw S.S.

D.O. Raw 0.92

P.H. Meter Calibration 4.0,7.0,10.0 Buffer [✓] Check if Completed

Analyst responsible for above information: J. Napp

Landfill Leachate Lab Bench Sheet 2024 Truck

Influent BOD-5 Date In: 8-28 Date Out: 9-2
Time In: 11:30 Time Out: 7:30

Bottle No:	ML. Sample	IDO:	FDO:	CBOD-5
5	2	8.79	7.12	251
6	4	8.73	4.02	353
7	6	8.67	5.67	150

Avg. CBOD-5 252 Mg/l

Inf. TSS ML of Sample: 100 Date: 8-28 Time In: 9:30 Time Out: 7:45

Sample #	I.W.	F.W.	Mg/l
A-1	.4948	.5171	223
A-2	.4970	.5187	217

Avg. 220 Mg/l

Nitrogen Ammonia Date: _____
ML of Sample: _____
N-Titration: _____ TO _____
Eff N. _____ Mg/l

Temp,P.H., D.O.and S.S. are Grab samples. Date: Time:
Temp. Raw _____ C P.H. Raw _____ Raw S.S. _____

D.O. Raw

P.H. Meter Calibration 4.0,7.0,10.0 Buffer ☑ Check if Completed

Analyst responsible for above information: [signature]

Landfill Leachate Lab Bench Sheet 2024 TRUE

Influent BOD-5 Date In: 9-4 Date Out: 9-9
Time In: 1:00 Time Out: 8:00

Bottle No:	ML. Sample	IDO:	FDO:	CBOD-5
5	2	8.93	4.44	6.74
6	4	8.86	—	
7	6	8.81	—	

Avg. CBOD-5 6.74 Mg/l

Inf. TSS ML of Sample: 100 Date: 9-4 Time In: 10:30 Time Out:

Sample #	I.W.	F.W.	Mg/l
A-1	.4996	.5173	1.77
A-2	.4963	.5168	2.05

Avg. 1.91 Mg/l

Nitrogen Ammonia Date: _____
ML of Sample: _____
N-Titration: _____ TO _____
Eff N. _____ Mg/l

Temp,P.H., D.O.and S.S. are Grab samples. Date: Time:
Temp. Raw _____ C P.H. Raw _____ Raw S.S. _____

D.O. Raw

P.H. Meter Calibration 4.0,7.0,10.0 Buffer ☐ Check if Completed

Analyst responsible for above information:

Truck

Landfill Leachate Lab Bench Sheet 2024

Influent BOD-5 Date In: 11-20 Date Out: 11-25
Time In: 2:00 Time Out: 8:00

Bottle No:	ML. Sample	IDO:	FDO:	CBOD-5
5	10	9.48	9.07	
6	20	9.47	8.90	8
7	40	9.54	8.59	7

7 EST

Avg. CBOD-5 _____ Mg/l

Inf. TSS ML of Sample: 100 Date: 11-20 Time In: 2:36 Time Out: 8:00

Sample #	I.W.	F.W.	Mg/l
A-1	.4993	.5012	19
A2	.4985	.5008	23

Avg. 21 Mg/l

Nitrogen Ammonia Date: 11-20
ML of Sample: 250
N-Titration: ~ TO 20.1
Eff N. 20.1 Mg/l

Temp,P.H., D.O.and S.S. are Grab samples. Date: Time:
Temp. Raw _____C P.H. Raw_____ Raw S.S._____

D.O. Raw

P.H. Meter Calibration 4.0,7.0,10.0 Buffer [✓] Check if Completed

Analyst responsible for above information: J. Voyn

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HC0788

Project Description

Leachate

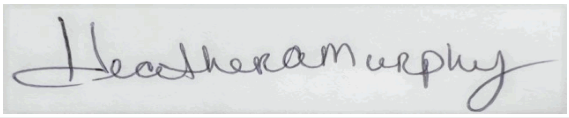
For:

Todd Whipple

HLW Engineering

PO Box 314

Story City, IA 50248



Heather Murphy

Customer Relationship Specialist

Friday, March 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.

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Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HC0788

HLW Engineering

Todd Whipple
PO Box 314
Story City, IA 50248

Project Name: Leachate

Project / PO Number: N/A
Received: 03/12/2024
Reported: 03/29/2024

Sample Summary Report

Sample Name	Laboratory ID	Client Matrix	Sample Type	Sample Begin	Sample Taken	Lab Received
Leachate	1HC0788-01	Water	GRAB		03/11/24 11:31	03/12/24 10:55

Analytical Testing Parameters

Client Sample ID:	Leachate		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC0788-01	**Collection Date:**	03/11/2024 11:31

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 624								
Chloromethane	<1.0	1.0	ug/L	1		03/14/24 0000	03/14/24 1550	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		03/14/24 0000	03/14/24 1550	CSM
Bromomethane	<1.0	1.0	ug/L	1		03/14/24 0000	03/14/24 1550	CSM
Chloroethane	<1.0	1.0	ug/L	1		03/14/24 0000	03/14/24 1550	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/14/24 0000	03/14/24 1550	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		03/14/24 0000	03/14/24 1550	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/14/24 0000	03/14/24 1550	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/14/24 0000	03/14/24 1550	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/14/24 0000	03/14/24 1550	CSM
Chloroform	<1.0	1.0	ug/L	1		03/14/24 0000	03/14/24 1550	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/14/24 0000	03/14/24 1550	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/14/24 0000	03/14/24 1550	CSM
Benzene	<1.0	1.0	ug/L	1		03/14/24 0000	03/14/24 1550	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/14/24 0000	03/14/24 1550	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		03/14/24 0000	03/14/24 1550	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/14/24 0000	03/14/24 1550	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		03/14/24 0000	03/14/24 1550	CSM
2-Chloroethylvinyl ether	<10.0	10.0	ug/L	1		03/14/24 0000	03/14/24 1550	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/14/24 0000	03/14/24 1550	CSM
Toluene	<1.0	1.0	ug/L	1		03/14/24 0000	03/14/24 1550	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/14/24 0000	03/14/24 1550	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/14/24 0000	03/14/24 1550	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/14/24 0000	03/14/24 1550	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		03/14/24 0000	03/14/24 1550	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		03/14/24 0000	03/14/24 1550	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		03/14/24 0000	03/14/24 1550	CSM
Bromoform	<1.0	1.0	ug/L	1		03/14/24 0000	03/14/24 1550	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/14/24 0000	03/14/24 1550	CSM
Surrogate: 1,2-Dichloroethane-d4	106	Limit: 66-134	% Rec	1		03/14/24 0000	03/14/24 1550	CSM
Surrogate: Toluene-d8	98.6	Limit: 91-113	% Rec	1		03/14/24 0000	03/14/24 1550	CSM
Surrogate: 4-Bromofluorobenzene	104	Limit: 83-112	% Rec	1		03/14/24 0000	03/14/24 1550	CSM

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 625								
Bis(2-Chloroethyl) Ether	<10	10	ug/L	1		03/18/24 1340	03/26/24 2001	EPP
2-Chlorophenol	<10	10	ug/L	1		03/18/24 1340	03/26/24 2001	EPP
1,3-Dichlorobenzene	<10	10	ug/L	1		03/18/24 1340	03/26/24 2001	EPP
1,4-Dichlorobenzene	<10	10	ug/L	1		03/18/24 1340	03/26/24 2001	EPP
Benzyl Alcohol	<10	10	ug/L	1		03/18/24 1340	03/26/24 2001	EPP
1,2-Dichlorobenzene	<10	10	ug/L	1		03/18/24 1340	03/26/24 2001	EPP

Client Sample ID:	Leachate		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC0788-01	**Collection Date:**	03/11/2024 11:31

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Bis[2-Chloroisopropyl]ether	<10	10	ug/L	1		03/18/24 1340	03/26/24 2001	EPP
n-Nitroso-di-n-propylamine	<10	10	ug/L	1		03/18/24 1340	03/26/24 2001	EPP
Hexachloroethane	<10	10	ug/L	1		03/18/24 1340	03/26/24 2001	EPP
Nitrobenzene	<10	10	ug/L	1		03/18/24 1340	03/26/24 2001	EPP
Isophorone	<10	10	ug/L	1		03/18/24 1340	03/26/24 2001	EPP
2-Nitrophenol	<10	10	ug/L	1		03/18/24 1340	03/26/24 2001	EPP
2,4-Dimethylphenol	<10	10	ug/L	1		03/18/24 1340	03/26/24 2001	EPP
Bis (2-Chloroethoxy) Methane	<10	10	ug/L	1		03/18/24 1340	03/26/24 2001	EPP
Benzoic acid	<50	50	ug/L	1		03/18/24 1340	03/26/24 2001	EPP
2,4-Dichlorophenol	<10	10	ug/L	1		03/18/24 1340	03/26/24 2001	EPP
1,2,4-Trichlorobenzene	<10	10	ug/L	1		03/18/24 1340	03/26/24 2001	EPP
Naphthalene	<10	10	ug/L	1		03/18/24 1340	03/26/24 2001	EPP
Hexachlorobutadiene	<20	20	ug/L	1		03/18/24 1340	03/26/24 2001	EPP
4-Chloro-3-methylphenol	<10	10	ug/L	1		03/18/24 1340	03/26/24 2001	EPP
Hexachlorocyclopentadiene	<20	20	ug/L	1		03/18/24 1340	03/26/24 2001	EPP
2,4,6-Trichlorophenol	<10	10	ug/L	1		03/18/24 1340	03/26/24 2001	EPP
2,4,5-Trichlorophenol	<50	50	ug/L	1		03/18/24 1340	03/26/24 2001	EPP
2-Chloronaphthalene	<10	10	ug/L	1		03/18/24 1340	03/26/24 2001	EPP
Dimethylphthalate	<15	15	ug/L	1		03/18/24 1340	03/26/24 2001	EPP
Acenaphthylene	<10	10	ug/L	1		03/18/24 1340	03/26/24 2001	EPP
2,6-Dinitrotoluene	<10	10	ug/L	1		03/18/24 1340	03/26/24 2001	EPP
Acenaphthene	<10	10	ug/L	1		03/18/24 1340	03/26/24 2001	EPP
2,4-Dinitrophenol	<20	20	ug/L	1		03/18/24 1340	03/26/24 2001	EPP
Dibenzofuran	<10	10	ug/L	1		03/18/24 1340	03/26/24 2001	EPP
2,4-Dinitrotoluene	<10	10	ug/L	1		03/18/24 1340	03/26/24 2001	EPP
4-Nitrophenol	<10	10	ug/L	1		03/18/24 1340	03/26/24 2001	EPP
Diethyl Phthalate	<30	30	ug/L	1		03/18/24 1340	03/26/24 2001	EPP
Fluorene	<10	10	ug/L	1		03/18/24 1340	03/26/24 2001	EPP
4-Chlorophenyl Phenyl Ether	<10	10	ug/L	1		03/18/24 1340	03/26/24 2001	EPP
4,6-Dinitro-2-methylphenol	<20	20	ug/L	1		03/18/24 1340	03/26/24 2001	EPP
N-Nitrosodiphenylamine	<10	10	ug/L	1		03/18/24 1340	03/26/24 2001	EPP
4-Bromophenyl Phenyl Ether	<10	10	ug/L	1		03/18/24 1340	03/26/24 2001	EPP
Hexachlorobenzene	<10	10	ug/L	1		03/18/24 1340	03/26/24 2001	EPP
Pentachlorophenol	<20	20	ug/L	1		03/18/24 1340	03/26/24 2001	EPP
Phenanthrene	<10	10	ug/L	1		03/18/24 1340	03/26/24 2001	EPP
Anthracene	<10	10	ug/L	1		03/18/24 1340	03/26/24 2001	EPP
Di-n-butyl Phthalate	<10	10	ug/L	1		03/18/24 1340	03/26/24 2001	EPP
Fluoranthene	<10	10	ug/L	1		03/18/24 1340	03/26/24 2001	EPP
Pyrene	<10	10	ug/L	1		03/18/24 1340	03/26/24 2001	EPP
Butyl Benzyl Phthalate	<10	10	ug/L	1		03/18/24 1340	03/26/24 2001	EPP
Benzo(a)anthracene	<10	10	ug/L	1		03/18/24 1340	03/26/24 2001	EPP
Chrysene	<10	10	ug/L	1		03/18/24 1340	03/26/24 2001	EPP
Bis(2-Ethylhexyl) Phthalate	<10	10	ug/L	1		03/18/24 1340	03/26/24 2001	EPP

Client Sample ID:	Leachate		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC0788-01	**Collection Date:**	03/11/2024 11:31

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Di-n-octyl Phthalate	<10	10	ug/L	1		03/18/24 1340	03/26/24 2001	EPP
Indeno(1,2,3-cd)Pyrene	<10	10	ug/L	1		03/18/24 1340	03/26/24 2001	EPP
3,3´-Dichlorobenzidine	<20	20	ug/L	1		03/18/24 1340	03/26/24 2001	EPP
Benzo(b)Fluoranthene	<10	10	ug/L	1		03/18/24 1340	03/26/24 2001	EPP
Benzo(k)Fluoranthene	<10	10	ug/L	1		03/18/24 1340	03/26/24 2001	EPP
Benzo(a)Pyrene	<10	10	ug/L	1		03/18/24 1340	03/26/24 2001	EPP
Dibenzo(a,h)anthracene	<10	10	ug/L	1		03/18/24 1340	03/26/24 2001	EPP
Benzo(g,h,i)perylene	<10	10	ug/L	1		03/18/24 1340	03/26/24 2001	EPP
Surrogate: 2-Fluorophenol	48.5	Limit: 19-139	% Rec	1		03/18/24 1340	03/26/24 2001	EPP
Surrogate: Phenol-d6	43.4	Limit: 14-154	% Rec	1		03/18/24 1340	03/26/24 2001	EPP
Surrogate: Nitrobenzene-d5	64.4	Limit: 17-146	% Rec	1		03/18/24 1340	03/26/24 2001	EPP
Surrogate: 2-Fluorobiphenyl	65.4	Limit: 18-122	% Rec	1		03/18/24 1340	03/26/24 2001	EPP
Surrogate: 2,4,6-Tribromophenol	71.8	Limit: 21-151	% Rec	1		03/18/24 1340	03/26/24 2001	EPP
Surrogate: Terphenyl-dl4	85.7	Limit: 27-131	% Rec	1		03/18/24 1340	03/26/24 2001	EPP

