

2024 ANNUAL GROUNDWATER QUALITY REPORT

FOR THE

BREMER COUNTY SANITARY LANDFILL

9-SDP-1-75C

BREMER COUNTY, IOWA

by:

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6035-23A.320

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Acronyms/Abbreviations:

ACM = Assessment of Corrective Measures

CAMP = Corrective Action Monitoring Plan

CL = Control Limit - Mean plus Two Standard Deviations

DO = Dissolved Oxygen

DQR = Double Quantification Rule

GWPS = Groundwater Protection Standard

LEL = Lower Explosive Limit

LCL = Lower Confidence Limit

LN = Lognormal

MCL = EPA Maximum Contaminant Level

N = Normal

NC = No Change

NP = Non-Parametric

ORP = Oxidation Reduction Potential

P = Parametric

PL = Prediction Limit

RL = Reporting Limit

SS = DNR Statewide Standard for a protected groundwater source

SSI = Statistically Significant Increase above background

SSL = Statistically Significant Level above groundwater protection standard

UCL = Upper Confidence Limit

Certification

Prepared by: 

Date: 1-15-2025

Printed: Todd Whipple, CPG

Section 1.0 Background Information

1.1 Report Format

Table 1 through Table 13 are attached to this report and satisfy the IDNR requirement to provide the tables to meet the IDNR format requirements included in Permit Amendment #6, dated April 2, 2018 (Doc #91937).

1.2 Report Priority

This report concludes that detection and assessment/corrective action monitoring have been stable over time and should continue on an annual basis until IDNR allows the site Owner to develop an Environmental Covenant for the site and end regulation under Iowa Administrative Code (IAC) 567, Chapter 113.

1.3 Period of Report Coverage

Water quality data evaluation is based on a running compilation of data beginning in October 15, 2014. Statistical evaluations herein are based on the Annual 2024 water quality data collected April 9, 2024.

1.4 Current Site Map

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

1.5 Site Status and Applicable Rules

Site Location

The Bremer County Sanitary Landfill is located in the NE $\frac{1}{4}$ of the SW $\frac{1}{4}$ of Section 23, T92N, R13W, Bremer County, Iowa (Figure 1). Waste deposition areas at the site encompass approximately 27 acres (Figure 2). The facility operates under Iowa Department of Natural Resources (IDNR) Closure Permit No. 9-SDP-1-75C.

Landfill History, Layout, and Hydrology

The facility includes two closed landfilling areas, an area of approximately 4 acres closed prior to 1975 with a 2' soil cap and an area of approximately 23 acres closed in 2008 with a 4' soil cap. Cap repair at the site and improvements to an additional 0.46 acres of cap were completed in 2019 (Doc #95921).

The site is situated in gently rolling terrain and adjacent properties are cultivated farm ground. Surface runoff from the landfill property flows in different directions controlled by the topographic surface. Surface runoff from the western parts of the site flows into Quarter Section Run; runoff from the northern portion of the site flows to the westward flowing intermittent stream north of the site; runoff from the eastern parts of the site flows to a drainage ditch along the east boundary of the site; runoff from the southern portion of the site flows to a drainage ditch along the south boundary of the site. All site drainage ultimately ends up in Quarter Section Run.

Groundwater flow in the glacial till soils is from east to west across the site as illustrated in Figure 3.

Applicable Rules

Groundwater monitoring at the site is conducted in accordance with Iowa Administrative Code (IAC) 567-113 as per the variance approved on August 28, 2012.

1.6 Summary of Hydrologic Monitoring System Plan (HMSP)

Monitoring Well Maintenance Performance Reevaluation activities associated with the HMSP monitoring wells are discussed in the report section below.

The frequency of assessment monitoring was relaxed to a five (5) year frequency by Permit Amendment #4, dated July 14, 2015 (Doc# 83873). The current HMSP includes seven (7) monitoring wells. MW-1 and MW-2A are the designated background/upgradient wells for the facility. The Site Plan and the approved monitoring network are illustrated on Figure 2. The current HMSP is summarized in Table 1. The HMSP Implementation Schedule for 2025 is itemized per Permit Amendment #9, dated May 17, 2024 (Doc #110105) - see Table 2.

MONITORING WELL MAINTENANCE PERFORMANCE REEVALUATION

Table 3 outlines the status of well performance and maintenance activities performed as required by IAC 567-113.10(2) f. Note that some semi-annual tasks are reduced to an annual frequency based on approvals for annual water sampling, annual gas monitoring, and annual inspections (see Doc #109724).

High & Low Water Levels

Current year water elevation data is included on Table 4. Historic water elevation data is included in the Table 4A. The maximum depth to water and the minimum depth to water are included in the tables. It appears that approximately 1 to 4 feet of variation in the recorded water table are observed seasonally over time.. A Water Table Contour Map (Figure 3) dated April 2024 is included with this report. The Water Table Contour Map illustrates the water table surface and the effects of the topography.

Well Depth & Sedimentation

Well depth measurements were made on April 9, 2024. Review of the well depth data included on Table 4 indicates that well sedimentation is estimated to be less than one (1.0) foot, except at MW-3 where 1.1 feet of sedimentation is recorded.

Well Recharge Rates & Chemistry

The originally measured horizontal hydraulic conductivity testing results (1991) for each site monitoring well is included on Table 4. Horizontal hydraulic conductivities ranged between 10^{-3} cm/sec and 10^{-5} cm/sec.

Review of the recorded field data on Table 4 for the April 9, 2024 sampling episode indicate that water levels within each well recover to approximately 100% in wells MW-3, MW-4, MW-105B, MW-108A, and MW-110A within 2 hours. Full recovery appears to require greater than 12 hours following purging at MW-1 and MW-2A. Well recovery information indicates that recharge to the individual wells remained sufficient to promote collection of representative water quality samples and the wells were functioning as intended. Monitoring well recharge reevaluation is due biennially according to 113.10(2)"f", and should be evaluated again in 2026.

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

Section 2.0 Reporting Period Monitoring Activities

Prior to April 9, 2012, monitoring was performed according to Iowa Administrative Code 567-103 and 113 that predates current IAC 567, Chapter 113. For a summary of testing performed under the previous rule see document #79355. In addition, full Appendix II samples were collected from all site monitoring points on 4/4/2009, except MW-2A (installed in 2013). A summary of the Appendix II sample collection events at each well is included on Table 2. A comprehensive summary of all sampling episodes (beginning April 9, 2012) to date are included in Table 2A.

Field sampling information for the April 9, 2024 sampling episode is included on the field forms (IDNR Form 542-1322) in Appendix A.

A comprehensive summary of Analytical Data for the episodes between October 15, 2014, and June 13, 2024 is included in Table 9.

2.1 Current Detection Monitoring Activities

Background wells are MW-1 and MW-2A. Downgradient monitoring wells for the Closed facility are MW-3, MW-4, MW-105B, MW-108A, and MW-110A.

2.2 Current Assessment Monitoring Activities

Site monitoring points that are currently in Assessment Monitoring are limited to MW-4 and MW-105B. Appendix II sampling (assessment monitoring) is required. The frequency of assessment monitoring was relaxed to a five (5) year frequency by Permit Amendment #4, dated July 14, 2015 (Doc# 83873).

Bis (2-ethylhexyl)phthalate and Methyl Parathion are the only compounds detected during the assessment monitoring. The compounds were detected infrequently. A summary of detected Bis (2-ethylhexyl)phthalate and Methyl Parathion results is included in Appendix F.

The bis (2-ethylhexyl)phthalate testing frequency is now 1 time per five (5) years in accordance with the approval dated April 18, 2017 (Doc #89126).

The methyl parathion testing frequency is now 1 time per five (5) years in accordance with the approval dated February 6, 2017 (Doc #88343).

On-going annual assessment monitoring at MW-4 and MW-105B will include Appendix I, except during the full Appendix II sampling required every five (5) years.

2.3 Current Corrective Action Monitoring Activities

MW-108A and MW-110A are designated as Point of Compliance - Corrective Action Wells. MW-3 and MW-4 are Step-Out Corrective Action Monitoring Wells (Attenuation Zone Point of Compliance (AZPOC) Wells) for MW-108A and MW-110A, respectively.

Corrective Actions in place at the facility (since 2008) are limited to the demonstrated natural attenuation of compounds between the Point of Compliance Corrective Action Wells and the Step-Out Corrective Action Wells. MW-3 and MW-4 water quality is compared against the GWPS in order to determine whether corrective actions are sufficient at this facility.

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 Bremer County Sanitary Landfill, First Semi-Annual Monitoring Event in 2024, dated May, 2024 is included in Appendix B.

The Keystone Analytical Reports for the laboratory testing of samples collected April 9, 2024 and June 13, 2024 are included in Appendix C.

QUALITY ASSURANCE/QUALITY CONTROL

A blind duplicate sample was collected at MW-2A during the April 9, 2024 annual sampling episode.

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

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

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

The results of the blind duplicate and the monitoring well results for April 9, 2024 were within the limits established and indicate that the data quality is acceptable without restriction.

BACKGROUND DATA VALIDATION

On July 10, 2014 an unnumbered Permit Amendment and Memo was issued by the IDNR regarding turbidity (Doc # 80725). A TSS and Field Turbidity Evaluation Report was prepared and submitted on March 2, 2015 (Doc# 82594) and was approved by IDNR on July 14, 2015 (Doc #83874).

The background data has been restricted to include only sample results that have been collected by “No Purge” methods in order to avoid turbidity related issues that may have been related to historic sample collection methods. A summary table of field measured turbidity is included in Appendix D.

Upgradient Data, Table 1, Attachment B, to the May, 2024 Statistical Evaluation Report (Appendix B) includes a summary of the background data. The site prediction limits established in the Statistical Evaluation Report (Appendix B) are based on the validated background data. The calculated Prediction Limits are summarized on Table 5.

SITE SPECIFIC GWPS

The information included on Table 5 indicates that all calculated Prediction Limits are below the applicable GWPS. Therefore, there is no need to develop a Site-Specific Groundwater Protection Standard for any compound. The published IAC 567, Chapter 137 Statewide Standard are utilized as the GWPS herein.

STATISTICALLY SIGNIFICANT INCREASES (SSI)

The detected concentration of each compound is compared to the current 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) at detection monitoring wells.

Since the Prediction limit for VOC is set at the laboratory Method Reporting Level (MRL), any VOC detection is recorded as an SSI. Table 6 is a summary of all compounds at site monitoring wells that have exceeded a *current* prediction limit in 2024. There were no verified prediction limit exceedance recorded in the current detection monitoring system wells. MW-1, MW-2A, and MW-3 remain in the detection monitoring system.

There were no verified prediction limit exceedance recorded in the current assessment monitoring system wells. MW-4 and MW-105B remain in the assessment monitoring system.

Prediction limit exceedances are recorded (Table 6) at wells that are included in the Corrective Action monitoring system (MW-108A and MW-110A). Table 7 includes an on-going summary of compound detections that exceed the prediction limits (highlighted in light brown).

Exceedances of the Prediction Limit at a well that is in the Assessment Monitoring System, or the Corrective Action Monitoring System is not an SSI, instead the exceedance is further evaluated by Confidence Interval Statistics. Exceedance of the Prediction Limits for the current year are summarized in Table 6. A running summary of recorded Prediction Limit exceedances by year is included in Appendix E. This report serves as notice to the operating record in accordance with IAC 567-113.10(5)c.

Summaries of the current prediction limit exceedances are discussed on pages 3 and 4 of the Otter Creek Report (Appendix B) and are summarized on Table 6 and Table 7.

ASSESSMENT MONITORING SUMMARY

Assessment monitoring (Appendix II sampling) is performed at each well where an SSI has been recorded. At least four (4) full rounds of Appendix II assessment monitoring has been completed at MW-105B (Assessment Monitoring), MW-108A (now Corrective Action Monitoring), and MW-110A (now Corrective Action Monitoring). The second round of Appendix II sampling is completed at MW-4. The most recent Appendix II sampling episode at each well is listed in Table 2.

Assessment monitoring is required to be repeated annually per IAC 567-113.10(6)b. However, assessment monitoring for full Appendix II was relaxed to a five (5) year frequency by Permit Amendment #4, dated July 14, 2015 (Doc# 83873). The next full Appendix II sampling events are due in 2025 (Table 2).

Compounds detected to date beyond the Appendix I list are limited to bis(2-ethylhexyl)phthalate and methyl parathion.

Bis (2-ethylhexyl)phthalate testing frequency is now 1 time per five (5) years in accordance with the approval dated April 18, 2017 (Doc #89126). Methyl Parathion testing frequency is now 1 time per five (5) years in accordance with the approval dated February 6, 2017 (Doc #88343).

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

STATISTICALLY SIGNIFICANT LEVELS (SSL)

The compounds with detections that exceed site prediction limits (see summary in Table 1) are utilized to calculate the Confidence Interval (the 95% lower confidence limits (LCL) and the 95% upper control limits (UCL)) in accordance with the 2009 Unified Guidance for Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities by US EPA. The 95% LCL values are compared to applicable GWPS. Any 95% LCL value that exceeds an applicable GWPS is recorded as an SSL. All wells with a recorded SSL require the plume of impact to be defined in the horizontal and vertical directions and required completion of an Assessment of Corrective Action (ACM).

The SSL Evaluation is based on data collected since April 11, 2016. The Confidence Intervals (95% LCL and 95% UCL) are calculated during each statistical evaluation based on the most recent four (4) data points. The 95% LCL evaluation is presented in Table 7 and Table 10. The yellow highlights in Table 7 indicate a 95% LCL value that exceeds the GWPS.

Based on the findings to date, the following SSL have been identified:

MW-108A – arsenic

MW-110A – arsenic and cobalt

ASSESSMENT OF CORRECTIVE MEASURES (ACM)

The IDNR approved that the spirit of the ACM had been satisfied by historic site activities and explorations performed under rules that predate current rule (Doc #91572).

CORRECTIVE ACTION MONITORING & EVALUATIONS

The SSL are currently limited to Point of Compliance Wells MW-108A (arsenic) and MW-110A (arsenic and cobalt). MW-3 and MW-4 are Step-Out Wells to monitor the effectiveness of the natural attenuation that is observed between each point of compliance well (MW-108A and MW-110A) and each respective Step-Out Well (MW-3 and MW-4).

The Confidence Interval (95% LCL to 95% UCL) is calculated and compared to the applicable GWPS to evaluate the performance of the Corrective Action Systems. A monitoring well is to remain in Corrective Action Monitoring until the 95% UCL value is below the applicable GWPS for a minimum of three (3) years at the Point of Compliance Corrective Action Monitoring Well(s).

The 95% UCL evaluations for MW-108A and MW-110A are presented in Table 8 and Table 10.

The green highlights in Table 8 and Table 10 indicate the 95% UCL values that exceed the GWPS.

Table 11 includes the evaluation of the corrective action trends over time.

Review of the Confidence Interval data (see Table 8 & 10) indicates that the point of compliance wells MW-108A and MW-110A need to remain in the Corrective Action Monitoring System.

Review of the data for Step-Out Corrective Action Monitoring Well MW-3 and MW-4 indicates that both arsenic and cobalt concentrations diminish to acceptable levels before migrating to the Step-Out wells.

It appears that the natural attenuation processes are a sufficient corrective action at this facility. Since it has been in effect at this facility since 2008, it is deemed sufficient moving forward.

It is recommended that Point of Compliance Corrective Action Monitoring Wells MW-108A and MW-110A remain in the corrective action monitoring system until the 95% UCL diminishes to levels below the GWPS.

Section 4.0 Gas Monitoring

Explosive gas monitoring is performed per 113.9(2) and the approved GMSP and was conducted annually during the 2024 reporting period. The IDNR Response Letter dated April 2, 2024 (Doc # 109724) reduced the frequency of gas monitoring to annual.

Monitoring points include the five (5) subsurface gas probes, the buildings on site, and the scale pit. Figure 2 illustrates the locations of gas monitoring points.

Following seeding efforts in 2019, numerous areas of stressed vegetation were noted on the cap during inspections in 2020 and 2021. It was concluded that the stressed areas were caused primarily by landfill gas migration through the closure cap. In an effort to improve the cap vegetation, gas vents were installed at sixteen (16) locations on the cap where vegetation had been noted as stressed. The gas venting project was completed June 2, 2022 and Construction Certification Documentation was submitted to IDNR on July 15, 2022 (Doc #103616).

The gas vents are illustrated on Figure 2. The sixteen Gas Vents (GV-1 through GV-16) were monitored on April 9, 2024 in order to determine whether gas is passively vented at each gas vent. The 2024 monitoring results indicate that the vents are productive and are venting gas.

A summary table of gas monitoring for 2024 is included as Table 13 and includes the results of the monitoring at the sixteen vents.

Note that the amount of exposed screen in the vadose zone at each subsurface gas probe (GP-1 through GP-5) was recorded on April 9, 2024 in order to document that the screened interval of each probe is exposed to the vadose zone. This information is included on Table 13. Review of Table 13 indicates that GP-1, GP-2, GP-3, GP-4, and GP-5 have screen exposed to the vadose zone.

Explosive gas concentrations are recorded as percent lower explosive limit (%LEL). Subsurface gas monitoring results were again below actionable levels during the monitoring episodes.

Section 5.0 Recommendations/Requests

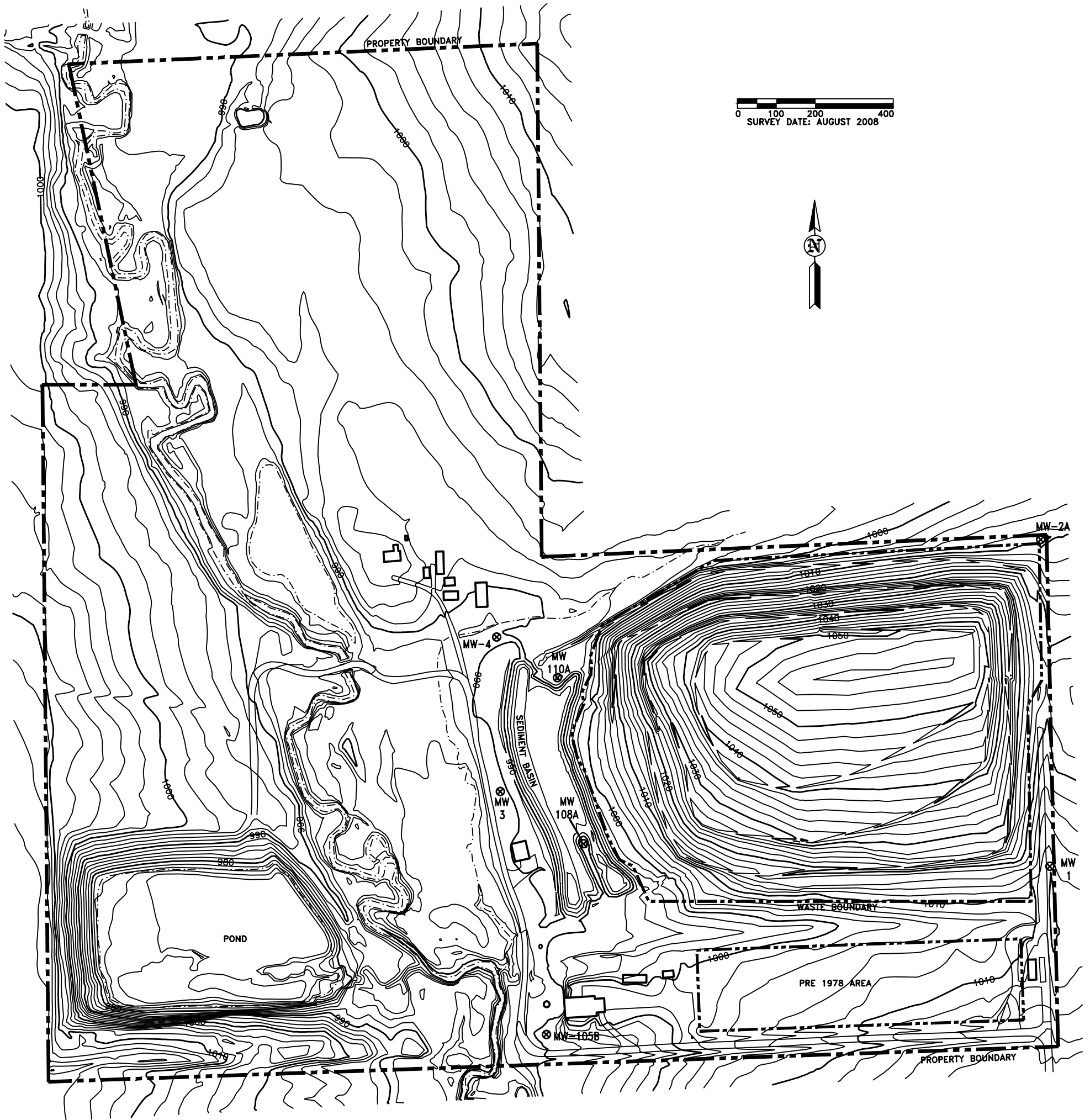
This report concludes that detection and assessment/corrective action monitoring have been sufficient over time to document the stable nature of water quality across the site.

The Owner desires to end regulatory oversight of the post-closure monitoring. The Owner desires to adopt an Environmental Covenant for the facility and have the Closure Permit rescinded. We request IDNR participation in developing an Environmental Covenant for the facility in order to rescind the Closure Permit for the facility. We request a site visit by IDNR in the Spring of 2025 as the initial step in proceeding with the Environmental Covenant.

We request that IDNR suspend requirements for further sampling and testing in 2025 while the Environmental Covenant process is underway.

Groundwater monitoring should continue as outlined in Table 2 in the event that the IDNR does not respond with approval of the recommended course to pursue an Environmental Covenant in 2025.

Figures



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SITE PLAN
 BREMER COUNTY SANITARY LANDFILL
 WAVERLY, IOWA

FIGURE:		1
REVISION	NO.	DATE
DRAWN DRA	PROJECT NO. 6035	DATE 5-20-24

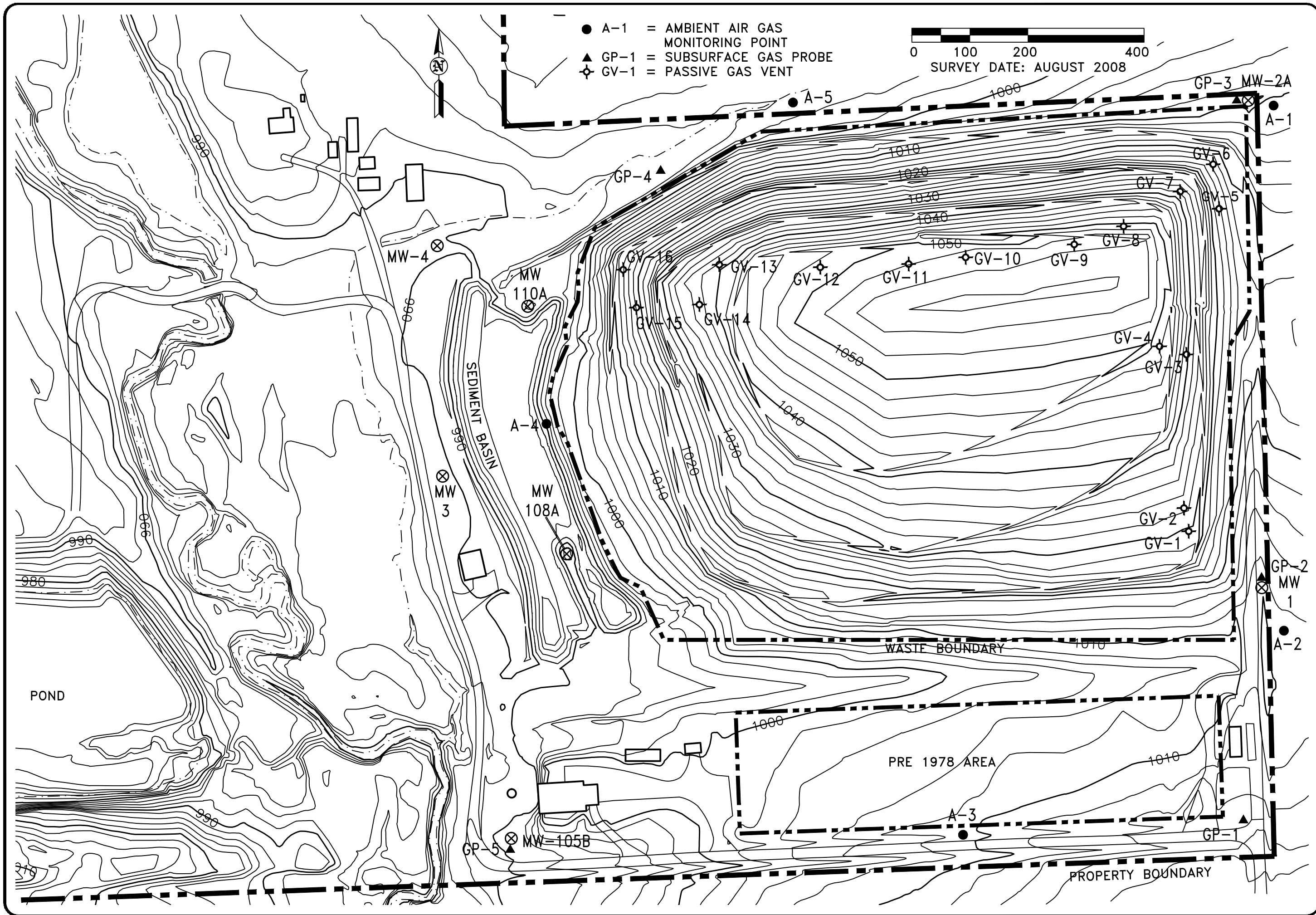
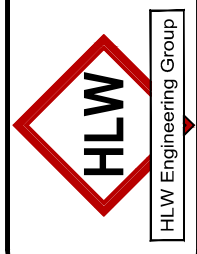


FIGURE: 2

REVISION	NO.	DATE
DRAWN	PROJECT NO.	DATE
DRA	6035	5-20-24

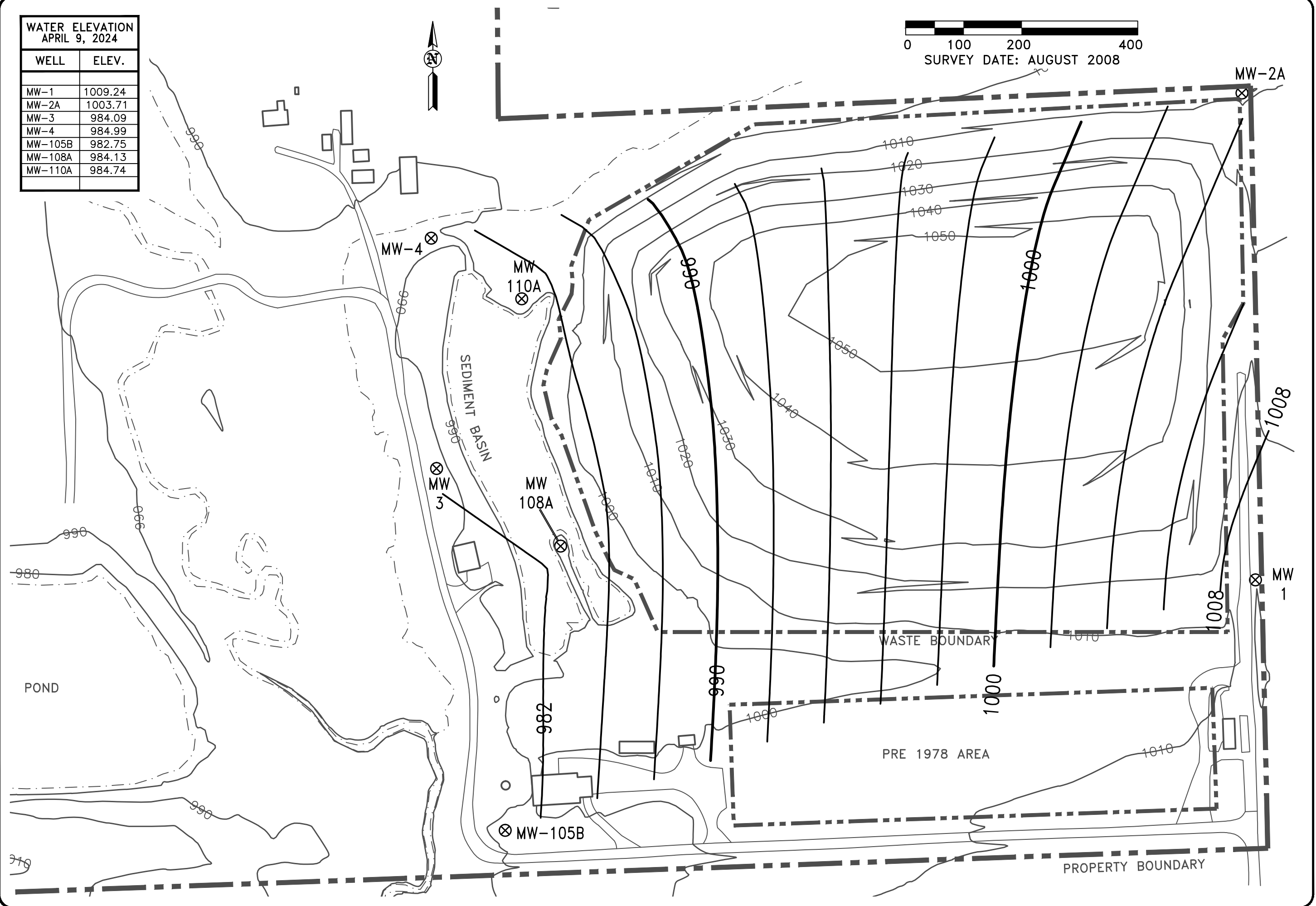
SITE PLAN WITH
 GAS MONITORING LOCATIONS
 BREMER COUNTY SANITARY LANDFILL
 WAVERLY, IOWA

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**WATER ELEVATION
APRIL 9, 2024**

WELL	ELEV.
MW-1	1009.24
MW-2A	1003.71
MW-3	984.09
MW-4	984.99
MW-105B	982.75
MW-108A	984.13
MW-110A	984.74



GROUNDWATER CONTOURS

**BREMER COUNTY SANITARY LANDFILL
WAVERLY, IOWA**

FIGURE: 3

REVISION	NO.	DATE
DRAWN	PROJECT NO. 6035	DATE 5-20-24
DRA		

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Tables

(in IDNR Format)

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Table 1 – Monitoring Program Summary

Table 1
Monitoring Program Summary
Annual Water Quality Report
Bremer County Sanitary Landfill
Permit No. 09-SDP-01-75C

Monitoring Well	Formation	Current Monitoring Program	Change for next sampling event	Constituents w/ SSI	Constituents w/ SSL	Total # of Samples in each monitoring program since October 15, 2014		
						Detection	Assessment	Corrective Action
MW-1	Weathered Till	Background	NC	None	None	22	0	0
MW-2A	Weathered Till	Background	NC	None	None	22	0	0
MW-3	Weathered Till	Detection & SOW-CA	NC	None	None	22	0	22
MW-4	Weathered Till	Assessment & SOW-CA	NC	None	None	0	22	22
MW-105B	Weathered Till	Assessment	NC	None	None	0	22	0
MW-108A	Weathered Till	POC-CA	NC	arsenic, cobalt, nickel, zinc	arsenic	0	0	22
MW-110A	Weathered Till	POC-CA	NC	arsenic, cobalt, nickel, zinc, 1,1-dichloroethane, 1,4-dichlorobenzene, benzene, chlorobenzene, chloroethane	arsenic, cobalt	0	0	22

SOW-CA = Step-Out Well for Corrective Action

POC-CA = Point of Compliance Well for Corrective Action

Table 2 – Monitoring Program Implementation Schedule

Table 2
Monitoring Program Implementation Schedule
Annual Water Quality Report
Bremer County Sanitary Landfill
Permit No. 09-SDP-01-75C

Monitoring Well	Recent Sampling Dates and Constituents	Upcoming Sampling Dates and Constituents		Full Appendix II Sample Dates	
		April, 2025	October, 2025	Previously Collected	Next Event
MW-1		---	Appendix I	4/4/2009	N/A
MW-2A	See Table 2 Supplement	---	Appendix I	N/A	N/A
MW-3		---	Appendix I	4/4/2009	N/A
MW-4		---	Appendix I	4/4/2009, 10/25/2022	Fall of 2027
MW-105B		---	Appendix I	4/4/2009, 10/15/2014, 9/22/2015, 10/15/2020	Fall of 2025
MW-108A		---	Appendix I	4/4/2009, 10/15/2014, 9/22/2015, 10/15/2020	Fall of 2025
MW-110A		---	Appendix I	4/4/2009, 10/7/2013, 4/17/2014, 4/8/2019, 4/9/2024	Spring of 2029

Table 2A – Summary of All Well Testing

Itemized Summary of Hydrologic Monitoring (to date)

<u>WELL</u>	<u>4/4/09</u>	<u>4/9/12</u>	<u>9/10/12</u>	<u>4/15/13</u>	<u>10/7/13</u>
MW-1 (b)	Appendix II	Appendix I	Appendix I	Appendix I	Appendix I
MW-2 (b)	Appendix II	Appendix I	Appendix I	Appendix I	---
MW-2A (b)	---	---	---	---	Dry
MW-3	Appendix II	Appendix I	Appendix I	Appendix I	Appendix I
MW-4	Appendix II	Appendix I	Appendix I	Appendix I	Appendix I
MW-105B	Appendix II	Appendix I	Appendix I	Appendix I	Appendix I
MW-108A	Appendix II	Appendix I	Appendix I	Appendix I	Appendix I
MW-110A	Appendix II	Appendix I	Appendix I	Appendix I	Appendix II
SW-3A	Appendix II	Appendix I ⁽¹⁾	Dry	Appendix I ⁽¹⁾	Dry
SW-4	---	Appendix I	Dry	Appendix I	Dry

<u>WELL</u>	<u>4/17/14</u>	<u>10/15/14</u>	<u>1/12/15</u>	<u>4/13/15</u>	<u>7/21/15</u>
MW-1 (b)	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
MW-2A (b)	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
MW-3	Appendix I	Appendix I	R-ni	Appendix I	---
MW-4	Appendix I	Appendix I	R-co	Appendix I	---
MW-105B	Appendix I	Appendix II	---	Appendix I ⁽¹⁾	---
MW-108A	Appendix I	Appendix II	---	Appendix I ⁽²⁾	---
MW-110A	Appendix II	Appendix I ⁽³⁾	---	Appendix I ⁽³⁾	---
SW-3A	Appendix I ⁽¹⁾	Appendix I ⁽¹⁾	---	Appendix I ⁽¹⁾	R-pb
SW-4	Appendix I	Appendix I	---	Appendix I	---
Duplicate	At SW-3A	At MW-4	---	At MW-4	---

<u>WELL</u>	<u>9/22/15</u>	<u>12/30/15</u>	<u>4/11/16</u>	<u>10/12/16</u>	<u>4/13/17</u>	<u>10/25/17</u>
MW-1 (b)	Appendix I		Appendix I	Appendix I	Appendix I	Appendix I
MW-2A (b)	Appendix I		Appendix I	Appendix I	Appendix I	Appendix I
MW-3	Appendix I		Appendix I	Appendix I	Appendix I	Appendix I
MW-4	Appendix I	R-co	Appendix I	Appendix I	Appendix I	Appendix I
MW-105B	Appendix II	R-co	Appendix I ⁽¹⁾	Appendix I ⁽¹⁾	Appendix I ⁽¹⁾	Appendix I
MW-108A	Appendix II		Appendix I ⁽²⁾	Appendix I ⁽²⁾	Appendix I	Appendix I
MW-110A	Appendix I ⁽³⁾		Appendix I ⁽³⁾	Appendix I ⁽³⁾	Appendix I	Appendix I
Duplicate	At MW-105B		At MW-108A	At MW-1	At MW-105B	At MW-2A

<u>WELL</u>	<u>1/12/18</u>	<u>4/12/18</u>	<u>10/16/18</u>	<u>4/18/19</u>	<u>10/15/19</u>
MW-1 (b)		Appendix I	Appendix I	Appendix I	Appendix I
MW-2A (b)		Appendix I	Appendix I	Appendix I	Appendix I
MW-3		Appendix I	Appendix I	Appendix I	Appendix I
MW-4		Appendix I	Appendix I	Appendix I	Appendix I
MW-105B	R - co + zn	Appendix I	Appendix I	Appendix I	Appendix I
MW-108A	R - co + ni + benzene	Appendix I	Appendix I	Appendix I	Appendix I
MW-110A		Appendix I	Appendix I	Appendix II	Appendix I
Duplicate		At MW-1	At MW-2A	At MW-110A	At MW-1

<u>WELL</u>	<u>1/9/20</u>	<u>4/6/20</u>	<u>10/15/20</u>	<u>4/12/2021</u>	<u>7/1/2021</u>	<u>10/6/2021</u>
MW-1 (b)		Appendix I	Appendix I	Appendix I		Appendix I
MW-2A (b)		Appendix I	Appendix I	Appendix I		Appendix I
MW-3		Appendix I	Appendix I	Appendix I		Appendix I
MW-4		Appendix I	Appendix I	Appendix I	R - Co	Appendix I
MW-105B	R - Cd	Appendix I	Appendix II	Appendix I		Appendix I
MW-108A		Appendix I	Appendix II	Appendix I		Appendix I
MW-110A		Appendix I	Appendix I	Appendix I		Appendix I
Duplicate		At MW-110A	At MW-105B	At MW-108A		At MW-1

<u>WELL</u>	<u>4/14/2022</u>	<u>7/13/2022</u>	<u>10/25/2022</u>	<u>1/9/2023</u>	<u>4/19/2023</u>	<u>10/23/2023</u>
MW-1 (b)	Appendix I		Appendix I		Appendix I	Appendix I
MW-2A (b)	Appendix I		Appendix I		Appendix I	Appendix I
MW-3	Appendix I		Appendix I	R - Co	Appendix I	Appendix I
MW-4	Appendix I	R - Co	Appendix II	R – bis(2EHP)	Appendix I	Appendix I
MW-105B	Appendix I		Appendix I		Appendix I	Appendix I
MW-108A	Appendix I		Appendix I		Appendix I	Appendix I
MW-110A	Appendix I		Appendix I		Appendix I	Appendix I
Duplicate	At MW-105B		At MW-2A		At MW-1	At MW-4

<u>WELL</u>	<u>4/19/2024</u>	<u>6/13/2024</u>
MW-1 (b)	Appendix I	R -VOC
MW-2A (b)	Appendix I	
MW-3	Appendix I	
MW-4	Appendix I ⁽³⁾	
MW-105B	Appendix I ⁽³⁾	
MW-108A	Appendix I ⁽³⁾	
MW-110A	Appendix II	
Duplicate	At MW-2A	

(b) background well

(R-x) verification re-sample

(1) = bis(2ethylhexyl) phthalate

(2) = methyl parathion

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

Table 3 – Monitoring Well Maintenance Performance Reevaluation Schedule

Table 3
Monitoring Well Maintenance and Performance Reevaluation Schedule
Annual Water Quality Report
Bremer County Sanitary Landfill
Permit No. 09-SDP-01-75C

Compliance with:	Monitoring Calendar Years									
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
567 IAC 113.10(2)"f"(1) high and low water levels (biennial)	X		X		X		X		X	X
567 IAC 113.10(2)"f"(2) changes in the hydrologic setting and flow paths (biennial)				X					X	
567 IAC 113.10(2)"f"(3) well depths (annual)	X	X	X	X	X	X	X	X	X	X
567 IAC 113.10(2)"f"(4) well recharge rates and chemistry (biennial)	X					X		X		X
Waste separation from ground water 113.6(2)"I"	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Compliance with:	Monitoring Calendar Years									
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
567 IAC 113.10(2)"f"(1) high and low water levels (biennial)	X	X	X	X	X	X	X	X	X	X
567 IAC 113.10(2)"f"(2) changes in the hydrologic setting and flow paths (biennial)	X		X		X		X		X	
567 IAC 113.10(2)"f"(3) well depths (annual)	X	X	X	X	X	X	X	X	X	X
567 IAC 113.10(2)"f"(4) well recharge rates and chemistry (biennial)	X		X		X		X		X	
Waste separation from ground water 113.6(2)"I"	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Compliance with:	Monitoring Calendar Years									
	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
567 IAC 113.10(2)"f"(1) high and low water levels (biennial)	R	P	P	P	P	P	P	P	P	P
567 IAC 113.10(2)"f"(2) changes in the hydrologic setting and flow paths (biennial)	R		P		P		P		P	
567 IAC 113.10(2)"f"(3) well depths (annual)	X	P	P	P	P	P	P	P	P	P
567 IAC 113.10(2)"f"(4) well recharge rates and chemistry (biennial)	X		P		P		P		P	
Waste separation from ground water 113.6(2)"I"	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

X = Completed

P = Planned

R= Completed at Annual frequency in accordance with IDNR Correspondance dated 4-2-24 (Doc #109724).

Table 4 – Monitoring Well Maintenance Performance Reevaluation Summary

Table 4
Monitoring Well Maintenance and Performance Summary
Annual Water Quality Report
Bremer County Sanitary Landfill
Permit No. 09-SDP-01-75C

Well	Top of casing	Top of Screen	Total Depth		Date of Measurement*	Maximum Depth Discrepancy (ft)	Baseline Recharge (gpm)/date	Most Recent Recharge Rate	
					4/9/2024			4/9/2024	% Change
MW-1	1013.3	1002.2	20.1	Groundwater Level (ft)	4.06	0.2	0.000018 6/5/1991	Full recovery in 24 hour	None percieved
				Groundwater Elevation (Ft MSL)	1009.24				
				Measured Well Depth (ft)	19.9				
				Submerged (+) or Exposed screen (-)	7.04				
MW-2A	1012.74	1004.19	18.55	Groundwater Level (ft)	9.03	0	0.000066 6/5/1991	Full recovery in 24 hour	None percieved
				Groundwater Elevation (Ft MSL)	1003.71				
				Measured Well Depth (ft)	18.55				
				Submerged (+) or Exposed screen (-)	-0.48				
MW-3	991.35	980.7	18.65	Groundwater Level (ft)	7.26	1.1	0.0098 6/5/1991	Full recovery in 2 hour	None percieved
				Groundwater Elevation (Ft MSL)	984.09				
				Measured Well Depth (ft)	17.55				
				Submerged (+) or Exposed screen (-)	3.39				
MW-4	990.8	982.05	18.75	Groundwater Level (ft)	5.81	0.35	0.0024 6/5/1991	Full recovery in 2 hour	None percieved
				Groundwater Elevation (Ft MSL)	984.99				
				Measured Well Depth (ft)	18.4				
				Submerged (+) or Exposed screen (-)	2.94				
MW-105B	993.06	981.16	21.9	Groundwater Level (ft)	10.31	0.35	0.0073 6/5/1991	Full recovery in 2 hour	None percieved
				Groundwater Elevation (Ft MSL)	982.75				
				Measured Well Depth (ft)	21.55				
				Submerged (+) or Exposed screen (-)	1.59				
MW-108A	994.7	983.75	20.55	Groundwater Level (ft)	10.57	-0.1	0.00036 6/5/1991	Full recovery in 2 hours	None percieved
				Groundwater Elevation (Ft MSL)	984.13				
				Measured Well Depth (ft)	20.65				
				Submerged (+) or Exposed screen (-)	0.38				
MW-110A	995.9	985.9	21	Groundwater Level (ft)	11.16	0.35	0.00069 6/5/1991	Full recovery in 1 hour	None percieved
				Groundwater Elevation (Ft MSL)	984.74				
				Measured Well Depth (ft)	20.65				
				Submerged (+) or Exposed screen (-)	-1.16				

* Annual Frequency required per 4-2-24 Doc #109724.

Groundwater Underdrain Piezometer

Well	Does Not Exist	Date of Measurements
		N/A

Table 4A – Historic Water Elevation Data

Water Elevation Data
Bremer County Sanitary Landfill
09-SDP-1-75P

Well/TOC	MW-1 1013.3		MW-2A 1012.74		MW-3 991.35		MW-4 990.8		MW-105B 993.06		MW-108A 994.7		MW-110A 995.9	
	Water Depth	Water Elevation	Water Depth	Water Elevation	Water Depth	Water Elevation	Water Depth	Water Elevation	Water Depth	Water Elevation	Water Depth	Water Elevation	Water Depth	Water Elevation
04/15/13	2.95	1010.35	NR	NR	5.64	985.71	3.57	987.23	9.26	983.80	7.02	987.68	7.53	988.37
05/05/13	4.10	1009.20	NR	NR	5.52	985.83	3.27	987.53	9.68	983.38	6.68	988.02	7.53	988.37
10/07/13	7.24	1006.06	Dry	Dry	8.98	982.37	8.24	982.56	11.61	981.45	12.64	982.06	13.34	982.56
12/19/13	6.54	1006.76			8.71	982.64	8.03	982.77	11.49	981.57	12.41	982.29	13.12	982.78
04/17/14	3.05	1010.25	9.90	1002.84	5.70	985.65	4.00	986.80	9.98	983.08	7.50	987.20	7.95	987.95
10/15/14	6.70	1006.60	9.70	1003.04	8.20	983.15	7.50	983.30	12.00	981.06	12.33	982.37	13.10	982.80
01/11/15	5.55	1007.75	8.55	1004.19	8.65	982.70	7.90	982.90	NR	NR	NR	NR	NR	NR
04/13/15	3.90	1009.40	5.30	1007.44	7.20	984.15	6.30	984.50	10.36	982.70	10.53	984.17	11.04	984.86
07/21/15	5.65	1007.65	6.50	1006.24	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
09/22/15	6.08	1007.22	8.57	1004.17	8.50	982.85	7.71	983.09	11.30	981.76	11.96	982.74	12.73	983.17
12/30/15	NR	NR	NR	NR	NR	NR	4.06	986.74	9.91	983.15	NR	NR	NR	NR
04/11/16	4.73	1008.57	4.74	1008.00	6.46	984.89	4.63	986.17	10.41	982.65	8.15	986.55	9.30	986.60
10/12/16	5.34	1007.96	5.80	1006.94	6.47	984.88	4.80	986.00	10.62	982.44	8.38	986.32	9.39	986.51
04/13/17	4.70	1008.60	4.65	1008.09	6.40	984.95	4.60	986.20	10.57	982.49	7.88	986.82	8.96	986.94
07/10/17	5.25	1008.05	7.86	1004.88	7.61	983.74	6.26	984.54	11.11	981.95	10.98	983.72	11.53	984.37
10/25/17	3.87	1009.43	8.63	1004.11	7.10	984.25	5.67	985.13	10.54	982.52	10.05	984.65	10.48	985.42
04/12/18	3.85	1009.45	4.05	1008.69	6.86	984.49	5.18	985.62	10.29	982.77	9.27	985.43	9.91	985.99
10/16/18	4.45	1008.85	4.08	1008.66	5.21	986.14	3.34	987.46	9.65	983.41	6.22	988.48	7.51	988.39
04/18/19	4.63	1008.67	4.91	1007.83	6.04	985.31	4.50	986.30	9.85	983.21	7.21	987.49	8.62	987.28
10/15/19	4.35	1008.95	5.79	1006.95	6.21	985.14	4.64	986.16	9.97	983.09	8.46	986.24	9.51	986.39
04/06/20	4.68	1008.62	4.92	1007.82	6.63	984.72	4.99	985.81	10.23	982.83	8.85	985.85	9.69	986.21
10/15/20	5.44	1007.86	8.30	1004.44	8.16	983.19	7.36	983.44	11.14	981.92	11.26	983.44	12.32	983.58
04/12/21	4.66	1008.64	6.44	1006.30	6.80	984.55	5.32	985.48	10.31	982.75	9.38	985.32	10.28	985.62
10/06/21	5.97	1007.33	8.86	1003.88	8.61	982.74	7.92	982.88	11.17	981.89	12.17	982.53	12.97	982.93
04/14/22	4.47	1008.83	4.69	1008.05	6.12	985.23	4.60	986.20	9.76	983.30	8.40	986.30	9.55	986.35
10/25/22	6.03	1007.27	8.66	1004.08	8.20	983.15	7.32	983.48	10.90	982.16	11.79	982.91	12.45	983.45
04/19/23	4.96	1008.34	5.97	1006.77	6.85	984.50	4.91	985.89	10.88	982.18	8.91	985.79	9.96	985.94
10/23/23	6.86	1006.44	9.84	1002.90	9.27	982.08	8.54	982.26	11.73	981.33	12.94	981.76	13.68	982.22
04/09/24	4.06	1009.24	9.03	1003.71	7.26	984.09	5.81	984.99	10.31	982.75	10.57	984.13	11.16	984.74
minimum	2.95	1006.06	4.05	1002.84	5.21	982.08	3.27	982.26	9.26	981.06	6.22	981.76	7.51	982.22
maximum	7.24	1010.35	9.90	1008.69	9.27	986.14	8.54	987.53	12.00	983.80	12.94	988.48	13.68	988.39
Top of Screen (Elev.)		1002.20		1004.19		980.70		982.05		981.16		983.75		985.90

Table 5 – Background and GWPS Summary

Table 5
Background and GWPS Summary
Annual Water Quality Report
Bremer County Sanitary Landfill
Permit No. 09-SDP-01-75C

Interwell Background/(MW-1 and MW-2A)

Inorganics - Appendix I										
Constituent	Units	Model Type	Samples - N	Detections	Mean	SD	Prediction Limit	Confidence	GWPS	Source
Antimony (Sb)	µg/l	nonparametric	44	0			2.0000	0.99	6	SS
Arsenic (As)	µg/l	nonparametric	44	0			4.0000	0.99	10	SS
Barium (Ba)	µg/l	normal	44	44	194.4273	144.2646	546.9330		2000	SS
Beryllium (Be)	µg/l	nonparametric	44	0			4.0000	0.99	4	SS
Cadmium (Cd)	µg/l	nonparametric	44	0			0.8000	0.99	5	SS
Chromium (Cr)	µg/l	nonparametric	44	0			8.0000	0.99	100	SS
Cobalt (Co)	µg/l	nonparametric	44	1			0.9000	0.99	2.1	SS
Copper (Cu)	µg/l	nonparametric	42	1			8.4000	0.99	1300	SS
Lead (Pb)	µg/l	nonparametric	44	0			4.0000	0.99	15	SS
Nickel (Ni)	µg/l	nonparametric	44	4			7.1000	0.99	100	SS
Selenium (Se)	µg/l	nonparametric	44	0			4.0000	0.99	50	SS
Silver (Ag)	µg/l	nonparametric	44	0			4.0000	0.99	100	SS
Thallium (Tl)	µg/l	nonparametric	44	0			2.0000	0.99	2	SS
Vanadium (V)	µg/l	nonparametric	44	0			20.0000	0.99	35	SS
Zinc (Zn)	µg/l	nonparametric	44	2			21.0000	0.99	2000	SS
VOC - Appendix I										
Constituent	Units	Model Type	Samples - N	Detections	Mean	SD	Prediction Limit	Confidence	GWPS	Source
All	µg/l	DQR	44	0	<1	<1	<1	<1	various	SS

= Prediction limit exceeds the GWPS. A Site-Specific GWPS is warranted

Table 6 – Summary of Detections

Table 6
Summary of Well/Detected Constituent Pairs that Exceed the Prediction Limit
Annual Water Quality Report
Bremer County Sanitary Landfill
Permit No. 09-SDP-01-75C

Well	Date	Compound	Result (ug/L)	Prediction Limit (ug/L)	Monitoring Program
MW-108A	4/9/2024	Arsenic	9.4	4.0	Corrective Action
MW-108A	4/9/2024	Cobalt	27.6	0.9	Corrective Action
MW-108A	4/9/2024	Nickel	55.6	7.1	Corrective Action
MW-108A	4/9/2024	Zinc	21.10	21.0	Corrective Action
MW-110A	4/9/2024	Arsenic	7.0	4.0	Corrective Action
MW-110A	4/9/2024	Cobalt	1460.0	0.9	Corrective Action
MW-110A	4/9/2024	Nickel	456.0	7.1	Corrective Action
MW-110A	4/9/2024	Zinc	21.4	21.0	Corrective Action
MW-110A	4/9/2024	1,1-dichloroethane	1.1	1.0	Corrective Action
MW-110A	4/9/2024	1,4-dichlorobenzene	3.6	1.0	Corrective Action
MW-110A	4/9/2024	Benzene	3.4	1.0	Corrective Action
MW-110A	4/9/2024	Chlorobenzene	7.6	1.0	Corrective Action
MW-110A	4/9/2024	Chloroethane	1.4	1.0	Corrective Action

Table 7 – Summary of Ongoing and Newly Identified SSI

Table 7

KEY:

SSI

SSL LCL>GWPS

Summary of Ongoing & Newly Identified SSI

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

Annual Water Quality Report

Bremer County Sanitary Landfill

Permit No. 09-SDP-01-75C

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI		5th Background Sample
							Initial Exceedance	Resamples Due	
MW-3	4/11/2016	Arsenic	<4.0	4.0	2.000	10	NA	NA	9/22/2015
MW-3	10/12/2016	Arsenic	<4.0	4.0	2.000	10	NA	NA	9/22/2015
MW-3	4/13/2017	Arsenic	<4.0	4.0	2.000	10	NA	NA	9/22/2015
MW-3	10/25/2017	Arsenic	<4.0	4.0	2.000	10	NA	NA	9/22/2015
MW-3	4/12/2018	Arsenic	<4.0	4.0	2.000	10	NA	NA	9/22/2015
MW-3	10/16/2018	Arsenic	<4.0	4.0	2.000	10	NA	NA	9/22/2015
MW-3	4/18/2019	Arsenic	<4.0	4.0	2.000	10	NA	NA	9/22/2015
MW-3	10/15/2019	Arsenic	<4.0	4.0	2.000	10	NA	NA	9/22/2015
MW-3	4/6/2020	Arsenic	<4.0	4.0	2.000	10	NA	NA	9/22/2015
MW-3	10/15/2020	Arsenic	<4.0	4.0	2.000	10	NA	NA	9/22/2015
MW-3	4/12/2021	Arsenic	<4.0	4.0	2.000	10	NA	NA	9/22/2015
MW-3	10/6/2021	Arsenic	<4.0	4.0	2.000	10	NA	NA	9/22/2015
MW-3	4/14/2022	Arsenic	<4.0	4.0	2.000	10	NA	NA	9/22/2015
MW-3	10/25/2022	Arsenic	<4.0	4.0	2.000	10	NA	NA	9/22/2015
MW-3	4/19/2023	Arsenic	<4.0	4.0	2.000	10	NA	NA	9/22/2015
MW-3	10/23/2023	Arsenic	<4.0	4.0	2.000	10	NA	NA	9/22/2015
MW-3	4/9/2024	Arsenic	<4.0	4.0	2.000	10	NA	NA	9/22/2015
MW-3	4/11/2016	Cobalt	<0.8	0.9	0.400	2.8	NA	NA	9/22/2015
MW-3	10/12/2016	Cobalt	<0.8	0.9	0.400	2.8	NA	NA	9/22/2015
MW-3	4/13/2017	Cobalt	<0.8	0.9	0.400	2.8	NA	NA	9/22/2015
MW-3	10/25/2017	Cobalt	<0.8	0.9	0.400	2.8	NA	NA	9/22/2015
MW-3	4/12/2018	Cobalt	<0.8	0.9	0.400	2.1	NA	NA	9/22/2015
MW-3	10/16/2018	Cobalt	<0.8	0.9	0.400	2.1	NA	NA	9/22/2015
MW-3	4/18/2019	Cobalt	<0.8	0.9	0.400	2.1	NA	NA	9/22/2015
MW-3	10/15/2019	Cobalt	<0.8	0.9	0.400	2.1	NA	NA	9/22/2015
MW-3	4/6/2020	Cobalt	<0.4	0.9	0.400	2.1	NA	NA	9/22/2015
MW-3	10/15/2020	Cobalt	<0.4	0.9	0.400	2.1	NA	NA	9/22/2015
MW-3	4/12/2021	Cobalt	<0.4	0.9	0.400	2.1	NA	NA	9/22/2015
MW-3	10/6/2021	Cobalt	<0.4	0.9	0.400	2.1	NA	NA	9/22/2015
MW-3	4/14/2022	Cobalt	0.4	0.9	0.400	2.1	NA	NA	9/22/2015
MW-3	10/25/2022	Cobalt	1.6*	0.9	0.000	2.1	NA	NA	9/22/2015
MW-3	1/9/2023	Cobalt	<2.0	0.9	0.000	2.1	NA	NA	9/22/2015
MW-3	4/19/2023	Cobalt	<0.4	0.9	0.000	2.1	NA	NA	9/22/2015
MW-3	10/23/2023	Cobalt	<0.4	0.9	0.000	2.1	NA	NA	9/22/2015
MW-3	4/9/2024	Cobalt	<0.4	0.9	0.200	2.1	NA	NA	9/22/2015

* Not verified

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

Table 7

KEY:	SSI	SSL LCL>GWPS
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Summary of Ongoing & Newly Identified SSI *Note: The absence of shading indicates that the condition does not exist.*
Annual Water Quality Report
Bremer County Sanitary Landfill
Permit No. 09-SDP-01-75C

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI		5th Background Sample
							Exceedance	Resamples Due	
MW-4	4/11/2016	Arsenic	<4.0	4.000	2.000	10	NA	NA	9/22/2015
MW-4	10/12/2016	Arsenic	<4.0	4.000	2.000	10	NA	NA	9/22/2015
MW-4	4/13/2017	Arsenic	<4.0	4.000	2.000	10	NA	NA	9/22/2015
MW-4	10/25/2017	Arsenic	<4.0	4.000	2.000	10	NA	NA	9/22/2015
MW-4	4/12/2018	Arsenic	<4.0	4.000	2.000	10	NA	NA	9/22/2015
MW-4	10/16/2018	Arsenic	<4.0	4.000	2.000	10	NA	NA	9/22/2015
MW-4	4/18/2019	Arsenic	<4.0	4.000	2.000	10	NA	NA	9/22/2015
MW-4	10/15/2019	Arsenic	<4.0	4.000	2.000	10	NA	NA	9/22/2015
MW-4	4/6/2020	Arsenic	<4.0	4.000	2.000	10	NA	NA	9/22/2015
MW-4	10/15/2020	Arsenic	<4.0	4.000	2.000	10	NA	NA	9/22/2015
MW-4	4/12/2021	Arsenic	<4.0	4.000	2.000	10	NA	NA	9/22/2015
MW-4	10/6/2021	Arsenic	<4.0	4.000	2.000	10	NA	NA	9/22/2015
MW-4	4/14/2022	Arsenic	<4.0	4.000	2.000	10	NA	NA	9/22/2015
MW-4	10/25/2022	Arsenic	<4.0	4.000	2.000	10	NA	NA	9/22/2015
MW-4	4/19/2023	Arsenic	<4.0	4.000	2.000	10	NA	NA	9/22/2015
MW-4	10/23/2023	Arsenic	<4.0	4.000	2.000	10	NA	NA	9/22/2015
MW-4	4/9/2024	Arsenic	<4.0	4.000	2.000	10	NA	NA	9/22/2015
MW-4	4/11/2016	Cobalt	1.6	0.900	0	2.8	NA	NA	9/22/2015
MW-4	10/12/2016	Cobalt	<0.8	0.900	0	2.8	NA	NA	9/22/2015
MW-4	4/13/2017	Cobalt	<0.8	0.900	1.665	2.8	NA	NA	9/22/2015
MW-4	10/25/2017	Cobalt	<0.8	0.900	1.665	2.8	NA	NA	9/22/2015
MW-4	4/12/2018	Cobalt	<0.8	0.900	0.4	2.1	NA	NA	9/22/2015
MW-4	10/16/2018	Cobalt	<0.8	0.900	0.4	2.1	NA	NA	9/22/2015
MW-4	4/18/2019	Cobalt	<0.8	0.900	0.4	2.1	NA	NA	9/22/2015
MW-4	10/15/2019	Cobalt	<0.8	0.900	0.4	2.1	NA	NA	9/22/2015
MW-4	4/6/2020	Cobalt	<0.4	0.900	0.4	2.1	NA	NA	9/22/2015
MW-4	10/15/2020	Cobalt	<0.4	0.900	0.4	2.1	NA	NA	9/22/2015
MW-4	4/12/2021	Cobalt	<0.4	0.900	0.4	2.1	NA	NA	9/22/2015
MW-4	7/1/2021	Cobalt	1.0	0.900	0.4	2.1	NA	NA	9/22/2015
MW-4	10/6/2021	Cobalt	<0.4	0.900	0.4	2.1	NA	NA	9/22/2015
MW-4	4/14/2022	Cobalt	2.1	0.900	0.032	2.1	NA	NA	9/22/2015
MW-4	7/13/2022	Cobalt	1.8	0.900	0.032	2.1	NA	NA	9/22/2015
MW-4	10/25/2022	Cobalt	<0.4	0.900	0.113	2.1	NA	NA	9/22/2015
MW-4	4/19/2023	Cobalt	<0.4	0.900	0.113	2.1	NA	NA	9/22/2015
MW-4	10/23/2023	Cobalt	<0.4	0.900	0.000	2.1	NA	NA	9/22/2015
MW-4	4/9/2024	Cobalt	<0.4	0.900	0.200	2.1	NA	NA	9/22/2015
MW-4	10/25/2022	Bis(2-ethylhexyl)phthalate	10.0*	6.000	---	6	NA	NA	9/22/2015
MW-4	1/9/2023	Bis(2-ethylhexyl)phthalate	<6	6.000	---	6	NA	NA	9/22/2015
MW-4	4/19/2023	Bis(2-ethylhexyl)phthalate	NT	6.000	---	6	NA	NA	9/22/2015
MW-4	10/23/2023	Bis(2-ethylhexyl)phthalate	NT	6.000	---	6	NA	NA	9/22/2015
MW-4	4/9/2024	Bis(2-ethylhexyl)phthalate	NT	6.000	---	6	NA	NA	9/22/2015

* Not verified

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

Table 7

KEY:	SSI	SSL LCL>GWPS
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**Summary of Ongoing & Newly Identified SSI
Annual Water Quality Report
Bremer County Sanitary Landfill
Permit No. 09-SDP-01-75C**

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI		Resamples Due	5th Background Sample
							Initial Exceedance			
MW-105B	4/11/2016	Cobalt	<0.8	0.900	0.000	2.8	9/22/2015	No-SSI	N/A	
MW-105B	10/12/2016	Cobalt	<0.8	0.900	0.000	2.8	9/22/2015	No-SSI	N/A	
MW-105B	4/13/2017	Cobalt	<0.8	0.900	0.400	2.8	9/22/2015	No-SSI	N/A	
MW-105B	10/25/2017	Cobalt	1.2	0.900	0.129	2.8	9/22/2015	SSI	N/A	
MW-105B	1/12/2018	Cobalt	36.6	0.900	0.000	2.8	9/22/2015	SSI	N/A	
MW-105B	4/12/2018	Cobalt	1.2	0.900	0.000	2.1	9/22/2015	SSI	N/A	
MW-105B	10/16/2018	Cobalt	<0.8	0.900	0.000	2.1	9/22/2015	No-SSI	N/A	
MW-105B	4/18/2019	Cobalt	<0.8	0.900	0.000	2.1	9/22/2015	No-SSI	N/A	
MW-105B	10/15/2019	Cobalt	<0.8	0.900	0.129	2.1	9/22/2015	No-SSI	N/A	
MW-105B	4/6/2020	Cobalt	<0.4	0.900	0.400	2.1	9/22/2015	No-SSI	N/A	
MW-105B	10/15/2020	Cobalt	1.6	0.900	0.000	2.1	9/22/2015	SSI	N/A	
MW-105B	4/12/2021	Cobalt	<0.4	0.900	0.000	2.1	9/22/2015	No-SSI	N/A	
MW-105B	10/6/2021	Cobalt	<0.4	0.900	0.000	2.1	9/22/2015	No-SSI	N/A	
MW-105B	4/14/2022	Cobalt	1.5	0.900	0.193	2.1	9/22/2015	SSI	N/A	
MW-105B	10/25/2022	Cobalt	0.7	0.900	0.139	2.1	9/22/2015	No-SSI	N/A	
MW-105B	4/19/2023	Cobalt	<0.4	0.900	0.139	2.1	9/22/2015	No-SSI	N/A	
MW-105B	10/23/2023	Cobalt	<0.4	0.900	0.139	2.1	9/22/2015	No-SSI	N/A	
MW-105B	4/9/2024	Cobalt	<0.4	0.900	0.299	2.1	9/22/2015	No-SSI	N/A	
MW-105B	10/25/2022	Bromoform	1.4*	1.000	---	80	9/22/2015	No-SSI	N/A	
MW-105B	4/19/2023	Bromoform	<1.0	1.000	---	80	9/22/2015	No-SSI	N/A	
MW-105B	10/23/2023	Bromoform	<1.0	1.000	---	80	9/22/2015	No-SSI	N/A	
MW-105B	4/9/2024	Bromoform	<1.0	1.000	---	80	9/22/2015	No-SSI	N/A	

* Not verified

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

Table 7 KEY: SSI SSL LCL>GWPS
Summary of Ongoing & Newly Identified SSI Note: The absence of shading indicates that the condition does not exist.
Annual Water Quality Report
Bremer County Sanitary Landfill
Permit No. 09-SDP-01-75C

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI		Resamples Due	5th Background Sample
							Initial Exceedance	Due		
MW-108A	4/11/2016	Arsenic	18.6	4.000	16.459	10	4/11/2016	NA	9/22/2015	
MW-108A	10/12/2016	Arsenic	27.9	4.000	15.098	10	4/11/2016	NA	9/22/2015	
MW-108A	4/13/2017	Arsenic	17.1	4.000	15.269	10	4/11/2016	NA	9/22/2015	
MW-108A	10/25/2017	Arsenic	7.9	4.000	8.244	10	4/11/2016	NA	9/22/2015	
MW-108A	4/12/2018	Arsenic	10.7	4.000	5.456	10	4/11/2016	NA	9/22/2015	
MW-108A	10/16/2018	Arsenic	17.5	4.000	7.700	10	4/11/2016	NA	9/22/2015	
MW-108A	4/18/2019	Arsenic	16.5	4.000	7.729	10	4/11/2016	NA	9/22/2015	
MW-108A	10/15/2019	Arsenic	11.6	4.000	10.050	10	4/11/2016	NA	9/22/2015	
MW-108A	4/6/2020	Arsenic	6.4	4.000	7.001	10	4/11/2016	NA	9/22/2015	
MW-108A	10/15/2020	Arsenic	21.5	4.000	0.505	10	4/11/2016	NA	9/22/2015	
MW-108A	4/12/2021	Arsenic	<4.0	4.000	0.000	10	4/11/2016	NA	9/22/2015	
MW-108A	10/6/2021	Arsenic	4.1	4.000	6.376	10	4/11/2016	NA	9/22/2015	
MW-108A	4/14/2022	Arsenic	9.0	4.000	0.000	10	4/11/2016	NA	9/22/2015	
MW-108A	10/25/2022	Arsenic	12.4	4.000	1.337	10	4/11/2016	NA	9/22/2015	
MW-108A	4/19/2023	Arsenic	<4.0	4.000	1.337	10	4/11/2016	NA	9/22/2015	
MW-108A	10/23/2023	Arsenic	14.1	4.000	3.077	10	4/11/2016	NA	9/22/2015	
MW-108A	4/9/2024	Arsenic	9.4	4.000	3.183	10	4/11/2016	NA	9/22/2015	
MW-108A	4/11/2016	Cadmium	<0.8	0.800	0.400	5	10/6/2021	NA	9/22/2015	
MW-108A	10/12/2016	Cadmium	<0.8	0.800	0.400	5	10/6/2021	NA	9/22/2015	
MW-108A	4/13/2017	Cadmium	<0.8	0.800	0.400	5	10/6/2021	NA	9/22/2015	
MW-108A	10/25/2017	Cadmium	<0.8	0.800	0.400	5	10/6/2021	NA	9/22/2015	
MW-108A	4/12/2018	Cadmium	<0.8	0.800	0.400	5	10/6/2021	NA	9/22/2015	
MW-108A	10/16/2018	Cadmium	<0.8	0.800	0.400	5	10/6/2021	NA	9/22/2015	
MW-108A	4/18/2019	Cadmium	<0.8	0.800	0.400	5	10/6/2021	NA	9/22/2015	
MW-108A	10/15/2019	Cadmium	<0.8	0.800	0.400	5	10/6/2021	NA	9/22/2015	
MW-108A	4/6/2020	Cadmium	<0.8	0.800	0.400	5	10/6/2021	NA	9/22/2015	
MW-108A	10/15/2020	Cadmium	<0.8	0.800	0.400	5	10/6/2021	NA	9/22/2015	
MW-108A	4/12/2021	Cadmium	<0.8	0.800	0.400	5	10/6/2021	NA	9/22/2015	
MW-108A	10/6/2021	Cadmium	2.0	0.800	0.000	5	10/6/2021	NA	9/22/2015	
MW-108A	4/14/2022	Cadmium	3.4	0.800	0.000	5	10/6/2021	NA	9/22/2015	
MW-108A	10/25/2022	Cadmium	<0.8	0.800	0.000	5	10/6/2021	NA	9/22/2015	
MW-108A	4/19/2023	Cadmium	<0.8	0.800	0.000	5	10/6/2021	NA	9/22/2015	
MW-108A	10/23/2023	Cadmium	1.5	0.800	0.000	5	10/6/2021	NA	9/22/2015	
MW-108A	4/9/2024	Cadmium	<0.8	0.800	0.028	5	10/6/2021	NA	9/22/2015	
MW-108A	4/11/2016	Cobalt	5.2	0.900	0.468	2.8	4/11/2016	NA	9/22/2015	
MW-108A	10/12/2016	Cobalt	2.9	0.900	0.000	2.8	4/11/2016	NA	9/22/2015	
MW-108A	4/13/2017	Cobalt	<0.8	0.900	0.726	2.8	4/11/2016	NA	9/22/2015	
MW-108A	10/25/2017	Cobalt	149	0.900	0.000	2.8	4/11/2016	NA	9/22/2015	
MW-108A	4/12/2018	Cobalt	1.1	0.900	0.000	2.1	4/11/2016	NA	9/22/2015	
MW-108A	10/16/2018	Cobalt	<0.8	0.900	0.000	2.1	4/11/2016	NA	9/22/2015	
MW-108A	4/18/2019	Cobalt	<0.8	0.900	0.163	2.1	4/11/2016	NA	9/22/2015	
MW-108A	10/15/2019	Cobalt	<0.8	0.900	0.400	2.1	4/11/2016	NA	9/22/2015	
MW-108A	4/6/2020	Cobalt	<0.8	0.900	0.163	2.1	4/11/2016	NA	9/22/2015	
MW-108A	10/15/2020	Cobalt	<0.4	0.900	0.400	2.1	4/11/2016	NA	9/22/2015	
MW-108A	4/12/2021	Cobalt	9.1	0.900	0.000	2.1	4/11/2016	NA	9/22/2015	
MW-108A	10/6/2021	Cobalt	173.0	0.900	0.000	2.1	4/11/2016	NA	9/22/2015	
MW-108A	4/14/2022	Cobalt	56.6	0.900	0.000	2.1	4/11/2016	NA	9/22/2015	
MW-108A	10/25/2022	Cobalt	1.9	0.900	0.000	2.1	4/11/2016	NA	9/22/2015	
MW-108A	4/19/2023	Cobalt	8.4	0.900	0.000	2.1	4/11/2016	NA	9/22/2015	
MW-108A	10/23/2023	Cobalt	586.0	0.900	0.000	2.1	4/11/2016	NA	9/22/2015	
MW-108A	4/9/2024	Cobalt	27.6	0.900	0.000	2.1	4/11/2016	NA	9/22/2015	
MW-108A	4/11/2016	Nickel	<4.0	4.700	2.597	100	10/12/2016	NA	9/22/2015	
MW-108A	10/12/2016	Nickel	5.2	4.700	2.144	100	10/12/2016	NA	9/22/2015	
MW-108A	4/13/2017	Nickel	<4.0	4.700	0.717	100	10/12/2016	NA	9/22/2015	
MW-108A	10/25/2017	Nickel	39.7	7.100	0.000	100	10/12/2016	NA	9/22/2015	
MW-108A	4/12/2018	Nickel	<4.0	7.100	0.000	100	10/12/2016	NA	9/22/2015	
MW-108A	10/16/2018	Nickel	<4.0	7.100	0.000	100	10/12/2016	NA	9/22/2015	
MW-108A	4/18/2019	Nickel	<4.0	7.100	2.000	100	10/12/2016	NA	9/22/2015	
MW-108A	10/15/2019	Nickel	<4.0	7.100	2.000	100	10/12/2016	NA	9/22/2015	
MW-108A	4/6/2020	Nickel	<4.0	7.100	2.000	100	10/12/2016	NA	9/22/2015	
MW-108A	10/15/2020	Nickel	<4.0	7.100	2.000	100	10/12/2016	NA	9/22/2015	
MW-108A	4/12/2021	Nickel	7.6	7.100	0.106	100	10/12/2016	NA	9/22/2015	
MW-108A	10/6/2021	Nickel	46.9	7.100	0.000	100	10/12/2016	NA	9/22/2015	
MW-108A	4/14/2022	Nickel	77.7	7.100	0.000	100	10/12/2016	NA	9/22/2015	
MW-108A	10/25/2022	Nickel	<4.0	7.100	0.000	100	10/12/2016	NA	9/22/2015	
MW-108A	4/19/2023	Nickel	34.6	7.100	3.466	100	10/12/2016	NA	9/22/2015	
MW-108A	10/23/2023	Nickel	292.0	7.100	0.000	100	10/12/2016	NA	9/22/2015	
MW-108A	4/9/2024	Nickel	55.6	7.100	0.000	100	10/12/2016	NA	9/22/2015	
MW-108A	4/11/2016	Zinc	<8	21.000	4.000	2000	10/6/2021	NA	9/22/2015	
MW-108A	10/12/2016	Zinc	<8	21.000	4.000	2000	10/6/2021	NA	9/22/2015	
MW-108A	4/13/2017	Zinc	<8	21.000	4.000	2000	10/6/2021	NA	9/22/2015	
MW-108A	10/25/2017	Zinc	9.0	21.000	2.309	2000	10/6/2021	NA	9/22/2015	
MW-108A	4/12/2018	Zinc	<20	21.000	2.309	2000	10/6/2021	NA	9/22/2015	
MW-108A	10/16/2018	Zinc	<20	21.000	2.309	2000	10/6/2021	NA	9/22/2015	
MW-108A	4/18/2019	Zinc	<8	21.000	2.309	2000	10/6/2021	NA	9/22/2015	
MW-108A	10/15/2019	Zinc	<20	21.000	4.000	2000	10/6/2021	NA	9/22/2015	
MW-108A	4/6/2020	Zinc	<20	21.000	4.000	2000	10/6/2021	NA	9/22/2015	
MW-108A	10/15/2020	Zinc	<20	21.000	4.000	2000	10/6/2021	NA	9/22/2015	
MW-108A	4/12/2021	Zinc	<20	21.000	4.000	2000	10/6/2021	NA	9/22/2015	
MW-108A	10/6/2021	Zinc	61.4	21.000	0.000	2000	10/6/2021	NA	9/22/2015	
MW-108A	4/14/2022	Zinc	35.7	21.000	0.000	2000	10/6/2021	NA	9/22/2015	
MW-108A	10/25/2022	Zinc	<20	21.000	0.000	2000	10/6/2021	NA	9/22/2015	
MW-108A	4/19/2023	Zinc	<20	21.000	0.000	2000	10/6/2021	NA	9/22/2015	
MW-108A	10/23/2023	Zinc	38.1	21.000	0.000	2000	10/6/2021	NA	9/22/2015	
MW-108A	4/9/2024	Zinc	21.1	21.000	1.071	2000	10/6/2021	NA	9/22/2015	
MW-108A	4/11/2016	Benzene	<1.0	1.000	0.309	5	NA	NA	9/22/2015	
MW-108A	10/12/2016	Benzene	<1.0	1.000	0.309	5	NA	NA	9/22/2015	
MW-108A	4/13/2017	Benzene	<1.0	1.000	0.128	5	NA	NA	9/22/2015	
MW-108A	10/25/2017	Benzene	1.0	1.000	0.331	5	NA	NA	9/22/2015	
MW-108A	4/12/2018	Benzene	<1.0	1.000	0.381	5	NA	NA	9/22/2015	
MW-108A	10/16/2018	Benzene	<1.0	1.000	0.381	5	NA	NA	9/22/2015	
MW-108A	4/18/2019	Benzene	<1.0	1.000	0.263	5	NA	NA	9/22/2015	
MW-108A	10/15/2019	Benzene	<1.0	1.000	0.500	5	NA	NA	9/22/2015	
MW-108A	4/6/2020	Benzene	<1.0	1.000	0.500	5	NA	NA	9/22/2015	
MW-108A	10/15/2020	Benzene	<1.0	1.000	0.500	5	NA	NA	9/22/2015	
MW-108A	4/12/2021	Benzene	<1.0	1.000	0.500	5	NA	NA	9/22/2015	
MW-108A	10/6/2021	Benzene	<1.0	1.000	0.500	5	NA	NA	9/22/2015	
MW-108A	4/14/2022	Benzene	<1.0	1.000	0.500	5	NA	NA	9/22/2015	
MW-108A	10/25/2022	Benzene	<1.0	1.000	0.500	5	NA	NA	9/22/2015	
MW-108A	4/19/2023	Benzene	<1.0	1.000	0.500	5	NA	NA	9/22/2015	
MW-108A	10/23/2023	Benzene	<1.0	1.000	0.500	5	NA	NA	9/22/2015	
MW-108A	4/9/2024	Benzene	<1.0	1.000	0.500	5	NA	NA	9/22/2015	

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

Table 7
Summary of Ongoing & Newly Identified SSI
Annual Water Quality Report
Bremer County Sanitary Landfill
Permit No. 09-SDP-01-75C

KEY:	SSI	SSL LCL>GWPS
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Note: The absence of shading indicates that the condition does not exist.

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW-110A	4/11/2016	Arsenic	24.4	4.000	25.105	10	4/11/2016	NA	9/22/2015
MW-110A	10/12/2016	Arsenic	44.8	4.000	23.078	10	4/11/2016	NA	9/22/2015
MW-110A	4/13/2017	Arsenic	33.3	4.000	24.25	10	4/11/2016	NA	9/22/2015
MW-110A	10/25/2017	Arsenic	37.6	4.000	24.997	10	4/11/2016	NA	9/22/2015
MW-110A	4/12/2018	Arsenic	36.3	4.000	32.262	10	4/11/2016	NA	9/22/2015
MW-110A	10/16/2018	Arsenic	50.2	4.000	30.582	10	4/11/2016	NA	9/22/2015
MW-110A	4/18/2019	Arsenic	21.8	4.000	22.807	10	4/11/2016	NA	9/22/2015
MW-110A	10/15/2019	Arsenic	54.2	4.000	23.323	10	4/11/2016	NA	9/22/2015
MW-110A	4/6/2020	Arsenic	44.7	4.000	25.688	10	4/11/2016	NA	9/22/2015
MW-110A	10/15/2020	Arsenic	53.1	4.000	25.754	10	4/11/2016	NA	9/22/2015
MW-110A	4/12/2021	Arsenic	43.8	4.000	42.53	10	4/11/2016	NA	9/22/2015
MW-110A	10/6/2021	Arsenic	42.2	4.000	40.213	10	4/11/2016	NA	9/22/2015
MW-110A	4/14/2022	Arsenic	19.5	4.000	22.868	10	4/11/2016	NA	9/22/2015
MW-110A	10/25/2022	Arsenic	67.1	4.000	20.278	10	4/11/2016	NA	9/22/2015
MW-110A	4/19/2023	Arsenic	18.7	4.000	9.930	10	4/11/2016	NA	9/22/2015
MW-110A	10/23/2023	Arsenic	57.6	4.000	10.988	10	4/11/2016	NA	9/22/2015
MW-110A	4/9/2024	Arsenic	7.0	4.000	3.213	10	4/11/2016	NA	9/22/2015
MW-110A	4/11/2016	Barium	639	635.423	472.843	2,000.00	4/11/2016	NA	9/22/2015
MW-110A	10/12/2016	Barium	748	627.248	625.088	2,000.00	4/11/2016	NA	9/22/2015
MW-110A	4/13/2017	Barium	890	607.518	648.8	2,000.00	4/11/2016	NA	9/22/2015
MW-110A	10/25/2017	Barium	784	594.315	643.478	2,000.00	4/11/2016	NA	9/22/2015
MW-110A	4/12/2018	Barium	733	584.693	705.455	2,000.00	4/11/2016	NA	9/22/2015
MW-110A	10/16/2018	Barium	650	573.2322	646.166	2,000.00	4/11/2016	NA	9/22/2015
MW-110A	4/18/2019	Barium	551	573.0557	559.609	2,000.00	4/11/2016	NA	9/22/2015
MW-110A	10/15/2019	Barium	803	569.0907	556.460	2,000.00	4/11/2016	NA	9/22/2015
MW-110A	4/6/2020	Barium	816	565.1623	555.181	2,000.00	4/11/2016	NA	9/22/2015
MW-110A	10/15/2020	Barium	701	559.7687	573.674	2,000.00	4/11/2016	NA	9/22/2015
MW-110A	4/12/2021	Barium	713	559.0225	688.123	2,000.00	4/11/2016	NA	9/22/2015
MW-110A	10/6/2021	Barium	714	554.4955	672.881	2,000.00	4/11/2016	NA	9/22/2015
MW-110A	4/14/2022	Barium	520	552.3424	550.428	2,000.00	4/11/2016	NA	9/22/2015
MW-110A	10/25/2022	Barium	675	549.8598	547.117	2,000.00	4/11/2016	NA	9/22/2015
MW-110A	4/19/2023	Barium	537	547.8423	496.928	2,000.00	4/11/2016	NA	9/22/2015
MW-110A	10/23/2023	Barium	842	546.0912	467.726	2,000.00	4/11/2016	NA	9/22/2015
MW-110A	4/9/2024	Barium	199	546.933	242.145	2,000.00	4/11/2016	NA	9/22/2015
MW-110A	4/11/2016	Cobalt	13.3	0.900	1.339	2.8	4/11/2016	NA	9/22/2015
MW-110A	10/12/2016	Cobalt	12.5	0.900	2.863	2.8	4/11/2016	NA	9/22/2015
MW-110A	4/13/2017	Cobalt	10.8	0.900	2.948	2.8	4/11/2016	NA	9/22/2015
MW-110A	10/25/2017	Cobalt	7.7	0.900	8.158	2.8	4/11/2016	NA	9/22/2015
MW-110A	4/12/2018	Cobalt	18.5	0.900	7.033	2.1	4/11/2016	NA	9/22/2015
MW-110A	10/16/2018	Cobalt	19.8	0.900	7.286	2.1	4/11/2016	NA	9/22/2015
MW-110A	4/18/2019	Cobalt	23.7	0.900	9.368	2.1	4/11/2016	NA	9/22/2015
MW-110A	10/15/2019	Cobalt	4.3	0.900	6.604	2.1	4/11/2016	NA	9/22/2015
MW-110A	4/6/2020	Cobalt	39.3	0.900	4.863	2.1	4/11/2016	NA	9/22/2015
MW-110A	10/15/2020	Cobalt	4.8	0.900	0.000	2.1	4/11/2016	NA	9/22/2015
MW-110A	4/12/2021	Cobalt	11.2	0.900	0.000	2.1	4/11/2016	NA	9/22/2015
MW-110A	10/6/2021	Cobalt	12.3	0.900	0.000	2.1	4/11/2016	NA	9/22/2015
MW-110A	4/14/2022	Cobalt	191.0	0.900	0.000	2.1	4/11/2016	NA	9/22/2015
MW-110A	10/25/2022	Cobalt	6.5	0.900	0.000	2.1	4/11/2016	NA	9/22/2015
MW-110A	4/19/2023	Cobalt	91.4	0.900	0.000	2.1	4/11/2016	NA	9/22/2015
MW-110A	10/23/2023	Cobalt	18.0	0.900	0.000	2.1	4/11/2016	NA	9/22/2015
MW-110A	4/9/2024	Cobalt	1460.0	0.900	0.000	2.1	4/11/2016	NA	9/22/2015
MW-110A	4/11/2016	Nickel	<4	7.1	2.000	100.00	4/11/2016	NA	9/22/2015
MW-110A	10/12/2016	Nickel	<4	7.1	2.000	100.00	4/11/2016	NA	9/22/2015
MW-110A	4/13/2017	Nickel	<4	7.1	2.000	100.00	4/11/2016	NA	9/22/2015
MW-110A	10/25/2017	Nickel	<4	7.1	2.000	100.00	4/11/2016	NA	9/22/2015
MW-110A	4/12/2018	Nickel	<4	7.1	2.000	100.00	4/11/2016	NA	9/22/2015
MW-110A	10/16/2018	Nickel	<4	7.1	2.000	100.00	4/11/2016	NA	9/22/2015
MW-110A	4/18/2019	Nickel	<4	7.1	2.000	100.00	4/11/2016	NA	9/22/2015
MW-110A	10/15/2019	Nickel	<4	7.1	2.000	100.00	4/11/2016	NA	9/22/2015
MW-110A	4/6/2020	Nickel	<4	7.1	2.000	100.00	4/11/2016	NA	9/22/2015
MW-110A	10/15/2020	Nickel	<4	7.1	2.000	100.00	4/11/2016	NA	9/22/2015
MW-110A	4/12/2021	Nickel	<4	7.1	2.000	100.00	4/11/2016	NA	9/22/2015
MW-110A	10/6/2021	Nickel	<4	7.1	2.000	100.00	4/11/2016	NA	9/22/2015
MW-110A	4/14/2022	Nickel	55.9	7.1	0.000	100.00	4/11/2016	NA	9/22/2015
MW-110A	10/25/2022	Nickel	<4	7.1	0.000	100.00	4/11/2016	NA	9/22/2015
MW-110A	4/19/2023	Nickel	21.2	7.1	0.000	100.00	4/11/2016	NA	9/22/2015
MW-110A	10/23/2023	Nickel	9.0	7.1	0.000	100.00	4/11/2016	NA	9/22/2015
MW-110A	4/9/2024	Nickel	456.0	7.1	0.000	100.00	4/11/2016	NA	9/22/2015
MW-110A	4/11/2016	Zinc	<8	21.0	---	100.00	4/11/2016	NA	9/22/2015
MW-110A	10/12/2016	Zinc	11.2	21.0	---	100.00	4/11/2016	NA	9/22/2015
MW-110A	4/13/2017	Zinc	<8	21.0	---	100.00	4/11/2016	NA	9/22/2015
MW-110A	10/25/2017	Zinc	<8	21.0	10.000	100.00	4/11/2016	NA	9/22/2015
MW-110A	4/12/2018	Zinc	<20	21.0	10.000	100.00	4/11/2016	NA	9/22/2015
MW-110A	10/16/2018	Zinc	<20	21.0	10.000	100.00	4/11/2016	NA	9/22/2015
MW-110A	4/18/2019	Zinc	<8	21.0	10.000	100.00	4/11/2016	NA	9/22/2015
MW-110A	10/15/2019	Zinc	<20	21.0	10.000	100.00	4/11/2016	NA	9/22/2015
MW-110A	4/6/2020	Zinc	<20	21.0	10.000	100.00	4/11/2016	NA	9/22/2015
MW-110A	10/15/2020	Zinc	<20	21.0	10.000	100.00	4/11/2016	NA	9/22/2015
MW-110A	4/12/2021	Zinc	<20	21.0	10.000	100.00	4/11/2016	NA	9/22/2015
MW-110A	10/6/2021	Zinc	<20	21.0	10.000	100.00	4/11/2016	NA	9/22/2015
MW-110A	4/14/2022	Zinc	<20	21.0	10.000	100.00	4/11/2016	NA	9/22/2015
MW-110A	10/25/2022	Zinc	<20	21.0	10.000	100.00	4/11/2016	NA	9/22/2015
MW-110A	4/19/2023	Zinc	<20	21.0	10.000	100.00	4/11/2016	NA	9/22/2015
MW-110A	10/23/2023	Zinc	31.5	21.0	2.730	100.00	4/11/2016	NA	9/22/2015
MW-110A	4/9/2024	Zinc	21.4	21.0	6.046	100.00	4/11/2016	NA	9/22/2015

Table 7
Summary of Ongoing & Newly Identified SSI
Annual Water Quality Report
Bremer County Sanitary Landfill
Permit No. 09-SDP-01-75C

KEY:	SSI	SSL LCL>GWPS
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Note: The absence of shading indicates that the condition does not exist.

