2024 ANNUAL WATER QUALITY REPORT

FOR THE
BOONE COUNTY SANITARY LANDFILL
08-SDP-1-75P
BOONE, IOWA

by:
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Certification

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Section 1.0 Background Information

1.1 Report Priority

The review of this report is considered to be low priority.

Continued semi-annual detection monitoring, assessment monitoring, and corrective action monitoring is recommended in 2025 according to Table 1 of Section 1.0.

MW98-25 warrants evaluation again in 2025 as a Point of Compliance Corrective Action Monitoring Point for the purpose of evaluating the success of the Corrective Measures constructed on the north side of the facility.

Several additional recommendations are offered in Section 4.0 of this report.

1.2 Period of Report Coverage

Water quality data evaluation is based on a running compilation of data beginning in March, 2008. Statistical evaluations herein are based on the water quality data collected through September 30, 2024.

1.3 Current Site Map

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

1.4 Site Status and Applicable Rules

Site Location

The Boone County Sanitary Landfill is located in SE1/4 Section 6, T83N, R26W, Boone County, Iowa. The facility is situated southwest of Boone, Iowa. The facility operates under the Iowa Department of Natural Resources (IDNR) Permit Number 08-SDP-1-75P.

Landfill Layout

The site is situated in the uplands above the Des Moines River valley to the west and south. The Original Landfill is closed and is designated as Areas A, B, and C. RCRA Subtitle D Expansion Areas are designated Phase 1, 2, 3, 4-R, 5-R, 6-R, 7-R, and 8-R. Phases 4-R, 5-R, 6-R, 7-R, and 8-R are actively receiving waste from the planning area.

Applicable Rules

Iowa Administrative Code (IAC) 567-113 is applicable to the site due to the contiguous nature of the Closed Landfill and the active areas.

1.5 Summary of Hydrologic Monitoring System Plan (HMSP)

The HMSP includes seventeen (17) monitoring wells, three (3) groundwater underdrains (GWD-1(aka GU-1), GU-3, and GU-4), one groundwater collection trench outfall (SRAMP 1), and two (2) passive engineered conveyance system outfalls (SRAMP 2 & PECS-3). MW88-2, MW91-8, MW02-15A, MW98-28, and MW02-30A are the designated background/upgradient wells for the facility.

The Site Plan, the HMSP monitoring network, and the GMSP monitoring network are illustrated on Figure 1. The Water Table Contour Map is included as Figure 2. Details of the North Side Corrective Action Plan are illustrated in Figure 3.

Table 1 – Planned Hydrologic Monitoring System Plan (HMSP) Activities

WELL	Monitoring Phase	3/2025	9/2025	Appendix II Sample Collection Events
MW88-2 (b)	Detection Monitoring	Appendix I	Appendix I	
MW91-8 (b)	Detection Monitoring	Appendix I	Appendix I	
MW02-15A (b)	Detection Monitoring	Appendix I	Appendix I	
MW98-28 (b)	Detection Monitoring	Appendix I	Appendix I	
MW02-30A (b)	Detection Monitoring	Appendix I	Appendix I	
MW94-18	Detection Monitoring	Appendix I	Appendix I	
MW09-40	Detection Monitoring	Appendix I	Appendix I	
MW91-10	Detection Monitoring	Appendix I	Appendix I	
MW96-21	Assessment Monitoring	Appendix I	Appendix I	9/19/17, 9/24/18, 9/12/2023
MW96-24	Detection Monitoring	Appendix I	Appendix I	
MW88-3	Detection Monitoring	Appendix I	Appendix I	
MW96-23	Detection Monitoring	Appendix I	Appendix I	9/15/11, 3/7/12*
MW21-43	Detection Monitoring	Appendix I	Appendix I	
GWD-1	Detection Monitoring	Appendix I	Appendix I	
GU-3	Corrective Action	Appendix I	Appendix I	
PECS-3	PECS - Corrective Action	Appendix I(2)	Appendix I(2)	
GU-4	Detection Monitoring	Appendix I	Appendix I	
SRAMP 1	Corrective Action	Appendix I(1)	Appendix I(1)	9/20/09, 9/25/10**
SRAMP 2	PECS - Corrective Action	Appendix I(1,2)	Appendix I(1,2)	
MW98-25	POC – Corrective Action	Appendix I(1)	Appendix I(1)	7/23/08, 9/12/08, 12/10/08, 3/4/09, 3/17/17, 9/14/2022
MW06-37	SOW - Corrective Action	Appendix I	Appendix I	7/23/08, 9/12/08, 12/10/08**
MW06-38	SOW - Corrective Action	Appendix I	Appendix I	7/23/08, 9/12/08, 12/10/08**
MW06-39	SOW - Corrective Action	Appendix I	Appendix I	7/23/08, 9/12/08, 12/10/08**
Duplicate	QA/QC	Appendix I	Appendix I	