Determination of Organochlorine Insecticides & PCBs	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 608								
Gamma-BHC [Lindane]	<0.05	0.05	ug/L	1		03/15/24 1236	03/27/24 1417	EPP
Beta-BHC	<0.05	0.05	ug/L	1		03/15/24 1236	03/27/24 1417	EPP
Heptachlor	<0.05	0.05	ug/L	1		03/15/24 1236	03/27/24 1417	EPP
Delta-BHC	<0.05	0.05	ug/L	1		03/15/24 1236	03/27/24 1417	EPP
Aldrin	<0.05	0.05	ug/L	1		03/15/24 1236	03/27/24 1417	EPP
Heptachlor Epoxide	<0.05	0.05	ug/L	1		03/15/24 1236	03/27/24 1417	EPP
Endosulfan I	<0.05	0.05	ug/L	1		03/15/24 1236	03/27/24 1417	EPP
4,4`-DDE	<0.05	0.05	ug/L	1		03/15/24 1236	03/27/24 1417	EPP
Dieldrin	<0.05	0.05	ug/L	1		03/15/24 1236	03/27/24 1417	EPP
Endrin	<0.05	0.05	ug/L	1		03/15/24 1236	03/27/24 1417	EPP
4,4`-DDD	<0.05	0.05	ug/L	1		03/15/24 1236	03/27/24 1417	EPP
Endosulfan II	<0.05	0.05	ug/L	1		03/15/24 1236	03/27/24 1417	EPP
4,4`-DDT	<0.05	0.05	ug/L	1		03/15/24 1236	03/27/24 1417	EPP
Endrin Aldehyde	<0.05	0.05	ug/L	1		03/15/24 1236	03/27/24 1417	EPP
Endosulfan Sulfate	<0.05	0.05	ug/L	1		03/15/24 1236	03/27/24 1417	EPP
Chlordane	<0.10	0.10	ug/L	1		03/15/24 1236	03/27/24 1417	EPP
Toxaphene	<0.20	0.20	ug/L	1		03/15/24 1236	03/27/24 1417	EPP
Arochlor 1016	<0.20	0.20	ug/L	1		03/15/24 1236	03/27/24 1417	EPP
Arochlor 1221	<0.20	0.20	ug/L	1		03/15/24 1236	03/27/24 1417	EPP
Arochlor 1232	<0.20	0.20	ug/L	1		03/15/24 1236	03/27/24 1417	EPP
Arochlor 1242	<0.20	0.20	ug/L	1		03/15/24 1236	03/27/24 1417	EPP
Arochlor 1248	<0.20	0.20	ug/L	1		03/15/24 1236	03/27/24 1417	EPP
Arochlor 1254	<0.20	0.20	ug/L	1		03/15/24 1236	03/27/24 1417	EPP
Arochlor 1260	<0.20	0.20	ug/L	1		03/15/24 1236	03/27/24 1417	EPP
Surrogate: Decachlorobiphenyl	87.0	Limit: 19-120	% Rec	1		03/15/24 1236	03/27/24 1417	EPP
Surrogate: Tetrachloro-m-xylene	87.1	Limit: 30-119	% Rec	1		03/15/24 1236	03/27/24 1417	EPP

Client Sample ID:	Leachate		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC0788-01	**Collection Date:**	03/11/2024 11:31

Determination of Conventional Chemistry Parameters	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
5310B								
Total Organic Carbon	**198**	50.0	mg/L	100		03/27/24 0000	03/27/24 1110	CSM
SM 4500 H+ B								
pH	**7.7**	0.5	pH	1	**I-03**	03/13/24 1427	03/13/24 1434	BSS
SM 5210 B								
BOD (5 day)	**175**	6	mg/L	3		03/13/24 0926	03/13/24 1008	MND
TIMBERLINE								
Nitrogen, Ammonia	**141**	10.0	mg/L	100		03/21/24 1026	03/21/24 1337	LJS
USGS I-1750-85								
Total Dissolved Solids (TDS)	**2150**	5	mg/L	1		03/13/24 0824	03/13/24 1240	MEAH
USGS I-3765-85								
Total Suspended Solids (TSS)	**139**	1	mg/L	1		03/15/24 0821	03/18/24 1100	MEAH

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
200.7								
Iron, total	**14.7**	0.100	mg/L	1		03/14/24 1532	03/15/24 1709	JAR
245.1								
Mercury, total	<0.00050	0.00050	mg/L	1		03/18/24 1503	03/19/24 1548	JAR
EPA 200.8								
Arsenic, total	**0.0110**	0.0020	mg/L	4		03/14/24 0835	03/15/24 0359	RVV
Barium, total	**0.509**	0.0020	mg/L	4		03/14/24 0835	03/15/24 0359	RVV
Cadmium, total	<0.0002	0.0002	mg/L	4		03/14/24 0835	03/15/24 0359	RVV
Chromium, total	**0.0160**	0.0020	mg/L	4		03/14/24 0835	03/15/24 0359	RVV
Copper, total	**0.0042**	0.0020	mg/L	4		03/14/24 0835	03/15/24 0359	RVV
Lead, total	**0.0013**	0.0008	mg/L	4		03/14/24 0835	03/15/24 0359	RVV
Nickel, total	**0.0619**	0.0040	mg/L	4		03/14/24 0835	03/15/24 0359	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/14/24 0835	03/15/24 0359	RVV
Silver, total	<0.0020	0.0020	mg/L	4		03/14/24 0835	03/15/24 0359	RVV
Zinc, total	**0.0294**	0.0200	mg/L	4		03/14/24 0835	03/15/24 0359	RVV

Batch Log Summary

Method	Batch	Laboratory ID	Client / Source ID
USGS I-1750-85	1HC0691	1HC0788-01	Leachate
		1HC0691-BS1	
		1HC0691-DUP1	1HC0511-01
		1HC0691-BLK1	

Method	Batch	Laboratory ID	Client / Source ID
SM 5210 B	1HC0702	1HC0702-BLK1	
		1HC0702-SRM1	
		1HC0788-01	Leachate
		1HC0702-DUP1	1HC0777-01

Method	Batch	Laboratory ID	Client / Source ID
SM 4500 H+ B	1HC0750	1HC0788-01	Leachate
		1HC0750-SRM1	
		1HC0750-SRM2	
		1HC0750-DUP1	1HC0788-01

Method	Batch	Laboratory ID	Client / Source ID
EPA 200.8	1HC0782	1HC0782-BLK1	
		1HC0782-BS1	
		1HC0782-MS1	1HC0572-01
		1HC0782-MSD1	1HC0572-01
		1HC0782-PS1	1HC0572-01
		1HC0788-01	Leachate

Method	Batch	Laboratory ID	Client / Source ID
200.7	1HC0838	1HC0838-BLK1	
		1HC0838-BS1	
		1HC0788-01	Leachate
		1HC0838-MS1	1HC0824-01
		1HC0838-MSD1	1HC0824-01
		1HC0838-PS1	1HC0824-01

Method	Batch	Laboratory ID	Client / Source ID
EPA 624	1HC0850	1HC0850-BS1	
		1HC0850-BSD1	
		1HC0850-BLK1	
		1HC0788-01	Leachate
		1HC0850-MS1	1HC0342-01
		1HC0850-MSD1	1HC0342-01

Method	Batch	Laboratory ID	Client / Source ID
USGS I-3765-85	1HC0855	1HC0855-BS1	
		1HC0855-DUP1	1HC0738-01
		1HC0855-BLK1	
		1HC0788-01	Leachate

Method	Batch	Laboratory ID	Client / Source ID
EPA 608	1HC0885	1HC0885-BLK1	
		1HC0885-BS1	
		1HC0885-BSD1	
		1HC0788-01	Leachate

Method	Batch	Laboratory ID	Client / Source ID
EPA 625	1HC0943	1HC0943-BS1	
		1HC0943-BSD1	
		1HC0943-SRM1	
		1HC0788-01	Leachate
		1HC0943-BLK1	

Method	Batch	Laboratory ID	Client / Source ID
245.1	1HC0965	1HC0965-BLK1	
		1HC0965-BS1	
		1HC0965-MS1	1HC0713-12
		1HC0965-MSD1	1HC0713-12
		1HC0788-01	Leachate

Method	Batch	Laboratory ID	Client / Source ID
TIMBERLINE	1HC1195	1HC1195-BLK1	
		1HC1195-BS1	
		1HC1195-MS1	1HC0783-02
		1HC1195-MSD1	1HC0783-02
		1HC0788-01	Leachate

Method	Batch	Laboratory ID	Client / Source ID
5310B	1HC1664	1HC1664-BS1	
		1HC1664-BSD1	
		1HC1664-BLK1	
		1HC0788-01	Leachate
		1HC1664-DUP1	1HC1212-01

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

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0850 - EPA 5030B - EPA 624										
Blank (1HC0850-BLK1)				Prepared: 03/14/24 00:00 Analyzed: 03/14/24 11:03						
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							
1,1-Dichloroethylene	<1.0	1.0	ug/L							
Methylene Chloride	<5.0	5.0	ug/L							
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L							
1,1-Dichloroethane	<1.0	1.0	ug/L							
cis-1,2-Dichloroethylene	<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							
Bromodichloromethane	<1.0	1.0	ug/L							
2-Chloroethylvinyl ether	<10.0	10.0	ug/L							
cis-1,3-Dichloropropene	<1.0	1.0	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							
Dibromochloromethane	<1.0	1.0	ug/L							
Chlorobenzene	<1.0	1.0	ug/L							
Ethylbenzene	<1.0	1.0	ug/L							
Bromoform	<1.0	1.0	ug/L							
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L							
Surrogate: 1,2-Dichloroethane-d4	*51.5*		ug/L	*50.1*		*103*	*66-134*			
Surrogate: Toluene-d8	*49.6*		ug/L	*50.4*		*98.3*	*91-113*			
Surrogate: 4-Bromofluorobenzene	*52.4*		ug/L	*50.1*		*105*	*83-112*			
LCS (1HC0850-BS1)				Prepared: 03/14/24 00:00 Analyzed: 03/14/24 09:43						
Chloromethane	32.92	1.0	ug/L	30.6		107	63-145			
Vinyl Chloride	28.95	1.0	ug/L	30.2		95.8	68-145			
Bromomethane	34.24	1.0	ug/L	28.8		119	69-150			
Chloroethane	32.21	1.0	ug/L	31.6		102	74-134			
1,1-Dichloroethylene	52.08	1.0	ug/L	50.0		104	76-139			
Methylene Chloride	44.60	5.0	ug/L	50.0		89.2	67-141			
trans-1,2-Dichloroethylene	47.93	1.0	ug/L	50.0		95.9	71-137			
1,1-Dichloroethane	47.29	1.0	ug/L	50.0		94.6	72-130			
cis-1,2-Dichloroethylene	47.30	1.0	ug/L	49.5		95.6	81-134			
2-Butanone (MEK)	98.32	10.0	ug/L	103		95.2	44-158			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0850 - EPA 5030B - EPA 624										
LCS (1HC0850-BS1)				Prepared: 03/14/24 00:00 Analyzed: 03/14/24 09:43						
Chloroform	46.26	1.0	ug/L	50.0		92.5	76-132			
1,1,1-Trichloroethane	42.88	1.0	ug/L	50.0		85.8	65-122			
Carbon Tetrachloride	47.01	1.0	ug/L	50.0		94.0	66-132			
Benzene	45.82	1.0	ug/L	50.0		91.6	77-130			
1,2-Dichloroethane	44.13	1.0	ug/L	50.0		88.3	75-124			
Trichloroethylene	45.35	1.0	ug/L	50.0		90.7	79-126			
1,2-Dichloropropane	45.97	1.0	ug/L	50.0		91.9	79-128			
Dibromomethane	48.87	1.0	ug/L	50.0		97.7	71-139			
Bromodichloromethane	44.11	1.0	ug/L	50.0		88.2	76-122			
2-Chloroethylvinyl ether	99.49	10.0	ug/L	103		97.0	50-169			
cis-1,3-Dichloropropene	44.57	1.0	ug/L	50.3		88.6	74-122			
Toluene	45.30	1.0	ug/L	50.0		90.6	76-128			
trans-1,3-Dichloropropene	44.26	1.0	ug/L	50.4		87.8	73-125			
1,1,2-Trichloroethane	45.33	1.0	ug/L	50.0		90.7	74-126			
Tetrachloroethylene	45.31	1.0	ug/L	50.0		90.6	68-124			
Dibromochloromethane	47.17	1.0	ug/L	49.5		95.3	76-125			
Chlorobenzene	43.81	1.0	ug/L	50.0		87.6	77-120			
Ethylbenzene	44.47	1.0	ug/L	50.0		88.9	76-118			
Xylenes, total	133.5	2.0	ug/L	150		89.0	74-121			
Bromoform	49.03	1.0	ug/L	50.0		98.1	68-128			
1,1,2,2-Tetrachloroethane	47.01	1.0	ug/L	49.8		94.3	62-128			
1,3-Dichlorobenzene	45.28	1.0	ug/L	50.0		90.6	72-123			
1,4-Dichlorobenzene	46.34	1.0	ug/L	50.0		92.7	75-120			
1,2-Dichlorobenzene	44.85	1.0	ug/L	50.0		89.7	72-121			
Surrogate: Dibromofluoromethane	*51.3*		ug/L	*50.2*		*102*	*79-129*			
Surrogate: 1,2-Dichloroethane-d4	*51.2*		ug/L	*50.1*		*102*	*66-134*			
Surrogate: Toluene-d8	*50.2*		ug/L	*50.4*		*99.7*	*91-113*			
Surrogate: 4-Bromofluorobenzene	*50.0*		ug/L	*50.1*		*99.8*	*83-112*			
LCS Dup (1HC0850-BSD1)				Prepared: 03/14/24 00:00 Analyzed: 03/14/24 10:09						
Chloromethane	30.96	1.0	ug/L	30.6		101	63-145	6.14	27	
Vinyl Chloride	27.54	1.0	ug/L	30.2		91.1	68-145	4.99	30	
Bromomethane	32.76	1.0	ug/L	28.8		114	69-150	4.42	30	
Chloroethane	30.55	1.0	ug/L	31.6		96.6	74-134	5.29	29	
1,1-Dichloroethylene	49.52	1.0	ug/L	50.0		99.0	76-139	5.04	30	
Methylene Chloride	42.90	5.0	ug/L	50.0		85.8	67-141	3.89	25	
trans-1,2-Dichloroethylene	46.45	1.0	ug/L	50.0		92.9	71-137	3.14	29	
1,1-Dichloroethane	45.24	1.0	ug/L	50.0		90.5	72-130	4.43	27	
cis-1,2-Dichloroethylene	45.14	1.0	ug/L	49.5		91.2	81-134	4.67	23	
2-Butanone (MEK)	95.45	10.0	ug/L	103		92.4	44-158	2.96	25	
Chloroform	44.68	1.0	ug/L	50.0		89.4	76-132	3.47	26	
1,1,1-Trichloroethane	41.44	1.0	ug/L	50.0		82.9	65-122	3.42	29	
Carbon Tetrachloride	45.32	1.0	ug/L	50.0		90.6	66-132	3.66	30	