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW-110A	4/11/2016	1,1-dichloroethane	<1.0	1.0	0.500	140	10/12/2016	NA	9/22/2015
MW-110A	10/12/2016	1,1-dichloroethane	1.1	1.0	0.297	140	10/12/2016	NA	9/22/2015
MW-110A	4/13/2017	1,1-dichloroethane	<1.0	1.0	0.297	140	10/12/2016	NA	9/22/2015
MW-110A	10/25/2017	1,1-dichloroethane	1.3	1.0	0.365	140	10/12/2016	NA	9/22/2015
MW-110A	4/12/2018	1,1-dichloroethane	<1.0	1.0	0.365	140	10/12/2016	NA	9/22/2015
MW-110A	10/16/2018	1,1-dichloroethane	<1.0	1.0	0.229	140	10/12/2016	NA	9/22/2015
MW-110A	4/18/2019	1,1-dichloroethane	<1.0	1.0	0.229	140	10/12/2016	NA	9/22/2015
MW-110A	10/15/2019	1,1-dichloroethane	1.4	1.0	0.196	140	10/12/2016	NA	9/22/2015
MW-110A	4/6/2020	1,1-dichloroethane	1.2	1.0	0.348	140	10/12/2016	NA	9/22/2015
MW-110A	10/15/2020	1,1-dichloroethane	1.5	1.0	0.620	140	10/12/2016	NA	9/22/2015
MW-110A	4/12/2021	1,1-dichloroethane	1.6	1.0	1.224	140	10/12/2016	NA	9/22/2015
MW-110A	10/6/2021	1,1-dichloroethane	1.6	1.0	1.252	140	10/12/2016	NA	9/22/2015
MW-110A	4/14/2022	1,1-dichloroethane	<1.0	1.0	0.670	140	10/12/2016	NA	9/22/2015
MW-110A	10/25/2022	1,1-dichloroethane	2.0	1.0	0.666	140	10/12/2016	NA	9/22/2015
MW-110A	4/19/2023	1,1-dichloroethane	1.3	1.0	0.603	140	10/12/2016	NA	9/22/2015
MW-110A	10/23/2023	1,1-dichloroethane	<1.0	1.0	0.225	140	10/12/2016	NA	9/22/2015
MW-110A	4/9/2024	1,1-dichloroethane	1.1	1.0	0.498	140	10/12/2016	NA	9/22/2015
MW-110A	4/11/2016	1,4-dichlorobenzene	13.6	1.0	7.816	75	4/11/2016	NA	9/22/2015
MW-110A	10/12/2016	1,4-dichlorobenzene	12.7	1.0	8.175	75	4/11/2016	NA	9/22/2015
MW-110A	4/13/2017	1,4-dichlorobenzene	11.0	1.0	11.203	75	4/11/2016	NA	9/22/2015
MW-110A	10/25/2017	1,4-dichlorobenzene	11.6	1.0	10.865	75	4/11/2016	NA	9/22/2015
MW-110A	4/12/2018	1,4-dichlorobenzene	12.1	1.0	10.999	75	4/11/2016	NA	9/22/2015
MW-110A	10/16/2018	1,4-dichlorobenzene	12.1	1.0	11.085	75	4/11/2016	NA	9/22/2015
MW-110A	4/18/2019	1,4-dichlorobenzene	9.7	1.0	10.033	75	4/11/2016	NA	9/22/2015
MW-110A	10/15/2019	1,4-dichlorobenzene	<1.0	1.0	2.110	75	4/11/2016	NA	9/22/2015
MW-110A	4/6/2020	1,4-dichlorobenzene	<1.0	1.0	0.000	75	4/11/2016	NA	9/22/2015
MW-110A	10/15/2020	1,4-dichlorobenzene	11.9	1.0	0.000	75	4/11/2016	NA	9/22/2015
MW-110A	4/12/2021	1,4-dichlorobenzene	6.8	1.0	0.000	75	4/11/2016	NA	9/22/2015
MW-110A	10/6/2021	1,4-dichlorobenzene	5.4	1.0	0.634	75	4/11/2016	NA	9/22/2015
MW-110A	4/14/2022	1,4-dichlorobenzene	4.7	1.0	3.374	75	4/11/2016	NA	9/22/2015
MW-110A	10/25/2022	1,4-dichlorobenzene	5.2	1.0	4.467	75	4/11/2016	NA	9/22/2015
MW-110A	4/19/2023	1,4-dichlorobenzene	5.4	1.0	4.786	75	4/11/2016	NA	9/22/2015
MW-110A	10/23/2023	1,4-dichlorobenzene	3.4	1.0	3.617	75	4/11/2016	NA	9/22/2015
MW-110A	4/9/2024	1,4-dichlorobenzene	3.6	1.0	3.170	75	4/11/2016	NA	9/22/2015
MW-110A	4/11/2016	Benzene	<1.0	1.0	1.012	5	10/12/2016	NA	9/22/2015
MW-110A	10/12/2016	Benzene	5.4	1.0	1.040	5	10/12/2016	NA	9/22/2015
MW-110A	4/13/2017	Benzene	3.5	1.0	0.956	5	10/12/2016	NA	9/22/2015
MW-110A	10/25/2017	Benzene	4.3	1.0	0.955	5	10/12/2016	NA	9/22/2015
MW-110A	4/12/2018	Benzene	5.1	1.0	3.571	5	10/12/2016	NA	9/22/2015
MW-110A	10/16/2018	Benzene	1.6	1.0	1.861	5	10/12/2016	NA	9/22/2015
MW-110A	4/18/2019	Benzene	2.6	1.0	1.530	5	10/12/2016	NA	9/22/2015
MW-110A	10/15/2019	Benzene	5.2	1.0	1.498	5	10/12/2016	NA	9/22/2015
MW-110A	4/6/2020	Benzene	4.0	1.0	1.494	5	10/12/2016	NA	9/22/2015
MW-110A	10/15/2020	Benzene	4.4	1.0	2.770	5	10/12/2016	NA	9/22/2015
MW-110A	4/12/2021	Benzene	4.0	1.0	3.735	5	10/12/2016	NA	9/22/2015
MW-110A	10/6/2021	Benzene	3.4	1.0	3.465	5	10/12/2016	NA	9/22/2015
MW-110A	4/14/2022	Benzene	3.5	1.0	3.279	5	10/12/2016	NA	9/22/2015
MW-110A	10/25/2022	Benzene	3.8	1.0	3.351	5	10/12/2016	NA	9/22/2015
MW-110A	4/19/2023	Benzene	2.3	1.0	2.479	5	10/12/2016	NA	9/22/2015
MW-110A	10/23/2023	Benzene	2.6	1.0	2.210	5	10/12/2016	NA	9/22/2015
MW-110A	4/9/2024	Benzene	3.4	1.0	2.208	5	10/12/2016	NA	9/22/2015
MW-110A	4/11/2016	Chlorobenzene	<1.0	1.0	1.210	100	10/12/2016	NA	9/22/2015
MW-110A	10/12/2016	Chlorobenzene	6.8	1.0	1.116	100	10/12/2016	NA	9/22/2015
MW-110A	4/13/2017	Chlorobenzene	3.7	1.0	0.492	100	10/12/2016	NA	9/22/2015
MW-110A	10/25/2017	Chlorobenzene	5.1	1.0	0.884	100	10/12/2016	NA	9/22/2015
MW-110A	4/12/2018	Chlorobenzene	5.7	1.0	3.805	100	10/12/2016	NA	9/22/2015
MW-110A	10/16/2018	Chlorobenzene	3.6	1.0	3.301	100	10/12/2016	NA	9/22/2015
MW-110A	4/18/2019	Chlorobenzene	5.4	1.0	3.853	100	10/12/2016	NA	9/22/2015
MW-110A	10/15/2019	Chlorobenzene	6.1	1.0	3.901	100	10/12/2016	NA	9/22/2015
MW-110A	4/6/2020	Chlorobenzene	5.9	1.0	3.911	100	10/12/2016	NA	9/22/2015
MW-110A	10/15/2020	Chlorobenzene	7.6	1.0	5.136	100	10/12/2016	NA	9/22/2015
MW-110A	4/12/2021	Chlorobenzene	7.9	1.0	5.674	100	10/12/2016	NA	9/22/2015
MW-110A	10/6/2021	Chlorobenzene	8.6	1.0	6.152	100	10/12/2016	NA	9/22/2015
MW-110A	4/14/2022	Chlorobenzene	6.3	1.0	6.468	100	10/12/2016	NA	9/22/2015
MW-110A	10/25/2022	Chlorobenzene	8.7	1.0	6.571	100	10/12/2016	NA	9/22/2015
MW-110A	4/19/2023	Chlorobenzene	5.1	1.0	5.090	100	10/12/2016	NA	9/22/2015
MW-110A	10/23/2023	Chlorobenzene	6.5	1.0	4.886	100	10/12/2016	NA	9/22/2015
MW-110A	4/9/2024	Chlorobenzene	7.6	1.0	5.164	100	10/12/2016	NA	9/22/2015
MW-110A	4/11/2016	Chloroethane	<1.0	1.0	0.764	2,800.00	10/12/2016	NA	9/22/2015
MW-110A	10/12/2016	Chloroethane	3.1	1.0	0.764	2,800.00	10/12/2016	NA	9/22/2015
MW-110A	4/13/2017	Chloroethane	2.5	1.0	0.814	2,800.00	10/12/2016	NA	9/22/2015
MW-110A	10/25/2017	Chloroethane	3.0	1.0	0.849	2,800.00	10/12/2016	NA	9/22/2015
MW-110A	4/12/2018	Chloroethane	2.2	1.0	0.849	2,800.00	10/12/2016	NA	9/22/2015
MW-110A	10/16/2018	Chloroethane	1.8	1.0	0.674	2,800.00	10/12/2016	NA	9/22/2015
MW-110A	4/18/2019	Chloroethane	2.2	1.0	0.674	2,800.00	10/12/2016	NA	9/22/2015
MW-110A	10/15/2019	Chloroethane	2.4	1.0	0.721	2,800.00	10/12/2016	NA	9/22/2015
MW-110A	4/6/2020	Chloroethane	2.1	1.0	1.831	2,800.00	10/12/2016	NA	9/22/2015
MW-110A	10/15/2020	Chloroethane	2.8	1.0	2.011	2,800.00	10/12/2016	NA	9/22/2015
MW-110A	4/12/2021	Chloroethane	2.1	1.0	1.96	2,800.00	10/12/2016	NA	9/22/2015
MW-110A	10/6/2021	Chloroethane	1.5	1.0	1.500	2,800.00	10/12/2016	NA	9/22/2015
MW-110A	4/14/2022	Chloroethane	1.5	1.0	1.248	2,800.00	10/12/2016	NA	9/22/2015
MW-110A	10/25/2022	Chloroethane	3.3	1.0	1.102	2,800.00	10/12/2016	NA	9/22/2015
MW-110A	4/19/2023	Chloroethane	1.8	1.0	1.011	2,800.00	10/12/2016	NA	9/22/2015
MW-110A	10/23/2023	Chloroethane	1.8	1.0	1.144	2,800.00	10/12/2016	NA	9/22/2015
MW-110A	4/9/2024	Chloroethane	1.4	1.0	1.089	2,800.00	10/12/2016	NA	9/22/2015

Table 7 KEY: SSI SSL LCL>GWPS
Summary of Ongoing & Newly Identified SSI Note: The absence of shading indicates that the condition does not exist.
Annual Water Quality Report
Bremer County Sanitary Landfill
Permit No. 09-SDP-01-75C

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample	
MW-110A		4/11/2016	Ethylbenzene	<1.0	1.0	0.297	700	NA	NA	9/22/2015
MW-110A		10/12/2016	Ethylbenzene	<1.0	1.0	0.297	700	NA	NA	9/22/2015
MW-110A		4/13/2017	Ethylbenzene	<1.0	1.0	0.398	700	NA	NA	9/22/2015
MW-110A		10/25/2017	Ethylbenzene	<1.0	1.0	0.500	700	NA	NA	9/22/2015
MW-110A		4/12/2018	Ethylbenzene	<1.0	1.0	0.500	700	NA	NA	9/22/2015
MW-110A		10/16/2018	Ethylbenzene	<1.0	1.0	0.500	700	NA	NA	9/22/2015
MW-110A		4/18/2019	Ethylbenzene	<1.0	1.0	0.500	700	NA	NA	9/22/2015
MW-110A		10/15/2019	Ethylbenzene	<1.0	1.0	0.500	700	NA	NA	9/22/2015
MW-110A		4/6/2020	Ethylbenzene	<1.0	1.0	0.500	700	NA	NA	9/22/2015
MW-110A		10/15/2020	Ethylbenzene	<1.0	1.0	0.500	700	NA	NA	9/22/2015
MW-110A		4/12/2021	Ethylbenzene	<1.0	1.0	0.500	700	NA	NA	9/22/2015
MW-110A		10/6/2021	Ethylbenzene	<1.0	1.0	0.500	700	NA	NA	9/22/2015
MW-110A		4/14/2022	Ethylbenzene	<1.0	1.0	0.500	700	NA	NA	9/22/2015
MW-110A		10/25/2022	Ethylbenzene	<1.0	1.0	0.500	700	NA	NA	9/22/2015
MW-110A		4/19/2023	Ethylbenzene	<1.0	1.0	0.500	700	NA	NA	9/22/2015
MW-110A		10/23/2023	Ethylbenzene	<1.0	1.0	0.500	700	NA	NA	9/22/2015
MW-110A		4/9/2024	Ethylbenzene	<1.0	1.0	0.500	700	NA	NA	9/22/2015
MW-110A		4/11/2016	Toluene	<1.0	1.0	0.500	1,000.00	NA	NA	9/22/2015
MW-110A		10/12/2016	Toluene	<1.0	1.0	0.500	1,000.00	NA	NA	9/22/2015
MW-110A		4/13/2017	Toluene	1.0	1.0	0.331	1,000.00	NA	NA	9/22/2015
MW-110A		10/25/2017	Toluene	<1.0	1.0	0.331	1,000.00	NA	NA	9/22/2015
MW-110A		4/12/2018	Toluene	<1.0	1.0	0.331	1,000.00	NA	NA	9/22/2015
MW-110A		10/16/2018	Toluene	<1.0	1.0	0.331	1,000.00	NA	NA	9/22/2015
MW-110A		4/18/2019	Toluene	<1.0	1.0	0.500	1,000.00	NA	NA	9/22/2015
MW-110A		10/15/2019	Toluene	<1.0	1.0	0.500	1,000.00	NA	NA	9/22/2015
MW-110A		4/6/2020	Toluene	<1.0	1.0	0.500	1,000.00	NA	NA	9/22/2015
MW-110A		10/15/2020	Toluene	<1.0	1.0	0.500	1,000.00	NA	NA	9/22/2015
MW-110A		4/12/2021	Toluene	<1.0	1.0	0.500	1,000.00	NA	NA	9/22/2015
MW-110A		10/6/2021	Toluene	<1.0	1.0	0.500	1,000.00	NA	NA	9/22/2015
MW-110A		4/14/2022	Toluene	<1.0	1.0	0.500	1,000.00	NA	NA	9/22/2015
MW-110A		10/25/2022	Toluene	<1.0	1.0	0.500	1,000.00	NA	NA	9/22/2015
MW-110A		4/19/2023	Toluene	<1.0	1.0	0.500	1,000.00	NA	NA	9/22/2015
MW-110A		10/23/2023	Toluene	<1.0	1.0	0.500	1,000.00	NA	NA	9/22/2015
MW-110A		4/9/2024	Toluene	<1.0	1.0	0.500	1,000.00	NA	NA	9/22/2015
MW-110A		4/11/2016	Vinyl Chloride	<1.0	1.0	0.592	2	10/12/2016	NA	9/22/2015
MW-110A		10/12/2016	Vinyl Chloride	1.3	1.0	0.605	2	10/12/2016	NA	9/22/2015
MW-110A		4/13/2017	Vinyl Chloride	1.2	1.0	0.621	2	10/12/2016	NA	9/22/2015
MW-110A		10/25/2017	Vinyl Chloride	1.0	1.0	0.581	2	10/12/2016	NA	9/22/2015
MW-110A		4/12/2018	Vinyl Chloride	<1.0	1.0	0.581	2	10/12/2016	NA	9/22/2015
MW-110A		10/16/2018	Vinyl Chloride	<1.0	1.0	0.381	2	10/12/2016	NA	9/22/2015
MW-110A		4/18/2019	Vinyl Chloride	<1.0	1.0	0.331	2	10/12/2016	NA	9/22/2015
MW-110A		10/15/2019	Vinyl Chloride	2.0	1.0	0.000	2	10/12/2016	NA	9/22/2015
MW-110A		4/6/2020	Vinyl Chloride	1.0	1.0	0.168	2	10/12/2016	NA	9/22/2015
MW-110A		10/15/2020	Vinyl Chloride	<1.0	1.0	0.168	2	10/12/2016	NA	9/22/2015
MW-110A		4/12/2021	Vinyl Chloride	<1.0	1.0	0.168	2	10/12/2016	NA	9/22/2015
MW-110A		10/6/2021	Vinyl Chloride	<1.0	1.0	0.331	2	10/12/2016	NA	9/22/2015
MW-110A		4/14/2022	Vinyl Chloride	<1.0	1.0	0.500	2	10/12/2016	NA	9/22/2015
MW-110A		10/25/2022	Vinyl Chloride	<1.0	1.0	0.500	2	10/12/2016	NA	9/22/2015
MW-110A		4/19/2023	Vinyl Chloride	<1.0	1.0	0.500	2	10/12/2016	NA	9/22/2015
MW-110A		10/23/2023	Vinyl Chloride	<1.0	1.0	0.500	2	10/12/2016	NA	9/22/2015
MW-110A		4/9/2024	Vinyl Chloride	<1.0	1.0	0.500	2	10/12/2016	NA	9/22/2015
MW-110A		4/11/2016	Xylenes	<2.0	2.0	1.000	10,000.00	4/13/2017	NA	9/22/2015
MW-110A		10/12/2016	Xylenes	<2.0	2.0	1.000	10,000.00	4/13/2017	NA	9/22/2015
MW-110A		4/13/2017	Xylenes	2.5	2.0	0.493	10,000.00	4/13/2017	NA	9/22/2015
MW-110A		10/25/2017	Xylenes	<2.0	2.0	0.493	10,000.00	4/13/2017	NA	9/22/2015
MW-110A		4/12/2018	Xylenes	<2.0	2.0	0.493	10,000.00	4/13/2017	NA	9/22/2015
MW-110A		10/16/2018	Xylenes	<2.0	2.0	0.493	10,000.00	4/13/2017	NA	9/22/2015
MW-110A		4/18/2019	Xylenes	<2.0	2.0	1.000	10,000.00	4/13/2017	NA	9/22/2015
MW-110A		10/15/2019	Xylenes	6.6	2.0	0.000	10,000.00	4/13/2017	NA	9/22/2015
MW-110A		4/6/2020	Xylenes	<2.0	2.0	0.000	10,000.00	4/13/2017	NA	9/22/2015
MW-110A		10/15/2020	Xylenes	<2.0	2.0	0.000	10,000.00	4/13/2017	NA	9/22/2015
MW-110A		4/12/2021	Xylenes	<2.0	2.0	0.000	10,000.00	4/13/2017	NA	9/22/2015
MW-110A		10/6/2021	Xylenes	<2.0	2.0	1.000	10,000.00	4/13/2017	NA	9/22/2015
MW-110A		4/14/2022	Xylenes	<2.0	2.0	1.000	10,000.00	4/13/2017	NA	9/22/2015
MW-110A		10/25/2022	Xylenes	<2.0	2.0	1.000	10,000.00	4/13/2017	NA	9/22/2015
MW-110A		4/19/2023	Xylenes	<2.0	2.0	1.000	10,000.00	4/13/2017	NA	9/22/2015
MW-110A		10/23/2023	Xylenes	<2.0	2.0	1.000	10,000.00	4/13/2017	NA	9/22/2015
MW-110A		4/9/2024	Xylenes	<2.0	2.0	1.000	10,000.00	4/13/2017	NA	9/22/2015

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

Table 8 - Summary of Ongoing and Newly Identified SSL

Table 8
Summary of Ongoing & Newly Identified SSL
Annual Water Quality Report
Bremer County Sanitary Landfill
Permit No. 09-SDP-01-75C

KEY: SSL SSL UCL>GWPS

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

Monitoring Well	Compound	Sample Date	Each		GWPS Limit (ug/L)	SSL Initial Exceedance	Compliance Date 1st Occurrence	Compliance Date Most Recent	Compliance Date Duration (years)
			Result (ug/L)	95% UCL (ug/L)					
MW-108A	4/11/2016	Arsenic	18.6	23.791	10	4/11/2016	NA	NA	NA
MW-108A	10/12/2016	Arsenic	27.9	26.602	10	4/11/2016	NA	NA	NA
MW-108A	4/13/2017	Arsenic	17.1	26.581	10	4/11/2016	NA	NA	NA
MW-108A	10/25/2017	Arsenic	7.9	27.506	10	4/11/2016	NA	NA	NA
MW-108A	4/12/2018	Arsenic	10.7	26.344	10	4/11/2016	NA	NA	NA
MW-108A	10/16/2018	Arsenic	17.5	18.900	10	4/11/2016	NA	NA	NA
MW-108A	4/18/2019	Arsenic	16.5	18.571	10	4/11/2016	NA	NA	NA
MW-108A	10/15/2019	Arsenic	11.6	18.100	10	4/11/2016	NA	NA	NA
MW-108A	4/6/2020	Arsenic	6.4	18.999	10	4/11/2016	NA	NA	NA
MW-108A	10/15/2020	Arsenic	21.5	20.245	10	4/11/2016	NA	NA	NA
MW-108A	4/12/2021	Arsenic	<4.0	18.911	10	4/11/2016	NA	NA	NA
MW-108A	10/6/2021	Arsenic	4.1	21.624	10	4/11/2016	NA	NA	NA
MW-108A	4/14/2022	Arsenic	9.0	19.431	10	4/11/2016	NA	NA	NA
MW-108A	10/25/2022	Arsenic	12.4	12.413	10	4/11/2016	NA	NA	NA
MW-108A	4/19/2023	Arsenic	<4.0	12.413	10	4/11/2016	NA	NA	NA
MW-108A	10/23/2023	Arsenic	14.1	15.673	10	4/11/2016	NA	NA	NA
MW-108A	4/9/2024	Arsenic	9.4	15.767	10	4/11/2016	NA	NA	NA
MW-108A	4/11/2016	Cadmium	<0.8	0.400	5	NA	NA	NA	NA
MW-108A	10/12/2016	Cadmium	<0.8	0.400	5	NA	NA	NA	NA
MW-108A	4/13/2017	Cadmium	<0.8	0.400	5	NA	NA	NA	NA
MW-108A	10/25/2017	Cadmium	<0.8	0.400	5	NA	NA	NA	NA
MW-108A	4/12/2018	Cadmium	<0.8	0.400	5	NA	NA	NA	NA
MW-108A	10/16/2018	Cadmium	<0.8	0.400	5	NA	NA	NA	NA
MW-108A	4/18/2019	Cadmium	<0.8	0.400	5	NA	NA	NA	NA
MW-108A	10/15/2019	Cadmium	<0.8	0.400	5	NA	NA	NA	NA
MW-108A	4/6/2020	Cadmium	<0.8	0.400	5	NA	NA	NA	NA
MW-108A	10/15/2020	Cadmium	<0.8	0.400	5	NA	NA	NA	NA
MW-108A	4/12/2021	Cadmium	<0.8	0.400	5	NA	NA	NA	NA
MW-108A	10/6/2021	Cadmium	2.0	1.741	5	NA	NA	NA	NA
MW-108A	4/14/2022	Cadmium	3.4	3.251	5	NA	NA	NA	NA
MW-108A	10/25/2022	Cadmium	<0.8	3.251	5	NA	NA	NA	NA
MW-108A	4/19/2023	Cadmium	<0.8	3.251	5	NA	NA	NA	NA
MW-108A	10/23/2023	Cadmium	1.5	3.090	5	NA	NA	NA	NA
MW-108A	4/9/2024	Cadmium	<0.8	1.322	5	NA	NA	NA	NA
MW-108A	4/11/2016	Cobalt	5.2	15.482	2.8	NA	NA	NA	NA
MW-108A	10/12/2016	Cobalt	2.9	15.501	2.8	NA	NA	NA	NA
MW-108A	4/13/2017	Cobalt	<0.8	6.174	2.8	NA	NA	NA	NA
MW-108A	10/25/2017	Cobalt	149	125.373	2.8	NA	NA	NA	NA
MW-108A	4/12/2018	Cobalt	1.1	124.987	2.1	NA	NA	NA	NA
MW-108A	10/16/2018	Cobalt	<0.8	124.987	2.1	NA	NA	NA	NA
MW-108A	4/18/2019	Cobalt	<0.8	0.987	2.1	NA	NA	NA	NA
MW-108A	10/15/2019	Cobalt	<0.8	0.400	2.1	NA	NA	NA	NA
MW-108A	4/6/2020	Cobalt	<0.8	0.987	2.1	NA	NA	NA	NA
MW-108A	10/15/2020	Cobalt	<0.4	0.400	2.1	NA	NA	NA	NA
MW-108A	4/12/2021	Cobalt	9.1	7.692	2.1	NA	NA	NA	NA
MW-108A	10/6/2021	Cobalt	173.0	145.650	2.1	NA	NA	NA	NA
MW-108A	4/14/2022	Cobalt	56.6	153.198	2.1	NA	NA	NA	NA
MW-108A	10/25/2022	Cobalt	1.9	153.136	2.1	NA	NA	NA	NA
MW-108A	4/19/2023	Cobalt	8.4	153.139	2.1	NA	NA	NA	NA
MW-108A	10/23/2023	Cobalt	586.0	496.002	2.1	NA	NA	NA	NA
MW-108A	4/9/2024	Cobalt	27.6	493.440	2.1	NA	NA	NA	NA
MW-108A	4/11/2016	Nickel	<4.0	11.303	100	NA	NA	NA	NA
MW-108A	10/12/2016	Nickel	5.2	11.106	100	NA	NA	NA	NA
MW-108A	4/13/2017	Nickel	<4.0	8.233	100	NA	NA	NA	NA
MW-108A	10/25/2017	Nickel	39.7	33.844	100	NA	NA	NA	NA
MW-108A	4/12/2018	Nickel	<4.0	33.598	100	NA	NA	NA	NA
MW-108A	10/16/2018	Nickel	<4.0	33.598	100	NA	NA	NA	NA
MW-108A	4/18/2019	Nickel	<4.0	2.000	100	NA	NA	NA	NA
MW-108A	10/15/2019	Nickel	<4.0	2.000	100	NA	NA	NA	NA
MW-108A	4/6/2020	Nickel	<4.0	2.000	100	NA	NA	NA	NA
MW-108A	10/15/2020	Nickel	<4.0	2.000	100	NA	NA	NA	NA
MW-108A	4/12/2021	Nickel	7.6	6.694	100	NA	NA	NA	NA
MW-108A	10/6/2021	Nickel	46.9	40.125	100	NA	NA	NA	NA
MW-108A	4/14/2022	Nickel	77.7	75.394	100	NA	NA	NA	NA
MW-108A	10/25/2022	Nickel	<4.0	75.394	100	NA	NA	NA	NA
MW-108A	4/19/2023	Nickel	34.6	77.134	100	NA	NA	NA	NA
MW-108A	10/23/2023	Nickel	292.0	255.293	100	NA	NA	NA	NA
MW-108A	4/9/2024	Nickel	55.6	251.887	100	NA	NA	NA	NA
MW-108A	4/11/2016	Zinc	<8	4.000	2000	NA	NA	NA	NA
MW-108A	10/12/2016	Zinc	<8	4.000	2000	NA	NA	NA	NA
MW-108A	4/13/2017	Zinc	<8	4.000	2000	NA	NA	NA	NA
MW-108A	10/25/2017	Zinc	9.0	8.191	2000	NA	NA	NA	NA
MW-108A	4/12/2018	Zinc	<20	8.191	2000	NA	NA	NA	NA
MW-108A	10/16/2018	Zinc	<20	8.191	2000	NA	NA	NA	NA
MW-108A	4/18/2019	Zinc	<8	8.191	2000	NA	NA	NA	NA
MW-108A	10/15/2019	Zinc	<20	4.000	2000	NA	NA	NA	NA
MW-108A	4/6/2020	Zinc	<20	4.000	2000	NA	NA	NA	NA
MW-108A	10/15/2020	Zinc	<20	4.000	2000	NA	NA	NA	NA
MW-108A	4/12/2021	Zinc	<20	4.000	2000	NA	NA	NA	NA
MW-108A	10/6/2021	Zinc	61.4	52.271	2000	NA	NA	NA	NA
MW-108A	4/14/2022	Zinc	35.7	58.823	2000	NA	NA	NA	NA
MW-108A	10/25/2022	Zinc	<20	58.823	2000	NA	NA	NA	NA
MW-108A	4/19/2023	Zinc	<20	58.823	2000	NA	NA	NA	NA
MW-108A	10/23/2023	Zinc	28.1	37.080	2000	NA	NA	NA	NA
MW-108A	4/9/2024	Zinc	21.1	28.529	2000	NA	NA	NA	NA
MW-108A	4/11/2016	Benzene	<1.0	1.591	5	NA	NA	NA	NA
MW-108A	10/12/2016	Benzene	<1.0	1.591	5	NA	NA	NA	NA
MW-108A	4/13/2017	Benzene	<1.0	1.422	5	NA	NA	NA	NA
MW-108A	10/25/2017	Benzene	1.0	0.919	5	NA	NA	NA	NA
MW-108A	4/12/2018	Benzene	<1.0	1.219	5	NA	NA	NA	NA
MW-108A	10/16/2018	Benzene	<1.0	1.219	5	NA	NA	NA	NA
MW-108A	4/18/2019	Benzene	<1.0	1.087	5	NA	NA	NA	NA
MW-108A	10/15/2019	Benzene	<1.0	0.500	5	NA	NA	NA	NA
MW-108A	4/6/2020	Benzene	<1.0	0.500	5	NA	NA	NA	NA
MW-108A	10/15/2020	Benzene	<1.0	0.500	5	NA	NA	NA	NA
MW-108A	4/12/2021	Benzene	<1.0	0.500	5	NA	NA	NA	NA
MW-108A	10/6/2021	Benzene	<1.0	0.500	5	NA	NA	NA	NA
MW-108A	4/14/2022	Benzene	<1.0	0.500	5	NA	NA	NA	NA
MW-108A	10/25/2022	Benzene	<1.0	0.500	5	NA	NA	NA	NA
MW-108A	4/19/2023	Benzene	<1.0	0.500	5	NA	NA	NA	NA
MW-108A	10/23/2023	Benzene	<1.0	0.500	5	NA	NA	NA	NA
MW-108A	4/9/2024	Benzene	<1.0	0.500	5	NA	NA	NA	NA

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

Table 8
Summary of Ongoing & Newly Identified SSL
Annual Water Quality Report
Bremer County Sanitary Landfill
Permit No. 09-SDP-01-75C

KEY:	SSI	SSL UCL>GWPS
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Note: The absence of shading indicates that the condition does not exist.

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	95% UCL (ug/L)	GWPS Limit (ug/L)	SSL Initial Exceedance	Compliance Date 1st Occurrence	Compliance Date Most Recent	Compliance Date Duration (years)
MW-110A		4/11/2016	24.4	36.695	10	4/11/2016	NA	NA	NA
MW-110A		10/12/2016	44.8	43.372	10	4/11/2016	NA	NA	NA
MW-110A		4/13/2017	33.3	43.9	10	4/11/2016	NA	NA	NA
MW-110A		10/25/2017	37.6	45.053	10	4/11/2016	NA	NA	NA
MW-110A		4/12/2018	36.3	43.738	10	4/11/2016	NA	NA	NA
MW-110A		10/16/2018	50.2	48.118	10	4/11/2016	NA	NA	NA
MW-110A		4/18/2019	21.8	50.143	10	4/11/2016	NA	NA	NA
MW-110A		10/15/2019	54.2	57.927	10	4/11/2016	NA	NA	NA
MW-110A		4/6/2020	44.7	59.762	10	4/11/2016	NA	NA	NA
MW-110A		10/15/2020	53.1	61.146	10	4/11/2016	NA	NA	NA
MW-110A		4/12/2021	43.8	55.37	10	4/11/2016	NA	NA	NA
MW-110A		10/6/2021	42.2	51.687	10	4/11/2016	NA	NA	NA
MW-110A		4/14/2022	19.5	56.432	10	4/11/2016	NA	NA	NA
MW-110A		10/25/2022	67.1	66.022	10	4/11/2016	NA	NA	NA
MW-110A		4/19/2023	18.7	63.820	10	4/11/2016	NA	NA	NA
MW-110A		10/23/2023	57.6	70.452	10	4/11/2016	NA	NA	NA
MW-110A		4/9/2024	7.0	71.987	10	4/11/2016	NA	NA	NA
MW-110A		4/11/2016	639	1651.157	2,000.00	NA	NA	NA	NA
MW-110A		10/12/2016	748	982.912	2,000.00	NA	NA	NA	NA
MW-110A		4/13/2017	890	904.2	2,000.00	NA	NA	NA	NA
MW-110A		10/25/2017	784	887.022	2,000.00	NA	NA	NA	NA
MW-110A		4/12/2018	733	872.045	2,000.00	NA	NA	NA	NA
MW-110A		10/16/2018	650	882.334	2,000.00	NA	NA	NA	NA
MW-110A		4/18/2019	551	799.391	2,000.00	NA	NA	NA	NA
MW-110A		10/15/2019	803	812.040	2,000.00	NA	NA	NA	NA
MW-110A		4/6/2020	816	854.819	2,000.00	NA	NA	NA	NA
MW-110A		10/15/2020	701	861.826	2,000.00	NA	NA	NA	NA
MW-110A		4/12/2021	713	828.377	2,000.00	NA	NA	NA	NA
MW-110A		10/6/2021	714	799.119	2,000.00	NA	NA	NA	NA
MW-110A		4/14/2022	520	773.572	2,000.00	NA	NA	NA	NA
MW-110A		10/25/2022	675	763.883	2,000.00	NA	NA	NA	NA
MW-110A		4/19/2023	537	726.072	2,000.00	NA	NA	NA	NA
MW-110A		10/23/2023	842	819.274	2,000.00	NA	NA	NA	NA
MW-110A		4/9/2024	199	884.355	2,000.00	NA	NA	NA	NA
MW-110A		4/11/2016	13.3	13.811	2.8	10/12/2016	NA	NA	NA
MW-110A		10/12/2016	12.5	15.837	2.8	10/12/2016	NA	NA	NA
MW-110A		4/13/2017	10.8	16.002	2.8	10/12/2016	NA	NA	NA
MW-110A		10/25/2017	7.7	13.992	2.8	10/12/2016	NA	NA	NA
MW-110A		4/12/2018	18.5	17.717	2.1	10/12/2016	NA	NA	NA
MW-110A		10/16/2018	19.8	21.114	2.1	10/12/2016	NA	NA	NA
MW-110A		4/18/2019	23.7	25.482	2.1	10/12/2016	NA	NA	NA
MW-110A		10/15/2019	4.3	26.546	2.1	10/12/2016	NA	NA	NA
MW-110A		4/6/2020	39.3	38.687	2.1	10/12/2016	NA	NA	NA
MW-110A		10/15/2020	4.8	37.803	2.1	10/12/2016	NA	NA	NA
MW-110A		4/12/2021	11.2	34.388	2.1	10/12/2016	NA	NA	NA
MW-110A		10/6/2021	12.3	34.891	2.1	10/12/2016	NA	NA	NA
MW-110A		4/14/2022	191.0	161.683	2.1	10/12/2016	NA	NA	NA
MW-110A		10/25/2022	6.5	161.745	2.1	10/12/2016	NA	NA	NA
MW-110A		4/19/2023	91.4	176.825	2.1	10/12/2016	NA	NA	NA
MW-110A		10/23/2023	18.0	176.662	2.1	10/12/2016	NA	NA	NA
MW-110A		4/9/2024	1460.0	1231.113	2.1	10/12/2016	NA	NA	NA
MW-110A		4/11/2016	<4	2.000	100.00	NA	NA	NA	NA
MW-110A		10/12/2016	<4	2.000	100.00	NA	NA	NA	NA
MW-110A		4/13/2017	<4	2.000	100.00	NA	NA	NA	NA
MW-110A		10/25/2017	<4	2.000	100.00	NA	NA	NA	NA
MW-110A		4/12/2018	<4	2.000	100.00	NA	NA	NA	NA
MW-110A		10/16/2018	<4	2.000	100.00	NA	NA	NA	NA
MW-110A		4/18/2019	<4	2.000	100.00	NA	NA	NA	NA
MW-110A		10/15/2019	<4	2.000	100.00	NA	NA	NA	NA
MW-110A		4/6/2020	<4	2.000	100.00	NA	NA	NA	NA
MW-110A		10/15/2020	<4	2.000	100.00	NA	NA	NA	NA
MW-110A		4/12/2021	<4	2.000	100.00	NA	NA	NA	NA
MW-110A		10/6/2021	<4	2.000	100.00	NA	NA	NA	NA
MW-110A		4/14/2022	55.9	47.176	100.00	NA	NA	NA	NA
MW-110A		10/25/2022	<4	47.176	100.00	NA	NA	NA	NA
MW-110A		4/19/2023	21.2	50.172	100.00	NA	NA	NA	NA
MW-110A		10/23/2023	9.0	50.181	100.00	NA	NA	NA	NA
MW-110A		4/9/2024	456.0	384.097	100.00	NA	NA	NA	NA
MW-110A		4/11/2016	<8	---	100.00	NA	NA	NA	NA
MW-110A		10/12/2016	11.2	---	100.00	NA	NA	NA	NA
MW-110A		4/13/2017	<8	---	100.00	NA	NA	NA	NA
MW-110A		10/25/2017	<8	10.000	100.00	NA	NA	NA	NA
MW-110A		4/12/2018	<20	10.000	100.00	NA	NA	NA	NA
MW-110A		10/16/2018	<20	10.000	100.00	NA	NA	NA	NA
MW-110A		4/18/2019	<8	10.000	100.00	NA	NA	NA	NA
MW-110A		10/15/2019	<20	10.000	100.00	NA	NA	NA	NA
MW-110A		4/6/2020	<20	10.000	100.00	NA	NA	NA	NA
MW-110A		10/15/2020	<20	10.000	100.00	NA	NA	NA	NA
MW-110A		4/12/2021	<20	10.000	100.00	NA	NA	NA	NA
MW-110A		10/6/2021	<20	10.000	100.00	NA	NA	NA	NA
MW-110A		4/14/2022	<20	10.000	100.00	NA	NA	NA	NA
MW-110A		10/25/2022	<20	10.000	100.00	NA	NA	NA	NA
MW-110A		4/19/2023	<20	10.000	100.00	NA	NA	NA	NA
MW-110A		10/23/2023	31.5	28.020	100.00	NA	NA	NA	NA
MW-110A		4/9/2024	21.4	30.404	100.00	NA	NA	NA	NA

Table 9 – Analytical Data Summary

Table 9

Analytical Data Summary for MW-1

Constituents	Units	10/15/2014	1/12/2015	4/13/2015	7/21/2015	9/22/2015	4/11/2016	10/12/2016	4/13/2017
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	ug/L	<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Antimony, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Barium, total	ug/L	370	385	385	336	307	284	324	341
Benzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	ug/L	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chromium, total	ug/L	<8	<8	<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Copper, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	8.4	<4.0	<4.0
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Methyl iodide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	ug/L	<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
Solids, total suspended	mg/L	3		<2					
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	<4	<4	<4	<4
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,2-dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	ug/L	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	<8	<8	<8	<8	<8	<8	<8	<8

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

Table 9

Analytical Data Summary for MW-1

Constituents	10/25/2017	4/12/2018	10/16/2018	4/18/2019	10/15/2019	4/6/2020	10/15/2020	4/12/2021	10/6/2021
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<1	<1	<1	<1	<1	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Barium, total	325	323	297	365	340	334	316	351	315
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	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
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	<8	<8	<8	<8	<4	<4	<4	<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
Lead, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Methyl iodide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Solids, total suspended									
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4	<4	<4	<2	<2	<2	<2	<2	<2
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,2-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	<20	<20	<8	<20	<20	<20	<20	<20

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

Table 9

Analytical Data Summary for MW-1

Constituents	4/14/2022	10/25/2022	4/19/2023	10/23/2023	4/9/2024	6/13/2024
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	<5	<5	<5	<5	
1,2-dibromoethane	<1	<1	<1	<1	<1	
1,2-dichlorobenzene	<1	<1	<1	<1	<1	
1,2-dichloroethane	<1	<1	<1	<1	<1	
1,2-dichloropropane	<1	<1	<1	<1	<1	
1,4-dichlorobenzene	<1	<1	<1	<1	<1	
2-butanone (mek)	<10	<10	<10	<10	<10	
2-hexanone (mbk)	<5	<5	<5	<5	<5	
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5	
Acetone	<10	<10	<10	<10	<10	
Acrylonitrile	<5	<5	<5	<5	<5	
Antimony, total	<2	<2	<2	<2	<2	
Arsenic, total	<4	<4	<4	<4	<4	
Barium, total	335	331	332	331	361	
Benzene	<1	<1	<1	<1	<1	
Beryllium, total	<4	<4	<4	<4	<4	
Bromochloromethane	<1	<1	<1	<1	<1	
Bromodichloromethane	<1	<1	<1	<1	<1	
Bromoform	<1	<1	<1	<1	<1	
Bromomethane	<1	<1	<1	<1	<1	
Cadmium, total	2.1	<.8	<.8	<.8	<.8	
Carbon disulfide	<1	<1	<1	<1	<1	
Carbon tetrachloride	<1	<1	<1	<1	<1	
Chlorobenzene	<1	<1	<1	<1	<1	
Chloroethane	<1	<1	<1	<1	<1	
Chloroform	<1	<1	<1	<1	<1	
Chloromethane	<1.0	<1.0	<1.0	<1.0	7.9	<1.0
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	<.4	<.4	<.4	<.4	<.4	
Copper, total	<4.0	<4.0	<4.0	<4.0	<4.0	
Dibromochloromethane	<1	<1	<1	<1	<1	
Dibromomethane	<1	<1	<1	<1	<1	
Ethylbenzene	<1	<1	<1	<1	<1	
Lead, total	<4	<4	<4	<4	<4	
Methyl iodide	<1	<1	<1	<1	<1	
Methylene chloride	<5	<5	<5	<5	<5	
Nickel, total	<4	<4	<4	<4	<4	
Selenium, total	<4	<4	<4	<4	<4	
Silver, total	<4	<4	<4	<4	<4	
Solids, total suspended						
Styrene	<1	<1	<1	<1	<1	
Tetrachloroethene	<1	<1	<1	<1	<1	
Thallium, total	<2	<2	<2	<2	<2	
Toluene	<1	<1	<1	<1	<1	
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	<2	
Zinc, total	<20	<20	<20	<20	<20	

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

Table 9

Analytical Data Summary for MW-105B

Constituents	Units	10/15/2014	4/13/2015	9/24/2015	12/30/2015	4/11/2016	10/12/2016	4/13/2017	10/25/2017
(3 4)-methylphenol	ug/L	<8		<8					
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1		<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1		<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1		<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1		<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1	<1	<1		<1	<1	<1	<1
1,1-dichloroethene	ug/L	<1	<1	<1		<1	<1	<1	<1
1,1-dichloropropene	ug/L	<1		<1					
1,2,3-trichloropropane	ug/L	<1	<1	<1		<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene	ug/L	<8		<8					
1,2,4-trichlorobenzene	ug/L	<1		<1					
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1		<1	<1	<1	<1
1,2-dibromoethane	ug/L	<1	<1	<1		<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1		<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1		<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1		<1	<1	<1	<1
1,2-dinitrobenzene	ug/L	<8		<8					
1,3,5-trinitrobenzene	ug/L	<8		<8					
1,3-dichlorobenzene	ug/L	<1		<1					
1,3-dichloropropane	ug/L	<1		<1					
1,3-dinitrobenzene	ug/L	<8		<8					
1,4-dichlorobenzene	ug/L	<1	<1	<1		<1	<1	<1	<1
1,4-naphthoquinone	ug/L	<8		<8					
1,4-phenylenediamine	ug/L	<8		<8					
1-naphthylamine	ug/L	<8		<8					
2,2-dichloropropane	ug/L	<1		<1					
2,3,4,6-tetrachlorophenol	ug/L	<8		<8					
2,4,5-t	ug/L	<.5		<.5					
2,4,5-tp (silvex)	ug/L	<.5		<.5					
2,4,5-trichlorophenol	ug/L	<8		<8					
2,4,6-trichlorophenol	ug/L	<8		<8					
2,4-d	ug/L	<2		<2					
2,4-dichlorophenol	ug/L	<8		<8					
2,4-dimethylphenol	ug/L	<8		<8					
2,4-dinitrophenol	ug/L	<8		<8					
2,4-dinitrotoluene	ug/L	<8		<8					
2,6-dichlorophenol	ug/L	<8		<8					
2,6-dinitrotoluene	ug/L	<8		<8					
2-acetylaminofluorene	ug/L	<8		<8					
2-butanone (mek)	ug/L	<5	<5	<5		<5	<5	<5	<5
2-chloronaphthalene	ug/L	<8		<8					
2-chlorophenol	ug/L	<8		<8					
2-hexanone (mbk)	ug/L	<5	<5	<5		<5	<5	<5	<5
2-methylnaphthalene	ug/L	<8		<8					
2-methylphenol	ug/L	<8		<8					
2-naphthylamine	ug/L	<8		<8					
2-nitroaniline	ug/L	<8		<8					
2-nitrophenol	ug/L	<8		<8					
3,3'-dichlorobenzidine	ug/L	<8		<8					
3,3-dimethylbenzidine	ug/L	<8		<8					
3-methylcholanthrene	ug/L	<8		<8					
3-nitroaniline	ug/L	<8		<8					
4,4'-ddd	ug/L	<.05		<.05					
4,4'-dde	ug/L	<.05		<.05					
4,4'-ddt	ug/L	<.05		<.05					
4,6-dinitro-2-methylphenol	ug/L	<8		<8					
4-aminobiphenyl	ug/L	<8		<8					
4-bromophenyl phenyl ether	ug/L	<8		<8					
4-chloro-3-methylphenol	ug/L	<8		<8					
4-chloroaniline	ug/L	<8		<8					
4-chlorophenyl phenyl ether	ug/L	<8		<8					
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5		<5	<5	<5	<5
4-nitroaniline	ug/L	<8		<8					
4-nitrophenol	ug/L	<8		<8					
5-nitro-o-toluidine	ug/L	<8		<8					
7,12-dimethylbenz [a] anthracene	ug/L	<8		<8					
Acenaphthene	ug/L	<8		<8					
Acenaphthylene	ug/L	<8		<8					
Acetone	ug/L	<10.0	<10.0	<10.0		<10.0	<10.0	<10.0	11.8
Acetonitrile	ug/L	<10		<10					
Acetophenone	ug/L	<8		<8					
Acrolein	ug/L	<10		<10					
Acrylonitrile	ug/L	<5	<5	<5		<5	<5	<5	<5
Aldrin	ug/L	<.05		<.05					
Allyl chloride	ug/L	<1		<1					
Alpha-bhc	ug/L	<.05		<.05					
Anthracene	ug/L	<8		<8					

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

Table 9

Analytical Data Summary for MW-105B

Constituents	1/12/2018	4/12/2018	10/16/2018	4/18/2019	10/15/2019	1/9/2020	4/6/2020	10/15/2020	4/12/2021
(3 4)-methylphenol								δ	
1,1,1,2-tetrachloroethane		<1	<1	<1	<1		<1	△	<1
1,1,1-trichloroethane		<1	<1	<1	<1		<1	△	<1
1,1,2,2-tetrachloroethane		<1	<1	<1	<1		<1	△	<1
1,1,2-trichloroethane		<1	<1	<1	<1		<1	△	<1
1,1-dichloroethane		<1	<1	<1	<1		<1	△	<1
1,1-dichloroethene		<1	<1	<1	<1		<1	△	<1
1,1-dichloropropene									
1,2,3-trichloropropane		<1	<1	<1	<1		<1	△	<1
1,2,4,5-tetrachlorobenzene								δ	
1,2,4-trichlorobenzene								△	
1,2-dibromo-3-chloropropane		<1	<1	<1	<1		<5	△	<5
1,2-dibromoethane		<1	<1	<1	<1		<1	△	<1
1,2-dichlorobenzene		<1	<1	<1	<1		<1	△	<1
1,2-dichloroethane		<1	<1	<1	<1		<1	△	<1
1,2-dichloropropane		<1	<1	<1	<1		<1	△	<1
1,2-dinitrobenzene								δ	
1,3,5-trinitrobenzene								δ	
1,3-dichlorobenzene								△	
1,3-dichloropropane								△	
1,3-dinitrobenzene								δ	
1,4-dichlorobenzene		<1	<1	<1	<1		<1	△	<1
1,4-naphthoquinone								δ	
1,4-phenylenediamine								δ	
1-naphthylamine								δ	
2,2-dichloropropane								△	
2,3,4,6-tetrachlorophenol								δ	
2,4,5-t								△	
2,4,5-tp (silvex)								△	
2,4,5-trichlorophenol								δ	
2,4,6-trichlorophenol								δ	
2,4-d								△	
2,4-dichlorophenol								δ	
2,4-dimethylphenol								δ	
2,4-dinitrophenol								δ	
2,4-dinitrotoluene								δ	
2,6-dichlorophenol								δ	
2,6-dinitrotoluene								δ	
2-acetylaminofluorene								δ	
2-butanone (mek)		<5	<5	<5	<5		<5	△	<5
2-chloronaphthalene								δ	
2-chlorophenol								δ	
2-hexanone (mbk)		<5	<5	<5	<5		<5	△	<5
2-methylnaphthalene								δ	
2-methylphenol								δ	
2-naphthylamine								δ	
2-nitroaniline								δ	
2-nitrophenol								δ	
3,3'-dichlorobenzidine								δ	
3,3-dimethylbenzidine								δ	
3-methylcholanthrene								δ	
3-nitroaniline								δ	
4,4'-ddd								△	
4,4'-dde								△	
4,4'-ddt								△	
4,6-dinitro-2-methylphenol								δ	
4-aminobiphenyl								δ	
4-bromophenyl phenyl ether								δ	
4-chloro-3-methylphenol								δ	
4-chloroaniline								δ	
4-chlorophenyl phenyl ether								δ	
4-methyl-2-pentanone (mibk)		<5	<5	<5	<5		<5	△	<5
4-nitroaniline								δ	
4-nitrophenol								δ	
5-nitro-o-toluidine								δ	
7,12-dimethylbenz [a] anthracene								δ	
Acenaphthene								δ	
Acenaphthylene								δ	
Acetone		<10.0	<10.0	<10.0	<10.0		<10.0	<10.0	<10.0
Acetonitrile								△	
Acetophenone								δ	
Acrolein								△	
Acrylonitrile		<5	<5	<5	<5		<5	△	<5
Aldrin								△	
Allyl chloride								△	
Alpha-bhc								△	
Anthracene								δ	

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

Table 9

Analytical Data Summary for MW-105B

Constituents	10/6/2021	4/14/2022	10/25/2022	4/19/2023	10/23/2023	4/9/2024
(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	<1	<1	<1	<1	<1
1,1-dichloroethene	<1	<1	<1	<1	<1	<1
1,1-dichloropropene						
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene						
1,2,4-trichlorobenzene						
1,2-dibromo-3-chloropropane	<5	<5	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1
1,2-dinitrobenzene						
1,3,5-trinitrobenzene						
1,3-dichlorobenzene						
1,3-dichloropropane						
1,3-dinitrobenzene						
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1
1,4-naphthoquinone						
1,4-phenylenediamine						
1-naphthylamine						
2,2-dichloropropane						
2,3,4,6-tetrachlorophenol						
2,4,5-t						
2,4,5-tp (silvex)						
2,4,5-trichlorophenol						
2,4,6-trichlorophenol						
2,4-d						
2,4-dichlorophenol						
2,4-dimethylphenol						
2,4-dinitrophenol						
2,4-dinitrotoluene						
2,6-dichlorophenol						
2,6-dinitrotoluene						
2-acetylaminofluorene						
2-butanone (mek)	<5	<10	<10	<10	<10	<10
2-chloronaphthalene						
2-chlorophenol						
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5
2-methylnaphthalene						
2-methylphenol						
2-naphthylamine						
2-nitroaniline						
2-nitrophenol						
3,3'-dichlorobenzidine						
3,3-dimethylbenzidine						
3-methylcholanthrene						
3-nitroaniline						
4,4'-ddd						
4,4'-dde						
4,4'-ddt						
4,6-dinitro-2-methylphenol						
4-aminobiphenyl						
4-bromophenyl phenyl ether						
4-chloro-3-methylphenol						
4-chloroaniline						
4-chlorophenyl phenyl ether						
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5	<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 9

Analytical Data Summary for MW-105B

Constituents	Units	10/15/2014	4/13/2015	9/24/2015	12/30/2015	4/11/2016	10/12/2016	4/13/2017	10/25/2017
Antimony, total	ug/L	<2	<2	<2		<2	<2	<2	<2
Arochlor 1016	ug/L	<.1		<.1					
Arochlor 1221	ug/L	<.2		<.2					
Arochlor 1232	ug/L	<.2		<.2					
Arochlor 1242	ug/L	<.2		<.2					
Arochlor 1248	ug/L	<.2		<.2					
Arochlor 1254	ug/L	<.1		<.1					
Arochlor 1260	ug/L	<.1		<.1					
Arsenic, total	ug/L	<4	<4	<4		<4	<4	<4	<4
Azobenzene	ug/L	<8		<8					
Barium, total	ug/L	132.0	152.0	197.0		87.4	146.0	103.0	157.0
Benzene	ug/L	<1	<1	<1		<1	<1	<1	<1
Benzo(a)anthracene	ug/L	<8		<8					
Benzo(a)pyrene	ug/L	<8		<8					
Benzo(b)fluoranthene	ug/L	<8		<8					
Benzo(g,h,i)perylene	ug/L	<8		<8					
Benzo(k)fluoranthene	ug/L	<8		<8					
Benzyl alcohol	ug/L	<8		<8					
Beryllium, total	ug/L	<4	<4	<4		<4	<4	<4	<4
Beta-bhc	ug/L	<.05		<.05					
Bis (2-chloroethoxy) methane	ug/L	<8		<8					
Bis(2-chloroethyl) ether	ug/L	<8		<8					
Bis(2-ethylhexyl) phthalate	ug/L	12	<10	8		<10	<10	<6	
Bis[2-chloroisopropyl]ether	ug/L	<8		<8					
Bromochloromethane	ug/L	<1	<1	<1		<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1		<1	<1	<1	<1
Bromoform	ug/L	<1.0	<1.0	<1.0		<1.0	<1.0	<1.0	<1.0
Bromomethane	ug/L	<1	<1	<1		<1	<1	<1	<1
Butyl benzyl phthalate	ug/L	<8		<8					
Cadmium, total	ug/L	<.8	<.8	<.8		<.8	<.8	<.8	<.8
Carbon disulfide	ug/L	<1	<1	<1		<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1		<1	<1	<1	<1
Chlordane	ug/L	<.1		<.1					
Chlorobenzene	ug/L	<1.0	<1.0	1.9		<1.0	<1.0	<1.0	<1.0
Chlorobenzilate	ug/L	<8		<8					
Chloroethane	ug/L	<1	<1	<1		<1	<1	<1	<1
Chloroform	ug/L	<1	<1	<1		<1	<1	<1	<1
Chloromethane	ug/L	<1	<1	<1		<1	<1	<1	<1
Chloroprene	ug/L	<1		<1					
Chromium, total	ug/L	<8	<8	<8		<8	<8	<8	<8
Chrysene	ug/L	<8		<8					
Cis-1,2-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	2.6	<8	11.1	<.8	<8	<8	<8	1.2
Copper, total	ug/L	<4.0	<4.0	<4.0		<4.0	<4.0	<4.0	<4.0
Cyanide, total	mg/L	<.005		<.005					
Delta-bhc	ug/L	<.05		<.05					
Diallate	ug/L	<8		<8					
Dibenzo(a,h)anthracene	ug/L	<8		<8					
Dibenzofuran	ug/L	<8		<8					
Dibromochloromethane	ug/L	<1	<1	<1		<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1		<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	<1		<1					
Dieldrin	ug/L	<.05		<.05					
Diethyl phthalate	ug/L	<8		<8					
Dimethoate	ug/L	<.4		<.4					
Dimethylphthalate	ug/L	<8		<8					
Di-n-butyl phthalate	ug/L	<8		<8					
Di-n-octyl phthalate	ug/L	<8		<8					
Dinoseb	ug/L	<.5		<.5					
Diphenylamine	ug/L	<8		<8					
Disulfoton	ug/L	<.4		<.4					
Endosulfan i	ug/L	<.05		<.05					
Endosulfan ii	ug/L	<.05		<.05					
Endosulfan sulfate	ug/L	<.05		<.05					
Endrin	ug/L	<.05		<.05					
Endrin aldehyde	ug/L	<.05		<.05					
Ethyl methacrylate	ug/L	<10		<10					
Ethyl methanesulfonate	ug/L	<8		<8					
Ethylbenzene	ug/L	<1	<1	<1		<1	<1	<1	<1
Famphur	ug/L	<.4		<.4					
Fluoranthene	ug/L	<8		<8					
Fluorene	ug/L	<8		<8					
Gamma-bhc (lindane)	ug/L	<.05		<.05					
Heptachlor	ug/L	<.05		<.05					
Heptachlor epoxide	ug/L	<.05		<.05					
Hexachlorobenzene	ug/L	<.05		<.05					

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

Table 9

Analytical Data Summary for MW-105B

Constituents	1/12/2018	4/12/2018	10/16/2018	4/18/2019	10/15/2019	1/9/2020	4/6/2020	10/15/2020	4/12/2021
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		<4	<4	<4	<4		<4	<4	<4
Azobenzene								<.8	
Barium, total		130.0	132.0	158.0	182.0		142.0	160.0	128.0
Benzene		<1	<1	<1	<1		<1	<1	<1
Benzo(a)anthracene								<.8	
Benzo(a)pyrene								<.8	
Benzo(b)fluoranthene								<.8	
Benzo(g,h,i)perylene								<.8	
Benzo(k)fluoranthene								<.8	
Benzyl alcohol								<.8	
Beryllium, total		<4	<4	<4	<4		<4	<4	<4
Beta-bhc								<.05	
Bis (2-chloroethoxy) methane								<.8	
Bis(2-chloroethyl) ether								<.8	
Bis(2-ethylhexyl) phthalate								<.6	
Bis[2-chloroisopropyl]ether								<.8	
Bromochloromethane		<1	<1	<1	<1		<1	<1	<1
Bromodichloromethane		<1	<1	<1	<1		<1	<1	<1
Bromoform		<1.0	<1.0	<1.0	<1.0		<1.0	<1.0	<1.0
Bromomethane		<1	<1	<1	<1		<1	<1	<1
Butyl benzyl phthalate								<.8	
Cadmium, total		<.8	<.8	<.8	1.6	<.8	<.8	<.8	<.8
Carbon disulfide		<1	<1	<1	<1		<1	<1	<1
Carbon tetrachloride		<1	<1	<1	<1		<1	<1	<1
Chlordane								<.1	
Chlorobenzene		<1.0	<1.0	<1.0	<1.0		<1.0	<1.0	<1.0
Chlorobenzilate								<.8	
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								<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	36.6	1.2	<.8	<.8	<.8		<.4	1.6	<.4
Copper, total		<4.0	<4.0	<4.0	<4.0		<4.0	<4.0	<4.0
Cyanide, total								<.005	
Delta-bhc								<.05	
Diallate								<.8	
Dibenzo(a,h)anthracene								<.8	
Dibenzofuran								<.8	
Dibromochloromethane		<1	<1	<1	<1		<1	<1	<1
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	
Fluorene								<.8	
Gamma-bhc (lindane)								<.05	
Heptachlor								<.05	
Heptachlor epoxide								<.05	
Hexachlorobenzene								<.05	

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

Table 9

Analytical Data Summary for MW-105B

Constituents	10/6/2021	4/14/2022	10/25/2022	4/19/2023	10/23/2023	4/9/2024
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	<4	<4	<4	<4	<4
Azobenzene						
Barium, total	143.0	132.0	121.0	88.7	102.0	110.0
Benzene	<1	<1	<1	<1	<1	<1
Benzo(a)anthracene						
Benzo(a)pyrene						
Benzo(b)fluoranthene						
Benzo(g,h,i)perylene						
Benzo(k)fluoranthene						
Benzyl alcohol						
Beryllium, total	<4	<4	<4	<4	<4	<4
Beta-bhc						
Bis (2-chloroethoxy) methane						
Bis(2-chloroethyl) ether						
Bis(2-ethylhexyl) phthalate						
Bis[2-chloroisopropyl]ether						
Bromochloromethane	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1
Bromoform	<1.0	<1.0	1.4	<1.0	<1.0	<1.0
Bromomethane	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate						
Cadmium, total	<.8	<.8	.8	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1
Chlordane						
Chlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
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	<.4	1.5	.7	<.4	<.4	<.4
Copper, total	<4.0	<4.0	<4.0	4.2	<4.0	<4.0
Cyanide, total						
Delta-bhc						
Diallate						
Dibenzo(a,h)anthracene						
Dibenzofuran						
Dibromochloromethane	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane						
Dieldrin						
Diethyl phthalate						
Dimethoate						
Dimethylphthalate						
Di-n-butyl phthalate						
Di-n-octyl phthalate						
Dinoseb						
Diphenylamine						
Disulfoton						
Endosulfan i						
Endosulfan ii						
Endosulfan sulfate						
Endrin						
Endrin aldehyde						
Ethyl methacrylate						
Ethyl methanesulfonate						
Ethylbenzene	<1	<1	<1	<1	<1	<1
Famphur						
Fluoranthene						
Fluorene						
Gamma-bhc (lindane)						
Heptachlor						
Heptachlor epoxide						
Hexachlorobenzene						

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

Table 9

Analytical Data Summary for MW-105B

Constituents	Units	10/15/2014	4/13/2015	9/24/2015	12/30/2015	4/11/2016	10/12/2016	4/13/2017	10/25/2017
Hexachlorobutadiene	ug/L	<8		<8					
Hexachlorocyclopentadiene	ug/L	<8		<8					
Hexachloroethane	ug/L	<8		<8					
Hexachloropropene	ug/L	<8		<8					
Indeno(1,2,3-cd)pyrene	ug/L	<8		<8					
Isobutanol	ug/L	<1000		<1000					
Isodrin	ug/L	<8		<8					
Isophorone	ug/L	<8		<8					
Isosafrole	ug/L	<8		<8					
Kepone	ug/L	<8		<8					
Lead, total	ug/L	<4	<4	<4		<4	<4	<4	<4
Mercury, total	ug/L	<.5		<.5					
Methacrylonitrile	ug/L	<1		<1					
Methapyrilene	ug/L	<8		<8					
Methoxychlor	ug/L	<.05		<.05					
Methyl iodide	ug/L	<1	<1	<1		<1	<1	<1	<1
Methyl methacrylate	ug/L	<1		<1					
Methyl methanesulfonate	ug/L	<8		<8					
Methyl parathion	ug/L	<.4		<.4					
Methylene chloride	ug/L	<5	<5	<5		<5	<5	<5	<5
Naphthalene	ug/L	<8		<8					
Nickel, total	ug/L	<4.0	<4.0	<4.0		<4.0	<4.0	<4.0	<4.0
Nitrobenzene	ug/L	<8		<8					
N-nitrosodiethylamine	ug/L	<8		<8					
N-nitrosodimethylamine	ug/L	<8		<8					
N-nitrosodi-n-butylamine	ug/L	<8		<8					
N-nitroso-di-n-propylamine	ug/L	<8		<8					
N-nitrosodiphenylamine	ug/L	<8		<8					
N-nitrosomethylethylamine	ug/L	<8		<8					
N-nitrosopiperidine	ug/L	<8		<8					
N-nitrosopyrrolidine	ug/L	<8		<8					
O,o,o-triethyl phosphorothioate	ug/L	<.4		<.4					
O-toluidine	ug/L	<8		<8					
P-(dimethylamino)azobenzene	ug/L	<8		<8					
Parathion	ug/L	<.4		<.4					
Pentachlorobenzene	ug/L	<8		<8					
Pentachloronitrobenzene (pcnb)	ug/L	<8		<8					
Pentachlorophenol	ug/L	<8		<8					
Phenacetin	ug/L	<8		<8					
Phenanthrene	ug/L	<8		<8					
Phenol	ug/L	<8		<8					
Phorate	ug/L	<.4		<.4					
Pronamide	ug/L	<8		<8					
Propionitrile	ug/L	<10		<10					
Pyrene	ug/L	<8		<8					
Safrole	ug/L	<8		<8					
Selenium, total	ug/L	<4	<4	<4		<4	<4	<4	<4
Silver, total	ug/L	<4	<4	<4		<4	<4	<4	<4
Solids, total suspended	mg/L	209	5						
Styrene	ug/L	<1	<1	<1		<1	<1	<1	<1
Sulfide, total	mg/L	<.1		<.1					
Tetrachloroethene	ug/L	<1	<1	<1		<1	<1	<1	<1
Thallium, total	ug/L	<4	<4	<4		<4	<4	<4	<4
Thionazin	ug/L	<.4		<.4					
Tin, total	ug/L	<20		<20					
Toluene	ug/L	<1	<1	<1		<1	<1	<1	<1
Toxaphene	ug/L	<.2		<.2					
Trans-1,2-dichloroethene	ug/L	<1	<1	<1		<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1		<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5		<5	<5	<5	<5
Trichloroethene	ug/L	<1	<1	<1		<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1		<1	<1	<1	<1
Vanadium, total	ug/L	<20	<20	<20		<20	<20	<20	<20
Vinyl acetate	ug/L	<5	<5	<5		<5	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1		<1	<1	<1	<1
Xylenes, total	ug/L	<2	<2	<2		<2	<2	<2	<2
Zinc, total	ug/L	<20.0	<8.0	<8.0		<8.0	<8.0	<8.0	25.0

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

Table 9

Analytical Data Summary for MW-105B

Constituents	1/12/2018	4/12/2018	10/16/2018	4/18/2019	10/15/2019	1/9/2020	4/6/2020	10/15/2020	4/12/2021
Hexachlorobutadiene								δ	
Hexachlorocyclopentadiene								δ	
Hexachloroethane								δ	
Hexachloropropene								δ	
Indeno(1,2,3-cd)pyrene								δ	
Isobutanol								<1000	
Isodrin								δ	
Isophorone								δ	
Isosafrole								δ	
Kepone								δ	
Lead, total	<4	<4	<4	<4	<4		<4	δ	<4
Mercury, total								δ	
Methacrylonitrile								δ	
Methapyrilene								δ	
Methoxychlor								δ	
Methyl iodide	<1	<1	<1	<1	<1		<1	δ	<1
Methyl methacrylate								δ	
Methyl methanesulfonate								δ	
Methyl parathion								δ	
Methylene chloride	<5	<5	<5	<5	<5		<5	δ	<5
Naphthalene								δ	
Nickel, total	<4.0	<4.0	<4.0	<4.0	<4.0		<4.0	δ	<4.0
Nitrobenzene								δ	
N-nitrosodiethylamine								δ	
N-nitrosodimethylamine								δ	
N-nitrosodi-n-butylamine								δ	
N-nitroso-di-n-propylamine								δ	
N-nitrosodiphenylamine								δ	
N-nitrosomethylethylamine								δ	
N-nitrosopiperidine								δ	
N-nitrosopyrrolidine								δ	
O,o,o-triethyl phosphorothioate								δ	
O-toluidine								δ	
P-(dimethylamino)azobenzene								δ	
Parathion								δ	
Pentachlorobenzene								δ	
Pentachloronitrobenzene (pcnb)								δ	
Pentachlorophenol								δ	
Phenacetin								δ	
Phenanthrene								δ	
Phenol								δ	
Phorate								δ	
Pronamide								δ	
Propionitrile								δ	
Pyrene								δ	
Safrole								δ	
Selenium, total	<4	<4	<4	<4	<4		<4	δ	<4
Silver, total	<4	<4	<4	<4	<4		<4	δ	<4
Solids, total suspended								δ	
Styrene	<1	<1	<1	<1	<1		<1	δ	<1
Sulfide, total								δ	
Tetrachloroethene	<1	<1	<1	<1	<1		<1	δ	<1
Thallium, total	<4	<4	<2	<2	<2		<2	δ	<2
Thionazin								δ	
Tin, total								δ	
Toluene	<1	<1	<1	<1	<1		<1	δ	<1
Toxaphene								δ	
Trans-1,2-dichloroethene	<1	<1	<1	<1	<1		<1	δ	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1		<1	δ	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5		<5	δ	<5
Trichloroethene	<1	<1	<1	<1	<1		<1	δ	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1		<1	δ	<1
Vanadium, total	<20	<20	<20	<20	<20		<20	δ	<20
Vinyl acetate	<5	<5	<5	<5	<5		<5	δ	<5
Vinyl chloride	<1	<1	<1	<1	<1		<1	δ	<1
Xylenes, total	<2	<2	<2	<2	<2		<2	δ	<2
Zinc, total	<8.0	<20.0	20.4	<8.0	<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-105B

Constituents	10/6/2021	4/14/2022	10/25/2022	4/19/2023	10/23/2023	4/9/2024
Hexachlorobutadiene						
Hexachlorocyclopentadiene						
Hexachloroethane						
Hexachloropropene						
Indeno(1,2,3-cd)pyrene						
Isobutanol						
Isodrin						
Isophorone						
Isosafrole						
Kepona						
Lead, total	<4	<4	<4	<4	<4	<4
Mercury, total						
Methacrylonitrile						
Methapyrilene						
Methoxychlor						
Methyl iodide	<1	<1	<1	<1	<1	<1
Methyl methacrylate						
Methyl methanesulfonate						
Methyl parathion						
Methylene chloride	<5	<5	<5	<5	<5	<5
Naphthalene						
Nickel, total	<4.0	<4.0	<4.0	<4.0	5.4	<4.0
Nitrobenzene						
N-nitrosodiethylamine						
N-nitrosodimethylamine						
N-nitrosodi-n-butylamine						
N-nitroso-di-n-propylamine						
N-nitrosodiphenylamine						
N-nitrosomethylethylamine						
N-nitrosopiperidine						
N-nitrosopyrrolidine						
O,o,o-triethyl phosphorothioate						
O-toluidine						
P-(dimethylamino)azobenzene						
Parathion						
Pentachlorobenzene						
Pentachloronitrobenzene (pcnb)						
Pentachlorophenol						
Phenacetin						
Phenanthrene						
Phenol						
Phorate						
Pronamide						
Propionitrile						
Pyrene						
Safrole						
Selenium, total	<4	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4	<4
Solids, total suspended						
Styrene	<1	<1	<1	<1	<1	<1
Sulfide, total						
Tetrachloroethene	<1	<1	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2	<2	<2
Thionazin						
Tin, total						
Toluene	<1	<1	<1	<1	<1	<1
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 9

Analytical Data Summary for MW-108A

Constituents	Units	10/15/2014	4/13/2015	9/22/2015	9/24/2015	4/11/2016	10/12/2016	4/13/2017	10/25/2017
(3 4)-methylphenol	ug/L	<8				<8			
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1		<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1		<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1		<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1		<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1	<1	<1		<1	<1	<1	<1
1,1-dichloroethene	ug/L	<1	<1	<1		<1	<1	<1	<1
1,1-dichloropropene	ug/L	<1		<1					
1,2,3-trichloropropane	ug/L	<1	<1	<1		<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene	ug/L	<8			<8				
1,2,4-trichlorobenzene	ug/L	<1		<1					
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1		<1	<1	<1	<1
1,2-dibromoethane	ug/L	<1	<1	<1		<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1		<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1		<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1		<1	<1	<1	<1
1,2-dinitrobenzene	ug/L	<8			<8				
1,3,5-trinitrobenzene	ug/L	<8			<8				
1,3-dichlorobenzene	ug/L	<1		<1					
1,3-dichloropropane	ug/L	<1		<1					
1,3-dinitrobenzene	ug/L	<8			<8				
1,4-dichlorobenzene	ug/L	<1	<1	<1		<1	<1	<1	<1
1,4-naphthoquinone	ug/L	<8			<8				
1,4-phenylenediamine	ug/L	<8			<8				
1-naphthylamine	ug/L	<8			<8				
2,2-dichloropropane	ug/L	<1		<1					
2,3,4,6-tetrachlorophenol	ug/L	<8			<8				
2,4,5-t	ug/L	<.5			<.5				
2,4,5-tp (silvex)	ug/L	<.5			<.5				
2,4,5-trichlorophenol	ug/L	<8			<8				
2,4,6-trichlorophenol	ug/L	<8			<8				
2,4-d	ug/L	<2			<2				
2,4-dichlorophenol	ug/L	<8			<8				
2,4-dimethylphenol	ug/L	<8			<8				
2,4-dinitrophenol	ug/L	<8			<8				
2,4-dinitrotoluene	ug/L	<8			<8				
2,6-dichlorophenol	ug/L	<8			<8				
2,6-dinitrotoluene	ug/L	<8			<8				
2-acetylaminofluorene	ug/L	<8			<8				
2-butanone (mek)	ug/L	<5	<5	<5		<5	<5	<5	<5
2-chloronaphthalene	ug/L	<8			<8				
2-chlorophenol	ug/L	<8			<8				
2-hexanone (mbk)	ug/L	<5	<5	<5		<5	<5	<5	<5
2-methylnaphthalene	ug/L	<8			<8				
2-methylphenol	ug/L	<8			<8				
2-naphthylamine	ug/L	<8			<8				
2-nitroaniline	ug/L	<8			<8				
2-nitrophenol	ug/L	<8			<8				
3,3'-dichlorobenzidine	ug/L	<8			<8				
3,3-dimethylbenzidine	ug/L	<8			<8				
3-methylcholanthrene	ug/L	<8			<8				
3-nitroaniline	ug/L	<8			<8				
4,4'-ddd	ug/L	<.05			<.05				
4,4'-dde	ug/L	<.05			<.05				
4,4'-ddt	ug/L	<.05			<.05				
4,6-dinitro-2-methylphenol	ug/L	<8			<8				
4-aminobiphenyl	ug/L	<8			<8				
4-bromophenyl phenyl ether	ug/L	<8			<8				
4-chloro-3-methylphenol	ug/L	<8			<8				
4-chloroaniline	ug/L	<8			<8				
4-chlorophenyl phenyl ether	ug/L	<8			<8				
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5		<5	<5	<5	<5
4-nitroaniline	ug/L	<8			<8				
4-nitrophenol	ug/L	<8			<8				
5-nitro-o-toluidine	ug/L	<8			<8				
7,12-dimethylbenz [a] anthracene	ug/L	<8			<8				
Acenaphthene	ug/L	<8			<8				
Acenaphthylene	ug/L	<8			<8				
Acetone	ug/L	<10.0	153.0	<10.0		<10.0	<10.0	75.5	83.8
Acetonitrile	ug/L	<10		<10					
Acetophenone	ug/L	<8			<8				
Acrolein	ug/L	<10		<10					
Acrylonitrile	ug/L	<5	<5	<5		<5	<5	<5	<5
Aldrin	ug/L	<.05			<.05				
Allyl chloride	ug/L	<1		<1					
Alpha-bhc	ug/L	<.05			<.05				
Anthracene	ug/L	<8			<8				

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

Table 9

Analytical Data Summary for MW-108A

Constituents	1/12/2018	4/12/2018	10/16/2018	4/18/2019	10/15/2019	4/6/2020	10/15/2020	4/12/2021	10/6/2021
(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		<1	<1	<1	<1	<5	<1	<5	<5
1,2-dibromoethane		<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene		<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane		<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane		<1	<1	<1	<1	<1	<1	<1	<1
1,2-dinitrobenzene							<8		
1,3,5-trinitrobenzene							<8		
1,3-dichlorobenzene							<1		
1,3-dichloropropane							<1		
1,3-dinitrobenzene							<8		
1,4-dichlorobenzene		<1	<1	<1	<1	<1	<1	<1	<1
1,4-naphthoquinone							<8		
1,4-phenylenediamine							<8		
1-naphthylamine							<8		
2,2-dichloropropane							<1		
2,3,4,6-tetrachlorophenol							<8		
2,4,5-t							<.5		
2,4,5-tp (silvex)							<.5		
2,4,5-trichlorophenol							<8		
2,4,6-trichlorophenol							<8		
2,4-d							<2		
2,4-dichlorophenol							<8		
2,4-dimethylphenol							<8		
2,4-dinitrophenol							<8		
2,4-dinitrotoluene							<8		
2,6-dichlorophenol							<8		
2,6-dinitrotoluene							<8		
2-acetylaminofluorene							<8		
2-butanone (mek)		<5	<5	<5	<5	<5	<5	<5	<5
2-chloronaphthalene							<8		
2-chlorophenol							<8		
2-hexanone (mbk)		<5	<5	<5	<5	<5	<5	<5	<5
2-methylnaphthalene							<8		
2-methylphenol							<8		
2-naphthylamine							<8		
2-nitroaniline							<8		
2-nitrophenol							<8		
3,3'-dichlorobenzidine							<8		
3,3-dimethylbenzidine							<8		
3-methylcholanthrene							<8		
3-nitroaniline							<8		
4,4'-ddd							<.05		
4,4'-dde							<.05		
4,4'-ddt							<.05		
4,6-dinitro-2-methylphenol							<8		
4-aminobiphenyl							<8		
4-bromophenyl phenyl ether							<8		
4-chloro-3-methylphenol							<8		
4-chloroaniline							<8		
4-chlorophenyl phenyl ether							<8		
4-methyl-2-pentanone (mibk)		<5	<5	<5	<5	<5	<5	<5	<5
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		
Anthracene							<8		

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

Table 9

Analytical Data Summary for MW-108A

Constituents	4/14/2022	10/25/2022	4/19/2023	10/23/2023	4/9/2024
(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	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1
1,2-dinitrobenzene					
1,3,5-trinitrobenzene					
1,3-dichlorobenzene					
1,3-dichloropropane					
1,3-dinitrobenzene					
1,4-dichlorobenzene	<1	<1	<1	<1	<1
1,4-naphthoquinone					
1,4-phenylenediamine					
1-naphthylamine					
2,2-dichloropropane					
2,3,4,6-tetrachlorophenol					
2,4,5-t					
2,4,5-tp (silvex)					
2,4,5-trichlorophenol					
2,4,6-trichlorophenol					
2,4-d					
2,4-dichlorophenol					
2,4-dimethylphenol					
2,4-dinitrophenol					
2,4-dinitrotoluene					
2,6-dichlorophenol					
2,6-dinitrotoluene					
2-acetylaminofluorene					
2-butanone (mek)	<10	<10	<10	<10	<10
2-chloronaphthalene					
2-chlorophenol					
2-hexanone (mbk)	<5	<5	<5	<5	<5
2-methylnaphthalene					
2-methylphenol					
2-naphthylamine					
2-nitroaniline					
2-nitrophenol					
3,3'-dichlorobenzidine					
3,3-dimethylbenzidine					
3-methylcholanthrene					
3-nitroaniline					
4,4'-ddd					
4,4'-dde					
4,4'-ddt					
4,6-dinitro-2-methylphenol					
4-aminobiphenyl					
4-bromophenyl phenyl ether					
4-chloro-3-methylphenol					
4-chloroaniline					
4-chlorophenyl phenyl ether					
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5
4-nitroaniline					
4-nitrophenol					
5-nitro-o-toluidine					
7,12-dimethylbenz [a] anthracene					
Acenaphthene					
Acenaphthylene					
Acetone	<10.0	<10.0	<10.0	<10.0	<10.0
Acetonitrile					
Acetophenone					
Acrolein					
Acrylonitrile	<5	<5	<5	<5	<5
Aldrin					
Allyl chloride					
Alpha-bhc					
Anthracene					