(1) = dichlorodifluoromethane
(2) = Appendix I VOC List Only
SOW = Step Out Well POC = Point of Compliance
PECS = Passive Engineered Conveyance System
* Monitoring well was returned to detection monitoring
** SOW & PECS - Corrective Action monitoring wells have no requirement for full Appendix II sample frequency.

Section 2.0 Reporting Period Monitoring Activities

Appendix B includes information related to the Monitoring Activities at this facility. A summary of all well testing performed beginning March 17, 2008 is included in Appendix B.1.

Field sampling information for the March 12, 2024; September 30, 2024; November 25, 2025; and December 9, 2024 sampling episodes is included on the field forms (IDNR Form 542-1322) in Appendix B.2.

A comprehensive summary of Analytical Data for the episodes between March 17, 2008 and September 30, 2024 is included in Appendix C.

2.1 Current Detection Monitoring Activities

Background wells MW88-2, MW91-8. MW02-15A, MW98-28, and MW02-30A and downgradient monitoring wells MW94-18, MW09-40, MW91-10, MW96-23, MW96-24, MW88-3, GWD-1 (GU-1), and UD-4 (GU-4) remain in detection monitoring (sampled for Appendix I).

2.2 Current Assessment Monitoring Activities

Monitoring well MW96-21 is included in the assessment monitoring program due to a historic (3/17/2017) cobalt exceedance at MW96-21. MW96-21 has been retained in the assessment monitoring program.

2.3 Current Corrective Action Monitoring Activities

The detected concentrations in MW98-25 historically exceeded groundwater protection standards and resulted in construction of the groundwater collection trench along the north side of the site and installation of two (2) leachate extraction wells in the closed landfill (Figure 3). Additionally, step-out Corrective Action monitoring wells MW06-37, MW06-38, and MW06-39 were installed to monitor the effectiveness of the remedial system. SRAMP 1 (the collection tile outlet into the PECS), SRAMP-2 (PECS outlet), GU-3, PECS-3 (PECS outlet), MW98-25, MW06-37, MW06-38, and MW06-39 are designated as Corrective Action monitoring points.

Discharge to the Passive Engineered Conveyance System below SRAMP-1 was approved by IDNR in Permit Amendment #8 dated October 28, 2013.

Based on the detected VOC at GU-3, this tile line discharge was placed in the Corrective Action Monitoring System and a Passive Engineered Conveyance System (PECS) below the discharge end of GU-3 was constructed on December 29, 2021. Record information for the PECS was submitted to IDNR on May 5, 2022 (Doc #103162). Approval of the PECS and inclusion of the PECS sampling point PECS-3 was approved by IDNR in the Permit Revision (Special Provision X.4.u) on May 17, 2022 (Doc #103223).

Nickel at GU-3 (23.5 ug/L) exceeded the prediction limit based on the background monitoring wells (17.4 ug/L) on December 9, 2024. Across Iowa it has been demonstrated that groundwater underdrain discharges from underdrain systems where mass excavations have occurred may not be suitable for comparison to a prediction limit based on water quality from a vertical background monitoring well located distant to the landfill waste boundaries. At numerous sites in Iowa, groundwater underdrains are evaluated by intrawell statistical evaluations in lieu of interwell statistical evaluations.

It is recommended that underdrain discharges (GU-1 (aka GWD-1), GU-3, and GU-4) at this site be evaluated by intrawell statistical evaluations moving forward.

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

The Keystone Analytical Reports from the 2024 laboratory testing are included in Appendix E.