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0850 - EPA 5030B - EPA 624										
LCS Dup (1HC0850-BSD1)				Prepared: 03/14/24 00:00 Analyzed: 03/14/24 10:09						
Benzene	44.47	1.0	ug/L	50.0		88.9	77-130	2.99	27	
1,2-Dichloroethane	43.63	1.0	ug/L	50.0		87.3	75-124	1.14	25	
Trichloroethylene	43.97	1.0	ug/L	50.0		87.9	79-126	3.09	28	
1,2-Dichloropropane	44.43	1.0	ug/L	50.0		88.9	79-128	3.41	26	
Dibromomethane	48.48	1.0	ug/L	50.0		97.0	71-139	0.801	27	
Bromodichloromethane	43.11	1.0	ug/L	50.0		86.2	76-122	2.29	24	
2-Chloroethylvinyl ether	98.61	10.0	ug/L	103		96.1	50-169	0.888	28	
cis-1,3-Dichloropropene	43.72	1.0	ug/L	50.3		86.9	74-122	1.93	27	
Toluene	44.57	1.0	ug/L	50.0		89.1	76-128	1.62	28	
trans-1,3-Dichloropropene	43.90	1.0	ug/L	50.4		87.1	73-125	0.817	27	
1,1,2-Trichloroethane	45.07	1.0	ug/L	50.0		90.1	74-126	0.575	26	
Tetrachloroethylene	43.41	1.0	ug/L	50.0		86.8	68-124	4.28	28	
Dibromochloromethane	45.72	1.0	ug/L	49.5		92.4	76-125	3.12	23	
Chlorobenzene	42.25	1.0	ug/L	50.0		84.5	77-120	3.63	27	
Ethylbenzene	42.62	1.0	ug/L	50.0		85.2	76-118	4.25	27	
Xylenes, total	128.9	2.0	ug/L	150		86.0	74-121	3.51	27	
Bromoform	48.30	1.0	ug/L	50.0		96.6	68-128	1.50	25	
1,1,2,2-Tetrachloroethane	46.46	1.0	ug/L	49.8		93.2	62-128	1.18	28	
1,3-Dichlorobenzene	43.68	1.0	ug/L	50.0		87.4	72-123	3.60	29	
1,4-Dichlorobenzene	44.80	1.0	ug/L	50.0		89.6	75-120	3.38	26	
1,2-Dichlorobenzene	43.90	1.0	ug/L	50.0		87.8	72-121	2.14	30	
Surrogate: Dibromofluoromethane	*51.7*		ug/L	*50.2*		*103*	*79-129*			
Surrogate: 1,2-Dichloroethane-d4	*51.0*		ug/L	*50.1*		*102*	*66-134*			
Surrogate: Toluene-d8	*50.5*		ug/L	*50.4*		*100*	*91-113*			
Surrogate: 4-Bromofluorobenzene	*49.7*		ug/L	*50.1*		*99.0*	*83-112*			
Matrix Spike (1HC0850-MS1)	**Source: 1HC0342-01**			Prepared: 03/14/24 00:00 Analyzed: 03/14/24 17:10						
Chloromethane	354.2	10.0	ug/L	306	ND	116	50-155			
Vinyl Chloride	313.3	10.0	ug/L	302	ND	104	64-148			
Bromomethane	272.3	10.0	ug/L	288	ND	94.5	50-159			
Chloroethane	347.3	10.0	ug/L	316	ND	110	65-144			
1,1-Dichloroethylene	554.6	10.0	ug/L	500	ND	111	78-139			
Methylene Chloride	478.9	50.0	ug/L	500	ND	95.8	65-144			
trans-1,2-Dichloroethylene	508.0	10.0	ug/L	500	ND	102	67-142			
1,1-Dichloroethane	499.7	10.0	ug/L	500	ND	99.9	71-133			
cis-1,2-Dichloroethylene	516.3	10.0	ug/L	495	ND	104	76-142			
2-Butanone (MEK)	1073	100	ug/L	1030	ND	104	48-169			
Chloroform	495.3	10.0	ug/L	500	ND	99.1	75-133			
1,1,1-Trichloroethane	466.3	10.0	ug/L	500	ND	93.3	66-120			
Carbon Tetrachloride	501.3	10.0	ug/L	500	ND	100	67-132			
Benzene	490.5	10.0	ug/L	500	ND	98.1	79-128			
1,2-Dichloroethane	470.0	10.0	ug/L	500	ND	94.0	74-124			
Trichloroethylene	487.7	10.0	ug/L	500	ND	97.5	82-122			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0850 - EPA 5030B - EPA 624										
Matrix Spike (1HC0850-MS1)	**Source: 1HC0342-01**		Prepared: 03/14/24 00:00 Analyzed: 03/14/24 17:10							
1,2-Dichloropropane	493.2	10.0	ug/L	500	ND	98.6	80-126			
Dibromomethane	519.0	10.0	ug/L	500	ND	104	62-141			
Bromodichloromethane	468.9	10.0	ug/L	500	ND	93.8	77-119			
2-Chloroethylvinyl ether	<100	100	ug/L	1030	ND	2.26	10-157			QM-05
cis-1,3-Dichloropropene	470.8	10.0	ug/L	503	ND	93.6	69-120			
Toluene	488.6	10.0	ug/L	500	ND	97.7	80-125			
trans-1,3-Dichloropropene	463.5	10.0	ug/L	504	ND	91.9	70-122			
1,1,2-Trichloroethane	485.7	10.0	ug/L	500	ND	97.1	73-127			
Tetrachloroethylene	473.6	10.0	ug/L	500	ND	94.7	70-122			
Dibromochloromethane	477.0	10.0	ug/L	495	ND	96.4	75-122			
Chlorobenzene	458.1	10.0	ug/L	500	ND	91.6	81-114			
Ethylbenzene	467.2	10.0	ug/L	500	ND	93.4	79-113			
Xylenes, total	1407	20.0	ug/L	1500	ND	93.8	79-114			
Bromoform	491.7	10.0	ug/L	500	ND	98.3	66-126			
1,1,2,2-Tetrachloroethane	469.1	10.0	ug/L	498	ND	94.1	56-132			
1,3-Dichlorobenzene	458.9	10.0	ug/L	500	ND	91.8	69-125			
1,4-Dichlorobenzene	477.1	10.0	ug/L	500	ND	95.4	73-119			
1,2-Dichlorobenzene	468.4	10.0	ug/L	500	ND	93.7	71-117			
Surrogate: Dibromofluoromethane	*517*		ug/L	*502*		*103*	*79-129*			
Surrogate: 1,2-Dichloroethane-d4	*514*		ug/L	*501*		*103*	*66-134*			
Surrogate: Toluene-d8	*510*		ug/L	*504*		*101*	*91-113*			
Surrogate: 4-Bromofluorobenzene	*502*		ug/L	*501*		*100*	*83-112*			
Matrix Spike Dup (1HC0850-MSD1)	**Source: 1HC0342-01**		Prepared: 03/14/24 00:00 Analyzed: 03/14/24 17:36							
Chloromethane	324.4	10.0	ug/L	306	ND	106	50-155	8.78	19	
Vinyl Chloride	294.2	10.0	ug/L	302	ND	97.3	64-148	6.29	24	
Bromomethane	239.8	10.0	ug/L	288	ND	83.3	50-159	12.7	17	
Chloroethane	330.1	10.0	ug/L	316	ND	104	65-144	5.08	28	
1,1-Dichloroethylene	536.5	10.0	ug/L	500	ND	107	78-139	3.32	20	
Methylene Chloride	469.1	50.0	ug/L	500	ND	93.8	65-144	2.07	16	
trans-1,2-Dichloroethylene	489.5	10.0	ug/L	500	ND	97.9	67-142	3.71	18	
1,1-Dichloroethane	490.9	10.0	ug/L	500	ND	98.2	71-133	1.78	16	
cis-1,2-Dichloroethylene	475.6	10.0	ug/L	495	ND	96.1	76-142	8.21	17	
2-Butanone (MEK)	1074	100	ug/L	1030	ND	104	48-169	0.102	17	
Chloroform	485.9	10.0	ug/L	500	ND	97.2	75-133	1.92	16	
1,1,1-Trichloroethane	442.6	10.0	ug/L	500	ND	88.6	66-120	5.22	15	
Carbon Tetrachloride	485.6	10.0	ug/L	500	ND	97.1	67-132	3.18	15	
Benzene	472.2	10.0	ug/L	500	ND	94.4	79-128	3.80	12	
1,2-Dichloroethane	468.3	10.0	ug/L	500	ND	93.7	74-124	0.362	12	
Trichloroethylene	463.5	10.0	ug/L	500	ND	92.7	82-122	5.09	13	
1,2-Dichloropropane	478.4	10.0	ug/L	500	ND	95.7	80-126	3.05	10	
Dibromomethane	520.3	10.0	ug/L	500	ND	104	62-141	0.250	11	
Bromodichloromethane	460.7	10.0	ug/L	500	ND	92.1	77-119	1.76	10	

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0850 - EPA 5030B - EPA 624										
Matrix Spike Dup (1HC0850-MSD1)	**Source: 1HC0342-01**	Prepared: 03/14/24 00:00 Analyzed: 03/14/24 17:36								
2-Chloroethylvinyl ether	<100	100	ug/L	1030	ND		10-157		30	QM-05
cis-1,3-Dichloropropene	465.6	10.0	ug/L	503	ND	92.5	69-120	1.11	10	
Toluene	473.5	10.0	ug/L	500	ND	94.7	80-125	3.14	12	
trans-1,3-Dichloropropene	467.6	10.0	ug/L	504	ND	92.7	70-122	0.881	10	
1,1,2-Trichloroethane	487.4	10.0	ug/L	500	ND	97.5	73-127	0.349	10	
Tetrachloroethylene	458.4	10.0	ug/L	500	ND	91.7	70-122	3.26	15	
Dibromochloromethane	478.4	10.0	ug/L	495	ND	96.6	75-122	0.293	12	
Chlorobenzene	448.9	10.0	ug/L	500	ND	89.8	81-114	2.03	12	
Ethylbenzene	453.8	10.0	ug/L	500	ND	90.8	79-113	2.91	13	
Xylenes, total	1363	20.0	ug/L	1500	ND	90.9	79-114	3.20	12	
Bromoform	496.2	10.0	ug/L	500	ND	99.2	66-126	0.911	16	
1,1,2,2-Tetrachloroethane	473.1	10.0	ug/L	498	ND	94.9	56-132	0.849	29	
1,3-Dichlorobenzene	452.1	10.0	ug/L	500	ND	90.4	69-125	1.49	18	
1,4-Dichlorobenzene	463.7	10.0	ug/L	500	ND	92.7	73-119	2.85	21	
1,2-Dichlorobenzene	462.2	10.0	ug/L	500	ND	92.4	71-117	1.33	23	
Surrogate: Dibromofluoromethane	*519*		ug/L	*502*		*103*	*79-129*			
Surrogate: 1,2-Dichloroethane-d4	*516*		ug/L	*501*		*103*	*66-134*			
Surrogate: Toluene-d8	*510*		ug/L	*504*		*101*	*91-113*			
Surrogate: 4-Bromofluorobenzene	*501*		ug/L	*501*		*99.9*	*83-112*			

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0943 - EPA 625 BNA - EPA 625										
Blank (1HC0943-BLK1)	Prepared: 03/18/24 13:40 Analyzed: 03/27/24 11:54									
Bis(2-Chloroethyl) Ether	<10	10	ug/L							
2-Chlorophenol	<10	10	ug/L							
1,3-Dichlorobenzene	<10	10	ug/L							
1,4-Dichlorobenzene	<10	10	ug/L							
Benzyl Alcohol	<10	10	ug/L							
1,2-Dichlorobenzene	<10	10	ug/L							
Bis[2-Chloroisopropyl]ether	<10	10	ug/L							
n-Nitroso-di-n-propylamine	<10	10	ug/L							
Hexachloroethane	<10	10	ug/L							
Nitrobenzene	<10	10	ug/L							
Isophorone	<10	10	ug/L							
2-Nitrophenol	<10	10	ug/L							
2,4-Dimethylphenol	<10	10	ug/L							
Bis (2-Chloroethoxy) Methane	<10	10	ug/L							
Benzoic acid	<50	50	ug/L							
2,4-Dichlorophenol	<10	10	ug/L							

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0943 - EPA 625 BNA - EPA 625										
Blank (1HC0943-BLK1)				Prepared: 03/18/24 13:40 Analyzed: 03/27/24 11:54						
1,2,4-Trichlorobenzene	<10	10	ug/L							
Naphthalene	<10	10	ug/L							
Hexachlorobutadiene	<20	20	ug/L							
4-Chloro-3-methylphenol	<10	10	ug/L							
Hexachlorocyclopentadiene	<20	20	ug/L							
2,4,6-Trichlorophenol	<10	10	ug/L							
2,4,5-Trichlorophenol	<50	50	ug/L							
2-Chloronaphthalene	<10	10	ug/L							
Dimethylphthalate	<15	15	ug/L							
Acenaphthylene	<10	10	ug/L							
2,6-Dinitrotoluene	<10	10	ug/L							
Acenaphthene	<10	10	ug/L							
2,4-Dinitrophenol	<20	20	ug/L							
Dibenzofuran	<10	10	ug/L							
2,4-Dinitrotoluene	<10	10	ug/L							
4-Nitrophenol	<10	10	ug/L							
Diethyl Phthalate	<30	30	ug/L							
Fluorene	<10	10	ug/L							
4-Chlorophenyl Phenyl Ether	<10	10	ug/L							
4,6-Dinitro-2-methylphenol	<20	20	ug/L							
N-Nitrosodiphenylamine	<10	10	ug/L							
4-Bromophenyl Phenyl Ether	<10	10	ug/L							
Hexachlorobenzene	<10	10	ug/L							
Pentachlorophenol	<20	20	ug/L							
Phenanthrene	<10	10	ug/L							
Anthracene	<10	10	ug/L							
Di-n-butyl Phthalate	<10	10	ug/L							
Fluoranthene	<10	10	ug/L							
Pyrene	<10	10	ug/L							
Butyl Benzyl Phthalate	<10	10	ug/L							
Benzo(a)anthracene	<10	10	ug/L							
Chrysene	<10	10	ug/L							
Bis(2-Ethylhexyl) Phthalate	<10	10	ug/L							
Di-n-octyl Phthalate	<10	10	ug/L							
Indeno(1,2,3-cd)Pyrene	<10	10	ug/L							
3,3´-Dichlorobenzidine	<20	20	ug/L							
Benzo(b)Fluoranthene	<10	10	ug/L							
Benzo(k)Fluoranthene	<10	10	ug/L							
Benzo(a)Pyrene	<10	10	ug/L							
Dibenzo(a,h)anthracene	<10	10	ug/L							
Benzo(g,h,i)perylene	<10	10	ug/L							