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

Table 9

Analytical Data Summary for MW-108A

Constituents	Units	10/15/2014	4/13/2015	9/22/2015	9/24/2015	4/11/2016	10/12/2016	4/13/2017	10/25/2017
Antimony, total	ug/L	<2	<2	<2		<2	<2	<2	<2
Arochlor 1016	ug/L	<.1			<.1				
Arochlor 1221	ug/L	<.2			<.2				
Arochlor 1232	ug/L	<.2			<.2				
Arochlor 1242	ug/L	<.2			<.2				
Arochlor 1248	ug/L	<.2			<.2				
Arochlor 1254	ug/L	<.1			<.1				
Arochlor 1260	ug/L	<.1			<.1				
Arsenic, total	ug/L	24.4	16.8	20.1		18.6	27.9	17.1	7.9
Azobenzene	ug/L	<8			<8				
Barium, total	ug/L	93.5	78.5	292.0		67.1	140.0	141.0	55.9
Benzene	ug/L	<1.0	1.2	1.6		<1.0	<1.0	<1.0	1.0
Benzo(a)anthracene	ug/L	<8			<8				
Benzo(a)pyrene	ug/L	<8			<8				
Benzo(b)fluoranthene	ug/L	<8			<8				
Benzo(g,h,i)perylene	ug/L	<8			<8				
Benzo(k)fluoranthene	ug/L	<8			<8				
Benzyl alcohol	ug/L	<8			<8				
Beryllium, total	ug/L	<4	<4	<4		<4	<4	<4	<4
Beta-bhc	ug/L	<.05			<.05				
Bis (2-chloroethoxy) methane	ug/L	<8			<8				
Bis(2-chloroethyl) ether	ug/L	<8			<8				
Bis(2-ethylhexyl) phthalate	ug/L	<8			<8				
Bis[2-chloroisopropyl]ether	ug/L	<8			<8				
Bromochloromethane	ug/L	<1	<1	<1		<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1		<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1		<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1		<1	<1	<1	<1
Butyl benzyl phthalate	ug/L	<8			<8				
Cadmium, total	ug/L	<.8	<.8	<.8		<.8	<.8	<.8	<.8
Carbon disulfide	ug/L	<1	<1	<1		<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1		<1	<1	<1	<1
Chlordane	ug/L	<.1			<.1				
Chlorobenzene	ug/L	<1	<1	<1		<1	<1	<1	<1
Chlorobenzilate	ug/L	<8			<8				
Chloroethane	ug/L	<1.0	1.4	2.0		<1.0	<1.0	<1.0	<1.0
Chloroform	ug/L	<1	<1	<1		<1	<1	<1	<1
Chloromethane	ug/L	<1	<1	<1		<1	<1	<1	<1
Chloroprene	ug/L	<1		<1		<1	<1	<1	<1
Chromium, total	ug/L	<8	<8	<8		<8	<8	<8	<8
Chrysene	ug/L	<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	3.9	17.5	5.3		5.2	2.9	<.8	149.0
Copper, total	ug/L	<4.0	4.0	<4.0		<4.0	<4.0	<4.0	<4.0
Cyanide, total	mg/L	<.005			<.005				
Delta-bhc	ug/L	<.05			<.05				
Diallate	ug/L	<8			<8				
Dibenzo(a,h)anthracene	ug/L	<8			<8				
Dibenzofuran	ug/L	<8			<8				
Dibromochloromethane	ug/L	<1	<1	<1		<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1		<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	<1		<1		<1	<1	<1	<1
Dieldrin	ug/L	<.05			<.05				
Diethyl phthalate	ug/L	<8			<8				
Dimethoate	ug/L	<.4			<.4				
Dimethylphthalate	ug/L	<8			<8				
Di-n-butyl phthalate	ug/L	<8			<8				
Di-n-octyl phthalate	ug/L	<8			<8				
Dinoseb	ug/L	<.5			<.5				
Diphenylamine	ug/L	<8			<8				
Disulfoton	ug/L	<.4			<.4				
Endosulfan i	ug/L	<.05			<.05				
Endosulfan ii	ug/L	<.05			<.05				
Endosulfan sulfate	ug/L	<.05			<.05				
Endrin	ug/L	<.05			<.05				
Endrin aldehyde	ug/L	<.05			<.05				
Ethyl methacrylate	ug/L	<10		<10					
Ethyl methanesulfonate	ug/L	<8			<8				
Ethylbenzene	ug/L	<1	<1	<1		<1	<1	<1	<1
Famphur	ug/L	<.4			<.4				
Fluoranthene	ug/L	<8			<8				
Fluorene	ug/L	<8			<8				
Gamma-bhc (lindane)	ug/L	<.05			<.05				
Heptachlor	ug/L	<.05			<.05				
Heptachlor epoxide	ug/L	<.05			<.05				
Hexachlorobenzene	ug/L	<.05			<.05				

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

Table 9

Analytical Data Summary for MW-108A

Constituents	1/12/2018	4/12/2018	10/16/2018	4/18/2019	10/15/2019	4/6/2020	10/15/2020	4/12/2021	10/6/2021
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		10.7	17.5	16.5	11.6	6.4	21.5	<4.0	4.1
Azobenzene							<8		
Barium, total		93.4	96.9	297.0	605.0	128.0	68.9	26.0	53.2
Benzene	1.2	<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
Beta-bhc							<.05		
Bis (2-chloroethoxy) methane							<8		
Bis(2-chloroethyl) ether							<8		
Bis(2-ethylhexyl) phthalate							10		
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	2.0
Carbon disulfide		<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride		<1	<1	<1	<1	<1	<1	<1	<1
Chlordane							<.1		
Chlorobenzene		<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzilate							<8		
Chloroethane		<1.0	<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	<.8	1.1	<.8	<.8	<.8	<.4	<.4	9.1	173.0
Copper, total		<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	4.9
Cyanide, total							<.005		
Delta-bhc							<.05		
Diallate							<8		
Dibenzo(a,h)anthracene							<8		
Dibenzofuran							<8		
Dibromochloromethane		<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane		<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane							<1		
Dieldrin							<.05		
Diethyl phthalate							<8		
Dimethoate							<.4		
Dimethylphthalate							<8		
Di-n-butyl phthalate							<8		
Di-n-octyl phthalate							<8		
Dinoseb							<.5		
Diphenylamine							<8		
Disulfoton							<.4		
Endosulfan i							<.05		
Endosulfan ii							<.05		
Endosulfan sulfate							<.05		
Endrin							<.05		
Endrin aldehyde							<.05		
Ethyl methacrylate							<10		
Ethyl methanesulfonate							<8		
Ethylbenzene		<1	<1	<1	<1	<1	<1	<1	<1
Famphur							<.4		
Fluoranthene							<8		
Fluorene							<8		
Gamma-bhc (lindane)							<.05		
Heptachlor							<.05		
Heptachlor epoxide							<.05		
Hexachlorobenzene							<.05		

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

Table 9

Analytical Data Summary for MW-108A

Constituents	4/14/2022	10/25/2022	4/19/2023	10/23/2023	4/9/2024
Antimony, total	<2	<2	<2	<2	<2
Arochlor 1016					
Arochlor 1221					
Arochlor 1232					
Arochlor 1242					
Arochlor 1248					
Arochlor 1254					
Arochlor 1260					
Arsenic, total	9.0	12.4	<4.0	14.1	9.4
Azobenzene					
Barium, total	19.6	46.7	17.7	39.9	26.9
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					
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	3.4	<.8	<.8	1.5	<.8
Carbon disulfide	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1
Chlordane					
Chlorobenzene	<1	<1	<1	<1	<1
Chlorobenzilate					
Chloroethane	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroform	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1
Chloroprene					
Chromium, total	<8	<8	<8	<8	<8
Chrysene					
Cis-1,2-dichloroethene	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1
Cobalt, total	56.6	1.9	8.4	586.0	27.6
Copper, total	5.5	<4.0	<4.0	<4.0	6.3
Cyanide, total					
Delta-bhc					
Diallate					
Dibenzo(a,h)anthracene					
Dibenzofuran					
Dibromochloromethane	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1
Dichlorodifluoromethane					
Dieldrin					
Diethyl phthalate					
Dimethoate					
Dimethylphthalate					
Di-n-butyl phthalate					
Di-n-octyl phthalate					
Dinoseb					
Diphenylamine					
Disulfoton					
Endosulfan i					
Endosulfan ii					
Endosulfan sulfate					
Endrin					
Endrin aldehyde					
Ethyl methacrylate					
Ethyl methanesulfonate					
Ethylbenzene	<1	<1	<1	<1	<1
Famphur					
Fluoranthene					
Fluorene					
Gamma-bhc (lindane)					
Heptachlor					
Heptachlor epoxide					
Hexachlorobenzene					

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

Table 9

Analytical Data Summary for MW-108A

Constituents	Units	10/15/2014	4/13/2015	9/22/2015	9/24/2015	4/11/2016	10/12/2016	4/13/2017	10/25/2017
Hexachlorobutadiene	ug/L	<8			<8				
Hexachlorocyclopentadiene	ug/L	<8			<8				
Hexachloroethane	ug/L	<8			<8				
Hexachloropropene	ug/L	<8			<8				
Indeno(1,2,3-cd)pyrene	ug/L	<8			<8				
Isobutanol	ug/L	<1000			<1000				
Isodrin	ug/L	<8			<8				
Isophorone	ug/L	<8			<8				
Isosafrole	ug/L	<8			<8				
Kepone	ug/L	<8			<8				
Lead, total	ug/L	<4	<4	<4		<4	<4	<4	<4
Mercury, total	ug/L	<.5		<.5					
Methacrylonitrile	ug/L	<1		<1					
Methapyrilene	ug/L	<8			<8				
Methoxychlor	ug/L	<.05			<.05				
Methyl iodide	ug/L	<1	<1	<1		<1	<1	<1	<1
Methyl methacrylate	ug/L	<1		<1					
Methyl methanesulfonate	ug/L	<8			<8				
Methyl parathion	ug/L	.5	<1	<.4		<1	<1	<1	<1
Methylene chloride	ug/L	<5	<5	<5		<5	<5	<5	<5
Naphthalene	ug/L	<8			<8				
Nickel, total	ug/L	6.5	10.6	8.7		<4.0	5.2	<4.0	39.7
Nitrobenzene	ug/L	<8			<8				
N-nitrosodiethylamine	ug/L	<8			<8				
N-nitrosodimethylamine	ug/L	<8			<8				
N-nitrosodi-n-butylamine	ug/L	<8			<8				
N-nitroso-di-n-propylamine	ug/L	<8			<8				
N-nitrosodiphenylamine	ug/L	<8			<8				
N-nitrosomethylethylamine	ug/L	<8			<8				
N-nitrosopiperidine	ug/L	<8			<8				
N-nitrosopyrrolidine	ug/L	<8			<8				
O,o,o-triethyl phosphorothioate	ug/L	<.4			<.4				
O-toluidine	ug/L	<8			<8				
P-(dimethylamino)azobenzene	ug/L	<8			<8				
Parathion	ug/L	<.4			.9				
Pentachlorobenzene	ug/L	<8			<8				
Pentachloronitrobenzene (pcnb)	ug/L	<8			<8				
Pentachlorophenol	ug/L	<8			<8				
Phenacetin	ug/L	<8			<8				
Phenanthrene	ug/L	<8			<8				
Phenol	ug/L	<8			<8				
Phorate	ug/L	<.4			<.4				
Pronamide	ug/L	<8			<8				
Propionitrile	ug/L	<10		<10					
Pyrene	ug/L	<8			<8				
Safrole	ug/L	<8			<8				
Selenium, total	ug/L	<4	<4	<4		<4	<4	<4	<4
Silver, total	ug/L	<4	<4	<4		<4	<4	<4	<4
Solids, total suspended	mg/L	72	186						
Styrene	ug/L	<1	<1	<1		<1	<1	<1	<1
Sulfide, total	mg/L	<.1			<.2				
Tetrachloroethene	ug/L	<1	<1	<1		<1	<1	<1	<1
Thallium, total	ug/L	<4	<4	<4		<4	<4	<4	<4
Thionazin	ug/L	<.4			<.4				
Tin, total	ug/L	<20		<20					
Toluene	ug/L	<1	<1	<1		<1	<1	<1	<1
Toxaphene	ug/L	<.2			<.2				
Trans-1,2-dichloroethene	ug/L	<1	<1	<1		<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1		<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5		<5	<5	<5	<5
Trichloroethene	ug/L	<1	<1	<1		<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1		<1	<1	<1	<1
Vanadium, total	ug/L	<20	<20	<20		<20	<20	<20	<20
Vinyl acetate	ug/L	<5	<5	<5		<5	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1		<1	<1	<1	<1
Xylenes, total	ug/L	<2	<2	<2		<2	<2	<2	<2
Zinc, total	ug/L	<20.0	<8.0	<8.0		<8.0	<8.0	<8.0	9.0

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

Table 9

Analytical Data Summary for MW-108A

Constituents	1/12/2018	4/12/2018	10/16/2018	4/18/2019	10/15/2019	4/6/2020	10/15/2020	4/12/2021	10/6/2021
Hexachlorobutadiene							<8		
Hexachlorocyclopentadiene							<8		
Hexachloroethane							<8		
Hexachloropropene							<8		
Indeno(1,2,3-cd)pyrene							<8		
Isobutanol							<1000		
Isodrin							<8		
Isophorone							<8		
Isosafrole							<8		
Kepon							<8		
Lead, total		<4	<4	<4	<4	<4	<4	<4	<4
Mercury, total							<.5		
Methacrylonitrile							<1		
Methapyrilene							<8		
Methoxychlor							<.05		
Methyl iodide		<1	<1	<1	<1	<1	<2	<1	<1
Methyl methacrylate							<1		
Methyl methanesulfonate							<8		
Methyl parathion							<.4		
Methylene chloride		<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene							<8		
Nickel, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	7.6	46.9
Nitrobenzene							<8		
N-nitrosodiethylamine							<8		
N-nitrosodimethylamine							<8		
N-nitrosodi-n-butylamine							<8		
N-nitroso-di-n-propylamine							<8		
N-nitrosodiphenylamine							<8		
N-nitrosomethylethylamine							<8		
N-nitrosopiperidine							<8		
N-nitrosopyrrolidine							<8		
O,o,o-triethyl phosphorothioate							<.4		
O-toluidine							<8		
P-(dimethylamino)azobenzene							<8		
Parathion							<.4		
Pentachlorobenzene							<8		
Pentachloronitrobenzene (pcnb)							<8		
Pentachlorophenol							<8		
Phenacetin							<8		
Phenanthrene							<8		
Phenol							<8		
Phorate							<.4		
Pronamide							<8		
Propionitrile							<10		
Pyrene							<8		
Safrole							<8		
Selenium, total		<4	<4	<4	<4	<4	<4	<4	<4
Silver, total		<4	<4	<4	<4	<4	<4	<4	<4
Solids, total suspended									
Styrene		<1	<1	<1	<1	<1	<1	<1	<1
Sulfide, total							<.1		
Tetrachloroethene		<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total		<4	<4	<2	<2	<2	<2	<2	<2
Thionazin							<.4		
Tin, total							<20		
Toluene		<1	<1	<1	<1	<1	<1	<1	<1
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	<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	<8.0	<20.0	<20.0	<20.0	<20.0	61.4

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

Table 9

Analytical Data Summary for MW-108A

Constituents	4/14/2022	10/25/2022	4/19/2023	10/23/2023	4/9/2024
Hexachlorobutadiene					
Hexachlorocyclopentadiene					
Hexachloroethane					
Hexachloropropene					
Indeno(1,2,3-cd)pyrene					
Isobutanol					
Isodrin					
Isophorone					
Isosafrole					
Kepone					
Lead, total	<4	<4	<4	<4	<4
Mercury, total					
Methacrylonitrile					
Methapyrilene					
Methoxychlor					
Methyl iodide	<1	<1	<1	<1	<1
Methyl methacrylate					
Methyl methanesulfonate					
Methyl parathion					
Methylene chloride	<5	<5	<5	<5	<5
Naphthalene					
Nickel, total	77.7	<4.0	34.6	292.0	55.6
Nitrobenzene					
N-nitrosodiethylamine					
N-nitrosodimethylamine					
N-nitrosodi-n-butylamine					
N-nitroso-di-n-propylamine					
N-nitrosodiphenylamine					
N-nitrosomethylethylamine					
N-nitrosopiperidine					
N-nitrosopyrrolidine					
O,o,o-triethyl phosphorothioate					
O-toluidine					
P-(dimethylamino)azobenzene					
Parathion					
Pentachlorobenzene					
Pentachloronitrobenzene (pcnb)					
Pentachlorophenol					
Phenacetin					
Phenanthrene					
Phenol					
Phorate					
Pronamide					
Propionitrile					
Pyrene					
Safrole					
Selenium, total	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4
Solids, total suspended					
Styrene	<1	<1	<1	<1	<1
Sulfide, total					
Tetrachloroethene	<1	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2	<2
Thionazin					
Tin, total					
Toluene	<1	<1	<1	<1	<1
Toxaphene					
Trans-1,2-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	<2
Zinc, total	35.7	<20.0	<20.0	28.1	21.1

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

Table 9

Analytical Data Summary for MW-110A

Constituents	Units	10/15/2014	4/13/2015	9/22/2015	4/11/2016	10/12/2016	4/13/2017	10/25/2017	4/12/2018
(3 4)-methylphenol	ug/L								
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1.0	<1.0	<1.0	<1.0	1.1	<1.0	1.3	<1.0
1,1-dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloropropene	ug/L								
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene	ug/L								
1,2,4-trichlorobenzene	ug/L								
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dinitrobenzene	ug/L								
1,3,5-trinitrobenzene	ug/L								
1,3-dichlorobenzene	ug/L								
1,3-dichloropropane	ug/L								
1,3-dinitrobenzene	ug/L								
1,4-dichlorobenzene	ug/L	10.8	7.3	12.6	13.6	12.7	11.0	11.6	12.1
1,4-naphthoquinone	ug/L								
1,4-phenylenediamine	ug/L								
1-naphthylamine	ug/L								
2,2-dichloropropane	ug/L								
2,3,4,6-tetrachlorophenol	ug/L								
2,4,5-t	ug/L								
2,4,5-tp (silvex)	ug/L								
2,4,5-trichlorophenol	ug/L								
2,4,6-trichlorophenol	ug/L								
2,4-d	ug/L								
2,4-dichlorophenol	ug/L								
2,4-dimethylphenol	ug/L								
2,4-dinitrophenol	ug/L								
2,4-dinitrotoluene	ug/L								
2,6-dichlorophenol	ug/L								
2,6-dinitrotoluene	ug/L								
2-acetylaminofluorene	ug/L								
2-butanone (mek)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
2-chloronaphthalene	ug/L								
2-chlorophenol	ug/L								
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
2-methylnaphthalene	ug/L								
2-methylphenol	ug/L								
2-naphthylamine	ug/L								
2-nitroaniline	ug/L								
2-nitrophenol	ug/L								
3,3'-dichlorobenzidine	ug/L								
3,3-dimethylbenzidine	ug/L								
3-methylcholanthrene	ug/L								
3-nitroaniline	ug/L								
4,4'-ddd	ug/L								
4,4'-dde	ug/L								
4,4'-ddt	ug/L								
4,6-dinitro-2-methylphenol	ug/L								
4-aminobiphenyl	ug/L								
4-bromophenyl phenyl ether	ug/L								
4-chloro-3-methylphenol	ug/L								
4-chloroaniline	ug/L								
4-chlorophenyl phenyl ether	ug/L								
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
4-nitroaniline	ug/L								
4-nitrophenol	ug/L								
5-nitro-o-toluidine	ug/L								
7,12-dimethylbenz [a] anthracene	ug/L								
Acenaphthene	ug/L								
Acenaphthylene	ug/L								
Acetone	ug/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	11.2	<10.0
Acetonitrile	ug/L								
Acetophenone	ug/L								
Acrolein	ug/L								
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Aldrin	ug/L								
Allyl chloride	ug/L								
Alpha-bhc	ug/L								
Anthracene	ug/L								

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

Table 9

Analytical Data Summary for MW-110A

Constituents	10/16/2018	4/18/2019	10/15/2019	4/6/2020	10/15/2020	4/12/2021	10/6/2021	4/14/2022	10/25/2022
(3 4)-methylphenol		<8							
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1.0	<1.0	1.4	1.2	1.5	1.6	1.6	<1.0	2.0
1,1-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloropropene		<1							
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene		<8							
1,2,4-trichlorobenzene		<1							
1,2-dibromo-3-chloropropane	<1	<1	<1	<5	<5	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dinitrobenzene		<8							
1,3,5-trinitrobenzene		<8							
1,3-dichlorobenzene		<1							
1,3-dichloropropane		<1							
1,3-dinitrobenzene		<8							
1,4-dichlorobenzene	12.1	9.7	<1.0	<1.0	11.9	6.8	5.4	4.7	5.2
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 (mek)	<5	<5	<5	<5	<5	<5	<5	<10	<10
2-chloronaphthalene		<8							
2-chlorophenol		<8							
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-methylnaphthalene		<8							
2-methylphenol		<8							
2-naphthylamine		<8							
2-nitroaniline		<8							
2-nitrophenol		<8							
3,3'-dichlorobenzidine		<8							
3,3-dimethylbenzidine		<8							
3-methylcholanthrene		<8							
3-nitroaniline		<8							
4,4'-ddd		<.05							
4,4'-dde		<.05							
4,4'-ddt		<.05							
4,6-dinitro-2-methylphenol		<8							
4-aminobiphenyl		<8							
4-bromophenyl phenyl ether		<8							
4-chloro-3-methylphenol		<8							
4-chloroaniline		<8							
4-chlorophenyl phenyl ether		<8							
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-nitroaniline		<8							
4-nitrophenol		<8							
5-nitro-o-toluidine		<8							
7,12-dimethylbenz [a] anthracene		<8							
Acenaphthene		<8							
Acenaphthylene		<8							
Acetone	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Acetonitrile		<10							
Acetophenone		<8							
Acrolein		<10							
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5
Aldrin		<.05							
Allyl chloride		<.05							
Alpha-bhc		<.05							
Anthracene		<8							

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

Table 9

Analytical Data Summary for MW-110A

Constituents	4/19/2023	10/23/2023	4/9/2024
(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	1.3	<1.0	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	<5	<1
1,2-dibromoethane	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1
1,2-dichloroethane	<1	<1	<1
1,2-dichloropropane	<1	<1	<1
1,2-dinitrobenzene			<8
1,3,5-trinitrobenzene			<8
1,3-dichlorobenzene			<1
1,3-dichloropropane			<1
1,3-dinitrobenzene			<8
1,4-dichlorobenzene	5.4	3.4	3.6
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 (mek)	<10	<10	<5
2-chloronaphthalene			<8
2-chlorophenol			<8
2-hexanone (mbk)	<5	<5	<5
2-methylnaphthalene			<8
2-methylphenol			<8
2-naphthylamine			<8
2-nitroaniline			<8
2-nitrophenol			<8
3,3'-dichlorobenzidine			<8
3,3-dimethylbenzidine			<8
3-methylcholanthrene			<8
3-nitroaniline			<8
4,4'-ddd			<.05
4,4'-dde			<.05
4,4'-ddt			<.05
4,6-dinitro-2-methylphenol			<8
4-aminobiphenyl			<8
4-bromophenyl phenyl ether			<8
4-chloro-3-methylphenol			<8
4-chloroaniline			<8
4-chlorophenyl phenyl ether			<8
4-methyl-2-pentanone (mibk)	<5	<5	<5
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 9

Analytical Data Summary for MW-110A

Constituents	Units	10/15/2014	4/13/2015	9/22/2015	4/11/2016	10/12/2016	4/13/2017	10/25/2017	4/12/2018
Antimony, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
Arochlor 1016	ug/L								
Arochlor 1221	ug/L								
Arochlor 1232	ug/L								
Arochlor 1242	ug/L								
Arochlor 1248	ug/L								
Arochlor 1254	ug/L								
Arochlor 1260	ug/L								
Arsenic, total	ug/L	35.5	29.9	33.8	24.4	44.8	33.3	37.6	36.3
Azobenzene	ug/L								
Barium, total	ug/L	1780	1000	829	639	748	890	784	733
Benzene	ug/L	4.7	3.8	5.8	<1.0	5.4	3.5	4.3	5.1
Benzo(a)anthracene	ug/L								
Benzo(a)pyrene	ug/L								
Benzo(b)fluoranthene	ug/L								
Benzo(g,h,i)perylene	ug/L								
Benzo(k)fluoranthene	ug/L								
Benzyl alcohol	ug/L								
Beryllium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Beta-bhc	ug/L								
Bis (2-chloroethoxy) methane	ug/L								
Bis(2-chloroethyl) ether	ug/L								
Bis(2-ethylhexyl) phthalate	ug/L								
Bis[2-chloroisopropyl]ether	ug/L								
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate	ug/L								
Cadmium, total	ug/L	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chlordane	ug/L								
Chlorobenzene	ug/L	7.7	5.6	9.8	<1.0	6.8	3.7	5.1	5.7
Chlorobenzilate	ug/L								
Chloroethane	ug/L	3.1	2.2	2.5	<1.0	3.1	2.5	3.0	<1.0
Chloroform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloroprene	ug/L								
Chromium, total	ug/L	<8	<8	<8	<8	<8	<8	<8	<8
Chrysene	ug/L								
Cis-1,2-dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	5.4	10.3	1.3	13.3	12.5	10.8	7.7	18.5
Copper, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Cyanide, total	mg/L								
Delta-bhc	ug/L								
Diallate	ug/L								
Dibenzo(a,h)anthracene	ug/L								
Dibenzofuran	ug/L								
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L								
Dieldrin	ug/L								
Diethyl phthalate	ug/L								
Dimethoate	ug/L								
Dimethylphthalate	ug/L								
Di-n-butyl phthalate	ug/L								
Di-n-octyl phthalate	ug/L								
Dinoseb	ug/L								
Diphenylamine	ug/L								
Disulfoton	ug/L								
Endosulfan i	ug/L								
Endosulfan ii	ug/L								
Endosulfan sulfate	ug/L								
Endrin	ug/L								
Endrin aldehyde	ug/L								
Ethyl methacrylate	ug/L								
Ethyl methanesulfonate	ug/L								
Ethylbenzene	ug/L	<1.0	<1.0	1.1	<1.0	<1.0	1.0	<1.0	<1.0
Famphur	ug/L								
Fluoranthene	ug/L								
Fluorene	ug/L								
Gamma-bhc (lindane)	ug/L								
Heptachlor	ug/L								
Heptachlor epoxide	ug/L								
Hexachlorobenzene	ug/L								

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

Table 9

Analytical Data Summary for MW-110A

Constituents	10/16/2018	4/18/2019	10/15/2019	4/6/2020	10/15/2020	4/12/2021	10/6/2021	4/14/2022	10/25/2022
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	50.2	21.8	54.2	44.7	53.1	43.8	42.2	19.5	67.1
Azobenzene		<8							
Barium, total	650	551	803	816	701	713	714	520	675
Benzene	1.6	2.6	5.2	4.0	4.4	4.0	3.4	3.5	3.8
Benzo(a)anthracene		<8							
Benzo(a)pyrene		<8							
Benzo(b)fluoranthene		<8							
Benzo(g,h,i)perylene		<8							
Benzo(k)fluoranthene		<8							
Benzyl alcohol		<8							
Beryllium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Beta-bhc		<.05							
Bis (2-chloroethoxy) methane		<8							
Bis(2-chloroethyl) ether		<8							
Bis(2-ethylhexyl) phthalate		<6							
Bis[2-chloroisopropyl]ether		<8							
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate		<8							
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlordane		<.1							
Chlorobenzene	3.6	5.4	6.1	5.9	7.6	7.9	8.6	6.3	8.7
Chlorobenzilate		<8							
Chloroethane	1.8	2.2	2.4	2.1	2.8	2.1	1.5	1.5	3.3
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	19.8	23.7	4.3	39.3	4.8	11.2	12.3	191.0	6.5
Copper, total	5.6	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	6.6
Cyanide, total		<.005							
Delta-bhc		<.05							
Diallate		<8							
Dibenzo(a,h)anthracene		<8							
Dibenzofuran		<8							
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane		<1							
Dieldrin		<.05							
Diethyl phthalate		<8							
Dimethoate		<.4							
Dimethylphthalate		<8							
Di-n-butyl phthalate		<8							
Di-n-octyl phthalate		<8							
Dinoseb		<.5							
Diphenylamine		<8							
Disulfoton		<.4							
Endosulfan i		<.05							
Endosulfan ii		<.05							
Endosulfan sulfate		<.05							
Endrin		<.05							
Endrin aldehyde		<.05							
Ethyl methacrylate		<10							
Ethyl methanesulfonate		<8							
Ethylbenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Famphur		<.4							
Fluoranthene		<8							
Fluorene		<8							
Gamma-bhc (lindane)		<.05							
Heptachlor		<.05							
Heptachlor epoxide		<.05							
Hexachlorobenzene		<.05							

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

Table 9

Analytical Data Summary for MW-110A

Constituents	4/19/2023	10/23/2023	4/9/2024
Antimony, total	<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	18.7	57.6	7.0
Azobenzene			<8
Barium, total	537	842	199
Benzene	2.3	2.6	3.4
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
Beta-bhc			<.05
Bis (2-chloroethoxy) methane			<8
Bis(2-chloroethyl) ether			<8
Bis(2-ethylhexyl) phthalate			<6
Bis[2-chloroisopropyl]ether			<8
Bromochloromethane	<1	<1	<1
Bromodichloromethane	<1	<1	<1
Bromoform	<1	<1	<1
Bromomethane	<1	<1	<1
Butyl benzyl phthalate			<8
Cadmium, total	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1
Carbon tetrachloride	<1	<1	<1
Chlordane			<.1
Chlorobenzene	5.1	6.5	7.6
Chlorobenzilate			<8
Chloroethane	1.8	1.8	1.4
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	91.4	18.0	1460.0
Copper, total	<4.0	<4.0	4.2
Cyanide, total			<.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
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
Famphur			<.4
Fluoranthene			<8
Fluorene			<8
Gamma-bhc (lindane)			<.05
Heptachlor			<.05
Heptachlor epoxide			<.05
Hexachlorobenzene			<.05

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

Table 9

Analytical Data Summary for MW-110A

Constituents	Units	10/15/2014	4/13/2015	9/22/2015	4/11/2016	10/12/2016	4/13/2017	10/25/2017	4/12/2018
Hexachlorobutadiene	ug/L								
Hexachlorocyclopentadiene	ug/L								
Hexachloroethane	ug/L								
Hexachloropropene	ug/L								
Indeno(1,2,3-cd)pyrene	ug/L								
Isobutanol	ug/L								
Isodrin	ug/L								
Isophorone	ug/L								
Isosafrole	ug/L								
Kepone	ug/L								
Lead, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Mercury, total	ug/L								
Methacrylonitrile	ug/L								
Methapyrilene	ug/L								
Methoxychlor	ug/L								
Methyl iodide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Methyl methacrylate	ug/L								
Methyl methanesulfonate	ug/L								
Methyl parathion	ug/L								
Methylene chloride	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene	ug/L								
Nickel, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Nitrobenzene	ug/L								
N-nitrosodiethylamine	ug/L								
N-nitrosodimethylamine	ug/L								
N-nitrosodi-n-butylamine	ug/L								
N-nitroso-di-n-propylamine	ug/L								
N-nitrosodiphenylamine	ug/L								
N-nitrosomethylethylamine	ug/L								
N-nitrosopiperidine	ug/L								
N-nitrosopyrrolidine	ug/L								
O,o,o-triethyl phosphorothioate	ug/L								
O-toluidine	ug/L								
P-(dimethylamino)azobenzene	ug/L								
Parathion	ug/L								
Pentachlorobenzene	ug/L								
Pentachloronitrobenzene (pcnb)	ug/L								
Pentachlorophenol	ug/L								
Phenacetin	ug/L								
Phenanthrene	ug/L								
Phenol	ug/L								
Phorate	ug/L								
Pronamide	ug/L								
Propionitrile	ug/L								
Pyrene	ug/L								
Safrole	ug/L								
Selenium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Solids, total suspended	mg/L	135	157						
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Sulfide, total	mg/L								
Tetrachloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Thionazin	ug/L								
Tin, total	ug/L								
Toluene	ug/L	<1	<1	<1	<1	<1	1	<1	<1
Toxaphene	ug/L								
Trans-1,2-dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	ug/L	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	1.5	1.1	1.3	<1.0	1.3	1.2	1.0	<1.0
Xylenes, total	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	2.5	<2.0	<2.0
Zinc, total	ug/L	<20.0	10.3	<8.0	<8.0	11.2	<8.0	<8.0	<20.0

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

Table 9

Analytical Data Summary for MW-110A

Constituents	10/16/2018	4/18/2019	10/15/2019	4/6/2020	10/15/2020	4/12/2021	10/6/2021	4/14/2022	10/25/2022
Hexachlorobutadiene		<8							
Hexachlorocyclopentadiene		<8							
Hexachloroethane		<8							
Hexachloropropene		<8							
Indeno(1,2,3-cd)pyrene		<8							
Isobutanol		<1000							
Isodrin		<8							
Isophorone		<8							
Isosafrole		<8							
Kepon		<8							
Lead, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Mercury, total		<5							
Methacrylonitrile		<1							
Methacrylonitrile		<8							
Methoxychlor		<.05							
Methyl iodide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methyl methacrylate		<1							
Methyl methanesulfonate		<8							
Methyl parathion		<4							
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene		<8							
Nickel, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	55.9	<4.0
Nitrobenzene		<8							
N-nitrosodiethylamine		<8							
N-nitrosodimethylamine		<8							
N-nitrosodi-n-butylamine		<8							
N-nitroso-di-n-propylamine		<8							
N-nitrosodiphenylamine		<8							
N-nitrosomethylethylamine		<8							
N-nitrosopiperidine		<8							
N-nitrosopyrrolidine		<8							
O,o,o-triethyl phosphorothioate		<4							
O-toluidine		<8							
P-(dimethylamino)azobenzene		<8							
Parathion		<4							
Pentachlorobenzene		<8							
Pentachloronitrobenzene (pcnb)		<8							
Pentachlorophenol		<8							
Phenacetin		<8							
Phenanthrene		<8							
Phenol		<8							
Phorate		<4							
Pronamide		<8							
Propionitrile		<10							
Pyrene		<8							
Safrole		<8							
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Solids, total suspended									
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfide, total		<1							
Tetrachloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4	<2	<2	<2	<2	<2	<2	<2	<2
Thionazin		<4							
Tin, total		<20							
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toxaphene		<2							
Trans-1,2-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	<1.0	<1.0	2.0	1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Xylenes, total	<2.0	<2.0	6.6	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Zinc, total	<20.0	<8.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 9

Analytical Data Summary for MW-110A

Constituents	4/19/2023	10/23/2023	4/9/2024
Hexachlorobutadiene			<8
Hexachlorocyclopentadiene			<8
Hexachloroethane			<8
Hexachloropropene			<8
Indeno(1,2,3-cd)pyrene			<8
Isobutanol			<1000
Isodrin			<8
Isophorone			<8
Isosafrole			<8
Kepone			<8
Lead, total	<4	<4	<4
Mercury, total			<.5
Methacrylonitrile			<1
Methapyrilene			<8
Methoxychlor			<.05
Methyl iodide	<1	<1	<2
Methyl methacrylate			<1
Methyl methanesulfonate			<8
Methyl parathion			<.4
Methylene chloride	<5	<5	<5
Naphthalene			<8
Nickel, total	21.2	9.0	456.0
Nitrobenzene			<8
N-nitrosodiethylamine			<8
N-nitrosodimethylamine			<8
N-nitrosodi-n-butylamine			<8
N-nitroso-di-n-propylamine			<8
N-nitrosodiphenylamine			<8
N-nitrosomethylethylamine			<8
N-nitrosopiperidine			<8
N-nitrosopyrrolidine			<8
O,o,o-triethyl phosphorothioate			<.4
O-toluidine			<8
P-(dimethylamino)azobenzene			<8
Parathion			<.4
Pentachlorobenzene			<8
Pentachloronitrobenzene (pcnb)			<8
Pentachlorophenol			<8
Phenacetin			<8
Phenanthrene			<8
Phenol			<8
Phorate			<.4
Pronamide			<8
Propionitrile			<10
Pyrene			<8
Safrole			<8
Selenium, total	<4	<4	<4
Silver, total	<4	<4	<4
Solids, total suspended			
Styrene	<1	<1	<1
Sulfide, total			<.3
Tetrachloroethene	<1	<1	<1
Thallium, total	<2	<2	<2
Thionazin			<.4
Tin, total			<20
Toluene	<1	<1	<1
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	<1.0	<1.0	<1.0
Xylenes, total	<2.0	<2.0	<2.0
Zinc, total	<20.0	31.5	21.4

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

Table 9

Analytical Data Summary for MW-2A

Constituents	Units	10/15/2014	1/12/2015	4/13/2015	7/21/2015	9/22/2015	4/11/2016	10/12/2016	4/13/2017
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	ug/L	<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Antimony, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Barium, total	ug/L	57.8	45.6	43.3	50.0	47.3	32.5	54.8	45.7
Benzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	ug/L	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	ug/L	<8	<8	<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	<.8	.9	<.8	<.8	<.8	<.8	<.8	<.8
Copper, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	27.3	<4.0	<4.0
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Methyl iodide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	ug/L	<4.0	4.7	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Selenium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Solids, total suspended	mg/L	88		5					
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	<4	<4	<4	<4
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,2-dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	ug/L	<1	<1	<1	3	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	ug/L	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	21	10	<8	<8	<8	<8	<8	<8

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

Table 9

Analytical Data Summary for MW-2A

Constituents	10/25/2017	4/12/2018	10/16/2018	4/18/2019	10/15/2019	4/6/2020	10/15/2020	4/12/2021	10/6/2021
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<1	<1	<1	<1	<1	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	13	<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Barium, total	58.0	45.6	46.1	56.8	59.2	55.7	56.5	53.3	59.0
Benzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	<8	<8	<8	<8	<8	<8	<8	<8	<8
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	<8	<8	<8	<8	<8	<8	<8	<8	<8
Cis-1,2-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	<8	<8	<8	<8	<4	<4	<4	<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
Lead, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Methyl iodide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	7.1	<4.0	<4.0	<4.0	5.3	<4.0	<4.0	<4.0	4.8
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Solids, total suspended									
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4	<4	<4	<2	<2	<2	<2	<2	<2
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,2-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	<20	<20	<8	<20	<20	<20	<20	<20

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

Table 9

Analytical Data Summary for MW-2A

Constituents	4/14/2022	10/25/2022	4/19/2023	10/23/2023	4/9/2024
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	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1	<1
2-butanone (mek)	<10	<10	<10	<10	<10
2-hexanone (mbk)	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5
Acetone	<10	<10	<10	<10	<10
Acrylonitrile	<5	<5	<5	<5	<5
Antimony, total	<2	<2	<2	<2	<2
Arsenic, total	<4	<4	<4	<4	<4
Barium, total	58.7	64.8	61.1	56.6	58.4
Benzene	<1	<1	<1	<1	<1
Beryllium, total	<4	<4	<4	<4	<4
Bromochloromethane	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1
Cadmium, total	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1
Chlorobenzene	<1	<1	<1	<1	<1
Chloroethane	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1
Chromium, total	<8	<8	<8	<8	<8
Cis-1,2-dichloroethene	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1
Cobalt, total	<.4	<.4	<.4	<.4	<.4
Copper, total	<4.0	<4.0	12.6	<4.0	<4.0
Dibromochloromethane	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1	<1
Lead, total	<4	<4	<4	<4	<4
Methyl iodide	<1	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5	<5
Nickel, total	<4.0	<4.0	<4.0	<4.0	<4.0
Selenium, total	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4
Solids, total suspended					
Styrene	<1	<1	<1	<1	<1
Tetrachloroethene	<1	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2	<2
Toluene	<1	<1	<1	<1	<1
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	<2
Zinc, total	<20	<20	<20	<20	<20

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

Table 9

Analytical Data Summary for MW-3

Constituents	Units	10/15/2014	1/12/2015	4/13/2015	9/22/2015	4/11/2016	10/12/2016	4/13/2017	10/25/2017
1,1,1,2-tetrachloroethane	ug/L	<1		<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1		<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1		<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1		<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1		<1	<1	<1	<1	<1	<1
1,1-dichloroethene	ug/L	<1		<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	ug/L	<1		<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L	<1		<1	<1	<1	<1	<1	<1
1,2-dibromoethane	ug/L	<1		<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1		<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1		<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1		<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	ug/L	<1		<1	<1	<1	<1	<1	<1
2-butanone (mek)	ug/L	<5		<5	<5	<5	<5	<5	<5
2-hexanone (mbk)	ug/L	<5		<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	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
Arsenic, total	ug/L	<4		<4	<4	<4	<4	<4	<4
Barium, total	ug/L	31.5		22.0	25.2	41.6	36.8	58.8	36.7
Benzene	ug/L	<1		<1	<1	<1	<1	<1	<1
Beryllium, total	ug/L	<4		<4	<4	<4	<4	<4	<4
Bromochloromethane	ug/L	<1		<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1		<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<1		<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1		<1	<1	<1	<1	<1	<1
Cadmium, total	ug/L	<.8		<.8	<.8	<.8	<.8	<.8	<.8
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
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	<.8	<.8	<.8	<.8
Copper, total	ug/L	<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
Lead, total	ug/L	<4		<4	<4	<4	<4	<4	<4
Methyl iodide	ug/L	<1		<1	<1	<1	<1	<1	<1
Methylene chloride	ug/L	<5		<5	<5	<5	<5	<5	<5
Nickel, total	ug/L	18.7	4.9	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Selenium, total	ug/L	<4		<4	<4	<4	<4	<4	<4
Silver, total	ug/L	<4		<4	<4	<4	<4	<4	<4
Solids, total suspended	mg/L	345		8					
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	<4	<4
Toluene	ug/L	<1		<1	<1	<1	<1	<1	<1
Trans-1,2-dichloroethene	ug/L	<1		<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1		<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5		<5	<5	<5	<5	<5	<5
Trichloroethene	ug/L	<1		<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1		<1	<1	<1	<1	<1	<1
Vanadium, total	ug/L	<20		<20	<20	<20	<20	<20	<20
Vinyl acetate	ug/L	<5		<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1		<1	<1	<1	<1	<1	<1
Xylenes, total	ug/L	<2		<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	<20.0		<8.0	<8.0	<8.0	<8.0	<8.0	<8.0

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

Table 9

Analytical Data Summary for MW-3

Constituents	4/12/2018	10/16/2018	4/18/2019	10/15/2019	4/6/2020	10/15/2020	4/12/2021	10/6/2021	4/14/2022
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<1	<1	<1	<1	<5	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	<5	<5	<5	<5	<5	<5	<5	<5	<10
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Barium, total	50.8	49.7	89.1	57.4	62.2	58.2	43.5	28.9	56.1
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	<.8	<.8	<.8	<.4	<.4	<.4	<.4	.4
Copper, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Methyl iodide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Solids, total suspended									
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4	<4	<2	<2	<2	<2	<2	<2	<2
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,2-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	13.3	<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-3

Constituents	10/25/2022	1/9/2023	4/19/2023	10/23/2023	4/9/2024
1,1,1,2-tetrachloroethane	<1		<1	<1	<1
1,1,1-trichloroethane	<1		<1	<1	<1
1,1,2,2-tetrachloroethane	<1		<1	<1	<1
1,1,2-trichloroethane	<1		<1	<1	<1
1,1-dichloroethane	<1		<1	<1	<1
1,1-dichloroethene	<1		<1	<1	<1
1,2,3-trichloropropane	<1		<1	<1	<1
1,2-dibromo-3-chloropropane	<5		<5	<5	<5
1,2-dibromoethane	<1		<1	<1	<1
1,2-dichlorobenzene	<1		<1	<1	<1
1,2-dichloroethane	<1		<1	<1	<1
1,2-dichloropropane	<1		<1	<1	<1
1,4-dichlorobenzene	<1		<1	<1	<1
2-butanone (mek)	<10		<10	<10	<10
2-hexanone (mbk)	<5		<5	<5	<5
4-methyl-2-pentanone (mibk)	<5		<5	<5	<5
Acetone	<10		<10	<10	<10
Acrylonitrile	<5		<5	<5	<5
Antimony, total	<2		<2	<2	<2
Arsenic, total	<4		<4	<4	<4
Barium, total	33.0		50.3	28.4	47.1
Benzene	<1		<1	<1	<1
Beryllium, total	<4		<4	<4	<4
Bromochloromethane	<1		<1	<1	<1
Bromodichloromethane	<1		<1	<1	<1
Bromoform	<1		<1	<1	<1
Bromomethane	<1		<1	<1	<1
Cadmium, total	<.8		<.8	<.8	<.8
Carbon disulfide	<1		<1	<1	<1
Carbon tetrachloride	<1		<1	<1	<1
Chlorobenzene	<1		<1	<1	<1
Chloroethane	<1		<1	<1	<1
Chloroform	<1		<1	<1	<1
Chloromethane	<1		<1	<1	<1
Chromium, total	<8		<8	<8	<8
Cis-1,2-dichloroethene	<1		<1	<1	<1
Cis-1,3-dichloropropene	<1		<1	<1	<1
Cobalt, total	1.6	<2.0	<.4	<.4	<.4
Copper, total	<4		<4	<4	<4
Dibromochloromethane	<1		<1	<1	<1
Dibromomethane	<1		<1	<1	<1
Ethylbenzene	<1		<1	<1	<1
Lead, total	<4		<4	<4	<4
Methyl iodide	<1		<1	<1	<1
Methylene chloride	<5		<5	<5	<5
Nickel, total	<4.0		<4.0	<4.0	<4.0
Selenium, total	<4		<4	<4	<4
Silver, total	<4		<4	<4	<4
Solids, total suspended					
Styrene	<1		<1	<1	<1
Tetrachloroethene	<1		<1	<1	<1
Thallium, total	<2		<2	<2	<2
Toluene	<1		<1	<1	<1
Trans-1,2-dichloroethene	<1		<1	<1	<1
Trans-1,3-dichloropropene	<1		<1	<1	<1
Trans-1,4-dichloro-2-butene	<5		<5	<5	<5
Trichloroethene	<1		<1	<1	<1
Trichlorofluoromethane	<1		<1	<1	<1
Vanadium, total	<20		<20	<20	<20
Vinyl acetate	<5		<5	<5	<5
Vinyl chloride	<1		<1	<1	<1
Xylenes, total	<2		<2	<2	<2
Zinc, total	<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-4

Constituents	Units	10/15/2014	1/12/2015	4/13/2015	9/22/2015	12/30/2015	4/11/2016	10/12/2016	4/13/2017
(3 4)-methylphenol	ug/L								
1,1,1,2-tetrachloroethane	ug/L	<1		<1	<1		<1	<1	<1
1,1,1-trichloroethane	ug/L	<1		<1	<1		<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1		<1	<1		<1	<1	<1
1,1,2-trichloroethane	ug/L	<1		<1	<1		<1	<1	<1
1,1-dichloroethane	ug/L	<1		<1	<1		<1	<1	<1
1,1-dichloroethene	ug/L	<1		<1	<1		<1	<1	<1
1,1-dichloropropene	ug/L								
1,2,3-trichloropropane	ug/L	<1		<1	<1		<1	<1	<1
1,2,4,5-tetrachlorobenzene	ug/L								
1,2,4-trichlorobenzene	ug/L								
1,2-dibromo-3-chloropropane	ug/L	<1		<1	<1		<1	<1	<1
1,2-dibromoethane	ug/L	<1		<1	<1		<1	<1	<1
1,2-dichlorobenzene	ug/L	<1		<1	<1		<1	<1	<1
1,2-dichloroethane	ug/L	<1		<1	<1		<1	<1	<1
1,2-dichloropropane	ug/L	<1		<1	<1		<1	<1	<1
1,2-dinitrobenzene	ug/L								
1,3,5-trinitrobenzene	ug/L								
1,3-dichlorobenzene	ug/L								
1,3-dichloropropane	ug/L								
1,3-dinitrobenzene	ug/L								
1,4-dichlorobenzene	ug/L	<1		<1	<1		<1	<1	<1
1,4-naphthoquinone	ug/L								
1,4-phenylenediamine	ug/L								
1-naphthylamine	ug/L								
2,2-dichloropropane	ug/L								
2,3,4,6-tetrachlorophenol	ug/L								
2,4,5-t	ug/L								
2,4,5-tp (silvex)	ug/L								
2,4,5-trichlorophenol	ug/L								
2,4,6-trichlorophenol	ug/L								
2,4-d	ug/L								
2,4-dichlorophenol	ug/L								
2,4-dimethylphenol	ug/L								
2,4-dinitrophenol	ug/L								
2,4-dinitrotoluene	ug/L								
2,6-dichlorophenol	ug/L								
2,6-dinitrotoluene	ug/L								
2-acetylaminofluorene	ug/L								
2-butanone (mek)	ug/L	<5		<5	<5		<5	<5	<5
2-chloronaphthalene	ug/L								
2-chlorophenol	ug/L								
2-hexanone (mbk)	ug/L	<5		<5	<5		<5	<5	<5
2-methylnaphthalene	ug/L								
2-methylphenol	ug/L								
2-naphthylamine	ug/L								
2-nitroaniline	ug/L								
2-nitrophenol	ug/L								
3,3'-dichlorobenzidine	ug/L								
3,3-dimethylbenzidine	ug/L								
3-methylcholanthrene	ug/L								
3-nitroaniline	ug/L								
4,4'-ddd	ug/L								
4,4'-dde	ug/L								
4,4'-ddt	ug/L								
4,6-dinitro-2-methylphenol	ug/L								
4-aminobiphenyl	ug/L								
4-bromophenyl phenyl ether	ug/L								
4-chloro-3-methylphenol	ug/L								
4-chloroaniline	ug/L								
4-chlorophenyl phenyl ether	ug/L								
4-methyl-2-pentanone (mibk)	ug/L	<5		<5	<5		<5	<5	<5
4-nitroaniline	ug/L								
4-nitrophenol	ug/L								
5-nitro-o-toluidine	ug/L								
7,12-dimethylbenz [a] anthracene	ug/L								
Acenaphthene	ug/L								
Acenaphthylene	ug/L								
Acetone	ug/L	<10.0		<10.0	<10.0		<10.0	<10.0	<10.0
Acetonitrile	ug/L								
Acetophenone	ug/L								
Acrolein	ug/L								
Acrylonitrile	ug/L	<5		<5	<5		<5	<5	<5
Aldrin	ug/L								
Allyl chloride	ug/L								
Alpha-bhc	ug/L								
Anthracene	ug/L								

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

Table 9

Analytical Data Summary for MW-4

Constituents	10/25/2017	4/12/2018	10/16/2018	4/18/2019	10/15/2019	4/6/2020	10/15/2020	4/12/2021	7/1/2021
(3 4)-methylphenol									
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-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	<1	<1	<1	<1	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dinitrobenzene									
1,3,5-trinitrobenzene									
1,3-dichlorobenzene									
1,3-dichloropropane									
1,3-dinitrobenzene									
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-naphthoquinone									
1,4-phenylenediamine									
1-naphthylamine									
2,2-dichloropropane									
2,3,4,6-tetrachlorophenol									
2,4,5-t									
2,4,5-tp (silvex)									
2,4,5-trichlorophenol									
2,4,6-trichlorophenol									
2,4-d									
2,4-dichlorophenol									
2,4-dimethylphenol									
2,4-dinitrophenol									
2,4-dinitrotoluene									
2,6-dichlorophenol									
2,6-dinitrotoluene									
2-acetylaminofluorene									
2-butanone (mek)	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-chloronaphthalene									
2-chlorophenol									
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-methylnaphthalene									
2-methylphenol									
2-naphthylamine									
2-nitroaniline									
2-nitrophenol									
3,3'-dichlorobenzidine									
3,3-dimethylbenzidine									
3-methylcholanthrene									
3-nitroaniline									
4,4'-ddd									
4,4'-dde									
4,4'-ddt									
4,6-dinitro-2-methylphenol									
4-aminobiphenyl									
4-bromophenyl phenyl ether									
4-chloro-3-methylphenol									
4-chloroaniline									
4-chlorophenyl phenyl ether									
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-nitroaniline									
4-nitrophenol									
5-nitro-o-toluidine									
7,12-dimethylbenz [a] anthracene									
Acenaphthene									
Acenaphthylene									
Acetone	12.7	<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 9

Analytical Data Summary for MW-4

Constituents	10/6/2021	4/14/2022	7/13/2022	10/25/2022	1/9/2023	4/19/2023	10/23/2023	4/9/2024
(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	<5		<1		<5	<5	<5
1,2-dibromoethane	<1	<1		<1		<1	<1	<1
1,2-dichlorobenzene	<1	<1		<1		<1	<1	<1
1,2-dichloroethane	<1	<1		<1		<1	<1	<1
1,2-dichloropropane	<1	<1		<1		<1	<1	<1
1,2-dinitrobenzene				<8				
1,3,5-trinitrobenzene				<8				
1,3-dichlorobenzene				<1				
1,3-dichloropropane				<1				
1,3-dinitrobenzene				<8				
1,4-dichlorobenzene	<1	<1		<1		<1	<1	<1
1,4-naphthoquinone				<8				
1,4-phenylenediamine				<8				
1-naphthylamine				<8				
2,2-dichloropropane				<1				
2,3,4,6-tetrachlorophenol				<8				
2,4,5-t				<5				
2,4,5-tp (silvex)				<5				
2,4,5-trichlorophenol				<8				
2,4,6-trichlorophenol				<8				
2,4-d				<2				
2,4-dichlorophenol				<8				
2,4-dimethylphenol				<8				
2,4-dinitrophenol				<8				
2,4-dinitrotoluene				<8				
2,6-dichlorophenol				<8				
2,6-dinitrotoluene				<8				
2-acetylaminofluorene				<8				
2-butanone (mek)	<5	<10		<5		<10	<10	<10
2-chloronaphthalene				<8				
2-chlorophenol				<8				
2-hexanone (mbk)	<5	<5		<5		<5	<5	<5
2-methylnaphthalene				<8				
2-methylphenol				<8				
2-naphthylamine				<8				
2-nitroaniline				<8				
2-nitrophenol				<8				
3,3'-dichlorobenzidine				<8				
3,3-dimethylbenzidine				<8				
3-methylcholanthrene				<8				
3-nitroaniline				<8				
4,4'-ddd				<.05				
4,4'-dde				<.05				
4,4'-ddt				<.05				
4,6-dinitro-2-methylphenol				<8				
4-aminobiphenyl				<8				
4-bromophenyl phenyl ether				<8				
4-chloro-3-methylphenol				<8				
4-chloroaniline				<8				
4-chlorophenyl phenyl ether				<8				
4-methyl-2-pentanone (mibk)	<5	<5		<5		<5	<5	<5
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 9

Analytical Data Summary for MW-4

Constituents	Units	10/15/2014	1/12/2015	4/13/2015	9/22/2015	12/30/2015	4/11/2016	10/12/2016	4/13/2017
Antimony, total	ug/L	<2		<2	<2		<2	<2	<2
Arochlor 1016	ug/L								
Arochlor 1221	ug/L								
Arochlor 1232	ug/L								
Arochlor 1242	ug/L								
Arochlor 1248	ug/L								
Arochlor 1254	ug/L								
Arochlor 1260	ug/L								
Arsenic, total	ug/L	<4		<4	<4		<4	<4	<4
Azobenzene	ug/L								
Barium, total	ug/L	116		149	125		120	169	102
Benzene	ug/L	<1		<1	<1		<1	<1	<1
Benzo(a)anthracene	ug/L								
Benzo(a)pyrene	ug/L								
Benzo(b)fluoranthene	ug/L								
Benzo(g,h,i)perylene	ug/L								
Benzo(k)fluoranthene	ug/L								
Benzyl alcohol	ug/L								
Beryllium, total	ug/L	<4		<4	<4		<4	<4	<4
Beta-bhc	ug/L								
Bis (2-chloroethoxy) methane	ug/L								
Bis(2-chloroethyl) ether	ug/L								
Bis(2-ethylhexyl) phthalate	ug/L								
Bis[2-chloroisopropyl]ether	ug/L								
Bromochloromethane	ug/L	<1		<1	<1		<1	<1	<1
Bromodichloromethane	ug/L	<1		<1	<1		<1	<1	<1
Bromoform	ug/L	<1		<1	<1		<1	<1	<1
Bromomethane	ug/L	<1		<1	<1		<1	<1	<1
Butyl benzyl phthalate	ug/L								
Cadmium, total	ug/L	<.8		<.8	<.8		<.8	<.8	<.8
Carbon disulfide	ug/L	1.7		<1.0	<1.0		<1.0	<1.0	<1.0
Carbon tetrachloride	ug/L	<1		<1	<1		<1	<1	<1
Chlordane	ug/L								
Chlorobenzene	ug/L	<1		<1	<1		<1	<1	<1
Chlorobenzilate	ug/L								
Chloroethane	ug/L	<1		<1	<1		<1	<1	<1
Chloroform	ug/L	<1		<1	<1		<1	<1	<1
Chloromethane	ug/L	<1		<1	<1		<1	<1	<1
Chloroprene	ug/L								
Chromium, total	ug/L	<8		<8	<8		<8	<8	<8
Chrysene	ug/L								
Cis-1,2-dichloroethene	ug/L	<1		<1	<1		<1	<1	<1
Cis-1,3-dichloropropene	ug/L	<1		<1	<1		<1	<1	<1
Cobalt, total	ug/L	6.5	1.1	1.4	12.5	2.0	1.6	<.8	<.8
Copper, total	ug/L	<4.0		<4.0	<4.0		<4.0	<4.0	<4.0
Cyanide, total	mg/L								
Delta-bhc	ug/L								
Diallate	ug/L								
Dibenzo(a,h)anthracene	ug/L								
Dibenzofuran	ug/L								
Dibromochloromethane	ug/L	<1		<1	<1		<1	<1	<1
Dibromomethane	ug/L	<1		<1	<1		<1	<1	<1
Dichlorodifluoromethane	ug/L								
Dieldrin	ug/L								
Diethyl phthalate	ug/L								
Dimethoate	ug/L								
Dimethylphthalate	ug/L								
Di-n-butyl phthalate	ug/L								
Di-n-octyl phthalate	ug/L								
Dinoseb	ug/L								
Diphenylamine	ug/L								
Disulfoton	ug/L								
Endosulfan i	ug/L								
Endosulfan ii	ug/L								
Endosulfan sulfate	ug/L								
Endrin	ug/L								
Endrin aldehyde	ug/L								
Ethyl methacrylate	ug/L								
Ethyl methanesulfonate	ug/L								
Ethylbenzene	ug/L	<1		<1	<1		<1	<1	<1
Famphur	ug/L								
Fluoranthene	ug/L								
Fluorene	ug/L								
Gamma-bhc (lindane)	ug/L								
Heptachlor	ug/L								
Heptachlor epoxide	ug/L								
Hexachlorobenzene	ug/L								

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

Table 9

Analytical Data Summary for MW-4

Constituents	10/25/2017	4/12/2018	10/16/2018	4/18/2019	10/15/2019	4/6/2020	10/15/2020	4/12/2021	7/1/2021
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	<4	<4	<4	<4	<4	<4	<4	
Azobenzene									
Barium, total	111	117	120	107	135	103	118	132	
Benzene	<1	<1	<1	<1	<1	<1	<1	<1	
Benzo(a)anthracene									
Benzo(a)pyrene									
Benzo(b)fluoranthene									
Benzo(g,h,i)perylene									
Benzo(k)fluoranthene									
Benzyl alcohol									
Beryllium, total	<4	<4	<4	<4	<4	<4	<4	<4	
Beta-bhc									
Bis (2-chloroethoxy) methane									
Bis(2-chloroethyl) ether									
Bis(2-ethylhexyl) phthalate									
Bis[2-chloroisopropyl]ether									
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1	
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1	
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	
Butyl benzyl phthalate									
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	
Carbon disulfide	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	
Chlordane									
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	<.8	<.8	<.8	<.8	<.8	<.4	<.4	1.0	<.4
Copper, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	
Cyanide, total									
Delta-bhc									
Diallate									
Dibenzo(a,h)anthracene									
Dibenzofuran									
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1	
Dichlorodifluoromethane									
Dieldrin									
Diethyl phthalate									
Dimethoate									
Dimethylphthalate									
Di-n-butyl phthalate									
Di-n-octyl phthalate									
Dinoseb									
Diphenylamine									
Disulfoton									
Endosulfan i									
Endosulfan ii									
Endosulfan sulfate									
Endrin									
Endrin aldehyde									
Ethyl methacrylate									
Ethyl methanesulfonate									
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	
Famphur									
Fluoranthene									
Fluorene									
Gamma-bhc (lindane)									
Heptachlor									
Heptachlor epoxide									
Hexachlorobenzene									

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

Table 9

Analytical Data Summary for MW-4

Constituents	10/6/2021	4/14/2022	7/13/2022	10/25/2022	1/9/2023	4/19/2023	10/23/2023	4/9/2024
Antimony, total	<2	<2		<2		<2	<2	<2
Arochlor 1016				<.1				
Arochlor 1221				<.2				
Arochlor 1232				<.2				
Arochlor 1242				<.2				
Arochlor 1248				<.2				
Arochlor 1254				<.1				
Arochlor 1260				<.1				
Arsenic, total	<4	<4		<4		<4	<4	<4
Azobenzene				<8				
Barium, total	105	156		103		106	105	150
Benzene	<1	<1		<1		<1	<1	<1
Benzo(a)anthracene				<8				
Benzo(a)pyrene				<8				
Benzo(b)fluoranthene				<8				
Benzo(g,h,i)perylene				<8				
Benzo(k)fluoranthene				<8				
Benzyl alcohol				<8				
Beryllium, total	<4	<4		<4		<4	<4	<4
Beta-bhc				<.05				
Bis (2-chloroethoxy) methane				<8				
Bis(2-chloroethyl) ether				<8				
Bis(2-ethylhexyl) phthalate				10	<6			
Bis[2-chloroisopropyl]ether				<8				
Bromochloromethane	<1	<1		<1		<1	<1	<1
Bromodichloromethane	<1	<1		<1		<1	<1	<1
Bromoform	<1	<1		<1		<1	<1	<1
Bromomethane	<1	<1		<1		<1	<1	<1
Butyl benzyl phthalate				<8				
Cadmium, total	<.8	<.8		<.8		<.8	<.8	<.8
Carbon disulfide	<1.0	<1.0		<1.0		<1.0	<1.0	<1.0
Carbon tetrachloride	<1	<1		<1		<1	<1	<1
Chlordane				<.1				
Chlorobenzene	<1	<1		<1		<1	<1	<1
Chlorobenzilate				<8				
Chloroethane	<1	<1		<1		<1	<1	<1
Chloroform	<1	<1		<1		<1	<1	<1
Chloromethane	<1	<1		<1		<1	<1	<1
Chloroprene				<1				
Chromium, total	<8	<8		<8		<8	<8	<8
Chrysene				<8				
Cis-1,2-dichloroethene	<1	<1		<1		<1	<1	<1
Cis-1,3-dichloropropene	<1	<1		<1		<1	<1	<1
Cobalt, total	<.4	2.1	1.8	<.4		<.4	<.4	<.4
Copper, total	<4.0	<4.0		<4.0		9.2	<4.0	<4.0
Cyanide, total				<.005				
Delta-bhc				<.05				
Diallate				<8				
Dibenzo(a,h)anthracene				<8				
Dibenzofuran				<8				
Dibromochloromethane	<1	<1		<1		<1	<1	<1
Dibromomethane	<1	<1		<1		<1	<1	<1
Dichlorodifluoromethane				<1				
Dieldrin				<.05				
Diethyl phthalate				<8				
Dimethoate				<.4				
Dimethylphthalate				<8				
Di-n-butyl phthalate				<8				
Di-n-octyl phthalate				<8				
Dinoseb				<.5				
Diphenylamine				<8				
Disulfoton				<.4				
Endosulfan i				<.05				
Endosulfan ii				<.05				
Endosulfan sulfate				<.05				
Endrin				<.05				
Endrin aldehyde				<.05				
Ethyl methacrylate				<10				
Ethyl methanesulfonate				<8				
Ethylbenzene	<1	<1		<1		<1	<1	<1
Famphur				<.4				
Fluoranthene				<8				
Fluorene				<8				
Gamma-bhc (lindane)				<.05				
Heptachlor				<.05				
Heptachlor epoxide				<.05				
Hexachlorobenzene				<.05				

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

Table 9

Analytical Data Summary for MW-4

Constituents	Units	10/15/2014	1/12/2015	4/13/2015	9/22/2015	12/30/2015	4/11/2016	10/12/2016	4/13/2017
Hexachlorobutadiene	ug/L								
Hexachlorocyclopentadiene	ug/L								
Hexachloroethane	ug/L								
Hexachloropropene	ug/L								
Indeno(1,2,3-cd)pyrene	ug/L								
Isobutanol	ug/L								
Isodrin	ug/L								
Isophorone	ug/L								
Isosafrole	ug/L								
Kepone	ug/L								
Lead, total	ug/L	<4		<4	<4		<4	<4	<4
Mercury, total	ug/L								
Methacrylonitrile	ug/L								
Methapyrilene	ug/L								
Methoxychlor	ug/L								
Methyl iodide	ug/L	<1		<1	<1		<1	<1	<1
Methyl methacrylate	ug/L								
Methyl methanesulfonate	ug/L								
Methyl parathion	ug/L								
Methylene chloride	ug/L	<5		<5	<5		<5	<5	<5
Naphthalene	ug/L								
Nickel, total	ug/L	8.4		5.2	4.8		5.4	<4.0	<4.0
Nitrobenzene	ug/L								
N-nitrosodiethylamine	ug/L								
N-nitrosodimethylamine	ug/L								
N-nitrosodi-n-butylamine	ug/L								
N-nitroso-di-n-propylamine	ug/L								
N-nitrosodiphenylamine	ug/L								
N-nitrosomethylethylamine	ug/L								
N-nitrosopiperidine	ug/L								
N-nitrosopyrrolidine	ug/L								
O,o,o-triethyl phosphorothioate	ug/L								
O-toluidine	ug/L								
P-(dimethylamino)azobenzene	ug/L								
Parathion	ug/L								
Pentachlorobenzene	ug/L								
Pentachloronitrobenzene (pcnb)	ug/L								
Pentachlorophenol	ug/L								
Phenacetin	ug/L								
Phenanthrene	ug/L								
Phenol	ug/L								
Phorate	ug/L								
Pronamide	ug/L								
Propionitrile	ug/L								
Pyrene	ug/L								
Safrole	ug/L								
Selenium, total	ug/L	<4		<4	<4		<4	<4	<4
Silver, total	ug/L	<4		<4	<4		<4	<4	<4
Solids, total suspended	mg/L	14		2					
Styrene	ug/L	<1		<1	<1		<1	<1	<1
Sulfide, total	mg/L								
Tetrachloroethene	ug/L	<1		<1	<1		<1	<1	<1
Thallium, total	ug/L	<4		<4	<4		<4	<4	<4
Thionazin	ug/L								
Tin, total	ug/L								
Toluene	ug/L	<1		<1	<1		<1	<1	<1
Toxaphene	ug/L								
Trans-1,2-dichloroethene	ug/L	<1		<1	<1		<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1		<1	<1		<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5		<5	<5		<5	<5	<5
Trichloroethene	ug/L	<1		<1	<1		<1	<1	<1
Trichlorofluoromethane	ug/L	<1		<1	<1		<1	<1	<1
Vanadium, total	ug/L	<20		<20	<20		<20	<20	<20
Vinyl acetate	ug/L	<5		<5	<5		<5	<5	<5
Vinyl chloride	ug/L	<1		<1	<1		<1	<1	<1
Xylenes, total	ug/L	<2		<2	<2		<2	<2	<2
Zinc, total	ug/L	<20.0		<8.0	<8.0		<8.0	14.5	<8.0

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

Table 9

Analytical Data Summary for MW-4

Constituents	10/25/2017	4/12/2018	10/16/2018	4/18/2019	10/15/2019	4/6/2020	10/15/2020	4/12/2021	7/1/2021
Hexachlorobutadiene									
Hexachlorocyclopentadiene									
Hexachloroethane									
Hexachloropropene									
Indeno(1,2,3-cd)pyrene									
Isobutanol									
Isodrin									
Isophorone									
Isosafrole									
Kepone									
Lead, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Mercury, total									
Methacrylonitrile									
Methapyrilene									
Methoxychlor									
Methyl iodide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methyl methacrylate									
Methyl methanesulfonate									
Methyl parathion									
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene									
Nickel, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Nitrobenzene									
N-nitrosodiethylamine									
N-nitrosodimethylamine									
N-nitrosodi-n-butylamine									
N-nitroso-di-n-propylamine									
N-nitrosodiphenylamine									
N-nitrosomethylethylamine									
N-nitrosopiperidine									
N-nitrosopyrrolidine									
O,o,o-triethyl phosphorothioate									
O-toluidine									
P-(dimethylamino)azobenzene									
Parathion									
Pentachlorobenzene									
Pentachloronitrobenzene (pcnb)									
Pentachlorophenol									
Phenacetin									
Phenanthrene									
Phenol									
Phorate									
Pronamide									
Propionitrile									
Pyrene									
Safrole									
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Solids, total suspended									
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfide, total									
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
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	8.1	<20.0	<20.0	<8.0	<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 9

Analytical Data Summary for MW-4

Constituents	10/6/2021	4/14/2022	7/13/2022	10/25/2022	1/9/2023	4/19/2023	10/23/2023	4/9/2024
Hexachlorobutadiene				<8				
Hexachlorocyclopentadiene				<8				
Hexachloroethane				<8				
Hexachloropropene				<8				
Indeno(1,2,3-cd)pyrene				<8				
Isobutanol				<1000				
Isodrin				<8				
Isophorone				<8				
Isosafrole				<8				
Kepona				<8				
Lead, total	<4	<4		<4		<4	<4	<4
Mercury, total				<.5				
Methacrylonitrile				<1				
Methapyrilene				<8				
Methoxychlor				<.05				
Methyl iodide	<1	<1		<2		<1	<1	<1
Methyl methacrylate				<1				
Methyl methanesulfonate				<8				
Methyl parathion				<.4				
Methylene chloride	<5	<5		<5		<5	<5	<5
Naphthalene				<8				
Nickel, total	<4.0	<4.0		<4.0		<4.0	<4.0	<4.0
Nitrobenzene				<8				
N-nitrosodiethylamine				<8				
N-nitrosodimethylamine				<8				
N-nitrosodi-n-butylamine				<8				
N-nitroso-di-n-propylamine				<8				
N-nitrosodiphenylamine				<8				
N-nitrosomethylethylamine				<8				
N-nitrosopiperidine				<8				
N-nitrosopyrrolidine				<8				
O,o,o-triethyl phosphorothioate				<.4				
O-toluidine				<8				
P-(dimethylamino)azobenzene				<8				
Parathion				<.4				
Pentachlorobenzene				<8				
Pentachloronitrobenzene (pcnb)				<8				
Pentachlorophenol				<8				
Phenacetin				<8				
Phenanthrene				<8				
Phenol				<8				
Phorate				<.4				
Pronamide				<8				
Propionitrile				<10				
Pyrene				<8				
Safrole				<8				
Selenium, total	<4	<4		<4		<4	<4	<4
Silver, total	<4	<4		<4		<4	<4	<4
Solids, total suspended								
Styrene	<1	<1		<1		<1	<1	<1
Sulfide, total				<.1				
Tetrachloroethene	<1	<1		<1		<1	<1	<1
Thallium, total	<2	<2		<2		<2	<2	<2
Thionazin				<.4				
Tin, total				<20				
Toluene	<1	<1		<1		<1	<1	<1
Toxaphene				<.2				
Trans-1,2-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 9

Analytical Data Summary for SW-3A

Constituents	Units	10/15/2014	4/13/2015	7/21/2015
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	<1	<1	
1,2,3-trichloropropane	ug/L	<1	<1	
1,2-dibromo-3-chloropropane	ug/L	<1	<1	
1,2-dibromoethane	ug/L	<1	<1	
1,2-dichlorobenzene	ug/L	<1	<1	
1,2-dichloroethane	ug/L	<1	<1	
1,2-dichloropropane	ug/L	<1	<1	
1,4-dichlorobenzene	ug/L	<1	<1	
2-butanone (mek)	ug/L	<5	<5	
2-hexanone (mbk)	ug/L	<5	<5	
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	
Acetone	ug/L	<10	<10	
Acrylonitrile	ug/L	<5	<5	
Antimony, total	ug/L	<2	<2	
Arsenic, total	ug/L	<4	<4	
Barium, total	ug/L	171	131	
Benzene	ug/L	<1	<1	
Beryllium, total	ug/L	<4	<4	
Bis(2-ethylhexyl) phthalate	ug/L	<10	<10	
Bromochloromethane	ug/L	<1	<1	
Bromodichloromethane	ug/L	<1	<1	
Bromoform	ug/L	<1	<1	
Bromomethane	ug/L	<1	<1	
Cadmium, total	ug/L	<.8	<.8	
Carbon disulfide	ug/L	<1	<1	
Carbon tetrachloride	ug/L	<1	<1	
Chlorobenzene	ug/L	<1	<1	
Chloroethane	ug/L	<1	<1	
Chloroform	ug/L	<1	<1	
Chloromethane	ug/L	<1	<1	
Chromium, total	ug/L	<8	<8	
Cis-1,2-dichloroethene	ug/L	<1	<1	
Cis-1,3-dichloropropene	ug/L	<1	<1	
Cobalt, total	ug/L	<.8	<.8	
Copper, total	ug/L	<4	<4	
Dibromochloromethane	ug/L	<1	<1	
Dibromomethane	ug/L	<1	<1	
Ethylbenzene	ug/L	<1	<1	
Lead, total	ug/L	<4.0	4.6	<4.0
Methyl iodide	ug/L	<1	<1	
Methylene chloride	ug/L	<5	<5	
Nickel, total	ug/L	<4	<4	
Selenium, total	ug/L	<4	<4	
Silver, total	ug/L	<4	<4	
Solids, total suspended	mg/L	<2	<2	
Styrene	ug/L	<1	<1	
Tetrachloroethene	ug/L	<1	<1	
Thallium, total	ug/L	<4	<4	
Toluene	ug/L	<1	<1	
Trans-1,2-dichloroethene	ug/L	<1	<1	
Trans-1,3-dichloropropene	ug/L	<1	<1	
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	
Trichloroethene	ug/L	<1	<1	
Trichlorofluoromethane	ug/L	<1	<1	
Vanadium, total	ug/L	<20	<20	
Vinyl acetate	ug/L	<5	<5	
Vinyl chloride	ug/L	<1	<1	
Xylenes, total	ug/L	<2	<2	
Zinc, total	ug/L	<20	<8	

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

Table 9

Analytical Data Summary for SW-4

Constituents	Units	4/13/2015
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	<1
1,2-dibromoethane	ug/L	<1
1,2-dichlorobenzene	ug/L	<1
1,2-dichloroethane	ug/L	<1
1,2-dichloropropane	ug/L	<1
1,4-dichlorobenzene	ug/L	<1
2-butanone (mek)	ug/L	<5
2-hexanone (mbk)	ug/L	<5
4-methyl-2-pentanone (mibk)	ug/L	<5
Acetone	ug/L	<10
Acrylonitrile	ug/L	<5
Antimony, total	ug/L	<2
Arsenic, total	ug/L	<4
Barium, total	ug/L	144
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	<8
Copper, total	ug/L	<4
Dibromochloromethane	ug/L	<1
Dibromomethane	ug/L	<1
Ethylbenzene	ug/L	<1
Lead, total	ug/L	<4
Methyl iodide	ug/L	<1
Methylene chloride	ug/L	<5
Nickel, total	ug/L	<4
Selenium, total	ug/L	<4
Silver, total	ug/L	<4
Solids, total suspended	mg/L	31
Styrene	ug/L	<1
Tetrachloroethene	ug/L	<1
Thallium, total	ug/L	<4
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	14.9

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

Table 10 – Historic SSI and SSL

Table 10

Historic SSI & SSL
Annual Water Quality Report
Bremer County Sanitary Landfill
Permit No. 09-SDP-01-75C

KEY: SSI SSL LCL>GWPS SSL UCL>GWPS

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	95% LCL (ug/L)	95% UCL (ug/L)	GWPS Limit (ug/L)
MW-108A		4/11/2016	18.6	16.459	23.791	10
MW-108A		10/12/2016	27.9	15.098	26.602	10
MW-108A		4/13/2017	17.1	15.269	26.581	10
MW-108A		10/25/2017	7.9	8.244	27.506	10
MW-108A		4/12/2018	10.7	5.456	26.344	10
MW-108A		10/16/2018	17.5	7.700	18.900	10
MW-108A		4/18/2019	16.5	7.729	18.571	10
MW-108A		10/15/2019	11.6	10.050	18.100	10
MW-108A		4/6/2020	6.4	7.001	18.999	10
MW-108A		10/15/2020	21.5	0.505	20.245	10
MW-108A		4/12/2021	<4.0	0.000	18.911	10
MW-108A		10/6/2021	4.1	6.376	21.624	10
MW-108A		4/14/2022	9.0	0.000	19.431	10
MW-108A		10/25/2022	12.4	1.337	12.413	10
MW-108A		4/19/2023	<4.0	1.337	12.413	10
MW-108A		10/23/2023	14.1	3.077	15.673	10
MW-108A		4/9/2024	9.4	3.183	15.767	10
MW-108A		4/11/2016	<0.8	0.400	0.400	5
MW-108A		10/12/2016	<0.8	0.400	0.400	5
MW-108A		4/13/2017	<0.8	0.400	0.400	5
MW-108A		10/25/2017	<0.8	0.400	0.400	5
MW-108A		4/12/2018	<0.8	0.400	0.400	5
MW-108A		10/16/2018	<0.8	0.400	0.400	5
MW-108A		4/18/2019	<0.8	0.400	0.400	5
MW-108A		10/15/2019	<0.8	0.400	0.400	5
MW-108A		4/6/2020	<0.8	0.400	0.400	5
MW-108A		10/15/2020	<0.8	0.400	0.400	5
MW-108A		4/12/2021	<0.8	0.400	0.400	5
MW-108A		10/6/2021	2.0	0.000	1.741	5
MW-108A		4/14/2022	3.4	0.000	3.251	5
MW-108A		10/25/2022	<0.8	0.000	3.251	5
MW-108A		4/19/2023	<0.8	0.000	3.251	5
MW-108A		10/23/2023	1.5	0.000	3.090	5
MW-108A		4/9/2024	<0.8	0.028	1.322	5
MW-108A		4/11/2016	5.2	0.468	15.482	2.8
MW-108A		10/12/2016	2.9	0.000	15.501	2.8
MW-108A		4/13/2017	<0.8	0.726	6.174	2.8
MW-108A		10/25/2017	149	0.000	125.373	2.8
MW-108A		4/12/2018	1.1	0.000	124.987	2.1
MW-108A		10/16/2018	<0.8	0.000	124.987	2.1
MW-108A		4/18/2019	<0.8	0.163	0.987	2.1
MW-108A		10/15/2019	<0.8	0.400	0.400	2.1
MW-108A		4/6/2020	<0.8	0.163	0.987	2.1
MW-108A		10/15/2020	<0.4	0.400	0.400	2.1
MW-108A		4/12/2021	9.1	0.000	7.692	2.1
MW-108A		10/6/2021	173.0	0.000	145.650	2.1
MW-108A		4/14/2022	56.6	0.000	153.198	2.1
MW-108A		10/25/2022	1.9	0.000	153.136	2.1
MW-108A		4/19/2023	8.4	0.000	153.139	2.1
MW-108A		10/23/2023	586.0	0.000	496.002	2.1
MW-108A		4/9/2024	27.6	0.000	493.440	2.1
MW-108A		4/11/2016	<4.0	2.597	11.303	100
MW-108A		10/12/2016	5.2	2.144	11.106	100
MW-108A		4/13/2017	<4.0	0.717	8.233	100
MW-108A		10/25/2017	39.7	0.000	33.844	100
MW-108A		4/12/2018	<4.0	0.000	33.598	100
MW-108A		10/16/2018	<4.0	0.000	33.598	100
MW-108A		4/18/2019	<4.0	2.000	2.000	100
MW-108A		10/15/2019	<4.0	2.000	2.000	100
MW-108A		4/6/2020	<4.0	2.000	2.000	100
MW-108A		10/15/2020	<4.0	2.000	2.000	100
MW-108A		4/12/2021	7.6	0.106	6.694	100
MW-108A		10/6/2021	46.9	0.000	40.125	100
MW-108A		4/14/2022	77.7	0.000	75.394	100
MW-108A		10/25/2022	<4.0	0.000	75.394	100
MW-108A		4/19/2023	34.6	3.466	77.134	100
MW-108A		10/23/2023	292.0	0.000	255.293	100
MW-108A		4/9/2024	55.6	0.000	251.887	100
MW-108A		4/11/2016	<8	4.000	4.000	2000
MW-108A		10/12/2016	<8	4.000	4.000	2000
MW-108A		4/13/2017	<8	4.000	4.000	2000
MW-108A		10/25/2017	9.0	2.309	8.191	2000
MW-108A		4/12/2018	<20	2.309	8.191	2000
MW-108A		10/16/2018	<20	2.309	8.191	2000
MW-108A		4/18/2019	<8	2.309	8.191	2000
MW-108A		10/15/2019	<20	4.000	4.000	2000
MW-108A		4/6/2020	<20	4.000	4.000	2000
MW-108A		10/15/2020	<20	4.000	4.000	2000
MW-108A		4/12/2021	<20	4.000	4.000	2000
MW-108A		10/6/2021	61.4	0.000	52.271	2000
MW-108A		4/14/2022	35.7	0.000	58.823	2000
MW-108A		10/25/2022	<20	0.000	58.823	2000
MW-108A		4/19/2023	<20	0.000	58.823	2000
MW-108A		10/23/2023	28.1	0.000	37.080	2000
MW-108A		4/9/2024	21.1	1.071	28.529	2000
MW-108A		4/11/2016	<1.0	0.309	1.591	5
MW-108A		10/12/2016	<1.0	0.309	1.591	5
MW-108A		4/13/2017	<1.0	0.128	1.422	5
MW-108A		10/25/2017	1.0	0.331	0.919	5
MW-108A		4/12/2018	<1.0	0.381	1.219	5
MW-108A		10/16/2018	<1.0	0.381	1.219	5
MW-108A		4/18/2019	<1.0	0.263	1.087	5
MW-108A		10/15/2019	<1.0	0.500	0.500	5
MW-108A		4/6/2020	<1.0	0.500	0.500	5
MW-108A		10/15/2020	<1.0	0.500	0.500	5
MW-108A		4/12/2021	<1.0	0.500	0.500	5
MW-108A		10/6/2021	<1.0	0.500	0.500	5
MW-108A		4/14/2022	<1.0	0.500	0.500	5
MW-108A		10/25/2022	<1.0	0.500	0.500	5
MW-108A		4/19/2023	<1.0	0.500	0.500	5
MW-108A		10/23/2023	<1.0	0.500	0.500	5
MW-108A		4/9/2024	<1.0	0.500	0.500	5

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

Table 10
Historic SSI & SSL
Annual Water Quality Report
Bremer County Sanitary Landfill
Permit No. 09-SDP-01-75C

KEY:	SSI	SSL LCL>GWPS	SSL UCL>GWPS
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Note: The absence of shading indicates that the condition does not exist.