QUALITY ASSURANCE/QUALITY CONTROL

A blind duplicate sample was collected at MW91-8 during the March 12, 2024, sampling episode. A blind duplicate was collected at MW94-18 during the September 30, 2024, sampling episode.

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

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

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

The results of the blind duplicate and the monitoring well results (both the March 12, 2024 and September 30, 2024) are 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 # 80724). A TSS and Field Turbidity Evaluation Report was prepared and submitted on February 25, 2015 (Doc# 82549). The submitted TSS and Field Turbidity Evaluation Report includes a requirement to evaluate and sort data within the background data pool and retain only data that is validated as appropriate based on TSS/field turbidity values. A summary of the recorded field turbidity measurements is included in Appendix D.3.

The background data utilized herein has been restricted to include only sample results that have been collected by “No Purge” methods (samples collected since September 18, 2014) in order to remove any data that may have had turbidity related issues associated with historic sample collection methods.

<u>Upgradient Data</u>, Table 1, Attachment B, to both the Spring and Fall Statistical Evaluation Reports (Appendix D.1 and D.2) includes a summary of the background data.

The site prediction limits established in the September, 2024 Statistical Evaluation Report (Appendix D.2) are the most recent and are based on the validated background.

SITE SPECIFIC GWPS

Review of the most recent inorganic Prediction Limits (based on the validated background data) in Table 5 of Attachment B in the November 2024 Statistical Evaluation Report (Appendix D.2) indicates that the prediction limits for arsenic (50.6 ug/L), for cobalt (7.0 ug/L), and for vanadium (40.6 ug/L) exceed the published IAC 567, Chapter 137 Statewide Standard (10.0 ug/L; 2.1 ug/L; and 35.0 ug/L, respectively).

The Site-Specific GWPS should not be set lower than the Site Prediction Limit calculated from the site background data. For this report, the prediction limits for arsenic (50.6 ug/L), for cobalt (7.0 ug/L), and for vanadium (40.6 ug/L) are utilized as the Site-Specific GWPS. For all other compounds the published IAC 567, Chapter 137 Statewide Standard are utilized as the GWPS.

STATISTICALLY SIGNIFICANT INCREASES (SSI)

The detected concentrations of each compound are compared to the site prediction limit for each respective compound calculated based on the validated background data set. In *detection* monitoring wells, a detected concentration for a compound that is in excess of the calculated site prediction limit is recorded as a Statistically Significant Increase (SSI).

Only assessment monitoring or corrective action monitoring wells had recorded exceedances of the prediction limit in 2024.

The exceedances in *assessment* or *corrective action* monitoring wells are not required to be reported as SSI, but a running summary of recorded prediction limit exceedances (beginning in 2013) is included in Appendix D.4. The current year list of prediction limit exceedances are listed below:

Spring, 2024		**Fall, 2024**	
MW98-25	cobalt	MW98-25	cobalt
	nickel		nickel
	1,1-dichloroethane		1,1-dichloroethane
	1,4-dichlorobenzene		1,4-dichlorobenzene
	chloroethane		chlorobenzene
	cis-1,2-dichloroethene		chloroethane
	trichlorofluoromethane		chloromethane
			cis-1,2-dichloroethene
GU-3	submerged	GU-3	nickel
			benzene
			chlorobenzene
			chloroethane
			cis-1,2-dichloroethene
			vinyl chloride
SRAMP 1	dry	SRAMP 1	dry

A summary of all monitoring data is included in Appendix C and includes all detected Appendix II compounds. This report serves as notice to the operating record in accordance with IAC 567-113.10(5)c.

ASSESSMENT MONITORING SUMMARY

The dates of the full Appendix II sampling episodes completed at site monitoring wells are summarized in Table 1 and in the Table below. A five-year frequency for Appendix II sample collection at MW96-21 began September, 2017 in accordance with Special Provision X.4.g of the February 12, 2014 Permit.