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0943 - EPA 625 BNA - EPA 625										
Blank (1HC0943-BLK1)				Prepared: 03/18/24 13:40 Analyzed: 03/27/24 11:54						
Surrogate: 2-Fluorophenol	*30.1*		ug/L	*61.6*		*48.9*	*19-139*			
Surrogate: Phenol-d6	*28.9*		ug/L	*63.5*		*45.6*	*14-154*			
Surrogate: Nitrobenzene-d5	*29.3*		ug/L	*62.6*		*46.8*	*17-146*			
Surrogate: 2-Fluorobiphenyl	*30.2*		ug/L	*60.0*		*50.4*	*18-122*			
Surrogate: 2,4,6-Tribromophenol	*41.0*		ug/L	*62.0*		*66.2*	*21-151*			
Surrogate: Terphenyl-dl4	*36.0*		ug/L	*60.0*		*59.9*	*27-131*			
LCS (1HC0943-BS1)				Prepared: 03/18/24 13:40 Analyzed: 03/26/24 15:06						
Bis(2-Chloroethyl) Ether	11.1	10	ug/L	25.0		44.3	35-150			
2-Chlorophenol	16.4	10	ug/L	25.0		65.6	51-117			
1,3-Dichlorobenzene	13.6	10	ug/L	25.0		54.2	27-91.3			
1,4-Dichlorobenzene	14.0	10	ug/L	25.0		56.1	28-92.6			
Benzyl Alcohol	11.6	10	ug/L	25.0		46.3	22-147			
1,2-Dichlorobenzene	14.4	10	ug/L	25.0		57.5	32-94.8			
Bis[2-Chloroisopropyl]ether	16.6	10	ug/L	25.0		66.3	40-125			
n-Nitroso-di-n-propylamine	14.4	10	ug/L	25.0		57.5	47-136			
Hexachloroethane	11.1	10	ug/L	25.0		44.5	13-110			
Nitrobenzene	17.2	10	ug/L	25.0		68.6	46-133			
Isophorone	16.0	10	ug/L	25.0		63.8	48-130			
2-Nitrophenol	17.9	10	ug/L	25.0		71.7	54-116			
2,4-Dimethylphenol	16.4	10	ug/L	25.0		65.5	47-121			
Bis (2-Chloroethoxy) Methane	15.5	10	ug/L	25.0		61.8	25-110			
2,4-Dichlorophenol	17.5	10	ug/L	25.0		69.9	50-118			
1,2,4-Trichlorobenzene	15.1	10	ug/L	25.0		60.3	27-95.5			
Naphthalene	15.1	10	ug/L	25.0		60.2	42-107			
Hexachlorobutadiene	<20	20	ug/L	25.0		39.4	10-110			
4-Chloro-3-methylphenol	16.3	10	ug/L	25.0		65.2	54-138			
Hexachlorocyclopentadiene	<20	20	ug/L	25.0		52.9	10-110			
2,4,6-Trichlorophenol	20.2	10	ug/L	25.0		80.6	46-127			
2,4,5-Trichlorophenol	<50	50	ug/L	25.0		80.3	62-119			
2-Chloronaphthalene	15.3	10	ug/L	25.0		61.4	38-118			
Dimethylphthalate	18.6	15	ug/L	25.0		74.5	58-125			
Acenaphthylene	17.0	10	ug/L	25.0		68.0	41-116			
2,6-Dinitrotoluene	18.6	10	ug/L	25.0		74.3	58-126			
Acenaphthene	16.9	10	ug/L	25.0		67.4	45-117			
2,4-Dinitrophenol	21.6	20	ug/L	25.0		86.4	21-138			
Dibenzofuran	17.0	10	ug/L	25.0		68.1	51-126			
2,4-Dinitrotoluene	16.6	10	ug/L	25.0		66.6	52-134			
4-Nitrophenol	15.8	10	ug/L	25.0		63.4	41-149			
Diethyl Phthalate	<30	30	ug/L	25.0		75.4	53-132			
Fluorene	16.8	10	ug/L	25.0		67.3	47-126			
4-Chlorophenyl Phenyl Ether	16.9	10	ug/L	25.0		67.5	47-124			
4,6-Dinitro-2-methylphenol	<20	20	ug/L	25.0		79.3	50-139			

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0943 - EPA 625 BNA - EPA 625										
LCS (1HC0943-BS1)				Prepared: 03/18/24 13:40 Analyzed: 03/26/24 15:06						
N-Nitrosodiphenylamine	19.1	10	ug/L	25.0		76.6	29-129			
4-Bromophenyl Phenyl Ether	19.5	10	ug/L	25.0		78.0	48-125			
Hexachlorobenzene	18.6	10	ug/L	25.0		74.6	29-137			
Pentachlorophenol	<20	20	ug/L	25.0		76.0	15-154			
Phenanthrene	18.2	10	ug/L	25.0		73.0	45-136			
Anthracene	18.0	10	ug/L	25.0		71.8	43-135			
Di-n-butyl Phthalate	18.1	10	ug/L	25.0		72.3	42-153			
Fluoranthene	16.4	10	ug/L	25.0		65.6	42-143			
Pyrene	19.3	10	ug/L	25.0		77.2	40-146			
Butyl Benzyl Phthalate	19.6	10	ug/L	25.0		78.4	40-151			
Benzo(a)anthracene	18.4	10	ug/L	25.0		73.6	48-136			
Chrysene	18.4	10	ug/L	25.0		73.7	50-136			
Bis(2-Ethylhexyl) Phthalate	19.9	10	ug/L	25.0		79.6	34-180			
Di-n-octyl Phthalate	20.3	10	ug/L	25.0		81.1	40-165			
Indeno(1,2,3-cd)Pyrene	19.2	10	ug/L	25.0		76.6	39-152			
Benzo(b)Fluoranthene	17.4	10	ug/L	25.0		69.7	52-140			
Benzo(k)Fluoranthene	19.3	10	ug/L	25.0		77.4	47-147			
Benzo(a)Pyrene	18.9	10	ug/L	25.0		75.6	38-142			
Dibenzo(a,h)anthracene	19.3	10	ug/L	25.0		77.4	37-153			
Benzo(g,h,i)perylene	18.6	10	ug/L	25.0		74.5	39-157			
Surrogate: 2-Fluorophenol	*37.3*		ug/L	*61.6*		*60.5*	*19-139*			
Surrogate: Phenol-d6	*35.0*		ug/L	*63.5*		*55.0*	*14-154*			
Surrogate: Nitrobenzene-d5	*41.9*		ug/L	*62.6*		*66.9*	*17-146*			
Surrogate: 2-Fluorobiphenyl	*41.8*		ug/L	*60.0*		*69.7*	*18-122*			
Surrogate: 2,4,6-Tribromophenol	*45.6*		ug/L	*62.0*		*73.6*	*21-151*			
Surrogate: Terphenyl-dl4	*49.2*		ug/L	*60.0*		*81.9*	*27-131*			
LCS Dup (1HC0943-BSD1)				Prepared: 03/18/24 13:40 Analyzed: 03/26/24 15:31						
Bis(2-Chloroethyl) Ether	11.3	10	ug/L	25.0		45.2	35-150	2.05	30	
2-Chlorophenol	17.9	10	ug/L	25.0		71.4	51-117	8.58	27	
1,3-Dichlorobenzene	14.0	10	ug/L	25.0		55.9	27-91.3	3.12	30	
1,4-Dichlorobenzene	14.4	10	ug/L	25.0		57.4	28-92.6	2.26	30	
Benzyl Alcohol	14.4	10	ug/L	25.0		57.7	22-147	21.8	30	
1,2-Dichlorobenzene	15.2	10	ug/L	25.0		60.8	32-94.8	5.61	30	
Bis[2-Chloroisopropyl]ether	17.7	10	ug/L	25.0		70.7	40-125	6.43	26	
n-Nitroso-di-n-propylamine	15.3	10	ug/L	25.0		61.2	47-136	6.20	29	
Hexachloroethane	11.6	10	ug/L	25.0		46.6	13-110	4.48	30	
Nitrobenzene	17.0	10	ug/L	25.0		67.9	46-133	0.996	19	
Isophorone	14.9	10	ug/L	25.0		59.6	48-130	6.87	23	
2-Nitrophenol	19.0	10	ug/L	25.0		76.0	54-116	5.80	25	
2,4-Dimethylphenol	17.0	10	ug/L	25.0		68.2	47-121	4.01	29	
Bis (2-Chloroethoxy) Methane	15.8	10	ug/L	25.0		63.0	25-110	1.86	30	
2,4-Dichlorophenol	18.1	10	ug/L	25.0		72.5	50-118	3.65	21	

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0943 - EPA 625 BNA - EPA 625										
LCS Dup (1HC0943-BSD1)			Prepared: 03/18/24 13:40 Analyzed: 03/26/24 15:31							
1,2,4-Trichlorobenzene	14.3	10	ug/L	25.0		57.3	27-95.5	5.10	30	
Naphthalene	15.6	10	ug/L	25.0		62.3	42-107	3.39	26	
Hexachlorobutadiene	<20	20	ug/L	25.0		41.8	10-110	5.91	30	
4-Chloro-3-methylphenol	17.1	10	ug/L	25.0		68.4	54-138	4.79	12	
Hexachlorocyclopentadiene	<20	20	ug/L	25.0		54.2	10-110	2.39	30	
2,4,6-Trichlorophenol	20.4	10	ug/L	25.0		81.5	46-127	1.04	21	
2,4,5-Trichlorophenol	<50	50	ug/L	25.0		81.6	62-119	1.58	15	
2-Chloronaphthalene	14.7	10	ug/L	25.0		58.7	38-118	4.40	24	
Dimethylphthalate	18.9	15	ug/L	25.0		75.6	58-125	1.55	20	
Acenaphthylene	16.9	10	ug/L	25.0		67.7	41-116	0.413	30	
2,6-Dinitrotoluene	19.3	10	ug/L	25.0		77.2	58-126	3.75	20	
Acenaphthene	17.6	10	ug/L	25.0		70.5	45-117	4.41	27	
2,4-Dinitrophenol	20.6	20	ug/L	25.0		82.6	21-138	4.55	22	
Dibenzofuran	17.4	10	ug/L	25.0		69.7	51-126	2.26	15	
2,4-Dinitrotoluene	17.9	10	ug/L	25.0		71.4	52-134	7.01	22	
4-Nitrophenol	17.1	10	ug/L	25.0		68.4	41-149	7.59	28	
Diethyl Phthalate	<30	30	ug/L	25.0		76.6	53-132	1.53	22	
Fluorene	17.5	10	ug/L	25.0		70.2	47-126	4.13	27	
4-Chlorophenyl Phenyl Ether	17.0	10	ug/L	25.0		68.2	47-124	1.00	20	
4,6-Dinitro-2-methylphenol	21.6	20	ug/L	25.0		86.2	50-139	8.36	25	
N-Nitrosodiphenylamine	19.2	10	ug/L	25.0		76.9	29-129	0.469	30	
4-Bromophenyl Phenyl Ether	19.3	10	ug/L	25.0		77.2	48-125	1.08	18	
Hexachlorobenzene	18.4	10	ug/L	25.0		73.5	29-137	1.46	30	
Pentachlorophenol	21.9	20	ug/L	25.0		87.5	15-154	14.0	29	
Phenanthrene	18.8	10	ug/L	25.0		75.2	45-136	3.02	27	
Anthracene	19.1	10	ug/L	25.0		76.5	43-135	6.31	28	
Di-n-butyl Phthalate	19.9	10	ug/L	25.0		79.6	42-153	9.53	29	
Fluoranthene	19.3	10	ug/L	25.0		77.2	42-143	16.2	30	
Pyrene	19.5	10	ug/L	25.0		78.2	40-146	1.29	25	
Butyl Benzyl Phthalate	19.1	10	ug/L	25.0		76.5	40-151	2.43	29	
Benzo(a)anthracene	18.5	10	ug/L	25.0		74.0	48-136	0.542	30	
Chrysene	18.7	10	ug/L	25.0		74.8	50-136	1.56	30	
Bis(2-Ethylhexyl) Phthalate	20.0	10	ug/L	25.0		79.8	34-180	0.351	30	
Di-n-octyl Phthalate	20.1	10	ug/L	25.0		80.5	40-165	0.792	30	
Indeno(1,2,3-cd)Pyrene	19.6	10	ug/L	25.0		78.4	39-152	2.27	30	
Benzo(b)Fluoranthene	18.5	10	ug/L	25.0		73.8	52-140	5.80	30	
Benzo(k)Fluoranthene	19.4	10	ug/L	25.0		77.6	47-147	0.310	30	
Benzo(a)Pyrene	19.0	10	ug/L	25.0		76.2	38-142	0.685	30	
Dibenzo(a,h)anthracene	19.7	10	ug/L	25.0		78.9	37-153	2.00	30	
Benzo(g,h,i)perylene	19.6	10	ug/L	25.0		78.4	39-157	5.18	30	
Surrogate: 2-Fluorophenol	*33.4*		ug/L	*61.6*		*54.1*	*19-139*			

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0943 - EPA 625 BNA - EPA 625										
LCS Dup (1HC0943-BSD1)			Prepared: 03/18/24 13:40 Analyzed: 03/26/24 15:31							
Surrogate: Phenol-d6	*30.0*		ug/L	*63.5*		*47.2*	*14-154*			
Surrogate: Nitrobenzene-d5	*38.3*		ug/L	*62.6*		*61.2*	*17-146*			
Surrogate: 2-Fluorobiphenyl	*38.2*		ug/L	*60.0*		*63.6*	*18-122*			
Surrogate: 2,4,6-Tribromophenol	*45.6*		ug/L	*62.0*		*73.5*	*21-151*			
Surrogate: Terphenyl-dl4	*46.7*		ug/L	*60.0*		*77.8*	*27-131*			
Reference (1HC0943-SRM1)			Prepared: 03/18/24 13:40 Analyzed: 03/26/24 15:55							
Bis(2-Chloroethyl) Ether	14.8	10	ug/L	25.0		59.4	80-120			QR-06
2-Chlorophenol	22.7	10	ug/L	25.0		90.8	80-120			
1,3-Dichlorobenzene	23.0	10	ug/L	25.0		91.8	80-120			
1,4-Dichlorobenzene	23.0	10	ug/L	25.0		92.1	80-120			
Benzyl Alcohol	17.3	10	ug/L	25.0		69.4	80-120			QR-06
1,2-Dichlorobenzene	23.4	10	ug/L	25.0		93.8	80-120			
Bis[2-Chloroisopropyl]ether	22.5	10	ug/L	25.0		90.0	80-120			
n-Nitroso-di-n-propylamine	19.1	10	ug/L	25.0		76.5	80-120			QR-06
Hexachloroethane	23.1	10	ug/L	25.0		92.3	80-120			
Nitrobenzene	22.3	10	ug/L	25.0		89.1	80-120			
Isophorone	20.6	10	ug/L	25.0		82.3	80-120			
2-Nitrophenol	24.2	10	ug/L	25.0		97.0	80-120			
2,4-Dimethylphenol	20.8	10	ug/L	25.0		83.3	80-120			
Bis (2-Chloroethoxy) Methane	19.4	10	ug/L	25.0		77.6	80-120			QR-06
2,4-Dichlorophenol	23.7	10	ug/L	25.0		94.8	80-120			
1,2,4-Trichlorobenzene	24.6	10	ug/L	25.0		98.3	80-120			
Naphthalene	22.3	10	ug/L	25.0		89.2	80-120			
Hexachlorobutadiene	26.3	20	ug/L	25.0		105	80-120			
4-Chloro-3-methylphenol	22.3	10	ug/L	25.0		89.2	80-120			
Hexachlorocyclopentadiene	22.2	20	ug/L	25.0		88.8	80-120			
2,4,6-Trichlorophenol	26.6	10	ug/L	25.0		106	80-120			
2,4,5-Trichlorophenol	<50	50	ug/L	25.0		104	80-120			
2-Chloronaphthalene	22.8	10	ug/L	25.0		91.2	80-120			
Dimethylphthalate	24.3	15	ug/L	25.0		97.1	80-120			
Acenaphthylene	24.2	10	ug/L	25.0		96.6	80-120			
2,6-Dinitrotoluene	24.8	10	ug/L	25.0		99.3	80-120			
Acenaphthene	24.2	10	ug/L	25.0		96.8	80-120			
2,4-Dinitrophenol	24.2	20	ug/L	25.0		96.8	80-120			
Dibenzofuran	23.7	10	ug/L	25.0		94.9	80-120			
2,4-Dinitrotoluene	22.1	10	ug/L	25.0		88.6	80-120			
4-Nitrophenol	19.8	10	ug/L	25.0		79.2	80-120			QR-06
Diethyl Phthalate	<30	30	ug/L	25.0		91.0	80-120			
Fluorene	23.2	10	ug/L	25.0		92.6	80-120			
4-Chlorophenyl Phenyl Ether	23.7	10	ug/L	25.0		94.8	80-120			
4,6-Dinitro-2-methylphenol	25.0	20	ug/L	25.0		100	80-120			