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	95% LCL (ug/L)	95% UCL (ug/L)	GWPS Limit (ug/L)
MW-110A	Arsenic	4/11/2016	24.4	25.105	36.695	10
MW-110A	Arsenic	10/12/2016	44.8	23.078	43.372	10
MW-110A	Arsenic	4/13/2017	33.3	24.25	43.9	10
MW-110A	Arsenic	10/25/2017	37.6	24.997	45.053	10
MW-110A	Arsenic	4/12/2018	36.3	32.262	43.738	10
MW-110A	Arsenic	10/16/2018	50.2	30.582	48.118	10
MW-110A	Arsenic	4/18/2019	21.8	22.807	50.143	10
MW-110A	Arsenic	10/15/2019	54.2	23.323	57.927	10
MW-110A	Arsenic	4/6/2020	44.7	25.688	59.762	10
MW-110A	Arsenic	10/15/2020	53.1	25.754	61.146	10
MW-110A	Arsenic	4/12/2021	43.8	42.53	55.37	10
MW-110A	Arsenic	10/6/2021	42.2	40.213	51.687	10
MW-110A	Arsenic	4/14/2022	19.5	22.868	56.432	10
MW-110A	Arsenic	10/25/2022	67.1	20.278	66.022	10
MW-110A	Arsenic	4/19/2023	18.7	9.930	63.820	10
MW-110A	Arsenic	10/23/2023	57.6	10.988	70.452	10
MW-110A	Arsenic	4/9/2024	7.0	3.213	71.987	10
MW-110A	Barium	4/11/2016	639	472.843	1651.157	2,000.00
MW-110A	Barium	10/12/2016	748	625.088	982.912	2,000.00
MW-110A	Barium	4/13/2017	890	648.8	904.2	2,000.00
MW-110A	Barium	10/25/2017	784	643.478	887.022	2,000.00
MW-110A	Barium	4/12/2018	733	705.455	872.045	2,000.00
MW-110A	Barium	10/16/2018	650	646.166	882.334	2,000.00
MW-110A	Barium	4/18/2019	551	559.609	799.391	2,000.00
MW-110A	Barium	10/15/2019	803	556.460	812.040	2,000.00
MW-110A	Barium	4/6/2020	816	555.181	854.819	2,000.00
MW-110A	Barium	10/15/2020	701	573.674	861.826	2,000.00
MW-110A	Barium	4/12/2021	713	688.123	828.377	2,000.00
MW-110A	Barium	10/6/2021	714	672.881	799.119	2,000.00
MW-110A	Barium	4/14/2022	520	550.428	773.572	2,000.00
MW-110A	Barium	10/25/2022	675	547.117	763.883	2,000.00
MW-110A	Barium	4/19/2023	537	496.928	726.072	2,000.00
MW-110A	Barium	10/23/2023	842	467.726	819.274	2,000.00
MW-110A	Barium	4/9/2024	199	242.145	884.355	2,000.00
MW-110A	Cobalt	4/11/2016	13.3	1.339	13.811	2.8
MW-110A	Cobalt	10/12/2016	12.5	2.863	15.837	2.8
MW-110A	Cobalt	4/13/2017	10.8	2.948	16.002	2.8
MW-110A	Cobalt	10/25/2017	7.7	8.158	13.992	2.8
MW-110A	Cobalt	4/12/2018	18.5	7.033	17.717	2.1
MW-110A	Cobalt	10/16/2018	19.8	7.286	21.114	2.1
MW-110A	Cobalt	4/18/2019	23.7	9.368	25.482	2.1
MW-110A	Cobalt	10/15/2019	4.3	6.604	26.546	2.1
MW-110A	Cobalt	4/6/2020	39.3	4.863	38.687	2.1
MW-110A	Cobalt	10/15/2020	4.8	0.000	37.803	2.1
MW-110A	Cobalt	4/12/2021	11.2	0.000	34.388	2.1
MW-110A	Cobalt	10/6/2021	12.3	0.000	34.891	2.1
MW-110A	Cobalt	4/14/2022	191.0	0.000	161.683	2.1
MW-110A	Cobalt	10/25/2022	6.5	0.000	161.745	2.1
MW-110A	Cobalt	4/19/2023	91.4	0.000	176.825	2.1
MW-110A	Cobalt	10/23/2023	18.0	0.000	176.662	2.1
MW-110A	Cobalt	4/9/2024	1460.0	0.000	1231.113	2.1
MW-110A	Nickel	4/11/2016	<4	2.000	2.000	100.00
MW-110A	Nickel	10/12/2016	<4	2.000	2.000	100.00
MW-110A	Nickel	4/13/2017	<4	2.000	2.000	100.00
MW-110A	Nickel	10/25/2017	<4	2.000	2.000	100.00
MW-110A	Nickel	4/12/2018	<4	2.000	2.000	100.00
MW-110A	Nickel	10/16/2018	<4	2.000	2.000	100.00
MW-110A	Nickel	4/18/2019	<4	2.000	2.000	100.00
MW-110A	Nickel	10/15/2019	<4	2.000	2.000	100.00
MW-110A	Nickel	4/6/2020	<4	2.000	2.000	100.00
MW-110A	Nickel	10/15/2020	<4	2.000	2.000	100.00
MW-110A	Nickel	4/12/2021	<4	2.000	2.000	100.00
MW-110A	Nickel	10/6/2021	<4	2.000	2.000	100.00
MW-110A	Nickel	4/14/2022	55.9	0.000	47.176	100.00
MW-110A	Nickel	10/25/2022	<4	0.000	47.176	100.00
MW-110A	Nickel	4/19/2023	21.2	0.000	50.172	100.00
MW-110A	Nickel	10/23/2023	9.0	0.000	50.181	100.00
MW-110A	Nickel	4/9/2024	456.0	0.000	384.097	100.00
MW-110A	Zinc	4/11/2016	<8	---	---	100.00
MW-110A	Zinc	10/12/2016	11.2	---	---	100.00
MW-110A	Zinc	4/13/2017	<8	---	---	100.00
MW-110A	Zinc	10/25/2017	<8	10.000	10.000	100.00
MW-110A	Zinc	4/12/2018	<20	10.000	10.000	100.00
MW-110A	Zinc	10/16/2018	<20	10.000	10.000	100.00
MW-110A	Zinc	4/18/2019	<8	10.000	10.000	100.00
MW-110A	Zinc	10/15/2019	<20	10.000	10.000	100.00
MW-110A	Zinc	4/6/2020	<20	10.000	10.000	100.00
MW-110A	Zinc	10/15/2020	<20	10.000	10.000	100.00
MW-110A	Zinc	4/12/2021	<20	10.000	10.000	100.00
MW-110A	Zinc	10/6/2021	<20	10.000	10.000	100.00
MW-110A	Zinc	4/14/2022	<20	10.000	10.000	100.00
MW-110A	Zinc	10/25/2022	<20	10.000	10.000	100.00
MW-110A	Zinc	4/19/2023	<20	10.000	10.000	100.00
MW-110A	Zinc	10/23/2023	31.5	2.730	28.020	100.00
MW-110A	Zinc	4/9/2024	21.4	6.046	30.404	100.00

Table 11 – Corrective Action Trend Analysis

Table 11
Corrective Action Trend Analysis
Annual Water Quality Report
Bremer County Sanitary Landfill
Permit No. 09-SDP-01-75C

Monitoring Well	Compound	Sample Date	Current Condition	Trend	N	Projected Year to Completion (IAC 113.10(9)"e")
MW-108A		4/11/2016	SSL	Static	5	2038
MW-108A		10/12/2016	Arsenic	Static	6	2038
MW-108A		4/13/2017	Arsenic	Static	7	2038
MW-108A		10/25/2017	Arsenic	Static	8	2038
MW-108A		4/12/2018	Arsenic	Static	9	2038
MW-108A		10/16/2018	Arsenic	Static	10	2038
MW-108A		4/18/2019	Arsenic	Static	11	2038
MW-108A		10/15/2019	Arsenic	Static	12	2038
MW-108A		4/6/2020	Arsenic	Static	13	2038
MW-108A		10/15/2020	Arsenic	Static	14	2038
MW-108A		4/12/2021	Arsenic	Static	15	2038
MW-108A		10/6/2021	Arsenic	Static	16	2038
MW-108A		4/14/2022	Arsenic	Static	17	2038
MW-108A		10/25/2022	Arsenic	Static	18	2038
MW-108A		4/19/2023	Arsenic	Static	19	2038
MW-108A		10/23/2023	Arsenic	Static	20	2038
MW-108A		4/9/2024	Arsenic	Static	21	2038
MW-108A		4/11/2016	Cadmium	No-SSI	NA	NA
MW-108A		10/12/2016	Cadmium	No-SSI	NA	NA
MW-108A		4/13/2017	Cadmium	No-SSI	NA	NA
MW-108A		10/25/2017	Cadmium	No-SSI	NA	NA
MW-108A		4/12/2018	Cadmium	No-SSI	NA	NA
MW-108A		10/16/2018	Cadmium	No-SSI	NA	NA
MW-108A		4/18/2019	Cadmium	No-SSI	NA	NA
MW-108A		10/15/2019	Cadmium	No-SSI	NA	NA
MW-108A		4/6/2020	Cadmium	No-SSI	NA	NA
MW-108A		10/15/2020	Cadmium	No-SSI	NA	NA
MW-108A		4/12/2021	Cadmium	SSI	NA	NA
MW-108A		10/6/2021	Cadmium	SSI	NA	NA
MW-108A		4/14/2022	Cadmium	SSI	NA	NA
MW-108A		10/25/2022	Cadmium	No-SSI	NA	NA
MW-108A		4/19/2023	Cadmium	No-SSI	NA	NA
MW-108A		10/23/2023	Cadmium	SSI	NA	NA
MW-108A		4/9/2024	Cadmium	No-SSI	NA	NA
MW-108A		4/11/2016	Cobalt	SSI	N/A	N/A
MW-108A		10/12/2016	Cobalt	SSI	N/A	N/A
MW-108A		4/13/2017	Cobalt	No-SSI	N/A	N/A
MW-108A		10/25/2017	Cobalt	SSI	N/A	N/A
MW-108A		4/12/2018	Cobalt	SSI	N/A	N/A
MW-108A		10/16/2018	Cobalt	No-SSI	N/A	N/A
MW-108A		4/18/2019	Cobalt	No-SSI	N/A	N/A
MW-108A		10/15/2019	Cobalt	No-SSI	N/A	N/A
MW-108A		4/6/2020	Cobalt	No-SSI	N/A	N/A
MW-108A		10/15/2020	Cobalt	No-SSI	N/A	N/A
MW-108A		4/12/2021	Cobalt	SSI	N/A	N/A
MW-108A		10/6/2021	Cobalt	SSI	N/A	N/A
MW-108A		4/14/2022	Cobalt	SSI	N/A	N/A
MW-108A		10/25/2022	Cobalt	SSI	N/A	N/A
MW-108A		4/19/2023	Cobalt	SSI	N/A	N/A
MW-108A		10/23/2023	Cobalt	SSI	N/A	N/A
MW-108A		4/9/2024	Cobalt	SSI	N/A	N/A
MW-108A		4/11/2016	Nickel	No-SSI	N/A	N/A
MW-108A		10/12/2016	Nickel	SSI	N/A	N/A
MW-108A		4/13/2017	Nickel	No-SSI	N/A	N/A
MW-108A		10/25/2017	Nickel	SSI	N/A	N/A
MW-108A		4/12/2018	Nickel	No-SSI	N/A	N/A
MW-108A		10/16/2018	Nickel	No-SSI	N/A	N/A
MW-108A		4/18/2019	Nickel	No-SSI	N/A	N/A
MW-108A		10/15/2019	Nickel	No-SSI	N/A	N/A
MW-108A		4/6/2020	Nickel	No-SSI	N/A	N/A
MW-108A		10/15/2020	Nickel	No-SSI	N/A	N/A
MW-108A		4/12/2021	Nickel	SSI	N/A	N/A
MW-108A		10/6/2021	Nickel	SSI	N/A	N/A
MW-108A		4/14/2022	Nickel	SSI	N/A	N/A
MW-108A		10/25/2022	Nickel	No-SSI	N/A	N/A
MW-108A		4/19/2023	Nickel	SSI	N/A	N/A
MW-108A		10/23/2023	Nickel	SSI	N/A	N/A
MW-108A		4/9/2024	Nickel	SSI	N/A	N/A
MW-108A		4/11/2016	Zinc	No-SSI	N/A	N/A
MW-108A		10/12/2016	Zinc	No-SSI	N/A	N/A
MW-108A		4/13/2017	Zinc	No-SSI	N/A	N/A
MW-108A		10/25/2017	Zinc	No-SSI	N/A	N/A
MW-108A		4/12/2018	Zinc	No-SSI	N/A	N/A
MW-108A		10/16/2018	Zinc	No-SSI	N/A	N/A
MW-108A		4/18/2019	Zinc	No-SSI	N/A	N/A
MW-108A		10/15/2019	Zinc	No-SSI	N/A	N/A
MW-108A		4/6/2020	Zinc	No-SSI	N/A	N/A
MW-108A		10/15/2020	Zinc	No-SSI	N/A	N/A
MW-108A		4/12/2021	Zinc	SSI	N/A	N/A
MW-108A		10/6/2021	Zinc	SSI	N/A	N/A
MW-108A		4/14/2022	Zinc	No-SSI	N/A	N/A
MW-108A		10/25/2022	Zinc	No-SSI	N/A	N/A
MW-108A		4/19/2023	Zinc	No-SSI	N/A	N/A
MW-108A		10/23/2023	Zinc	SSI	N/A	N/A
MW-108A		4/9/2024	Zinc	SSI	N/A	N/A
MW-108A		4/11/2016	Benzene	No-SSI	N/A	N/A
MW-108A		10/12/2016	Benzene	No-SSI	N/A	N/A
MW-108A		4/13/2017	Benzene	No-SSI	N/A	N/A
MW-108A		10/25/2017	Benzene	No-SSI	N/A	N/A
MW-108A		4/12/2018	Benzene	No-SSI	N/A	N/A
MW-108A		10/16/2018	Benzene	No-SSI	N/A	N/A
MW-108A		4/18/2019	Benzene	No-SSI	N/A	N/A
MW-108A		10/15/2019	Benzene	No-SSI	N/A	N/A
MW-108A		4/6/2020	Benzene	No-SSI	N/A	N/A
MW-108A		10/15/2020	Benzene	No-SSI	N/A	N/A
MW-108A		4/12/2021	Benzene	No-SSI	N/A	N/A
MW-108A		10/6/2021	Benzene	No-SSI	N/A	N/A
MW-108A		4/14/2022	Benzene	No-SSI	N/A	N/A
MW-108A		10/25/2022	Benzene	No-SSI	N/A	N/A
MW-108A		4/19/2023	Benzene	No-SSI	N/A	N/A
MW-108A		10/23/2023	Benzene	No-SSI	N/A	N/A
MW-108A		4/9/2024	Benzene	No-SSI	N/A	N/A

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

Table 11
Corrective Action Trend Analysis
Annual Water Quality Report
Bremer County Sanitary Landfill
Permit No. 09-SDP-01-75C

Monitoring Well	Compound	Sample Date	Current Condition	Trend	N	Projected Year to Completion (IAC 113.10(9)"e"	
MW-110A		4/11/2016	Arsenic	SSL	Static	5	2038
MW-110A		10/12/2016	Arsenic	SSL	Static	6	2038
MW-110A		4/13/2017	Arsenic	SSL	Static	7	2038
MW-110A		10/25/2017	Arsenic	SSL	Static	8	2038
MW-110A		4/12/2018	Arsenic	SSL	Static	9	2038
MW-110A		10/16/2018	Arsenic	SSL	Static	10	2038
MW-110A		4/18/2019	Arsenic	SSL	Static	11	2038
MW-110A		10/15/2019	Arsenic	SSL	Static	12	2038
MW-110A		4/6/2020	Arsenic	SSL	Static	13	2038
MW-110A		10/15/2020	Arsenic	SSL	Static	14	2038
MW-110A		4/12/2021	Arsenic	SSL	Static	15	2038
MW-110A		10/6/2021	Arsenic	SSL	Static	16	2038
MW-110A		4/14/2022	Arsenic	SSL	Static	17	2038
MW-110A		10/25/2022	Arsenic	SSL	Static	18	2038
MW-110A		4/19/2023	Arsenic	SSL	Static	19	2038
MW-110A		10/23/2023	Arsenic	SSL	Static	20	2038
MW-110A		4/9/2024	Arsenic	SSL	Static	21	2038
MW-110A		4/11/2016	Barium	SSI	N/A	N/A	N/A
MW-110A		10/12/2016	Barium	SSI	N/A	N/A	N/A
MW-110A		4/13/2017	Barium	SSI	N/A	N/A	N/A
MW-110A		10/25/2017	Barium	SSI	N/A	N/A	N/A
MW-110A		4/12/2018	Barium	SSI	N/A	N/A	N/A
MW-110A		10/16/2018	Barium	SSI	N/A	N/A	N/A
MW-110A		4/18/2019	Barium	No-SSI	N/A	N/A	N/A
MW-110A		10/15/2019	Barium	SSI	N/A	N/A	N/A
MW-110A		4/6/2020	Barium	SSI	N/A	N/A	N/A
MW-110A		10/15/2020	Barium	SSI	N/A	N/A	N/A
MW-110A		4/12/2021	Barium	SSI	N/A	N/A	N/A
MW-110A		10/6/2021	Barium	SSI	N/A	N/A	N/A
MW-110A		4/14/2022	Barium	SSI	N/A	N/A	N/A
MW-110A		10/25/2022	Barium	SSI	N/A	N/A	N/A
MW-110A		4/19/2023	Barium	No-SSI	N/A	N/A	N/A
MW-110A		10/23/2023	Barium	SSI	N/A	N/A	N/A
MW-110A		4/9/2024	Barium	SSI	N/A	N/A	N/A
MW-110A		4/11/2016	Cobalt	SSI	Static	5	2038
MW-110A		10/12/2016	Cobalt	SSL	Static	6	2038
MW-110A		4/13/2017	Cobalt	SSL	Static	7	2038
MW-110A		10/25/2017	Cobalt	SSL	Static	8	2038
MW-110A		4/12/2018	Cobalt	SSL	Static	9	2038
MW-110A		10/16/2018	Cobalt	SSL	Static	10	2038
MW-110A		4/18/2019	Cobalt	SSL	Static	11	2038
MW-110A		10/15/2019	Cobalt	SSL	Static	12	2038
MW-110A		4/6/2020	Cobalt	SSL	Static	13	2038
MW-110A		10/15/2020	Cobalt	SSL	Static	14	2038
MW-110A		4/12/2021	Cobalt	SSL	Static	15	2038
MW-110A		10/6/2021	Cobalt	SSL	Static	16	2038
MW-110A		4/14/2022	Cobalt	SSL	Static	17	2038
MW-110A		10/25/2022	Cobalt	SSL	Static	18	2038
MW-110A		4/19/2023	Cobalt	SSL	Static	19	2038
MW-110A		10/23/2023	Cobalt	SSL	Static	20	2038
MW-110A		4/9/2024	Cobalt	SSL	Static	21	2038
MW-110A		4/11/2016	Nickel	No-SSI	N/A	N/A	N/A
MW-110A		10/12/2016	Nickel	No-SSI	N/A	N/A	N/A
MW-110A		4/13/2017	Nickel	No-SSI	N/A	N/A	N/A
MW-110A		10/25/2017	Nickel	No-SSI	N/A	N/A	N/A
MW-110A		4/12/2018	Nickel	No-SSI	N/A	N/A	N/A
MW-110A		10/16/2018	Nickel	No-SSI	N/A	N/A	N/A
MW-110A		4/18/2019	Nickel	No-SSI	N/A	N/A	N/A
MW-110A		10/15/2019	Nickel	No-SSI	N/A	N/A	N/A
MW-110A		4/6/2020	Nickel	No-SSI	N/A	N/A	N/A
MW-110A		10/15/2020	Nickel	No-SSI	N/A	N/A	N/A
MW-110A		4/12/2021	Nickel	No-SSI	N/A	N/A	N/A
MW-110A		10/6/2021	Nickel	No-SSI	N/A	N/A	N/A
MW-110A		4/14/2022	Nickel	SSI	N/A	N/A	N/A
MW-110A		10/25/2022	Nickel	No-SSI	N/A	N/A	N/A
MW-110A		4/19/2023	Nickel	SSI	N/A	N/A	N/A
MW-110A		10/23/2023	Nickel	SSI	N/A	N/A	N/A
MW-110A		4/9/2024	Nickel	SSI	N/A	N/A	N/A
MW-110A		4/11/2016	Zinc	No-SSI	N/A	N/A	N/A
MW-110A		10/12/2016	Zinc	No-SSI	N/A	N/A	N/A
MW-110A		4/13/2017	Zinc	No-SSI	N/A	N/A	N/A
MW-110A		10/25/2017	Zinc	No-SSI	N/A	N/A	N/A
MW-110A		4/12/2018	Zinc	No-SSI	N/A	N/A	N/A
MW-110A		10/16/2018	Zinc	No-SSI	N/A	N/A	N/A
MW-110A		4/18/2019	Zinc	No-SSI	N/A	N/A	N/A
MW-110A		10/15/2019	Zinc	No-SSI	N/A	N/A	N/A
MW-110A		4/6/2020	Zinc	No-SSI	N/A	N/A	N/A
MW-110A		10/15/2020	Zinc	No-SSI	N/A	N/A	N/A
MW-110A		4/12/2021	Zinc	No-SSI	N/A	N/A	N/A
MW-110A		10/6/2021	Zinc	No-SSI	N/A	N/A	N/A
MW-110A		4/14/2022	Zinc	No-SSI	N/A	N/A	N/A
MW-110A		10/25/2022	Zinc	No-SSI	N/A	N/A	N/A
MW-110A		4/19/2023	Zinc	No-SSI	N/A	N/A	N/A
MW-110A		10/23/2023	Zinc	SSI	N/A	N/A	N/A
MW-110A		4/9/2024	Zinc	SSI	N/A	N/A	N/A

Table 12 – *Leachate Summary – Not Used*

Table 12
Leachate Management Summary
Leachate Control System Performance Evaluation Report
Bremer County Sanitary Landfill
Permit No. 09-SDP-01-75C

Not Applicable - No Leachate Collection System Exists

Table 13 – Gas Monitoring Summary

Table 13
Annual Methane Gas Evaluation Report
Bremer County Sanitary Landfill
2024

Permit Compliance

Location/Date	Depth of Probe (ft) from Top PVC	Depth to Top Screen (ft) from Top PVC	Depth to Top Screen from ground surface (ft)	4/9/24 % LEL	4/9/24 Depth to Water (ft) from Top PVC	4/9/24 Exposed* Screen (ft)
SCALEHOUSE	---	---	---	0	---	---
SCALE PIT	---	---	---	0	---	---
CUSTOMER CONVENIENCE BLDGS	---	---	---	0	---	---
MAINTENANCE BLDG	---	---	---	0	---	---
GP-1	11.65	6.65	2.00	0	7.1	-0.45
GP-2	7.50	5.00	1.50	0	7.5	-2.5
GP-3	7.50	5.00	1.50	0	6.25	-1.25
GP-4	3.80	3.63	1.00	0	3.8	-0.2
GP-5	10.05	5.00	2.00	0	9.42	-4.4

**negative values indicate exposed screen length*

Primary Landfill Vents

Location/Date	4/9/24 % LEL
GV-1	0.0
GV-2	O.L.
GV-3	0.0
GV-4	O.L.
GV-5	O.L.
GV-6	O.L.
GV-7	O.L.
GV-8	O.L.
GV-9	O.L.
GV-10	7.0
GV-11	O.L.
GV-12	O.L.
GV-13	O.L.
GV-14	O.L.
GV-15	O.L.
GV-16	O.L.

O.L. = Over the Limit, >100%LEL, or >5% methane

Appendix A

Field Sampling Forms

**Bremer County Sanitary Landfill
PERMIT # 9-SDP-1-75P**

4/9/2024

Sampled by: Todd Whipple

Weather conditions: Sunny, breezy, 60 degrees

IDNR Form 542-1322

Monitoring Well: MW 1 (ug)

Primary Sampling Method:
Secondary Sampling Method:

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

GENERAL INFORMATION

TOC	1013.3
Well Depth	20.10
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1013.3
Well Depth	19.90
Top Screen	1002.20
Bottom Screen	993.20
Bottom Well	993.20
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	14.00
Top sample	999.30
Bottom sample	995.30
Turbidity(NTU)	2.23

Date	Time	Water Level	Water Elevation	Notes
4/9/2024	9:59	4.06	1009.24	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte	Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10	2.23
Appendix I	Metals	150	150	2.23
Appendix I	VOC	240	240	2.23
Full Appendix II	10 more containers	5620		
TSS	TSS	1000		
Supplemental	BEHP	1 - qt		
Supplemental				
Total			400	

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

TOC	1013.30	4" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	20.10	Before purging	4/9/2024	9:59	4.06	1009.24	5	0.5	No
		After purging	4/9/2024	10:08	10.08	1003.22			
		Top of Screen after construction				1002.20			
						7.04			feet above (+) or below (-) top screen
		Bottom of Well after construction				993.20			
		Bottom of Well	4/9/2024		19.90	993.40			
						0.20			feet sedimentation
		Before Sampling				1013.30			
		Recovery				1013.30			
		Recovery				1013.30			
		Recovery				1013.30			
		Recovery	4/9/2024	12:39	9.25	1004.05			

Monitoring Well: MW 2A (ug)

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

GENERAL INFORMATION

TOC	1012.74
Well Depth	18.55
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1012.74
Well Depth	18.55
Top Screen	1004.19
Bottom Screen	994.10
Bottom Well	994.10
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	13.00
Top sample	999.74
Bottom sample	995.74
Turbidity(NTU)	1.75

Date	Time	Water Level	Water Elevation	Notes
4/9/2024	10:18	9.03	1003.71	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte	Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10	1.75
Appendix I	Metals	150	150	1.75
Appendix I	VOC	240	240	1.75
Full Appendix II	10 more containers	5620		
TSS	TSS	1000		
Supplemental	BEHP	1 - qt		
Supplemental				
Total			400	

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

TOC	1012.74	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	18.55								
			4/9/2024	10:18	9.03	1003.71	3	1.9	No
			4/9/2024	10:29	13.90	998.84			
						1004.19			
						-0.48			feet above (+) or below (-) top screen
						994.10			
			4/9/2024		18.55	994.19			
						0.09			feet sedimentation
						1012.74			
						1012.74			
						1012.74			
						1012.74			
			4/9/2024	12:42	11.63	1001.11			

Monitoring Well: MW 3 (dg)

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

GENERAL INFORMATION

TOC	991.35
Well Depth	18.65
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	991.35
Well Depth	17.55
Top Screen	980.70
Bottom Screen	972.70
Bottom Well	972.70
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	12.00
Top sample	979.35
Bottom sample	975.35
Turbidity(NTU)	3.21

Date	Time	Water Level	Water Elevation	Notes
4/9/2024	11:00	7.26	984.09	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte	Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10	3.21
Appendix I	Metals	150	150	3.21
Appendix I	VOC	240	240	3.21
Full Appendix II	10 more containers	5620		
TSS	TSS	1000		
Supplemental	BEHP	1 - qt		
Supplemental				
Total			400	

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

TOC	991.35	4" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	18.65								
		Before purging	4/9/2024	11:00	7.26	984.09	5	0.7	no
		After purging	4/9/2024	11:08	7.70	983.65			
		Top of Screen after construction				980.70			
						3.39			feet above (+) or below (-) top screen
		Bottom of Well after construction				972.70			
		Bottom of Well	4/9/2024		17.55	973.80			
						1.10			feet sedimentation
		Before Sampling				991.35			
		Recovery				991.35			
		Recovery				991.35			
		Recovery				991.35			
		Recovery	4/9/2024	12:53	7.26	984.09			

Monitoring Well: MW 4 (dg)

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

GENERAL INFORMATION

TOC	990.8
Well Depth	18.75
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	990.8
Well Depth	18.40
Top Screen	982.05
Bottom Screen	973.05
Bottom Well	973.05
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	13.00
Top sample	977.80
Bottom sample	973.80
Turbidity(NTU)	2.25

Date	Time	Water Level	Water Elevation	Notes
4/9/2024	10:43	5.81	984.99	

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	10	2.25
Appendix I	Metals	150	150	2.25
Appendix I	VOC	240	240	2.25
Full Appendix II	10 more containers	5620		
TSS	TSS	1000		
Supplemental	BEHP	1 - qt		
Supplemental				
Total		400		

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

TOC	990.8	4" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	18.75								
			4/9/2024	10:43	5.81	984.99	5	0.6	no
			4/9/2024	10:53	6.55	984.25			
						982.05			
						2.94			feet above (+) or below (-) top screen
						973.05			
			4/9/2024		18.40	972.40			
						-0.65			feet sedimentation
						990.80			
						990.80			
						990.80			
						990.80			
			4/9/2024	12:52	5.82	984.98			

Monitoring Well: MW 105B (dg)

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

GENERAL INFORMATION

TOC	993.06
Well Depth	21.90
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	993.06
Well Depth	21.55
Top Screen	981.16
Bottom Screen	971.16
Bottom Well	971.16
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	16.00
Top sample	977.06
Bottom sample	973.06
Turbidity(NTU)	1.70

Date	Time	Water Level	Water Elevation	Notes
4/9/2024	11:18	10.31	982.75	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte	Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10	1.70
Appendix I	Metals	150	150	1.70
Appendix I	VOC	240	240	1.70
Full Appendix II	10 more containers	5620		
TSS	TSS	1000		
Supplemental	BEHP	1 - qt		
Supplemental				
Total		400		

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

TOC	993.06	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	21.90								
		Before purging	4/9/2024	11:18	10.31	982.75	3	1.6	No
		After purging	4/9/2024	11:28	10.8	982.26			
		Top of Screen after construction				981.16			
						1.59			feet above (+) or below (-) top screen
		Bottom of Well after construction				971.16			
		Bottom of Well	4/9/2024		21.55	971.51			
						0.35			feet sedimentation
		Before Sampling				993.06			App I
		Before Sampling				993.06			App II
		Recovery				993.06			
		Recovery				993.06			
		Recovery	4/9/2024	12:56	10.35	982.71			No Recovery - No significant draw down

Monitoring Well: MW 108A (dg)

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

GENERAL INFORMATION

TOC	994.7
Well Depth	20.55
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	994.7
Well Depth	20.65
Top Screen	983.75
Bottom Screen	973.75
Bottom Well	973.75
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	15.50
Top sample	979.20
Bottom sample	975.20
Turbidity(NTU)	173.20

Date	Time	Water Level	Water Elevation	Notes
4/9/2024	11:35	10.57	984.13	

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	173.20
Appendix I	Metals	150	150	173.20
Appendix I	VOC	240	240	173.20
Full Appendix II	10 more containers	5620		
TSS	TSS	1000		
Supplemental	Methyl parathion	1 - qt		
Supplemental				
Total		400		

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

TOC	994.7	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	20.55		4/9/2024	11:35	10.57	984.13	3	1.8	No
			4/9/2024	11:44	13.70	981.00			
						983.75			
						0.38			feet above (+) or below (-) top screen
						973.75			
			4/9/2024		20.65	974.05			
						0.30			feet sedimentation
						994.70			App I
						994.70			App II
						994.70			
						994.70			
			4/9/2024	12:49	11.22	983.48			

Monitoring Well: MW 110A (dg)

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

GENERAL INFORMATION

TOC	995.9
Well Depth	21.00
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	995.9
Well Depth	20.65
Top Screen	985.90
Bottom Screen	974.90
Bottom Well	974.90
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	15.50
Top sample	980.40
Bottom sample	976.40
Turbidity(NTU)	7.26

Date	Time	Water Level	Water Elevation	Notes
4/9/2024	11:54	11.16	984.74	

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	7.26
Appendix I	Metals	150	150	7.26
Appendix I	VOC	240	240	7.26
Full Appendix II	10 more containers	5620		
TSS	TSS	1000		
Supplemental	BEHP	1 - qt		
Supplemental				
Total			400	

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

TOC	995.9	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	21.00								
			4/9/2024	11:54	11.16	984.74	5	3.1	No
			4/9/2024	12:08	16.45	979.45			
						985.90			
						-1.16			feet above (+) or below (-) top screen
						974.90			
			4/9/2024		20.65	975.25			
						0.35			feet sedimentation
						995.90			
						995.90			
						995.90			
						995.90			
			4/9/2024	12:51	11.18	984.72			

Appendix B
Statistical Report

GROUND WATER STATISTICS

FOR THE

BREMER COUNTY LANDFILL

First Semi-Annual Monitoring Event in 2024

Prepared for:
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May 2024

INTRODUCTION

This report summarizes the results of the statistical analysis used to evaluate the ground water quality data obtained during the first semi-annual monitoring event in 2024 at the Bremer County Landfill in Waverly, Iowa. The statistical plan was designed to detect a release from the facility at the earliest indication so that it is protective of human health and the environment. The interwell methodology is described and then applied to the Bremer County Landfill data. The statistical plan conforms with IAC 567, Chapter 113.10, USEPA Guidance document (“*Statistical Analysis of Ground-Water Monitoring Data at RCRA Facilities, Unified Guidance*”, March 2009), and the American Society for Testing and Materials (ASTM) standard D6312-98, *Developing Appropriate Statistical Approaches for Ground-Water Detection Monitoring Programs*.

Ground Water Monitoring Program

The groundwater monitoring network for Bremer County Landfill includes upgradient wells MW-1 and MW-2A, and downgradient detection sample points MW-105B, MW-108A, MW-110A, MW-3, MW-4, SW-3A, and SW-4. Each of the groundwater monitoring wells is to be sampled at least semiannually and analyzed for the detection monitoring parameters listed in 113.10(5), which includes 15 inorganic constituents and 47 organic compounds, summarized in Table 1 below.

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

Organic Compounds:

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

Inorganic constituents:

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

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

STATISTICAL METHODOLOGIES FOR DETECTION MONITORING

IAC 567, Chapter 113.10(4) provides several options for statistically evaluating the ground water data at those wells that monitor the open cells or contiguous MSWLF units. The preferred methods for comparing ground water data are using either prediction limits or using control charts. The prediction limit method was applied to the Bremer County Landfill data using the DUMPStat® statistical program. Ground water statistics are to be done on the inorganic constituents listed. The organic constituents are compared to maximum contaminant levels (MCLs) or practical quantitation limits (PQLs), in lieu of statistical comparisons to historical concentrations.

Interwell Statistics: Upgradient versus Downgradient Comparisons

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

Results of the Interwell Statistics

The background data used in this statistical analysis includes the ground water data collected from ground water wells MW-1 and MW-2A during the period from October 2014 through the current data. A summary of the background data from monitoring wells MW-1 and MW-2A, used to determine the site prediction limits, is listed in Attachment B, Table 1 “Upgradient Data”. This statistical method compares the current downgradient determinations to site prediction limits and checks for exceedances.

Table 2 “Most Current Downgradient Monitoring Data”, summarizes the current data from downgradient wells MW-105B, MW-108A, MW-110A, MW-3, and MW-4 compared to the site prediction limits. Prediction limit exceedances are flagged with asterisks. For the most current data, the site prediction limit exceedances detected are summarized in the Table below.

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
MW-108A	Arsenic, µg/L	9.4	4.0000	Nonparametric	Verified
	Cobalt, µg/L	27.6	0.9000	Nonparametric	Verified
	Nickel, µg/L	55.6	7.1000	Nonparametric	Verified
	Zinc, µg/L	21.1	21.0000	Nonparametric	Verified
MW-110A	Arsenic, µg/L	7.0	4.0000	Nonparametric	Verified
	Cobalt, µg/L	1460	0.9000	Nonparametric	Verified
	Nickel, µg/L	456	7.1000	Nonparametric	Verified
	Zinc, µg/L	21.4	21.0000	Nonparametric	Verified

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

Table 4 summarizes the results of the Shapiro-Wilk test. Table 5 is a summary of the statistics and prediction limits determined for the metals. Time series graphs of each of the parameters at each well with the corresponding prediction limits are attached.

A statistical power curve indicates the expected false assessments for the site as a whole. The false positive rate for interwell analyses is the percentage of failures when the upgradient versus downgradient true mean difference equals zero. False negative rate indicates the chance of missing contamination at a single well for a single constituent. The statistical power is a function of the number of wells included, the number of constituents compared, the detection frequencies, and the data distributions involved. For interwell analysis, the site-wide false positive rate is 1% and the test becomes sensitive to 3 standard deviation unit increases over background.

The past and current verified exceedances were evaluated against the ground water protection standards (GWPS) using confidence limits. 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 LCLs for the verified trace metals are below GWPS.

Volatile Organic Compounds

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

water at Bremer County Landfill during the first semi-annual monitoring event in 2024 are summarized below.

Organic compounds detected during the first semi-annual monitoring event in 2024

Well	VOC Detected	Result, µg/L	Reporting Limit, µg/L	Verified/ Awaiting Verification	Groundwater Standard, µg/L
MW-1	Chloromethane	7.9	1	Awaiting Verification	na
MW-110A	1,1-Dichloroethane	1.1	1	Awaiting Verification	140 ^b
	1,4-Dichlorobenzene	3.6	1	Verified	75 ^a
	Benzene	3.4	1	Verified	5 ^a
	Chlorobenzene	7.6	1	Verified	100 ^a
	Chloroethane	1.4	1	Verified	2800 ^b

a - USEPA MCL

b - Iowa Statewide Standard

Historical VOC detections are summarized in Attachment C. The verified VOC detections were evaluated against the GWPS using confidence limits (Attachment D). The 95% LCL for the VOCs are all below the respective ground water standards.

Attachment A

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

Table 1

Analytical Data Summary for 4/9/2024

Constituents	Units	MW-1	MW-105B	MW-108A	MW-110A	MW-2A	MW-3	MW-4
(3,4)-methylphenol	ug/L				<8			
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1.0	<1.0	<1.0	1.1	<1.0	<1.0	<1.0
1,1-dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,1-dichloropropene	ug/L				<1			
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene	ug/L				<8			
1,2,4-trichlorobenzene	ug/L				<1			
1,2-dibromo-3-chloropropane	ug/L	<5	<5	<5	<1	<5	<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
1,2-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	<1.0	<1.0	<1.0	3.6	<1.0	<1.0	<1.0
1,4-naphthoquinone	ug/L				<8			
1,4-phenylenediamine	ug/L				<8			
1-naphthylamine	ug/L				<8			
2,2-dichloropropane	ug/L				<1			
2,3,4,6-tetrachlorophenol	ug/L				<8			
2,4,5-t	ug/L				<5			
2,4,5-tp (silvex)	ug/L				<5			
2,4,5-trichlorophenol	ug/L				<8			
2,4,6-trichlorophenol	ug/L				<8			
2,4-d	ug/L				<2			
2,4-dichlorophenol	ug/L				<8			
2,4-dimethylphenol	ug/L				<8			
2,4-dinitrophenol	ug/L				<8			
2,4-dinitrotoluene	ug/L				<8			
2,6-dichlorophenol	ug/L				<8			
2,6-dinitrotoluene	ug/L				<8			
2-acetylaminofluorene	ug/L				<8			
2-butanone (mek)	ug/L	<10	<10	<10	<5	<10	<10	<10
2-chloronaphthalene	ug/L				<8			
2-chlorophenol	ug/L				<8			
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5	<5	<5
2-methylnaphthalene	ug/L				<8			
2-methylphenol	ug/L				<8			
2-naphthylamine	ug/L				<8			
2-nitroaniline	ug/L				<8			
2-nitrophenol	ug/L				<8			
3,3'-dichlorobenzidine	ug/L				<8			
3,3-dimethylbenzidine	ug/L				<8			
3-methylcholanthrene	ug/L				<8			
3-nitroaniline	ug/L				<8			
4,4'-ddd	ug/L				<.05			
4,4'-dde	ug/L				<.05			
4,4'-ddt	ug/L				<.05			
4,6-dinitro-2-methylphenol	ug/L				<8			
4-aminobiphenyl	ug/L				<8			
4-bromophenyl phenyl ether	ug/L				<8			
4-chloro-3-methylphenol	ug/L				<8			
4-chloroaniline	ug/L				<8			
4-chlorophenyl phenyl ether	ug/L				<8			
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5	<5	<5	<5
4-nitroaniline	ug/L				<8			
4-nitrophenol	ug/L				<8			
5-nitro-o-toluidine	ug/L				<8			
7,12-dimethylbenz [a] anthracene	ug/L				<8			
Acenaphthene	ug/L				<8			
Acenaphthylene	ug/L				<8			
Acetone	ug/L	<10	<10	<10	<10	<10	<10	<10
Acetonitrile	ug/L				<10			
Acetophenone	ug/L				<8			
Acrolein	ug/L				<10			
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5
Aldrin	ug/L				<.05			
Allyl chloride	ug/L				<1			
Alpha-bhc	ug/L				<.05			
Anthracene	ug/L				<8			

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

Table 1

Analytical Data Summary for 4/9/2024

Constituents	Units	MW-1	MW-105B	MW-108A	MW-110A	MW-2A	MW-3	MW-4
Antimony, total	ug/L	<2	<2	<2	<2	<2	<2	<2
Arochlor 1016	ug/L				<2			
Arochlor 1221	ug/L				<2			
Arochlor 1232	ug/L				<2			
Arochlor 1242	ug/L				<2			
Arochlor 1248	ug/L				<2			
Arochlor 1254	ug/L				<2			
Arochlor 1260	ug/L				<2			
Arsenic, total	ug/L	<4.0	<4.0	9.4	7.0	<4.0	<4.0	<4.0
Azobenzene	ug/L				<8			
Barium, total	ug/L	361.0	110.0	26.9	199.0	58.4	47.1	150.0
Benzene	ug/L	<1.0	<1.0	<1.0	3.4	<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	<4	<4	<4	<4	<4	<4	<4
Beta-bhc	ug/L				<.05			
Bis (2-chloroethoxy) methane	ug/L				<8			
Bis(2-chloroethyl) ether	ug/L				<8			
Bis(2-ethylhexyl) phthalate	ug/L				<6			
Bis[2-chloroisopropyl]ether	ug/L				<8			
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate	ug/L				<8			
Cadmium, total	ug/L	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1
Chlordane	ug/L				<.1			
Chlorobenzene	ug/L	<1.0	<1.0	<1.0	7.6	<1.0	<1.0	<1.0
Chlorobenzilate	ug/L				<8			
Chloroethane	ug/L	<1.0	<1.0	<1.0	1.4	<1.0	<1.0	<1.0
Chloroform	ug/L	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	7.9	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroprene	ug/L				<1			
Chromium, total	ug/L	<8	<8	<8	<8	<8	<8	<8
Chrysene	ug/L				<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	<.4	<.4	27.6	1460.0	<.4	<.4	<.4
Copper, total	ug/L	<4.0	<4.0	6.3	4.2	<4.0	<4.0	<4.0
Cyanide, total	mg/L				<.005			
Delta-bhc	ug/L				<.05			
Diallate	ug/L				<8			
Dibenzo(a,h)anthracene	ug/L				<8			
Dibenzofuran	ug/L				<8			
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L				<1			
Dieldrin	ug/L				<.05			
Diethyl phthalate	ug/L				<8			
Dimethoate	ug/L				<.4			
Dimethylphthalate	ug/L				<8			
Di-n-butyl phthalate	ug/L				<8			
Di-n-octyl phthalate	ug/L				<8			
Dinoseb	ug/L				<.5			
Diphenylamine	ug/L				<8			
Disulfoton	ug/L				<.4			
Endosulfan i	ug/L				<.05			
Endosulfan ii	ug/L				<.05			
Endosulfan sulfate	ug/L				<.05			
Endrin	ug/L				<.05			
Endrin aldehyde	ug/L				<.05			
Ethyl methacrylate	ug/L				<10			
Ethyl methanesulfonate	ug/L				<8			
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
Famphur	ug/L				<.4			
Fluoranthene	ug/L				<8			
Fluorene	ug/L				<8			
Gamma-bhc (lindane)	ug/L				<.05			
Heptachlor	ug/L				<.05			
Heptachlor epoxide	ug/L				<.05			
Hexachlorobenzene	ug/L				<.05			

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

Table 1

Analytical Data Summary for 4/9/2024

Constituents	Units	MW-1	MW-105B	MW-108A	MW-110A	MW-2A	MW-3	MW-4
Hexachlorobutadiene	ug/L				<8			
Hexachlorocyclopentadiene	ug/L				<8			
Hexachloroethane	ug/L				<8			
Hexachloropropene	ug/L				<8			
Indeno(1,2,3-cd)pyrene	ug/L				<8			
Isobutanol	ug/L				<1000			
Isodrin	ug/L				<8			
Isophorone	ug/L				<8			
Isosafrole	ug/L				<8			
Kepone	ug/L				<8			
Lead, total	ug/L	<4	<4	<4	<4	<4	<4	<4
Mercury, total	ug/L				<.5			
Methacrylonitrile	ug/L				<1			
Methapyrilene	ug/L				<8			
Methoxychlor	ug/L				<.05			
Methyl iodide	ug/L	<1	<1	<1	<2	<1	<1	<1
Methyl methacrylate	ug/L				<1			
Methyl methanesulfonate	ug/L				<8			
Methyl parathion	ug/L				<.4			
Methylene chloride	ug/L	<5	<5	<5	<5	<5	<5	<5
Naphthalene	ug/L				<8			
Nickel, total	ug/L	<4.0	<4.0	55.6	456.0	<4.0	<4.0	<4.0
Nitrobenzene	ug/L				<8			
N-nitrosodiethylamine	ug/L				<8			
N-nitrosodimethylamine	ug/L				<8			
N-nitrosodi-n-butylamine	ug/L				<8			
N-nitroso-di-n-propylamine	ug/L				<8			
N-nitrosodiphenylamine	ug/L				<8			
N-nitrosomethylethylamine	ug/L				<8			
N-nitrosopiperidine	ug/L				<8			
N-nitrosopyrrolidine	ug/L				<8			
O,o,o-triethyl phosphorothioate	ug/L				<.4			
O-toluidine	ug/L				<8			
P-(dimethylamino)azobenzene	ug/L				<8			
Parathion	ug/L				<.4			
Pentachlorobenzene	ug/L				<8			
Pentachloronitrobenzene (pcnb)	ug/L				<8			
Pentachlorophenol	ug/L				<8			
Phenacetin	ug/L				<8			
Phenanthrene	ug/L				<8			
Phenol	ug/L				<8			
Phorate	ug/L				<.4			
Pronamide	ug/L				<8			
Propionitrile	ug/L				<10			
Pyrene	ug/L				<8			
Safrole	ug/L				<8			
Selenium, total	ug/L	<4	<4	<4	<4	<4	<4	<4
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1
Sulfide, total	mg/L				<.3			
Tetrachloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<2	<2	<2	<2	<2	<2	<2
Thionazin	ug/L				<.4			
Tin, total	ug/L				<20			
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1
Toxaphene	ug/L				<.2			
Trans-1,2-dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	ug/L	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	ug/L	<2	<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	<20.0	<20.0	21.1	21.4	<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-1	10/15/2014	ND	2.0000		
Antimony, total	ug/L	MW-1	01/12/2015	ND	2.0000		
Antimony, total	ug/L	MW-1	04/13/2015	ND	2.0000		
Antimony, total	ug/L	MW-1	07/21/2015	ND	2.0000		
Antimony, total	ug/L	MW-1	09/22/2015	ND	2.0000		
Antimony, total	ug/L	MW-1	04/11/2016	ND	2.0000		
Antimony, total	ug/L	MW-1	10/12/2016	ND	2.0000		
Antimony, total	ug/L	MW-1	04/13/2017	ND	2.0000		
Antimony, total	ug/L	MW-1	10/25/2017	ND	2.0000		
Antimony, total	ug/L	MW-1	04/12/2018	ND	2.0000		
Antimony, total	ug/L	MW-1	10/16/2018	ND	2.0000		
Antimony, total	ug/L	MW-1	04/18/2019	ND	2.0000		
Antimony, total	ug/L	MW-1	10/15/2019	ND	2.0000		
Antimony, total	ug/L	MW-1	04/06/2020	ND	2.0000		
Antimony, total	ug/L	MW-1	10/15/2020	ND	2.0000		
Antimony, total	ug/L	MW-1	04/12/2021	ND	2.0000		
Antimony, total	ug/L	MW-1	10/06/2021	ND	2.0000		
Antimony, total	ug/L	MW-1	04/14/2022	ND	2.0000		
Antimony, total	ug/L	MW-1	10/25/2022	ND	2.0000		
Antimony, total	ug/L	MW-1	04/19/2023	ND	2.0000		
Antimony, total	ug/L	MW-1	10/23/2023	ND	2.0000		
Antimony, total	ug/L	MW-1	04/09/2024	ND	2.0000		
Arsenic, total	ug/L	MW-1	10/15/2014	ND	4.0000		
Arsenic, total	ug/L	MW-1	01/12/2015	ND	4.0000		
Arsenic, total	ug/L	MW-1	04/13/2015	ND	4.0000		
Arsenic, total	ug/L	MW-1	07/21/2015	ND	4.0000		
Arsenic, total	ug/L	MW-1	09/22/2015	ND	4.0000		
Arsenic, total	ug/L	MW-1	04/11/2016	ND	4.0000		
Arsenic, total	ug/L	MW-1	10/12/2016	ND	4.0000		
Arsenic, total	ug/L	MW-1	04/13/2017	ND	4.0000		
Arsenic, total	ug/L	MW-1	10/25/2017	ND	4.0000		
Arsenic, total	ug/L	MW-1	04/12/2018	ND	4.0000		
Arsenic, total	ug/L	MW-1	10/16/2018	ND	4.0000		
Arsenic, total	ug/L	MW-1	04/18/2019	ND	4.0000		
Arsenic, total	ug/L	MW-1	10/15/2019	ND	4.0000		
Arsenic, total	ug/L	MW-1	04/06/2020	ND	4.0000		
Arsenic, total	ug/L	MW-1	10/15/2020	ND	4.0000		
Arsenic, total	ug/L	MW-1	04/12/2021	ND	4.0000		
Arsenic, total	ug/L	MW-1	10/06/2021	ND	4.0000		
Arsenic, total	ug/L	MW-1	04/14/2022	ND	4.0000		
Arsenic, total	ug/L	MW-1	10/25/2022	ND	4.0000		
Arsenic, total	ug/L	MW-1	04/19/2023	ND	4.0000		
Arsenic, total	ug/L	MW-1	10/23/2023	ND	4.0000		
Arsenic, total	ug/L	MW-1	04/09/2024	ND	4.0000		
Barium, total	ug/L	MW-1	10/15/2014		370.0000		
Barium, total	ug/L	MW-1	01/12/2015		385.0000		
Barium, total	ug/L	MW-1	04/13/2015		385.0000		
Barium, total	ug/L	MW-1	07/21/2015		336.0000		
Barium, total	ug/L	MW-1	09/22/2015		307.0000		
Barium, total	ug/L	MW-1	04/11/2016		284.0000		
Barium, total	ug/L	MW-1	10/12/2016		324.0000		
Barium, total	ug/L	MW-1	04/13/2017		341.0000		
Barium, total	ug/L	MW-1	10/25/2017		325.0000		
Barium, total	ug/L	MW-1	04/12/2018		323.0000		
Barium, total	ug/L	MW-1	10/16/2018		297.0000		
Barium, total	ug/L	MW-1	04/18/2019		365.0000		
Barium, total	ug/L	MW-1	10/15/2019		340.0000		
Barium, total	ug/L	MW-1	04/06/2020		334.0000		
Barium, total	ug/L	MW-1	10/15/2020		316.0000		
Barium, total	ug/L	MW-1	04/12/2021		351.0000		
Barium, total	ug/L	MW-1	10/06/2021		315.0000		
Barium, total	ug/L	MW-1	04/14/2022		335.0000		
Barium, total	ug/L	MW-1	10/25/2022		331.0000		
Barium, total	ug/L	MW-1	04/19/2023		332.0000		
Barium, total	ug/L	MW-1	10/23/2023		331.0000		
Barium, total	ug/L	MW-1	04/09/2024		361.0000		
Beryllium, total	ug/L	MW-1	10/15/2014	ND	4.0000		
Beryllium, total	ug/L	MW-1	01/12/2015	ND	4.0000		
Beryllium, total	ug/L	MW-1	04/13/2015	ND	4.0000		
Beryllium, total	ug/L	MW-1	07/21/2015	ND	4.0000		
Beryllium, total	ug/L	MW-1	09/22/2015	ND	4.0000		
Beryllium, total	ug/L	MW-1	04/11/2016	ND	4.0000		
Beryllium, total	ug/L	MW-1	10/12/2016	ND	4.0000		
Beryllium, total	ug/L	MW-1	04/13/2017	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-1	10/25/2017	ND	4.0000		
Beryllium, total	ug/L	MW-1	04/12/2018	ND	4.0000		
Beryllium, total	ug/L	MW-1	10/16/2018	ND	4.0000		
Beryllium, total	ug/L	MW-1	04/18/2019	ND	4.0000		
Beryllium, total	ug/L	MW-1	10/15/2019	ND	4.0000		
Beryllium, total	ug/L	MW-1	04/06/2020	ND	4.0000		
Beryllium, total	ug/L	MW-1	10/15/2020	ND	4.0000		
Beryllium, total	ug/L	MW-1	04/12/2021	ND	4.0000		
Beryllium, total	ug/L	MW-1	10/06/2021	ND	4.0000		
Beryllium, total	ug/L	MW-1	04/14/2022	ND	4.0000		
Beryllium, total	ug/L	MW-1	10/25/2022	ND	4.0000		
Beryllium, total	ug/L	MW-1	04/19/2023	ND	4.0000		
Beryllium, total	ug/L	MW-1	10/23/2023	ND	4.0000		
Beryllium, total	ug/L	MW-1	04/09/2024	ND	4.0000		
Cadmium, total	ug/L	MW-1	10/15/2014	ND	0.8000		
Cadmium, total	ug/L	MW-1	01/12/2015	ND	0.8000		
Cadmium, total	ug/L	MW-1	04/13/2015	ND	0.8000		
Cadmium, total	ug/L	MW-1	07/21/2015	ND	0.8000		
Cadmium, total	ug/L	MW-1	09/22/2015	ND	0.8000		
Cadmium, total	ug/L	MW-1	04/11/2016	ND	0.8000		
Cadmium, total	ug/L	MW-1	10/12/2016	ND	0.8000		
Cadmium, total	ug/L	MW-1	04/13/2017	ND	0.8000		
Cadmium, total	ug/L	MW-1	10/25/2017	ND	0.8000		
Cadmium, total	ug/L	MW-1	04/12/2018	ND	0.8000		
Cadmium, total	ug/L	MW-1	10/16/2018	ND	0.8000		
Cadmium, total	ug/L	MW-1	04/18/2019	ND	0.8000		
Cadmium, total	ug/L	MW-1	10/15/2019	ND	0.8000		
Cadmium, total	ug/L	MW-1	04/06/2020	ND	0.8000		
Cadmium, total	ug/L	MW-1	10/15/2020	ND	0.8000		
Cadmium, total	ug/L	MW-1	04/12/2021	ND	0.8000		
Cadmium, total	ug/L	MW-1	10/06/2021	ND	0.8000		
Cadmium, total	ug/L	MW-1	04/14/2022	ND	2.1000		*
Cadmium, total	ug/L	MW-1	10/25/2022	ND	0.8000		
Cadmium, total	ug/L	MW-1	04/19/2023	ND	0.8000		
Cadmium, total	ug/L	MW-1	10/23/2023	ND	0.8000		
Cadmium, total	ug/L	MW-1	04/09/2024	ND	0.8000		
Chromium, total	ug/L	MW-1	10/15/2014	ND	8.0000		
Chromium, total	ug/L	MW-1	01/12/2015	ND	8.0000		
Chromium, total	ug/L	MW-1	04/13/2015	ND	8.0000		
Chromium, total	ug/L	MW-1	07/21/2015	ND	8.0000		
Chromium, total	ug/L	MW-1	09/22/2015	ND	8.0000		
Chromium, total	ug/L	MW-1	04/11/2016	ND	8.0000		
Chromium, total	ug/L	MW-1	10/12/2016	ND	8.0000		
Chromium, total	ug/L	MW-1	04/13/2017	ND	8.0000		
Chromium, total	ug/L	MW-1	10/25/2017	ND	8.0000		
Chromium, total	ug/L	MW-1	04/12/2018	ND	8.0000		
Chromium, total	ug/L	MW-1	10/16/2018	ND	8.0000		
Chromium, total	ug/L	MW-1	04/18/2019	ND	8.0000		
Chromium, total	ug/L	MW-1	10/15/2019	ND	8.0000		
Chromium, total	ug/L	MW-1	04/06/2020	ND	8.0000		
Chromium, total	ug/L	MW-1	10/15/2020	ND	8.0000		
Chromium, total	ug/L	MW-1	04/12/2021	ND	8.0000		
Chromium, total	ug/L	MW-1	10/06/2021	ND	8.0000		
Chromium, total	ug/L	MW-1	04/14/2022	ND	8.0000		
Chromium, total	ug/L	MW-1	10/25/2022	ND	8.0000		
Chromium, total	ug/L	MW-1	04/19/2023	ND	8.0000		
Chromium, total	ug/L	MW-1	10/23/2023	ND	8.0000		
Chromium, total	ug/L	MW-1	04/09/2024	ND	8.0000		
Cobalt, total	ug/L	MW-1	10/15/2014	ND	0.8000		
Cobalt, total	ug/L	MW-1	01/12/2015	ND	0.8000		
Cobalt, total	ug/L	MW-1	04/13/2015	ND	0.8000		
Cobalt, total	ug/L	MW-1	07/21/2015	ND	0.8000		
Cobalt, total	ug/L	MW-1	09/22/2015	ND	0.8000		
Cobalt, total	ug/L	MW-1	04/11/2016	ND	0.8000		
Cobalt, total	ug/L	MW-1	10/12/2016	ND	0.8000		
Cobalt, total	ug/L	MW-1	04/13/2017	ND	0.8000		
Cobalt, total	ug/L	MW-1	10/25/2017	ND	0.8000		
Cobalt, total	ug/L	MW-1	04/12/2018	ND	0.8000		
Cobalt, total	ug/L	MW-1	10/16/2018	ND	0.8000		
Cobalt, total	ug/L	MW-1	04/18/2019	ND	0.8000		
Cobalt, total	ug/L	MW-1	10/15/2019	ND	0.8000		
Cobalt, total	ug/L	MW-1	04/06/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-1	10/15/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-1	04/12/2021	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-1	10/06/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-1	04/14/2022	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-1	10/25/2022	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-1	04/19/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-1	10/23/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-1	04/09/2024	ND	0.4000	0.8000	**
Copper, total	ug/L	MW-1	10/15/2014	ND	4.0000		
Copper, total	ug/L	MW-1	01/12/2015	ND	4.0000		
Copper, total	ug/L	MW-1	04/13/2015	ND	4.0000		
Copper, total	ug/L	MW-1	07/21/2015	ND	4.0000		
Copper, total	ug/L	MW-1	09/22/2015	ND	4.0000		
Copper, total	ug/L	MW-1	04/11/2016		8.4000		
Copper, total	ug/L	MW-1	10/12/2016	ND	4.0000		
Copper, total	ug/L	MW-1	04/13/2017	ND	4.0000		
Copper, total	ug/L	MW-1	10/25/2017	ND	4.0000		
Copper, total	ug/L	MW-1	04/12/2018	ND	4.0000		
Copper, total	ug/L	MW-1	10/16/2018	ND	4.0000		
Copper, total	ug/L	MW-1	04/18/2019	ND	4.0000		
Copper, total	ug/L	MW-1	10/15/2019	ND	4.0000		
Copper, total	ug/L	MW-1	04/06/2020	ND	4.0000		
Copper, total	ug/L	MW-1	10/15/2020	ND	4.0000		
Copper, total	ug/L	MW-1	04/12/2021	ND	4.0000		
Copper, total	ug/L	MW-1	10/06/2021	ND	4.0000		
Copper, total	ug/L	MW-1	04/14/2022	ND	4.0000		
Copper, total	ug/L	MW-1	10/25/2022	ND	4.0000		
Copper, total	ug/L	MW-1	04/19/2023	ND	4.0000		
Copper, total	ug/L	MW-1	10/23/2023	ND	4.0000		
Copper, total	ug/L	MW-1	04/09/2024	ND	4.0000		
Lead, total	ug/L	MW-1	10/15/2014	ND	4.0000		
Lead, total	ug/L	MW-1	01/12/2015	ND	4.0000		
Lead, total	ug/L	MW-1	04/13/2015	ND	4.0000		
Lead, total	ug/L	MW-1	07/21/2015	ND	4.0000		
Lead, total	ug/L	MW-1	09/22/2015	ND	4.0000		
Lead, total	ug/L	MW-1	04/11/2016	ND	4.0000		
Lead, total	ug/L	MW-1	10/12/2016	ND	4.0000		
Lead, total	ug/L	MW-1	04/13/2017	ND	4.0000		
Lead, total	ug/L	MW-1	10/25/2017	ND	4.0000		
Lead, total	ug/L	MW-1	04/12/2018	ND	4.0000		
Lead, total	ug/L	MW-1	10/16/2018	ND	4.0000		
Lead, total	ug/L	MW-1	04/18/2019	ND	4.0000		
Lead, total	ug/L	MW-1	10/15/2019	ND	4.0000		
Lead, total	ug/L	MW-1	04/06/2020	ND	4.0000		
Lead, total	ug/L	MW-1	10/15/2020	ND	4.0000		
Lead, total	ug/L	MW-1	04/12/2021	ND	4.0000		
Lead, total	ug/L	MW-1	10/06/2021	ND	4.0000		
Lead, total	ug/L	MW-1	04/14/2022	ND	4.0000		
Lead, total	ug/L	MW-1	10/25/2022	ND	4.0000		
Lead, total	ug/L	MW-1	04/19/2023	ND	4.0000		
Lead, total	ug/L	MW-1	10/23/2023	ND	4.0000		
Lead, total	ug/L	MW-1	04/09/2024	ND	4.0000		
Nickel, total	ug/L	MW-1	10/15/2014	ND	4.0000		
Nickel, total	ug/L	MW-1	01/12/2015	ND	4.0000		
Nickel, total	ug/L	MW-1	04/13/2015	ND	4.0000		
Nickel, total	ug/L	MW-1	07/21/2015	ND	4.0000		
Nickel, total	ug/L	MW-1	09/22/2015	ND	4.0000		
Nickel, total	ug/L	MW-1	04/11/2016	ND	4.0000		
Nickel, total	ug/L	MW-1	10/12/2016	ND	4.0000		
Nickel, total	ug/L	MW-1	04/13/2017	ND	4.0000		
Nickel, total	ug/L	MW-1	10/25/2017	ND	4.0000		
Nickel, total	ug/L	MW-1	04/12/2018	ND	4.0000		
Nickel, total	ug/L	MW-1	10/16/2018	ND	4.0000		
Nickel, total	ug/L	MW-1	04/18/2019	ND	4.0000		
Nickel, total	ug/L	MW-1	10/15/2019	ND	4.0000		
Nickel, total	ug/L	MW-1	04/06/2020	ND	4.0000		
Nickel, total	ug/L	MW-1	10/15/2020	ND	4.0000		
Nickel, total	ug/L	MW-1	04/12/2021	ND	4.0000		
Nickel, total	ug/L	MW-1	10/06/2021	ND	4.0000		
Nickel, total	ug/L	MW-1	04/14/2022	ND	4.0000		
Nickel, total	ug/L	MW-1	10/25/2022	ND	4.0000		
Nickel, total	ug/L	MW-1	04/19/2023	ND	4.0000		
Nickel, total	ug/L	MW-1	10/23/2023	ND	4.0000		
Nickel, total	ug/L	MW-1	04/09/2024	ND	4.0000		
Selenium, total	ug/L	MW-1	10/15/2014	ND	4.0000		
Selenium, total	ug/L	MW-1	01/12/2015	ND	4.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Selenium, total	ug/L	MW-1	04/13/2015	ND	4.0000		
Selenium, total	ug/L	MW-1	07/21/2015	ND	4.0000		
Selenium, total	ug/L	MW-1	09/22/2015	ND	4.0000		
Selenium, total	ug/L	MW-1	04/11/2016	ND	4.0000		
Selenium, total	ug/L	MW-1	10/12/2016	ND	4.0000		
Selenium, total	ug/L	MW-1	04/13/2017	ND	4.0000		
Selenium, total	ug/L	MW-1	10/25/2017	ND	4.0000		
Selenium, total	ug/L	MW-1	04/12/2018	ND	4.0000		
Selenium, total	ug/L	MW-1	10/16/2018	ND	4.0000		
Selenium, total	ug/L	MW-1	04/18/2019	ND	4.0000		
Selenium, total	ug/L	MW-1	10/15/2019	ND	4.0000		
Selenium, total	ug/L	MW-1	04/06/2020	ND	4.0000		
Selenium, total	ug/L	MW-1	10/15/2020	ND	4.0000		
Selenium, total	ug/L	MW-1	04/12/2021	ND	4.0000		
Selenium, total	ug/L	MW-1	10/06/2021	ND	4.0000		
Selenium, total	ug/L	MW-1	04/14/2022	ND	4.0000		
Selenium, total	ug/L	MW-1	10/25/2022	ND	4.0000		
Selenium, total	ug/L	MW-1	04/19/2023	ND	4.0000		
Selenium, total	ug/L	MW-1	10/23/2023	ND	4.0000		
Selenium, total	ug/L	MW-1	04/09/2024	ND	4.0000		
Silver, total	ug/L	MW-1	10/15/2014	ND	4.0000		
Silver, total	ug/L	MW-1	01/12/2015	ND	4.0000		
Silver, total	ug/L	MW-1	04/13/2015	ND	4.0000		
Silver, total	ug/L	MW-1	07/21/2015	ND	4.0000		
Silver, total	ug/L	MW-1	09/22/2015	ND	4.0000		
Silver, total	ug/L	MW-1	04/11/2016	ND	4.0000		
Silver, total	ug/L	MW-1	10/12/2016	ND	4.0000		
Silver, total	ug/L	MW-1	04/13/2017	ND	4.0000		
Silver, total	ug/L	MW-1	10/25/2017	ND	4.0000		
Silver, total	ug/L	MW-1	04/12/2018	ND	4.0000		
Silver, total	ug/L	MW-1	10/16/2018	ND	4.0000		
Silver, total	ug/L	MW-1	04/18/2019	ND	4.0000		
Silver, total	ug/L	MW-1	10/15/2019	ND	4.0000		
Silver, total	ug/L	MW-1	04/06/2020	ND	4.0000		
Silver, total	ug/L	MW-1	10/15/2020	ND	4.0000		
Silver, total	ug/L	MW-1	04/12/2021	ND	4.0000		
Silver, total	ug/L	MW-1	10/06/2021	ND	4.0000		
Silver, total	ug/L	MW-1	04/14/2022	ND	4.0000		
Silver, total	ug/L	MW-1	10/25/2022	ND	4.0000		
Silver, total	ug/L	MW-1	04/19/2023	ND	4.0000		
Silver, total	ug/L	MW-1	10/23/2023	ND	4.0000		
Silver, total	ug/L	MW-1	04/09/2024	ND	4.0000		
Thallium, total	ug/L	MW-1	10/15/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-1	01/12/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-1	04/13/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-1	07/21/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-1	09/22/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-1	04/11/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-1	10/12/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-1	04/13/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-1	10/25/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-1	04/12/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-1	10/16/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-1	04/18/2019	ND	2.0000		
Thallium, total	ug/L	MW-1	10/15/2019	ND	2.0000		
Thallium, total	ug/L	MW-1	04/06/2020	ND	2.0000		
Thallium, total	ug/L	MW-1	10/15/2020	ND	2.0000		
Thallium, total	ug/L	MW-1	04/12/2021	ND	2.0000		
Thallium, total	ug/L	MW-1	10/06/2021	ND	2.0000		
Thallium, total	ug/L	MW-1	04/14/2022	ND	2.0000		
Thallium, total	ug/L	MW-1	10/25/2022	ND	2.0000		
Thallium, total	ug/L	MW-1	04/19/2023	ND	2.0000		
Thallium, total	ug/L	MW-1	10/23/2023	ND	2.0000		
Thallium, total	ug/L	MW-1	04/09/2024	ND	2.0000		
Vanadium, total	ug/L	MW-1	10/15/2014	ND	20.0000		
Vanadium, total	ug/L	MW-1	01/12/2015	ND	20.0000		
Vanadium, total	ug/L	MW-1	04/13/2015	ND	20.0000		
Vanadium, total	ug/L	MW-1	07/21/2015	ND	20.0000		
Vanadium, total	ug/L	MW-1	09/22/2015	ND	20.0000		
Vanadium, total	ug/L	MW-1	04/11/2016	ND	20.0000		
Vanadium, total	ug/L	MW-1	10/12/2016	ND	20.0000		
Vanadium, total	ug/L	MW-1	04/13/2017	ND	20.0000		
Vanadium, total	ug/L	MW-1	10/25/2017	ND	20.0000		
Vanadium, total	ug/L	MW-1	04/12/2018	ND	20.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Vanadium, total	ug/L	MW-1	10/16/2018	ND	20.0000		
Vanadium, total	ug/L	MW-1	04/18/2019	ND	20.0000		
Vanadium, total	ug/L	MW-1	10/15/2019	ND	20.0000		
Vanadium, total	ug/L	MW-1	04/06/2020	ND	20.0000		
Vanadium, total	ug/L	MW-1	10/15/2020	ND	20.0000		
Vanadium, total	ug/L	MW-1	04/12/2021	ND	20.0000		
Vanadium, total	ug/L	MW-1	10/06/2021	ND	20.0000		
Vanadium, total	ug/L	MW-1	04/14/2022	ND	20.0000		
Vanadium, total	ug/L	MW-1	10/25/2022	ND	20.0000		
Vanadium, total	ug/L	MW-1	04/19/2023	ND	20.0000		
Vanadium, total	ug/L	MW-1	10/23/2023	ND	20.0000		
Vanadium, total	ug/L	MW-1	04/09/2024	ND	20.0000		
Zinc, total	ug/L	MW-1	10/15/2014	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-1	01/12/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-1	04/13/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-1	07/21/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-1	09/22/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-1	04/11/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-1	10/12/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-1	04/13/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-1	10/25/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-1	04/12/2018	ND	20.0000		
Zinc, total	ug/L	MW-1	10/16/2018	ND	20.0000		
Zinc, total	ug/L	MW-1	04/18/2019	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-1	10/15/2019	ND	20.0000		
Zinc, total	ug/L	MW-1	04/06/2020	ND	20.0000		
Zinc, total	ug/L	MW-1	10/15/2020	ND	20.0000		
Zinc, total	ug/L	MW-1	04/12/2021	ND	20.0000		
Zinc, total	ug/L	MW-1	10/06/2021	ND	20.0000		
Zinc, total	ug/L	MW-1	04/14/2022	ND	20.0000		
Zinc, total	ug/L	MW-1	10/25/2022	ND	20.0000		
Zinc, total	ug/L	MW-1	04/19/2023	ND	20.0000		
Zinc, total	ug/L	MW-1	10/23/2023	ND	20.0000		
Zinc, total	ug/L	MW-1	04/09/2024	ND	20.0000		
Antimony, total	ug/L	MW-2A	10/15/2014	ND	2.0000		
Antimony, total	ug/L	MW-2A	01/12/2015	ND	2.0000		
Antimony, total	ug/L	MW-2A	04/13/2015	ND	2.0000		
Antimony, total	ug/L	MW-2A	07/21/2015	ND	2.0000		
Antimony, total	ug/L	MW-2A	09/22/2015	ND	2.0000		
Antimony, total	ug/L	MW-2A	04/11/2016	ND	2.0000		
Antimony, total	ug/L	MW-2A	10/12/2016	ND	2.0000		
Antimony, total	ug/L	MW-2A	04/13/2017	ND	2.0000		
Antimony, total	ug/L	MW-2A	10/25/2017	ND	2.0000		
Antimony, total	ug/L	MW-2A	04/12/2018	ND	2.0000		
Antimony, total	ug/L	MW-2A	10/16/2018	ND	2.0000		
Antimony, total	ug/L	MW-2A	04/18/2019	ND	2.0000		
Antimony, total	ug/L	MW-2A	10/15/2019	ND	2.0000		
Antimony, total	ug/L	MW-2A	04/06/2020	ND	2.0000		
Antimony, total	ug/L	MW-2A	10/15/2020	ND	2.0000		
Antimony, total	ug/L	MW-2A	04/12/2021	ND	2.0000		
Antimony, total	ug/L	MW-2A	10/06/2021	ND	2.0000		
Antimony, total	ug/L	MW-2A	04/14/2022	ND	2.0000		
Antimony, total	ug/L	MW-2A	10/25/2022	ND	2.0000		
Antimony, total	ug/L	MW-2A	04/19/2023	ND	2.0000		
Antimony, total	ug/L	MW-2A	10/23/2023	ND	2.0000		
Antimony, total	ug/L	MW-2A	04/09/2024	ND	2.0000		
Arsenic, total	ug/L	MW-2A	10/15/2014	ND	4.0000		
Arsenic, total	ug/L	MW-2A	01/12/2015	ND	4.0000		
Arsenic, total	ug/L	MW-2A	04/13/2015	ND	4.0000		
Arsenic, total	ug/L	MW-2A	07/21/2015	ND	4.0000		
Arsenic, total	ug/L	MW-2A	09/22/2015	ND	4.0000		
Arsenic, total	ug/L	MW-2A	04/11/2016	ND	4.0000		
Arsenic, total	ug/L	MW-2A	10/12/2016	ND	4.0000		
Arsenic, total	ug/L	MW-2A	04/13/2017	ND	4.0000		
Arsenic, total	ug/L	MW-2A	10/25/2017	ND	4.0000		
Arsenic, total	ug/L	MW-2A	04/12/2018	ND	4.0000		
Arsenic, total	ug/L	MW-2A	10/16/2018	ND	4.0000		
Arsenic, total	ug/L	MW-2A	04/18/2019	ND	4.0000		
Arsenic, total	ug/L	MW-2A	10/15/2019	ND	4.0000		
Arsenic, total	ug/L	MW-2A	04/06/2020	ND	4.0000		
Arsenic, total	ug/L	MW-2A	10/15/2020	ND	4.0000		
Arsenic, total	ug/L	MW-2A	04/12/2021	ND	4.0000		
Arsenic, total	ug/L	MW-2A	10/06/2021	ND	4.0000		
Arsenic, total	ug/L	MW-2A	04/14/2022	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-2A	10/25/2022	ND	4.0000		
Arsenic, total	ug/L	MW-2A	04/19/2023	ND	4.0000		
Arsenic, total	ug/L	MW-2A	10/23/2023	ND	4.0000		
Arsenic, total	ug/L	MW-2A	04/09/2024	ND	4.0000		
Barium, total	ug/L	MW-2A	10/15/2014		57.8000		
Barium, total	ug/L	MW-2A	01/12/2015		45.6000		
Barium, total	ug/L	MW-2A	04/13/2015		43.3000		
Barium, total	ug/L	MW-2A	07/21/2015		50.0000		
Barium, total	ug/L	MW-2A	09/22/2015		47.3000		
Barium, total	ug/L	MW-2A	04/11/2016		32.5000		
Barium, total	ug/L	MW-2A	10/12/2016		54.8000		
Barium, total	ug/L	MW-2A	04/13/2017		45.7000		
Barium, total	ug/L	MW-2A	10/25/2017		58.0000		
Barium, total	ug/L	MW-2A	04/12/2018		45.6000		
Barium, total	ug/L	MW-2A	10/16/2018		46.1000		
Barium, total	ug/L	MW-2A	04/18/2019		56.8000		
Barium, total	ug/L	MW-2A	10/15/2019		59.2000		
Barium, total	ug/L	MW-2A	04/06/2020		55.7000		
Barium, total	ug/L	MW-2A	10/15/2020		56.5000		
Barium, total	ug/L	MW-2A	04/12/2021		53.3000		
Barium, total	ug/L	MW-2A	10/06/2021		59.0000		
Barium, total	ug/L	MW-2A	04/14/2022		58.7000		
Barium, total	ug/L	MW-2A	10/25/2022		64.8000		
Barium, total	ug/L	MW-2A	04/19/2023		61.1000		
Barium, total	ug/L	MW-2A	10/23/2023		56.6000		
Barium, total	ug/L	MW-2A	04/09/2024		58.4000		
Beryllium, total	ug/L	MW-2A	10/15/2014	ND	4.0000		
Beryllium, total	ug/L	MW-2A	01/12/2015	ND	4.0000		
Beryllium, total	ug/L	MW-2A	04/13/2015	ND	4.0000		
Beryllium, total	ug/L	MW-2A	07/21/2015	ND	4.0000		
Beryllium, total	ug/L	MW-2A	09/22/2015	ND	4.0000		
Beryllium, total	ug/L	MW-2A	04/11/2016	ND	4.0000		
Beryllium, total	ug/L	MW-2A	10/12/2016	ND	4.0000		
Beryllium, total	ug/L	MW-2A	04/13/2017	ND	4.0000		
Beryllium, total	ug/L	MW-2A	10/25/2017	ND	4.0000		
Beryllium, total	ug/L	MW-2A	04/12/2018	ND	4.0000		
Beryllium, total	ug/L	MW-2A	10/16/2018	ND	4.0000		
Beryllium, total	ug/L	MW-2A	04/18/2019	ND	4.0000		
Beryllium, total	ug/L	MW-2A	10/15/2019	ND	4.0000		
Beryllium, total	ug/L	MW-2A	04/06/2020	ND	4.0000		
Beryllium, total	ug/L	MW-2A	10/15/2020	ND	4.0000		
Beryllium, total	ug/L	MW-2A	04/12/2021	ND	4.0000		
Beryllium, total	ug/L	MW-2A	10/06/2021	ND	4.0000		
Beryllium, total	ug/L	MW-2A	04/14/2022	ND	4.0000		
Beryllium, total	ug/L	MW-2A	10/25/2022	ND	4.0000		
Beryllium, total	ug/L	MW-2A	04/19/2023	ND	4.0000		
Beryllium, total	ug/L	MW-2A	10/23/2023	ND	4.0000		
Beryllium, total	ug/L	MW-2A	04/09/2024	ND	4.0000		
Cadmium, total	ug/L	MW-2A	10/15/2014	ND	0.8000		
Cadmium, total	ug/L	MW-2A	01/12/2015	ND	0.8000		
Cadmium, total	ug/L	MW-2A	04/13/2015	ND	0.8000		
Cadmium, total	ug/L	MW-2A	07/21/2015	ND	0.8000		
Cadmium, total	ug/L	MW-2A	09/22/2015	ND	0.8000		
Cadmium, total	ug/L	MW-2A	04/11/2016	ND	0.8000		
Cadmium, total	ug/L	MW-2A	10/12/2016	ND	0.8000		
Cadmium, total	ug/L	MW-2A	04/13/2017	ND	0.8000		
Cadmium, total	ug/L	MW-2A	10/25/2017	ND	0.8000		
Cadmium, total	ug/L	MW-2A	04/12/2018	ND	0.8000		
Cadmium, total	ug/L	MW-2A	10/16/2018	ND	0.8000		
Cadmium, total	ug/L	MW-2A	04/18/2019	ND	0.8000		
Cadmium, total	ug/L	MW-2A	10/15/2019	ND	0.8000		
Cadmium, total	ug/L	MW-2A	04/06/2020	ND	0.8000		
Cadmium, total	ug/L	MW-2A	10/15/2020	ND	0.8000		
Cadmium, total	ug/L	MW-2A	04/12/2021	ND	0.8000		
Cadmium, total	ug/L	MW-2A	10/06/2021	ND	0.8000		
Cadmium, total	ug/L	MW-2A	04/14/2022	ND	0.8000		
Cadmium, total	ug/L	MW-2A	10/25/2022	ND	0.8000		
Cadmium, total	ug/L	MW-2A	04/19/2023	ND	0.8000		
Cadmium, total	ug/L	MW-2A	10/23/2023	ND	0.8000		
Cadmium, total	ug/L	MW-2A	04/09/2024	ND	0.8000		
Chromium, total	ug/L	MW-2A	10/15/2014	ND	8.0000		
Chromium, total	ug/L	MW-2A	01/12/2015	ND	8.0000		
Chromium, total	ug/L	MW-2A	04/13/2015	ND	8.0000		
Chromium, total	ug/L	MW-2A	07/21/2015	ND	8.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Chromium, total	ug/L	MW-2A	09/22/2015	ND	8.0000		
Chromium, total	ug/L	MW-2A	04/11/2016	ND	8.0000		
Chromium, total	ug/L	MW-2A	10/12/2016	ND	8.0000		
Chromium, total	ug/L	MW-2A	04/13/2017	ND	8.0000		
Chromium, total	ug/L	MW-2A	10/25/2017	ND	8.0000		
Chromium, total	ug/L	MW-2A	04/12/2018	ND	8.0000		
Chromium, total	ug/L	MW-2A	10/16/2018	ND	8.0000		
Chromium, total	ug/L	MW-2A	04/18/2019	ND	8.0000		
Chromium, total	ug/L	MW-2A	10/15/2019	ND	8.0000		
Chromium, total	ug/L	MW-2A	04/06/2020	ND	8.0000		
Chromium, total	ug/L	MW-2A	10/15/2020	ND	8.0000		
Chromium, total	ug/L	MW-2A	04/12/2021	ND	8.0000		
Chromium, total	ug/L	MW-2A	10/06/2021	ND	8.0000		
Chromium, total	ug/L	MW-2A	04/14/2022	ND	8.0000		
Chromium, total	ug/L	MW-2A	10/25/2022	ND	8.0000		
Chromium, total	ug/L	MW-2A	04/19/2023	ND	8.0000		
Chromium, total	ug/L	MW-2A	10/23/2023	ND	8.0000		
Chromium, total	ug/L	MW-2A	04/09/2024	ND	8.0000		
Cobalt, total	ug/L	MW-2A	10/15/2014	ND	0.8000		
Cobalt, total	ug/L	MW-2A	01/12/2015		0.9000		
Cobalt, total	ug/L	MW-2A	04/13/2015	ND	0.8000		
Cobalt, total	ug/L	MW-2A	07/21/2015	ND	0.8000		
Cobalt, total	ug/L	MW-2A	09/22/2015	ND	0.8000		
Cobalt, total	ug/L	MW-2A	04/11/2016	ND	0.8000		
Cobalt, total	ug/L	MW-2A	10/12/2016	ND	0.8000		
Cobalt, total	ug/L	MW-2A	04/13/2017	ND	0.8000		
Cobalt, total	ug/L	MW-2A	10/25/2017	ND	0.8000		
Cobalt, total	ug/L	MW-2A	04/12/2018	ND	0.8000		
Cobalt, total	ug/L	MW-2A	10/16/2018	ND	0.8000		
Cobalt, total	ug/L	MW-2A	04/18/2019	ND	0.8000		
Cobalt, total	ug/L	MW-2A	10/15/2019	ND	0.8000		
Cobalt, total	ug/L	MW-2A	04/06/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-2A	10/15/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-2A	04/12/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-2A	10/06/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-2A	04/14/2022	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-2A	10/25/2022	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-2A	04/19/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-2A	10/23/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-2A	04/09/2024	ND	0.4000	0.8000	**
Copper, total	ug/L	MW-2A	10/15/2014	ND	4.0000		
Copper, total	ug/L	MW-2A	01/12/2015	ND	4.0000		
Copper, total	ug/L	MW-2A	04/13/2015	ND	4.0000		
Copper, total	ug/L	MW-2A	07/21/2015	ND	4.0000		
Copper, total	ug/L	MW-2A	09/22/2015	ND	4.0000		
Copper, total	ug/L	MW-2A	04/11/2016		27.3000		*
Copper, total	ug/L	MW-2A	10/12/2016	ND	4.0000		
Copper, total	ug/L	MW-2A	04/13/2017	ND	4.0000		
Copper, total	ug/L	MW-2A	10/25/2017	ND	4.0000		
Copper, total	ug/L	MW-2A	04/12/2018	ND	4.0000		
Copper, total	ug/L	MW-2A	10/16/2018	ND	4.0000		
Copper, total	ug/L	MW-2A	04/18/2019	ND	4.0000		
Copper, total	ug/L	MW-2A	10/15/2019	ND	4.0000		
Copper, total	ug/L	MW-2A	04/06/2020	ND	4.0000		
Copper, total	ug/L	MW-2A	10/15/2020	ND	4.0000		
Copper, total	ug/L	MW-2A	04/12/2021	ND	4.0000		
Copper, total	ug/L	MW-2A	10/06/2021	ND	4.0000		
Copper, total	ug/L	MW-2A	04/14/2022	ND	4.0000		
Copper, total	ug/L	MW-2A	10/25/2022	ND	4.0000		
Copper, total	ug/L	MW-2A	04/19/2023		12.6000		*
Copper, total	ug/L	MW-2A	10/23/2023	ND	4.0000		
Copper, total	ug/L	MW-2A	04/09/2024	ND	4.0000		
Lead, total	ug/L	MW-2A	10/15/2014	ND	4.0000		
Lead, total	ug/L	MW-2A	01/12/2015	ND	4.0000		
Lead, total	ug/L	MW-2A	04/13/2015	ND	4.0000		
Lead, total	ug/L	MW-2A	07/21/2015	ND	4.0000		
Lead, total	ug/L	MW-2A	09/22/2015	ND	4.0000		
Lead, total	ug/L	MW-2A	04/11/2016	ND	4.0000		
Lead, total	ug/L	MW-2A	10/12/2016	ND	4.0000		
Lead, total	ug/L	MW-2A	04/13/2017	ND	4.0000		
Lead, total	ug/L	MW-2A	10/25/2017	ND	4.0000		
Lead, total	ug/L	MW-2A	04/12/2018	ND	4.0000		
Lead, total	ug/L	MW-2A	10/16/2018	ND	4.0000		
Lead, total	ug/L	MW-2A	04/18/2019	ND	4.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted
Lead, total	ug/L	MW-2A	10/15/2019	ND	4.0000	
Lead, total	ug/L	MW-2A	04/06/2020	ND	4.0000	
Lead, total	ug/L	MW-2A	10/15/2020	ND	4.0000	
Lead, total	ug/L	MW-2A	04/12/2021	ND	4.0000	
Lead, total	ug/L	MW-2A	10/06/2021	ND	4.0000	
Lead, total	ug/L	MW-2A	04/14/2022	ND	4.0000	
Lead, total	ug/L	MW-2A	10/25/2022	ND	4.0000	
Lead, total	ug/L	MW-2A	04/19/2023	ND	4.0000	
Lead, total	ug/L	MW-2A	10/23/2023	ND	4.0000	
Lead, total	ug/L	MW-2A	04/09/2024	ND	4.0000	
Nickel, total	ug/L	MW-2A	10/15/2014	ND	4.0000	
Nickel, total	ug/L	MW-2A	01/12/2015		4.7000	
Nickel, total	ug/L	MW-2A	04/13/2015	ND	4.0000	
Nickel, total	ug/L	MW-2A	07/21/2015	ND	4.0000	
Nickel, total	ug/L	MW-2A	09/22/2015	ND	4.0000	
Nickel, total	ug/L	MW-2A	04/11/2016	ND	4.0000	
Nickel, total	ug/L	MW-2A	10/12/2016	ND	4.0000	
Nickel, total	ug/L	MW-2A	04/13/2017	ND	4.0000	
Nickel, total	ug/L	MW-2A	10/25/2017		7.1000	
Nickel, total	ug/L	MW-2A	04/12/2018	ND	4.0000	
Nickel, total	ug/L	MW-2A	10/16/2018	ND	4.0000	
Nickel, total	ug/L	MW-2A	04/18/2019	ND	4.0000	
Nickel, total	ug/L	MW-2A	10/15/2019		5.3000	
Nickel, total	ug/L	MW-2A	04/06/2020	ND	4.0000	
Nickel, total	ug/L	MW-2A	10/15/2020	ND	4.0000	
Nickel, total	ug/L	MW-2A	04/12/2021	ND	4.0000	
Nickel, total	ug/L	MW-2A	10/06/2021		4.8000	
Nickel, total	ug/L	MW-2A	04/14/2022	ND	4.0000	
Nickel, total	ug/L	MW-2A	10/25/2022	ND	4.0000	
Nickel, total	ug/L	MW-2A	04/19/2023	ND	4.0000	
Nickel, total	ug/L	MW-2A	10/23/2023	ND	4.0000	
Nickel, total	ug/L	MW-2A	04/09/2024	ND	4.0000	
Selenium, total	ug/L	MW-2A	10/15/2014	ND	4.0000	
Selenium, total	ug/L	MW-2A	01/12/2015	ND	4.0000	
Selenium, total	ug/L	MW-2A	04/13/2015	ND	4.0000	
Selenium, total	ug/L	MW-2A	07/21/2015	ND	4.0000	
Selenium, total	ug/L	MW-2A	09/22/2015	ND	4.0000	
Selenium, total	ug/L	MW-2A	04/11/2016	ND	4.0000	
Selenium, total	ug/L	MW-2A	10/12/2016	ND	4.0000	
Selenium, total	ug/L	MW-2A	04/13/2017	ND	4.0000	
Selenium, total	ug/L	MW-2A	10/25/2017	ND	4.0000	
Selenium, total	ug/L	MW-2A	04/12/2018	ND	4.0000	
Selenium, total	ug/L	MW-2A	10/16/2018	ND	4.0000	
Selenium, total	ug/L	MW-2A	04/18/2019	ND	4.0000	
Selenium, total	ug/L	MW-2A	10/15/2019	ND	4.0000	
Selenium, total	ug/L	MW-2A	04/06/2020	ND	4.0000	
Selenium, total	ug/L	MW-2A	10/15/2020	ND	4.0000	
Selenium, total	ug/L	MW-2A	04/12/2021	ND	4.0000	
Selenium, total	ug/L	MW-2A	10/06/2021	ND	4.0000	
Selenium, total	ug/L	MW-2A	04/14/2022	ND	4.0000	
Selenium, total	ug/L	MW-2A	10/25/2022	ND	4.0000	
Selenium, total	ug/L	MW-2A	04/19/2023	ND	4.0000	
Selenium, total	ug/L	MW-2A	10/23/2023	ND	4.0000	
Selenium, total	ug/L	MW-2A	04/09/2024	ND	4.0000	
Silver, total	ug/L	MW-2A	10/15/2014	ND	4.0000	
Silver, total	ug/L	MW-2A	01/12/2015	ND	4.0000	
Silver, total	ug/L	MW-2A	04/13/2015	ND	4.0000	
Silver, total	ug/L	MW-2A	07/21/2015	ND	4.0000	
Silver, total	ug/L	MW-2A	09/22/2015	ND	4.0000	
Silver, total	ug/L	MW-2A	04/11/2016	ND	4.0000	
Silver, total	ug/L	MW-2A	10/12/2016	ND	4.0000	
Silver, total	ug/L	MW-2A	04/13/2017	ND	4.0000	
Silver, total	ug/L	MW-2A	10/25/2017	ND	4.0000	
Silver, total	ug/L	MW-2A	04/12/2018	ND	4.0000	
Silver, total	ug/L	MW-2A	10/16/2018	ND	4.0000	
Silver, total	ug/L	MW-2A	04/18/2019	ND	4.0000	
Silver, total	ug/L	MW-2A	10/15/2019	ND	4.0000	
Silver, total	ug/L	MW-2A	04/06/2020	ND	4.0000	
Silver, total	ug/L	MW-2A	10/15/2020	ND	4.0000	
Silver, total	ug/L	MW-2A	04/12/2021	ND	4.0000	
Silver, total	ug/L	MW-2A	10/06/2021	ND	4.0000	
Silver, total	ug/L	MW-2A	04/14/2022	ND	4.0000	
Silver, total	ug/L	MW-2A	10/25/2022	ND	4.0000	
Silver, total	ug/L	MW-2A	04/19/2023	ND	4.0000	
Silver, total	ug/L	MW-2A	10/23/2023	ND	4.0000	
Silver, total	ug/L	MW-2A	04/09/2024	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-2A	10/23/2023	ND	4.0000		
Silver, total	ug/L	MW-2A	04/09/2024	ND	4.0000		
Thallium, total	ug/L	MW-2A	10/15/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-2A	01/12/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-2A	04/13/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-2A	07/21/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-2A	09/22/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-2A	04/11/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-2A	10/12/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-2A	04/13/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-2A	10/25/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-2A	04/12/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-2A	10/16/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-2A	04/18/2019	ND	2.0000		
Thallium, total	ug/L	MW-2A	10/15/2019	ND	2.0000		
Thallium, total	ug/L	MW-2A	04/06/2020	ND	2.0000		
Thallium, total	ug/L	MW-2A	10/15/2020	ND	2.0000		
Thallium, total	ug/L	MW-2A	04/12/2021	ND	2.0000		
Thallium, total	ug/L	MW-2A	10/06/2021	ND	2.0000		
Thallium, total	ug/L	MW-2A	04/14/2022	ND	2.0000		
Thallium, total	ug/L	MW-2A	10/25/2022	ND	2.0000		
Thallium, total	ug/L	MW-2A	04/19/2023	ND	2.0000		
Thallium, total	ug/L	MW-2A	10/23/2023	ND	2.0000		
Thallium, total	ug/L	MW-2A	04/09/2024	ND	2.0000		
Vanadium, total	ug/L	MW-2A	10/15/2014	ND	20.0000		
Vanadium, total	ug/L	MW-2A	01/12/2015	ND	20.0000		
Vanadium, total	ug/L	MW-2A	04/13/2015	ND	20.0000		
Vanadium, total	ug/L	MW-2A	07/21/2015	ND	20.0000		
Vanadium, total	ug/L	MW-2A	09/22/2015	ND	20.0000		
Vanadium, total	ug/L	MW-2A	04/11/2016	ND	20.0000		
Vanadium, total	ug/L	MW-2A	10/12/2016	ND	20.0000		
Vanadium, total	ug/L	MW-2A	04/13/2017	ND	20.0000		
Vanadium, total	ug/L	MW-2A	10/25/2017	ND	20.0000		
Vanadium, total	ug/L	MW-2A	04/12/2018	ND	20.0000		
Vanadium, total	ug/L	MW-2A	10/16/2018	ND	20.0000		
Vanadium, total	ug/L	MW-2A	04/18/2019	ND	20.0000		
Vanadium, total	ug/L	MW-2A	10/15/2019	ND	20.0000		
Vanadium, total	ug/L	MW-2A	04/06/2020	ND	20.0000		
Vanadium, total	ug/L	MW-2A	10/15/2020	ND	20.0000		
Vanadium, total	ug/L	MW-2A	04/12/2021	ND	20.0000		
Vanadium, total	ug/L	MW-2A	10/06/2021	ND	20.0000		
Vanadium, total	ug/L	MW-2A	04/14/2022	ND	20.0000		
Vanadium, total	ug/L	MW-2A	10/25/2022	ND	20.0000		
Vanadium, total	ug/L	MW-2A	04/19/2023	ND	20.0000		
Vanadium, total	ug/L	MW-2A	10/23/2023	ND	20.0000		
Vanadium, total	ug/L	MW-2A	04/09/2024	ND	20.0000		
Zinc, total	ug/L	MW-2A	10/15/2014		21.0000		
Zinc, total	ug/L	MW-2A	01/12/2015		10.0000		
Zinc, total	ug/L	MW-2A	04/13/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-2A	07/21/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-2A	09/22/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-2A	04/11/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-2A	10/12/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-2A	04/13/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-2A	10/25/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-2A	04/12/2018	ND	20.0000		
Zinc, total	ug/L	MW-2A	10/16/2018	ND	20.0000		
Zinc, total	ug/L	MW-2A	04/18/2019	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-2A	10/15/2019	ND	20.0000		
Zinc, total	ug/L	MW-2A	04/06/2020	ND	20.0000		
Zinc, total	ug/L	MW-2A	10/15/2020	ND	20.0000		
Zinc, total	ug/L	MW-2A	04/12/2021	ND	20.0000		
Zinc, total	ug/L	MW-2A	10/06/2021	ND	20.0000		
Zinc, total	ug/L	MW-2A	04/14/2022	ND	20.0000		
Zinc, total	ug/L	MW-2A	10/25/2022	ND	20.0000		
Zinc, total	ug/L	MW-2A	04/19/2023	ND	20.0000		
Zinc, total	ug/L	MW-2A	10/23/2023	ND	20.0000		
Zinc, total	ug/L	MW-2A	04/09/2024	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	MW-105B	04/09/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-105B	04/09/2024	ND	4.0000		4.0000
Barium, total	ug/L	MW-105B	04/09/2024		110.0000		546.9330
Beryllium, total	ug/L	MW-105B	04/09/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-105B	04/09/2024	ND	0.8000		0.8000
Chromium, total	ug/L	MW-105B	04/09/2024	ND	8.0000		8.0000
Cobalt, total	ug/L	MW-105B	04/09/2024	ND	0.4000		0.9000
Copper, total	ug/L	MW-105B	04/09/2024	ND	4.0000		8.4000
Lead, total	ug/L	MW-105B	04/09/2024	ND	4.0000		4.0000
Nickel, total	ug/L	MW-105B	04/09/2024	ND	4.0000		7.1000
Selenium, total	ug/L	MW-105B	04/09/2024	ND	4.0000		4.0000
Silver, total	ug/L	MW-105B	04/09/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW-105B	04/09/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-105B	04/09/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-105B	04/09/2024	ND	20.0000		21.0000
Antimony, total	ug/L	MW-108A	04/09/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-108A	04/09/2024		9.4000	***	4.0000
Barium, total	ug/L	MW-108A	04/09/2024		26.9000		546.9330
Beryllium, total	ug/L	MW-108A	04/09/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-108A	04/09/2024	ND	0.8000	**	0.8000
Chromium, total	ug/L	MW-108A	04/09/2024	ND	8.0000		8.0000
Cobalt, total	ug/L	MW-108A	04/09/2024		27.6000	***	0.9000
Copper, total	ug/L	MW-108A	04/09/2024		6.3000		8.4000
Lead, total	ug/L	MW-108A	04/09/2024	ND	4.0000		4.0000
Nickel, total	ug/L	MW-108A	04/09/2024		55.6000	***	7.1000
Selenium, total	ug/L	MW-108A	04/09/2024	ND	4.0000		4.0000
Silver, total	ug/L	MW-108A	04/09/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW-108A	04/09/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-108A	04/09/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-108A	04/09/2024		21.1000	***	21.0000
Antimony, total	ug/L	MW-110A	04/09/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-110A	04/09/2024		7.0000	***	4.0000
Barium, total	ug/L	MW-110A	04/09/2024		199.0000	**	546.9330
Beryllium, total	ug/L	MW-110A	04/09/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-110A	04/09/2024	ND	0.8000		0.8000
Chromium, total	ug/L	MW-110A	04/09/2024	ND	8.0000		8.0000
Cobalt, total	ug/L	MW-110A	04/09/2024		1460.0000	***	0.9000
Copper, total	ug/L	MW-110A	04/09/2024		4.2000		8.4000
Lead, total	ug/L	MW-110A	04/09/2024	ND	4.0000		4.0000
Nickel, total	ug/L	MW-110A	04/09/2024		456.0000	***	7.1000
Selenium, total	ug/L	MW-110A	04/09/2024	ND	4.0000		4.0000
Silver, total	ug/L	MW-110A	04/09/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW-110A	04/09/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-110A	04/09/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-110A	04/09/2024		21.4000	***	21.0000
Antimony, total	ug/L	MW-3	04/09/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-3	04/09/2024	ND	4.0000		4.0000
Barium, total	ug/L	MW-3	04/09/2024		47.1000		546.9330
Beryllium, total	ug/L	MW-3	04/09/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-3	04/09/2024	ND	0.8000		0.8000
Chromium, total	ug/L	MW-3	04/09/2024	ND	8.0000		8.0000
Cobalt, total	ug/L	MW-3	04/09/2024	ND	0.4000		0.9000
Copper, total	ug/L	MW-3	04/09/2024	ND	4.0000		8.4000
Lead, total	ug/L	MW-3	04/09/2024	ND	4.0000		4.0000
Nickel, total	ug/L	MW-3	04/09/2024	ND	4.0000		7.1000
Selenium, total	ug/L	MW-3	04/09/2024	ND	4.0000		4.0000
Silver, total	ug/L	MW-3	04/09/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW-3	04/09/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-3	04/09/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-3	04/09/2024	ND	20.0000		21.0000
Antimony, total	ug/L	MW-4	04/09/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-4	04/09/2024	ND	4.0000		4.0000
Barium, total	ug/L	MW-4	04/09/2024		150.0000		546.9330
Beryllium, total	ug/L	MW-4	04/09/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-4	04/09/2024	ND	0.8000		0.8000
Chromium, total	ug/L	MW-4	04/09/2024	ND	8.0000		8.0000
Cobalt, total	ug/L	MW-4	04/09/2024	ND	0.4000		0.9000
Copper, total	ug/L	MW-4	04/09/2024	ND	4.0000		8.4000
Lead, total	ug/L	MW-4	04/09/2024	ND	4.0000		4.0000
Nickel, total	ug/L	MW-4	04/09/2024	ND	4.0000		7.1000
Selenium, total	ug/L	MW-4	04/09/2024	ND	4.0000		4.0000
Silver, total	ug/L	MW-4	04/09/2024	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-4	04/09/2024	ND	2.0000	2.0000
Vanadium, total	ug/L	MW-4	04/09/2024	ND	20.0000	20.0000
Zinc, total	ug/L	MW-4	04/09/2024	ND	20.0000	21.0000