MW96-21 (green highlights indicate full Appendix II sample analyses were performed)

Date	***dichlorodifluoromethane*** **ug/L**	***bis(2-ethylhexyl)phthalate*** **ug/L**	***beta (BHC)*** **ug/L**	***VOC*** **ug/L**
9/19/2017	<1.0	<6	<0.05	<1.0
3/8/2018	NT	NT	NT	<1.0
9/24/2018	<1.0	<6	<0.05	<1.0
3/25/2019	NT	NT	NT	<1.0
9/3/2019	NT	NT	NT	<1.0
3/26/2020	NT	NT	NT	<1.0
9/4/2020	NT	NT	NT	<1.0
3/6/2021	NT	NT	NT	<1.0
9/7/2021	NT	NT	NT	<1.0
3/28/2022	NT	NT	NT	<1.0
9/14/2022	NT	NT	NT	<1.0
3/20/2023	NT	NT	NT	<1.0
9/12/2023	<1.0	<6	<0.05	<1.0
3/12/2024	<1.0	<6	<0.05	<1.0
9/30/2024	NT	NT	NT	<1.0

NT = Not Tested *VOC = Appendix I volatile organic compounds*

During full Appendix II sampling events (September, 2017; September, 2018; and September, 2023) the compounds detected at MW96-21 are limited to those exclusive to the Appendix I list. There is no required on-going semi-annual assessment compounds required at MW96-21 beyond the Appendix I list in accordance with IAC 567-113.10(6)"d"2. The next full Appendix II sample collection at MW96-21 on the approved five (5) year schedule is due in March, 2029.

STATISTICALLY SIGNIFICANT LEVELS (SSL)

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

The SSL Evaluation for 2024 is based on data collected since September, 2014 and is included in Appendix D.5. The Confidence Intervals (95% LCL and 95% UCL) are calculated during each statistical evaluation based on the most recent four (4) data points. The Confidence Intervals below are restricted to the March, 2016 values and more recent. 95% LCL Values that exceed a corresponding GWPS are highlighted in yellow in Appendix D.5. Note that the brown highlights in Appendix D.5 indicate compound detections that exceed the prediction limit (SSI).

Identified SSL at the site include:

MW98-25 - cobalt
GU-3 - benzene

The 95% LCL values for VOC compounds at corrective action monitoring well MW98-25 are also below the Statewide Standards published in IAC 567, Chapter 137. The 95% LCL values for inorganic compounds at corrective action monitoring well MW98-25 are also below the GWPS, *with the exception of cobalt.* Since 2017 (March), the 95% LCL value for cobalt at MW98-25 has exceeded Site-Specific GWPS (7.0 ug/L) and represents an SSL at the site.

The impact to MW98-25 was delineated in 2006 and the corrective measure (SRAMP-1) was installed in 2008. The 95% LCL values for both inorganic compounds and VOC compounds at corrective action monitoring point SRAMP-1 are below the GWPS. MW98-25 is further evaluated in the sections that follow.

Corrective Action point GU-3 *does not* demonstrate 95% LCL values that exceed a GWPS with the exception of benzene (2024). As discussed previously, the discharge from GU-3 is remedied in the PECS constructed below GU-3.

The 95% LCL values for both inorganic compounds and VOC compounds at assessment monitoring well MW96-21 are below the applicable GWPS. The designation of MW96-21 as an assessment monitoring point is included in Table 1 (Section 1.0) and will be carried forward in 2025.

PASSIVE ENGINEERED CONVEYANCE SYSTEM PERFORMANCE

There are two (2) PECS in-place at this facility, SRAMP-2 and PECS-3. VOC analyses performed in 2024 at both PECS are summarized below:

SRAMP-2 Evaluation

Compounds (Historically Detected)	Detected at SRAMP-1		PECS Performance at SRAMP-2	
	Results 3/12/2024 (ug/L)	Results 9/30/2024 (ug/L)	Results 3/12/2024 (ug/L)	Results 9/30/2024 (ug/L)
1,1-dichloroethane	Dry	Dry	<1	Dry
1,4-dichlorobenzene	Dry	Dry	<1	Dry
acetone	Dry	Dry	<10	Dry
benzene	Dry	Dry	<1	Dry
chlorobenzene	Dry	Dry	<1	Dry
chloroethane	Dry	Dry	<1	Dry
cis-1,2-dichloroethylene	Dry	Dry	<1	Dry
dichlorofluoromethane	Dry	Dry	<1	Dry
ethylbenzene	Dry	Dry	<1	Dry
trichlorofluoromethane	Dry	Dry	<1	Dry
vinyl chloride	Dry	Dry	<1	Dry