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0943 - EPA 625 BNA - EPA 625										
Reference (1HC0943-SRM1)				Prepared: 03/18/24 13:40 Analyzed: 03/26/24 15:55						
N-Nitrosodiphenylamine	24.4	10	ug/L	25.0		97.5	80-120			
4-Bromophenyl Phenyl Ether	27.1	10	ug/L	25.0		108	80-120			
Hexachlorobenzene	27.0	10	ug/L	25.0		108	80-120			
Pentachlorophenol	24.3	20	ug/L	25.0		97.4	80-120			
Phenanthrene	24.1	10	ug/L	25.0		96.3	80-120			
Anthracene	24.9	10	ug/L	25.0		99.6	80-120			
Di-n-butyl Phthalate	26.2	10	ug/L	25.0		105	80-120			
Fluoranthene	26.0	10	ug/L	25.0		104	80-120			
Pyrene	25.2	10	ug/L	25.0		101	80-120			
Butyl Benzyl Phthalate	24.2	10	ug/L	25.0		96.8	80-120			
Benzo(a)anthracene	23.9	10	ug/L	25.0		95.5	80-120			
Chrysene	24.1	10	ug/L	25.0		96.3	80-120			
Bis(2-Ethylhexyl) Phthalate	24.9	10	ug/L	25.0		99.5	80-120			
Di-n-octyl Phthalate	25.4	10	ug/L	25.0		102	80-120			
Indeno(1,2,3-cd)Pyrene	23.7	10	ug/L	25.0		95.0	80-120			
3,3´-Dichlorobenzidine	25.4	20	ug/L	25.0		102	80-120			
Benzo(b)Fluoranthene	23.8	10	ug/L	25.0		95.0	80-120			
Benzo(k)Fluoranthene	25.2	10	ug/L	25.0		101	80-120			
Benzo(a)Pyrene	25.0	10	ug/L	25.0		100	80-120			
Dibenzo(a,h)anthracene	24.0	10	ug/L	25.0		96.2	80-120			
Benzo(g,h,i)perylene	23.0	10	ug/L	25.0		91.8	80-120			
Surrogate: 2-Fluorophenol	*53.8*		ug/L	*61.6*		*87.3*	*19-139*			
Surrogate: Phenol-d6	*51.9*		ug/L	*63.5*		*81.7*	*14-154*			
Surrogate: Nitrobenzene-d5	*52.2*		ug/L	*62.6*		*83.3*	*17-146*			
Surrogate: 2-Fluorobiphenyl	*58.8*		ug/L	*60.0*		*98.1*	*18-122*			
Surrogate: 2,4,6-Tribromophenol	*60.0*		ug/L	*62.0*		*96.9*	*21-151*			
Surrogate: Terphenyl-dl4	*58.9*		ug/L	*60.0*		*98.0*	*27-131*			

Determination of Organochlorine Insecticides & PCBs	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0885 - EPA 608 OC/PCB - EPA 608										
Blank (1HC0885-BLK1)				Prepared: 03/15/24 12:36 Analyzed: 03/27/24 13:33						
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							

Determination of Organochlorine Insecticides & PCBs	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0885 - EPA 608 OC/PCB - EPA 608										
Blank (1HC0885-BLK1)				Prepared: 03/15/24 12:36 Analyzed: 03/27/24 13:33						
Dieldrin	<0.05	0.05	ug/L							
Endrin	<0.05	0.05	ug/L							
4,4`-DDD	<0.05	0.05	ug/L							
Endosulfan II	<0.05	0.05	ug/L							
4,4`-DDT	<0.05	0.05	ug/L							
Endrin Aldehyde	<0.05	0.05	ug/L							
Endosulfan Sulfate	<0.05	0.05	ug/L							
Chlordane	<0.10	0.10	ug/L							
Toxaphene	<0.20	0.20	ug/L							
Arochlor 1016	<0.20	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: Decachlorobiphenyl	*0.580*		ug/L	*0.600*		*96.6*	*19-120*			
Surrogate: Tetrachloro-m-xylene	*0.476*		ug/L	*0.600*		*79.4*	*30-119*			
LCS (1HC0885-BS1)				Prepared: 03/15/24 12:36 Analyzed: 03/27/24 13:48						
Gamma-BHC [Lindane]	0.233	0.05	ug/L	0.250		93.3	37-127			
Beta-BHC	0.240	0.05	ug/L	0.250		95.9	36-131			
Heptachlor	0.266	0.05	ug/L	0.250		106	36-128			
Delta-BHC	0.275	0.05	ug/L	0.250		110	29-147			
Aldrin	0.238	0.05	ug/L	0.250		95.0	41-120			
Heptachlor Epoxide	0.255	0.05	ug/L	0.250		102	50-132			
Endosulfan I	0.270	0.05	ug/L	0.250		108	50-133			
4,4`-DDE	0.232	0.05	ug/L	0.250		92.9	46-140			
Dieldrin	0.250	0.05	ug/L	0.250		100	41-138			
Endrin	0.289	0.05	ug/L	0.250		116	32-152			
4,4`-DDD	0.262	0.05	ug/L	0.250		105	44-150			
Endosulfan II	0.270	0.05	ug/L	0.250		108	45-141			
4,4`-DDT	0.308	0.05	ug/L	0.250		123	46-145			
Endrin Aldehyde	0.266	0.05	ug/L	0.250		106	33-145			
Endosulfan Sulfate	0.257	0.05	ug/L	0.250		103	52-133			
Surrogate: Decachlorobiphenyl	*0.600*		ug/L	*0.600*		*100*	*19-120*			
Surrogate: Tetrachloro-m-xylene	*0.478*		ug/L	*0.600*		*79.6*	*30-119*			
LCS Dup (1HC0885-BSD1)				Prepared: 03/15/24 12:36 Analyzed: 03/27/24 14:02						
Gamma-BHC [Lindane]	0.238	0.05	ug/L	0.250		95.1	37-127	1.97	30	
Beta-BHC	0.247	0.05	ug/L	0.250		98.8	36-131	2.95	30	
Heptachlor	0.271	0.05	ug/L	0.250		109	36-128	1.93	30	

Determination of Organochlorine Insecticides & PCBs	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0885 - EPA 608 OC/PCB - EPA 608										
LCS Dup (1HC0885-BSD1)			Prepared: 03/15/24 12:36 Analyzed: 03/27/24 14:02							
Delta-BHC	0.283	0.05	ug/L	0.250		113	29-147	3.15	30	
Aldrin	0.245	0.05	ug/L	0.250		98.0	41-120	3.13	30	
Heptachlor Epoxide	0.263	0.05	ug/L	0.250		105	50-132	3.05	30	
Endosulfan I	0.280	0.05	ug/L	0.250		112	50-133	3.73	30	
4,4`-DDE	0.246	0.05	ug/L	0.250		98.6	46-140	5.90	30	
Dieldrin	0.258	0.05	ug/L	0.250		103	41-138	3.22	30	
Endrin	0.296	0.05	ug/L	0.250		118	32-152	2.29	30	
4,4`-DDD	0.271	0.05	ug/L	0.250		108	44-150	3.19	30	
Endosulfan II	0.276	0.05	ug/L	0.250		110	45-141	2.40	30	
4,4`-DDT	0.309	0.05	ug/L	0.250		124	46-145	0.548	30	
Endrin Aldehyde	0.252	0.05	ug/L	0.250		101	33-145	5.47	30	
Endosulfan Sulfate	0.263	0.05	ug/L	0.250		105	52-133	2.53	30	
Surrogate: Decachlorobiphenyl	*0.301*		ug/L	*0.600*		*50.1*	*19-120*			
Surrogate: Tetrachloro-m-xylene	*0.498*		ug/L	*0.600*		*83.0*	*30-119*			

Determination of Conventional Chemistry Parameters	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0691 - Wet Chem Preparation - USGS I-1750-85										
Blank (1HC0691-BLK1)			Prepared: 03/13/24 08:24 Analyzed: 03/13/24 12:40							
Total Dissolved Solids (TDS)	<5	5	mg/L							
LCS (1HC0691-BS1)			Prepared: 03/13/24 08:24 Analyzed: 03/13/24 12:40							
Total Dissolved Solids (TDS)	97	5	mg/L	100		97.4	71-114			
Duplicate (1HC0691-DUP1)	**Source: 1HC0511-01**		Prepared: 03/13/24 08:24 Analyzed: 03/13/24 12:40							
Total Dissolved Solids (TDS)	1230	5	mg/L		1230			0.326	30	
Batch 1HC0702 - General Prep Micro - SM 5210 B										
Blank (1HC0702-BLK1)			Prepared: 03/13/24 09:26 Analyzed: 03/13/24 09:57							
BOD (5 day)	<2	2	mg/L							B-06
Duplicate (1HC0702-DUP1)	**Source: 1HC0777-01**		Prepared: 03/13/24 09:26 Analyzed: 03/13/24 10:52							
BOD (5 day)	182	60	mg/L		226			21.7	29	
Reference (1HC0702-SRM1)			Prepared: 03/13/24 09:26 Analyzed: 03/13/24 10:02							
BOD (5 day)	188	100	mg/L	198		94.9	84.6-115.4			
Batch 1HC0750 - Wet Chem Preparation - SM 4500 H+ B										
Duplicate (1HC0750-DUP1)	**Source: 1HC0788-01**		Prepared: 03/13/24 14:27 Analyzed: 03/13/24 14:34							
pH	7.7	0.5	pH		7.7			0.0389	10	
Reference (1HC0750-SRM1)			Prepared: 03/13/24 14:27 Analyzed: 03/13/24 14:34							

Determination of Conventional Chemistry Parameters	Result		RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0750 - Wet Chem Preparation - SM 4500 H+ B											
Reference (1HC0750-SRM1)				Prepared: 03/13/24 14:27 Analyzed: 03/13/24 14:34							
pH	7.0		0.5	pH	7.00		99.8	90-110			
Reference (1HC0750-SRM2)				Prepared: 03/13/24 14:27 Analyzed: 03/13/24 14:34							
pH	7.0		0.5	pH	7.00		99.9	90-110			
Batch 1HC0855 - Wet Chem Preparation - USGS I-3765-85											
Blank (1HC0855-BLK1)				Prepared: 03/15/24 08:21 Analyzed: 03/18/24 11:00							
Total Suspended Solids (TSS)	<1		1	mg/L							
LCS (1HC0855-BS1)				Prepared: 03/15/24 08:21 Analyzed: 03/18/24 11:00							
Total Suspended Solids (TSS)	13.0		1	mg/L	15.0		86.7	74-114			
Duplicate (1HC0855-DUP1)		**Source: 1HC0738-01**		Prepared: 03/15/24 08:21 Analyzed: 03/18/24 11:00							
Total Suspended Solids (TSS)	111		1	mg/L		95.0			15.5	30	
Batch 1HC1195 - General Prep HPLC/IC - TIMBERLINE											
Blank (1HC1195-BLK1)				Prepared: 03/21/24 10:26 Analyzed: 03/21/24 13:23							
Nitrogen, Ammonia	<0.10		0.10	mg/L							
LCS (1HC1195-BS1)				Prepared: 03/21/24 10:26 Analyzed: 03/21/24 13:25							
Nitrogen, Ammonia	5.27		0.10	mg/L	5.00		105	90-114			
Matrix Spike (1HC1195-MS1)		**Source: 1HC0783-02**		Prepared: 03/21/24 10:26 Analyzed: 03/21/24 13:26							
Nitrogen, Ammonia	5.57		0.10	mg/L	5.00	ND	111	84-115			
Matrix Spike Dup (1HC1195-MSD1)		**Source: 1HC0783-02**		Prepared: 03/21/24 10:26 Analyzed: 03/21/24 13:27							
Nitrogen, Ammonia	5.52		0.10	mg/L	5.00	ND	110	84-115	0.986	20	
Batch 1HC1664 - TOC/DOC - 5310B											
Blank (1HC1664-BLK1)				Prepared: 03/27/24 00:00 Analyzed: 03/27/24 10:28							
Total Organic Carbon	<0.50		0.50	mg/L							
LCS (1HC1664-BS1)				Prepared: 03/27/24 00:00 Analyzed: 03/27/24 09:58							
Total Organic Carbon	5.42		0.50	mg/L	5.00		108	86-120			
LCS Dup (1HC1664-BSD1)				Prepared: 03/27/24 00:00 Analyzed: 03/27/24 10:14							
Total Organic Carbon	5.36		0.50	mg/L	5.00		107	86-120	1.00	10	
Duplicate (1HC1664-DUP1)		**Source: 1HC1212-01**		Prepared: 03/27/24 00:00 Analyzed: 03/29/24 15:17							
Total Organic Carbon	34.20		0.50	mg/L		35.49			3.70	20	

Determination of Total Metals	Result		RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0782 - EPA 200.2 Total ICP-MS - EPA 200.8											
Blank (1HC0782-BLK1)				Prepared: 03/14/24 08:35 Analyzed: 03/15/24 02:08							
Arsenic, total	<0.0020		0.0020	mg/L							

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0782 - EPA 200.2 Total ICP-MS - EPA 200.8										
Blank (1HC0782-BLK1)			Prepared: 03/14/24 08:35 Analyzed: 03/15/24 02:08							
Barium, total	<0.0020	0.0020	mg/L							
Cadmium, total	<0.0002	0.0002	mg/L							
Chromium, total	<0.0020	0.0020	mg/L							
Copper, total	<0.0020	0.0020	mg/L							
Lead, total	<0.0008	0.0008	mg/L							
Nickel, total	<0.0040	0.0040	mg/L							
Selenium, total	<0.0040	0.0040	mg/L							
Silver, total	<0.0020	0.0020	mg/L							
Zinc, total	<0.0200	0.0200	mg/L							
LCS (1HC0782-BS1)			Prepared: 03/14/24 08:35 Analyzed: 03/15/24 02:14							
Arsenic, total	0.0913	0.0020	mg/L	0.100		91.3	85-115			
Barium, total	0.109	0.0020	mg/L	0.100		109	85-115			
Cadmium, total	0.0916	0.0002	mg/L	0.100		91.6	85-115			
Chromium, total	0.0959	0.0020	mg/L	0.100		95.9	85-115			
Copper, total	0.0892	0.0020	mg/L	0.100		89.2	85-115			
Lead, total	0.0985	0.0008	mg/L	0.100		98.5	85-115			
Nickel, total	0.0911	0.0040	mg/L	0.100		91.1	85-115			
Selenium, total	0.0947	0.0040	mg/L	0.100		94.7	85-115			
Silver, total	0.0977	0.0020	mg/L	0.100		97.7	85-115			
Zinc, total	0.0928	0.0200	mg/L	0.100		92.8	85-115			
Matrix Spike (1HC0782-MS1)	**Source: 1HC0572-01**		Prepared: 03/14/24 08:35 Analyzed: 03/15/24 02:26							
Arsenic, total	0.0930	0.0020	mg/L	0.100	0.0015	91.4	70-130			
Barium, total	0.164	0.0020	mg/L	0.100	0.0612	103	70-130			
Cadmium, total	0.0876	0.0002	mg/L	0.100	ND	87.6	70-130			
Chromium, total	0.0951	0.0020	mg/L	0.100	0.0032	91.9	70-130			
Copper, total	0.0882	0.0020	mg/L	0.100	0.0052	83.0	70-130			
Lead, total	0.0920	0.0008	mg/L	0.100	0.0012	90.8	70-130			
Nickel, total	0.0899	0.0040	mg/L	0.100	0.0034	86.5	70-130			
Selenium, total	0.0912	0.0040	mg/L	0.100	ND	91.2	70-130			
Silver, total	0.0930	0.0020	mg/L	0.100	ND	93.0	70-130			
Zinc, total	0.173	0.0200	mg/L	0.100	0.0891	83.9	70-130			
Matrix Spike Dup (1HC0782-MSD1)	**Source: 1HC0572-01**		Prepared: 03/14/24 08:35 Analyzed: 03/15/24 02:33							
Arsenic, total	0.0926	0.0020	mg/L	0.100	0.0015	91.1	70-130	0.345	20	
Barium, total	0.165	0.0020	mg/L	0.100	0.0612	104	70-130	0.963	20	
Cadmium, total	0.0891	0.0002	mg/L	0.100	ND	89.1	70-130	1.68	20	
Chromium, total	0.0979	0.0020	mg/L	0.100	0.0032	94.8	70-130	2.92	20	
Copper, total	0.0873	0.0020	mg/L	0.100	0.0052	82.1	70-130	1.06	20	
Lead, total	0.0924	0.0008	mg/L	0.100	0.0012	91.2	70-130	0.402	20	
Nickel, total	0.0890	0.0040	mg/L	0.100	0.0034	85.6	70-130	0.978	20	
Selenium, total	0.0918	0.0040	mg/L	0.100	ND	91.8	70-130	0.601	20	
Silver, total	0.0927	0.0020	mg/L	0.100	ND	92.7	70-130	0.314	20	
Zinc, total	0.171	0.0200	mg/L	0.100	0.0891	82.4	70-130	0.892	20	
Post Spike (1HC0782-PS1)	**Source: 1HC0572-01**		Prepared: 03/14/24 08:35 Analyzed: 03/15/24 02:39							