- * - 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	Upgradient			Downgradient		
	Detect	N	Proportion	Detect	N	Proportion
Antimony, total	0	44	0.000	0	130	0.000
Arsenic, total	0	44	0.000	103	192	0.536
Barium, total	44	44	1.000	216	216	1.000
Beryllium, total	0	44	0.000	0	130	0.000
Cadmium, total	0	43	0.000	17	143	0.119
Chromium, total	0	44	0.000	17	166	0.102
Cobalt, total	1	44	0.023	159	224	0.710
Copper, total	1	42	0.024	47	176	0.267
Lead, total	0	44	0.000	22	154	0.143
Nickel, total	4	44	0.091	132	218	0.606
Selenium, total	0	44	0.000	0	130	0.000
Silver, total	0	44	0.000	0	130	0.000
Thallium, total	0	44	0.000	0	130	0.000
Vanadium, total	0	44	0.000	15	154	0.097
Zinc, total	2	44	0.045	90	217	0.415

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	44	0.000									nonpar
Arsenic, total	0	44	0.000									nonpar
Barium, total	44	44	1.000	1.049	1.479					2.326	normal	normal
Beryllium, total	0	44	0.000									nonpar
Cadmium, total	0	43	0.000									nonpar
Chromium, total	0	44	0.000									nonpar
Cobalt, total	1	44	0.023									nonpar
Copper, total	1	42	0.024									nonpar
Lead, total	0	44	0.000									nonpar
Nickel, total	4	44	0.091	1.215	0.965					2.326	normal	nonpar
Selenium, total	0	44	0.000									nonpar
Silver, total	0	44	0.000									nonpar
Thallium, total	0	44	0.000									nonpar
Vanadium, total	0	44	0.000									nonpar
Zinc, total	2	44	0.045									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	44					2.0000	nonpar	***	0.99
Arsenic, total	ug/L	0	44					4.0000	nonpar	***	0.99
Barium, total	ug/L	44	44	194.4273	144.2646	0.0100	2.4435	546.9330	normal		
Beryllium, total	ug/L	0	44					4.0000	nonpar	***	0.99
Cadmium, total	ug/L	0	43					0.8000	nonpar	***	0.99
Chromium, total	ug/L	0	44					8.0000	nonpar	***	0.99
Cobalt, total	ug/L	1	44					0.9000	nonpar		0.99
Copper, total	ug/L	1	42					8.4000	nonpar		0.99
Lead, total	ug/L	0	44					4.0000	nonpar	***	0.99
Nickel, total	ug/L	4	44					7.1000	nonpar		0.99
Selenium, total	ug/L	0	44					4.0000	nonpar	***	0.99
Silver, total	ug/L	0	44					4.0000	nonpar	***	0.99
Thallium, total	ug/L	0	44					2.0000	nonpar	***	0.99
Vanadium, total	ug/L	0	44					20.0000	nonpar	***	0.99
Zinc, total	ug/L	2	44					21.0000	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
1% Significance Level**

Constituent	Units	Well	Date	Result	ND Qualifier	Date Range	N	Critical Value
Copper, total	ug/L	MW-2A	04/11/2016	27.3000		10/15/2014-04/09/2024	22	0.5263
Copper, total	ug/L	MW-2A	04/19/2023	12.6000		10/15/2014-04/09/2024	22	0.5263

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

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

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

Table 8

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

Constituent	Units	Well	Date		Result	Pred. Limit
Arsenic, total	ug/L	MW-108A	09/01/2005		8.0000 *	4.0000
Arsenic, total	ug/L	MW-108A	04/01/2006		8.0000 *	4.0000
Arsenic, total	ug/L	MW-108A	09/01/2006		11.0000 *	4.0000
Arsenic, total	ug/L	MW-108A	04/01/2007		8.0000 *	4.0000
Arsenic, total	ug/L	MW-108A	09/01/2007		21.0000 *	4.0000
Arsenic, total	ug/L	MW-108A	04/01/2008		8.0000 *	4.0000
Arsenic, total	ug/L	MW-108A	10/01/2008		14.7000 *	4.0000
Arsenic, total	ug/L	MW-108A	04/04/2009		11.0500 *	4.0000
Arsenic, total	ug/L	MW-108A	06/09/2009		23.6000 *	4.0000
Arsenic, total	ug/L	MW-108A	07/09/2009		21.0000 *	4.0000
Arsenic, total	ug/L	MW-108A	10/09/2009		28.8500 *	4.0000
Arsenic, total	ug/L	MW-108A	04/10/2010		17.3000 *	4.0000
Arsenic, total	ug/L	MW-108A	04/13/2010		17.3000 *	4.0000
Arsenic, total	ug/L	MW-108A	06/10/2010		22.2000 *	4.0000
Arsenic, total	ug/L	MW-108A	06/29/2010		22.2000 *	4.0000
Arsenic, total	ug/L	MW-108A	09/10/2010		34.1000 *	4.0000
Arsenic, total	ug/L	MW-108A	09/27/2010		34.1000 *	4.0000
Arsenic, total	ug/L	MW-108A	04/01/2011		23.9000 *	4.0000
Arsenic, total	ug/L	MW-108A	04/11/2011		23.9000 *	4.0000
Arsenic, total	ug/L	MW-108A	09/01/2011		32.9000 *	4.0000
Arsenic, total	ug/L	MW-108A	04/09/2012		32.2000 *	4.0000
Arsenic, total	ug/L	MW-108A	09/10/2012		23.6000 *	4.0000
Arsenic, total	ug/L	MW-108A	04/15/2013		26.3000 *	4.0000
Arsenic, total	ug/L	MW-108A	10/07/2013		28.8000 *	4.0000
Arsenic, total	ug/L	MW-108A	04/17/2014		28.4000 *	4.0000
Arsenic, total	ug/L	MW-108A	10/15/2014		24.4000 *	4.0000
Arsenic, total	ug/L	MW-108A	04/13/2015		16.8000 *	4.0000
Arsenic, total	ug/L	MW-108A	09/22/2015		20.1000 *	4.0000
Arsenic, total	ug/L	MW-108A	04/11/2016		18.6000 *	4.0000
Arsenic, total	ug/L	MW-108A	10/12/2016		27.9000 *	4.0000
Arsenic, total	ug/L	MW-108A	04/13/2017		17.1000 *	4.0000
Arsenic, total	ug/L	MW-108A	10/25/2017		7.9000 *	4.0000
Arsenic, total	ug/L	MW-108A	04/12/2018		10.7000 *	4.0000
Arsenic, total	ug/L	MW-108A	10/16/2018		17.5000 *	4.0000
Arsenic, total	ug/L	MW-108A	04/18/2019		16.5000 *	4.0000
Arsenic, total	ug/L	MW-108A	10/15/2019		11.6000 *	4.0000
Arsenic, total	ug/L	MW-108A	04/06/2020		6.4000 *	4.0000
Arsenic, total	ug/L	MW-108A	10/15/2020		21.5000 *	4.0000
Arsenic, total	ug/L	MW-108A	04/12/2021	ND	4.0000	4.0000
Arsenic, total	ug/L	MW-108A	10/06/2021		4.1000 *	4.0000
Arsenic, total	ug/L	MW-108A	04/14/2022		9.0000 *	4.0000
Arsenic, total	ug/L	MW-108A	10/25/2022		12.4000 *	4.0000
Arsenic, total	ug/L	MW-108A	04/19/2023	ND	4.0000	4.0000
Arsenic, total	ug/L	MW-108A	10/23/2023		14.1000 *	4.0000
Arsenic, total	ug/L	MW-108A	04/09/2024		9.4000 *	4.0000
Cadmium, total	ug/L	MW-108A	04/04/2009	ND	1.0000	0.8000
Cadmium, total	ug/L	MW-108A	04/09/2012	ND	0.8000	0.8000
Cadmium, total	ug/L	MW-108A	09/10/2012	ND	0.8000	0.8000
Cadmium, total	ug/L	MW-108A	04/15/2013	ND	0.8000	0.8000
Cadmium, total	ug/L	MW-108A	10/07/2013	ND	0.8000	0.8000
Cadmium, total	ug/L	MW-108A	04/17/2014	ND	0.8000	0.8000
Cadmium, total	ug/L	MW-108A	10/15/2014	ND	0.8000	0.8000
Cadmium, total	ug/L	MW-108A	04/13/2015	ND	0.8000	0.8000
Cadmium, total	ug/L	MW-108A	09/22/2015	ND	0.8000	0.8000
Cadmium, total	ug/L	MW-108A	04/11/2016	ND	0.8000	0.8000
Cadmium, total	ug/L	MW-108A	10/12/2016	ND	0.8000	0.8000
Cadmium, total	ug/L	MW-108A	04/13/2017	ND	0.8000	0.8000
Cadmium, total	ug/L	MW-108A	10/25/2017	ND	0.8000	0.8000
Cadmium, total	ug/L	MW-108A	04/12/2018	ND	0.8000	0.8000
Cadmium, total	ug/L	MW-108A	10/16/2018	ND	0.8000	0.8000
Cadmium, total	ug/L	MW-108A	04/18/2019	ND	0.8000	0.8000
Cadmium, total	ug/L	MW-108A	10/15/2019	ND	0.8000	0.8000
Cadmium, total	ug/L	MW-108A	04/06/2020	ND	0.8000	0.8000
Cadmium, total	ug/L	MW-108A	10/15/2020	ND	0.8000	0.8000
Cadmium, total	ug/L	MW-108A	04/12/2021	ND	0.8000	0.8000
Cadmium, total	ug/L	MW-108A	10/06/2021		2.0000 *	0.8000
Cadmium, total	ug/L	MW-108A	04/14/2022		3.4000 *	0.8000
Cadmium, total	ug/L	MW-108A	10/25/2022	ND	0.8000	0.8000
Cadmium, total	ug/L	MW-108A	04/19/2023	ND	0.8000	0.8000
Cadmium, total	ug/L	MW-108A	10/23/2023		1.5000 *	0.8000
Cadmium, total	ug/L	MW-108A	04/09/2024	ND	0.8000	0.8000

* - 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-108A	09/01/2005		17.0000 *	0.9000
Cobalt, total	ug/L	MW-108A	04/01/2006		17.0000 *	0.9000
Cobalt, total	ug/L	MW-108A	09/01/2006		19.0000 *	0.9000
Cobalt, total	ug/L	MW-108A	04/01/2007		25.0000 *	0.9000
Cobalt, total	ug/L	MW-108A	09/01/2007		64.0000 *	0.9000
Cobalt, total	ug/L	MW-108A	04/01/2008		28.0000 *	0.9000
Cobalt, total	ug/L	MW-108A	10/01/2008		21.1000 *	0.9000
Cobalt, total	ug/L	MW-108A	04/04/2009		34.9000 *	0.9000
Cobalt, total	ug/L	MW-108A	06/09/2009		114.0000 *	0.9000
Cobalt, total	ug/L	MW-108A	07/09/2009		71.0000 *	0.9000
Cobalt, total	ug/L	MW-108A	10/09/2009		86.0000 *	0.9000
Cobalt, total	ug/L	MW-108A	04/10/2010		43.8000 *	0.9000
Cobalt, total	ug/L	MW-108A	04/13/2010		43.8000 *	0.9000
Cobalt, total	ug/L	MW-108A	06/10/2010		68.5000 *	0.9000
Cobalt, total	ug/L	MW-108A	06/29/2010		68.5000 *	0.9000
Cobalt, total	ug/L	MW-108A	09/10/2010		53.4000 *	0.9000
Cobalt, total	ug/L	MW-108A	09/27/2010		53.4000 *	0.9000
Cobalt, total	ug/L	MW-108A	04/01/2011		71.1000 *	0.9000
Cobalt, total	ug/L	MW-108A	04/11/2011		71.1000 *	0.9000
Cobalt, total	ug/L	MW-108A	09/01/2011		63.6000 *	0.9000
Cobalt, total	ug/L	MW-108A	04/09/2012		92.2000 *	0.9000
Cobalt, total	ug/L	MW-108A	09/10/2012		29.5000 *	0.9000
Cobalt, total	ug/L	MW-108A	04/15/2013		123.0000 *	0.9000
Cobalt, total	ug/L	MW-108A	10/07/2013		29.7000 *	0.9000
Cobalt, total	ug/L	MW-108A	04/17/2014		83.7000 *	0.9000
Cobalt, total	ug/L	MW-108A	10/15/2014		3.9000 *	0.9000
Cobalt, total	ug/L	MW-108A	04/13/2015		17.5000 *	0.9000
Cobalt, total	ug/L	MW-108A	09/22/2015		5.3000 *	0.9000
Cobalt, total	ug/L	MW-108A	04/11/2016		5.2000 *	0.9000
Cobalt, total	ug/L	MW-108A	10/12/2016		2.9000 *	0.9000
Cobalt, total	ug/L	MW-108A	04/13/2017	ND	0.8000	0.9000
Cobalt, total	ug/L	MW-108A	10/25/2017		149.0000 *	0.9000
Cobalt, total	ug/L	MW-108A	01/12/2018	ND	0.8000	0.9000
Cobalt, total	ug/L	MW-108A	04/12/2018		1.1000 *	0.9000
Cobalt, total	ug/L	MW-108A	10/16/2018	ND	0.8000	0.9000
Cobalt, total	ug/L	MW-108A	04/18/2019	ND	0.8000	0.9000
Cobalt, total	ug/L	MW-108A	10/15/2019	ND	0.8000	0.9000
Cobalt, total	ug/L	MW-108A	04/06/2020	ND	0.4000	0.9000
Cobalt, total	ug/L	MW-108A	10/15/2020	ND	0.4000	0.9000
Cobalt, total	ug/L	MW-108A	04/12/2021		9.1000 *	0.9000
Cobalt, total	ug/L	MW-108A	10/06/2021		173.0000 *	0.9000
Cobalt, total	ug/L	MW-108A	04/14/2022		56.6000 *	0.9000
Cobalt, total	ug/L	MW-108A	10/25/2022		1.9000 *	0.9000
Cobalt, total	ug/L	MW-108A	04/19/2023		8.4000 *	0.9000
Cobalt, total	ug/L	MW-108A	10/23/2023		586.0000 *	0.9000
Cobalt, total	ug/L	MW-108A	04/09/2024		27.6000 *	0.9000
Nickel, total	ug/L	MW-108A	09/01/2005		9.0000 *	7.1000
Nickel, total	ug/L	MW-108A	04/01/2006		6.0000	7.1000
Nickel, total	ug/L	MW-108A	09/01/2006		10.0000 *	7.1000
Nickel, total	ug/L	MW-108A	04/01/2007		12.0000 *	7.1000
Nickel, total	ug/L	MW-108A	09/01/2007		59.0000 *	7.1000
Nickel, total	ug/L	MW-108A	04/01/2008		22.0000 *	7.1000
Nickel, total	ug/L	MW-108A	10/01/2008		19.1000 *	7.1000
Nickel, total	ug/L	MW-108A	04/04/2009		22.3000 *	7.1000
Nickel, total	ug/L	MW-108A	06/09/2009		79.4000 *	7.1000
Nickel, total	ug/L	MW-108A	07/09/2009		39.0000 *	7.1000
Nickel, total	ug/L	MW-108A	10/09/2009		59.7000 *	7.1000
Nickel, total	ug/L	MW-108A	04/10/2010		19.4000 *	7.1000
Nickel, total	ug/L	MW-108A	04/13/2010		19.4000 *	7.1000
Nickel, total	ug/L	MW-108A	06/10/2010		34.2000 *	7.1000
Nickel, total	ug/L	MW-108A	06/29/2010		34.2000 *	7.1000
Nickel, total	ug/L	MW-108A	09/10/2010		22.2000 *	7.1000
Nickel, total	ug/L	MW-108A	09/27/2010		22.2000 *	7.1000
Nickel, total	ug/L	MW-108A	04/01/2011		31.3000 *	7.1000
Nickel, total	ug/L	MW-108A	04/11/2011		31.3000 *	7.1000
Nickel, total	ug/L	MW-108A	09/01/2011		27.0000 *	7.1000
Nickel, total	ug/L	MW-108A	04/09/2012		52.2000 *	7.1000
Nickel, total	ug/L	MW-108A	09/10/2012		31.4000 *	7.1000
Nickel, total	ug/L	MW-108A	04/15/2013		88.4000 *	7.1000
Nickel, total	ug/L	MW-108A	10/07/2013		16.3000 *	7.1000
Nickel, total	ug/L	MW-108A	04/17/2014		34.1000 *	7.1000

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

Table 8

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

Constituent	Units	Well	Date		Result	Pred. Limit
Nickel, total	ug/L	MW-108A	10/15/2014		6.5000	7.1000
Nickel, total	ug/L	MW-108A	04/13/2015		10.6000	7.1000
Nickel, total	ug/L	MW-108A	09/22/2015		8.7000	7.1000
Nickel, total	ug/L	MW-108A	04/11/2016	ND	4.0000	7.1000
Nickel, total	ug/L	MW-108A	10/12/2016		5.2000	7.1000
Nickel, total	ug/L	MW-108A	04/13/2017	ND	4.0000	7.1000
Nickel, total	ug/L	MW-108A	10/25/2017		39.7000	7.1000
Nickel, total	ug/L	MW-108A	01/12/2018	ND	4.0000	7.1000
Nickel, total	ug/L	MW-108A	04/12/2018	ND	4.0000	7.1000
Nickel, total	ug/L	MW-108A	10/16/2018	ND	4.0000	7.1000
Nickel, total	ug/L	MW-108A	04/18/2019	ND	4.0000	7.1000
Nickel, total	ug/L	MW-108A	10/15/2019	ND	4.0000	7.1000
Nickel, total	ug/L	MW-108A	04/06/2020	ND	4.0000	7.1000
Nickel, total	ug/L	MW-108A	10/15/2020	ND	4.0000	7.1000
Nickel, total	ug/L	MW-108A	04/12/2021		7.6000	7.1000
Nickel, total	ug/L	MW-108A	10/06/2021		46.9000	7.1000
Nickel, total	ug/L	MW-108A	04/14/2022		77.7000	7.1000
Nickel, total	ug/L	MW-108A	10/25/2022	ND	4.0000	7.1000
Nickel, total	ug/L	MW-108A	04/19/2023		34.6000	7.1000
Nickel, total	ug/L	MW-108A	10/23/2023		292.0000	7.1000
Nickel, total	ug/L	MW-108A	04/09/2024		55.6000	7.1000
Zinc, total	ug/L	MW-108A	09/01/2005		11.0000	21.0000
Zinc, total	ug/L	MW-108A	04/01/2006	ND	10.0000	21.0000
Zinc, total	ug/L	MW-108A	09/01/2006		12.0000	21.0000
Zinc, total	ug/L	MW-108A	04/01/2007		12.0000	21.0000
Zinc, total	ug/L	MW-108A	09/01/2007		26.0000	21.0000
Zinc, total	ug/L	MW-108A	04/01/2008	ND	10.0000	21.0000
Zinc, total	ug/L	MW-108A	10/01/2008	ND	10.0000	21.0000
Zinc, total	ug/L	MW-108A	04/04/2009		11.1000	21.0000
Zinc, total	ug/L	MW-108A	06/09/2009		84.9000	21.0000
Zinc, total	ug/L	MW-108A	07/09/2009		44.0000	21.0000
Zinc, total	ug/L	MW-108A	10/09/2009		48.0500	21.0000
Zinc, total	ug/L	MW-108A	04/10/2010	ND	10.0000	21.0000
Zinc, total	ug/L	MW-108A	04/13/2010	ND	10.0000	21.0000
Zinc, total	ug/L	MW-108A	06/10/2010		15.5000	21.0000
Zinc, total	ug/L	MW-108A	06/29/2010		15.5000	21.0000
Zinc, total	ug/L	MW-108A	09/10/2010		11.5000	21.0000
Zinc, total	ug/L	MW-108A	09/27/2010		11.5000	21.0000
Zinc, total	ug/L	MW-108A	04/01/2011	ND	8.0000	21.0000
Zinc, total	ug/L	MW-108A	04/11/2011	ND	8.0000	21.0000
Zinc, total	ug/L	MW-108A	09/01/2011	ND	8.0000	21.0000
Zinc, total	ug/L	MW-108A	04/09/2012		9.0000	21.0000
Zinc, total	ug/L	MW-108A	09/10/2012		20.0000	21.0000
Zinc, total	ug/L	MW-108A	04/15/2013		30.6000	21.0000
Zinc, total	ug/L	MW-108A	10/07/2013	ND	20.0000	21.0000
Zinc, total	ug/L	MW-108A	04/17/2014	ND	8.0000	21.0000
Zinc, total	ug/L	MW-108A	10/15/2014	ND	20.0000	21.0000
Zinc, total	ug/L	MW-108A	04/13/2015	ND	8.0000	21.0000
Zinc, total	ug/L	MW-108A	09/22/2015	ND	8.0000	21.0000
Zinc, total	ug/L	MW-108A	04/11/2016	ND	8.0000	21.0000
Zinc, total	ug/L	MW-108A	10/12/2016	ND	8.0000	21.0000
Zinc, total	ug/L	MW-108A	04/13/2017	ND	8.0000	21.0000
Zinc, total	ug/L	MW-108A	10/25/2017		9.0000	21.0000
Zinc, total	ug/L	MW-108A	04/12/2018	ND	20.0000	21.0000
Zinc, total	ug/L	MW-108A	10/16/2018	ND	20.0000	21.0000
Zinc, total	ug/L	MW-108A	04/18/2019	ND	8.0000	21.0000
Zinc, total	ug/L	MW-108A	10/15/2019	ND	20.0000	21.0000
Zinc, total	ug/L	MW-108A	04/06/2020	ND	20.0000	21.0000
Zinc, total	ug/L	MW-108A	10/15/2020	ND	20.0000	21.0000
Zinc, total	ug/L	MW-108A	04/12/2021	ND	20.0000	21.0000
Zinc, total	ug/L	MW-108A	10/06/2021		61.4000	21.0000
Zinc, total	ug/L	MW-108A	04/14/2022		35.7000	21.0000
Zinc, total	ug/L	MW-108A	10/25/2022	ND	20.0000	21.0000
Zinc, total	ug/L	MW-108A	04/19/2023	ND	20.0000	21.0000
Zinc, total	ug/L	MW-108A	10/23/2023		28.1000	21.0000
Zinc, total	ug/L	MW-108A	04/09/2024		21.1000	21.0000
Arsenic, total	ug/L	MW-110A	09/01/2005		8.0000	4.0000
Arsenic, total	ug/L	MW-110A	04/01/2006		6.0000	4.0000
Arsenic, total	ug/L	MW-110A	09/01/2006		11.0000	4.0000
Arsenic, total	ug/L	MW-110A	04/01/2007		11.0000	4.0000
Arsenic, total	ug/L	MW-110A	09/01/2007		18.0000	4.0000

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

Table 8

**Historical Downgradient Data for Constituent-Well Combinations
that Failed the Current Statistical Evaluation or
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Constituent	Units	Well	Date		Result	Pred. Limit
Arsenic, total	ug/L	MW-110A	04/01/2008	ND	12.0000 *	4.0000
Arsenic, total	ug/L	MW-110A	10/01/2008		16.4000 *	4.0000
Arsenic, total	ug/L	MW-110A	04/04/2009		17.9000 *	4.0000
Arsenic, total	ug/L	MW-110A	06/09/2009		20.0000 *	4.0000
Arsenic, total	ug/L	MW-110A	07/09/2009		22.0000 *	4.0000
Arsenic, total	ug/L	MW-110A	10/09/2009		34.4500 *	4.0000
Arsenic, total	ug/L	MW-110A	04/10/2010		16.6000 *	4.0000
Arsenic, total	ug/L	MW-110A	04/13/2010		16.6000 *	4.0000
Arsenic, total	ug/L	MW-110A	06/10/2010		24.6000 *	4.0000
Arsenic, total	ug/L	MW-110A	06/29/2010		24.6000 *	4.0000
Arsenic, total	ug/L	MW-110A	09/10/2010		22.5000 *	4.0000
Arsenic, total	ug/L	MW-110A	09/27/2010		22.5000 *	4.0000
Arsenic, total	ug/L	MW-110A	04/01/2011		10.2000 *	4.0000
Arsenic, total	ug/L	MW-110A	04/11/2011		10.2000 *	4.0000
Arsenic, total	ug/L	MW-110A	09/01/2011		27.4000 *	4.0000
Arsenic, total	ug/L	MW-110A	04/09/2012		18.7000 *	4.0000
Arsenic, total	ug/L	MW-110A	09/10/2012		19.2000 *	4.0000
Arsenic, total	ug/L	MW-110A	04/15/2013		22.0000 *	4.0000
Arsenic, total	ug/L	MW-110A	10/07/2013		8.9000 *	4.0000
Arsenic, total	ug/L	MW-110A	04/17/2014		23.7000 *	4.0000
Arsenic, total	ug/L	MW-110A	10/15/2014		35.5000 *	4.0000
Arsenic, total	ug/L	MW-110A	04/13/2015		29.9000 *	4.0000
Arsenic, total	ug/L	MW-110A	09/22/2015		33.8000 *	4.0000
Arsenic, total	ug/L	MW-110A	04/11/2016		24.4000 *	4.0000
Arsenic, total	ug/L	MW-110A	10/12/2016		44.8000 *	4.0000
Arsenic, total	ug/L	MW-110A	04/13/2017		33.3000 *	4.0000
Arsenic, total	ug/L	MW-110A	10/25/2017		37.6000 *	4.0000
Arsenic, total	ug/L	MW-110A	04/12/2018		36.3000 *	4.0000
Arsenic, total	ug/L	MW-110A	10/16/2018		50.2000 *	4.0000
Arsenic, total	ug/L	MW-110A	04/18/2019		21.8000 *	4.0000
Arsenic, total	ug/L	MW-110A	10/15/2019		54.2000 *	4.0000
Arsenic, total	ug/L	MW-110A	04/06/2020		44.7000 *	4.0000
Arsenic, total	ug/L	MW-110A	10/15/2020		53.1000 *	4.0000
Arsenic, total	ug/L	MW-110A	04/12/2021	43.8000 *	4.0000	
Arsenic, total	ug/L	MW-110A	10/06/2021	42.2000 *	4.0000	
Arsenic, total	ug/L	MW-110A	04/14/2022	19.5000 *	4.0000	
Arsenic, total	ug/L	MW-110A	10/25/2022	67.1000 *	4.0000	
Arsenic, total	ug/L	MW-110A	04/19/2023	18.7000 *	4.0000	
Arsenic, total	ug/L	MW-110A	10/23/2023	57.6000 *	4.0000	
Arsenic, total	ug/L	MW-110A	04/09/2024	7.0000 *	4.0000	
Barium, total	ug/L	MW-110A	09/01/2005		234.0000	546.9330
Barium, total	ug/L	MW-110A	04/01/2006		186.0000	546.9330
Barium, total	ug/L	MW-110A	09/01/2006		265.0000	546.9330
Barium, total	ug/L	MW-110A	04/01/2007		277.0000	546.9330
Barium, total	ug/L	MW-110A	09/01/2007		323.0000	546.9330
Barium, total	ug/L	MW-110A	04/01/2008		425.0000	546.9330
Barium, total	ug/L	MW-110A	10/01/2008		399.0000	546.9330
Barium, total	ug/L	MW-110A	04/04/2009		391.0000	546.9330
Barium, total	ug/L	MW-110A	06/09/2009		952.0000 *	546.9330
Barium, total	ug/L	MW-110A	07/09/2009		671.0000 *	546.9330
Barium, total	ug/L	MW-110A	10/09/2009		795.0000 *	546.9330
Barium, total	ug/L	MW-110A	04/10/2010		501.0000	546.9330
Barium, total	ug/L	MW-110A	04/13/2010		501.0000	546.9330
Barium, total	ug/L	MW-110A	06/10/2010		438.0000	546.9330
Barium, total	ug/L	MW-110A	06/29/2010		438.0000	546.9330
Barium, total	ug/L	MW-110A	09/10/2010		359.0000	546.9330
Barium, total	ug/L	MW-110A	09/27/2010		359.0000	546.9330
Barium, total	ug/L	MW-110A	04/01/2011		405.0000	546.9330
Barium, total	ug/L	MW-110A	04/11/2011		405.0000	546.9330
Barium, total	ug/L	MW-110A	09/01/2011		417.0000	546.9330
Barium, total	ug/L	MW-110A	04/09/2012		515.0000	546.9330
Barium, total	ug/L	MW-110A	09/10/2012		452.0000	546.9330
Barium, total	ug/L	MW-110A	04/15/2013		477.0000	546.9330
Barium, total	ug/L	MW-110A	10/07/2013		538.0000	546.9330
Barium, total	ug/L	MW-110A	04/17/2014		969.0000 *	546.9330
Barium, total	ug/L	MW-110A	10/15/2014		1780.0000 *	546.9330
Barium, total	ug/L	MW-110A	04/13/2015		1000.0000 *	546.9330
Barium, total	ug/L	MW-110A	09/22/2015		829.0000 *	546.9330
Barium, total	ug/L	MW-110A	04/11/2016		639.0000 *	546.9330
Barium, total	ug/L	MW-110A	10/12/2016		748.0000 *	546.9330
Barium, total	ug/L	MW-110A	04/13/2017		890.0000 *	546.9330

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Table 8

**Historical Downgradient Data for Constituent-Well Combinations
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Constituent	Units	Well	Date	Result	Pred. Limit
Barium, total	ug/L	MW-110A	10/25/2017	784.0000 *	546.9330
Barium, total	ug/L	MW-110A	04/12/2018	733.0000 *	546.9330
Barium, total	ug/L	MW-110A	10/16/2018	650.0000 *	546.9330
Barium, total	ug/L	MW-110A	04/18/2019	551.0000 *	546.9330
Barium, total	ug/L	MW-110A	10/15/2019	803.0000 *	546.9330
Barium, total	ug/L	MW-110A	04/06/2020	816.0000 *	546.9330
Barium, total	ug/L	MW-110A	10/15/2020	701.0000 *	546.9330
Barium, total	ug/L	MW-110A	04/12/2021	713.0000 *	546.9330
Barium, total	ug/L	MW-110A	10/06/2021	714.0000 *	546.9330
Barium, total	ug/L	MW-110A	04/14/2022	520.0000 *	546.9330
Barium, total	ug/L	MW-110A	10/25/2022	675.0000 *	546.9330
Barium, total	ug/L	MW-110A	04/19/2023	537.0000 *	546.9330
Barium, total	ug/L	MW-110A	10/23/2023	842.0000 *	546.9330
Barium, total	ug/L	MW-110A	04/09/2024	199.0000 *	546.9330
Cobalt, total	ug/L	MW-110A	09/01/2005	64.0000 *	0.9000
Cobalt, total	ug/L	MW-110A	04/01/2006	68.0000 *	0.9000
Cobalt, total	ug/L	MW-110A	09/01/2006	118.0000 *	0.9000
Cobalt, total	ug/L	MW-110A	04/01/2007	98.0000 *	0.9000
Cobalt, total	ug/L	MW-110A	09/01/2007	21.0000 *	0.9000
Cobalt, total	ug/L	MW-110A	04/01/2008	70.0000 *	0.9000
Cobalt, total	ug/L	MW-110A	10/01/2008	62.5000 *	0.9000
Cobalt, total	ug/L	MW-110A	04/04/2009	82.3000 *	0.9000
Cobalt, total	ug/L	MW-110A	06/09/2009	89.9000 *	0.9000
Cobalt, total	ug/L	MW-110A	07/09/2009	60.0000 *	0.9000
Cobalt, total	ug/L	MW-110A	10/09/2009	52.0500 *	0.9000
Cobalt, total	ug/L	MW-110A	04/10/2010	95.5000 *	0.9000
Cobalt, total	ug/L	MW-110A	04/13/2010	95.5000 *	0.9000
Cobalt, total	ug/L	MW-110A	06/10/2010	116.0000 *	0.9000
Cobalt, total	ug/L	MW-110A	06/29/2010	116.0000 *	0.9000
Cobalt, total	ug/L	MW-110A	09/10/2010	52.6000 *	0.9000
Cobalt, total	ug/L	MW-110A	09/27/2010	52.6000 *	0.9000
Cobalt, total	ug/L	MW-110A	04/01/2011	84.4000 *	0.9000
Cobalt, total	ug/L	MW-110A	04/11/2011	84.4000 *	0.9000
Cobalt, total	ug/L	MW-110A	09/01/2011	26.4000 *	0.9000
Cobalt, total	ug/L	MW-110A	04/09/2012	60.5000 *	0.9000
Cobalt, total	ug/L	MW-110A	09/10/2012	25.3000 *	0.9000
Cobalt, total	ug/L	MW-110A	04/15/2013	67.1000 *	0.9000
Cobalt, total	ug/L	MW-110A	10/07/2013	6.8000 *	0.9000
Cobalt, total	ug/L	MW-110A	04/17/2014	40.1000 *	0.9000
Cobalt, total	ug/L	MW-110A	10/15/2014	5.4000 *	0.9000
Cobalt, total	ug/L	MW-110A	04/13/2015	10.3000 *	0.9000
Cobalt, total	ug/L	MW-110A	09/22/2015	1.3000 *	0.9000
Cobalt, total	ug/L	MW-110A	04/11/2016	13.3000 *	0.9000
Cobalt, total	ug/L	MW-110A	10/12/2016	12.5000 *	0.9000
Cobalt, total	ug/L	MW-110A	04/13/2017	10.8000 *	0.9000
Cobalt, total	ug/L	MW-110A	10/25/2017	7.7000 *	0.9000
Cobalt, total	ug/L	MW-110A	04/12/2018	18.5000 *	0.9000
Cobalt, total	ug/L	MW-110A	10/16/2018	19.8000 *	0.9000
Cobalt, total	ug/L	MW-110A	04/18/2019	23.7000 *	0.9000
Cobalt, total	ug/L	MW-110A	10/15/2019	4.3000 *	0.9000
Cobalt, total	ug/L	MW-110A	04/06/2020	39.3000 *	0.9000
Cobalt, total	ug/L	MW-110A	10/15/2020	4.8000 *	0.9000
Cobalt, total	ug/L	MW-110A	04/12/2021	11.2000 *	0.9000
Cobalt, total	ug/L	MW-110A	10/06/2021	12.3000 *	0.9000
Cobalt, total	ug/L	MW-110A	04/14/2022	191.0000 *	0.9000
Cobalt, total	ug/L	MW-110A	10/25/2022	6.5000 *	0.9000
Cobalt, total	ug/L	MW-110A	04/19/2023	91.4000 *	0.9000
Cobalt, total	ug/L	MW-110A	10/23/2023	18.0000 *	0.9000
Cobalt, total	ug/L	MW-110A	04/09/2024	1460.0000 *	0.9000
Nickel, total	ug/L	MW-110A	09/01/2005	27.0000 *	7.1000
Nickel, total	ug/L	MW-110A	04/01/2006	31.0000 *	7.1000
Nickel, total	ug/L	MW-110A	09/01/2006	37.0000 *	7.1000
Nickel, total	ug/L	MW-110A	04/01/2007	24.0000 *	7.1000
Nickel, total	ug/L	MW-110A	09/01/2007	12.0000 *	7.1000
Nickel, total	ug/L	MW-110A	04/01/2008	14.0000 *	7.1000
Nickel, total	ug/L	MW-110A	10/01/2008	19.9000 *	7.1000
Nickel, total	ug/L	MW-110A	04/04/2009	19.1000 *	7.1000
Nickel, total	ug/L	MW-110A	06/09/2009	48.3000 *	7.1000
Nickel, total	ug/L	MW-110A	07/09/2009	32.0000 *	7.1000
Nickel, total	ug/L	MW-110A	10/09/2009	44.4500 *	7.1000
Nickel, total	ug/L	MW-110A	04/10/2010	21.0000 *	7.1000

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

Table 8

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

Constituent	Units	Well	Date		Result	Pred. Limit
Nickel, total	ug/L	MW-110A	04/13/2010		21.0000 *	7.1000
Nickel, total	ug/L	MW-110A	06/10/2010		19.2000 *	7.1000
Nickel, total	ug/L	MW-110A	06/29/2010		19.2000 *	7.1000
Nickel, total	ug/L	MW-110A	09/10/2010		9.1000 *	7.1000
Nickel, total	ug/L	MW-110A	09/27/2010		9.1000 *	7.1000
Nickel, total	ug/L	MW-110A	04/01/2011		19.1000 *	7.1000
Nickel, total	ug/L	MW-110A	04/11/2011		19.1000 *	7.1000
Nickel, total	ug/L	MW-110A	09/01/2011		8.5000 *	7.1000
Nickel, total	ug/L	MW-110A	04/09/2012		13.9000 *	7.1000
Nickel, total	ug/L	MW-110A	09/10/2012		7.6000 *	7.1000
Nickel, total	ug/L	MW-110A	04/15/2013		10.8000 *	7.1000
Nickel, total	ug/L	MW-110A	10/07/2013	ND	4.0000	7.1000
Nickel, total	ug/L	MW-110A	04/17/2014		5.0000	7.1000
Nickel, total	ug/L	MW-110A	10/15/2014	ND	4.0000	7.1000
Nickel, total	ug/L	MW-110A	04/13/2015	ND	4.0000	7.1000
Nickel, total	ug/L	MW-110A	09/22/2015	ND	4.0000	7.1000
Nickel, total	ug/L	MW-110A	04/11/2016	ND	4.0000	7.1000
Nickel, total	ug/L	MW-110A	10/12/2016	ND	4.0000	7.1000
Nickel, total	ug/L	MW-110A	04/13/2017	ND	4.0000	7.1000
Nickel, total	ug/L	MW-110A	10/25/2017	ND	4.0000	7.1000
Nickel, total	ug/L	MW-110A	04/12/2018	ND	4.0000	7.1000
Nickel, total	ug/L	MW-110A	10/16/2018	ND	4.0000	7.1000
Nickel, total	ug/L	MW-110A	04/18/2019	ND	4.0000	7.1000
Nickel, total	ug/L	MW-110A	10/15/2019	ND	4.0000	7.1000
Nickel, total	ug/L	MW-110A	04/06/2020	ND	4.0000	7.1000
Nickel, total	ug/L	MW-110A	10/15/2020	ND	4.0000	7.1000
Nickel, total	ug/L	MW-110A	04/12/2021	ND	4.0000	7.1000
Nickel, total	ug/L	MW-110A	10/06/2021	ND	4.0000	7.1000
Nickel, total	ug/L	MW-110A	04/14/2022		55.9000 *	7.1000
Nickel, total	ug/L	MW-110A	10/25/2022	ND	4.0000	7.1000
Nickel, total	ug/L	MW-110A	04/19/2023		21.2000 *	7.1000
Nickel, total	ug/L	MW-110A	10/23/2023		9.0000 *	7.1000
Nickel, total	ug/L	MW-110A	04/09/2024		456.0000 *	7.1000
Zinc, total	ug/L	MW-110A	09/01/2005		20.0000	21.0000
Zinc, total	ug/L	MW-110A	04/01/2006	ND	10.0000	21.0000
Zinc, total	ug/L	MW-110A	09/01/2006		23.0000 *	21.0000
Zinc, total	ug/L	MW-110A	04/01/2007		24.0000 *	21.0000
Zinc, total	ug/L	MW-110A	09/01/2007		47.0000 *	21.0000
Zinc, total	ug/L	MW-110A	04/01/2008		14.0000	21.0000
Zinc, total	ug/L	MW-110A	10/01/2008		24.2000 *	21.0000
Zinc, total	ug/L	MW-110A	04/04/2009		39.3000 *	21.0000
Zinc, total	ug/L	MW-110A	06/09/2009		311.0000 *	21.0000
Zinc, total	ug/L	MW-110A	07/09/2009		142.0000 *	21.0000
Zinc, total	ug/L	MW-110A	10/09/2009		160.5000 *	21.0000
Zinc, total	ug/L	MW-110A	04/10/2010		25.1000 *	21.0000
Zinc, total	ug/L	MW-110A	04/13/2010		25.1000 *	21.0000
Zinc, total	ug/L	MW-110A	06/10/2010		51.2000 *	21.0000
Zinc, total	ug/L	MW-110A	06/29/2010		51.2000 *	21.0000
Zinc, total	ug/L	MW-110A	09/10/2010	ND	10.0000	21.0000
Zinc, total	ug/L	MW-110A	09/27/2010	ND	10.0000	21.0000
Zinc, total	ug/L	MW-110A	04/01/2011	ND	8.0000	21.0000
Zinc, total	ug/L	MW-110A	04/11/2011	ND	8.0000	21.0000
Zinc, total	ug/L	MW-110A	09/01/2011	ND	8.0000	21.0000
Zinc, total	ug/L	MW-110A	04/09/2012		22.4000 *	21.0000
Zinc, total	ug/L	MW-110A	09/10/2012		47.5000 *	21.0000
Zinc, total	ug/L	MW-110A	04/15/2013		38.0000 *	21.0000
Zinc, total	ug/L	MW-110A	10/07/2013	ND	20.0000	21.0000
Zinc, total	ug/L	MW-110A	04/17/2014		14.0000	21.0000
Zinc, total	ug/L	MW-110A	10/15/2014	ND	20.0000	21.0000
Zinc, total	ug/L	MW-110A	04/13/2015		10.3000	21.0000
Zinc, total	ug/L	MW-110A	09/22/2015	ND	8.0000	21.0000
Zinc, total	ug/L	MW-110A	04/11/2016	ND	8.0000	21.0000
Zinc, total	ug/L	MW-110A	10/12/2016		11.2000	21.0000
Zinc, total	ug/L	MW-110A	04/13/2017	ND	8.0000	21.0000
Zinc, total	ug/L	MW-110A	10/25/2017	ND	8.0000	21.0000
Zinc, total	ug/L	MW-110A	04/12/2018	ND	20.0000	21.0000
Zinc, total	ug/L	MW-110A	10/16/2018	ND	20.0000	21.0000
Zinc, total	ug/L	MW-110A	04/18/2019	ND	8.0000	21.0000
Zinc, total	ug/L	MW-110A	10/15/2019	ND	20.0000	21.0000
Zinc, total	ug/L	MW-110A	04/06/2020	ND	20.0000	21.0000
Zinc, total	ug/L	MW-110A	10/15/2020	ND	20.0000	21.0000

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

Table 8

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

Constituent	Units	Well	Date		Result	Pred. Limit
Zinc, total	ug/L	MW-110A	04/12/2021	ND	20.0000	21.0000
Zinc, total	ug/L	MW-110A	10/06/2021	ND	20.0000	21.0000
Zinc, total	ug/L	MW-110A	04/14/2022	ND	20.0000	21.0000
Zinc, total	ug/L	MW-110A	10/25/2022	ND	20.0000	21.0000
Zinc, total	ug/L	MW-110A	04/19/2023	ND	20.0000	21.0000
Zinc, total	ug/L	MW-110A	10/23/2023		31.5000 *	21.0000
Zinc, total	ug/L	MW-110A	04/09/2024		21.4000 *	21.0000

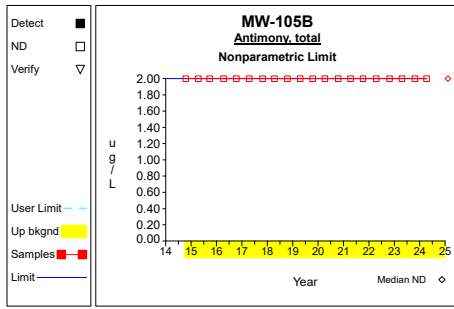
* - Significantly increased over background.

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

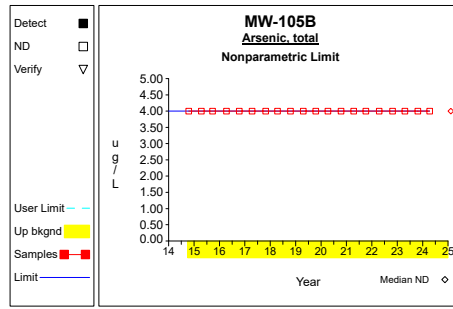
*** - Manual exclusion.

ND = Not Detected, Result = detection limit.