PECS-3 Evaluation

Compounds (Historically Detected)	Detected at GU-3			PECS Performance at PECS-3		
	Results 3/12/2024 (ug/L)	Results 9/30/2024 (ug/L)	Results 12/9/2024 (ug/L)	Results 3/12/2024 (ug/L)	Results 9/30/2024 (ug/L)	Results 12/9/2024 (ug/L)
1,1-dichloroethane	Submerged	<1.0	<1.0	Submerged	<1.0	<1.0
1,4-dichlorobenzene	Submerged	<1.0	**1.2**	Submerged	<1.0	<1.0
benzene	Submerged	**6.0**	**7.8**	Submerged	<1.0	<1.0
chlorobenzene	Submerged	**1.3**	**1.8**	Submerged	<1.0	<1.0
chloroethane	Submerged	**1.1**	**1.1**	Submerged	<1.0	<1.0
cis-1,2-dichloroethylene	Submerged	**4.3**	**6.0**	Submerged	<1.0	<1.0
dichlorofluoromethane	Submerged	<1.0	<1.0	Submerged	<1.0	<1.0
ethylbenzene	Submerged	<1.0	<1.0	Submerged	<1.0	<1.0
trichlorofluoromethane	Submerged	<1.0	<1.0	Submerged	<1.0	<1.0
vinyl chloride	Submerged	**1.2**	**1.8**	Submerged	<1.0	<2.0
acetone	Submerged	<10.0	<10.0	Submerged	<10.0	**508.***
2-Butanone (MEK)	Submerged	<10.0	<10.0	Submerged	<10.0	**606.***
toluene	Submerged	<1.0	<1.0	Submerged	<1.0	**2.0***

* A resample is required to verify the acetone, MEK, or toluene detections (prior to March 9, 2025)

VOC were undetected at the end of SRAMP #2 (the PECS) and demonstrate that SRAMP-2 is capable of remediating the VOC compounds detected at SRAMP-1 and that the PECS performed sufficiently in 2024.

The end of pipe at GU-3 and the PECS below GU-3 (PECS-3) were both submerged by water and/or sediment in 2023 and in March, 2024. The sediment that filled the sedimentation basin was removed on August 28, 2024 (Doc #110773) resulting in additional sediment storage below GU-3 and PECS-3 and lowering of the water surface that was previously backed-up and submerging the sampling point at the end of GU-3 and/or PECS-3.

GU-3 was sampled on September 30, 2024, and again on December 9, 2024. There were six (6) VOC compounds detected in GU-3 on September 30, 2024, and/or December 9, 2024. There were no VOC detected in PECS-3 on September 30, 2024, and indicate that the PECS is functioning properly. On December 9, 2024, acetone, 2-butanone (MEK), and toluene were detected in PECS-3 at elevated concentrations, however, the compounds were not detected in the parent discharge from GU-3. A resample will be collected at PECS-3 to verify the acetone, 2-butanone (MEK), and toluene results reported for the December 9, 2024, sample. The findings will then be reported upon receipt of the laboratory data.

ASSESSMENT OF CORRECTIVE MEASURES

Assessment of Corrective Measures has not been required at this site to date.

The historic detected concentrations of compounds at MW98-25 exceeded groundwater protection standards and resulted in the construction of the groundwater collection trench along the north side of the site in 2008 and installation of two (2) leachate extraction wells in the closed landfill. Additionally, delineation wells and step-out corrective action monitoring wells MW06-37, MW06-38, and MW06-39 were installed to monitor the effectiveness of the remedial system. SRAMP 1 (the collection tile outlet), SRAMP-2 (the Passive Engineered Conveyance System outlet), MW98-25, MW06-37, MW06-38, and MW06-39 are designated as Corrective Action monitoring points.

Discharge to the Passive Engineered Conveyance System (SRAMP-2) was approved by IDNR in Permit Amendment #8 dated October 28, 2013. SRAMP-2 performed effectively as demonstrated in the section above.