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0782 - EPA 200.2 Total ICP-MS - EPA 200.8										
Post Spike (1HC0782-PS1)		**Source: 1HC0572-01**	Prepared: 03/14/24 08:35 Analyzed: 03/15/24 02:39							
Arsenic, total	0.0780		mg/L	0.0800	0.0015	95.5	70-130			
Barium, total	0.144		mg/L	0.0800	0.0600	105	70-130			
Cadmium, total	0.0733		mg/L	0.0800	0.00007	91.5	70-130			
Chromium, total	0.0793		mg/L	0.0800	0.0031	95.2	70-130			
Copper, total	0.0750		mg/L	0.0800	0.0051	87.4	70-130			
Lead, total	0.0773		mg/L	0.0800	0.0012	95.2	70-130			
Nickel, total	0.0753		mg/L	0.0800	0.0033	90.0	70-130			
Selenium, total	0.0726		mg/L	0.0800	-0.00008	90.7	70-130			
Silver, total	0.0781		mg/L	0.0800	0.0004	97.1	70-130			
Zinc, total	0.158		mg/L	0.0800	0.0873	88.2	70-130			
Batch 1HC0838 - EPA 200.2 Total ICP-OES (200.7) - 200.7										
Blank (1HC0838-BLK1)			Prepared: 03/14/24 15:32 Analyzed: 03/15/24 16:44							
Iron, total	<0.100	0.100	mg/L							
LCS (1HC0838-BS1)			Prepared: 03/14/24 15:32 Analyzed: 03/15/24 16:52							
Iron, total	2.32	0.100	mg/L	2.20		105	85-115			
Matrix Spike (1HC0838-MS1)		**Source: 1HC0824-01**	Prepared: 03/14/24 15:32 Analyzed: 03/15/24 17:24							
Iron, total	3.71	0.100	mg/L	2.20	1.48	101	70-130			
Matrix Spike Dup (1HC0838-MSD1)		**Source: 1HC0824-01**	Prepared: 03/14/24 15:32 Analyzed: 03/15/24 17:30							
Iron, total	3.73	0.100	mg/L	2.20	1.48	102	70-130	0.596	20	
Post Spike (1HC0838-PS1)		**Source: 1HC0824-01**	Prepared: 03/14/24 15:32 Analyzed: 03/15/24 17:36							
Iron, total	10.5		mg/L	8.80	1.48	102	85-115			
Batch 1HC0965 - EPA 7470A Hg Water - 245.1										
Blank (1HC0965-BLK1)			Prepared: 03/18/24 15:03 Analyzed: 03/19/24 14:53							
Mercury, total	<0.00050	0.00050	mg/L							
LCS (1HC0965-BS1)			Prepared: 03/18/24 15:03 Analyzed: 03/19/24 15:23							
Mercury, total	0.00202	0.00050	mg/L	0.00250		80.9	85-115			QS-03
Matrix Spike (1HC0965-MS1)		**Source: 1HC0713-12**	Prepared: 03/18/24 15:03 Analyzed: 03/19/24 15:37							
Mercury, total	0.00188	0.00050	mg/L	0.00250	ND	75.0	70-130			
Matrix Spike Dup (1HC0965-MSD1)		**Source: 1HC0713-12**	Prepared: 03/18/24 15:03 Analyzed: 03/19/24 15:43							
Mercury, total	0.00187	0.00050	mg/L	0.00250	ND	74.7	70-130	0.395	10	

Definitions

B-06:	Unseeded Blank equals .27mg/L
I-03:	Analyte required to be analyzed within 15 minutes of sampling. Analysis performed upon receipt of sample at laboratory.
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-06:	The reference standard was outside of established control limits.
QS-03:	The blank spike recovery was below established acceptance limits.
RL:	Reporting Limit
RPD:	Relative Percent Difference

Cooler Receipt Log

Cooler ID: Default Cooler Temp: 0.0°C

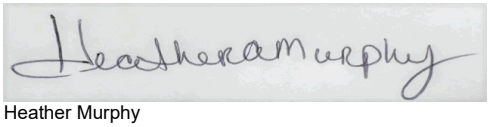
Cooler Inspection Checklist

Custody Seals	No	Containers Intact	Yes
COC/Labels Agree	Yes	Preservation Confirmed	No
Received On Ice	Yes		

Report Comments

The data and information on this, and other accompanying documents, represents only the sample(s) analyzed. This report is incomplete unless all pages indicated in the footnote are present and an authorized signature is included. ***The services were provided under and subject to Microbac's standard terms and conditions which can be located and reviewed at <https://www.microbac.com/standard-terms-conditions>.***

Reviewed and Approved By:



Heather Murphy
Customer Relationship Specialist
heather.murphy@microbac.com
03/29/24 16:40

CHAIN OF CUSTODY

Keystone LABORATORIES
A Microbac Company

600 East 17th Street South
Newton, IA 50208
641-792-9451

1HC0788

HLW Engineering
PM: Heather Murphy

SITE INFORMATION

Sampler: TODD WHIPPLE

Project: ~~Benton Co. Landfill - Leachate~~
Leachate

REPORT TO

Todd Whipple
HLW Engineering
PO Box 314
Story City, IA 50248

INVOICE TO

Eric Werner
Benton County Sanitary Landfill
7004 20th Ave
Blairstown, IA 52209

SPECIAL INSTRUCTIONS

None

Turn Around Time

☐ Standard ☐ RUSH, need by ___/___/___

LAB USE ONLY

Work Order: 1HC 0788
Temperature: 0.0
Turn-Cooler: No

- ☐ Custody Seal
- ☒ Containers Intact
- ☒ COC/Labels Agree
- ☒ Preservation Confirmed
- ☒ Received on Ice

Number	Sample Identification / Client ID	Matrix	Sample Type	Date	Time	Number of Containers	Analyses	Lab Sample Number
-001	Leachate	Water	GRAB	3/11/24	11:31	12	608-107 624@dibromochloromethane 624-105 625-116 ag-t-200.8 as-t-200.8 ba-t-200.8 bod-5210 cd-t-200.8 cr-t-200.8 cu-t-200.8 fe-t-200.7 hg-t-245.1 nh3-timberline ni-t-200.8 pb-t-200.8 ph-4500 se-t-200.8 tds-i-1750-85 toc-5310b tss-i-3765-85 zn-t-200.8	01

Relinquished By: Todd Whipple Date/Time: 3/12/24

Received By: ___ Date/Time: ___

Relinquished By: ___ Date/Time: ___

Received for Lab By: Lacy Wood Date/Time: 3/12/24 1055

Remarks:

Original - Lab Copy Yellow - Sampler Copy

Appendix G.4 –
Leachate Head & Elevation Data – Original Landfill

BENTON COUNTY SANITARY LANDFILL

Monthly Piezemeter Level Measurements

Date	LPZ - 1	LPZ - 2	LPZ - 3	LPZ -4	LPZ -5	LPZ -6	LPZ -7
TOC	874.54	868.05	909.16	914.13	890.07	922.45	918.82
TD	19.00	22.90	31.00	23.70	18.70	44.70	24.10
BTM	855.54	845.15	878.16	890.43	871.37	877.75	894.72
1/5/1999	865.44	851.72	897.40	899.20	878.35	903.15	903.21
2/5/1999	865.40	851.73	897.38	899.25	878.39	903.12	903.18
3/5/1999	869.78	851.77	897.72	898.09	879.76	900.80	901.78
4/5/1999	865.41	851.31	897.64	897.95	879.72	901.53	902.63
5/5/1999	869.56	852.44	898.23	899.68	879.80	foam	902.08
6/7/1999	869.16	852.31	897.23	899.88	879.84	903.51	903.70
7/6/1999	865.35	851.72	897.69	898.42	875.32	?	904.10
8/5/1999	866.33	851.39	897.20	898.29	879.60	903.76	904.24
9/7/1999	864.50	851.05	896.95	897.50	879.31	901.17	904.60
10/5/1999	863.65	850.53	896.59	897.11	879.21	901.24	904.27
11/5/1999	862.48	849.78	898.21	896.15	879.03	900.82	904.20
12/6/1999	862.92	849.81	895.32	896.25	879.13	900.93	904.44

Date	LPZ - 1	LPZ - 2	LPZ - 3	LPZ -4	LPZ -5	LPZ -6	LPZ -7
TOC	874.54	868.05	909.16	914.13	890.07	922.45	918.82
TD	19.00	22.90	31.00	23.70	18.70	44.70	24.10
BTM	855.54	845.15	878.16	890.43	871.37	877.75	894.72
1/5/2000	862.81	849.66	896.11	895.82	878.72	900.82	904.12
2/5/2000	862.90	849.68	895.51	896.32	878.64	900.90	904.25
3/6/2000	864.43	849.66	895.70	895.67	878.70	900.95	904.41
4/5/2000	865.12	849.77	895.71	895.29	878.94	900.93	903.98
5/5/2000	865.55	850.18	895.55	894.80	878.72	900.91	904.27
6/5/2000	864.81	850.14	895.72	895.01	878.62	active	904.30
7/5/2000	865.23	851.01	895.82	894.91	878.92	901.07	904.49
8/5/2000	866.38	851.69	896.18	895.48	878.97	active	904.59
9/5/2000	864.08	851.24	895.70	894.83	878.64	899.64	903.85
10/5/2000	862.73	850.57	895.92	894.67	878.75	901.27	904.17
11/15/2000	862.48	850.77	895.47	894.22	878.61	900.95	904.28

Date	LPZ - 1	LPZ - 2	LPZ - 3	LPZ -4	LPZ -5	LPZ -6	LPZ -7
TOC	874.54	868.05	909.16	914.13	890.07	922.45	918.82
TD	19.00	22.90	31.00	23.70	18.70	44.70	24.10
BTM	855.54	845.15	878.16	890.43	871.37	877.75	894.72
1/5/2001	862.43	frozen	frozen	frozen	frozen	frozen	frozen
2/5/2001	frozen	frozen	frozen	frozen	frozen	frozen	frozen
3/5/2001	frozen	frozen	917.26	frozen	frozen	active	frozen
4/5/2001	866.86	851.70	896.78	frozen	878.81	901.33	903.71
5/4/2001	868.36	851.63	897.96	896.93	879.09	902.34	904.97
6/5/2001	868.39	852.20	897.99	897.13	879.23	902.20	904.65
7/5/2001	866.87	851.90	897.32	896.75	879.35	901.70	904.45
8/4/2001	864.91	850.84	896.98	896.46	878.67	901.18	904.63
9/5/2001	863.39	850.70	897.94	896.38	879.23	901.83	903.92
10/5/2001	862.81	850.66	897.12	896.15	879.11	902.03	904.71
11/5/2001	862.61	850.60	897.15	896.12	879.15	902.00	904.60
12/5/2001	862.75	850.64	897.12	896.10	879.12	902.04	904.62

BENTON COUNTY SANITARY LANDFILL

Monthly Piezemeter Level Measurements

Date	LPZ - 1	LPZ - 2	LPZ - 3	LPZ -4	LPZ -5	LPZ -6	LPZ -7
TOC	874.54	868.05	909.16	914.13	890.07	922.45	918.82
TD	19.00	22.90	31.00	23.70	18.70	44.70	24.10
BTM	855.54	845.15	878.16	890.43	871.37	877.75	894.72
1/5/2002	864.20	850.32	frozen	frozen	frozen	907.94	frozen
2/5/2002	863.84	849.45	894.96	frozen	878.07	907.75	897.42
3/5/2002	863.45	850.10	894.75	frozen	879.22	907.62	897.73
4/5/2002	864.83	850.34	894.72	894.00	878.59	900.80	897.17
5/6/2002	866.63	851.45	897.23	895.33	878.97	917.82	904.98
6/5/2002	866.54	852.05	894.91	895.11	879.99	896.60	905.86
7/5/2002	865.44	851.60	896.76	894.92	878.57	915.85	905.02
8/5/2002	864.15	851.32	896.94	895.35	878.90	902.00	905.03
9/5/2002	874.54	851.05	896.96	895.29	878.72	901.75	905.50
10/5/2002	862.94	850.91	897.30	895.51	878.90	905.65	905.56
11/5/2002	863.39	851.33	917.53	895.42	879.06	901.73	905.78
12/5/2002	863.72	850.77	897.21	895.15	878.55	901.81	904.91

Date	LPZ - 1	LPZ - 2	LPZ - 3	LPZ -4	LPZ -5	LPZ -6	LPZ -7
TOC	874.54	868.05	909.16	914.13	890.07	922.45	918.82
TD	19.00	22.90	31.00	23.70	18.70	44.70	24.10
BTM	855.54	845.15	878.16	890.43	871.37	877.75	894.72
1/6/2003	864.31	850.85	896.18	894.55	879.02	901.50	904.88
2/6/2003	863.33	850.05	frozen	frozen	frozen	frozen	904.17
3/5/2003	863.73	850.46	frozen	frozen	frozen	frozen	904.25
4/2/2003	864.33	850.91	894.92	893.21	878.44	901.25	904.30
5/5//03	856.42	850.44	895.44	893.78	878.52	902.38	904.78
6/5/2003	866.60	851.83	896.33	894.50	878.78	908.19	898.19
7/7/2003	862.91	851.32	897.14	892.38	878.82	901.50	905.75
8/5/2003	863.64	850.90	896.40	894.28	878.87	901.45	904.97
9/5/2003	862.23	850.23	896.41	893.88	878.27	900.97	904.41
10/6/2003	861.44	849.84	895.36	893.90	878.17	901.14	904.47
11/5/2003	862.03	849.94	896.35	894.68	878.64	902.33	905.02
12/5/2003	861.53	849.54	896.33	894.22	878.17	901.41	905.71