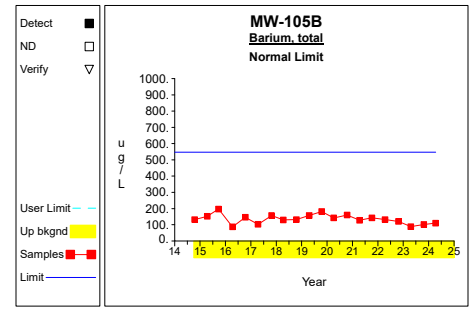
Up vs. Down Prediction Limits



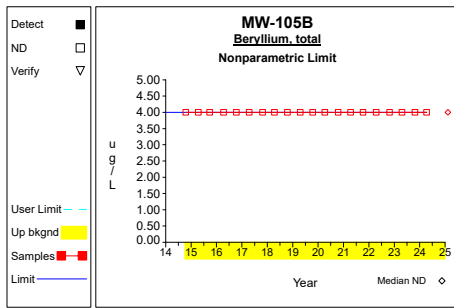
Graph 1



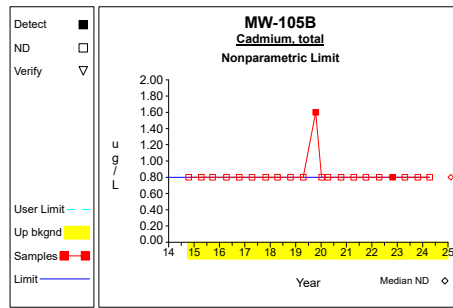
Graph 2



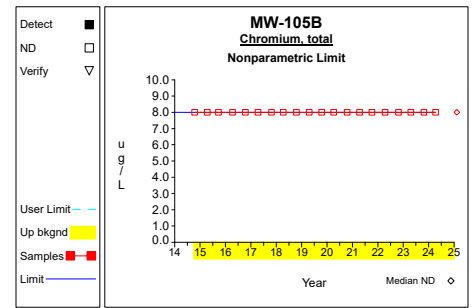
Graph 3



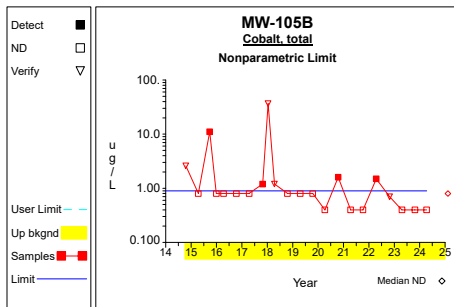
Graph 4



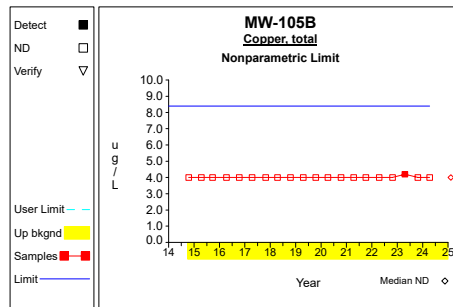
Graph 5



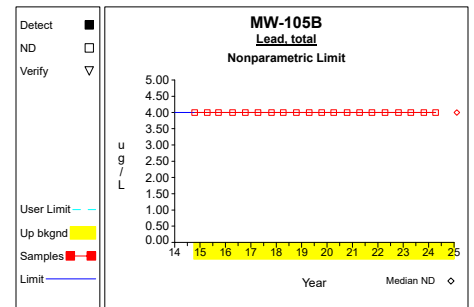
Graph 6



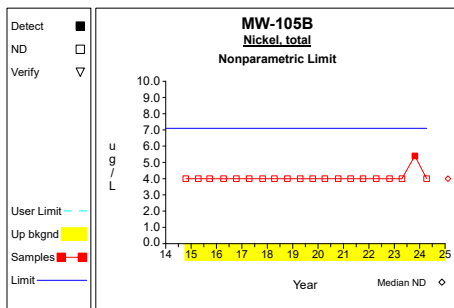
Graph 7



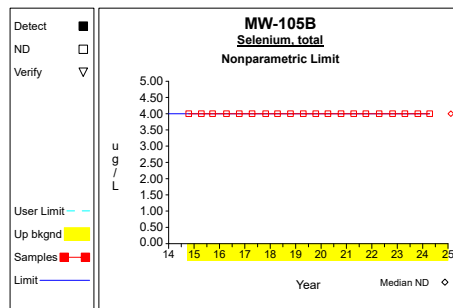
Graph 8



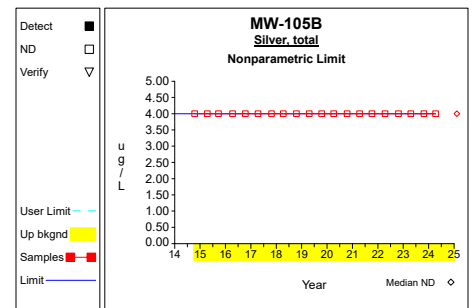
Graph 9



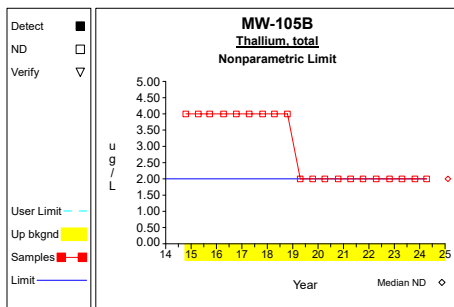
Graph 10



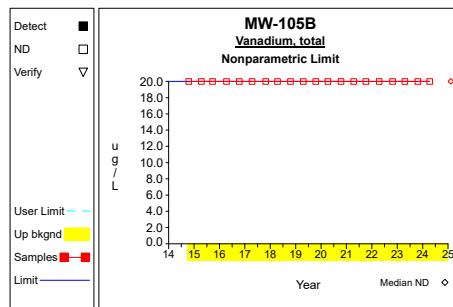
Graph 11



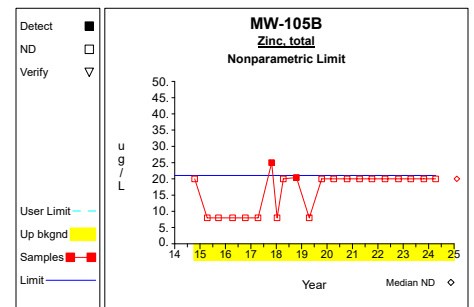
Graph 12



Graph 13

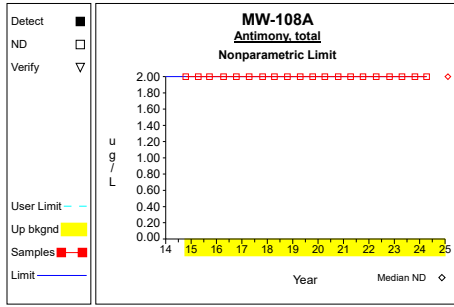


Graph 14

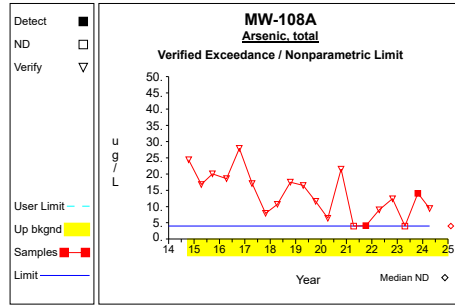


Graph 15

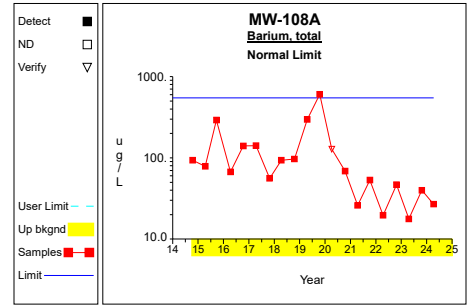
Up vs. Down Prediction Limits



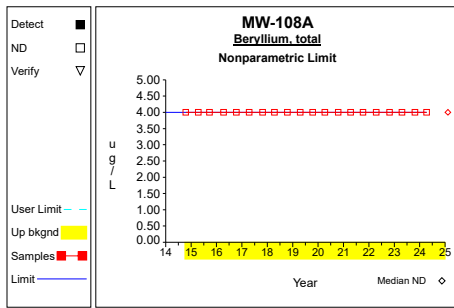
Graph 16



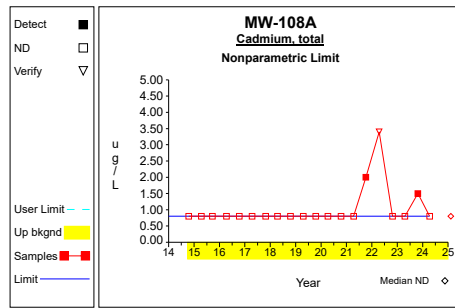
Graph 17



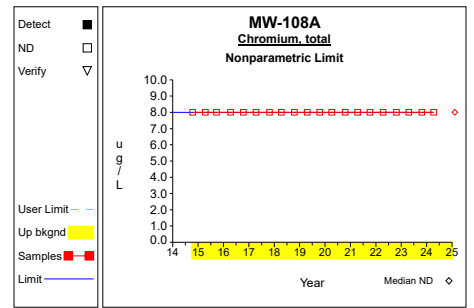
Graph 18



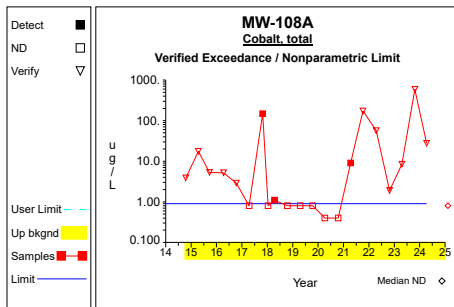
Graph 19



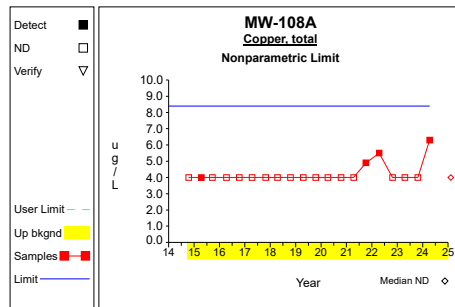
Graph 20



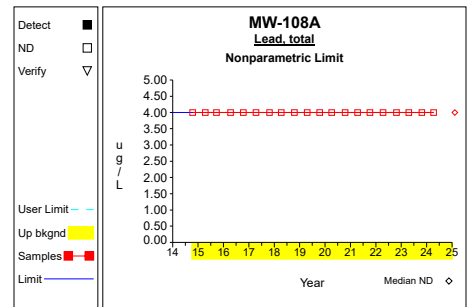
Graph 21



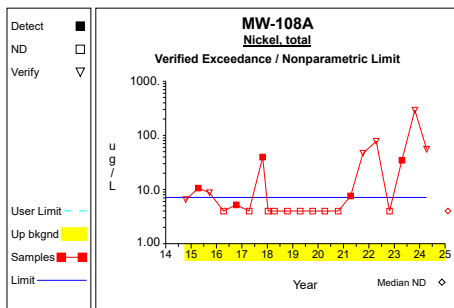
Graph 22



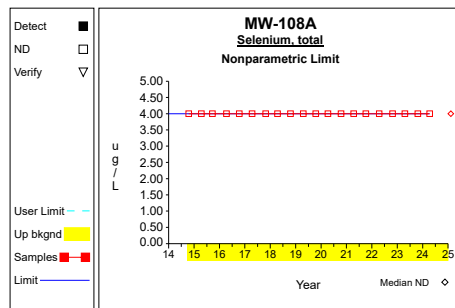
Graph 23



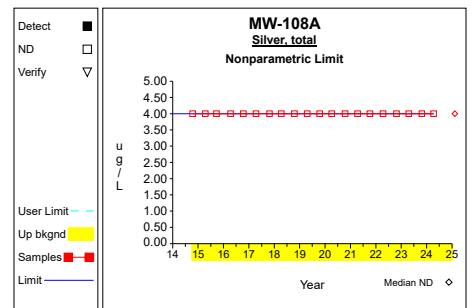
Graph 24



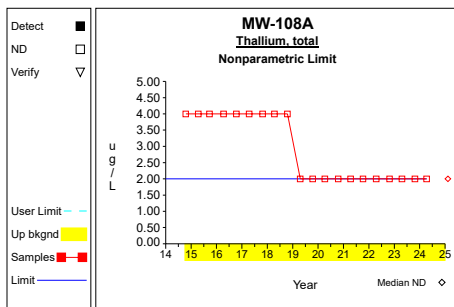
Graph 25



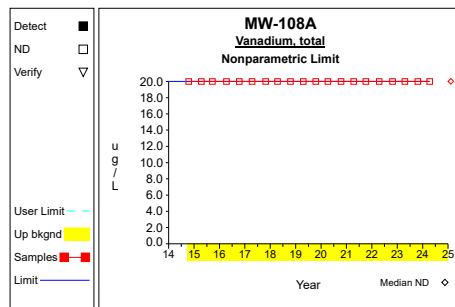
Graph 26



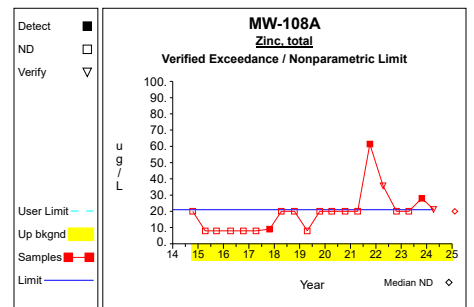
Graph 27



Graph 28

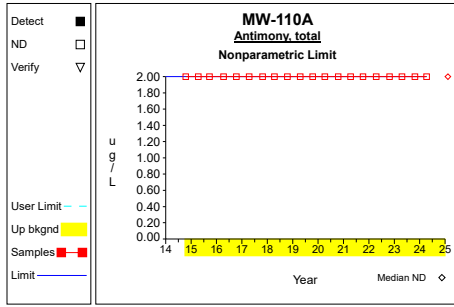


Graph 29

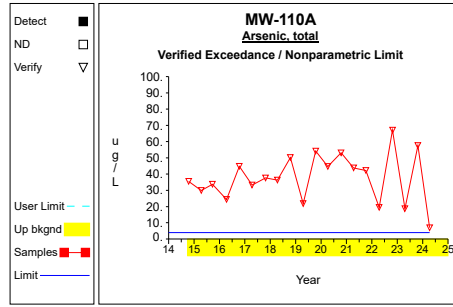


Graph 30

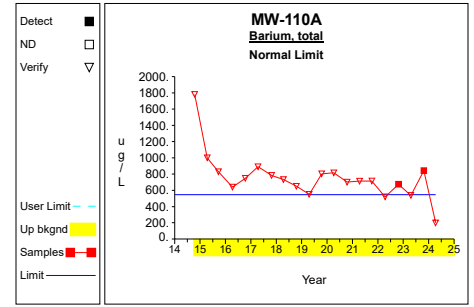
Up vs. Down Prediction Limits



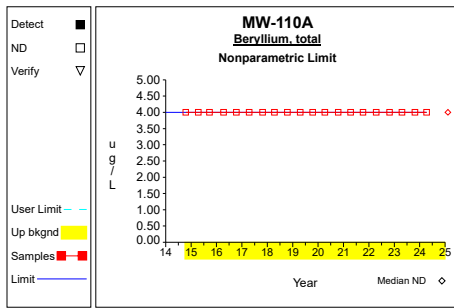
Graph 31



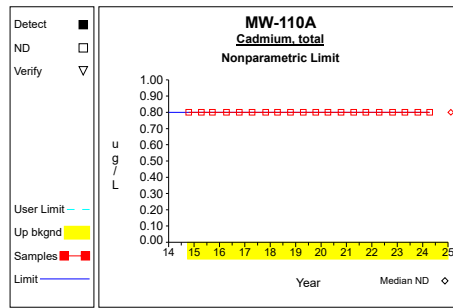
Graph 32



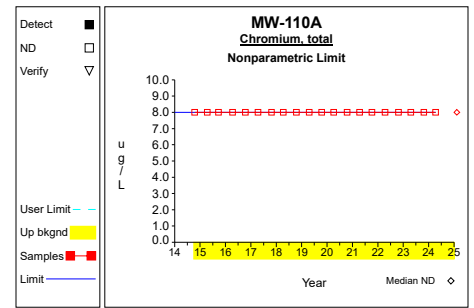
Graph 33



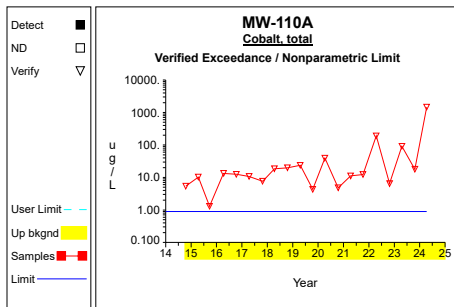
Graph 34



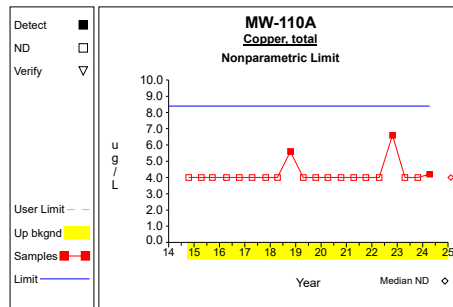
Graph 35



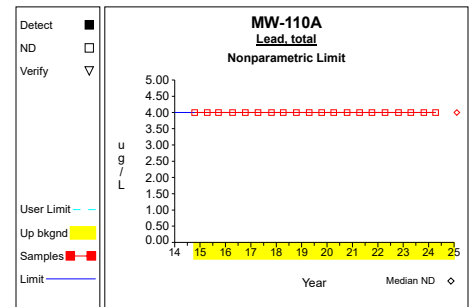
Graph 36



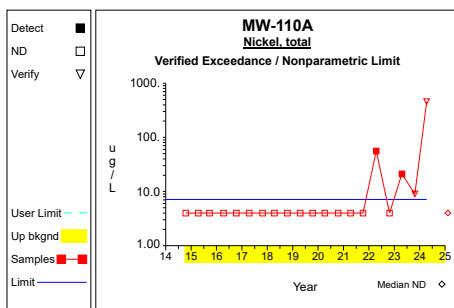
Graph 37



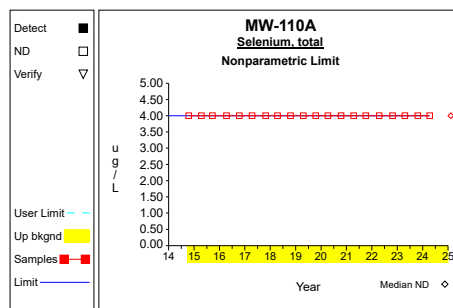
Graph 38



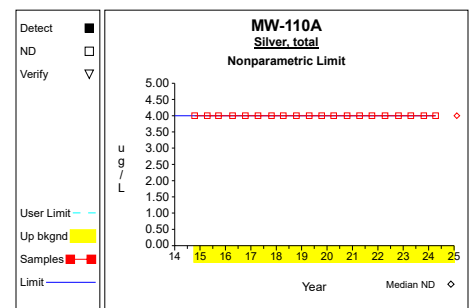
Graph 39



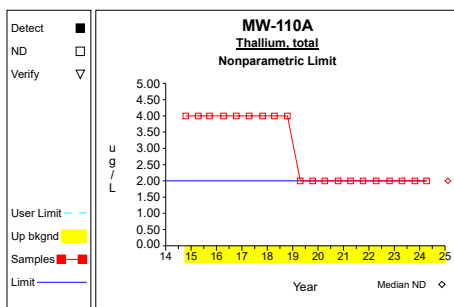
Graph 40



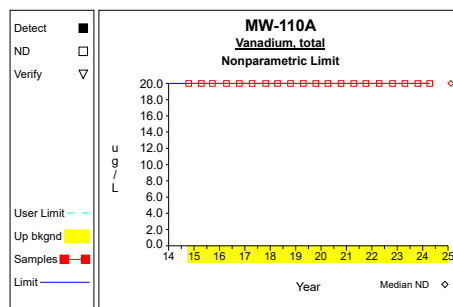
Graph 41



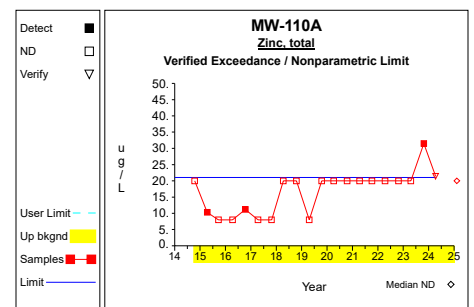
Graph 42



Graph 43

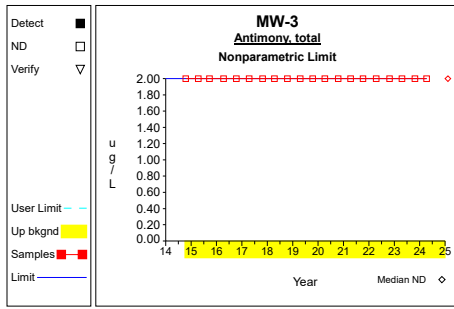


Graph 44

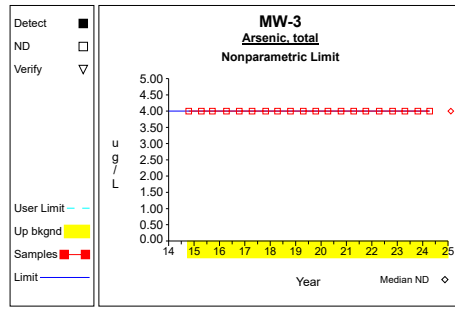


Graph 45

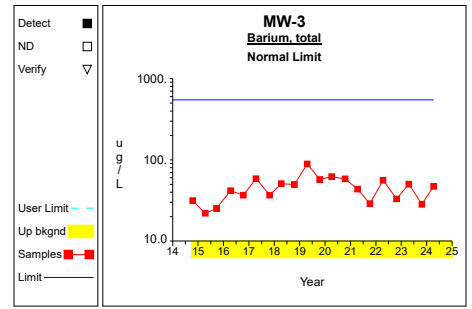
Up vs. Down Prediction Limits



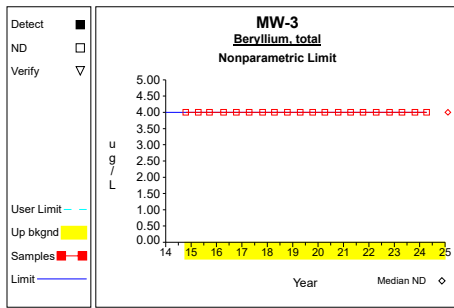
Graph 46



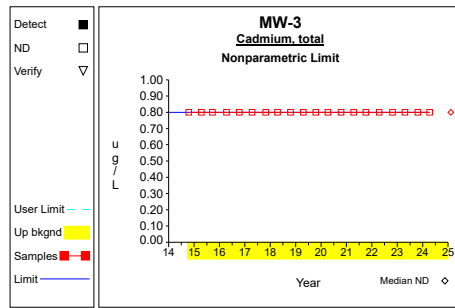
Graph 47



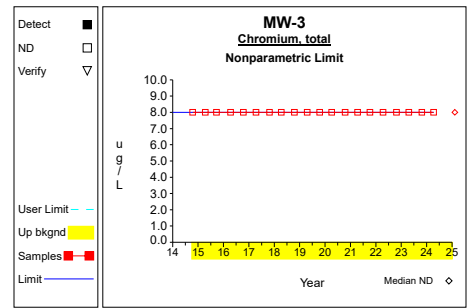
Graph 48



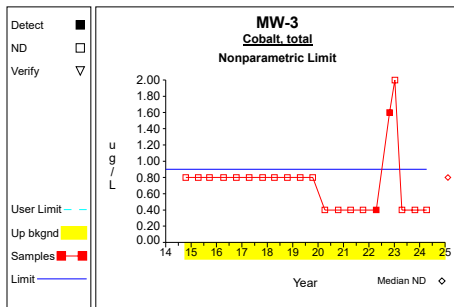
Graph 49



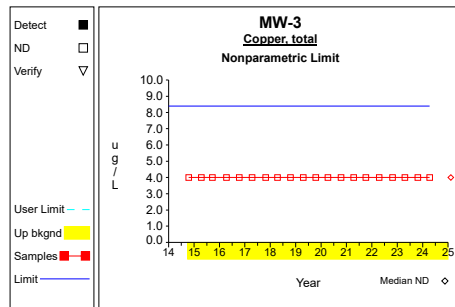
Graph 50



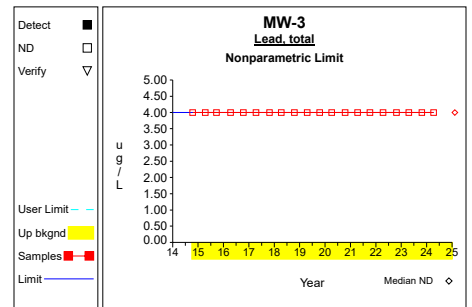
Graph 51



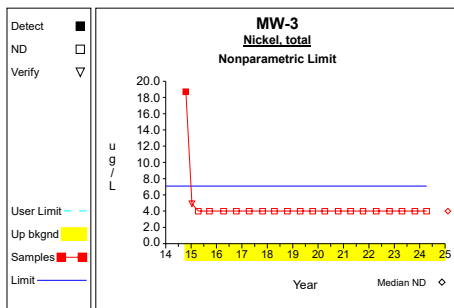
Graph 52



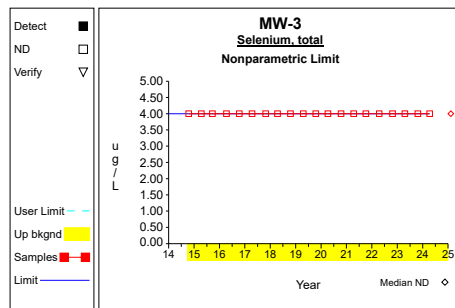
Graph 53



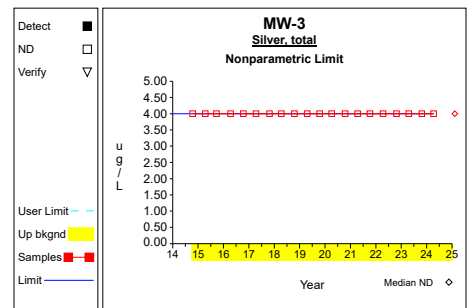
Graph 54



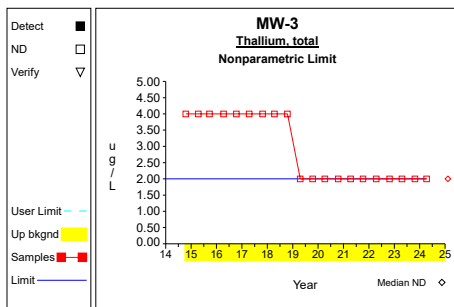
Graph 55



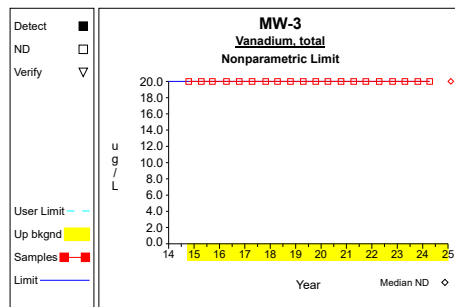
Graph 56



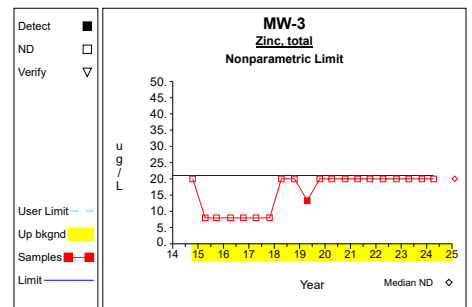
Graph 57



Graph 58

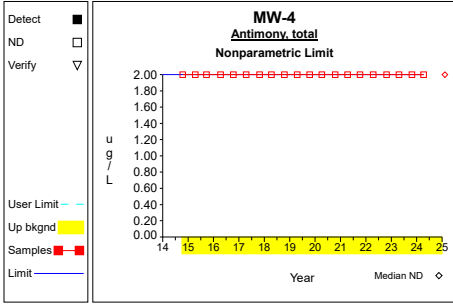


Graph 59

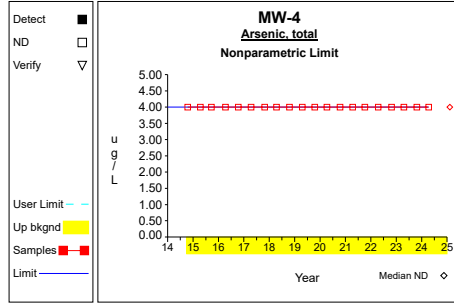


Graph 60

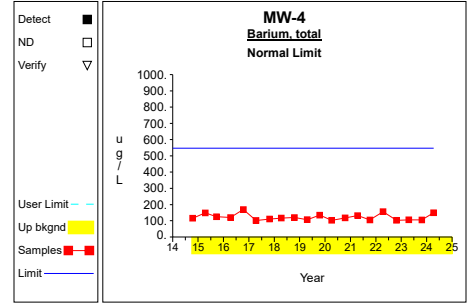
Up vs. Down Prediction Limits



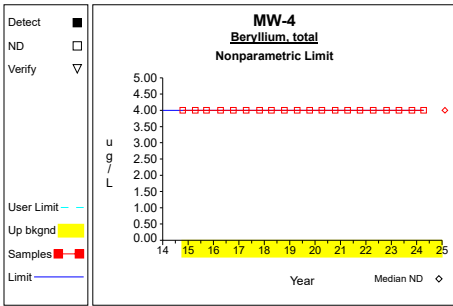
Graph 61



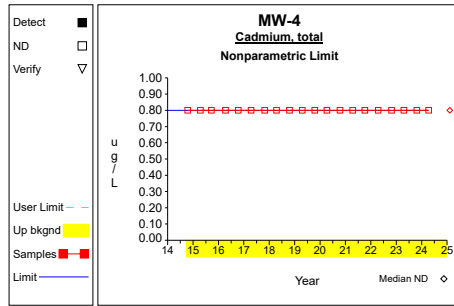
Graph 62



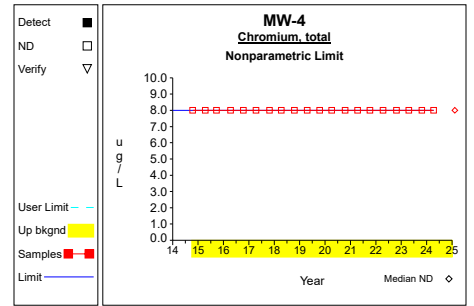
Graph 63



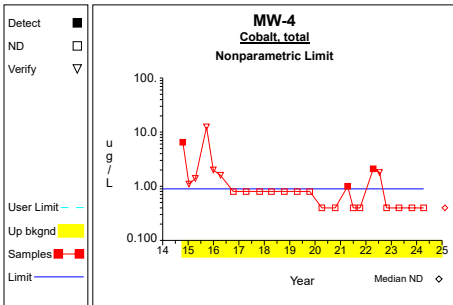
Graph 64



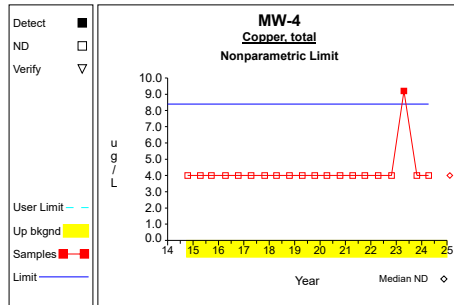
Graph 65



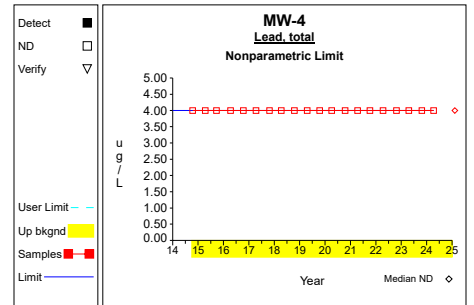
Graph 66



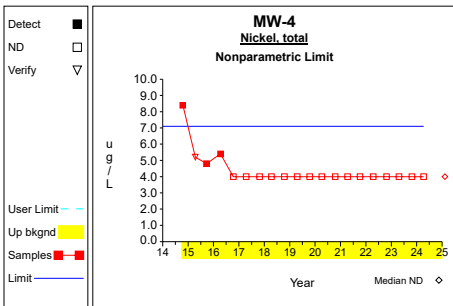
Graph 67



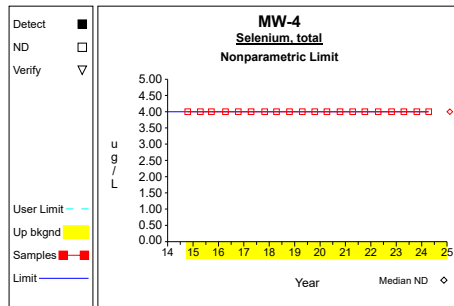
Graph 68



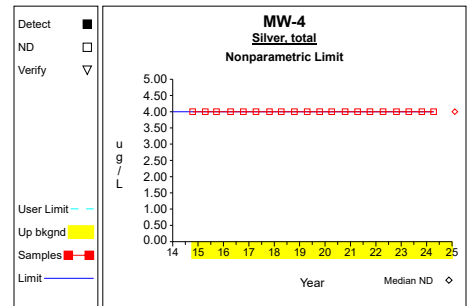
Graph 69



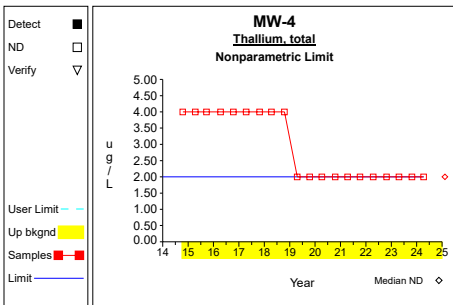
Graph 70



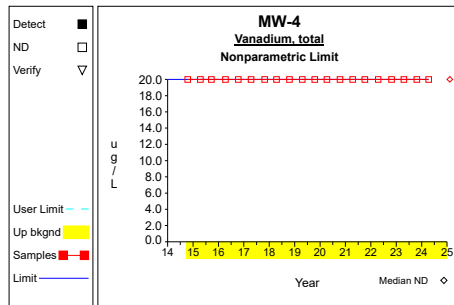
Graph 71



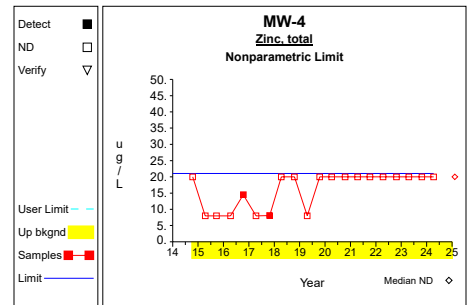
Graph 72



Graph 73



Graph 74



Graph 75

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

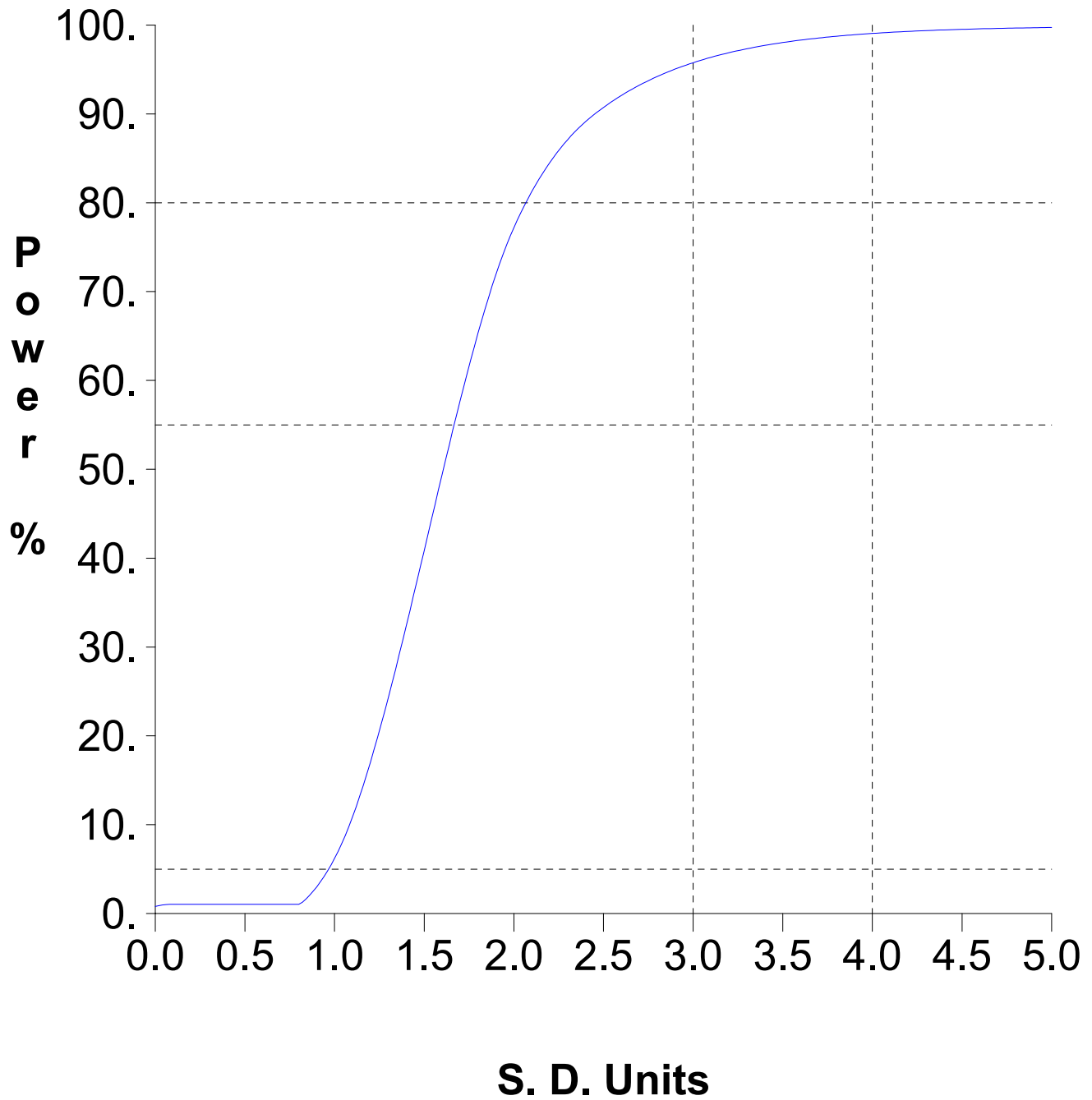


Table 1

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

Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend
Arsenic, total	ug/L	MW-105B	4	2.000	0.000	1.176	2.000	2.000	10.000	
Barium, total	ug/L	MW-105B	4	105.425	13.601	1.176	89.426	121.424	2000.000	dec
Cadmium, total	ug/L	MW-105B	4	0.500	0.200	1.176	0.265	0.735	5.000	
Cobalt, total	ug/L	MW-105B	4	0.475	0.150	1.176	0.299	0.651	2.100	dec
Nickel, total	ug/L	MW-105B	4	2.850	1.700	1.176	0.850	4.850	100.000	
Zinc, total	ug/L	MW-105B	4	5.000	0.000	1.176	5.000	5.000	2000.000	
Arsenic, total	ug/L	MW-108A	4	9.475	5.349	1.176	3.183	15.767	10.000	
Barium, total	ug/L	MW-108A	4	32.800	12.993	1.176	17.517	48.083	2000.000	
Cadmium, total	ug/L	MW-108A	4	0.675	0.550	1.176	0.028	1.322	5.000	
Cobalt, total	ug/L	MW-108A	4	155.975	286.891	1.176	0.000	493.441	2.100	
Nickel, total	ug/L	MW-108A	4	96.050	132.482	1.176	0.000	251.887	100.000	
Zinc, total	ug/L	MW-108A	4	14.800	11.671	1.176	1.071	28.529	2000.000	
Arsenic, total	ug/L	MW-110A	4	37.600	29.234	1.176	3.213	71.987	10.000	inc
Barium, total	ug/L	MW-110A	4	563.250	272.982	1.176	242.145	884.355	2000.000	inc
Cadmium, total	ug/L	MW-110A	4	0.400	0.000	1.176	0.400	0.400	5.000	
Cobalt, total	ug/L	MW-110A	4	393.975	711.678	1.176	0.000	1231.113	2.100	dec
Nickel, total	ug/L	MW-110A	4	122.050	222.775	1.176	0.000	384.097	100.000	dec
Zinc, total	ug/L	MW-110A	4	18.225	10.354	1.176	6.046	30.404	2000.000	
Arsenic, total	ug/L	MW-3	4	2.000	0.000	1.176	2.000	2.000	10.000	
Barium, total	ug/L	MW-3	4	39.700	10.641	1.176	27.183	52.217	2000.000	dec
Cadmium, total	ug/L	MW-3	4	0.400	0.000	1.176	0.400	0.400	5.000	
Cobalt, total	ug/L	MW-3	4	0.400	0.000	1.176	0.400	0.400	2.100	
Nickel, total	ug/L	MW-3	4	2.000	0.000	1.176	2.000	2.000	100.000	
Zinc, total	ug/L	MW-3	4	10.000	0.000	1.176	10.000	10.000	2000.000	
Arsenic, total	ug/L	MW-4	4	2.000	0.000	1.176	2.000	2.000	10.000	
Barium, total	ug/L	MW-4	4	116.000	22.701	1.176	89.297	142.703	2000.000	dec
Cadmium, total	ug/L	MW-4	4	0.400	0.000	1.176	0.400	0.400	5.000	
Cobalt, total	ug/L	MW-4	4	0.400	0.000	1.176	0.400	0.400	2.100	dec
Nickel, total	ug/L	MW-4	4	2.000	0.000	1.176	2.000	2.000	100.000	dec
Zinc, total	ug/L	MW-4	4	10.000	0.000	1.176	10.000	10.000	2000.000	

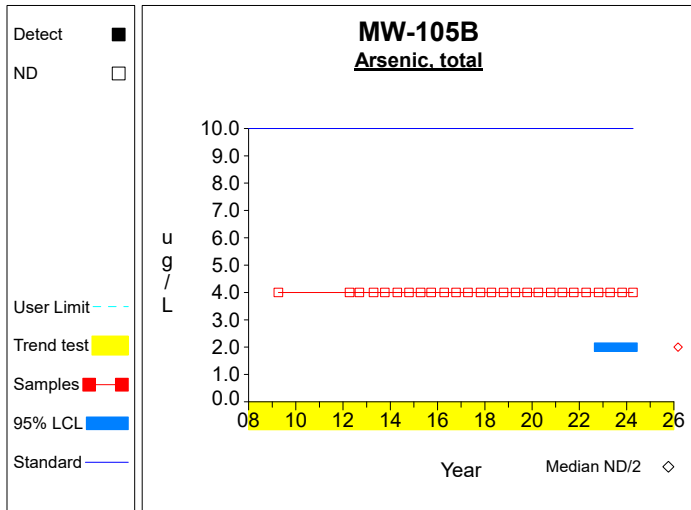
* - Insufficient Data

** - Significant Exceedance

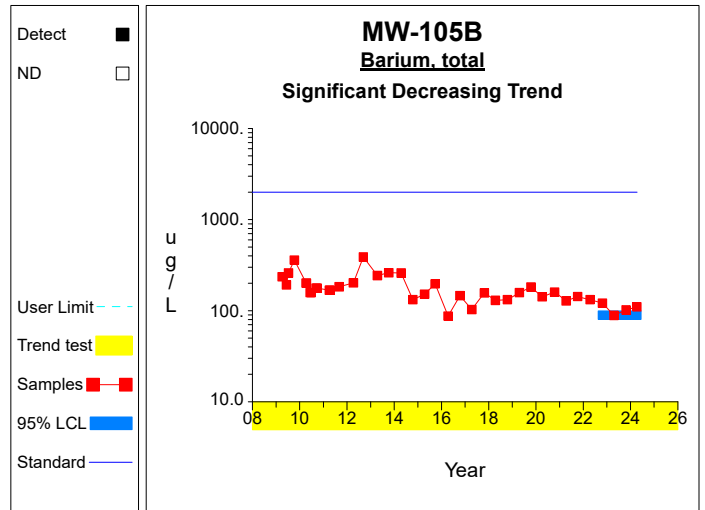
LCL = Lower Confidence Limit

UCL = Upper Confidence Limit

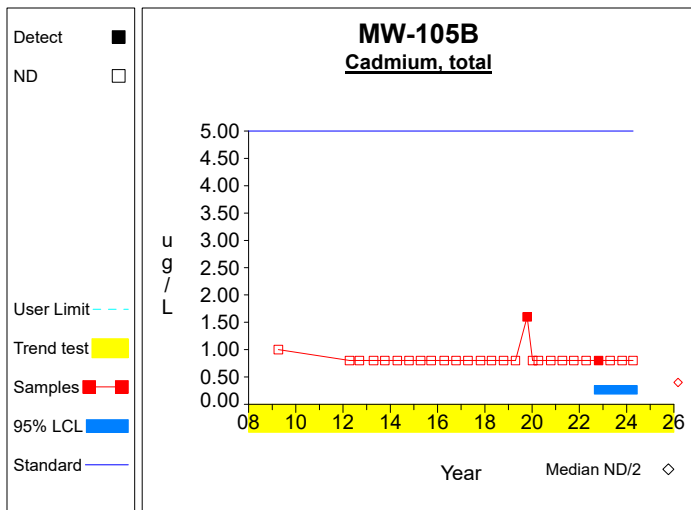
Confidence Limits (Assessment)



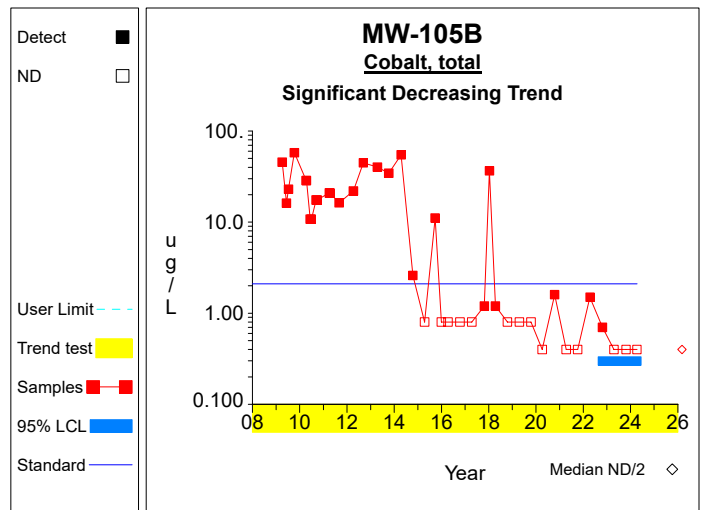
Graph 1



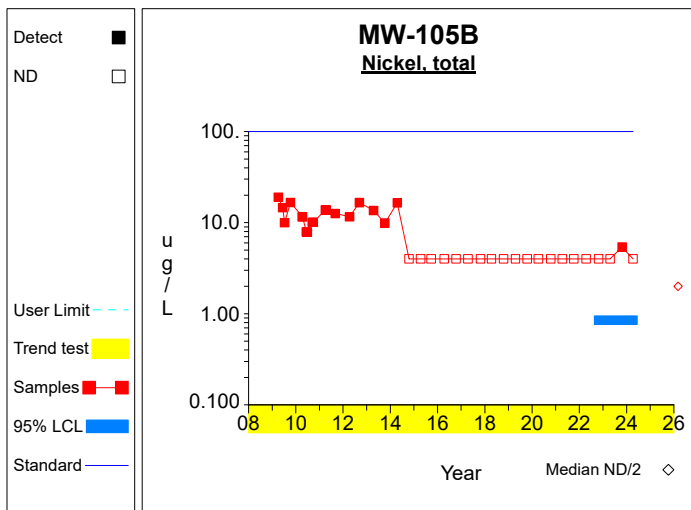
Graph 2



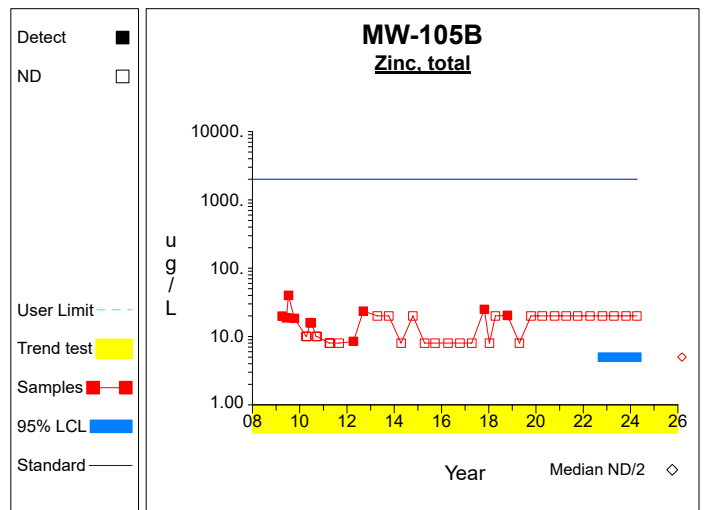
Graph 3



Graph 4

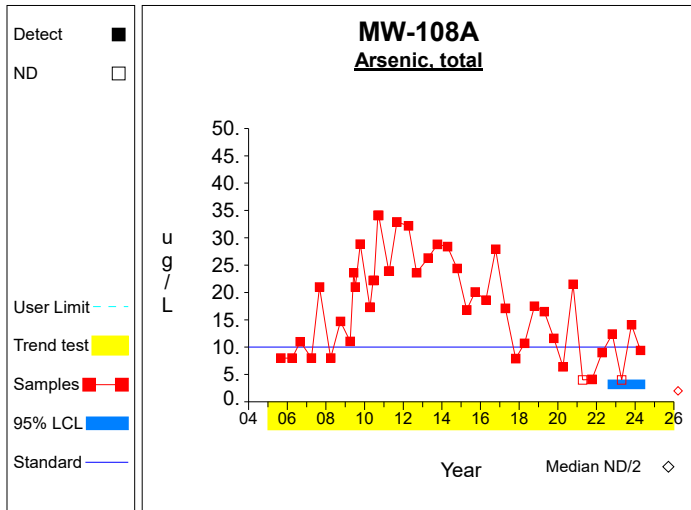


Graph 5

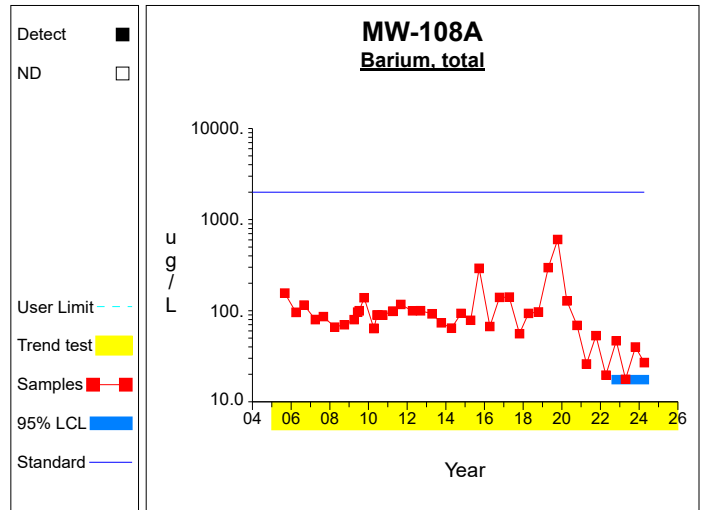


Graph 6

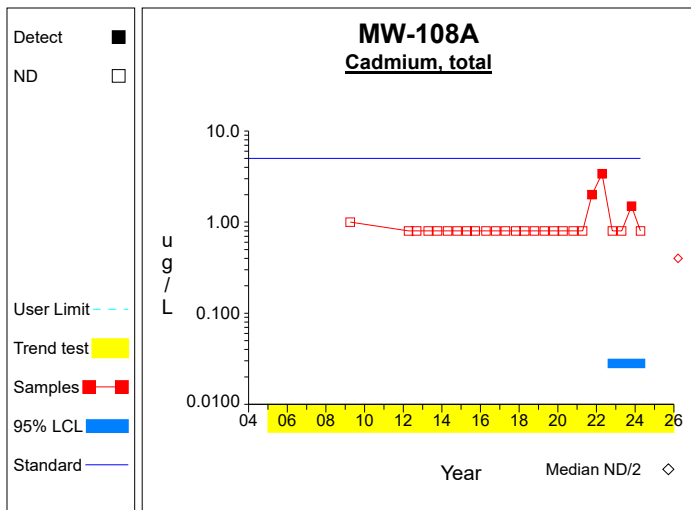
Confidence Limits (Assessment)



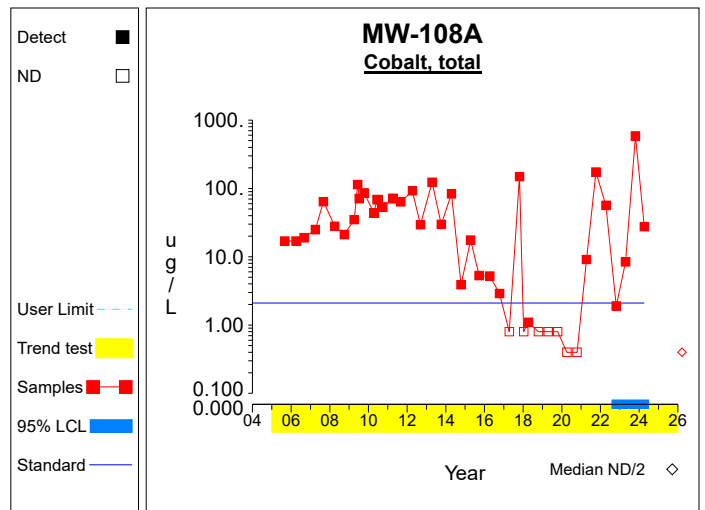
Graph 7



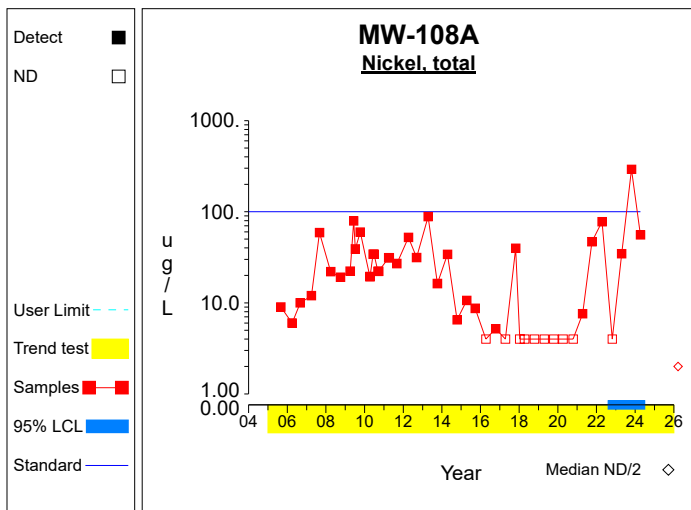
Graph 8



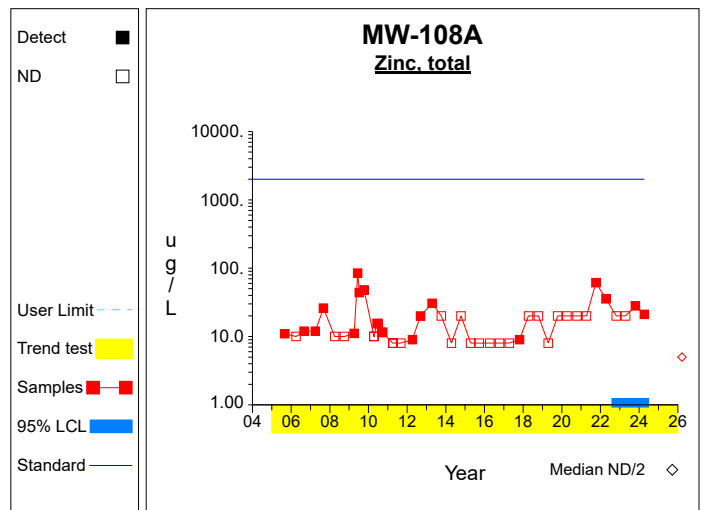
Graph 9



Graph 10

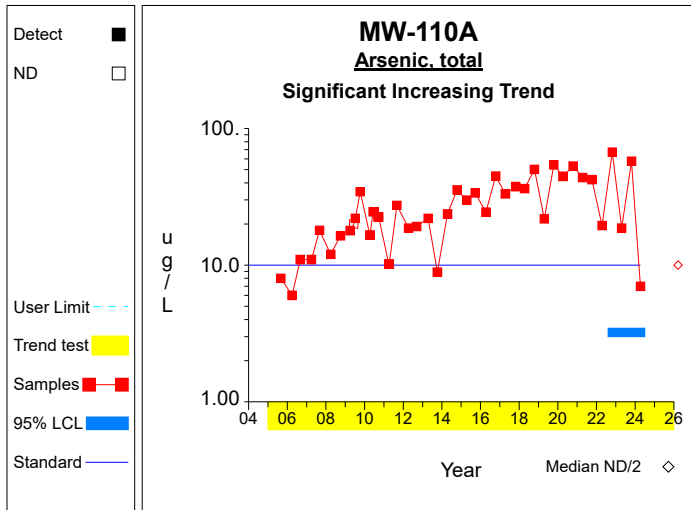


Graph 11

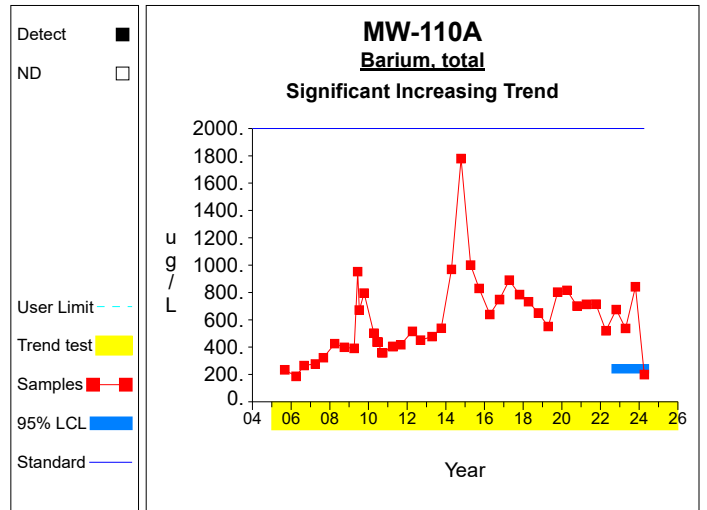


Graph 12

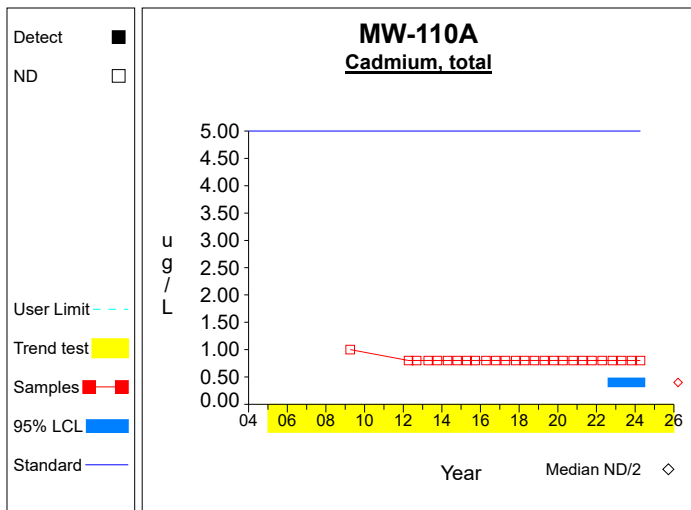
Confidence Limits (Assessment)



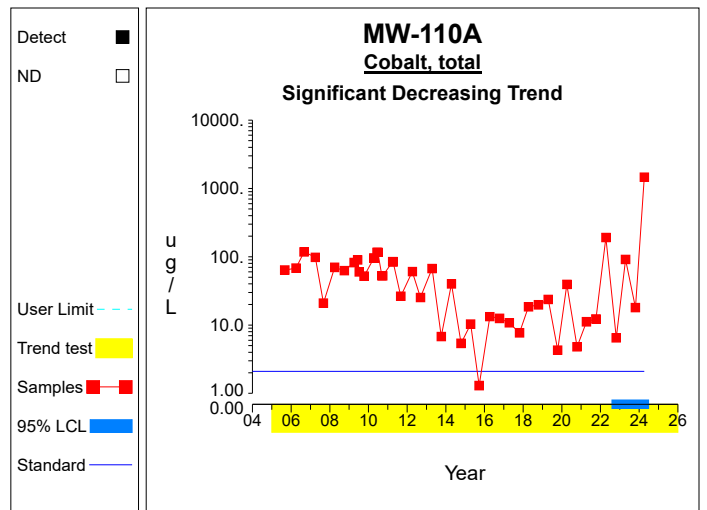
Graph 13



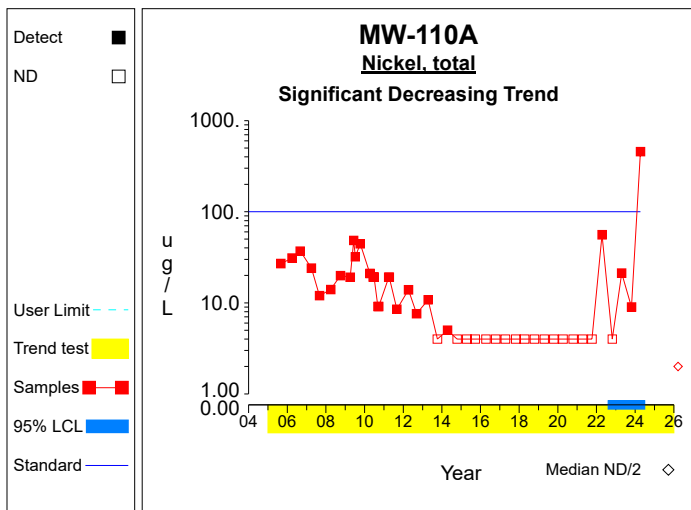
Graph 14



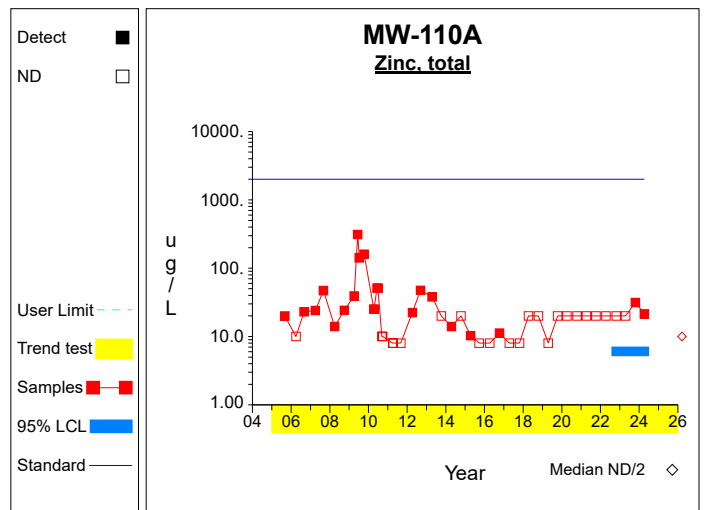
Graph 15



Graph 16

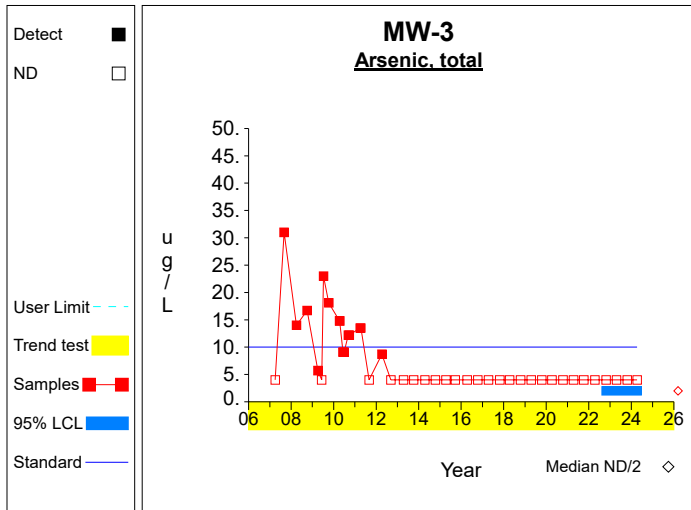


Graph 17

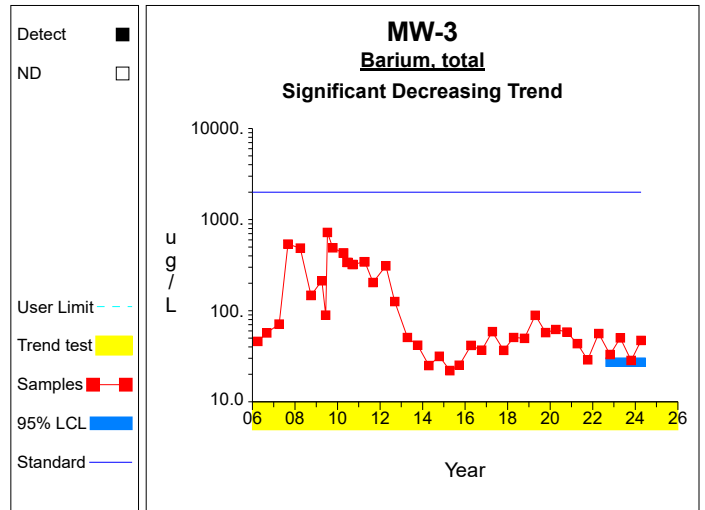


Graph 18

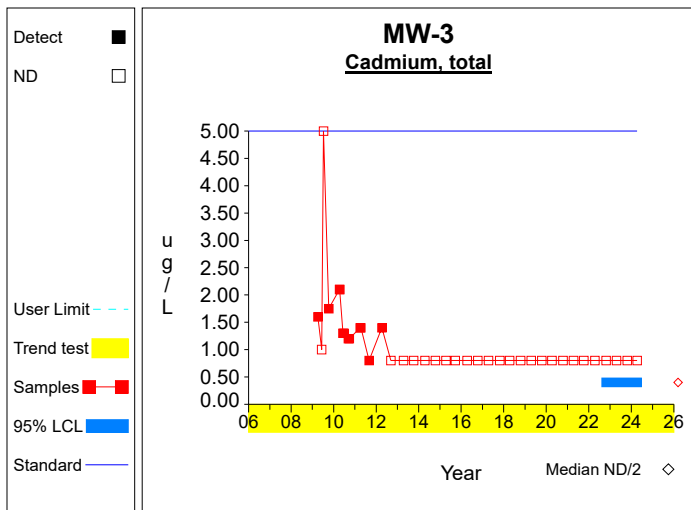
Confidence Limits (Assessment)



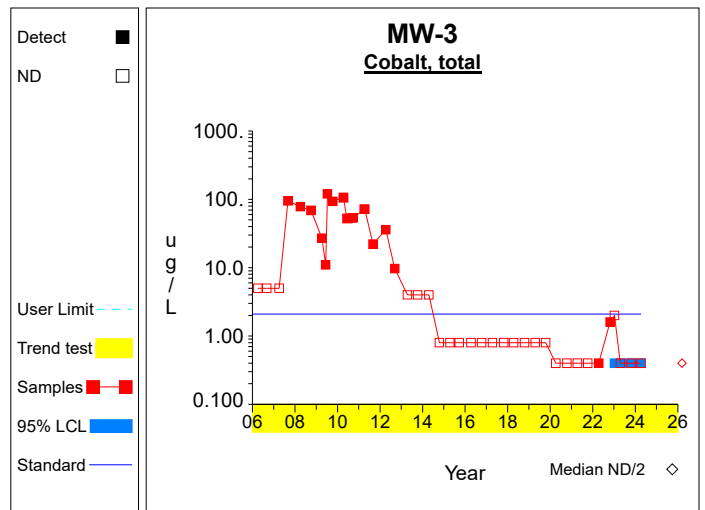
Graph 19



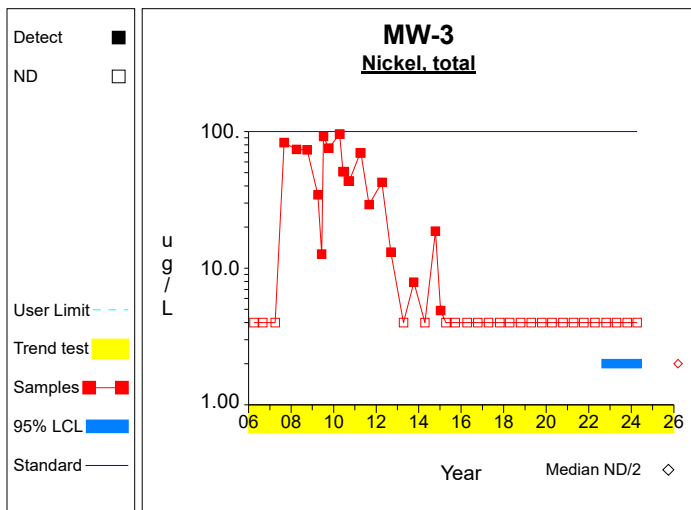
Graph 20



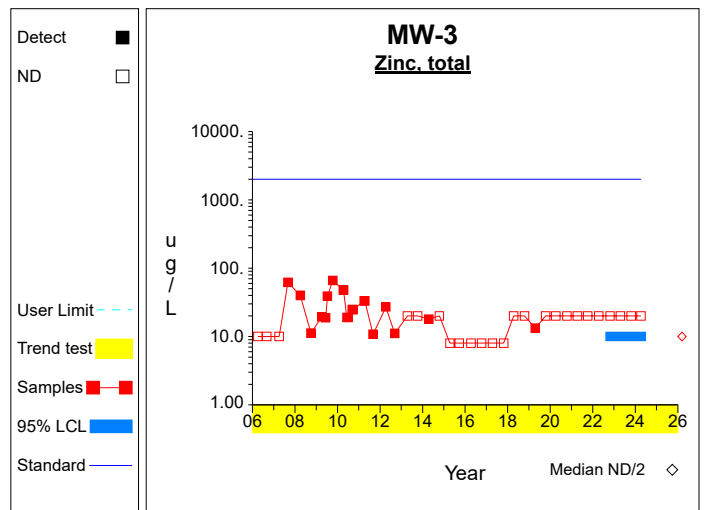
Graph 21



Graph 22

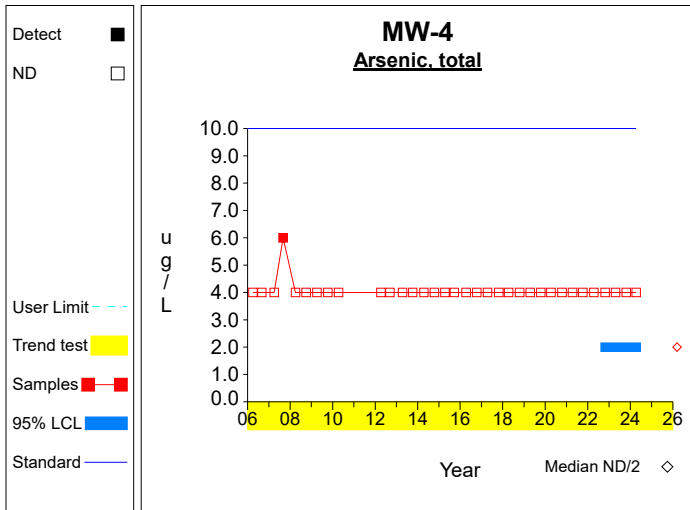


Graph 23

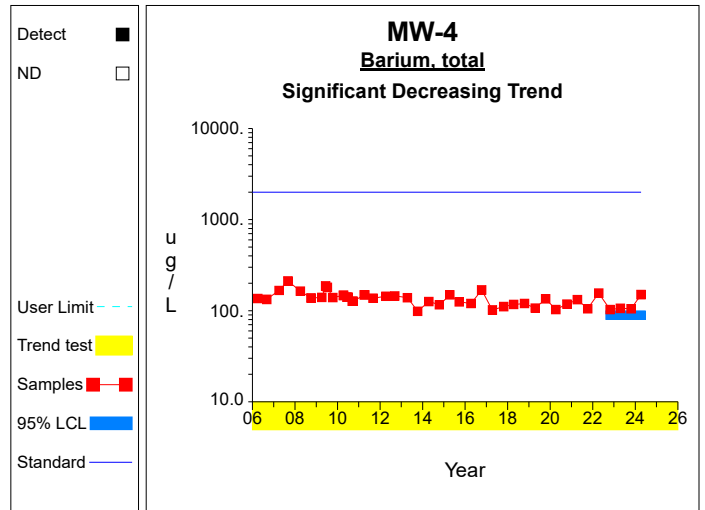


Graph 24

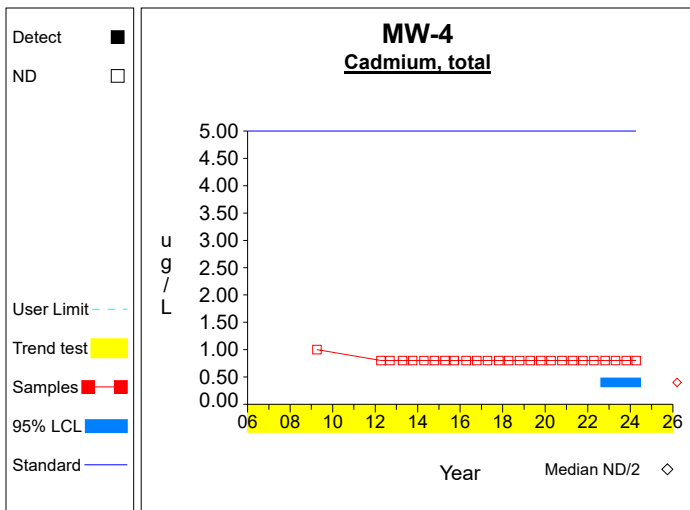
Confidence Limits (Assessment)



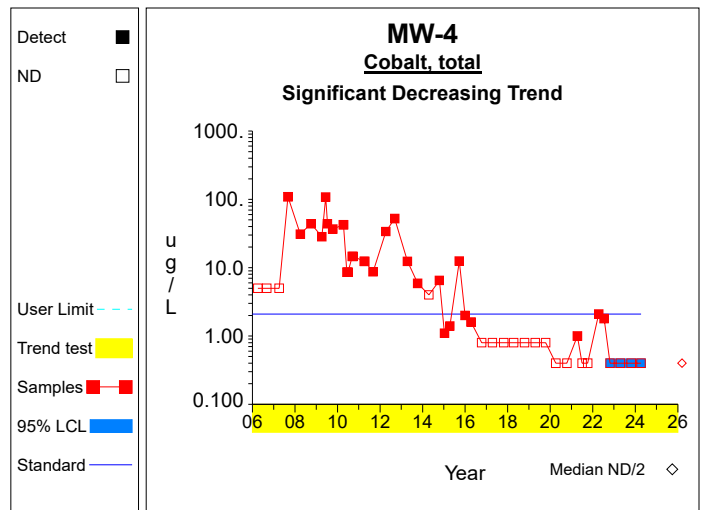
Graph 25



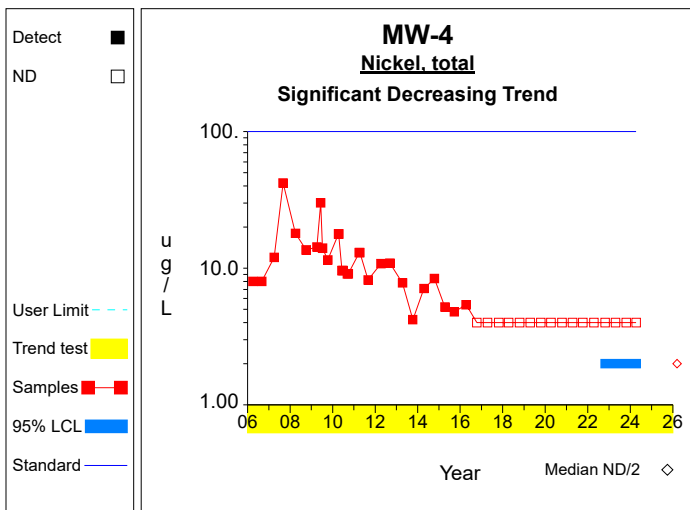
Graph 26



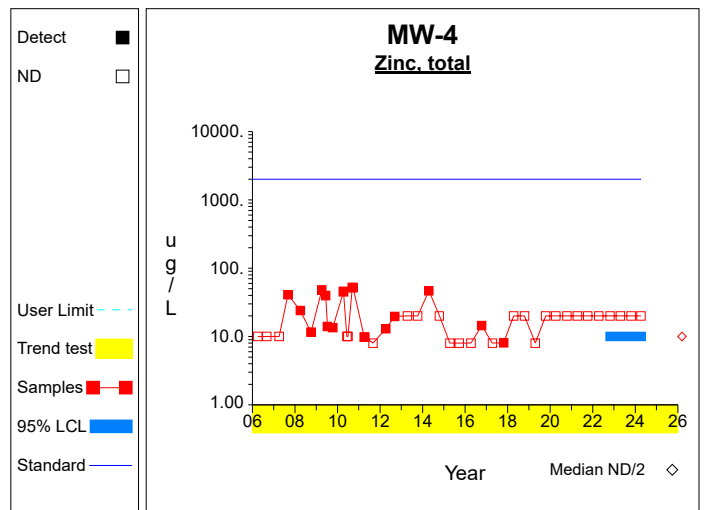
Graph 27



Graph 28



Graph 29



Graph 30

Attachment C

Summary Table of Historical VOC Detections

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Chloromethane	MW-1	4/09/2024		7.9	1.0	ug/L
Acetone	MW-105B	10/25/2017		11.8	10.0	ug/L
Bis(2-ethylhexyl) phthalate	MW-105B	10/15/2014		12	8	ug/L
Bis(2-ethylhexyl) phthalate	MW-105B	9/24/2015		8	8	ug/L
Bromoform	MW-105B	10/25/2022		1.4	1.0	ug/L
Chlorobenzene	MW-105B	10/07/2013		1.2	1.0	ug/L
Chlorobenzene	MW-105B	4/17/2014		1.1	1.0	ug/L
Chlorobenzene	MW-105B	9/24/2015		1.9	1.0	ug/L
Acetone	MW-108A	4/13/2015		153.0	10.0	ug/L
Acetone	MW-108A	4/13/2017		75.5	10.0	ug/L
Acetone	MW-108A	10/25/2017		83.8	10.0	ug/L
Benzene	MW-108A	9/10/2012		1.6	1.0	ug/L
Benzene	MW-108A	10/07/2013		1.4	1.0	ug/L
Benzene	MW-108A	4/17/2014		1.0	1.0	ug/L
Benzene	MW-108A	4/13/2015		1.2	1.0	ug/L
Benzene	MW-108A	9/22/2015		1.6	1.0	ug/L
Benzene	MW-108A	10/25/2017		1.0	1.0	ug/L
Benzene	MW-108A	1/12/2018		1.2	1.0	ug/L
Bis(2-ethylhexyl) phthalate	MW-108A	10/15/2020		10	6	ug/L
Chloroethane	MW-108A	4/17/2014		1.3	1.0	ug/L
Chloroethane	MW-108A	4/13/2015		1.4	1.0	ug/L
Chloroethane	MW-108A	9/22/2015		2.0	1.0	ug/L
Methyl parathion	MW-108A	10/15/2014		.5	.4	ug/L
Parathion	MW-108A	9/24/2015		.9	.4	ug/L
1,1-dichloroethane	MW-110A	4/09/2012		1.4	1.0	ug/L
1,1-dichloroethane	MW-110A	9/10/2012		1.6	1.0	ug/L
1,1-dichloroethane	MW-110A	10/07/2013		1.0	1.0	ug/L
1,1-dichloroethane	MW-110A	4/17/2014		1.5	1.0	ug/L
1,1-dichloroethane	MW-110A	10/12/2016		1.1	1.0	ug/L
1,1-dichloroethane	MW-110A	10/25/2017		1.3	1.0	ug/L
1,1-dichloroethane	MW-110A	10/15/2019		1.4	1.0	ug/L
1,1-dichloroethane	MW-110A	4/06/2020		1.2	1.0	ug/L
1,1-dichloroethane	MW-110A	10/15/2020		1.5	1.0	ug/L
1,1-dichloroethane	MW-110A	4/12/2021		1.6	1.0	ug/L
1,1-dichloroethane	MW-110A	10/06/2021		1.6	1.0	ug/L
1,1-dichloroethane	MW-110A	10/25/2022		2.0	1.0	ug/L
1,1-dichloroethane	MW-110A	4/19/2023		1.3	1.0	ug/L
1,1-dichloroethane	MW-110A	4/09/2024		1.1	1.0	ug/L
1,1-dichloroethane	MW-110A	9/01/2005		2.3	1.0	ug/L
1,4-dichlorobenzene	MW-110A	4/09/2012		6.8	1.0	ug/L
1,4-dichlorobenzene	MW-110A	9/10/2012		8.6	1.0	ug/L
1,4-dichlorobenzene	MW-110A	4/15/2013		9.6	1.0	ug/L
1,4-dichlorobenzene	MW-110A	10/07/2013		7.1	1.0	ug/L
1,4-dichlorobenzene	MW-110A	4/17/2014		9.1	1.0	ug/L
1,4-dichlorobenzene	MW-110A	10/15/2014		10.8	1.0	ug/L
1,4-dichlorobenzene	MW-110A	4/13/2015		7.3	1.0	ug/L
1,4-dichlorobenzene	MW-110A	9/22/2015		12.6	1.0	ug/L
1,4-dichlorobenzene	MW-110A	4/11/2016		13.6	1.0	ug/L
1,4-dichlorobenzene	MW-110A	10/12/2016		12.7	1.0	ug/L
1,4-dichlorobenzene	MW-110A	4/13/2017		11.0	1.0	ug/L
1,4-dichlorobenzene	MW-110A	10/25/2017		11.6	1.0	ug/L
1,4-dichlorobenzene	MW-110A	4/12/2018		12.1	1.0	ug/L
1,4-dichlorobenzene	MW-110A	10/16/2018		12.1	1.0	ug/L
1,4-dichlorobenzene	MW-110A	4/18/2019		9.7	1.0	ug/L
1,4-dichlorobenzene	MW-110A	10/15/2020		11.9	1.0	ug/L
1,4-dichlorobenzene	MW-110A	4/12/2021		6.8	1.0	ug/L
1,4-dichlorobenzene	MW-110A	10/06/2021		5.4	1.0	ug/L
1,4-dichlorobenzene	MW-110A	4/14/2022		4.7	1.0	ug/L
1,4-dichlorobenzene	MW-110A	10/25/2022		5.2	1.0	ug/L
1,4-dichlorobenzene	MW-110A	4/19/2023		5.4	1.0	ug/L
1,4-dichlorobenzene	MW-110A	10/23/2023		3.4	1.0	ug/L
1,4-dichlorobenzene	MW-110A	4/09/2024		3.6	1.0	ug/L
Acetone	MW-110A	10/25/2017		11.2	10.0	ug/L
Benzene	MW-110A	9/01/2005		2.3	1.0	ug/L
Benzene	MW-110A	4/01/2006		2.7	1.0	ug/L
Benzene	MW-110A	9/01/2006		3.2	1.0	ug/L
Benzene	MW-110A	4/01/2007		3.5	1.0	ug/L
Benzene	MW-110A	9/01/2007		3.0	1.0	ug/L
Benzene	MW-110A	4/01/2008		4.6	1.0	ug/L
Benzene	MW-110A	10/01/2008		6.2	1.0	ug/L
Benzene	MW-110A	4/04/2009		4.6	1.0	ug/L
Benzene	MW-110A	4/04/2009		4.6	1.0	ug/L
Benzene	MW-110A	6/09/2009		4.1	1.0	ug/L
Benzene	MW-110A	7/09/2009		4.3	1.0	ug/L
Benzene	MW-110A	10/09/2009		5.1	1.0	ug/L
Benzene	MW-110A	10/09/2009		5.4	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
Benzene	MW-110A	4/10/2010		6.1	1.0	ug/L
Benzene	MW-110A	4/13/2010		6.1	1.0	ug/L
Benzene	MW-110A	6/10/2010		7.8	1.0	ug/L
Benzene	MW-110A	6/29/2010		7.8	1.0	ug/L
Benzene	MW-110A	9/10/2010		6.3	1.0	ug/L
Benzene	MW-110A	9/27/2010		6.3	1.0	ug/L
Benzene	MW-110A	4/01/2011		5.1	1.0	ug/L
Benzene	MW-110A	4/11/2011		5.1	1.0	ug/L
Benzene	MW-110A	9/01/2011		5.9	1.0	ug/L
Benzene	MW-110A	4/09/2012		6.4	1.0	ug/L
Benzene	MW-110A	9/10/2012		6.8	1.0	ug/L
Benzene	MW-110A	4/15/2013		5.8	1.0	ug/L
Benzene	MW-110A	10/07/2013		4.9	1.0	ug/L
Benzene	MW-110A	4/17/2014		6.0	1.0	ug/L
Benzene	MW-110A	10/15/2014		4.7	1.0	ug/L
Benzene	MW-110A	4/13/2015		3.8	1.0	ug/L
Benzene	MW-110A	9/22/2015		5.8	1.0	ug/L
Benzene	MW-110A	10/12/2016		5.4	1.0	ug/L
Benzene	MW-110A	4/13/2017		3.5	1.0	ug/L
Benzene	MW-110A	10/25/2017		4.3	1.0	ug/L
Benzene	MW-110A	4/12/2018		5.1	1.0	ug/L
Benzene	MW-110A	10/16/2018		1.6	1.0	ug/L
Benzene	MW-110A	4/18/2019		2.6	1.0	ug/L
Benzene	MW-110A	10/15/2019		5.2	1.0	ug/L
Benzene	MW-110A	4/06/2020		4.0	1.0	ug/L
Benzene	MW-110A	10/15/2020		4.4	1.0	ug/L
Benzene	MW-110A	4/12/2021		4.0	1.0	ug/L
Benzene	MW-110A	10/06/2021		3.4	1.0	ug/L
Benzene	MW-110A	4/14/2022		3.5	1.0	ug/L
Benzene	MW-110A	10/25/2022		3.8	1.0	ug/L
Benzene	MW-110A	4/19/2023		2.3	1.0	ug/L
Benzene	MW-110A	10/23/2023		2.6	1.0	ug/L
Benzene	MW-110A	4/09/2024		3.4	1.0	ug/L
Chlorobenzene	MW-110A	9/01/2005		4.8	1.0	ug/L
Chlorobenzene	MW-110A	4/01/2006		5.2	1.0	ug/L
Chlorobenzene	MW-110A	9/01/2006		5.0	1.0	ug/L
Chlorobenzene	MW-110A	4/01/2007		5.8	1.0	ug/L
Chlorobenzene	MW-110A	9/01/2007		4.9	1.0	ug/L
Chlorobenzene	MW-110A	4/01/2008		7.0	1.0	ug/L
Chlorobenzene	MW-110A	10/01/2008		9.9	1.0	ug/L
Chlorobenzene	MW-110A	4/04/2009		6.8	1.0	ug/L
Chlorobenzene	MW-110A	4/04/2009		6.8	1.0	ug/L
Chlorobenzene	MW-110A	6/09/2009		4.9	1.0	ug/L
Chlorobenzene	MW-110A	7/09/2009		4.4	1.0	ug/L
Chlorobenzene	MW-110A	10/09/2009		5.4	1.0	ug/L
Chlorobenzene	MW-110A	10/09/2009		6.7	1.0	ug/L
Chlorobenzene	MW-110A	4/10/2010		10.8	1.0	ug/L
Chlorobenzene	MW-110A	4/13/2010		10.8	1.0	ug/L
Chlorobenzene	MW-110A	6/10/2010		10.9	1.0	ug/L
Chlorobenzene	MW-110A	6/29/2010		10.9	1.0	ug/L
Chlorobenzene	MW-110A	9/10/2010		10.6	1.0	ug/L
Chlorobenzene	MW-110A	9/27/2010		10.6	1.0	ug/L
Chlorobenzene	MW-110A	4/01/2011		8.0	1.0	ug/L
Chlorobenzene	MW-110A	4/11/2011		8.0	1.0	ug/L
Chlorobenzene	MW-110A	9/01/2011		5.5	1.0	ug/L
Chlorobenzene	MW-110A	4/09/2012		8.6	1.0	ug/L
Chlorobenzene	MW-110A	9/10/2012		8.0	1.0	ug/L
Chlorobenzene	MW-110A	4/15/2013		12.5	1.0	ug/L
Chlorobenzene	MW-110A	10/07/2013		7.1	1.0	ug/L
Chlorobenzene	MW-110A	4/17/2014		10.2	1.0	ug/L
Chlorobenzene	MW-110A	10/15/2014		7.7	1.0	ug/L
Chlorobenzene	MW-110A	4/13/2015		5.6	1.0	ug/L
Chlorobenzene	MW-110A	9/22/2015		9.8	1.0	ug/L
Chlorobenzene	MW-110A	10/12/2016		6.8	1.0	ug/L
Chlorobenzene	MW-110A	4/13/2017		3.7	1.0	ug/L
Chlorobenzene	MW-110A	10/25/2017		5.1	1.0	ug/L
Chlorobenzene	MW-110A	4/12/2018		5.7	1.0	ug/L
Chlorobenzene	MW-110A	10/16/2018		3.6	1.0	ug/L
Chlorobenzene	MW-110A	4/18/2019		5.4	1.0	ug/L
Chlorobenzene	MW-110A	10/15/2019		6.1	1.0	ug/L
Chlorobenzene	MW-110A	4/06/2020		5.9	1.0	ug/L
Chlorobenzene	MW-110A	10/15/2020		7.6	1.0	ug/L
Chlorobenzene	MW-110A	4/12/2021		7.9	1.0	ug/L
Chlorobenzene	MW-110A	10/06/2021		8.6	1.0	ug/L
Chlorobenzene	MW-110A	4/14/2022		6.3	1.0	ug/L
Chlorobenzene	MW-110A	10/25/2022		8.7	1.0	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Chlorobenzene	MW-110A	4/19/2023		5.1	1.0	ug/L
Chlorobenzene	MW-110A	10/23/2023		6.5	1.0	ug/L
Chlorobenzene	MW-110A	4/09/2024		7.6	1.0	ug/L
Chloroethane	MW-110A	9/01/2005		6.2	1.0	ug/L
Chloroethane	MW-110A	4/04/2009		2.7	1.0	ug/L
Chloroethane	MW-110A	4/04/2009		2.7	1.0	ug/L
Chloroethane	MW-110A	6/09/2009		2.2	1.0	ug/L
Chloroethane	MW-110A	7/09/2009		2.4	1.0	ug/L
Chloroethane	MW-110A	10/09/2009		2.4	1.0	ug/L
Chloroethane	MW-110A	10/09/2009		3.0	1.0	ug/L
Chloroethane	MW-110A	4/10/2010		3.8	1.0	ug/L
Chloroethane	MW-110A	4/13/2010		3.8	1.0	ug/L
Chloroethane	MW-110A	6/10/2010		5.0	1.0	ug/L
Chloroethane	MW-110A	6/29/2010		5.0	1.0	ug/L
Chloroethane	MW-110A	4/01/2011		4.2	1.0	ug/L
Chloroethane	MW-110A	4/11/2011		4.2	1.0	ug/L
Chloroethane	MW-110A	9/01/2011		5.3	1.0	ug/L
Chloroethane	MW-110A	4/09/2012		4.9	1.0	ug/L
Chloroethane	MW-110A	9/10/2012		4.9	1.0	ug/L
Chloroethane	MW-110A	4/15/2013		2.9	1.0	ug/L
Chloroethane	MW-110A	10/07/2013		2.9	1.0	ug/L
Chloroethane	MW-110A	4/17/2014		3.1	1.0	ug/L
Chloroethane	MW-110A	10/15/2014		3.1	1.0	ug/L
Chloroethane	MW-110A	4/13/2015		2.2	1.0	ug/L
Chloroethane	MW-110A	9/22/2015		2.5	1.0	ug/L
Chloroethane	MW-110A	10/12/2016		3.1	1.0	ug/L
Chloroethane	MW-110A	4/13/2017		2.5	1.0	ug/L
Chloroethane	MW-110A	10/25/2017		3.0	1.0	ug/L
Chloroethane	MW-110A	10/16/2018		1.8	1.0	ug/L
Chloroethane	MW-110A	4/18/2019		2.2	1.0	ug/L
Chloroethane	MW-110A	10/15/2019		2.4	1.0	ug/L
Chloroethane	MW-110A	4/06/2020		2.1	1.0	ug/L
Chloroethane	MW-110A	10/15/2020		2.8	1.0	ug/L
Chloroethane	MW-110A	4/12/2021		2.1	1.0	ug/L
Chloroethane	MW-110A	10/06/2021		1.5	1.0	ug/L
Chloroethane	MW-110A	4/14/2022		1.5	1.0	ug/L
Chloroethane	MW-110A	10/25/2022		3.3	1.0	ug/L
Chloroethane	MW-110A	4/19/2023		1.8	1.0	ug/L
Chloroethane	MW-110A	10/23/2023		1.8	1.0	ug/L
Chloroethane	MW-110A	4/09/2024		1.4	1.0	ug/L
Cis-1,2-dichloroethene	MW-110A	9/01/2005		7.9	1.0	ug/L
Cis-1,2-dichloroethene	MW-110A	4/01/2006		14.3	1.0	ug/L
Cis-1,2-dichloroethene	MW-110A	9/01/2006		13.8	1.0	ug/L
Cis-1,2-dichloroethene	MW-110A	4/01/2007		8.7	1.0	ug/L
Cis-1,2-dichloroethene	MW-110A	9/01/2007		4.2	1.0	ug/L
Cis-1,2-dichloroethene	MW-110A	4/01/2008		8.0	1.0	ug/L
Cis-1,2-dichloroethene	MW-110A	4/04/2009		4.7	1.0	ug/L
Cis-1,2-dichloroethene	MW-110A	4/04/2009		4.7	1.0	ug/L
Cis-1,2-dichloroethene	MW-110A	6/09/2009		4.3	1.0	ug/L
Cis-1,2-dichloroethene	MW-110A	7/09/2009		4.3	1.0	ug/L
Cis-1,2-dichloroethene	MW-110A	10/09/2009		5.8	1.0	ug/L
Cis-1,2-dichloroethene	MW-110A	10/09/2009		5.4	1.0	ug/L
Cis-1,2-dichloroethene	MW-110A	4/10/2010		3.0	1.0	ug/L
Cis-1,2-dichloroethene	MW-110A	4/13/2010		3.0	1.0	ug/L
Cis-1,2-dichloroethene	MW-110A	6/10/2010		1.9	1.0	ug/L
Cis-1,2-dichloroethene	MW-110A	6/29/2010		1.9	1.0	ug/L
Cis-1,2-dichloroethene	MW-110A	9/10/2010		2.1	1.0	ug/L
Cis-1,2-dichloroethene	MW-110A	9/27/2010		2.1	1.0	ug/L
Cis-1,2-dichloroethene	MW-110A	4/01/2011		1.6	1.0	ug/L
Cis-1,2-dichloroethene	MW-110A	4/11/2011		1.6	1.0	ug/L
Cis-1,2-dichloroethene	MW-110A	9/01/2011		2.1	1.0	ug/L
Cis-1,2-dichloroethene	MW-110A	9/10/2012		2.7	1.0	ug/L
Cis-1,2-dichloroethene	MW-110A	4/15/2013		1.1	1.0	ug/L
Ethylbenzene	MW-110A	4/09/2012		1.1	1.0	ug/L
Ethylbenzene	MW-110A	4/15/2013		2.8	1.0	ug/L
Ethylbenzene	MW-110A	10/07/2013		1.5	1.0	ug/L
Ethylbenzene	MW-110A	4/17/2014		1.0	1.0	ug/L
Ethylbenzene	MW-110A	9/22/2015		1.1	1.0	ug/L
Ethylbenzene	MW-110A	4/13/2017		1.0	1.0	ug/L
Toluene	MW-110A	4/01/2006		1.7	1.0	ug/L
Toluene	MW-110A	4/01/2007		3.8	1.0	ug/L
Toluene	MW-110A	4/01/2008		4.8	1.0	ug/L
Toluene	MW-110A	4/04/2009		6.1	1.0	ug/L
Toluene	MW-110A	4/04/2009		6.1	1.0	ug/L
Toluene	MW-110A	6/09/2009		2.9	1.0	ug/L
Toluene	MW-110A	7/09/2009		6.8	1.0	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Toluene	MW-110A	10/09/2009		5.1	1.0	ug/L
Toluene	MW-110A	10/09/2009		2.2	1.0	ug/L
Toluene	MW-110A	4/10/2010		5.2	1.0	ug/L
Toluene	MW-110A	4/13/2010		1.4	1.0	ug/L
Toluene	MW-110A	9/10/2010		3.0	1.0	ug/L
Toluene	MW-110A	9/27/2010		1.1	1.0	ug/L
Toluene	MW-110A	9/01/2011		2.6	1.0	ug/L
Toluene	MW-110A	4/15/2013		1.0	1.0	ug/L
Toluene	MW-110A	4/13/2017		1.0	1.0	ug/L
Vinyl chloride	MW-110A	9/01/2005		1.7	1.0	ug/L
Vinyl chloride	MW-110A	9/01/2006		2.5	1.0	ug/L
Vinyl chloride	MW-110A	9/01/2007		2.2	1.0	ug/L
Vinyl chloride	MW-110A	10/01/2008		5.6	1.0	ug/L
Vinyl chloride	MW-110A	4/04/2009		5.8	1.0	ug/L
Vinyl chloride	MW-110A	4/04/2009		5.8	1.0	ug/L
Vinyl chloride	MW-110A	6/09/2009		5.8	1.0	ug/L
Vinyl chloride	MW-110A	7/09/2009		2.2	1.0	ug/L
Vinyl chloride	MW-110A	10/09/2009		1.4	1.0	ug/L
Vinyl chloride	MW-110A	10/09/2009		4.7	1.0	ug/L
Vinyl chloride	MW-110A	4/10/2010		1.4	1.0	ug/L
Vinyl chloride	MW-110A	4/13/2010		5.2	1.0	ug/L
Vinyl chloride	MW-110A	6/10/2010		5.1	1.0	ug/L
Vinyl chloride	MW-110A	6/29/2010		5.1	1.0	ug/L
Vinyl chloride	MW-110A	9/10/2010		1.1	1.0	ug/L
Vinyl chloride	MW-110A	9/27/2010		3.0	1.0	ug/L
Vinyl chloride	MW-110A	4/01/2011		2.7	1.0	ug/L
Vinyl chloride	MW-110A	4/11/2011		2.7	1.0	ug/L
Vinyl chloride	MW-110A	4/09/2012		2.4	1.0	ug/L
Vinyl chloride	MW-110A	9/10/2012		3.0	1.0	ug/L
Vinyl chloride	MW-110A	4/15/2013		1.8	1.0	ug/L
Vinyl chloride	MW-110A	10/07/2013		1.7	1.0	ug/L
Vinyl chloride	MW-110A	4/17/2014		1.8	1.0	ug/L
Vinyl chloride	MW-110A	10/15/2014		1.5	1.0	ug/L
Vinyl chloride	MW-110A	4/13/2015		1.1	1.0	ug/L
Vinyl chloride	MW-110A	9/22/2015		1.3	1.0	ug/L
Vinyl chloride	MW-110A	10/12/2016		1.3	1.0	ug/L
Vinyl chloride	MW-110A	4/13/2017		1.2	1.0	ug/L
Vinyl chloride	MW-110A	10/25/2017		1.0	1.0	ug/L
Vinyl chloride	MW-110A	10/15/2019		2.0	1.0	ug/L
Vinyl chloride	MW-110A	4/06/2020		1.0	1.0	ug/L
Xylenes, total	MW-110A	4/04/2009		3.2	2.0	ug/L
Xylenes, total	MW-110A	4/04/2009		3.2	2.0	ug/L
Xylenes, total	MW-110A	6/09/2009		2.2	2.0	ug/L
Xylenes, total	MW-110A	7/09/2009		2.0	2.0	ug/L
Xylenes, total	MW-110A	10/09/2009		2.8	2.0	ug/L
Xylenes, total	MW-110A	10/09/2009		2.2	2.0	ug/L
Xylenes, total	MW-110A	4/10/2010		5.3	2.0	ug/L
Xylenes, total	MW-110A	4/13/2010		5.3	2.0	ug/L
Xylenes, total	MW-110A	4/01/2011		4.7	2.0	ug/L
Xylenes, total	MW-110A	4/11/2011		4.7	2.0	ug/L
Xylenes, total	MW-110A	4/13/2017		2.5	2.0	ug/L
Xylenes, total	MW-110A	10/15/2019		6.6	2.0	ug/L
Toluene	MW-2	4/09/2012		1.1	1.0	ug/L
Acetone	MW-2A	10/25/2017		13	10	ug/L
Trichloroethene	MW-2A	7/21/2015		3	1	ug/L
Acetone	MW-4	10/25/2017		12.7	10.0	ug/L
Bis(2-ethylhexyl) phthalate	MW-4	10/25/2022		10	6	ug/L
Carbon disulfide	MW-4	10/15/2014		1.7	1.0	ug/L
Bis(2-ethylhexyl) phthalate	SW-3A	4/04/2009		16	10	ug/L
Bis(2-ethylhexyl) phthalate	SW-3A	4/04/2009		16	8	ug/L
Bis(2-ethylhexyl) phthalate	SW-3A	6/09/2009		18	10	ug/L
Bis(2-ethylhexyl) phthalate	SW-3A	6/10/2010		10	10	ug/L
Bis(2-ethylhexyl) phthalate	SW-3A	6/29/2010		10	10	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 D

Assessment Statistics for Detected VOCs

Table 1

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

Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend
1,1-dichloroethane	ug/L	MW-110A	4	1.225	0.618	1.176	0.498	1.952	140.000	
1,4-dichlorobenzene	ug/L	MW-110A	4	4.400	1.046	1.176	3.170	5.630	75.000	
Benzene	ug/L	MW-110A	4	3.025	0.695	1.176	2.208	3.842	5.000	
Chlorobenzene	ug/L	MW-110A	4	6.975	1.539	1.176	5.164	8.786	100.000	
Chloroethane	ug/L	MW-110A	4	2.075	0.838	1.176	1.089	3.061	2800.000	dec
Vinyl chloride	ug/L	MW-110A	4	0.500	0.000	1.176	0.500	0.500	2.000	dec

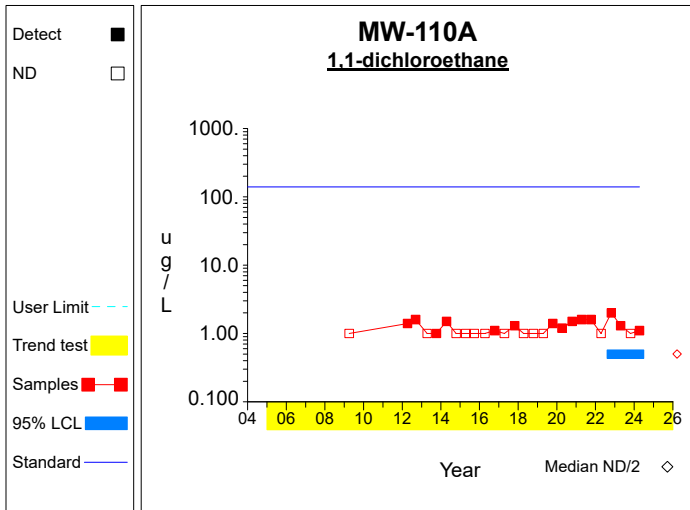
* - Insufficient Data

** - Significant Exceedance

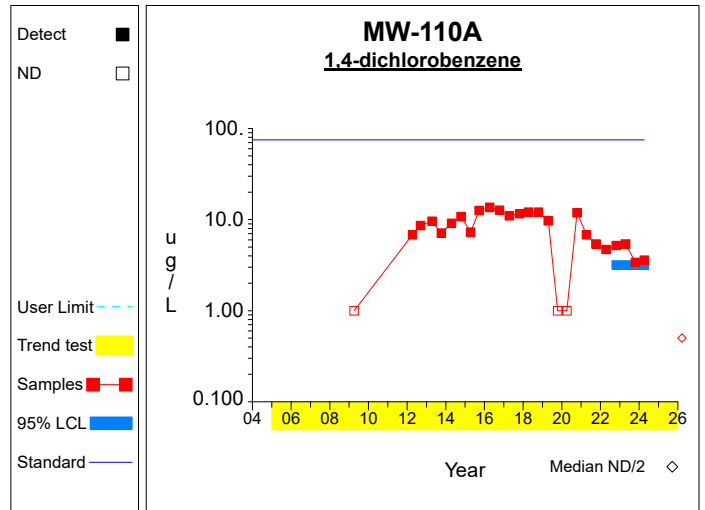
LCL = Lower Confidence Limit

UCL = Upper Confidence Limit

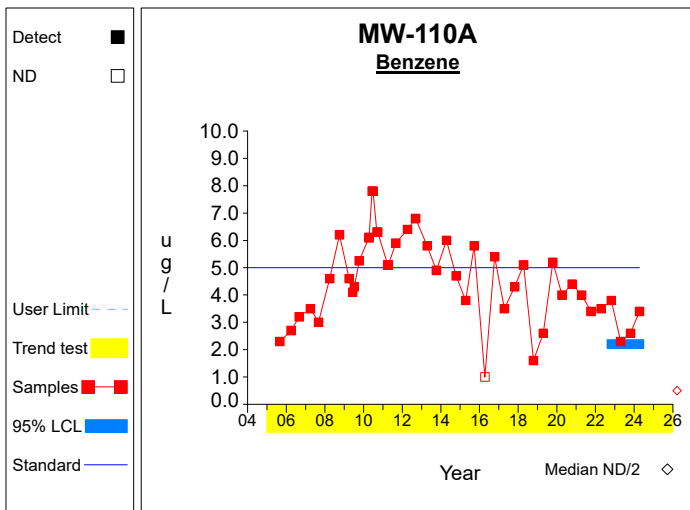
Confidence Limits (Assessment)



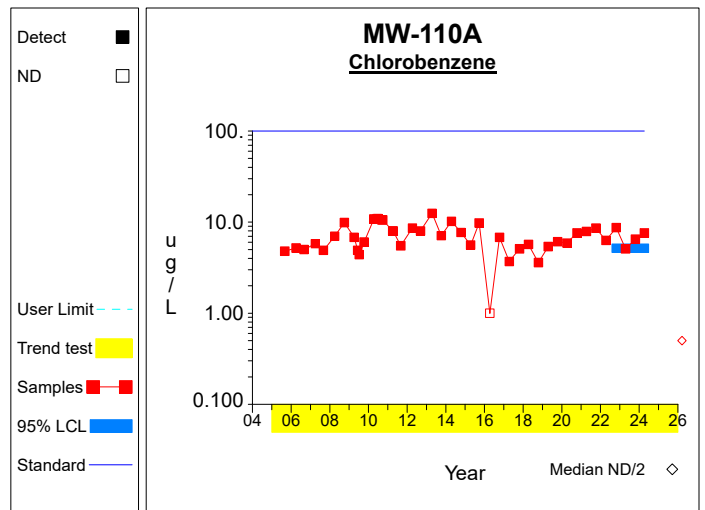
Graph 1



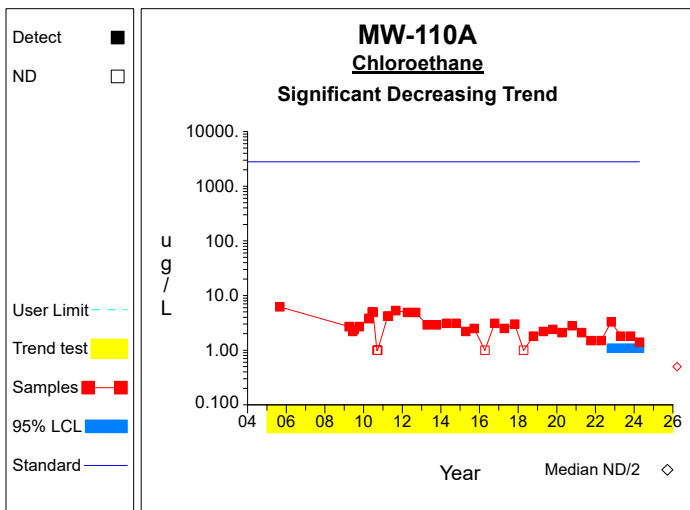
Graph 2



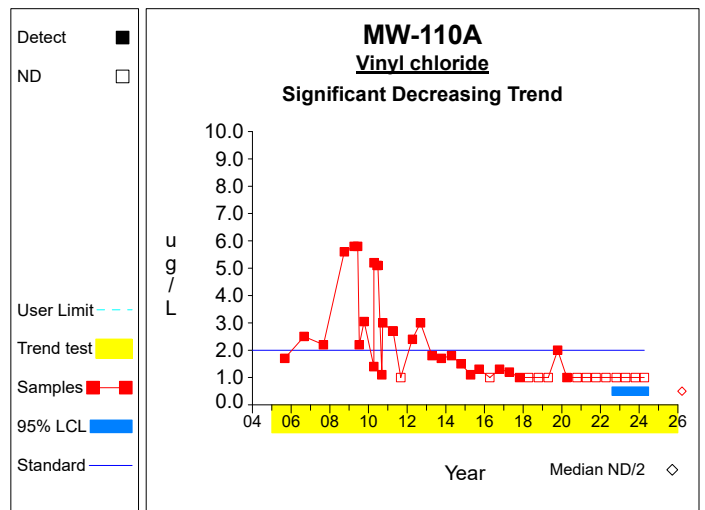
Graph 3



Graph 4



Graph 5



Graph 6

Appendix C

Laboratory Reports for Reporting Period *With Chain of Custody*



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HD0953

Project Description

6035

For:

Todd Whipple

HLW Engineering

PO Box 314

Story City, IA 50248

Heather Murphy

Customer Relationship Specialist

Friday, May 3, 2024

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

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

Microbac Laboratories, Inc.