Based on the recorded VOC SSI/SSL at GU-3 a passive engineered conveyance structure was constructed below the GU-3 discharge and the performance of the PECS is monitored at PECS-3. PECS-3 performed effectively in 2021 and 2022, was submerged in 2023, and performed effectively in September, 2024.

CORRECTIVE MEASURES MONITORING SUMMARY

Full Appendix II assessment monitoring has been completed at corrective action monitoring points SRAMP 1 (2 episodes), MW98-25 (6 episodes), MW06-37 (3 episodes), MW06-38 (3 episodes), and MW06-39 (3 episodes). The full Appendix II sampling episode dates at each listed well are summarized in Table 1.

Full Appendix II assessment monitoring is performed in conformance with Special Provision X.4.e of the SDP Permit. The on-going semi-annual corrective action monitoring includes full Appendix I plus dichlorodifluoromethane at MW98-25, SRAMP -1 and SRAMP-2.

Corrective Action monitoring under IAC 567-113.10(9) includes no requirement for full Appendix II re-sampling, except at the point of compliance well (MW98-25, in this case).

The detected compounds in the full Appendix II list (beyond the Appendix I list) at corrective action monitoring points MW98-25, SRAMP #1, MW06-37, MW06-38, and MW06-39 are limited to dichlorodifluoromethane, bis(2-ethylhexyl) phthalate, beta (BHC), and some VOC. The tables below summarize corrective action monitoring detections for Appendix II parameters beyond the Appendix I list. Full Appendix II sample collection events are highlighted in green.

SRAMP #1

Date	***dichlorodifluoromethane*** **ug/L**	***bis(2-ethylhexyl)phthalate*** **ug/L**	***beta (BHC)*** **ug/L**	***VOC*** **(yes/ND)**
3/17/2008	NT	NT	NT	NT
6/4/2008	NT	NT	NT	NT
7/22/2008	NT	NT	NT	**yes**
9/12/2008	NT	NT	NT	**yes**
12/11/2008	NT	NT	NT	**yes**
3/4/2009	NT	NT	NT	**yes**
9/21/2009	**20.4**	<6	<0.05	**yes**
3/25/2010	NT	NT	NT	NT
9/25/2010	**7.6**	<6	<0.05	**yes**
3/30/2011	NT	NT	NT	**yes**
9/15/2011	NT	NT	NT	**yes**
3/7/2012	**1.1**	<6	<0.05	**yes**
9/12/2012	**2.2**	<6	<0.05	ND
3/20/2013	**9.5**	<6	<0.05	**yes**
9/27/2013	**20.3**	<6	<0.05	**yes**
3/14/2014	<1.0	<6	<0.05	ND
9/19/2014	<1.0	<6	<0.05	ND
3/17/2015	**16.7**	<6	<0.05	**yes**
9/11/2015	**40.6**	<6	<0.05	**yes**
3/16/2016	**16.5**	<6	<0.05	**yes**
9/8/2016	**40.7**	<6	<0.05	**yes**
3/18/2017	**34.8**	<6	<0.05	**yes**
9/19/2017	**3.1**	<6	<0.05	**yes**
3/8/2018	Dry	Dry	Dry	Dry
9/24/2018	Dry	Dry	Dry	Dry
3/25/2019	**38.4**	NT	NT	**yes**
9/3/2019	<1.0	NT	NT	**yes**
3/26/2020	NT	NT	NT	NT
9/4/2020	NT	NT	NT	NT
3/6/2021	**50.7**	NT	NT	**yes**
9/7/2021	Dry	Dry	Dry	Dry
3/28/2022	**12.2**	NT	NT	**yes**
9/14/2022	Dry	Dry	Dry	Dry
3/20/2023	**18.5**	NT	NT	**yes**
9/12/2023	Dry	Dry	Dry	Dry
3/12/2024	Dry	Dry	Dry	Dry
9/30/2024	Dry	Dry	Dry	Dry

NT = Not Tested *ND = Non-Detected* *VOC = Appendix I volatile organic compounds*