Date	LPZ - 1	LPZ - 2	LPZ - 3	LPZ -4	LPZ -5	LPZ -6	LPZ -7
TOC	874.54	868.05	909.16	914.13	890.07	922.45	918.82
TD	19.00	22.90	31.00	23.70	18.70	44.70	24.10
BTM	855.54	845.15	878.16	890.43	871.37	877.75	894.72
1/5/2004	862.32	850.04	frozen	894.25	878.16	frozen	904.97
2/5/2004	862.93	849.74	frozen	893.92	frozen	frozen	904.77
3/5/2004	865.13	850.69	896.69	894.61	877.97	902.14	904.41
4/5/2004	866.55	851.39	897.08	894.72	878.39	901.89	905.15
5/5/2004	866.72	852.10	897.14	895.32	878.72	897.59	908.45
6/5/2004	864.73	851.85	897.34	895.68	878.72	901.80	905.31
7/5/2004	867.40	852.13	897.50	896.49	879.13	916.20	905.94
8/5/2004	866.79	852.10	897.80	896.57	879.26	916.84	906.38
9/4/2004	866.72	852.09	897.85	898.04	879.06	915.83	906.01
10/5/2004	866.29	851.88	897.54	897.31	879.33	902.24	906.36
11/5/2004	865.19	851.40	897.01	896.21	878.52	901.45	905.57
12/5/2004	865.13	851.05	896.31	896.13	878.55	901.70	904.98

BENTON COUNTY SANITARY LANDFILL

Monthly Piezemeter Level Measurements

Date	LPZ - 1	LPZ - 2	LPZ - 3	LPZ -4	LPZ -5	LPZ -6	LPZ -7
TOC	874.54	868.05	909.16	914.13	890.07	922.45	918.82
TD	19.00	22.90	31.00	23.70	18.70	44.70	24.10
BTM	855.54	845.15	878.16	890.43	871.37	877.75	894.72
1/5/2005	865.33	851.37	896.20	895.98	878.42	901.80	904.92
2/5/2005	867.09	851.62	895.06	895.28	878.28	901.83	904.87
3/5/2005	868.14	852.25	897.06	897.13	878.92	902.50	905.04
4/5/2005	868.19	852.30	895.72	896.29	878.87	901.45	905.29
5/5/2005	867.32	853.06	896.25	896.21	875.32	901.82	905.43
6/5/2005	867.81	851.80	896.81	896.33	878.82	902.45	905.87
7/5/2005	865.82	850.44	896.51	896.25	878.72	902.35	906.27
8/5/2005	863.79	851.07	895.51	895.98	878.76	902.00	906.37
9/5/2005	863.04	850.35	896.05	895.67	878.32	901.71	906.28
10/5/2005	863.36	850.30	895.63	895.51	878.90	899.41	906.56
11/5/2005	862.84	849.95	894.21	894.93	878.37	901.75	905.87
12/5/2005	861.96	849.15	frozen	894.13	frozen	frozen	905.17

Date	LPZ - 1	LPZ - 2	LPZ - 3	LPZ -4	LPZ -5	LPZ -6	LPZ -7
TOC	874.54	868.05	909.16	914.13	890.07	922.45	918.82
TD	19.00	22.90	31.00	23.70	18.70	44.70	24.10
BTM	855.54	845.15	878.16	890.43	871.37	877.75	894.72
1/5/2006	861.70	849.15	892.94	895.23	877.99	901.77	905.20
2/6/2006	861.99	849.34	892.45	894.58	frozen	901.65	904.85
3/6/2006	861.99	849.30	894.43	893.94	877.77	901.60	904.72
4/5/2006	863.97	850.31	893.18	895.00	879.34	902.31	905.29
5/5/2006	866.19	851.65	897.01	896.18	878.87	911.14	905.19
6/5/2006	866.32	851.72	896.21	896.57	878.84	902.33	905.19
7/5/2006	866.13	851.40	896.43	895.46	878.71	902.30	905.97
8/5/2006	864.36	850.51	884.69	894.81	878.34	902.00	906.12
9/5/2006	863.89	850.05	885.21	895.08	878.32	902.50	906.58
10/5/2006	862.29	849.52	884.61	894.33	878.07	901.60	906.30
11/8/2006	862.14	849.15	894.84	894.65	878.29	902.49	906.50
12/8/2006	859.54	848.50	894.02	894.01	877.92	902.00	905.82

Date	LPZ - 1	LPZ - 2	LPZ - 3	LPZ -4	LPZ -5	LPZ -6	LPZ -7
TOC	874.54	868.05	909.16	914.13	890.07	922.45	918.82
TD	19.00	22.90	31.00	23.70	18.70	44.70	24.10
BTM	855.54	845.15	878.16	890.43	871.37	877.75	894.72
1/5/2007	862.39	848.90	896.95	894.73	878.76	902.80	905.72
2/8/2007	862.54	848.30	frozen	frozen	frozen	frozen	904.87
3/5/2007	862.26	848.15	894.61	frozen	frozen	frozen	904.57
4/2/2007	863.65	849.46	897.02	894.67	879.61	902.90	905.40
5/9/2007	867.94	849.61	897.06	896.78	879.39	903.20	905.52
6/6/2007	868.04	849.95	897.04	896.88	879.17	905.85	906.32
7/3/2007	868.64	850.85	897.16	898.23	880.27	903.11	906.57
8/3/2007	866.29	849.85	896.96	898.13	878.97	902.45	906.72
9/5/2007	866.29	850.65	897.01	898.83	879.07	902.45	906.48
10/6/2007	866.04	849.40	896.51	898.13	879.23	902.35	907.02
11/5/2007	864.69	850.60	897.31	899.13	879.07	902.60	906.82
12/5/2007	864.91	850.83	897.15	899.51	879.32	902.78	906.61

BENTON COUNTY SANITARY LANDFILL

Monthly Piezemeter Level Measurements

Date	LPZ - 1	LPZ - 2	LPZ - 3	LPZ -4	LPZ -5	LPZ -6	LPZ -7
TOC	874.54	868.05	909.16	914.13	890.07	922.45	918.82
TD	19.00	22.90	31.00	23.70	18.70	44.70	24.10
BTM	855.54	845.15	878.16	890.43	871.37	877.75	894.72
1/14/2008	863.92	850.51	frozen	frozen	frozen	frozen	906.24
2/5/2008	frozen	frozen	frozen	frozen	frozen	frozen	frozen
3/7/2008	frozen	frozen	897.42	899.62	frozen	frozen	906.62
4/15/2008	869.99	852.35	897.66	901.23	880.37	904.87	905.10
5/5/2008	870.03	852.25	897.16	901.83	879.89	912.30	905.70
6/7/2008	870.49	852.15	897.21	901.31	879.91	912.32	905.72
7/7/2008	869.28	851.19	897.51	901.41	879.41	911.81	905.81
8/8/2008	870.32	851.44	897.15	901.72	879.21	912.61	905.21
9/6/2008	868.84	850.60	896.76	900.55	879.22	903.38	907.27
10/6/2008	869.52	850.32	897.48	901.41	879.20	904.90	906.15
11/1/2008	868.48	850.11	895.95	899.74	879.72	903.09	907.21
12/5/2008	868.40	850.06	895.92	899.65	879.90	903.00	907.13

Date	LPZ - 1	LPZ - 2	LPZ - 3	LPZ -4	LPZ -5	LPZ -6	LPZ -7
TOC	874.54	868.05	909.16	914.13	890.07	922.45	918.82
TD	19.00	22.90	31.00	23.70	18.70	44.70	24.10
BTM	855.54	845.15	878.16	890.43	871.37	877.75	894.72
1/5/2009	868.44	850.08	895.90	899.70	879.76	903.08	907.16
2/5/2009	868.78	850.40	895.75	899.10	879.90	903.20	907.89
3/4/2009	869.40	851.35	895.80	898.54	879.80	902.78	906.40
4/6/2009	870.15	851.76	896.54	898.99	878.30	902.62	906.70
5/5/2009	868.46	851.78	896.50	899.30	878.25	903.40	907.20
6/5/2009	869.83	857.88	898.70	899.33	878.47	907.70	905.23
7/6/2009	868.72	850.37	895.87	899.08	878.80	903.25	907.97
8/5/2009	869.29	851.20	898.35	900.00	878.51	903.80	906.04
9/4/2009	869.99	851.42	898.68	901.18	878.84	903.82	906.66
10/5/2009	869.92	851.40	898.80	901.10	878.72	903.76	906.70
11/x/2009	870.12	851.45	898.95	900.04	879.03	907.72	906.74
12/x/2009	868.42	850.09	895.70	899.58	879.85	903.04	907.26

Date	LPZ - 1	LPZ - 2	LPZ - 3	LPZ -4	LPZ -5	LPZ -6	LPZ -7
TOC	874.54	868.05	909.16	914.13	890.07	922.45	918.82
TD	19.00	22.90	31.00	23.70	18.70	44.70	24.10
BTM	855.54	845.15	878.16	890.43	871.37	877.75	894.72
1/5/2010	frozen	frozen	frozen	frozen	frozen	frozen	frozen
2/5/2010	868.26	850.12	894.44	898.32	879.10	903.18	906.82
3/5/2010	862.25	851.72	895.84	898.54	879.86	903.20	907.20
4/5/2010	870.69	851.90	896.62	900.00	878.81	903.26	906.58
5/5/2010	870.62	851.70	898.64	900.15	878.34	902.80	906.24
6/5/2010	869.70	852.20	896.46	900.10	878.25	902.82	905.78
7/6/2010	870.06	851.65	899.24	900.90	879.09	903.22	907.86
8/5/2010	871.76	851.13	898.81	900.42	878.64	903.35	906.12
9/4/2010	870.20	851.18	898.70	900.58	878.62	903.24	906.60
10/5/2010	869.54	852.65	898.54	899.60	877.50	903.84	904.70
11/5/2010	868.49	852.65	898.54	898.81	877.64	boiling	904.70
12/6/2010	frozen	849.05	898.76	899.71	877.15	frozen	905.54

BENTON COUNTY SANITARY LANDFILL

Monthly Piezemeter Level Measurements

Date	LPZ - 1	LPZ - 2	LPZ - 3	LPZ -4	LPZ -5	LPZ -6	LPZ -7
TOC	874.54	868.05	909.16	914.13	890.07	922.45	918.82
TD	19.00	22.90	31.00	23.70	18.70	44.70	24.10
BTM	855.54	845.15	878.16	890.43	871.37	877.75	894.72
1/5/2011	frozen	850.16	898.72	899.73	877.15	frozen	905.48
2/5/2011	frozen	849.10	898.70	899.68	877.12	frozen	905.36
3/5/2011	frozen	849.93	897.38	899.18	876.64	916.73	906.28
4/5/2011	869.79	850.81	898.80	897.85	877.74	920.45	906.32
5/5/2011	869.82	851.06	898.78	897.96	878.13	boiling	904.22
6/4/2011	870.02	851.12	898.72	899.40	878.20	boiling	906.18
7/5/2011	869.92	851.20	898.79	899.23	878.42	909.81	906.38
8/5/2011	870.06	851.16	898.82	900.00	878.60	904.96	906.12
9/6/2011	870.10	851.18	898.68	897.95	878.65	908.00	906.90
10/5/2011	865.32	852.70	898.82	897.73	877.94	907.42	906.67
11/5/2011	866.10	852.48	898.76	897.70	877.92	907.38	906.20
12/5/2011	867.20	852.50	897.60	898.22	877.98	907.41	906.58

Date	LPZ - 1	LPZ - 2	LPZ - 3	LPZ -4	LPZ -5	LPZ -6	LPZ -7
TOC	874.54	868.05	909.16	914.13	890.07	922.45	918.82
TD	19.00	22.90	31.00	23.70	18.70	44.70	24.10
BTM	855.54	845.15	878.16	890.43	871.37	877.75	894.72
1/5/2012	867.82	849.05	897.88	898.78	878.07	907.40	906.86
2/6/2012	867.50	849.08	898.16	898.72	878.05	907.40	906.84
3/5/2012	867.58	849.12	898.22	898.80	878.07	907.38	906.76
4/5/2012	867.60	850.02	898.72	898.21	878.12	907.40	906.83
5/6/2012	861.13	848.32	895.21	895.85	875.99	904.70	904.26
6/5/2012	868.08	850.10	897.72	897.16	877.08	906.82	906.24
7/5/2012	869.12	851.16	898.02	898.20	878.06	906.78	906.31
8/5/2012	870.06	851.22	897.85	898.17	878.10	906.73	906.25
9/5/2012	870.13	851.20	898.01	898.22	877.40	907.00	906.18
10/5/2012	869.50	851.18	898.22	898.30	878.08	907.05	906.13
11/5/2012	broke	848.80	890.63	896.85	878.65	907.83	906.54
12/5/2012	broke	850.01	897.90	897.20	878.45	906.70	906.10

Date	LPZ - 1	LPZ - 2	LPZ - 3	LPZ -4	LPZ -5	LPZ -6	LPZ -7
TOC	874.54	868.05	909.16	914.13	890.07	922.45	918.82
TD	19.00	22.90	31.00	23.70	18.70	44.70	24.10
BTM	855.54	845.15	878.16	890.43	871.37	877.75	894.72
1/5/2013	broke	849.06	897.84	897.24	878.60	906.68	906.08
2/5/2013	broke	848.66	897.81	896.90	878.39	906.70	906.02
3/5/2013	broke	850.00	898.02	896.87	878.41	906.76	906.06
4/5/2013	broke	847.68	897.80	896.23	877.10	905.90	904.75
5/6/2013	broke	846.82	897.61	896.18	877.06	905.93	905.02
6/5/2013	broke	851.64	899.25	898.08	878.56	907.25	905.24
7/5/2013	broke	850.71	899.28	899.30	877.17	919.81	906.44
8/5/2013	876.12	850.08	898.38	899.38	877.35	916.13	907.08
9/5/2013	869.21	851.27	899.31	897.15	876.99	907.19	907.44
10/5/2013	868.84	848.50	898.60	896.33	876.90	907.11	907.89
11/5/2013	867.25	851.30	898.52	891.03	877.00	907.08	906.80
12/5/2013	867.32	852.01	897.60	891.00	877.10	907.12	906.78

BENTON COUNTY SANITARY LANDFILL

Monthly Piezemeter Level Measurements

Date	LPZ - 1	LPZ - 2	LPZ - 3	LPZ -4	LPZ -5	LPZ -6	LPZ -7
TOC	874.54	868.05	909.16	914.13	890.07	922.45	918.82
TD	19.00	22.90	31.00	23.70	18.70	44.70	24.10
BTM	855.54	845.15	878.16	890.43	871.37	877.75	894.72
1/6/2014	frozen	frozen	frozen	frozen	frozen	frozen	frozen
2/5/2014	frozen	frozen	frozen	frozen	frozen	frozen	frozen
3/5/2014	frozen	frozen	frozen	frozen	frozen	frozen	frozen
4/5/2014	867.82	850.30	898.45	891.06	877.05	907.45	906.26
5/5/2014	868.11	852.03	899.00	891.12	877.20	907.42	906.71
6/5/2014	868.14	852.05	898.65	891.08	877.21	907.40	906.68
7/7/2014	868.18	852.10	898.32	891.11	877.20	907.46	906.72
8/5/2014	867.86	852.07	898.29	891.08	877.16	907.43	906.70
9/5/2014	861.74	852.10	898.56	890.12	878.92	907.45	906.82
10/4/2014	862.21	852.16	898.30	891.06	877.18	907.42	906.65
11/6/2014	863.28	852.21	898.30	892.10	877.09	907.51	906.70
12/1/2014	864.64	848.85	897.68	897.35	877.04	907.45	906.56