600 East 17th Street South | Newton, IA 50208 | 641-792-8451 p | www.microbac.com



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HD0953

HLW Engineering

Todd Whipple
PO Box 314
Story City, IA 50248

Project Name: 6035

Project / PO Number: N/A
Received: 04/10/2024
Reported: 05/03/2024

Sample Summary Report

<u>Sample Name</u>	<u>Laboratory ID</u>	<u>Client Matrix</u>	<u>Sample Type</u>	<u>Sample Begin</u>	<u>Sample Taken</u>	<u>Lab Received</u>
MW-1	1HD0953-01	Aqueous	GRAB		04/09/24 09:59	04/10/24 10:08
MW-2A	1HD0953-02	Aqueous	GRAB		04/09/24 10:15	04/10/24 10:08
MW-3	1HD0953-03	Aqueous	GRAB		04/09/24 11:00	04/10/24 10:08
MW-4	1HD0953-04	Aqueous	GRAB		04/09/24 10:43	04/10/24 10:08
MW-105B	1HD0953-05	Aqueous	GRAB		04/09/24 11:18	04/10/24 10:08
MW-108A	1HD0953-06	Aqueous	GRAB		04/09/24 11:35	04/10/24 10:08
MW-110A	1HD0953-07	Aqueous	GRAB		04/09/24 11:54	04/10/24 10:08
Duplicate	1HD0953-08	Aqueous	GRAB		04/09/24 00:00	04/10/24 10:08



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HD0953

Analytical Testing Parameters

Client Sample ID:	MW-1	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/09/2024 9:59
Lab Sample ID:	1HD0953-01		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	7.9	1.0	ug/L	1		04/15/24 0000	04/15/24 1713	LJS
Vinyl Chloride	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1713	LJS
Bromomethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1713	LJS
Chloroethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1713	LJS
Trichlorofluoromethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1713	LJS
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1713	LJS
Acetone	<10.0	10.0	ug/L	1		04/15/24 0000	04/15/24 1713	LJS
Methyl Iodide	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1713	LJS
Carbon Disulfide	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1713	LJS
Methylene Chloride	<5.0	5.0	ug/L	1		04/15/24 0000	04/15/24 1713	LJS
Acrylonitrile	<5.0	5.0	ug/L	1		04/15/24 0000	04/15/24 1713	LJS
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1713	LJS
1,1-Dichloroethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1713	LJS
Vinyl Acetate	<5.0	5.0	ug/L	1		04/15/24 0000	04/15/24 1713	LJS
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1713	LJS
2-Butanone (MEK)	<10.0	10.0	ug/L	1		04/15/24 0000	04/15/24 1713	LJS
Bromochloromethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1713	LJS
Chloroform	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1713	LJS
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1713	LJS
Carbon Tetrachloride	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1713	LJS
Benzene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1713	LJS
1,2-Dichloroethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1713	LJS
Trichloroethylene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1713	LJS
1,2-Dichloropropane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1713	LJS
Dibromomethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1713	LJS
Bromodichloromethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1713	LJS
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1713	LJS
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		04/15/24 0000	04/15/24 1713	LJS
Toluene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1713	LJS
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1713	LJS
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1713	LJS
Tetrachloroethylene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1713	LJS
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		04/15/24 0000	04/15/24 1713	LJS
Dibromochloromethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1713	LJS
1,2-Dibromoethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1713	LJS
Chlorobenzene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1713	LJS
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1713	LJS
Ethylbenzene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1713	LJS
Xylenes, total	<2.0	2.0	ug/L	1		04/15/24 0000	04/15/24 1713	LJS
Styrene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1713	LJS

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CERTIFICATE OF ANALYSIS

1HD0953

Client Sample ID:	MW-1	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/09/2024 9:59
Lab Sample ID:	1HD0953-01		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Bromoform	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1713	LJS
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1713	LJS
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		04/15/24 0000	04/15/24 1713	LJS
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1713	LJS
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1713	LJS
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1713	LJS
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		04/15/24 0000	04/15/24 1713	LJS
Surrogate: Dibromofluoromethane	106	Limit: 80-126	% Rec	1		04/15/24 0000	04/15/24 1713	LJS
Surrogate: Dibromofluoromethane	106	Limit: 75-136	% Rec	1		04/15/24 0000	04/15/24 1713	LJS
Surrogate: 1,2-Dichloroethane-d4	112	Limit: 63-138	% Rec	1		04/15/24 0000	04/15/24 1713	LJS
Surrogate: 1,2-Dichloroethane-d4	112	Limit: 61-142	% Rec	1		04/15/24 0000	04/15/24 1713	LJS
Surrogate: Toluene-d8	102	Limit: 87-116	% Rec	1		04/15/24 0000	04/15/24 1713	LJS
Surrogate: Toluene-d8	102	Limit: 82-121	% Rec	1		04/15/24 0000	04/15/24 1713	LJS
Surrogate: 4-Bromofluorobenzene	101	Limit: 85-111	% Rec	1		04/15/24 0000	04/15/24 1713	LJS
Surrogate: 4-Bromofluorobenzene	101	Limit: 80-116	% Rec	1		04/15/24 0000	04/15/24 1713	LJS

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		04/12/24 1625	04/15/24 2303	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		04/12/24 1625	04/15/24 2303	RVV
Barium, total	0.361	0.0040	mg/L	4		04/12/24 1625	04/15/24 2303	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		04/12/24 1625	04/15/24 2303	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		04/12/24 1625	04/15/24 2303	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		04/12/24 1625	04/15/24 2303	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		04/12/24 1625	04/15/24 2303	RVV
Copper, total	<0.0040	0.0040	mg/L	4		04/12/24 1625	04/15/24 2303	RVV
Lead, total	<0.0040	0.0040	mg/L	4		04/12/24 1625	04/15/24 2303	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		04/12/24 1625	04/15/24 2303	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		04/12/24 1625	04/15/24 2303	RVV
Silver, total	<0.0040	0.0040	mg/L	4		04/12/24 1625	04/15/24 2303	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		04/12/24 1625	04/15/24 2303	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		04/12/24 1625	04/15/24 2303	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		04/12/24 1625	04/15/24 2303	RVV



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CERTIFICATE OF ANALYSIS

1HD0953

Client Sample ID:	MW-2A	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/09/2024 10:15
Lab Sample ID:	1HD0953-02		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1740	LJS
Vinyl Chloride	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1740	LJS
Bromomethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1740	LJS
Chloroethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1740	LJS
Trichlorofluoromethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1740	LJS
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1740	LJS
Acetone	<10.0	10.0	ug/L	1		04/15/24 0000	04/15/24 1740	LJS
Methyl Iodide	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1740	LJS
Carbon Disulfide	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1740	LJS
Methylene Chloride	<5.0	5.0	ug/L	1		04/15/24 0000	04/15/24 1740	LJS
Acrylonitrile	<5.0	5.0	ug/L	1		04/15/24 0000	04/15/24 1740	LJS
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1740	LJS
1,1-Dichloroethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1740	LJS
Vinyl Acetate	<5.0	5.0	ug/L	1		04/15/24 0000	04/15/24 1740	LJS
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1740	LJS
2-Butanone (MEK)	<10.0	10.0	ug/L	1		04/15/24 0000	04/15/24 1740	LJS
Bromochloromethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1740	LJS
Chloroform	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1740	LJS
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1740	LJS
Carbon Tetrachloride	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1740	LJS
Benzene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1740	LJS
1,2-Dichloroethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1740	LJS
Trichloroethylene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1740	LJS
1,2-Dichloropropane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1740	LJS
Dibromomethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1740	LJS
Bromodichloromethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1740	LJS
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1740	LJS
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		04/15/24 0000	04/15/24 1740	LJS
Toluene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1740	LJS
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1740	LJS
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1740	LJS
Tetrachloroethylene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1740	LJS
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		04/15/24 0000	04/15/24 1740	LJS
Dibromochloromethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1740	LJS
1,2-Dibromoethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1740	LJS
Chlorobenzene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1740	LJS
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1740	LJS
Ethylbenzene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1740	LJS
Xylenes, total	<2.0	2.0	ug/L	1		04/15/24 0000	04/15/24 1740	LJS
Styrene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1740	LJS
Bromoform	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1740	LJS
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1740	LJS

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CERTIFICATE OF ANALYSIS

1HD0953

Client Sample ID:	MW-2A	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/09/2024 10:15
Lab Sample ID:	1HD0953-02		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		04/15/24 0000	04/15/24 1740	LJS
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1740	LJS
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1740	LJS
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1740	LJS
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		04/15/24 0000	04/15/24 1740	LJS
Surrogate: Dibromofluoromethane	106	Limit: 80-126	% Rec	1		04/15/24 0000	04/15/24 1740	LJS
Surrogate: Dibromofluoromethane	106	Limit: 75-136	% Rec	1		04/15/24 0000	04/15/24 1740	LJS
Surrogate: 1,2-Dichloroethane-d4	111	Limit: 63-138	% Rec	1		04/15/24 0000	04/15/24 1740	LJS
Surrogate: 1,2-Dichloroethane-d4	111	Limit: 61-142	% Rec	1		04/15/24 0000	04/15/24 1740	LJS
Surrogate: Toluene-d8	101	Limit: 87-116	% Rec	1		04/15/24 0000	04/15/24 1740	LJS
Surrogate: Toluene-d8	101	Limit: 82-121	% Rec	1		04/15/24 0000	04/15/24 1740	LJS
Surrogate: 4-Bromofluorobenzene	101	Limit: 85-111	% Rec	1		04/15/24 0000	04/15/24 1740	LJS
Surrogate: 4-Bromofluorobenzene	101	Limit: 80-116	% Rec	1		04/15/24 0000	04/15/24 1740	LJS

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		04/12/24 1625	04/15/24 2309	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		04/12/24 1625	04/15/24 2309	RVV
Barium, total	0.0584	0.0040	mg/L	4		04/12/24 1625	04/15/24 2309	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		04/12/24 1625	04/15/24 2309	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		04/12/24 1625	04/15/24 2309	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		04/12/24 1625	04/15/24 2309	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		04/12/24 1625	04/15/24 2309	RVV
Copper, total	<0.0040	0.0040	mg/L	4		04/12/24 1625	04/15/24 2309	RVV
Lead, total	<0.0040	0.0040	mg/L	4		04/12/24 1625	04/15/24 2309	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		04/12/24 1625	04/15/24 2309	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		04/12/24 1625	04/15/24 2309	RVV
Silver, total	<0.0040	0.0040	mg/L	4		04/12/24 1625	04/15/24 2309	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		04/12/24 1625	04/15/24 2309	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		04/12/24 1625	04/15/24 2309	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		04/12/24 1625	04/15/24 2309	RVV

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CERTIFICATE OF ANALYSIS

1HD0953

Client Sample ID:	MW-3	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/09/2024 11:00
Lab Sample ID:	1HD0953-03		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1806	LJS
Vinyl Chloride	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1806	LJS
Bromomethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1806	LJS
Chloroethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1806	LJS
Trichlorofluoromethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1806	LJS
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1806	LJS
Acetone	<10.0	10.0	ug/L	1		04/15/24 0000	04/15/24 1806	LJS
Methyl Iodide	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1806	LJS
Carbon Disulfide	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1806	LJS
Methylene Chloride	<5.0	5.0	ug/L	1		04/15/24 0000	04/15/24 1806	LJS
Acrylonitrile	<5.0	5.0	ug/L	1		04/15/24 0000	04/15/24 1806	LJS
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1806	LJS
1,1-Dichloroethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1806	LJS
Vinyl Acetate	<5.0	5.0	ug/L	1		04/15/24 0000	04/15/24 1806	LJS
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1806	LJS
2-Butanone (MEK)	<10.0	10.0	ug/L	1		04/15/24 0000	04/15/24 1806	LJS
Bromochloromethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1806	LJS
Chloroform	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1806	LJS
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1806	LJS
Carbon Tetrachloride	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1806	LJS
Benzene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1806	LJS
1,2-Dichloroethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1806	LJS
Trichloroethylene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1806	LJS
1,2-Dichloropropane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1806	LJS
Dibromomethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1806	LJS
Bromodichloromethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1806	LJS
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1806	LJS
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		04/15/24 0000	04/15/24 1806	LJS
Toluene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1806	LJS
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1806	LJS
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1806	LJS
Tetrachloroethylene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1806	LJS
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		04/15/24 0000	04/15/24 1806	LJS
Dibromochloromethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1806	LJS
1,2-Dibromoethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1806	LJS
Chlorobenzene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1806	LJS
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1806	LJS
Ethylbenzene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1806	LJS
Xylenes, total	<2.0	2.0	ug/L	1		04/15/24 0000	04/15/24 1806	LJS
Styrene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1806	LJS
Bromoform	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1806	LJS
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1806	LJS

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CERTIFICATE OF ANALYSIS

1HD0953

Client Sample ID:	MW-3	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/09/2024 11:00
Lab Sample ID:	1HD0953-03		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		04/15/24 0000	04/15/24 1806	LJS
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1806	LJS
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1806	LJS
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1806	LJS
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		04/15/24 0000	04/15/24 1806	LJS
Surrogate: Dibromofluoromethane	105	Limit: 80-126	% Rec	1		04/15/24 0000	04/15/24 1806	LJS
Surrogate: Dibromofluoromethane	105	Limit: 75-136	% Rec	1		04/15/24 0000	04/15/24 1806	LJS
Surrogate: 1,2-Dichloroethane-d4	110	Limit: 61-142	% Rec	1		04/15/24 0000	04/15/24 1806	LJS
Surrogate: 1,2-Dichloroethane-d4	110	Limit: 63-138	% Rec	1		04/15/24 0000	04/15/24 1806	LJS
Surrogate: Toluene-d8	102	Limit: 82-121	% Rec	1		04/15/24 0000	04/15/24 1806	LJS
Surrogate: Toluene-d8	102	Limit: 87-116	% Rec	1		04/15/24 0000	04/15/24 1806	LJS
Surrogate: 4-Bromofluorobenzene	101	Limit: 85-111	% Rec	1		04/15/24 0000	04/15/24 1806	LJS
Surrogate: 4-Bromofluorobenzene	101	Limit: 80-116	% Rec	1		04/15/24 0000	04/15/24 1806	LJS

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		04/12/24 1625	04/15/24 2315	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		04/12/24 1625	04/15/24 2315	RVV
Barium, total	0.0471	0.0040	mg/L	4		04/12/24 1625	04/15/24 2315	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		04/12/24 1625	04/15/24 2315	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		04/12/24 1625	04/15/24 2315	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		04/12/24 1625	04/15/24 2315	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		04/12/24 1625	04/15/24 2315	RVV
Copper, total	<0.0040	0.0040	mg/L	4		04/12/24 1625	04/15/24 2315	RVV
Lead, total	<0.0040	0.0040	mg/L	4		04/12/24 1625	04/15/24 2315	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		04/12/24 1625	04/15/24 2315	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		04/12/24 1625	04/15/24 2315	RVV
Silver, total	<0.0040	0.0040	mg/L	4		04/12/24 1625	04/15/24 2315	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		04/12/24 1625	04/15/24 2315	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		04/12/24 1625	04/15/24 2315	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		04/12/24 1625	04/15/24 2315	RVV

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CERTIFICATE OF ANALYSIS

1HD0953

Client Sample ID:	MW-4	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/09/2024 10:43
Lab Sample ID:	1HD0953-04		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1833	LJS
Vinyl Chloride	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1833	LJS
Bromomethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1833	LJS
Chloroethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1833	LJS
Trichlorofluoromethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1833	LJS
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1833	LJS
Acetone	<10.0	10.0	ug/L	1		04/15/24 0000	04/15/24 1833	LJS
Methyl Iodide	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1833	LJS
Carbon Disulfide	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1833	LJS
Methylene Chloride	<5.0	5.0	ug/L	1		04/15/24 0000	04/15/24 1833	LJS
Acrylonitrile	<5.0	5.0	ug/L	1		04/15/24 0000	04/15/24 1833	LJS
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1833	LJS
1,1-Dichloroethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1833	LJS
Vinyl Acetate	<5.0	5.0	ug/L	1		04/15/24 0000	04/15/24 1833	LJS
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1833	LJS
2-Butanone (MEK)	<10.0	10.0	ug/L	1		04/15/24 0000	04/15/24 1833	LJS
Bromochloromethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1833	LJS
Chloroform	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1833	LJS
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1833	LJS
Carbon Tetrachloride	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1833	LJS
Benzene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1833	LJS
1,2-Dichloroethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1833	LJS
Trichloroethylene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1833	LJS
1,2-Dichloropropane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1833	LJS
Dibromomethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1833	LJS
Bromodichloromethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1833	LJS
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1833	LJS
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		04/15/24 0000	04/15/24 1833	LJS
Toluene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1833	LJS
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1833	LJS
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1833	LJS
Tetrachloroethylene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1833	LJS
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		04/15/24 0000	04/15/24 1833	LJS
Dibromochloromethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1833	LJS
1,2-Dibromoethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1833	LJS
Chlorobenzene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1833	LJS
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1833	LJS
Ethylbenzene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1833	LJS
Xylenes, total	<2.0	2.0	ug/L	1		04/15/24 0000	04/15/24 1833	LJS
Styrene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1833	LJS
Bromoform	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1833	LJS
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1833	LJS

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CERTIFICATE OF ANALYSIS

1HD0953

Client Sample ID:	MW-4	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/09/2024 10:43
Lab Sample ID:	1HD0953-04		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		04/15/24 0000	04/15/24 1833	LJS
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1833	LJS
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1833	LJS
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1833	LJS
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		04/15/24 0000	04/15/24 1833	LJS
Surrogate: Dibromofluoromethane	102	Limit: 80-126	% Rec	1		04/15/24 0000	04/15/24 1833	LJS
Surrogate: Dibromofluoromethane	102	Limit: 75-136	% Rec	1		04/15/24 0000	04/15/24 1833	LJS
Surrogate: 1,2-Dichloroethane-d4	108	Limit: 61-142	% Rec	1		04/15/24 0000	04/15/24 1833	LJS
Surrogate: 1,2-Dichloroethane-d4	108	Limit: 63-138	% Rec	1		04/15/24 0000	04/15/24 1833	LJS
Surrogate: Toluene-d8	99.8	Limit: 82-121	% Rec	1		04/15/24 0000	04/15/24 1833	LJS
Surrogate: Toluene-d8	99.8	Limit: 87-116	% Rec	1		04/15/24 0000	04/15/24 1833	LJS
Surrogate: 4-Bromofluorobenzene	102	Limit: 85-111	% Rec	1		04/15/24 0000	04/15/24 1833	LJS
Surrogate: 4-Bromofluorobenzene	102	Limit: 80-116	% Rec	1		04/15/24 0000	04/15/24 1833	LJS

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		04/12/24 1625	04/15/24 2322	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		04/12/24 1625	04/15/24 2322	RVV
Barium, total	0.150	0.0040	mg/L	4		04/12/24 1625	04/15/24 2322	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		04/12/24 1625	04/15/24 2322	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		04/12/24 1625	04/15/24 2322	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		04/12/24 1625	04/15/24 2322	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		04/12/24 1625	04/15/24 2322	RVV
Copper, total	<0.0040	0.0040	mg/L	4		04/12/24 1625	04/15/24 2322	RVV
Lead, total	<0.0040	0.0040	mg/L	4		04/12/24 1625	04/15/24 2322	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		04/12/24 1625	04/15/24 2322	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		04/12/24 1625	04/15/24 2322	RVV
Silver, total	<0.0040	0.0040	mg/L	4		04/12/24 1625	04/15/24 2322	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		04/12/24 1625	04/15/24 2322	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		04/12/24 1625	04/15/24 2322	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		04/12/24 1625	04/15/24 2322	RVV

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CERTIFICATE OF ANALYSIS

1HD0953

Client Sample ID:	MW-105B	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/09/2024 11:18
Lab Sample ID:	1HD0953-05		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1900	LJS
Vinyl Chloride	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1900	LJS
Bromomethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1900	LJS
Chloroethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1900	LJS
Trichlorofluoromethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1900	LJS
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1900	LJS
Acetone	<10.0	10.0	ug/L	1		04/15/24 0000	04/15/24 1900	LJS
Methyl Iodide	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1900	LJS
Carbon Disulfide	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1900	LJS
Methylene Chloride	<5.0	5.0	ug/L	1		04/15/24 0000	04/15/24 1900	LJS
Acrylonitrile	<5.0	5.0	ug/L	1		04/15/24 0000	04/15/24 1900	LJS
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1900	LJS
1,1-Dichloroethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1900	LJS
Vinyl Acetate	<5.0	5.0	ug/L	1		04/15/24 0000	04/15/24 1900	LJS
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1900	LJS
2-Butanone (MEK)	<10.0	10.0	ug/L	1		04/15/24 0000	04/15/24 1900	LJS
Bromochloromethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1900	LJS
Chloroform	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1900	LJS
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1900	LJS
Carbon Tetrachloride	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1900	LJS
Benzene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1900	LJS
1,2-Dichloroethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1900	LJS
Trichloroethylene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1900	LJS
1,2-Dichloropropane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1900	LJS
Dibromomethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1900	LJS
Bromodichloromethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1900	LJS
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1900	LJS
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		04/15/24 0000	04/15/24 1900	LJS
Toluene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1900	LJS
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1900	LJS
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1900	LJS
Tetrachloroethylene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1900	LJS
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		04/15/24 0000	04/15/24 1900	LJS
Dibromochloromethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1900	LJS
1,2-Dibromoethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1900	LJS
Chlorobenzene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1900	LJS
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1900	LJS
Ethylbenzene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1900	LJS
Xylenes, total	<2.0	2.0	ug/L	1		04/15/24 0000	04/15/24 1900	LJS
Styrene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1900	LJS
Bromoform	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1900	LJS
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1900	LJS

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CERTIFICATE OF ANALYSIS

1HD0953

Client Sample ID:	MW-105B	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/09/2024 11:18
Lab Sample ID:	1HD0953-05		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		04/15/24 0000	04/15/24 1900	LJS
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1900	LJS
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1900	LJS
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1900	LJS
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		04/15/24 0000	04/15/24 1900	LJS
Surrogate: Dibromofluoromethane	102	Limit: 75-136	% Rec	1		04/15/24 0000	04/15/24 1900	LJS
Surrogate: Dibromofluoromethane	102	Limit: 80-126	% Rec	1		04/15/24 0000	04/15/24 1900	LJS
Surrogate: 1,2-Dichloroethane-d4	109	Limit: 61-142	% Rec	1		04/15/24 0000	04/15/24 1900	LJS
Surrogate: 1,2-Dichloroethane-d4	109	Limit: 63-138	% Rec	1		04/15/24 0000	04/15/24 1900	LJS
Surrogate: Toluene-d8	100	Limit: 82-121	% Rec	1		04/15/24 0000	04/15/24 1900	LJS
Surrogate: Toluene-d8	100	Limit: 87-116	% Rec	1		04/15/24 0000	04/15/24 1900	LJS
Surrogate: 4-Bromofluorobenzene	102	Limit: 80-116	% Rec	1		04/15/24 0000	04/15/24 1900	LJS
Surrogate: 4-Bromofluorobenzene	102	Limit: 85-111	% Rec	1		04/15/24 0000	04/15/24 1900	LJS

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		04/12/24 1625	04/15/24 2328	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		04/12/24 1625	04/15/24 2328	RVV
Barium, total	0.110	0.0040	mg/L	4		04/12/24 1625	04/15/24 2328	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		04/12/24 1625	04/15/24 2328	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		04/12/24 1625	04/15/24 2328	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		04/12/24 1625	04/15/24 2328	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		04/12/24 1625	04/15/24 2328	RVV
Copper, total	<0.0040	0.0040	mg/L	4		04/12/24 1625	04/15/24 2328	RVV
Lead, total	<0.0040	0.0040	mg/L	4		04/12/24 1625	04/15/24 2328	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		04/12/24 1625	04/15/24 2328	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		04/12/24 1625	04/15/24 2328	RVV
Silver, total	<0.0040	0.0040	mg/L	4		04/12/24 1625	04/15/24 2328	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		04/12/24 1625	04/15/24 2328	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		04/12/24 1625	04/15/24 2328	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		04/12/24 1625	04/15/24 2328	RVV

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CERTIFICATE OF ANALYSIS

1HD0953

Client Sample ID:	MW-108A	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/09/2024 11:35
Lab Sample ID:	1HD0953-06		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1926	LJS
Vinyl Chloride	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1926	LJS
Bromomethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1926	LJS
Chloroethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1926	LJS
Trichlorofluoromethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1926	LJS
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1926	LJS
Acetone	<10.0	10.0	ug/L	1		04/15/24 0000	04/15/24 1926	LJS
Methyl Iodide	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1926	LJS
Carbon Disulfide	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1926	LJS
Methylene Chloride	<5.0	5.0	ug/L	1		04/15/24 0000	04/15/24 1926	LJS
Acrylonitrile	<5.0	5.0	ug/L	1		04/15/24 0000	04/15/24 1926	LJS
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1926	LJS
1,1-Dichloroethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1926	LJS
Vinyl Acetate	<5.0	5.0	ug/L	1		04/15/24 0000	04/15/24 1926	LJS
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1926	LJS
2-Butanone (MEK)	<10.0	10.0	ug/L	1		04/15/24 0000	04/15/24 1926	LJS
Bromochloromethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1926	LJS
Chloroform	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1926	LJS
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1926	LJS
Carbon Tetrachloride	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1926	LJS
Benzene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1926	LJS
1,2-Dichloroethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1926	LJS
Trichloroethylene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1926	LJS
1,2-Dichloropropane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1926	LJS
Dibromomethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1926	LJS
Bromodichloromethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1926	LJS
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1926	LJS
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		04/15/24 0000	04/15/24 1926	LJS
Toluene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1926	LJS
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1926	LJS
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1926	LJS
Tetrachloroethylene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1926	LJS
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		04/15/24 0000	04/15/24 1926	LJS
Dibromochloromethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1926	LJS
1,2-Dibromoethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1926	LJS
Chlorobenzene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1926	LJS
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1926	LJS
Ethylbenzene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1926	LJS
Xylenes, total	<2.0	2.0	ug/L	1		04/15/24 0000	04/15/24 1926	LJS
Styrene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1926	LJS
Bromoform	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1926	LJS
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1926	LJS

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CERTIFICATE OF ANALYSIS

1HD0953

Client Sample ID:	MW-108A	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/09/2024 11:35
Lab Sample ID:	1HD0953-06		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		04/15/24 0000	04/15/24 1926	LJS
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1926	LJS
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1926	LJS
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1926	LJS
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		04/15/24 0000	04/15/24 1926	LJS
Surrogate: Dibromofluoromethane	102	Limit: 75-136	% Rec	1		04/15/24 0000	04/15/24 1926	LJS
Surrogate: Dibromofluoromethane	102	Limit: 80-126	% Rec	1		04/15/24 0000	04/15/24 1926	LJS
Surrogate: 1,2-Dichloroethane-d4	109	Limit: 61-142	% Rec	1		04/15/24 0000	04/15/24 1926	LJS
Surrogate: 1,2-Dichloroethane-d4	109	Limit: 63-138	% Rec	1		04/15/24 0000	04/15/24 1926	LJS
Surrogate: Toluene-d8	101	Limit: 87-116	% Rec	1		04/15/24 0000	04/15/24 1926	LJS
Surrogate: Toluene-d8	101	Limit: 82-121	% Rec	1		04/15/24 0000	04/15/24 1926	LJS
Surrogate: 4-Bromofluorobenzene	102	Limit: 80-116	% Rec	1		04/15/24 0000	04/15/24 1926	LJS
Surrogate: 4-Bromofluorobenzene	102	Limit: 85-111	% Rec	1		04/15/24 0000	04/15/24 1926	LJS

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		04/12/24 1625	04/15/24 2346	RVV
Arsenic, total	0.0094	0.0040	mg/L	4		04/12/24 1625	04/15/24 2346	RVV
Barium, total	0.0269	0.0040	mg/L	4		04/12/24 1625	04/15/24 2346	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		04/12/24 1625	04/15/24 2346	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		04/12/24 1625	04/15/24 2346	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		04/12/24 1625	04/15/24 2346	RVV
Cobalt, total	0.0276	0.0004	mg/L	4		04/12/24 1625	04/15/24 2346	RVV
Copper, total	0.0063	0.0040	mg/L	4		04/12/24 1625	04/15/24 2346	RVV
Lead, total	<0.0040	0.0040	mg/L	4		04/12/24 1625	04/15/24 2346	RVV
Nickel, total	0.0556	0.0040	mg/L	4		04/12/24 1625	04/15/24 2346	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		04/12/24 1625	04/15/24 2346	RVV
Silver, total	<0.0040	0.0040	mg/L	4		04/12/24 1625	04/15/24 2346	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		04/12/24 1625	04/15/24 2346	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		04/12/24 1625	04/15/24 2346	RVV
Zinc, total	0.0211	0.0200	mg/L	4		04/12/24 1625	04/15/24 2346	RVV



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CERTIFICATE OF ANALYSIS

1HD0953

Client Sample ID:	MW-110A	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/09/2024 11:54
Lab Sample ID:	1HD0953-07		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Dichlorodifluoromethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1953	LJS
Chloromethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1953	LJS
Vinyl Chloride	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1953	LJS
Bromomethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1953	LJS
Chloroethane	1.4	1.0	ug/L	1		04/15/24 0000	04/15/24 1953	LJS
Trichlorofluoromethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1953	LJS
Acrolein	<10.0	10.0	ug/L	1		04/15/24 0000	04/15/24 1953	LJS
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1953	LJS
Acetone	<10.0	10.0	ug/L	1		04/15/24 0000	04/15/24 1953	LJS
Methyl Iodide	<2.0	2.0	ug/L	1		04/15/24 0000	04/15/24 1953	LJS
Carbon Disulfide	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1953	LJS
Acetonitrile	<10.0	10.0	ug/L	1		04/15/24 0000	04/15/24 1953	LJS
Methylene Chloride	<5.0	5.0	ug/L	1		04/15/24 0000	04/15/24 1953	LJS
Acrylonitrile	<5.0	5.0	ug/L	1		04/15/24 0000	04/15/24 1953	LJS
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1953	LJS
1,1-Dichloroethane	1.1	1.0	ug/L	1		04/15/24 0000	04/15/24 1953	LJS
Vinyl Acetate	<5.0	5.0	ug/L	1		04/15/24 0000	04/15/24 1953	LJS
2,2-Dichloropropane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1953	LJS
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1953	LJS
2-Butanone (MEK)	<5.0	5.0	ug/L	1		04/15/24 0000	04/15/24 1953	LJS
Bromochloromethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1953	LJS
Chloroform	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1953	LJS
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1953	LJS
1,1-Dichloropropene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1953	LJS
Carbon Tetrachloride	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1953	LJS
Benzene	3.4	1.0	ug/L	1		04/15/24 0000	04/15/24 1953	LJS
1,2-Dichloroethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1953	LJS
Trichloroethylene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1953	LJS
1,2-Dichloropropane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1953	LJS
Dibromomethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1953	LJS
Bromodichloromethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1953	LJS
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1953	LJS
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		04/15/24 0000	04/15/24 1953	LJS
Toluene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1953	LJS
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1953	LJS
Ethyl Methacrylate	<10.0	10.0	ug/L	1		04/15/24 0000	04/15/24 1953	LJS
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1953	LJS
Tetrachloroethylene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1953	LJS
1,3-Dichloropropane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1953	LJS
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		04/15/24 0000	04/15/24 1953	LJS
Dibromochloromethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1953	LJS
1,2-Dibromoethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1953	LJS

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CERTIFICATE OF ANALYSIS

1HD0953

Client Sample ID:	MW-110A	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/09/2024 11:54
Lab Sample ID:	1HD0953-07		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Chlorobenzene	7.6	1.0	ug/L	1		04/15/24 0000	04/15/24 1953	LJS
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1953	LJS
Ethylbenzene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1953	LJS
Xylenes, total	<2.0	2.0	ug/L	1		04/15/24 0000	04/15/24 1953	LJS
Styrene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1953	LJS
Bromoform	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1953	LJS
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1953	LJS
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		04/15/24 0000	04/15/24 1953	LJS
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1953	LJS
1,3-Dichlorobenzene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1953	LJS
1,4-Dichlorobenzene	3.6	1.0	ug/L	1		04/15/24 0000	04/15/24 1953	LJS
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1953	LJS
1,2-Dibromo-3-chloropropane	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1953	LJS
1,2,4-Trichlorobenzene	<1.0	1.0	ug/L	1		04/15/24 0000	04/15/24 1953	LJS
Allyl chloride	<1.0	1.0	ug/L	1		04/17/24 0000	04/17/24 1908	LJS
Chloroprene	<1.0	1.0	ug/L	1		04/17/24 0000	04/17/24 1908	LJS
Methacrylonitrile	<1.0	1.0	ug/L	1		04/17/24 0000	04/17/24 1908	LJS
Methyl Methacrylate	<1.0	1.0	ug/L	1		04/17/24 0000	04/17/24 1908	LJS
Propionitrile	<10.0	10.0	ug/L	1		04/17/24 0000	04/17/24 1908	LJS
Surrogate: Dibromofluoromethane	101	Limit: 80-126	% Rec	1		04/15/24 0000	04/15/24 1953	LJS
Surrogate: Dibromofluoromethane	95.5	Limit: 80-126	% Rec	1		04/17/24 0000	04/17/24 1908	LJS
Surrogate: 1,2-Dichloroethane-d4	107	Limit: 63-138	% Rec	1		04/15/24 0000	04/15/24 1953	LJS
Surrogate: 1,2-Dichloroethane-d4	99.5	Limit: 63-138	% Rec	1		04/17/24 0000	04/17/24 1908	LJS
Surrogate: 1,2-Dichloroethane-d4	107	Limit: 63-138	% Rec	1		04/15/24 0000	04/15/24 1953	LJS
Surrogate: Toluene-d8	100	Limit: 87-116	% Rec	1		04/15/24 0000	04/15/24 1953	LJS
Surrogate: Toluene-d8	97.4	Limit: 87-116	% Rec	1		04/17/24 0000	04/17/24 1908	LJS
Surrogate: Toluene-d8	100	Limit: 87-116	% Rec	1		04/15/24 0000	04/15/24 1953	LJS
Surrogate: 4-Bromofluorobenzene	102	Limit: 85-111	% Rec	1		04/15/24 0000	04/15/24 1953	LJS
Surrogate: 4-Bromofluorobenzene	98.5	Limit: 85-111	% Rec	1		04/17/24 0000	04/17/24 1908	LJS
Surrogate: 4-Bromofluorobenzene	102	Limit: 85-111	% Rec	1		04/15/24 0000	04/15/24 1953	LJS

Determination of General Solvents	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 8015C								
Isobutanol	<1.0	1.0	mg/L	1		04/15/24 0830	04/15/24 2037	PDS

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3520C/EPA 8270C								
N-Nitrosodimethylamine	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
Methyl Methanesulfonate	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
N-Nitrosodiethylamine	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
N-Nitrosomethylethylamine	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
Ethyl Methanesulfonate	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
Phenol	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP



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CERTIFICATE OF ANALYSIS

1HD0953

Client Sample ID:	MW-110A	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/09/2024 11:54
Lab Sample ID:	1HD0953-07		

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Bis(2-Chloroethyl) Ether	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
2-Chlorophenol	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
Benzyl Alcohol	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
2-Methylphenol (o-Cresol)	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
Bis[2-Chloroisopropyl]ether	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
n-Nitroso-di-n-propylamine	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
N-Nitrosopyrrolidine	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
Acetophenone	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
o-Toluidine	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
(3 & 4)-Methylphenol	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
Hexachloroethane	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
Nitrobenzene	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
N-Nitrosopiperidine	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
Isophorone	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
2-Nitrophenol	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
2,4-Dimethylphenol	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
Bis (2-Chloroethoxy) Methane	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
2,4-Dichlorophenol	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
Naphthalene	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
4-Chloroaniline	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
2,6-Dichlorophenol	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
Hexachloropropene	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
Hexachlorobutadiene	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
N-Nitrosodi-n-butylamine	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
1,4-Phenylenediamine	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
4-Chloro-3-methylphenol	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
2-Methylnaphthalene	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
Isosafrole	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
1,2,4,5-Tetrachlorobenzene	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
Hexachlorocyclopentadiene	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
2,4,6-Trichlorophenol	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
2,4,5-Trichlorophenol	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
Safrole	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
2-Chloronaphthalene	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
2-Nitroaniline	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
1,4-Naphthoquinone	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
Dimethylphthalate	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
1,3-Dinitrobenzene	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
1,2-Dinitrobenzene	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
2,6-Dinitrotoluene	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
Acenaphthylene	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
3-Nitroaniline	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
Acenaphthene	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP

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CERTIFICATE OF ANALYSIS

1HD0953

Client Sample ID:	MW-110A	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/09/2024 11:54
Lab Sample ID:	1HD0953-07		

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
2,4-Dinitrophenol	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
4-Nitrophenol	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
Dibenzofuran	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
2,4-Dinitrotoluene	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
2,3,4,6-Tetrachlorophenol	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
Pentachlorobenzene	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
1-Naphthylamine	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
2-Naphthylamine	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
Diethyl Phthalate	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
Fluorene	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
4-Chlorophenyl Phenyl Ether	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
4-Nitroaniline	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
5-Nitro-o-toluidine	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
4,6-Dinitro-2-methylphenol	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
N-Nitrosodiphenylamine	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
Diphenylamine	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
Azobenzene	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
Diallate	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
1,3,5-Trinitrobenzene	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
Phenacetin	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
4-Bromophenyl Phenyl Ether	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
4-Aminobiphenyl	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
Pentachlorophenol	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
Pronamide	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
Pentachloronitrobenzene (PCNB)	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
Phenanthrene	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
Anthracene	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
Di-n-butyl Phthalate	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
Methapyrilene	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
Fluoranthene	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
Isodrin	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
Chlorobenzilate	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
Pyrene	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
p-(Dimethylamino)azobenzene	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
3,3-Dimethylbenzidine	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
Butyl Benzyl Phthalate	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
Benzo(a)anthracene	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
Chrysene	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
Bis(2-Ethylhexyl) Phthalate	<6	6	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
Kepone	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
3,3'-Dichlorobenzidine	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
2-Acetylamino fluorene	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
Di-n-octyl Phthalate	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP

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CERTIFICATE OF ANALYSIS

1HD0953

Client Sample ID:	MW-110A	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/09/2024 11:54
Lab Sample ID:	1HD0953-07		

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Benzo(b)Fluoranthene	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
7,12-Dimethylbenz [a] anthracene	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
Benzo(k)Fluoranthene	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
Benzo(a)Pyrene	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
3-Methylcholanthrene	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
Dibenzo(a,h)anthracene	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
Indeno(1,2,3-cd)Pyrene	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
Benzo(g,h,i)perylene	<8	8	ug/L	1		04/15/24 1345	04/29/24 1752	EPP
Surrogate: 2-Fluorophenol	60.2	Limit: 24-136	% Rec	1		04/15/24 1345	04/29/24 1752	EPP
Surrogate: Phenol-d6	60.2	Limit: 15-140	% Rec	1		04/15/24 1345	04/29/24 1752	EPP
Surrogate: Nitrobenzene-d5	62.7	Limit: 29-130	% Rec	1		04/15/24 1345	04/29/24 1752	EPP
Surrogate: 2-Fluorobiphenyl	54.7	Limit: 23-113	% Rec	1		04/15/24 1345	04/29/24 1752	EPP
Surrogate: 2,4,6-Tribromophenol	71.1	Limit: 15-139	% Rec	1		04/15/24 1345	04/29/24 1752	EPP
Surrogate: Terphenyl-dl4	40.7	Limit: 27-141	% Rec	1		04/15/24 1345	04/29/24 1752	EPP

Determination of Organophosphorus Insecticides	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3510C/EPA 8141								
O,O,O-Triethyl phosphorothioate	<0.4	0.4	ug/L	1		04/15/24 1644	04/18/24 2114	EPP
Thionazin	<0.4	0.4	ug/L	1		04/15/24 1644	04/18/24 2114	EPP
Phorate	<0.4	0.4	ug/L	1		04/15/24 1644	04/18/24 2114	EPP
Dimethoate	<0.4	0.4	ug/L	1		04/15/24 1644	04/18/24 2114	EPP
Disulfoton	<0.4	0.4	ug/L	1		04/15/24 1644	04/18/24 2114	EPP
Methyl Parathion	<0.4	0.4	ug/L	1		04/15/24 1644	04/18/24 2114	EPP
Parathion	<0.4	0.4	ug/L	1		04/15/24 1644	04/18/24 2114	EPP
Famphur	<0.4	0.4	ug/L	1		04/15/24 1644	04/18/24 2114	EPP
Surrogate: 2-Nitro-m-xylene	83.6	Limit: 38-122	% Rec	1		04/15/24 1644	04/18/24 2114	EPP

Determination of Chlorinated Phenoxy Herbicides	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 8151A								
2,4-D	<2.0	2.0	ug/L	1		04/15/24 1731	04/30/24 1717	MSV
2,4,5-TP (Silvex)	<0.5	0.5	ug/L	1		04/15/24 1731	04/30/24 1717	MSV
2,4,5-T	<0.5	0.5	ug/L	1		04/15/24 1731	04/30/24 1717	MSV
Dinoseb	<0.5	0.5	ug/L	1		04/15/24 1731	04/30/24 1717	MSV
Surrogate: 2,5-Dichlorobenzoic Acid	141	Limit: 31-116	% Rec	1	S-07	04/15/24 1731	04/30/24 1717	MSV

Determination of Organochlorine Insecticides & Metabolites	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3510C/EPA 8081								
Alpha-BHC	<0.05	0.05	ug/L	1		04/15/24 1643	04/17/24 1929	EPP
Gamma-BHC [Lindane]	<0.05	0.05	ug/L	1		04/15/24 1643	04/17/24 1929	EPP
Beta-BHC	<0.05	0.05	ug/L	1		04/15/24 1643	04/17/24 1929	EPP
Heptachlor	<0.05	0.05	ug/L	1		04/15/24 1643	04/17/24 1929	EPP



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CERTIFICATE OF ANALYSIS

1HD0953

Client Sample ID:	MW-110A	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/09/2024 11:54
Lab Sample ID:	1HD0953-07		

Determination of Organochlorine Insecticides & Metabolites	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Delta-BHC	<0.05	0.05	ug/L	1		04/15/24 1643	04/17/24 1929	EPP
Aldrin	<0.05	0.05	ug/L	1		04/15/24 1643	04/17/24 1929	EPP
Heptachlor Epoxide	<0.05	0.05	ug/L	1		04/15/24 1643	04/17/24 1929	EPP
Endosulfan I	<0.05	0.05	ug/L	1		04/15/24 1643	04/17/24 1929	EPP
4,4`-DDE	<0.05	0.05	ug/L	1		04/15/24 1643	04/17/24 1929	EPP
Dieldrin	<0.05	0.05	ug/L	1		04/15/24 1643	04/17/24 1929	EPP
Endrin	<0.05	0.05	ug/L	1		04/15/24 1643	04/17/24 1929	EPP
4,4`-DDD	<0.05	0.05	ug/L	1		04/15/24 1643	04/17/24 1929	EPP
Endosulfan II	<0.05	0.05	ug/L	1		04/15/24 1643	04/17/24 1929	EPP
4,4`-DDT	<0.05	0.05	ug/L	1		04/15/24 1643	04/17/24 1929	EPP
Endrin Aldehyde	<0.05	0.05	ug/L	1		04/15/24 1643	04/17/24 1929	EPP
Endosulfan Sulfate	<0.05	0.05	ug/L	1		04/15/24 1643	04/17/24 1929	EPP
Methoxychlor	<0.05	0.05	ug/L	1		04/15/24 1643	04/17/24 1929	EPP
Chlordane	<0.10	0.10	ug/L	1		04/15/24 1643	04/17/24 1929	EPP
Toxaphene	<0.20	0.20	ug/L	1		04/15/24 1643	04/17/24 1929	EPP
Hexachlorobenzene	<0.05	0.05	ug/L	1		04/15/24 1643	04/17/24 1929	EPP
Surrogate: Tetrachloro-m-xylene	81.0	Limit: 10-121	% Rec	1		04/15/24 1643	04/17/24 1929	EPP

Determination of Polychlorinated Biphenyls (PCB)	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3510C/EPA 8082								
Arochlor 1016	<0.20	0.20	ug/L	1		04/15/24 1643	04/17/24 1929	EPP
Arochlor 1221	<0.20	0.20	ug/L	1		04/15/24 1643	04/17/24 1929	EPP
Arochlor 1232	<0.20	0.20	ug/L	1		04/15/24 1643	04/17/24 1929	EPP
Arochlor 1242	<0.20	0.20	ug/L	1		04/15/24 1643	04/17/24 1929	EPP
Arochlor 1248	<0.20	0.20	ug/L	1		04/15/24 1643	04/17/24 1929	EPP
Arochlor 1254	<0.20	0.20	ug/L	1		04/15/24 1643	04/17/24 1929	EPP
Arochlor 1260	<0.20	0.20	ug/L	1		04/15/24 1643	04/17/24 1929	EPP
Surrogate: Tetrachloro-m-xylene	87.5	Limit: 38-121	% Rec	1		04/15/24 1643	04/17/24 1929	EPP
Surrogate: Decachlorobiphenyl	82.2	Limit: 25-119	% Rec	1		04/15/24 1643	04/17/24 1929	EPP

Determination of Conventional Chemistry Parameters	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 376.2								
Sulfide, total	<0.30	0.30	mg/L	1		04/11/24 0922	04/15/24 1717	CHP
EPA 9010B								
Cyanide, total	<0.005	0.005	mg/L	1		04/18/24 1716	04/21/24 1210	CHP

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		04/12/24 1625	04/15/24 2352	RVV
Arsenic, total	0.0070	0.0040	mg/L	4		04/12/24 1625	04/15/24 2352	RVV
Barium, total	0.199	0.0040	mg/L	4		04/12/24 1625	04/15/24 2352	RVV

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CERTIFICATE OF ANALYSIS

1HD0953

Client Sample ID:	MW-110A	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/09/2024 11:54
Lab Sample ID:	1HD0953-07		

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Beryllium, total	<0.0040	0.0040	mg/L	4		04/12/24 1625	04/15/24 2352	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		04/12/24 1625	04/15/24 2352	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		04/12/24 1625	04/15/24 2352	RVV
Cobalt, total	1.46	0.0004	mg/L	4		04/12/24 1625	04/15/24 2352	RVV
Copper, total	0.0042	0.0040	mg/L	4		04/12/24 1625	04/15/24 2352	RVV
Lead, total	<0.0040	0.0040	mg/L	4		04/12/24 1625	04/15/24 2352	RVV
Nickel, total	0.456	0.0040	mg/L	4		04/12/24 1625	04/15/24 2352	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		04/12/24 1625	04/15/24 2352	RVV
Silver, total	<0.0040	0.0040	mg/L	4		04/12/24 1625	04/15/24 2352	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		04/12/24 1625	04/15/24 2352	RVV
Tin, total	<0.0200	0.0200	mg/L	4		04/12/24 1625	04/15/24 2352	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		04/12/24 1625	04/15/24 2352	RVV
Zinc, total	0.0214	0.0200	mg/L	4		04/12/24 1625	04/15/24 2352	RVV
EPA 7470A								
Mercury, total	<0.00050	0.00050	mg/L	1		04/16/24 1340	04/17/24 1621	JAR

Client Sample ID:	Duplicate	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/09/2024
Lab Sample ID:	1HD0953-08		

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		04/12/24 1625	04/15/24 2358	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		04/12/24 1625	04/15/24 2358	RVV
Barium, total	0.0566	0.0040	mg/L	4		04/12/24 1625	04/15/24 2358	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		04/12/24 1625	04/15/24 2358	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		04/12/24 1625	04/15/24 2358	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		04/12/24 1625	04/15/24 2358	RVV
Cobalt, total	0.0006	0.0004	mg/L	4		04/12/24 1625	04/15/24 2358	RVV
Copper, total	<0.0040	0.0040	mg/L	4		04/12/24 1625	04/15/24 2358	RVV
Lead, total	<0.0040	0.0040	mg/L	4		04/12/24 1625	04/15/24 2358	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		04/12/24 1625	04/15/24 2358	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		04/12/24 1625	04/15/24 2358	RVV
Silver, total	<0.0040	0.0040	mg/L	4		04/12/24 1625	04/15/24 2358	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		04/12/24 1625	04/15/24 2358	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		04/12/24 1625	04/15/24 2358	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		04/12/24 1625	04/15/24 2358	RVV



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CERTIFICATE OF ANALYSIS

1HD0953

Batch Log Summary

Method	Batch	Laboratory ID	Client / Source ID
EPA 376.2	1HD0714	1HD0714-BLK1	
		1HD0953-07	MW-110A
		1HD0714-MSD1	1HD0788-02
		1HD0714-MS1	1HD0788-02
		1HD0714-BS1	
Method	Batch	Laboratory ID	Client / Source ID
EPA 6020A	1HD0843	1HD0843-BLK1	
		1HD0843-BS1	
		1HD0843-MS1	1HD0949-01
		1HD0843-MSD1	1HD0949-01
		1HD0843-PS1	1HD0949-01
		1HD0953-01	MW-1
		1HD0953-02	MW-2A
		1HD0953-03	MW-3
		1HD0953-04	MW-4
		1HD0953-05	MW-105B
		1HD0953-06	MW-108A
		1HD0953-07	MW-110A
		1HD0953-08	Duplicate
Method	Batch	Laboratory ID	Client / Source ID
EPA 8015C	1HD0875	1HD0875-BS1	
		1HD0875-BLK1	
		1HD0953-07	MW-110A
		1HD0875-MS1	1HD0193-01
		1HD0875-MSD1	1HD0193-01
Method	Batch	Laboratory ID	Client / Source ID
EPA 8270C	1HD0906	1HD0906-BLK1	
		1HD0906-BS1	
		1HD0906-BSD1	
		1HD0953-07	MW-110A
Method	Batch	Laboratory ID	Client / Source ID
EPA 8081	1HD0934	1HD0934-BLK1	
		1HD0934-BS1	
		1HD0934-BSD1	
		1HD0953-07	MW-110A
Method	Batch	Laboratory ID	Client / Source ID



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CERTIFICATE OF ANALYSIS

1HD0953

EPA 8082	1HD0935	1HD0935-BLK1 1HD0935-BS1 1HD0935-BSD1 1HD0953-07	MW-110A
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Method	Batch	Laboratory ID	Client / Source ID
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EPA 8141	1HD0937	1HD0937-BLK1 1HD0953-07 1HD0937-BS1 1HD0937-BSD1	MW-110A
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Method	Batch	Laboratory ID	Client / Source ID
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EPA 8151A	1HD0942	1HD0942-BLK1 1HD0942-BS1 1HD0942-BSD1 1HD0953-07	MW-110A
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Method	Batch	Laboratory ID	Client / Source ID
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EPA 8260B	1HD0944	1HD0944-BS1 1HD0944-BSD1 1HD0944-BLK1 1HD0953-01 1HD0953-02 1HD0953-03 1HD0953-04 1HD0953-05 1HD0953-06 1HD0953-07	MW-1 MW-2A MW-3 MW-4 MW-105B MW-108A MW-110A
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Method	Batch	Laboratory ID	Client / Source ID
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EPA 7470A	1HD0991	1HD0991-BLK1 1HD0991-BS1 1HD0953-07 1HD0991-MS1 1HD0991-MSD1	MW-110A 1HD0953-07 1HD0953-07
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Method	Batch	Laboratory ID	Client / Source ID
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EPA 8260B	1HD1128	1HD1128-BS1 1HD1128-BSD1 1HD1128-BLK1 1HD0953-07 1HD1128-MS1 1HD1128-MSD1	MW-110A 1HD0953-07 1HD0953-07
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Method	Batch	Laboratory ID	Client / Source ID
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CERTIFICATE OF ANALYSIS

1HD0953

EPA 9010B

1HD1205

1HD1205-BLK1

1HD1205-BS1

1HD1205-MS1

1HD0814-02

1HD1205-MSD1

1HD0814-02

1HD0953-07

MW-110A

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 1HD0944 - EPA 5030B - EPA 8260B										

Blank (1HD0944-BLK1)

Prepared: 04/15/24 00:00 Analyzed: 04/15/24 10:55

Dichlorodifluoromethane	<1.0	1.0	ug/L
Chloromethane	<1.0	1.0	ug/L
Chloromethane	<1.0	1.0	ug/L
Vinyl Chloride	<1.0	1.0	ug/L
Vinyl Chloride	<1.0	1.0	ug/L
Bromomethane	<1.0	1.0	ug/L
Bromomethane	<1.0	1.0	ug/L
Chloroethane	<1.0	1.0	ug/L
Chloroethane	<1.0	1.0	ug/L
Trichlorofluoromethane	<1.0	1.0	ug/L
Trichlorofluoromethane	<1.0	1.0	ug/L
Acrolein	<10.0	10.0	ug/L
1,1-Dichloroethylene	<1.0	1.0	ug/L
1,1-Dichloroethylene	<1.0	1.0	ug/L
Acetone	<10.0	10.0	ug/L
Acetone	<10.0	10.0	ug/L
Methyl Iodide	<2.0	2.0	ug/L
Methyl Iodide	<1.0	1.0	ug/L
Carbon Disulfide	<1.0	1.0	ug/L
Carbon Disulfide	<1.0	1.0	ug/L
Acetonitrile	<10.0	10.0	ug/L
Methylene Chloride	<5.0	5.0	ug/L
Methylene Chloride	<5.0	5.0	ug/L
Acrylonitrile	<5.0	5.0	ug/L
Acrylonitrile	<5.0	5.0	ug/L
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L
1,1-Dichloroethane	<1.0	1.0	ug/L
1,1-Dichloroethane	<1.0	1.0	ug/L
Vinyl Acetate	<5.0	5.0	ug/L
Vinyl Acetate	<5.0	5.0	ug/L
2,2-Dichloropropane	<1.0	1.0	ug/L
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L
2-Butanone (MEK)	<5.0	5.0	ug/L

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1HD0953

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD0944 - EPA 5030B - EPA 8260B										
Blank (1HD0944-BLK1)				Prepared: 04/15/24 00:00 Analyzed: 04/15/24 10:55						
2-Butanone (MEK)	<10.0	10.0	ug/L							
Bromochloromethane	<1.0	1.0	ug/L							
Bromochloromethane	<1.0	1.0	ug/L							
Chloroform	<1.0	1.0	ug/L							
Chloroform	<1.0	1.0	ug/L							
1,1,1-Trichloroethane	<1.0	1.0	ug/L							
1,1,1-Trichloroethane	<1.0	1.0	ug/L							
1,1-Dichloropropene	<1.0	1.0	ug/L							
Carbon Tetrachloride	<1.0	1.0	ug/L							
Carbon Tetrachloride	<1.0	1.0	ug/L							
Benzene	<1.0	1.0	ug/L							
Benzene	<1.0	1.0	ug/L							
1,2-Dichloroethane	<1.0	1.0	ug/L							
1,2-Dichloroethane	<1.0	1.0	ug/L							
Trichloroethylene	<1.0	1.0	ug/L							
Trichloroethylene	<1.0	1.0	ug/L							
1,2-Dichloropropane	<1.0	1.0	ug/L							
1,2-Dichloropropane	<1.0	1.0	ug/L							
Dibromomethane	<1.0	1.0	ug/L							
Dibromomethane	<1.0	1.0	ug/L							
Bromodichloromethane	<1.0	1.0	ug/L							
Bromodichloromethane	<1.0	1.0	ug/L							
cis-1,3-Dichloropropene	<1.0	1.0	ug/L							
cis-1,3-Dichloropropene	<1.0	1.0	ug/L							
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L							
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L							
Toluene	<1.0	1.0	ug/L							
Toluene	<1.0	1.0	ug/L							
trans-1,3-Dichloropropene	<1.0	1.0	ug/L							
trans-1,3-Dichloropropene	<1.0	1.0	ug/L							
Ethyl Methacrylate	<10.0	10.0	ug/L							
1,1,2-Trichloroethane	<1.0	1.0	ug/L							
1,1,2-Trichloroethane	<1.0	1.0	ug/L							
Tetrachloroethylene	<1.0	1.0	ug/L							
Tetrachloroethylene	<1.0	1.0	ug/L							
1,3-Dichloropropane	<1.0	1.0	ug/L							
2-Hexanone (MBK)	<5.0	5.0	ug/L							
2-Hexanone (MBK)	<5.0	5.0	ug/L							
Dibromochloromethane	<1.0	1.0	ug/L							
Dibromochloromethane	<1.0	1.0	ug/L							
1,2-Dibromoethane	<1.0	1.0	ug/L							
1,2-Dibromoethane	<1.0	1.0	ug/L							
Chlorobenzene	<1.0	1.0	ug/L							

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1HD0953

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1HD0944 - EPA 5030B - EPA 8260B

Blank (1HD0944-BLK1)

Prepared: 04/15/24 00:00 Analyzed: 04/15/24 10:55

Chlorobenzene	<1.0	1.0	ug/L							
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L							
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L							
Ethylbenzene	<1.0	1.0	ug/L							
Ethylbenzene	<1.0	1.0	ug/L							
Xylenes, total	<2.0	2.0	ug/L							
Xylenes, total	<2.0	2.0	ug/L							
Styrene	<1.0	1.0	ug/L							
Styrene	<1.0	1.0	ug/L							
Bromoform	<1.0	1.0	ug/L							
Bromoform	<1.0	1.0	ug/L							
1,2,3-Trichloropropane	<1.0	1.0	ug/L							
1,2,3-Trichloropropane	<1.0	1.0	ug/L							
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L							
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L							
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L							
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L							
1,3-Dichlorobenzene	<1.0	1.0	ug/L							
1,4-Dichlorobenzene	<1.0	1.0	ug/L							
1,4-Dichlorobenzene	<1.0	1.0	ug/L							
1,2-Dichlorobenzene	<1.0	1.0	ug/L							
1,2-Dichlorobenzene	<1.0	1.0	ug/L							
1,2-Dibromo-3-chloropropane	<1.0	1.0	ug/L							
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L							
1,2,4-Trichlorobenzene	<1.0	1.0	ug/L							

Surrogate: Dibromofluoromethane	59.0		ug/L	50.2		118	80-126			
Surrogate: Dibromofluoromethane	59.0		ug/L	50.2		118	80-126			
Surrogate: Dibromofluoromethane	59.0		ug/L	50.2		118	75-136			
Surrogate: 1,2-Dichloroethane-d4	60.2		ug/L	50.1		120	63-138			
Surrogate: 1,2-Dichloroethane-d4	60.2		ug/L	50.1		120	63-138			
Surrogate: 1,2-Dichloroethane-d4	60.2		ug/L	50.1		120	63-138			
Surrogate: 1,2-Dichloroethane-d4	60.2		ug/L	50.1		120	61-142			
Surrogate: Toluene-d8	52.0		ug/L	50.4		103	87-116			
Surrogate: Toluene-d8	52.0		ug/L	50.4		103	87-116			
Surrogate: Toluene-d8	52.0		ug/L	50.4		103	87-116			
Surrogate: Toluene-d8	52.0		ug/L	50.4		103	82-121			
Surrogate: 4-Bromofluorobenzene	51.0		ug/L	50.1		102	85-111			
Surrogate: 4-Bromofluorobenzene	51.0		ug/L	50.1		102	85-111			
Surrogate: 4-Bromofluorobenzene	51.0		ug/L	50.1		102	85-111			
Surrogate: 4-Bromofluorobenzene	51.0		ug/L	50.1		102	80-116			

LCS (1HD0944-BS1)

Prepared: 04/15/24 00:00 Analyzed: 04/15/24 09:35

QM-18

Dichlorodifluoromethane	40.19	1.0	ug/L	31.6		127	44-139			
Chloromethane	43.47	1.0	ug/L	30.6		142	56-152			
Chloromethane	43.47	1.0	ug/L	30.6		142	63-155			

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CERTIFICATE OF ANALYSIS

1HD0953

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD0944 - EPA 5030B - EPA 8260B										
LCS (1HD0944-BS1)				Prepared: 04/15/24 00:00 Analyzed: 04/15/24 09:35						QM-18
Vinyl Chloride	39.95	1.0	ug/L	30.2		132	62-151			
Vinyl Chloride	39.95	1.0	ug/L	30.2		132	70-154			
Bromomethane	37.62	1.0	ug/L	28.8		131	61-162			
Bromomethane	37.62	1.0	ug/L	28.8		131	52-176			
Chloroethane	42.75	1.0	ug/L	31.6		135	69-138			
Chloroethane	42.75	1.0	ug/L	31.6		135	72-148			
Trichlorofluoromethane	40.36	1.0	ug/L	32.6		124	70-143			
Trichlorofluoromethane	40.36	1.0	ug/L	32.6		124	70-152			
Acrolein	103.6	10.0	ug/L	100		103	27-144			
1,1-Dichloroethylene	62.35	1.0	ug/L	50.0		125	76-140			
1,1-Dichloroethylene	62.35	1.0	ug/L	50.0		125	70-148			
Acetone	177.2	10.0	ug/L	102		174	51-156			QS-02
Acetone	177.2	10.0	ug/L	102		174	43-172			QS-02
Methyl Iodide	113.0	2.0	ug/L	99.7		113	81-166			
Methyl Iodide	113.0	1.0	ug/L	99.7		113	69-170			
Carbon Disulfide	112.9	1.0	ug/L	101		112	76-147			
Carbon Disulfide	112.9	1.0	ug/L	101		112	72-162			
Acetonitrile	118.6	10.0	ug/L	101		118	46-156			
Methylene Chloride	55.13	5.0	ug/L	50.0		110	67-139			
Methylene Chloride	55.13	5.0	ug/L	50.0		110	68-142			
Acrylonitrile	121.2	5.0	ug/L	100		121	67-144			
Acrylonitrile	121.2	5.0	ug/L	100		121	67-144			
trans-1,2-Dichloroethylene	61.74	1.0	ug/L	50.0		123	72-135			
trans-1,2-Dichloroethylene	61.74	1.0	ug/L	50.0		123	66-148			
1,1-Dichloroethane	60.70	1.0	ug/L	50.0		121	72-129			
1,1-Dichloroethane	60.70	1.0	ug/L	50.0		121	66-143			
Vinyl Acetate	134.5	5.0	ug/L	102		132	24-144			
Vinyl Acetate	134.5	5.0	ug/L	102		132	43-153			
2,2-Dichloropropane	57.88	1.0	ug/L	50.0		116	64-131			
cis-1,2-Dichloroethylene	60.07	1.0	ug/L	50.0		120	81-137			
cis-1,2-Dichloroethylene	60.07	1.0	ug/L	50.0		120	71-149			
2-Butanone (MEK)	157.9	5.0	ug/L	103		153	47-149			QS-02
2-Butanone (MEK)	157.9	10.0	ug/L	103		153	52-159			
Bromochloromethane	60.87	1.0	ug/L	50.0		122	75-138			
Bromochloromethane	60.87	1.0	ug/L	50.0		122	69-143			
Chloroform	58.04	1.0	ug/L	50.0		116	78-131			
Chloroform	58.04	1.0	ug/L	50.0		116	69-144			
1,1,1-Trichloroethane	57.20	1.0	ug/L	50.0		114	67-121			
1,1,1-Trichloroethane	57.20	1.0	ug/L	50.0		114	62-129			
1,1-Dichloropropene	57.51	1.0	ug/L	50.0		115	80-131			
Carbon Tetrachloride	57.93	1.0	ug/L	50.0		116	71-131			
Carbon Tetrachloride	57.93	1.0	ug/L	50.0		116	63-141			
Benzene	52.57	1.0	ug/L	50.0		105	77-130			

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CERTIFICATE OF ANALYSIS

1HD0953

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD0944 - EPA 5030B - EPA 8260B										
LCS (1HD0944-BS1)										QM-18
										Prepared: 04/15/24 00:00 Analyzed: 04/15/24 09:35
Benzene	52.57	1.0	ug/L	50.0		105	71-134			
1,2-Dichloroethane	49.77	1.0	ug/L	50.0		99.5	76-126			
1,2-Dichloroethane	49.77	1.0	ug/L	50.0		99.5	72-132			
Trichloroethylene	51.44	1.0	ug/L	50.0		103	80-124			
Trichloroethylene	51.44	1.0	ug/L	50.0		103	71-135			
1,2-Dichloropropane	52.62	1.0	ug/L	50.0		105	81-125			
1,2-Dichloropropane	52.62	1.0	ug/L	50.0		105	69-136			
Dibromomethane	52.31	1.0	ug/L	50.0		105	84-134			
Dibromomethane	52.31	1.0	ug/L	50.0		105	73-147			
Bromodichloromethane	50.73	1.0	ug/L	50.0		101	78-121			
Bromodichloromethane	50.73	1.0	ug/L	50.0		101	68-129			
cis-1,3-Dichloropropene	51.12	1.0	ug/L	50.0		102	78-120			
cis-1,3-Dichloropropene	51.12	1.0	ug/L	50.0		102	65-134			
4-Methyl-2-pentanone (MIBK)	115.8	5.0	ug/L	101		114	67-143			
4-Methyl-2-pentanone (MIBK)	115.8	5.0	ug/L	101		114	58-147			
Toluene	51.92	1.0	ug/L	50.0		104	77-130			
Toluene	51.92	1.0	ug/L	50.0		104	72-133			
trans-1,3-Dichloropropene	52.17	1.0	ug/L	50.0		104	77-123			
trans-1,3-Dichloropropene	52.17	1.0	ug/L	50.0		104	67-130			
Ethyl Methacrylate	108.9	10.0	ug/L	101		108	52-148			
1,1,2-Trichloroethane	51.49	1.0	ug/L	50.0		103	78-124			
1,1,2-Trichloroethane	51.49	1.0	ug/L	50.0		103	69-135			
Tetrachloroethylene	48.53	1.0	ug/L	50.0		97.1	73-124			
Tetrachloroethylene	48.53	1.0	ug/L	50.0		97.1	69-130			
1,3-Dichloropropane	55.03	1.0	ug/L	50.0		110	78-131			
2-Hexanone (MBK)	122.2	5.0	ug/L	103		118	57-145			
2-Hexanone (MBK)	122.2	5.0	ug/L	103		118	55-144			
Dibromochloromethane	47.64	1.0	ug/L	50.0		95.3	78-126			
Dibromochloromethane	47.64	1.0	ug/L	50.0		95.3	73-127			
1,2-Dibromoethane	47.72	1.0	ug/L	50.0		95.4	69-126			
1,2-Dibromoethane	47.72	1.0	ug/L	50.0		95.4	67-132			
Chlorobenzene	48.26	1.0	ug/L	50.0		96.5	76-120			
Chlorobenzene	48.26	1.0	ug/L	50.0		96.5	72-123			
1,1,1,2-Tetrachloroethane	48.71	1.0	ug/L	50.0		97.4	81-122			
1,1,1,2-Tetrachloroethane	48.71	1.0	ug/L	50.0		97.4	73-127			
Ethylbenzene	49.70	1.0	ug/L	50.0		99.4	74-121			
Ethylbenzene	49.70	1.0	ug/L	50.0		99.4	71-127			
Xylenes, total	148.9	2.0	ug/L	150		99.3	75-122			
Xylenes, total	148.9	2.0	ug/L	150		99.3	74-127			
Styrene	49.00	1.0	ug/L	50.0		98.0	76-119			
Styrene	49.00	1.0	ug/L	50.0		98.0	66-126			
Bromoform	46.62	1.0	ug/L	50.0		93.2	74-127			
Bromoform	46.62	1.0	ug/L	50.0		93.2	68-130			

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CERTIFICATE OF ANALYSIS

1HD0953

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD0944 - EPA 5030B - EPA 8260B										
LCS (1HD0944-BS1)										
				Prepared: 04/15/24 00:00 Analyzed: 04/15/24 09:35						QM-18
1,2,3-Trichloropropane	51.06	1.0	ug/L	50.0		102	73-125			
1,2,3-Trichloropropane	51.06	1.0	ug/L	50.0		102	63-136			
trans-1,4-Dichloro-2-butene	95.01	5.0	ug/L	104		91.4	55-135			
trans-1,4-Dichloro-2-butene	95.01	5.0	ug/L	104		91.4	54-134			
1,1,2,2-Tetrachloroethane	52.47	1.0	ug/L	50.0		105	58-133			
1,1,2,2-Tetrachloroethane	52.47	1.0	ug/L	50.0		105	61-131			
1,3-Dichlorobenzene	49.93	1.0	ug/L	50.0		99.9	70-125			
1,4-Dichlorobenzene	48.14	1.0	ug/L	50.0		96.3	69-128			
1,4-Dichlorobenzene	48.14	1.0	ug/L	50.0		96.3	70-129			
1,2-Dichlorobenzene	50.33	1.0	ug/L	50.0		101	70-125			
1,2-Dichlorobenzene	50.33	1.0	ug/L	50.0		101	69-126			
1,2-Dibromo-3-chloropropane	51.40	1.0	ug/L	50.0		103	54-147			
1,2-Dibromo-3-chloropropane	51.40	5.0	ug/L	50.0		103	50-143			
1,2,4-Trichlorobenzene	52.73	1.0	ug/L	50.0		105	55-149			
<i>Surrogate: Dibromofluoromethane</i>	58.8		ug/L	50.2		117	80-126			
<i>Surrogate: Dibromofluoromethane</i>	58.8		ug/L	50.2		117	80-126			
<i>Surrogate: Dibromofluoromethane</i>	58.8		ug/L	50.2		117	75-136			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	59.1		ug/L	50.1		118	63-138			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	59.1		ug/L	50.1		118	63-138			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	59.1		ug/L	50.1		118	63-138			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	59.1		ug/L	50.1		118	61-142			
<i>Surrogate: Toluene-d8</i>	53.7		ug/L	50.4		107	87-116			
<i>Surrogate: Toluene-d8</i>	53.7		ug/L	50.4		107	87-116			
<i>Surrogate: Toluene-d8</i>	53.7		ug/L	50.4		107	87-116			
<i>Surrogate: Toluene-d8</i>	53.7		ug/L	50.4		107	82-121			
<i>Surrogate: 4-Bromofluorobenzene</i>	50.0		ug/L	50.1		99.7	85-111			
<i>Surrogate: 4-Bromofluorobenzene</i>	50.0		ug/L	50.1		99.7	85-111			
<i>Surrogate: 4-Bromofluorobenzene</i>	50.0		ug/L	50.1		99.7	85-111			
<i>Surrogate: 4-Bromofluorobenzene</i>	50.0		ug/L	50.1		99.7	80-116			
LCS Dup (1HD0944-BS1)										
				Prepared: 04/15/24 00:00 Analyzed: 04/15/24 10:01						
Dichlorodifluoromethane	36.15	1.0	ug/L	31.6		114	44-139	10.6	30	
Chloromethane	39.72	1.0	ug/L	30.6		130	56-152	9.02	30	
Chloromethane	39.72	1.0	ug/L	30.6		130	63-155	9.02	24	QM-18
Vinyl Chloride	36.19	1.0	ug/L	30.2		120	62-151	9.88	28	
Vinyl Chloride	36.19	1.0	ug/L	30.2		120	70-154	9.88	25	QM-18
Bromomethane	36.05	1.0	ug/L	28.8		125	61-162	4.26	28	
Bromomethane	36.05	1.0	ug/L	28.8		125	52-176	4.26	27	QM-18
Chloroethane	39.82	1.0	ug/L	31.6		126	69-138	7.10	29	
Chloroethane	39.82	1.0	ug/L	31.6		126	72-148	7.10	25	QM-18
Trichlorofluoromethane	37.30	1.0	ug/L	32.6		114	70-143	7.88	27	
Trichlorofluoromethane	37.30	1.0	ug/L	32.6		114	70-152	7.88	26	QM-18
Acrolein	100.8	10.0	ug/L	100		101	27-144	2.73	30	
1,1-Dichloroethylene	58.03	1.0	ug/L	50.0		116	76-140	7.18	30	
1,1-Dichloroethylene	58.03	1.0	ug/L	50.0		116	70-148	7.18	24	QM-18

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CERTIFICATE OF ANALYSIS

1HD0953

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD0944 - EPA 5030B - EPA 8260B										
LCS Dup (1HD0944-BSD1)										
Prepared: 04/15/24 00:00 Analyzed: 04/15/24 10:01										
Acetone	159.3	10.0	ug/L	102		156	51-156	10.7	30	
Acetone	159.3	10.0	ug/L	102		156	43-172	10.7	30	QM-18
Methyl Iodide	107.8	2.0	ug/L	99.7		108	81-166	4.78	29	
Methyl Iodide	107.8	1.0	ug/L	99.7		108	69-170	4.78	30	QM-18
Carbon Disulfide	105.6	1.0	ug/L	101		105	76-147	6.75	27	
Carbon Disulfide	105.6	1.0	ug/L	101		105	72-162	6.75	24	QM-18
Acetonitrile	115.0	10.0	ug/L	101		114	46-156	3.14	30	
Methylene Chloride	54.25	5.0	ug/L	50.0		108	67-139	1.61	26	
Methylene Chloride	54.25	5.0	ug/L	50.0		108	68-142	1.61	21	QM-18
Acrylonitrile	119.0	5.0	ug/L	100		119	67-144	1.82	24	QM-18
Acrylonitrile	119.0	5.0	ug/L	100		119	67-144	1.82	24	
trans-1,2-Dichloroethylene	58.08	1.0	ug/L	50.0		116	72-135	6.11	28	
trans-1,2-Dichloroethylene	58.08	1.0	ug/L	50.0		116	66-148	6.11	27	QM-18
1,1-Dichloroethane	57.81	1.0	ug/L	50.0		116	72-129	4.88	26	
1,1-Dichloroethane	57.81	1.0	ug/L	50.0		116	66-143	4.88	24	QM-18
Vinyl Acetate	144.0	5.0	ug/L	102		141	24-144	6.81	30	
Vinyl Acetate	144.0	5.0	ug/L	102		141	43-153	6.81	30	QM-18
2,2-Dichloropropane	54.17	1.0	ug/L	50.0		108	64-131	6.62	26	
cis-1,2-Dichloroethylene	59.52	1.0	ug/L	50.0		119	81-137	0.920	27	
cis-1,2-Dichloroethylene	59.52	1.0	ug/L	50.0		119	71-149	0.920	26	QM-18
2-Butanone (MEK)	150.0	5.0	ug/L	103		145	47-149	5.14	30	
2-Butanone (MEK)	150.0	10.0	ug/L	103		145	52-159	5.14	27	QM-18
Bromochloromethane	59.05	1.0	ug/L	50.0		118	75-138	3.04	24	
Bromochloromethane	59.05	1.0	ug/L	50.0		118	69-143	3.04	23	QM-18
Chloroform	56.00	1.0	ug/L	50.0		112	78-131	3.58	27	
Chloroform	56.00	1.0	ug/L	50.0		112	69-144	3.58	23	QM-18
1,1,1-Trichloroethane	54.20	1.0	ug/L	50.0		108	67-121	5.39	28	
1,1,1-Trichloroethane	54.20	1.0	ug/L	50.0		108	62-129	5.39	24	QM-18
1,1-Dichloropropene	54.07	1.0	ug/L	50.0		108	80-131	6.17	30	
Carbon Tetrachloride	54.42	1.0	ug/L	50.0		109	71-131	6.25	28	
Carbon Tetrachloride	54.42	1.0	ug/L	50.0		109	63-141	6.25	25	QM-18
Benzene	50.18	1.0	ug/L	50.0		100	77-130	4.65	25	
Benzene	50.18	1.0	ug/L	50.0		100	71-134	4.65	24	QM-18
1,2-Dichloroethane	49.25	1.0	ug/L	50.0		98.5	76-126	1.05	24	
1,2-Dichloroethane	49.25	1.0	ug/L	50.0		98.5	72-132	1.05	24	QM-18
Trichloroethylene	48.68	1.0	ug/L	50.0		97.4	80-124	5.51	27	
Trichloroethylene	48.68	1.0	ug/L	50.0		97.4	71-135	5.51	24	QM-18
1,2-Dichloropropane	50.98	1.0	ug/L	50.0		102	81-125	3.17	25	
1,2-Dichloropropane	50.98	1.0	ug/L	50.0		102	69-136	3.17	24	QM-18
Dibromomethane	51.82	1.0	ug/L	50.0		104	84-134	0.941	23	
Dibromomethane	51.82	1.0	ug/L	50.0		104	73-147	0.941	25	QM-18
Bromodichloromethane	49.59	1.0	ug/L	50.0		99.2	78-121	2.27	25	
Bromodichloromethane	49.59	1.0	ug/L	50.0		99.2	68-129	2.27	22	QM-18

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CERTIFICATE OF ANALYSIS

1HD0953

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD0944 - EPA 5030B - EPA 8260B										
LCS Dup (1HD0944-BSD1)										
				Prepared: 04/15/24 00:00 Analyzed: 04/15/24 10:01						
cis-1,3-Dichloropropene	49.99	1.0	ug/L	50.0	100	78-120	2.24	26		
cis-1,3-Dichloropropene	49.99	1.0	ug/L	50.0	100	65-134	2.24	23	QM-18	
4-Methyl-2-pentanone (MIBK)	115.2	5.0	ug/L	101	114	67-143	0.554	26		
4-Methyl-2-pentanone (MIBK)	115.2	5.0	ug/L	101	114	58-147	0.554	27	QM-18	
Toluene	49.70	1.0	ug/L	50.0	99.4	77-130	4.37	27		
Toluene	49.70	1.0	ug/L	50.0	99.4	72-133	4.37	24	QM-18	
trans-1,3-Dichloropropene	51.25	1.0	ug/L	50.0	102	77-123	1.78	28		
trans-1,3-Dichloropropene	51.25	1.0	ug/L	50.0	102	67-130	1.78	24	QM-18	
Ethyl Methacrylate	107.3	10.0	ug/L	101	107	52-148	1.46	30		
1,1,2-Trichloroethane	51.30	1.0	ug/L	50.0	103	78-124	0.370	24		
1,1,2-Trichloroethane	51.30	1.0	ug/L	50.0	103	69-135	0.370	23	QM-18	
Tetrachloroethylene	46.56	1.0	ug/L	50.0	93.1	73-124	4.14	26		
Tetrachloroethylene	46.56	1.0	ug/L	50.0	93.1	69-130	4.14	25	QM-18	
1,3-Dichloropropane	54.92	1.0	ug/L	50.0	110	78-131	0.200	24		
2-Hexanone (MBK)	118.9	5.0	ug/L	103	115	57-145	2.74	30		
2-Hexanone (MBK)	118.9	5.0	ug/L	103	115	55-144	2.74	25	QM-18	
Dibromochloromethane	47.05	1.0	ug/L	50.0	94.1	78-126	1.25	23		
Dibromochloromethane	47.05	1.0	ug/L	50.0	94.1	73-127	1.25	22	QM-18	
1,2-Dibromoethane	47.78	1.0	ug/L	50.0	95.6	69-126	0.126	22		
1,2-Dibromoethane	47.78	1.0	ug/L	50.0	95.6	67-132	0.126	24	QM-18	
Chlorobenzene	47.14	1.0	ug/L	50.0	94.3	76-120	2.35	25		
Chlorobenzene	47.14	1.0	ug/L	50.0	94.3	72-123	2.35	23	QM-18	
1,1,1,2-Tetrachloroethane	47.80	1.0	ug/L	50.0	95.6	81-122	1.89	23		
1,1,1,2-Tetrachloroethane	47.80	1.0	ug/L	50.0	95.6	73-127	1.89	24	QM-18	
Ethylbenzene	48.20	1.0	ug/L	50.0	96.4	74-121	3.06	27		
Ethylbenzene	48.20	1.0	ug/L	50.0	96.4	71-127	3.06	26	QM-18	
Xylenes, total	143.8	2.0	ug/L	150	95.8	75-122	3.55	26		
Xylenes, total	143.8	2.0	ug/L	150	95.8	74-127	3.55	25	QM-18	
Styrene	48.10	1.0	ug/L	50.0	96.2	76-119	1.85	26		
Styrene	48.10	1.0	ug/L	50.0	96.2	66-126	1.85	23	QM-18	
Bromoform	46.20	1.0	ug/L	50.0	92.4	74-127	0.905	22		
Bromoform	46.20	1.0	ug/L	50.0	92.4	68-130	0.905	23	QM-18	
1,2,3-Trichloropropane	50.56	1.0	ug/L	50.0	101	73-125	0.984	20		
1,2,3-Trichloropropane	50.56	1.0	ug/L	50.0	101	63-136	0.984	24	QM-18	
trans-1,4-Dichloro-2-butene	94.42	5.0	ug/L	104	90.9	55-135	0.623	26		
trans-1,4-Dichloro-2-butene	94.42	5.0	ug/L	104	90.9	54-134	0.623	27	QM-18	
1,1,2,2-Tetrachloroethane	51.72	1.0	ug/L	50.0	103	58-133	1.44	28		
1,1,2,2-Tetrachloroethane	51.72	1.0	ug/L	50.0	103	61-131	1.44	29	QM-18	
1,3-Dichlorobenzene	48.62	1.0	ug/L	50.0	97.3	70-125	2.66	27		
1,4-Dichlorobenzene	47.39	1.0	ug/L	50.0	94.8	69-128	1.57	29		
1,4-Dichlorobenzene	47.39	1.0	ug/L	50.0	94.8	70-129	1.57	24	QM-18	
1,2-Dichlorobenzene	49.19	1.0	ug/L	50.0	98.4	70-125	2.29	25		
1,2-Dichlorobenzene	49.19	1.0	ug/L	50.0	98.4	69-126	2.29	26	QM-18	

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CERTIFICATE OF ANALYSIS

1HD0953

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1HD0944 - EPA 5030B - EPA 8260B

LCS Dup (1HD0944-BSD1)

Prepared: 04/15/24 00:00 Analyzed: 04/15/24 10:01

1,2-Dibromo-3-chloropropane	51.64	1.0	ug/L	50.0		103	54-147	0.466	29	
1,2-Dibromo-3-chloropropane	51.64	5.0	ug/L	50.0		103	50-143	0.466	30	QM-18
1,2,4-Trichlorobenzene	51.41	1.0	ug/L	50.0		103	55-149	2.54	30	
Surrogate: Dibromofluoromethane	58.4		ug/L	50.2		116	80-126			
Surrogate: Dibromofluoromethane	58.4		ug/L	50.2		116	80-126			QM-18
Surrogate: Dibromofluoromethane	58.4		ug/L	50.2		116	75-136			QM-18
Surrogate: 1,2-Dichloroethane-d4	58.5		ug/L	50.1		117	63-138			
Surrogate: 1,2-Dichloroethane-d4	58.5		ug/L	50.1		117	63-138			QM-18
Surrogate: 1,2-Dichloroethane-d4	58.5		ug/L	50.1		117	63-138			
Surrogate: 1,2-Dichloroethane-d4	58.5		ug/L	50.1		117	61-142			QM-18
Surrogate: Toluene-d8	53.0		ug/L	50.4		105	87-116			
Surrogate: Toluene-d8	53.0		ug/L	50.4		105	87-116			QM-18
Surrogate: Toluene-d8	53.0		ug/L	50.4		105	87-116			
Surrogate: Toluene-d8	53.0		ug/L	50.4		105	82-121			QM-18
Surrogate: 4-Bromofluorobenzene	49.8		ug/L	50.1		99.2	85-111			
Surrogate: 4-Bromofluorobenzene	49.8		ug/L	50.1		99.2	85-111			QM-18
Surrogate: 4-Bromofluorobenzene	49.8		ug/L	50.1		99.2	85-111			
Surrogate: 4-Bromofluorobenzene	49.8		ug/L	50.1		99.2	80-116			QM-18