Date	LPZ - 1	LPZ - 2	LPZ - 3	LPZ -4	LPZ -5	LPZ -6	LPZ -7
TOC	874.54	868.05	909.16	914.13	890.07	922.45	918.82
TD	19.00	22.90	31.00	23.70	18.70	44.70	24.10
BTM	855.54	845.15	878.16	890.43	871.37	877.75	894.72
1/6/2015	869.09	848.73	896.49	897.95	877.49	911.28	905.98
2/9/2015	869.52	848.41	897.71	897.13	877.51	909.46	907.30
3/5/2015	869.19	848.87	896.83	897.67	877.50	909.22	904.37
4/1/2015	869.59	849.33	898.24	898.38	878.75	909.47	909.93
5/15/2015	871.13	850.81	898.22	898.99	879.95	910.06	914.14
6/3/2015	871.82	851.03	898.04	898.88	880.31	916.47	906.87
7/1/2015	872.59	852.34	899.52	900.39	880.03	916.54	916.61
8/3/2015	Removed	852.38	899.30	899.84	879.69	915.18	908.88
9/4/2015		852.66	898.34	898.44	878.95	909.50	908.27
10/6/2015		851.35	898.72	898.26	879.15	909.17	907.81
11/5/2015		850.92	898.46	899.11	879.86	909.86	908.87
12/2/2015		852.04	899.51	899.76	879.44	911.37	910.55

Date	LPZ - 1	LPZ - 2	LPZ - 3	LPZ -4	LPZ -5	LPZ -6	LPZ -7
TOC	874.54	868.05	909.16	914.13	890.07	922.45	918.82
TD	19.00	22.90	31.00	23.70	18.70	44.70	24.10
BTM	855.54	845.15	878.16	890.43	871.37	877.75	894.72
1/4/2016	Removed	852.94	899.00	901.35	879.83	909.90	905.34
2/1/2016		853.04	899.08	901.51	879.56	910.18	905.48
3/2/2016		853.62	898.71	902.04	880.14	910.77	904.96
4/1/2016		854.09	897.84	901.98	877.23	910.27	905.26
5/10/2016		853.14	899.49	898.87	879.92	909.89	906.87
6/6/2016		852.62	896.57	900.12	879.51	913.17	906.84
7/7/2016		853.25	896.70	900.11	879.93	914.50	907.58
8/12/2016		852.86	896.02	899.21	879.76	913.90	906.65
9/14/2016		852.03	899.35	899.99	879.43	909.89	908.10
10/6/2016		851.96	898.67	899.11	879.20	910.14	908.46
11/9/2016		851.14	898.10	897.98	878.42	909.86	906.25
12/5/2016		851.64	898.71	898.46	879.01	910.10	907.10

BENTON COUNTY SANITARY LANDFILL

Monthly Piezemeter Level Measurements

Date	LPZ - 1	LPZ - 2	LPZ - 3	LPZ -4	LPZ -5	LPZ -6	LPZ -7
TOC	874.54	868.05	909.16	914.13	890.07	922.45	918.82
TD	19.00	22.90	31.00	23.70	18.70	44.70	24.10
BTM	855.54	845.15	878.16	890.43	871.37	877.75	894.72
1/10/2017		851.11	898.10	898.00	878.64	909.64	906.37
2/8/2017		850.82	897.65	898.46	878.47	910.08	905.86
3/9/2017		850.35	898.08	898.10	877.98	909.74	904.74
4/7/2017		851.42	899.01	898.76	879.42	910.77	906.07
5/2/2017	Removed	851.96	899.78	899.47	881.12	912.58	907.81
6/6/2017		850.78	897.91	897.86	878.21	909.54	904.68
7/6/2017		850.36	897.71	897.31	878.46	908.94	905.61
8/17/2017		851.01	898.14	898.10	879.51	909.71	905.91
9/7/2017		850.86	898.04	898.00	878.71	908.56	905.35
10/6/2017		849.76	897.98	897.34	877.86	908.10	904.63
11/14/2017		848.56	896.71	896.71	877.34	907.85	904.14
12/1/2017		851.31	897.24	896.59	877.25	909.31	906.59

Date	LPZ - 1	LPZ - 2	LPZ - 3	LPZ -4	LPZ -5	LPZ -6	LPZ -7
TOC	874.54	868.05	909.16	914.13	890.07	922.45	918.82
TD	19.00	22.90	31.00	23.70	18.70	44.70	24.10
BTM	855.54	845.15	878.16	890.43	871.37	877.75	894.72
1/9/2018		850.29	frozen	frozen	frozen	907.44	905.96
2/2/2018		849.93	897.08	895.44	874.91	908.43	904.13
3/7/2018		851.09	894.35	896.37	876.04	910.31	903.97
4/1/2018		850.69	893.76	895.76	875.15	903.93	901.86
5/2/2018	Removed	849.60	894.16	894.87	874.78	904.80	902.16
6/16/2018		849.48	893.67	893.86	874.14	903.33	902.02
7/5/2018		848.78	893.38	894.01	874.68	903.14	901.87
8/16/2018		848.69	893.65	893.09	873.69	902.86	901.14
9/6/2018		849.15	894.18	893.87	874.16	903.38	902.78
10/8/2018		850.17	895.99	895.43	875.77	904.91	903.84
11/14/2018		851.69	896.96	894.92	875.42	906.80	904.01
12/19/2018		851.46	897.22	895.16	875.81	907.14	904.85

Date	LPZ - 1	LPZ - 2	LPZ - 3	LPZ -4	LPZ -5	LPZ -6	LPZ -7
TOC	874.54	868.05	909.16	914.13	890.07	922.45	918.82
TD	19.00	22.90	31.00	23.70	18.70	44.70	24.10
BTM	855.54	845.15	878.16	890.43	871.37	877.75	894.72
1/8/2019		852.02	896.87	895.74	875.86	906.95	905.10
2/21/2019		852.14	896.96	895.69	875.69	907.04	905.31
3/20/2019		853.41	898.76	898.14	877.96	909.46	904.71
4/10/2019		853.70	899.14	898.69	877.90	909.72	905.12
5/9/2019	Removed	854.14	899.62	899.01	878.14	909.81	906.14
6/10/2019		853.16	898.12	898.01	878.01	909.02	905.22
7/23/2019		853.10	899.14	897.96	877.81	909.87	906.18
8/21/2019		853.86	899.24	899.00	878.14	909.65	905.76
9/13/2019		853.40	899.10	898.76	878.01	909.10	906.01
10/4/2019		853.96	900.06	899.44	879.60	910.14	906.64
11/21/2019		854.06	901.14	901.24	880.02	911.23	906.99
12/16/2019		854.14	901.69	901.78	880.92	910.87	907.89

TOC: Top of Casing Elevation

TD: Total Depth of the Leachate Piezometer.

BTM: Base of the Leachate Piezometer

BENTON COUNTY SANITARY LANDFILL

Monthly Piezemeter Level Measurements

Date	LPZ - 1	LPZ - 2	LPZ - 3	LPZ -4	LPZ -5	LPZ -6	LPZ -7
TOC	874.54	868.05	909.16	914.13	890.07	922.45	918.82
TD	19.00	22.90	31.00	23.70	18.70	44.70	24.10
BTM	855.54	845.15	878.16	890.43	871.37	877.75	894.72
1/16/2020		854.68	900.69	899.29	879.48	910.14	906.94
2/19/2020		854.80	899.26	899.48	879.01	910.87	906.36
3/2/2020		855.07	898.32	900.07	879.71	911.06	905.70
4/10/2020		853.84	898.90	901.17	879.38	911.12	903.92
5/20/2020	Removed	854.19	899.14	900.20	878.69	910.60	904.35
6/11/2020		853.10	897.44	898.81	877.12	909.81	902.18
7/16/2020		852.96	895.80	896.80	876.42	908.76	901.18
8/6/2020		853.86	896.91	898.11	878.07	909.92	902.86
9/24/2020		854.17	898.05	899.77	879.21	910.18	904.77
10/15/2020		854.99	899.42	900.48	879.05	909.91	904.86
11/19/2020		855.18	899.14	900.68	879.36	909.77	904.42
12/28/2020		854.80	898.69	899.77	878.92	910.46	905.01

Date	LPZ - 1	LPZ - 2	LPZ - 3	LPZ -4	LPZ -5	LPZ -6	LPZ -7
TOC	874.54	868.05	909.16	914.13	890.07	922.45	918.82
TD	19.00	22.90	31.00	23.70	18.70	44.70	24.10
BTM	855.54	845.15	878.16	890.43	871.37	877.75	894.72
1/14/2021		852.59	898.41	898.44	878.31	912.19	904.37
2/18/2021		850.11	898.07	898.34	877.01	912.34	904.70
3/15/2021		850.90	898.00	898.68	877.69	912.89	904.41
4/13/2021		851.14	897.69	899.01	877.30	912.12	904.11
5/4/2021	Removed	850.10	898.69	898.41	877.76	911.87	903.96
6/4/2021		849.86	897.91	898.01	876.85	910.85	903.41
7/8/2021		849.70	897.22	898.32	876.89	910.33	903.56
8/18/2021		849.49	898.11	897.29	876.69	910.01	903.91
9/14/2021		849.07	898.45	869.87	876.55	909.48	904.58
10/19/2021		849.14	899.01	897.46	877.14	909.98	905.15
11/17/2021		850.11	898.76	897.70	876.46	909.72	904.69
12/21/2021		850.76	899.14	898.69	877.50	910.11	904.98

Date	LPZ - 1	LPZ - 2	LPZ - 3	LPZ -4	LPZ -5	LPZ -6	LPZ -7
TOC	874.54	868.05	909.16	914.13	890.07	922.45	918.82
TD	19.00	22.90	31.00	23.70	18.70	44.70	24.10
BTM	855.54	845.15	878.16	890.43	871.37	877.75	894.72
1/17/2022		849.14	898.69	897.16	876.49	909.17	904.11
2/8/2022		frozen	897.10	frozen	876.10	frozen	903.85
3/14/2022		850.68	899.14	897.89	877.01	909.98	905.16
4/15/2022		850.29	899.60	897.53	877.67	904.19	903.90
5/19/2022	Removed	853.85	898.76	899.33	878.10	913.24	903.13
6/22/2022		852.68	898.12	898.69	877.56	909.76	902.86
7/18/2022		850.14	897.84	897.76	876.93	907.96	902.71
8/15/2022		849.86	897.14	897.01	877.12	908.12	901.89
9/14/2022		849.47	896.89	897.92	877.01	907.02	901.64
10/25/2022		850.10	897.99	898.14	877.36	909.01	902.78
11/21/2022		850.86	898.27	898.76	877.91	908.86	902.57
12/6/2022		850.26	898.69	899.04	877.68	909.17	902.89

TOC: Top of Casing Elevation

TD: Total Depth of the Leachate Piezometer.

BTM: Base of the Leachate Piezometer

BENTON COUNTY SANITARY LANDFILL

Monthly Piezemeter Level Measurements

Date	LPZ - 1	LPZ - 2	LPZ - 3	LPZ -4	LPZ -5	LPZ -6	LPZ -7
TOC	874.54	868.05	909.16	914.13	890.07	922.45	918.82
TD	19.00	22.90	31.00	23.70	18.70	44.70	24.10
BTM	855.54	845.15	878.16	890.43	871.37	877.75	894.72
1/18/2023		849.79	899.26	898.91	877.89	909.38	903.46
2/8/2023		850.08	899.02	898.14	877.69	frozen	904.37
3/14/2023		850.95	898.72	897.69	877.25	909.70	904.20
4/18/2023		849.59	899.47	897.77	877.79	911.14	903.02
5/17/2023	Removed	850.68	898.74	897.72	877.99	910.70	903.60
6/14/2023		850.26	899.31	898.01	878.25	910.64	904.07
7/10/2023			899.18	898.00	878.01	910.36	903.86
8/4/2023			898.72	897.70	877.64	910.35	904.89
9/19/2023		Removed	898.02	897.35	877.91	910.10	903.16
10/23/2023			898.64	897.62	877.14	909.14	902.91
11/14/2023			897.98	897.14	877.08	910.16	903.21
12/4/2023			899.37	898.41	877.69	910.70	903.72

Date	LPZ - 1	LPZ - 2	LPZ - 3	LPZ -4	LPZ -5	LPZ -6	LPZ -7
TOC	874.54	868.05	909.16	914.13	890.07	922.45	918.82
TD	19.00	22.90	31.00	23.70	18.70	44.70	24.10
BTM	855.54	845.15	878.16	890.43	871.37	877.75	894.72
1/5/2024			898.41	896.21	877.08	910.14	904.02
2/15/2024			899.69	896.89	878.91	911.15	904.20
3/14/2024			899.54	897.51	878.21	910.98	903.17
4/10/2024			899.01	897.31	877.76	908.98	903.76
5/1/2024	Removed	Removed	898.76	897.11	877.31	907.92	904.56
6/6/2024			899.31	898.16	878.01	906.14	905.11
7/17/2024			901.14	897.57	878.16	908.01	904.98
8/8/2024			898.72	896.35	877.76	908.76	905.14
9/18/2024			897.99	895.99	877.99	907.00	905.97
10/16/2024			897.52	895.72	878.26	907.14	905.46
11/21/2024			898.46	896.01	878.70	907.69	905.89
12/18/2024			898.64	895.89	878.10	906.14	904.73

TOC: Top of Casing Elevation

TD: Total Depth of the Leachate Piezometer.

BTM: Base of the Leachate Piezometer

Appendix H

Gas Monitoring Report

Gas Monitoring Report

Explosive gas monitoring per 113.9(2) and the approved GMSP was conducted during the last reporting period (2024). Monitoring points include the four subsurface monitoring points, (GMW's), four monitoring points located within facility structures (BLDG's), one underdrain monitoring point (GU), and four ambient air monitoring points (GMP's). Figure 2 in the body of the report illustrates the locations of the subsurface monitoring points.

Note that groundwater underdrains GU-2 and GU-3 were connected to the leachate collection system in March, 2016 and are no longer a part of the GMSP.

Explosive gas concentrations were below action levels during the monitoring episodes. Summary tables of gas monitoring are included in Appendix H.1. All gas concentrations are reported as percent (%) of Lower Explosive Limit (LEL).

Appendix H.1 –
Explosive Gas Monitoring Results (% LEL)

Annual Methane Gas Evaluation Report
Benton County Sanitary Landfill
2024

Readings are % LEL

Point Number	Location/Date	3/14/24	6/6/24	9/18/24	12/18/24
1	GMP-N (50' west of MW-6)	0	0	0	0
2	GMP-S (Due south of MW-14 at driveway)	0	0	0	0
3	GMP-W (Due west of LPZ-3; north of MW-22)	0	0	0	0
4	GMP-E (Due east of MW-19)	0	0	0	0
5	BLDG-1 (Scalehouse)	0	0	0	0
6	BLDG-2 (Shop and cold storage building)	0	0	0	0
7	GU-1 (Former SW3 42" RCP manhole)	0	0	0	0
8	GMW-1 (North facility property boundary 50' west of MW-6)	0	0	0	0
9	GMW-2 (East faility property boundary due east of MW-19)	0	0	0	0
10	GMW-3 (Due south of MW-14 at south fill site fence line)	0	0	0	0
11	GMW-4 (Due west of LPZ-3 at west fill site boundary; north of MW-22)	0	0	0	0
12	BLDG-3 (Scale pit)	0	0	0	0
13	BLDG-4 (Basement of scalehouse)	0	0	0	0