Batch 1HD1128 - EPA 5030B - EPA 8260B

Blank (1HD1128-BLK1)

Prepared: 04/17/24 00:00 Analyzed: 04/17/24 10:52

Allyl chloride	<1.0	1.0	ug/L							
Chloroprene	<1.0	1.0	ug/L							
Methacrylonitrile	<1.0	1.0	ug/L							
Methyl Methacrylate	<1.0	1.0	ug/L							
Propionitrile	<10.0	10.0	ug/L							
Surrogate: Dibromofluoromethane	50.8		ug/L	50.2		101	80-126			
Surrogate: 1,2-Dichloroethane-d4	52.2		ug/L	50.1		104	63-138			
Surrogate: Toluene-d8	49.8		ug/L	50.4		98.9	87-116			
Surrogate: 4-Bromofluorobenzene	50.1		ug/L	50.1		100	85-111			

LCS (1HD1128-BS1)

Prepared: 04/17/24 00:00 Analyzed: 04/17/24 09:43

Allyl chloride	32.69	1.0	ug/L	35.7		91.5	76-134			
Chloroprene	57.08	1.0	ug/L	50.0		114	74-141			
Methacrylonitrile	65.34	1.0	ug/L	64.3		102	73-143			
Methyl Methacrylate	58.27	1.0	ug/L	57.3		102	72-123			
Propionitrile	83.18	10.0	ug/L	50.0		166	50-151			QS-02
Surrogate: Dibromofluoromethane	51.6		ug/L	50.2		103	80-126			
Surrogate: 1,2-Dichloroethane-d4	51.4		ug/L	50.1		103	63-138			
Surrogate: Toluene-d8	50.5		ug/L	50.4		100	87-116			
Surrogate: 4-Bromofluorobenzene	50.5		ug/L	50.1		101	85-111			

LCS Dup (1HD1128-BSD1)

Prepared: 04/17/24 00:00 Analyzed: 04/17/24 10:06

Allyl chloride	32.20	1.0	ug/L	35.7		90.1	76-134	1.51	30	
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CERTIFICATE OF ANALYSIS

1HD0953

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD1128 - EPA 5030B - EPA 8260B										
LCS Dup (1HD1128-BSD1) Prepared: 04/17/24 00:00 Analyzed: 04/17/24 10:06										
Chloroprene	55.85	1.0	ug/L	50.0		112	74-141	2.18	30	
Methacrylonitrile	65.46	1.0	ug/L	64.3		102	73-143	0.183	30	
Methyl Methacrylate	59.32	1.0	ug/L	57.3		103	72-123	1.79	30	
Propionitrile	84.20	10.0	ug/L	50.0		168	50-151	1.22	30	QS-02
Surrogate: Dibromofluoromethane	51.5		ug/L	50.2		103	80-126			
Surrogate: 1,2-Dichloroethane-d4	51.7		ug/L	50.1		103	63-138			
Surrogate: Toluene-d8	50.5		ug/L	50.4		100	87-116			
Surrogate: 4-Bromofluorobenzene	50.4		ug/L	50.1		100	85-111			
Matrix Spike (1HD1128-MS1) Source: 1HD0953-07 Prepared: 04/17/24 00:00 Analyzed: 04/17/24 20:16										
Allyl chloride	289.7	10.0	ug/L	357	ND	81.1	60-140			
Chloroprene	514.1	10.0	ug/L	500	ND	103	60-140			
Methacrylonitrile	585.4	10.0	ug/L	643	ND	91.1	60-140			
Methyl Methacrylate	554.8	10.0	ug/L	573	ND	96.8	60-140			
Propionitrile	783.3	100	ug/L	500	ND	157	60-140			QS-02
Surrogate: Dibromofluoromethane	477		ug/L	502		95.1	80-126			
Surrogate: 1,2-Dichloroethane-d4	484		ug/L	501		96.7	63-138			
Surrogate: Toluene-d8	503		ug/L	504		99.8	87-116			
Surrogate: 4-Bromofluorobenzene	497		ug/L	501		99.2	85-111			
Matrix Spike Dup (1HD1128-MSD1) Source: 1HD0953-07 Prepared: 04/17/24 00:00 Analyzed: 04/17/24 20:39										
Allyl chloride	285.6	10.0	ug/L	357	ND	79.9	60-140	1.43	30	
Chloroprene	502.1	10.0	ug/L	500	ND	100	60-140	2.36	30	
Methacrylonitrile	581.1	10.0	ug/L	643	ND	90.4	60-140	0.737	30	
Methyl Methacrylate	562.0	10.0	ug/L	573	ND	98.0	60-140	1.29	30	
Propionitrile	752.2	100	ug/L	500	ND	150	60-140	4.05	30	QS-02
Surrogate: Dibromofluoromethane	476		ug/L	502		94.9	80-126			
Surrogate: 1,2-Dichloroethane-d4	482		ug/L	501		96.3	63-138			
Surrogate: Toluene-d8	495		ug/L	504		98.2	87-116			
Surrogate: 4-Bromofluorobenzene	504		ug/L	501		100	85-111			

Determination of General Solvents	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD0875 - Semi-Vol GC - EPA 8015C										
Blank (1HD0875-BLK1) Prepared: 04/15/24 08:30 Analyzed: 04/15/24 16:51										
Isobutanol	<1.0	1.0	mg/L							
LCS (1HD0875-BS1) Prepared: 04/15/24 08:30 Analyzed: 04/15/24 14:19										
Isobutanol	27.31	1.0	mg/L	26.0		105	40-135			
Matrix Spike (1HD0875-MS1) Source: 1HD0193-01 Prepared: 04/15/24 08:30 Analyzed: 04/15/24 22:12										
Isobutanol	27.26	1.0	mg/L	26.0	ND	105	63-135			
Matrix Spike Dup (1HD0875-MSD1) Source: 1HD0193-01 Prepared: 04/15/24 08:30 Analyzed: 04/15/24 22:43										



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CERTIFICATE OF ANALYSIS

1HD0953

Determination of General Solvents	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1HD0875 - Semi-Vol GC - EPA 8015C

Matrix Spike Dup (1HD0875-MSD1) Source: 1HD0193-01 Prepared: 04/15/24 08:30 Analyzed: 04/15/24 22:43

Isobutanol	26.89	1.0	mg/L	26.0	ND	103	63-135	1.35	30	
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Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1HD0906 - 3520C BNA Cont Liq - EPA 8270C

Blank (1HD0906-BLK1) Prepared: 04/15/24 13:45 Analyzed: 04/29/24 16:14

N-Nitrosodimethylamine	<8	8	ug/L							
Methyl Methanesulfonate	<8	8	ug/L							
N-Nitrosodiethylamine	<8	8	ug/L							
N-Nitrosomethylethylamine	<8	8	ug/L							
Ethyl Methanesulfonate	<8	8	ug/L							
Phenol	<8	8	ug/L							
Bis(2-Chloroethyl) Ether	<8	8	ug/L							
2-Chlorophenol	<8	8	ug/L							
Benzyl Alcohol	<8	8	ug/L							
2-Methylphenol (o-Cresol)	<8	8	ug/L							
Bis[2-Chloroisopropyl]ether	<8	8	ug/L							
n-Nitroso-di-n-propylamine	<8	8	ug/L							
N-Nitrosopyrrolidine	<8	8	ug/L							
Acetophenone	<8	8	ug/L							
o-Toluidine	<8	8	ug/L							
(3 & 4)-Methylphenol	<8	8	ug/L							
Hexachloroethane	<8	8	ug/L							
Nitrobenzene	<8	8	ug/L							
N-Nitrosopiperidine	<8	8	ug/L							
Isophorone	<8	8	ug/L							
2-Nitrophenol	<8	8	ug/L							
2,4-Dimethylphenol	<8	8	ug/L							
Bis (2-Chloroethoxy) Methane	<8	8	ug/L							
2,4-Dichlorophenol	<8	8	ug/L							
Naphthalene	<8	8	ug/L							
4-Chloroaniline	<8	8	ug/L							
2,6-Dichlorophenol	<8	8	ug/L							
Hexachloropropene	<8	8	ug/L							
Hexachlorobutadiene	<8	8	ug/L							
N-Nitrosodi-n-butylamine	<8	8	ug/L							
1,4-Phenylenediamine	<8	8	ug/L							
4-Chloro-3-methylphenol	<8	8	ug/L							
2-Methylnaphthalene	<8	8	ug/L							
Isosafrole	<8	8	ug/L							
1,2,4,5-Tetrachlorobenzene	<8	8	ug/L							

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1HD0953

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD0906 - 3520C BNA Cont Liq - EPA 8270C									
Blank (1HD0906-BLK1)				Prepared: 04/15/24 13:45 Analyzed: 04/29/24 16:14					
Hexachlorocyclopentadiene	<8	8	ug/L						
2,4,6-Trichlorophenol	<8	8	ug/L						
2,4,5-Trichlorophenol	<8	8	ug/L						
Safrole	<8	8	ug/L						
2-Chloronaphthalene	<8	8	ug/L						
2-Nitroaniline	<8	8	ug/L						
1,4-Naphthoquinone	<8	8	ug/L						
Dimethylphthalate	<8	8	ug/L						
1,3-Dinitrobenzene	<8	8	ug/L						
1,2-Dinitrobenzene	<8	8	ug/L						
2,6-Dinitrotoluene	<8	8	ug/L						
Acenaphthylene	<8	8	ug/L						
3-Nitroaniline	<8	8	ug/L						
Acenaphthene	<8	8	ug/L						
2,4-Dinitrophenol	<8	8	ug/L						
4-Nitrophenol	<8	8	ug/L						
Dibenzofuran	<8	8	ug/L						
2,4-Dinitrotoluene	<8	8	ug/L						
2,3,4,6-Tetrachlorophenol	<8	8	ug/L						
Pentachlorobenzene	<8	8	ug/L						
1-Naphthylamine	<8	8	ug/L						
2-Naphthylamine	<8	8	ug/L						
Diethyl Phthalate	<8	8	ug/L						
Fluorene	<8	8	ug/L						
4-Chlorophenyl Phenyl Ether	<8	8	ug/L						
4-Nitroaniline	<8	8	ug/L						
5-Nitro-o-toluidine	<8	8	ug/L						
4,6-Dinitro-2-methylphenol	<8	8	ug/L						
N-Nitrosodiphenylamine	<8	8	ug/L						
Diphenylamine	<8	8	ug/L						
Azobenzene	<8	8	ug/L						
Diallate	<8	8	ug/L						
1,3,5-Trinitrobenzene	<8	8	ug/L						
Phenacetin	<8	8	ug/L						
4-Bromophenyl Phenyl Ether	<8	8	ug/L						
4-Aminobiphenyl	<8	8	ug/L						
Pentachlorophenol	<8	8	ug/L						
Pronamide	<8	8	ug/L						
Pentachloronitrobenzene (PCNB)	<8	8	ug/L						
Phenanthrene	<8	8	ug/L						
Anthracene	<8	8	ug/L						
Di-n-butyl Phthalate	<8	8	ug/L						

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1HD0953

Determination of	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Base/Neutral/Acid Extractable Compounds										
Batch 1HD0906 - 3520C BNA Cont Liq - EPA 8270C										
Blank (1HD0906-BLK1)										
				Prepared: 04/15/24 13:45 Analyzed: 04/29/24 16:14						
Methapyrilene	<8	8	ug/L							
Fluoranthene	<8	8	ug/L							
Isodrin	<8	8	ug/L							
Chlorobenzilate	<8	8	ug/L							
Pyrene	<8	8	ug/L							
p-(Dimethylamino)azobenzene	<8	8	ug/L							
3,3-Dimethylbenzidine	<8	8	ug/L							
Butyl Benzyl Phthalate	<8	8	ug/L							
Benzo(a)anthracene	<8	8	ug/L							
Chrysene	<8	8	ug/L							
Bis(2-Ethylhexyl) Phthalate	<6	6	ug/L							
Kepon	<8	8	ug/L							
3,3'-Dichlorobenzidine	<8	8	ug/L							
2-Acetylaminofluorene	<8	8	ug/L							
Di-n-octyl Phthalate	<8	8	ug/L							
Benzo(b)Fluoranthene	<8	8	ug/L							
7,12-Dimethylbenz [a] anthracene	<8	8	ug/L							
Benzo(k)Fluoranthene	<8	8	ug/L							
Benzo(a)Pyrene	<8	8	ug/L							
3-Methylcholanthrene	<8	8	ug/L							
Dibenzo(a,h)anthracene	<8	8	ug/L							
Indeno(1,2,3-cd)Pyrene	<8	8	ug/L							
Benzo(g,h,i)perylene	<8	8	ug/L							
Surrogate: 2-Fluorophenol										
	21.3		ug/L	29.6		72.0	24-136			
Surrogate: Phenol-d6										
	22.9		ug/L	30.5		75.2	15-140			
Surrogate: Nitrobenzene-d5										
	23.2		ug/L	30.0		77.3	29-130			
Surrogate: 2-Fluorobiphenyl										
	19.9		ug/L	28.8		69.0	23-113			
Surrogate: 2,4,6-Tribromophenol										
	25.2		ug/L	29.7		84.8	15-139			
Surrogate: Terphenyl-d14										
	27.5		ug/L	28.8		95.5	27-141			
LCS (1HD0906-BS1)										
				Prepared: 04/15/24 13:45 Analyzed: 04/29/24 16:39						
N-Nitrosodimethylamine	20.3	8	ug/L	21.4		95.1	36-138			
Methyl Methanesulfonate	18.7	8	ug/L	25.0		74.6	22-114			
N-Nitrosodiethylamine	43.2	8	ug/L	50.0		86.5	52-114			
N-Nitrosomethylethylamine	44.5	8	ug/L	50.0		88.9	36-120			
Ethyl Methanesulfonate	20.9	8	ug/L	25.0		83.4	46-110			
Phenol	21.6	8	ug/L	21.4		101	50-112			
Bis(2-Chloroethyl) Ether	18.8	8	ug/L	21.4		87.7	39-151			
2-Chlorophenol	20.2	8	ug/L	21.4		94.5	56-116			
Benzyl Alcohol	24.0	8	ug/L	21.4		112	13-158			
2-Methylphenol (o-Cresol)	21.2	8	ug/L	21.4		99.1	53-131			
Bis[2-Chloroisopropyl]ether	24.3	8	ug/L	21.4		113	50-121			
n-Nitroso-di-n-propylamine	23.6	8	ug/L	21.4		110	50-138			



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CERTIFICATE OF ANALYSIS

1HD0953

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD0906 - 3520C BNA Cont Liq - EPA 8270C									
LCS (1HD0906-BS1)				Prepared: 04/15/24 13:45 Analyzed: 04/29/24 16:39					
N-Nitrosopyrrolidine	44.2	8	ug/L	50.0		88.4	31-118		
Acetophenone	22.2	8	ug/L	25.0		88.8	45-104		
o-Toluidine	29.9	8	ug/L	50.0		59.7	10-163		
(3 & 4)-Methylphenol	23.9	8	ug/L	21.4		112	30-164		
Hexachloroethane	15.7	8	ug/L	21.4		73.5	10-110		
Nitrobenzene	24.5	8	ug/L	21.4		114	47-134		
N-Nitrosopiperidine	47.8	8	ug/L	50.0		95.5	51-122		
Isophorone	25.0	8	ug/L	21.4		117	54-128		
2-Nitrophenol	24.5	8	ug/L	21.4		115	54-117		
2,4-Dimethylphenol	25.6	8	ug/L	21.4		120	52-118		QS-02
Bis (2-Chloroethoxy) Methane	12.4	8	ug/L	21.4		58.1	13-132		
2,4-Dichlorophenol	25.7	8	ug/L	21.4		120	58-114		QS-02
Naphthalene	22.4	8	ug/L	21.4		105	37-116		
2,6-Dichlorophenol	23.4	8	ug/L	25.0		93.5	52-129		
Hexachloropropene	10.7	8	ug/L	25.0		42.8	14-110		
Hexachlorobutadiene	12.5	8	ug/L	21.4		58.3	14-110		
N-Nitrosodi-n-butylamine	47.0	8	ug/L	50.0		93.9	40-135		
4-Chloro-3-methylphenol	27.0	8	ug/L	21.4		126	57-136		
2-Methylnaphthalene	21.7	8	ug/L	21.4		101	44-111		
Isosafrole	20.0	8	ug/L	25.0		80.2	49-107		
1,2,4,5-Tetrachlorobenzene	14.0	8	ug/L	25.0		56.1	42-110		
Hexachlorocyclopentadiene	16.2	8	ug/L	21.4		75.5	11-110		
2,4,6-Trichlorophenol	24.2	8	ug/L	21.4		113	55-120		
2,4,5-Trichlorophenol	26.3	8	ug/L	21.4		123	55-121		QS-02
Safrole	13.5	8	ug/L	25.0		53.8	40-118		
2-Chloronaphthalene	15.2	8	ug/L	21.4		71.2	47-127		
2-Nitroaniline	24.0	8	ug/L	21.4		112	36-143		
Dimethylphthalate	24.5	8	ug/L	21.4		115	59-128		
1,3-Dinitrobenzene	24.2	8	ug/L	21.4		113	63-125		
1,2-Dinitrobenzene	24.9	8	ug/L	21.4		116	63-123		
2,6-Dinitrotoluene	24.6	8	ug/L	21.4		115	60-127		
Acenaphthylene	18.9	8	ug/L	21.4		88.2	49-113		
Acenaphthene	22.1	8	ug/L	21.4		103	50-119		
2,4-Dinitrophenol	26.2	8	ug/L	21.4		123	27-157		
4-Nitrophenol	24.4	8	ug/L	21.4		114	49-154		
Dibenzofuran	22.6	8	ug/L	21.4		106	56-121		
2,4-Dinitrotoluene	25.3	8	ug/L	21.4		118	53-138		
2,3,4,6-Tetrachlorophenol	25.4	8	ug/L	21.4		119	47-132		
Pentachlorobenzene	19.6	8	ug/L	25.0		78.4	41-125		
Diethyl Phthalate	25.9	8	ug/L	21.4		121	53-138		
Fluorene	24.1	8	ug/L	21.4		113	54-125		
4-Chlorophenyl Phenyl Ether	23.2	8	ug/L	21.4		108	51-122		

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CERTIFICATE OF ANALYSIS

1HD0953

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1HD0906 - 3520C BNA Cont Liq - EPA 8270C

LCS (1HD0906-BS1)

Prepared: 04/15/24 13:45 Analyzed: 04/29/24 16:39

4-Nitroaniline	<8	8	ug/L	21.4		36.6	10-136			
4,6-Dinitro-2-methylphenol	24.4	8	ug/L	21.4		114	49-137			
Diphenylamine	18.6	8	ug/L	21.4		86.7	35-151			
Azobenzene	23.6	8	ug/L	21.4		110	16-156			
Diallate	22.8	8	ug/L	25.0		91.3	54-132			
1,3,5-Trinitrobenzene	23.7	8	ug/L	25.0		94.9	57-173			
Phenacetin	23.9	8	ug/L	25.0		95.6	55-121			
4-Bromophenyl Phenyl Ether	22.8	8	ug/L	21.4		107	53-122			
Pentachlorophenol	25.4	8	ug/L	21.4		119	18-152			
Pronamide	19.2	8	ug/L	25.0		76.8	42-122			
Pentachloronitrobenzene (PCNB)	24.0	8	ug/L	25.0		95.9	50-128			
Phenanthrene	24.0	8	ug/L	21.4		112	59-131			
Anthracene	22.1	8	ug/L	21.4		103	59-127			
Di-n-butyl Phthalate	26.0	8	ug/L	21.4		122	64-148			
Fluoranthene	26.0	8	ug/L	21.4		121	62-132			
Isodrin	23.3	8	ug/L	25.0		93.2	46-130			
Chlorobenzilate	22.3	8	ug/L	25.0		89.1	48-150			
Pyrene	26.4	8	ug/L	21.4		123	58-135			
p-(Dimethylamino)azobenzene	26.2	8	ug/L	50.0		52.4	28-146			
Butyl Benzyl Phthalate	24.2	8	ug/L	21.4		113	52-150			
Benzo(a)anthracene	24.3	8	ug/L	21.4		113	58-131			
Chrysene	25.4	8	ug/L	21.4		119	59-131			
Bis(2-Ethylhexyl) Phthalate	26.4	6	ug/L	21.4		123	33-184			
2-Acetylaminofluorene	57.8	8	ug/L	50.0		116	47-166			
Di-n-octyl Phthalate	29.6	8	ug/L	21.4		138	48-162			
Benzo(b)Fluoranthene	29.0	8	ug/L	21.4		136	50-146			
7,12-Dimethylbenz [a] anthracene	20.4	8	ug/L	25.0		81.7	22-155			
Benzo(k)Fluoranthene	27.1	8	ug/L	21.4		127	54-144			
Benzo(a)Pyrene	22.2	8	ug/L	21.4		104	39-148			
3-Methylcholanthrene	11.5	8	ug/L	25.0		46.1	34-118			
Dibenzo(a,h)anthracene	27.7	8	ug/L	21.4		129	46-153			
Indeno(1,2,3-cd)Pyrene	26.8	8	ug/L	21.4		125	48-152			
Benzo(g,h,i)perylene	26.1	8	ug/L	21.4		122	47-161			

Surrogate: 2-Fluorophenol	23.9		ug/L	29.6		80.9	24-136			
Surrogate: Phenol-d6	25.6		ug/L	30.5		84.2	15-140			
Surrogate: Nitrobenzene-d5	28.9		ug/L	30.0		96.2	38-115			
Surrogate: 2-Fluorobiphenyl	24.8		ug/L	28.8		86.1	33-110			
Surrogate: 2,4,6-Tribromophenol	31.4		ug/L	29.7		105	15-139			
Surrogate: Terphenyl-d14	32.0		ug/L	28.8		111	30-142			

LCS Dup (1HD0906-BSD1)

Prepared: 04/15/24 13:45 Analyzed: 04/29/24 17:03

N-Nitrosodimethylamine	18.8	8	ug/L	21.4		88.0	36-138	7.76	30	
Methyl Methanesulfonate	17.9	8	ug/L	25.0		71.5	22-114	4.33	23	

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CERTIFICATE OF ANALYSIS

1HD0953

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD0906 - 3520C BNA Cont Liq - EPA 8270C									
LCS Dup (1HD0906-BSD1)				Prepared: 04/15/24 13:45 Analyzed: 04/29/24 17:03					
N-Nitrosodiethylamine	40.4	8	ug/L	50.0	80.9	52-114	6.69	18	
N-Nitrosomethylethylamine	42.4	8	ug/L	50.0	84.8	36-120	4.70	22	
Ethyl Methanesulfonate	18.8	8	ug/L	25.0	75.2	46-110	10.4	24	
Phenol	20.5	8	ug/L	21.4	96.0	50-112	5.12	28	
Bis(2-Chloroethyl) Ether	16.9	8	ug/L	21.4	78.8	39-151	10.7	30	
2-Chlorophenol	20.1	8	ug/L	21.4	93.9	56-116	0.546	22	
Benzyl Alcohol	22.3	8	ug/L	21.4	104	13-158	7.18	30	
2-Methylphenol (o-Cresol)	20.5	8	ug/L	21.4	95.9	53-131	3.31	25	
Bis[2-Chloroisopropyl]ether	20.1	8	ug/L	21.4	94.1	50-121	18.7	25	
n-Nitroso-di-n-propylamine	22.4	8	ug/L	21.4	105	50-138	5.04	30	
N-Nitrosopyrrolidine	41.4	8	ug/L	50.0	82.8	31-118	6.50	30	
Acetophenone	20.6	8	ug/L	25.0	82.2	45-104	7.67	30	
o-Toluidine	28.2	8	ug/L	50.0	56.4	10-163	5.72	30	
(3 & 4)-Methylphenol	22.6	8	ug/L	21.4	105	30-164	5.72	30	
Hexachloroethane	13.6	8	ug/L	21.4	63.7	10-110	14.4	37	
Nitrobenzene	22.5	8	ug/L	21.4	105	47-134	8.48	28	
N-Nitrosopiperidine	43.9	8	ug/L	50.0	87.8	51-122	8.38	30	
Isophorone	22.5	8	ug/L	21.4	105	54-128	10.6	22	
2-Nitrophenol	22.2	8	ug/L	21.4	104	54-117	9.97	21	
2,4-Dimethylphenol	22.9	8	ug/L	21.4	107	52-118	11.2	23	
Bis (2-Chloroethoxy) Methane	18.7	8	ug/L	21.4	87.2	13-132	40.0	30	QR-02
2,4-Dichlorophenol	23.6	8	ug/L	21.4	110	58-114	8.48	20	
Naphthalene	19.5	8	ug/L	21.4	91.2	37-116	13.6	17	
2,6-Dichlorophenol	21.6	8	ug/L	25.0	86.4	52-129	7.91	16	
Hexachloropropene	8.9	8	ug/L	25.0	35.4	14-110	18.7	29	
Hexachlorobutadiene	11.4	8	ug/L	21.4	53.5	14-110	8.70	29	
N-Nitrosodi-n-butylamine	43.7	8	ug/L	50.0	87.4	40-135	7.26	23	
4-Chloro-3-methylphenol	24.9	8	ug/L	21.4	116	57-136	8.20	18	
2-Methylnaphthalene	18.4	8	ug/L	21.4	85.9	44-111	16.5	20	
Isosafrole	18.1	8	ug/L	25.0	72.4	49-107	10.2	12	
1,2,4,5-Tetrachlorobenzene	12.9	8	ug/L	25.0	51.7	42-110	8.17	30	
Hexachlorocyclopentadiene	11.1	8	ug/L	21.4	51.7	11-110	37.3	29	QR-02
2,4,6-Trichlorophenol	24.5	8	ug/L	21.4	115	55-120	1.44	15	
2,4,5-Trichlorophenol	25.9	8	ug/L	21.4	121	55-121	1.49	16	QS-02
Safrole	19.0	8	ug/L	25.0	75.9	40-118	34.0	30	QR-02
2-Chloronaphthalene	14.1	8	ug/L	21.4	65.9	47-127	7.71	17	
2-Nitroaniline	24.6	8	ug/L	21.4	115	36-143	2.55	30	
Dimethylphthalate	25.8	8	ug/L	21.4	121	59-128	5.25	15	
1,3-Dinitrobenzene	27.1	8	ug/L	21.4	127	63-125	11.2	14	QS-02
1,2-Dinitrobenzene	25.5	8	ug/L	21.4	119	63-123	2.26	18	
2,6-Dinitrotoluene	25.8	8	ug/L	21.4	121	60-127	4.64	13	
Acenaphthylene	21.7	8	ug/L	21.4	101	49-113	13.9	23	

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CERTIFICATE OF ANALYSIS

1HD0953

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD0906 - 3520C BNA Cont Liq - EPA 8270C										
LCS Dup (1HD0906-BSD1)										
				Prepared: 04/15/24 13:45 Analyzed: 04/29/24 17:03						
Acenaphthene	20.9	8	ug/L	21.4		97.8	50-119	5.67	16	
2,4-Dinitrophenol	29.8	8	ug/L	21.4		139	27-157	12.6	23	
4-Nitrophenol	23.7	8	ug/L	21.4		111	49-154	2.58	28	
Dibenzofuran	22.3	8	ug/L	21.4		104	56-121	1.69	18	
2,4-Dinitrotoluene	24.7	8	ug/L	21.4		115	53-138	2.56	18	
2,3,4,6-Tetrachlorophenol	28.6	8	ug/L	21.4		133	47-132	11.9	29	QS-02
Pentachlorobenzene	19.2	8	ug/L	25.0		76.7	41-125	2.17	22	
Diethyl Phthalate	26.5	8	ug/L	21.4		124	53-138	2.60	18	
Fluorene	22.5	8	ug/L	21.4		105	54-125	6.83	14	
4-Chlorophenyl Phenyl Ether	21.9	8	ug/L	21.4		102	51-122	5.46	15	
4-Nitroaniline	9.1	8	ug/L	21.4		42.6	10-136	15.0	30	
4,6-Dinitro-2-methylphenol	25.0	8	ug/L	21.4		117	49-137	2.47	16	
Diphenylamine	21.2	8	ug/L	21.4		99.1	35-151	13.3	30	
Azobenzene	23.4	8	ug/L	21.4		109	16-156	0.893	30	
Diallate	22.4	8	ug/L	25.0		89.6	54-132	1.90	25	
1,3,5-Trinitrobenzene	23.2	8	ug/L	25.0		93.0	57-173	2.04	30	
Phenacetin	23.4	8	ug/L	25.0		93.8	55-121	1.90	30	
4-Bromophenyl Phenyl Ether	23.3	8	ug/L	21.4		109	53-122	1.87	16	
Pentachlorophenol	27.5	8	ug/L	21.4		128	18-152	7.71	30	
Pronamide	21.6	8	ug/L	25.0		86.2	42-122	11.5	30	
Pentachloronitrobenzene (PCNB)	23.9	8	ug/L	25.0		95.6	50-128	0.292	18	
Phenanthrene	24.2	8	ug/L	21.4		113	59-131	0.746	16	
Anthracene	23.7	8	ug/L	21.4		111	59-127	7.16	16	
Di-n-butyl Phthalate	26.5	8	ug/L	21.4		124	64-148	1.67	30	
Fluoranthene	25.8	8	ug/L	21.4		120	62-132	0.735	16	
Isodrin	21.9	8	ug/L	25.0		87.7	46-130	6.10	29	
Chlorobenzilate	22.1	8	ug/L	25.0		88.4	48-150	0.811	30	
Pyrene	24.5	8	ug/L	21.4		115	58-135	7.38	18	
p-(Dimethylamino)azobenzene	21.0	8	ug/L	50.0		42.0	28-146	22.1	30	
Butyl Benzyl Phthalate	24.1	8	ug/L	21.4		112	52-150	0.415	30	
Benzo(a)anthracene	24.0	8	ug/L	21.4		112	58-131	1.29	30	
Chrysene	25.0	8	ug/L	21.4		117	59-131	1.35	30	
Bis(2-Ethylhexyl) Phthalate	28.6	6	ug/L	21.4		134	33-184	8.08	30	
2-Acetylaminofluorene	54.9	8	ug/L	50.0		110	47-166	5.23	30	
Di-n-octyl Phthalate	29.3	8	ug/L	21.4		137	48-162	0.985	30	
Benzo(b)Fluoranthene	28.3	8	ug/L	21.4		132	50-146	2.34	30	
7,12-Dimethylbenz [a] anthracene	21.2	8	ug/L	25.0		84.7	22-155	3.61	30	
Benzo(k)Fluoranthene	28.6	8	ug/L	21.4		134	54-144	5.27	30	
Benzo(a)Pyrene	24.3	8	ug/L	21.4		114	39-148	9.11	30	
3-Methylcholanthrene	19.9	8	ug/L	25.0		79.6	34-118	53.2	30	QR-02
Dibenzo(a,h)anthracene	25.6	8	ug/L	21.4		120	46-153	7.58	30	
Indeno(1,2,3-cd)Pyrene	25.3	8	ug/L	21.4		118	48-152	5.79	30	

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CERTIFICATE OF ANALYSIS

1HD0953

Determination of	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Base/Neutral/Acid Extractable Compounds										
Batch 1HD0906 - 3520C BNA Cont Liq - EPA 8270C										

LCS Dup (1HD0906-BSD1)										
Prepared: 04/15/24 13:45 Analyzed: 04/29/24 17:03										
Benzo(g,h,i)perylene	25.3	8	ug/L	21.4		118	47-161	3.31	30	
Surrogate: 2-Fluorophenol	22.4		ug/L	29.6		75.8	24-136			
Surrogate: Phenol-d6	24.6		ug/L	30.5		80.6	15-140			
Surrogate: Nitrobenzene-d5	26.8		ug/L	30.0		89.2	38-115			
Surrogate: 2-Fluorobiphenyl	23.8		ug/L	28.8		82.6	33-110			
Surrogate: 2,4,6-Tribromophenol	30.2		ug/L	29.7		102	15-139			
Surrogate: Terphenyl-d14	30.0		ug/L	28.8		104	30-142			

Determination of	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Organophosphorus Insecticides										
Batch 1HD0937 - 3510C NP/OC Sep Fnl - EPA 8141										

Blank (1HD0937-BLK1)										
Prepared: 04/15/24 16:44 Analyzed: 04/18/24 19:18										
O,O,O-Triethyl phosphorothioate	<0.4	0.4	ug/L							
Thionazin	<0.4	0.4	ug/L							
Phorate	<0.4	0.4	ug/L							
Dimethoate	<0.4	0.4	ug/L							
Disulfoton	<0.4	0.4	ug/L							
Methyl Parathion	<0.4	0.4	ug/L							
Parathion	<0.4	0.4	ug/L							
Famphur	<0.4	0.4	ug/L							

Surrogate: 2-Nitro-m-xylene	ND		ug/L	8.34			38-122			A-01
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LCS (1HD0937-BS1)										
Prepared: 04/15/24 16:44 Analyzed: 04/19/24 00:08										
O,O,O-Triethyl phosphorothioate	3.86	0.4	ug/L	4.02		95.8	42-115			
Thionazin	3.98	0.4	ug/L	4.03		98.8	28-118			
Phorate	3.88	0.4	ug/L	4.03		96.1	18-159			
Dimethoate	5.05	0.4	ug/L	4.03		125	43-155			
Disulfoton	3.65	0.4	ug/L	4.03		90.6	37-126			
Methyl Parathion	3.96	0.4	ug/L	4.04		98.0	28-145			
Parathion	3.62	0.4	ug/L	4.00		90.6	52-121			
Famphur	4.53	0.4	ug/L	4.02		113	44-144			

Surrogate: 2-Nitro-m-xylene	7.84		ug/L	8.34		94.0	38-122			
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LCS Dup (1HD0937-BSD1)										
Prepared: 04/15/24 16:44 Analyzed: 04/19/24 01:06										
O,O,O-Triethyl phosphorothioate	3.79	0.4	ug/L	4.02		94.2	42-115	1.70	30	
Thionazin	4.02	0.4	ug/L	4.03		99.5	28-118	0.750	30	
Phorate	3.86	0.4	ug/L	4.03		95.7	18-159	0.388	30	
Dimethoate	4.68	0.4	ug/L	4.03		116	43-155	7.61	22	
Disulfoton	3.88	0.4	ug/L	4.03		96.3	37-126	6.11	30	



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CERTIFICATE OF ANALYSIS

1HD0953

Determination of Organophosphorus Insecticides	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD0937 - 3510C NP/OC Sep Fnl - EPA 8141										
LCS Dup (1HD0937-BSD1)										
				Prepared: 04/15/24 16:44 Analyzed: 04/19/24 01:06						
Methyl Parathion	4.01	0.4	ug/L	4.04		99.3	28-145	1.25	28	
Parathion	3.72	0.4	ug/L	4.00		92.9	52-121	2.45	26	
Famphur	4.30	0.4	ug/L	4.02		107	44-144	5.21	28	
<i>Surrogate: 2-Nitro-m-xylene</i>	7.68		ug/L	8.34		92.0	38-122			

Determination of Chlorinated Phenoxy Herbicides	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD0942 - EPA 8151A - EPA 8151A										
Blank (1HD0942-BLK1)										
				Prepared: 04/15/24 17:31 Analyzed: 04/30/24 09:58						
2,4-D	<2.0	2.0	ug/L							
2,4,5-TP (Silvex)	<0.5	0.5	ug/L							
2,4,5-T	<0.5	0.5	ug/L							
Dinoseb	<0.5	0.5	ug/L							
<i>Surrogate: 2,5-Dichlorobenzoic Acid</i>	1.96		ug/L	2.02		96.8	31-116			

LCS (1HD0942-BS1)										
				Prepared: 04/15/24 17:31 Analyzed: 04/30/24 10:31						
2,4-D	<2.0	2.0	ug/L	1.15		87.0	16-161			
2,4,5-TP (Silvex)	0.54	0.5	ug/L	0.575		94.8	35-141			
2,4,5-T	0.70	0.5	ug/L	0.575		121	54-149			
Dinoseb	0.74	0.5	ug/L	1.15		63.9	10-133			
<i>Surrogate: 2,5-Dichlorobenzoic Acid</i>	1.92		ug/L	2.02		95.3	31-116			

LCS Dup (1HD0942-BSD1)										
				Prepared: 04/15/24 17:31 Analyzed: 04/30/24 16:12						
2,4-D	<2.0	2.0	ug/L	1.15		89.6	16-161	2.96	30	
2,4,5-TP (Silvex)	0.57	0.5	ug/L	0.575		99.1	35-141	4.48	30	
2,4,5-T	0.70	0.5	ug/L	0.575		122	54-149	0.717	30	
Dinoseb	<0.5	0.5	ug/L	1.15		31.3	10-133	68.5	30	QR-02
<i>Surrogate: 2,5-Dichlorobenzoic Acid</i>	2.04		ug/L	2.02		101	31-116			

Determination of Organochlorine Insecticides & Metabolites	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD0934 - 3510C NP/OC Sep Fnl - EPA 8081										
Blank (1HD0934-BLK1)										
				Prepared: 04/15/24 16:43 Analyzed: 04/17/24 17:02						
Alpha-BHC	<0.05	0.05	ug/L							
Gamma-BHC [Lindane]	<0.05	0.05	ug/L							
Beta-BHC	<0.05	0.05	ug/L							
Heptachlor	<0.05	0.05	ug/L							



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CERTIFICATE OF ANALYSIS

1HD0953

Determination of	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Determination of Organochlorine Insecticides & Metabolites										
Batch 1HD0934 - 3510C NP/OC Sep Fnl - EPA 8081										
Blank (1HD0934-BLK1)										
Prepared: 04/15/24 16:43 Analyzed: 04/17/24 17:02										
Delta-BHC	<0.05	0.05	ug/L							
Aldrin	<0.05	0.05	ug/L							
Heptachlor Epoxide	<0.05	0.05	ug/L							
Endosulfan I	<0.05	0.05	ug/L							
4,4'-DDE	<0.05	0.05	ug/L							
Dieldrin	<0.05	0.05	ug/L							
Endrin	<0.05	0.05	ug/L							
4,4'-DDD	<0.05	0.05	ug/L							
Endosulfan II	<0.05	0.05	ug/L							
4,4'-DDT	<0.05	0.05	ug/L							
Endrin Aldehyde	<0.05	0.05	ug/L							
Endosulfan Sulfate	<0.05	0.05	ug/L							
Methoxychlor	<0.05	0.05	ug/L							
Chlordane	<0.10	0.10	ug/L							
Toxaphene	<0.20	0.20	ug/L							
Hexachlorobenzene	<0.05	0.05	ug/L							
<i>Surrogate: Tetrachloro-m-xylene</i>	0.521		ug/L	0.600		86.8	10-121			
LCS (1HD0934-BS1)										
Prepared: 04/15/24 16:43 Analyzed: 04/17/24 17:17										
Alpha-BHC	0.236	0.05	ug/L	0.250		94.5	33-123			
Gamma-BHC [Lindane]	0.228	0.05	ug/L	0.250		91.1	34-120			
Beta-BHC	0.225	0.05	ug/L	0.250		89.9	33-125			
Heptachlor	0.255	0.05	ug/L	0.250		102	32-117			
Delta-BHC	0.268	0.05	ug/L	0.250		107	24-140			
Aldrin	0.207	0.05	ug/L	0.250		82.7	29-122			
Heptachlor Epoxide	0.222	0.05	ug/L	0.250		88.6	37-137			
Endosulfan I	0.239	0.05	ug/L	0.250		95.6	27-141			
4,4'-DDE	0.227	0.05	ug/L	0.250		90.6	38-147			
Dieldrin	0.217	0.05	ug/L	0.250		86.8	32-137			
Endrin	0.320	0.05	ug/L	0.250		128	25-142			
4,4'-DDD	0.227	0.05	ug/L	0.250		90.8	43-146			
Endosulfan II	0.238	0.05	ug/L	0.250		95.3	36-140			
4,4'-DDT	0.296	0.05	ug/L	0.250		118	39-140			
Endrin Aldehyde	0.236	0.05	ug/L	0.250		94.3	17-150			
Endosulfan Sulfate	0.246	0.05	ug/L	0.250		98.5	41-135			
Methoxychlor	0.337	0.05	ug/L	0.250		135	40-148			
<i>Surrogate: Tetrachloro-m-xylene</i>	0.545		ug/L	0.600		90.9	10-121			
LCS Dup (1HD0934-BSD1)										
Prepared: 04/15/24 16:43 Analyzed: 04/17/24 17:32										
Alpha-BHC	0.243	0.05	ug/L	0.250		97.0	33-123	2.60	30	
Gamma-BHC [Lindane]	0.235	0.05	ug/L	0.250		94.1	34-120	3.24	30	
Beta-BHC	0.233	0.05	ug/L	0.250		93.4	33-125	3.79	30	

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CERTIFICATE OF ANALYSIS

1HD0953

Determination of Organochlorine Insecticides & Metabolites	Result	RL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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Batch 1HD0934 - 3510C NP/OC Sep Fnl - EPA 8081

LCS Dup (1HD0934-BSD1)

Prepared: 04/15/24 16:43 Analyzed: 04/17/24 17:32

Heptachlor	0.256	0.05	ug/L	0.250	102	32-117	0.339	30	
Delta-BHC	0.271	0.05	ug/L	0.250	109	24-140	1.26	30	
Aldrin	0.209	0.05	ug/L	0.250	83.5	29-122	0.977	30	
Heptachlor Epoxide	0.229	0.05	ug/L	0.250	91.5	37-137	3.19	30	
Endosulfan I	0.243	0.05	ug/L	0.250	97.2	27-141	1.65	30	
4,4'-DDE	0.229	0.05	ug/L	0.250	91.6	38-147	1.03	30	
Dieldrin	0.222	0.05	ug/L	0.250	88.8	32-137	2.27	30	
Endrin	0.324	0.05	ug/L	0.250	130	25-142	1.32	30	
4,4'-DDD	0.234	0.05	ug/L	0.250	93.6	43-146	3.05	30	
Endosulfan II	0.241	0.05	ug/L	0.250	96.5	36-140	1.25	30	
4,4'-DDT	0.302	0.05	ug/L	0.250	121	39-140	2.24	30	
Endrin Aldehyde	0.233	0.05	ug/L	0.250	93.4	17-150	0.919	30	
Endosulfan Sulfate	0.249	0.05	ug/L	0.250	99.6	41-135	1.16	30	
Methoxychlor	0.342	0.05	ug/L	0.250	137	40-148	1.50	30	

Surrogate: Tetrachloro-m-xylene 0.534 ug/L 0.600 89.0 10-121

Determination of Polychlorinated Biphenyls (PCB)	Result	RL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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Batch 1HD0935 - 3510C NP/OC Sep Fnl - EPA 8082

Blank (1HD0935-BLK1)

Prepared: 04/15/24 16:43 Analyzed: 04/17/24 17:02

Arochlor 1016	<0.20	0.20	ug/L						
Arochlor 1221	<0.20	0.20	ug/L						
Arochlor 1232	<0.20	0.20	ug/L						
Arochlor 1242	<0.20	0.20	ug/L						
Arochlor 1248	<0.20	0.20	ug/L						
Arochlor 1254	<0.20	0.20	ug/L						
Arochlor 1260	<0.20	0.20	ug/L						

Surrogate: Tetrachloro-m-xylene 0.561 ug/L 0.600 93.4 38-121
Surrogate: Decachlorobiphenyl 0.274 ug/L 0.600 45.7 25-119

LCS (1HD0935-BS1)

Prepared: 04/15/24 16:43 Analyzed: 04/17/24 17:46

Arochlor 1016	2.014	0.20	ug/L	2.60	77.5	25-126			
Arochlor 1260	2.665	0.20	ug/L	2.60	102	29-142			

Surrogate: Tetrachloro-m-xylene 0.571 ug/L 0.600 95.2 38-121
Surrogate: Decachlorobiphenyl 0.296 ug/L 0.600 49.4 25-119

LCS Dup (1HD0935-BSD1)

Prepared: 04/15/24 16:43 Analyzed: 04/17/24 18:01

Arochlor 1016	1.954	0.20	ug/L	2.60	75.2	25-126	3.02	30	
Arochlor 1260	2.565	0.20	ug/L	2.60	98.6	29-142	3.82	30	



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CERTIFICATE OF ANALYSIS

1HD0953

Determination of	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Determination of Polychlorinated Biphenyls (PCB)										
Batch 1HD0935 - 3510C NP/OC Sep Fnl - EPA 8082										

LCS Dup (1HD0935-BSD1) Prepared: 04/15/24 16:43 Analyzed: 04/17/24 18:01										
Surrogate: Tetrachloro-m-xylene	0.534		ug/L	0.600		89.1	38-121			
Surrogate: Decachlorobiphenyl	0.322		ug/L	0.600		53.7	25-119			

Determination of	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Determination of Conventional Chemistry Parameters										
Batch 1HD0714 - Wet Chem Preparation - EPA 376.2										

Blank (1HD0714-BLK1) Prepared: 04/11/24 09:22 Analyzed: 04/15/24 17:17										
Sulfide, total	<0.10	0.10	mg/L							

LCS (1HD0714-BS1) Prepared: 04/11/24 09:22 Analyzed: 04/15/24 17:17										
Sulfide, total	0.223	0.10	mg/L	0.31		70.8	59-110			

Matrix Spike (1HD0714-MS1) Source: 1HD0788-02 Prepared: 04/11/24 09:22 Analyzed: 04/15/24 17:17										
Sulfide, total	0.604	0.30	mg/L	0.94	ND	64.0	50-150			

Matrix Spike Dup (1HD0714-MSD1) Source: 1HD0788-02 Prepared: 04/11/24 09:22 Analyzed: 04/15/24 17:17										
Sulfide, total	0.855	0.30	mg/L	0.94	ND	90.5	50-150	34.4	30	QR-02

Batch 1HD1205 - Wet Chem Preparation - EPA 9010B

Blank (1HD1205-BLK1) Prepared: 04/18/24 17:16 Analyzed: 04/21/24 12:10										
Cyanide, total	<0.005	0.005	mg/L							

LCS (1HD1205-BS1) Prepared: 04/18/24 17:16 Analyzed: 04/21/24 12:10										
Cyanide, total	0.0307	0.005	mg/L	0.0300		102	66-136			

Matrix Spike (1HD1205-MS1) Source: 1HD0814-02 Prepared: 04/18/24 17:16 Analyzed: 04/21/24 12:10										
Cyanide, total	0.0344	0.005	mg/L	0.0300	ND	115	59-153			

Matrix Spike Dup (1HD1205-MSD1) Source: 1HD0814-02 Prepared: 04/18/24 17:16 Analyzed: 04/21/24 12:10										
Cyanide, total	0.0352	0.005	mg/L	0.0300	ND	117	59-153	2.26	30	

Determination of	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Determination of Total Metals										
Batch 1HD0843 - EPA 3005A Total Recoverable Metals - EPA 6020A										

Blank (1HD0843-BLK1) Prepared: 04/12/24 16:25 Analyzed: 04/15/24 21:25										
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							



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HD0953

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD0843 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Blank (1HD0843-BLK1) Prepared: 04/12/24 16:25 Analyzed: 04/15/24 21:25										
Lead, total	<0.0040	0.0040	mg/L							
Nickel, total	<0.0040	0.0040	mg/L							
Selenium, total	<0.0040	0.0040	mg/L							
Silver, total	<0.0040	0.0040	mg/L							
Thallium, total	<0.0020	0.0020	mg/L							
Tin, total	<0.0200	0.0200	mg/L							
Vanadium, total	<0.0200	0.0200	mg/L							
Zinc, total	<0.0200	0.0200	mg/L							
LCS (1HD0843-BS1) Prepared: 04/12/24 16:25 Analyzed: 04/15/24 21:31										
Antimony, total	0.0958	0.0020	mg/L	0.100		95.8	80-120			
Arsenic, total	0.0968	0.0040	mg/L	0.100		96.8	80-120			
Barium, total	0.106	0.0040	mg/L	0.100		106	80-120			
Beryllium, total	0.0962	0.0040	mg/L	0.100		96.2	80-120			
Cadmium, total	0.0972	0.0008	mg/L	0.100		97.2	80-120			
Chromium, total	0.0940	0.0080	mg/L	0.100		94.0	80-120			
Cobalt, total	0.0973	0.0004	mg/L	0.100		97.3	80-120			
Copper, total	0.0970	0.0040	mg/L	0.100		97.0	80-120			
Lead, total	0.0980	0.0040	mg/L	0.100		98.0	80-120			
Nickel, total	0.0958	0.0040	mg/L	0.100		95.8	80-120			
Selenium, total	0.0983	0.0040	mg/L	0.100		98.3	80-120			
Silver, total	0.0971	0.0040	mg/L	0.100		97.1	80-120			
Thallium, total	0.0969	0.0020	mg/L	0.100		96.9	80-120			
Tin, total	0.0972	0.0200	mg/L	0.100		97.2	80-120			
Vanadium, total	0.0976	0.0200	mg/L	0.100		97.6	80-120			
Zinc, total	0.101	0.0200	mg/L	0.100		101	80-120			
Matrix Spike (1HD0843-MS1) Source: 1HD0949-01 Prepared: 04/12/24 16:25 Analyzed: 04/15/24 21:50										
Antimony, total	0.0944	0.0020	mg/L	0.100	ND	94.4	75-125			
Arsenic, total	0.0990	0.0040	mg/L	0.100	0.0020	97.0	75-125			
Barium, total	0.195	0.0040	mg/L	0.100	0.0868	108	75-125			
Beryllium, total	0.0897	0.0040	mg/L	0.100	ND	89.7	75-125			
Cadmium, total	0.0935	0.0008	mg/L	0.100	ND	93.5	75-125			
Chromium, total	0.0908	0.0080	mg/L	0.100	0.0009	89.9	75-125			
Cobalt, total	0.0983	0.0004	mg/L	0.100	ND	98.3	75-125			
Copper, total	0.0931	0.0040	mg/L	0.100	ND	93.1	75-125			
Lead, total	0.0923	0.0040	mg/L	0.100	ND	92.3	75-125			
Nickel, total	0.0947	0.0040	mg/L	0.100	ND	94.7	75-125			
Selenium, total	0.0976	0.0040	mg/L	0.100	ND	97.6	75-125			
Silver, total	0.0940	0.0040	mg/L	0.100	ND	94.0	75-125			
Thallium, total	0.0933	0.0020	mg/L	0.100	ND	93.3	75-125			
Tin, total	0.0943	0.0200	mg/L	0.100	ND	94.3	75-125			
Vanadium, total	0.100	0.0200	mg/L	0.100	ND	100	75-125			
Zinc, total	0.0996	0.0200	mg/L	0.100	ND	99.6	75-125			
Matrix Spike Dup (1HD0843-MSD1) Source: 1HD0949-01 Prepared: 04/12/24 16:25 Analyzed: 04/15/24 21:56										

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CERTIFICATE OF ANALYSIS

1HD0953

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD0843 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Matrix Spike Dup (1HD0843-MSD1) Source: 1HD0949-01 Prepared: 04/12/24 16:25 Analyzed: 04/15/24 21:56										
Antimony, total	0.0968	0.0020	mg/L	0.100	ND	96.8	75-125	2.51	20	
Arsenic, total	0.0979	0.0040	mg/L	0.100	0.0020	95.9	75-125	1.11	20	
Barium, total	0.199	0.0040	mg/L	0.100	0.0868	112	75-125	2.19	20	
Beryllium, total	0.0947	0.0040	mg/L	0.100	ND	94.7	75-125	5.48	20	
Cadmium, total	0.0952	0.0008	mg/L	0.100	ND	95.2	75-125	1.85	20	
Chromium, total	0.0921	0.0080	mg/L	0.100	0.0009	91.3	75-125	1.44	20	
Cobalt, total	0.0980	0.0004	mg/L	0.100	ND	98.0	75-125	0.352	20	
Copper, total	0.0924	0.0040	mg/L	0.100	ND	92.4	75-125	0.755	20	
Lead, total	0.0954	0.0040	mg/L	0.100	ND	95.4	75-125	3.23	20	
Nickel, total	0.0944	0.0040	mg/L	0.100	ND	94.4	75-125	0.309	20	
Selenium, total	0.0936	0.0040	mg/L	0.100	ND	93.6	75-125	4.23	20	
Silver, total	0.0967	0.0040	mg/L	0.100	ND	96.7	75-125	2.82	20	
Thallium, total	0.0959	0.0020	mg/L	0.100	ND	95.9	75-125	2.80	20	
Tin, total	0.0982	0.0200	mg/L	0.100	ND	98.2	75-125	4.05	20	
Vanadium, total	0.102	0.0200	mg/L	0.100	ND	102	75-125	1.78	20	
Zinc, total	0.0958	0.0200	mg/L	0.100	ND	95.8	75-125	3.91	20	
Post Spike (1HD0843-PS1) Source: 1HD0949-01 Prepared: 04/12/24 16:25 Analyzed: 04/15/24 22:02										
Antimony, total	0.0766		mg/L	0.0800	0.00005	95.6	80-120			
Arsenic, total	0.0787		mg/L	0.0800	0.0020	95.8	80-120			
Barium, total	0.171		mg/L	0.0800	0.0851	108	80-120			
Beryllium, total	0.0763		mg/L	0.0800	0.000003	95.3	80-120			
Cadmium, total	0.0757		mg/L	0.0800	-0.0001	94.6	80-120			
Chromium, total	0.0745		mg/L	0.0800	0.0008	92.1	80-120			
Cobalt, total	0.0784		mg/L	0.0800	0.00006	97.9	80-120			
Copper, total	0.0742		mg/L	0.0800	0.0005	92.1	80-120			
Lead, total	0.0763		mg/L	0.0800	0.00009	95.3	80-120			
Nickel, total	0.0759		mg/L	0.0800	0.0002	94.6	80-120			
Selenium, total	0.0763		mg/L	0.0800	0.0002	95.1	80-120			
Silver, total	0.0772		mg/L	0.0800	0.0002	96.2	80-120			
Thallium, total	0.0773		mg/L	0.0800	-0.000007	96.6	80-120			
Tin, total	0.0793		mg/L	0.0800	0.00006	99.0	75-125			
Vanadium, total	0.0851		mg/L	0.0800	0.0098	94.1	80-120			
Zinc, total	0.0747		mg/L	0.0800	-0.0012	93.4	80-120			
Batch 1HD0991 - EPA 7470A Hg Water - EPA 7470A										
Blank (1HD0991-BLK1) Prepared: 04/16/24 13:40 Analyzed: 04/17/24 16:17										
Mercury, total	<0.00050	0.00050	mg/L							
LCS (1HD0991-BS1) Prepared: 04/16/24 13:40 Analyzed: 04/17/24 16:19										
Mercury, total	0.00247	0.00050	mg/L	0.00250		98.7	80-120			
Matrix Spike (1HD0991-MS1) Source: 1HD0953-07 Prepared: 04/16/24 13:40 Analyzed: 04/17/24 16:23										
Mercury, total	0.00248	0.00050	mg/L	0.00250	ND	99.2	75-125			
Matrix Spike Dup (1HD0991-MSD1) Source: 1HD0953-07 Prepared: 04/16/24 13:40 Analyzed: 04/17/24 16:26										



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HD0953

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD0991 - EPA 7470A Hg Water - EPA 7470A										
Matrix Spike Dup (1HD0991-MSD1)										
		Source: 1HD0953-07		Prepared: 04/16/24 13:40 Analyzed: 04/17/24 16:26						
Mercury, total	0.00243	0.00050	mg/L	0.00250	ND	97.3	75-125	1.96	20	

Definitions

- A-01:** Surrogate not added to batch blank.
- QM-18:** LCS/LCSD were analyzed in place of MS/MSD due to instrument malfunction.
- QR-02:** The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
- QS-02:** The spike recovery for this QC sample exceeded established acceptance limits. However, all samples were below the reporting and/or regulatory limit so the data is acceptable.
- RL:** Reporting Limit
- RPD:** Relative Percent Difference
- S-07:** The surrogate recovery for this sample is outside of established control limits.

Cooler Receipt Log

Cooler ID: Default Cooler Temp: 0.6°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
05/03/24 08:15



1 H D 0 9 5 3

HLW Engineering
PM: Heather Murphy

SITE INFORMATION

Sampler: _____
Project: TODD WHIPPLE
Bremer Co. Landfill - New Regs
6035

REPORT TO

Todd Whipple
HLW Engineering
PO Box 214
Story City, IA 50246

INVOICE TO

Ken Kammeyer
Bremer County Board of Supervisors
415 E Bremer Ave
Waverly, IA 50677

SPECIAL INSTRUCTIONS

None

Turn Around Time
 Standard RUSH, need by ___/___/___

LAB USE ONLY

Work Order: 1HD0953
Temperature: 0.6
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-1	Water	GRAB	<u>4/9/24</u>	<u>9:59</u>	<u>7</u>	Indfill-app1-voc-group Indfill-app1-metals-6020	<u>01</u>
-001	MW-2A	Water	GRAB	<u>4/9/24</u>	<u>10:18</u>	<u>7</u>	Indfill-app1-voc-group Indfill-app1-metals-6020	<u>02</u>
-001	MW-3	Water	GRAB	<u>4/9/24</u>	<u>11:00</u>	<u>7</u>	Indfill-app1-voc-group Indfill-app1-metals-6020	<u>03</u>
-001	MW-4	Water	GRAB	<u>4/9/24</u>	<u>10:43</u>	<u>7</u>	Indfill-app1-voc-group Indfill-app1-metals-6020	<u>04</u>
-001	MW-105B	Water	GRAB	<u>4/9/24</u>	<u>11:18</u>	<u>7</u>	Indfill-app1-voc-group Indfill-app1-metals-6020	<u>05</u>
-001	MW-108A	Water	GRAB	<u>4/9/24</u>	<u>11:35</u>	<u>7</u>	Indfill-app1-voc-group Indfill-app1-metals-6020	<u>06</u>
-001	MW-110A	Water	GRAB	<u>4/9/24</u>	<u>11:54</u>	<u>17</u>	Indfill-app2-inorg-6020 Indfill-app2-org	<u>07</u>

Relinquished By: [Signature] Date/Time: 4/10/24

Relinquished By: _____ Date/Time: _____
Received for Lab By: [Signature] Date/Time: 10:08

Remarks: _____

Received By: _____ Date/Time: _____



SITE INFORMATION

Sampler: TODD WHIPPLE

Project: Bremner Co. Landfill - New Regs
6035

REPORT TO

Todd Whipple
HLW Engineering
PO Box 314
Story City, IA 50246

INVOICE TO

Ken Kammeyer
Bremner County Board of Supervisors
415 E Bremner Ave
Waverly, IA 50677

SPECIAL INSTRUCTIONS

None

Turn Around Time
 Standard RUSH, need by ___/___/___

LAB USE ONLY

Work Order 1HDO953

Temperature 0.6

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	Water	GRAB	<u>4/19/24</u>	<u>✓</u>	<u>1</u>	Indfill-app1-voc-group Indfill-app1-metals-6020	<u>08</u>

Todd Whipple 4/10/24
Relinquished By Date/Time

Mary 4/10/24 10:08
Received for Lab By Date/Time

Remarks:

Received By Date/Time



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HF1081

Project Description

6035

For:

Todd Whipple

HLW Engineering

PO Box 314

Story City, IA 50248

Heather Tisdale

Customer Relationship Specialist

Friday, June 21, 2024

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

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

Microbac Laboratories, Inc.

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Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HF1081

HLW Engineering

Todd Whipple
PO Box 314
Story City, IA 50248

Project Name: 6035

Project / PO Number: N/A
Received: 06/14/2024
Reported: 06/21/2024

Sample Summary Report

<u>Sample Name</u>	<u>Laboratory ID</u>	<u>Client Matrix</u>	<u>Sample Type</u>	<u>Sample Begin</u>	<u>Sample Taken</u>	<u>Lab Received</u>
MW-1	1HF1081-01	Aqueous	GRAB		06/13/24 00:00	06/14/24 10:58



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HF1081

Analytical Testing Parameters

Client Sample ID:	MW-1	Collected By:	
Sample Matrix:	Aqueous	Collection Date:	06/13/2024
Lab Sample ID:	1HF1081-01		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		06/20/24 0000	06/20/24 1427	LNH
Surrogate: Dibromofluoromethane	85.9	Limit: 80-126	% Rec	1		06/20/24 0000	06/20/24 1427	LNH
Surrogate: Dibromofluoromethane	85.9	Limit: 80-126	% Rec	1		06/20/24 0000	06/20/24 1427	LNH
Surrogate: 1,2-Dichloroethane-d4	88.2	Limit: 63-138	% Rec	1		06/20/24 0000	06/20/24 1427	LNH
Surrogate: 1,2-Dichloroethane-d4	88.2	Limit: 63-138	% Rec	1		06/20/24 0000	06/20/24 1427	LNH
Surrogate: Toluene-d8	97.6	Limit: 87-116	% Rec	1		06/20/24 0000	06/20/24 1427	LNH
Surrogate: Toluene-d8	97.6	Limit: 87-116	% Rec	1		06/20/24 0000	06/20/24 1427	LNH
Surrogate: 4-Bromofluorobenzene	97.0	Limit: 85-111	% Rec	1		06/20/24 0000	06/20/24 1427	LNH
Surrogate: 4-Bromofluorobenzene	97.0	Limit: 85-111	% Rec	1		06/20/24 0000	06/20/24 1427	LNH



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CERTIFICATE OF ANALYSIS

1HF1081

Batch Log Summary

Method	Batch	Laboratory ID	Client / Source ID
EPA 8260B	1HF1094	1HF1094-BS1	
		1HF1094-BSD1	
		1HF1094-BLK1	
		1HF1081-01	MW-1
		1HF1094-MS1	1HF1081-01
		1HF1094-MSD1	1HF1081-01

Batch Quality Control Summary: Microbac Laboratories, Inc., Newton

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HF1094 - EPA 5030B - EPA 8260B										
Blank (1HF1094-BLK1)										
Prepared: 06/20/24 00:00 Analyzed: 06/20/24 10:46										
Chloromethane	<1.0	1.0	ug/L							
Surrogate: Dibromofluoromethane	43.0		ug/L	50.2		85.7	80-126			
Surrogate: Dibromofluoromethane	43.0		ug/L	50.2		85.7	80-126			
Surrogate: 1,2-Dichloroethane-d4	43.9		ug/L	50.1		87.7	63-138			
Surrogate: 1,2-Dichloroethane-d4	43.9		ug/L	50.1		87.7	63-138			
Surrogate: Toluene-d8	48.9		ug/L	50.4		97.1	87-116			
Surrogate: Toluene-d8	48.9		ug/L	50.4		97.1	87-116			
Surrogate: 4-Bromofluorobenzene	49.0		ug/L	50.1		97.7	85-111			
Surrogate: 4-Bromofluorobenzene	49.0		ug/L	50.1		97.7	85-111			
LCS (1HF1094-BS1)										
Prepared: 06/20/24 00:00 Analyzed: 06/20/24 09:39										
Chloromethane	35.20	1.0	ug/L	30.6		115	56-152			
Surrogate: Dibromofluoromethane	43.0		ug/L	50.2		85.7	80-126			
Surrogate: Dibromofluoromethane	43.0		ug/L	50.2		85.7	80-126			
Surrogate: 1,2-Dichloroethane-d4	42.4		ug/L	50.1		84.7	63-138			
Surrogate: 1,2-Dichloroethane-d4	42.4		ug/L	50.1		84.7	63-138			
Surrogate: Toluene-d8	49.3		ug/L	50.4		97.9	87-116			
Surrogate: Toluene-d8	49.3		ug/L	50.4		97.9	87-116			
Surrogate: 4-Bromofluorobenzene	49.9		ug/L	50.1		99.5	85-111			
Surrogate: 4-Bromofluorobenzene	49.9		ug/L	50.1		99.5	85-111			
LCS Dup (1HF1094-BSD1)										
Prepared: 06/20/24 00:00 Analyzed: 06/20/24 10:01										
Chloromethane	33.10	1.0	ug/L	30.6		108	56-152	6.15	30	
Surrogate: Dibromofluoromethane	42.9		ug/L	50.2		85.5	80-126			
Surrogate: Dibromofluoromethane	42.9		ug/L	50.2		85.5	80-126			
Surrogate: 1,2-Dichloroethane-d4	42.6		ug/L	50.1		85.1	63-138			
Surrogate: 1,2-Dichloroethane-d4	42.6		ug/L	50.1		85.1	63-138			
Surrogate: Toluene-d8	49.3		ug/L	50.4		97.8	87-116			
Surrogate: Toluene-d8	49.3		ug/L	50.4		97.8	87-116			
Surrogate: 4-Bromofluorobenzene	49.7		ug/L	50.1		99.2	85-111			
Surrogate: 4-Bromofluorobenzene	49.7		ug/L	50.1		99.2	85-111			
Matrix Spike (1HF1094-MS1)										
Source: 1HF1081-01 Prepared: 06/20/24 00:00 Analyzed: 06/20/24 15:14										



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HF1081

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1HF1094 - EPA 5030B - EPA 8260B

Matrix Spike (1HF1094-MS1)	Source: 1HF1081-01	Prepared: 06/20/24 00:00 Analyzed: 06/20/24 15:14								
Chloromethane	345.0	10.0	ug/L	306	ND	113	49-154			
Surrogate: Dibromofluoromethane	426		ug/L	502		84.9	80-126			
Surrogate: Dibromofluoromethane	426		ug/L	502		84.9	80-126			
Surrogate: 1,2-Dichloroethane-d4	423		ug/L	501		84.5	63-138			
Surrogate: 1,2-Dichloroethane-d4	423		ug/L	501		84.5	63-138			
Surrogate: Toluene-d8	495		ug/L	504		98.3	87-116			
Surrogate: Toluene-d8	495		ug/L	504		98.3	87-116			
Surrogate: 4-Bromofluorobenzene	502		ug/L	501		100	85-111			
Surrogate: 4-Bromofluorobenzene	502		ug/L	501		100	85-111			

Matrix Spike Dup (1HF1094-MSD1)	Source: 1HF1081-01	Prepared: 06/20/24 00:00 Analyzed: 06/20/24 15:36								
Chloromethane	327.0	10.0	ug/L	306	ND	107	49-154	5.36	25	
Surrogate: Dibromofluoromethane	427		ug/L	502		85.0	80-126			
Surrogate: Dibromofluoromethane	427		ug/L	502		85.0	80-126			
Surrogate: 1,2-Dichloroethane-d4	420		ug/L	501		83.9	63-138			
Surrogate: 1,2-Dichloroethane-d4	420		ug/L	501		83.9	63-138			
Surrogate: Toluene-d8	494		ug/L	504		98.1	87-116			
Surrogate: Toluene-d8	494		ug/L	504		98.1	87-116			
Surrogate: 4-Bromofluorobenzene	504		ug/L	501		101	85-111			
Surrogate: 4-Bromofluorobenzene	504		ug/L	501		101	85-111			

Definitions

- RL: Reporting Limit
- RPD: Relative Percent Difference

Cooler Receipt Log

Cooler ID: Default Cooler Temp: 0.0°C

Cooler Inspection Checklist

Custody Seals	No	Containers Intact	Yes
COC/Labels Agree	Yes	Preservation Confirmed	No
Received On Ice	Yes		

Report Comments

The data and information on this, and other accompanying documents, represents only the sample(s) analyzed. This report is incomplete unless all pages indicated in the footnote are present and an authorized signature is included. The services were provided under and subject to Microbac's standard terms and conditions which can be located and reviewed at <https://www.microbac.com/standard-terms-conditions>.

Reviewed and Approved By:

Heather Tisdale
Customer Relationship Specialist
06/21/24 16:07

CHAIN OF CUSTODY RECORD

Keystone
LABORATORIES, INC.

600 E. 17th St. S.
Newton, IA 50208
Phone: 641-792-8451
Fax: 641-792-7989



6105
356
778

205 E VanBuren St
Centerville, IA 52544
Phone: 641-437-7023
Fax: 641-437-7040

PAGE 1 OF 1

Page 6 of 6

PRINT OR TYPE INFORMATION BELOW

SAMPLER: <u>TODD WHIPPLE</u> SITE NAME: <u>Bremer Co SLF</u> ADDRESS: _____ CITY/ST/ZIP: _____ PHONE: _____	REPORT TO: NAME: <u>TODD WHIPPLE</u> COMPANY NAME: <u>HLW Group LLC</u> ADDRESS: <u>P.O. Box 314</u> CITY/ST/ZIP: <u>STORY CITY IA 50248</u> PHONE: <u>515 733 4144</u> FAX: <u>4146</u>	BILL TO: NAME: <u>Corey Cerwinski, Chair</u> COMPANY NAME: <u>Bremer Co BOARD of Sup.</u> ADDRESS: <u>415 EAST Bremer Ave</u> CITY/ST/ZIP: <u>Waverly IA 50677</u> PHONE: _____ Keystone Quote No: _____ (If Applicable)
---	---	---

CLIENT SAMPLE NUMBER	DATE	TIME	SAMPLE LOCATION	NO. OF CONTAINERS	MATRIX	GRAB/COMPOSITE	ANALYSES REQUIRED										LAB USE ONLY					
																	LABORATORY WORK ORDER NO.	LABORATORY SAMPLE NUMBER				
<u>MW-1</u>	<u>6/13/24</u>	<u>9:35</u>	<u>MW-1</u>	<u>3</u>	<u>W</u>	<u>G</u>	<u>X</u>													<u>1HF1081</u>	<u>01</u>	

Relinquished by: (Signature)	Date	Received by: (Signature)	Date	Turn-Around:
	Time		Time	<input type="checkbox"/> Standard <input type="checkbox"/> Rush
				Contact Lab Prior to Submission
Relinquished by: (Signature)	Date	Received for Lab by: (Signature)	Date	Remarks:
	Time	<u>Dan R. Hill</u>	<u>6-14-24</u> Time <u>10:58</u>	

Appendix D

Field Turbidity Summary

Bremer County Sanitary Landfill
Field Turbidity Over Time

No-Purge Sampling

Well	10/15/14	1/11/15	4/13/15	7/21/15	9/22/15	12/30/15	4/11/16	10/12/16	4/13/17	10/25/17	1/12/18	4/12/18	10/16/18	4/18/19	10/15/19	1/9/20	4/6/20	10/15/20	4/12/21	10/6/21	4/14/22	10/25/22	1/9/23	4/19/23	10/23/23	4/9/24	Max	Min	Ave	Std Dev
	NTU	NTU	NTU	NTU	NTU	NTU	NTU	NTU	NTU	NTU	NTU	NTU	NTU	NTU	NTU	NTU	NTU	NTU	NTU	NTU	NTU	NTU	NTU	NTU	NTU	NTU				
1	0.67	1.7	0.08	0.68	0.15		0.1	3.08	0.5	0.81		0.89	0.45	1.84	1.14		1.33	1.46	1.25	1.51	1.26	1.12		1.03	2.63	2.23	3.08	0.08	1.18	0.78
2A	0.76	1.89	1.43	1.79	2.48		0.56	1.53	1.46	1.05		0.65	0.82	1.04	1.07		1.21	1.77	1.51	1.82	2.31	1.98		1.1	5.48	1.75	5.48	0.56	1.61	1.01
3	2.72	4.52	0.18		0.22		0.14	2.07	0.38	4.67		2.19	0.43	0.91	0.79		1.14	1.44	1.52	1.48	2.01	0.94	1.07	1.31	2.34	3.21	4.67	0.14	1.62	1.28
4	2.67	1.07	0.91		0.12	0.3	0.19	4.5	0.4	0.98		7.76	0.55	0.76	0.75		1.43	1.2	1.44	1.18	2.14	0.63		1.11	1.73	2.25	7.76	0.12	1.55	1.70
105B	0.97	---	1.74		14.76	0.93	0.8	0.99	6.22	0.63	0.37	1.24	0.37	0.84	0.77	2.8	1.11	2.68	22.89	8.66	11.1	1.18		0.93	1.92	1.7	22.89	0.37	3.72	5.62
108A	4.8	---	11.61		10.7		5.38	2.2	7.23	4.21	14.32	10.8	1.56	16.1	2.65		4.09	2.89	15.63	12.7	3.7	3.91		28.21	19.8	173.2	173.20	1.56	16.94	36.46
110A	0.77	---	4.41		1.01		1.64	5.15	6.02	2.09		11.2	0.61	0.91	0.75		18.98	2.82	9.85	11.78	1.43	2.93		11.39	3.31	7.26	18.98	0.61	5.22	5.04
Max	4.80	4.52	11.61	1.79	14.76	0.93	5.38	5.15	7.23	4.67	14.32	11.20	1.56	16.10	2.65	2.80	2.65	2.89	2.65	12.70	2.65	3.91	1.07	2.65	19.80	173.20				
Min	0.67	1.07	0.08	0.68	0.12	0.30	0.10	0.99	0.38	0.63	0.37	0.65	0.37	0.76	0.75	2.80	0.75	1.20	0.75	1.18	0.75	0.63	1.07	0.75	1.73	1.70				
Median	0.97	1.80	1.43	1.24	1.01	0.62	0.56	2.20	1.46	1.05	7.35	2.19	0.55	0.91	0.79	2.80	0.79	1.77	0.79	1.82	0.79	1.18	1.07	0.79	2.63	2.25				
Average	1.91	2.30	2.91	1.24	4.21	0.62	1.26	2.79	3.17	2.06	7.35	4.96	0.68	3.20	1.13	2.80	1.13	2.04	1.13	5.59	1.13	1.81	1.07	1.13	5.32	27.37				

Appendix E

Running Summary of Prediction Limit Exceedances

Spring 2014		Fall 2014	
MW-105B	Cobalt	MW-105B	bis(2-ethylhexyl)phthalate
	Nickel		
	Chlorobenzene		
MW-108A	Arsenic	MW-108A	Arsenic
	Cobalt		Methyl parathion
	Nickel		
	Benzene		
	Chloroethane		
MW-110A	Arsenic	MW-110A	Arsenic
	Barium		Barium
	Cobalt		1,4-dichlorobenzene
	1,1-dichloroethane		Benzene
	1,4-dichlorobenzene		Chlorobenzene
	Benzene		Chloroethane
	Chlorobenzene		Vinyl chloride
	Chloroethane		
	Ethylbenzene		
	Vinyl chloride		

Spring 2015		Fall 2015	
MW-105B	None	MW-105B	bis(2-ethylhexyl)phthalate
			Chlorobenzene
MW-108A	Arsenic	MW-108A	Arsenic
	Cobalt		Benzene
	Acetone		Chloroethane
	Benzene		Parathion*
	Chloroethane		
MW-110A	Arsenic	MW-110A	Arsenic
	Barium		Barium
	Cobalt		1,4-dichlorobenzene
	1,4-dichlorobenzene		Benzene
	Benzene		Chlorobenzene
	Chlorobenzene		Chloroethane
	Chloroethane		Ethylbenzene
	Vinyl chloride		Vinyl chloride

Spring 2016		Fall 2016	
MW-108A	Arsenic	MW-108A	Arsenic
MW-110A	Arsenic	MW-110A	Arsenic
	Barium		Barium
	Cobalt		Cobalt
	1,4-dichlorobenzene		1,1-dichloroethane
			1,4-dichlorobenzene
			Benzene
			Chlorobenzene
			Chloroethane
			Vinyl chloride

Spring 2017		Fall 2017	
MW-105B	None	MW-105B	Cobalt
MW-108A	Arsenic	MW-108A	Arsenic Benzene
MW-110A	Arsenic Barium Cobalt 1,4-dichlorobenzene Benzene Chlorobenzene Chloroethane Ethylbenzene Toluene Vinyl chloride Xylenes	MW-110A	Arsenic Barium Cobalt 1,1-dichloroethane 1,4-dichlorobenzene Benzene Chlorobenzene Chloroethane Vinyl chloride

Spring 2018		Fall 2018	
MW-105B	Cobalt	MW-105B	None
MW-108A	Arsenic Cobalt	MW-108A	Arsenic
MW-110A	Arsenic Barium Cobalt 1,4-dichlorobenzene Benzene Chlorobenzene	MW-110A	Arsenic Barium Cobalt 1,4-dichlorobenzene Benzene Chlorobenzene Chloroethane

Spring 2019		Fall 2019	
MW-105B	None	MW-105B	None
MW-108A	Arsenic Cobalt	MW-108A	Arsenic Barium
MW-110A	Arsenic Cobalt 1,4-dichlorobenzene Benzene Chlorobenzene Chloroethane	MW-110A	Arsenic Barium Cobalt 1,1-dichloroethane Benzene Chlorobenzene Chloroethane Vinyl chloride Xylenes

Spring 2020		Fall 2020	
MW-105B	None	MW-105B	Cobalt
MW-108A	Arsenic	MW-108A	Arsenic bis(2-ethylhexyl)phthalate
MW-110A	Arsenic Barium Cobalt 1,1-dichloroethane Benzene Chlorobenzene Chloroethane Vinyl chloride	MW-110A	Arsenic Barium Cobalt 1,1-dichloroethane 1,4-dichlorobenzene Benzene Chlorobenzene Chloroethane

Spring 2021		Fall 2021	
MW-108A	Cobalt Nickel	MW-108A	Arsenic Cadmium Cobalt Nickel Zinc
MW-110A	Arsenic Barium Cobalt 1,1-dichloroethane 1,4-dichlorobenzene Benzene Chlorobenzene Chloroethane	MW-110A	Arsenic Barium Cobalt 1,1-dichloroethane 1,4-dichlorobenzene Benzene Chlorobenzene Chloroethane

Spring 2022		Fall 2022	
MW-3	None	MW-3	None
MW-4	Cobalt	MW-4	None
MW-105B	Cobalt	MW-105B	Bromoform
MW-108A	Arsenic Cadmium Cobalt Nickel Zinc	MW-108A	Arsenic Cobalt
MW-110A	Arsenic Cobalt Nickel 1,4-dichlorobenzene Benzene Chlorobenzene Chloroethane	MW-110A	Arsenic Barium Cobalt 1,1-dichloroethane 1,4-dichlorobenzene Benzene Chlorobenzene Chloroethane

Spring 2023		Fall 2023	
MW-3	None	MW-3	None
MW-4	None	MW-4	None
MW-105B	None	MW-105B	None
MW-108A	Cobalt	MW-108A	Arsenic
	Nickel		Cadmium
			Cobalt
			Nickel
			Zinc
MW-110A	Arsenic	MW-110A	Arsenic
	Cobalt		Barium
	Nickel		Cobalt
	1,1-dichloroethane		Nickel
	1,4-dichlorobenzene		Zinc
	Benzene		1,4-dichlorobenzene
	Chlorobenzene		Benzene
	Chloroethane		Chlorobenzene
			Chloroethane

Spring 2024		Fall 2024 – Not Sampled – Annual Requirement	
MW-3	None		
MW-4	None		
MW-105B	None		
MW-108A	Arsenic		
	Cobalt		
	Nickel		
	Zinc		
MW-110A	Arsenic		
	Cobalt		
	Nickel		
	Zinc		
	1,1-dichloroethane		
	1,4-dichlorobenzene		
	Benzene		
	Chlorobenzene		
	Chloroethane		

Appendix F

Assessment Monitoring Results

Historic Appendix II Compound Detections (Green Highlights = Full Appendix II Samples)

Date	bis(2-ethylhexyl)phthalate (ug/L)				Methyl parathion (ug/L)			
	MW-4	MW-105B	MW-108A	MW-110A	MW-4	MW-105B	MW-108A	MW-110A
4/4/09	<6	<6	<6	<6	<0.4	<0.4	<0.4	<0.4
6/9/09	NT	NT	NT	NT	NT	NT	NT	NT
7/9/09	NT	NT	NT	NT	NT	NT	NT	NT
10/9/09	NT	NT	NT	NT	NT	NT	NT	NT
4/10/2010	NT	NT	NT	NT	NT	NT	NT	NT
4/13/2010	NT	NT	NT	NT	NT	NT	NT	NT
6/10/2010	NT	NT	NT	NT	NT	NT	NT	NT
6/29/2010	NT	NT	NT	NT	NT	NT	NT	NT
9/10/2010	NT	NT	NT	NT	NT	NT	NT	NT
9/27/2010	NT	NT	NT	NT	NT	NT	NT	NT
4/1/11	NT	NT	NT	NT	NT	NT	NT	NT
4/11/11	NT	NT	NT	NT	NT	NT	NT	NT
9/1/11	NT	NT	NT	NT	NT	NT	NT	NT
4/9/12	NT	NT	NT	NT	NT	NT	NT	NT
4/15/13	NT	NT	NT	NT	NT	NT	NT	NT
10/7/13	NT	NT	NT	<6	NT	NT	NT	<0.4
4/17/14	NT	NT	NT	<6	NT	NT	NT	<0.4
10/15/14	NT	12.0	<6	NT	NT	<0.4	0.5	NT
4/13/15	NT	<10	NT	NT	NT	NT	<0.1	NT
9/22/15	NT	8.0	<6	NT	NT	<0.4	<0.4	NT
4/11/16	NT	<4	NT	NT	NT	NT	<0.1	NT
10/12/16	NT	<4	NT	NT	NT	NT	<0.1	NT
4/13/17	NT	<6 ⁽¹⁾	NT ⁽¹⁾	NT ⁽¹⁾	NT	NT ⁽²⁾	NT ⁽²⁾	NT ⁽²⁾
10/25/17	NT	NT ⁽¹⁾	NT ⁽¹⁾	NT ⁽¹⁾	NT	NT ⁽²⁾	NT ⁽²⁾	NT ⁽²⁾
4/12/18	NT	NT ⁽¹⁾	NT ⁽¹⁾	NT ⁽¹⁾	NT	NT ⁽²⁾	NT ⁽²⁾	NT ⁽²⁾
10/16/18	NT	NT ⁽¹⁾	NT ⁽¹⁾	NT ⁽¹⁾	NT	NT ⁽²⁾	NT ⁽²⁾	NT ⁽²⁾
4/18/19	NT	NT ⁽¹⁾	NT ⁽¹⁾	<6	NT	NT ⁽²⁾	NT ⁽²⁾	<0.4
10/15/19	NT	NT ⁽¹⁾	NT ⁽¹⁾	NT ⁽¹⁾	NT	NT ⁽²⁾	NT ⁽²⁾	NT ⁽²⁾
4/6/2020	NT	NT ⁽¹⁾	NT ⁽¹⁾	NT ⁽¹⁾	NT	NT ⁽²⁾	NT ⁽²⁾	NT ⁽²⁾
10/15/2020	NT	<6	10.0	NT ⁽¹⁾	NT	<0.4	<0.4	NT ⁽²⁾
4/12/2021	NT	NT ⁽¹⁾	NT ⁽¹⁾	NT ⁽¹⁾	NT	NT ⁽²⁾	NT ⁽²⁾	NT ⁽²⁾
10/6/2021	NT	NT ⁽¹⁾	NT ⁽¹⁾	NT ⁽¹⁾	NT	NT ⁽²⁾	NT ⁽²⁾	NT ⁽²⁾
4/14/2022	NT	NT ⁽¹⁾	NT ⁽¹⁾	NT ⁽¹⁾	NT	NT ⁽²⁾	NT ⁽²⁾	NT ⁽²⁾
10/25/2022	10.0	NT ⁽¹⁾	NT ⁽¹⁾	NT ⁽¹⁾	<0.4	NT ⁽²⁾	NT ⁽²⁾	NT ⁽²⁾
1/9/2023	<6 ⁽¹⁾	NT ⁽¹⁾	NT ⁽¹⁾	NT ⁽¹⁾	NT ⁽²⁾	NT ⁽²⁾	NT ⁽²⁾	NT ⁽²⁾
4/19/2023	NT ⁽¹⁾	NT ⁽¹⁾	NT ⁽¹⁾	NT ⁽¹⁾	NT ⁽²⁾	NT ⁽²⁾	NT ⁽²⁾	NT ⁽²⁾
10/23/2023	NT ⁽¹⁾	NT ⁽¹⁾	NT ⁽¹⁾	NT ⁽¹⁾	NT ⁽²⁾	NT ⁽²⁾	NT ⁽²⁾	NT ⁽²⁾
4/9/2024	NT ⁽¹⁾	NT ⁽¹⁾	NT ⁽¹⁾	<6	NT ⁽²⁾	NT ⁽²⁾	NT ⁽²⁾	<0.4

Note^(1,2)

- Bis (2-ethylhexyl)phthalate and Methyl Parathion testing frequency is now 1 time per five (5) years in accordance with the approval dated April 18, 2017 (Doc #89126) and February 6, 2017 (Doc #88343).