SRAMP #2

Date	***dichlorodifluoromethane*** **ug/L**	***bis(2-ethylhexyl)phthalate*** **ug/L**	***beta (BHC)*** **ug/L**	***VOC*** **(yes/ND)**
3/14/2014	<1.0	<6	<0.05	**yes**
6/10/2014	NT	NT	NT	ND
8/7/2014	NT	NT	NT	ND
9/19/2014	NT	NT	NT	ND
11/13/2014	NT	NT	NT	ND
3/17/2015	NT	NT	NT	ND
9/11/2015	<1.0	<6	<0.05	ND
3/16/2016	<1.0	<6	<0.05	ND
9/8/2016	<1.0	<6	<0.05	ND
3/18/2017	<1.0	<6	<0.05	ND
9/19/2017	dry	dry	dry	dry
3/8/2018	<1.0	NT	NT	ND
9/24/2018	<1.0	NT	NT	ND
3/25/2019	<1.0	NT	NT	ND
9/3/2019	Dry	Dry	Dry	Dry
3/26/2020	<1.0	NT	NT	ND
9/4/2020	<1.0	NT	NT	ND
3/6/2021	<1.0	NT	NT	ND
9/7/2021	Dry	Dry	Dry	Dry
3/28/2022	<1.0	NT	NT	ND
9/14/2022	Dry	Dry	Dry	Dry
3/20/2023	<1.0	NT	NT	ND
9/12/2023	Dry	Dry	Dry	Dry
3/12/2024	<1.0	NT	NT	ND
9/30/2024	Dry	Dry	Dry	Dry

NT = Not Tested *ND = Non-Detected* *VOC = Appendix I volatile organic compounds*

MW98-25

Date	*dichlorodifluoromethane* ug/L	*bis(2-ethylhexyl)phthalate* ug/L	*beta (BHC)* ug/L	*VOC* (yes/ND)
3/17/2008	NT	NT	NT	**yes**
6/4/2008	NT	NT	NT	**yes**
7/22/2008	**6.2**	<6.0	<0.05	**yes**
9/12/2008	**2.6**	<6.0	**0.14**	**yes**
12/11/2008	<1.0	**13.0**	<0.05	**yes**
3/4/2009	**21.6**	<6.0	<0.05	**yes**
9/21/2009	**16.6**	<6.0	<0.05	**yes**
3/25/2010	**34.6**	<6.0	<0.05	**yes**
9/25/2010	**28.2**	<6.0	<0.05	**yes**
3/30/2011	**32.0**	<6.0	<0.05	**yes**
9/15/2011	**12.6**	<6.0	<0.05	**yes**
3/7/2012	**34.5**	<6.0	<0.05	**yes**
9/12/2012	**4.2**	<6.0	<0.05	**yes**
3/20/2013	**13.0**	<6.0	<0.05	**yes**
9/27/2013	**1.3**	**10.0**	<0.05	**yes**
3/14/2014	**1.5**	<6.0	**0.07**	**yes**
9/19/2014	**24.3**	<6.0	<0.05	**yes**
3/17/2015	ND	<6.0	<0.05	**yes**
9/11/2015	**14.7**	<6.0	<0.05	**yes**
3/16/2016	ND	<6.0	<0.05	**yes**
9/8/2016	**6.6**	<6.0	<0.05	**yes**
3/18/2017	**18.8**	<6.0	<0.05	**yes**
9/19/2017	**6.9**	**6.0**	<0.05	**yes**
3/8/2018	**38.4**	NT	NT	**yes**
9/24/2018	**1.6**	NT	NT	**yes**
3/25/2019	**3.8**	NT	NT	**yes**
9/3/2019	<1.0	NT	NT	ND
3/26/2020	**19.4**	NT	NT	**yes**
9/4/2020	**19.4**	NT	NT	**yes**
3/6/2021	**8.6**	NT	NT	**yes**
9/7/2021	**4.8**	NT	NT	**yes**
3/28/2022	**1.7**	NT	NT	**yes**
9/14/2022	<1.0	<6.0	<0.05	ND
3/20/2023	**3.3**	NT	NT	**yes**
9/12/2023	**2.1**	NT	NT	**yes**
3/12/2024	<1.0	NT	NT	**yes**
9/30/2024	<1.0	NT	NT	**yes**

NT = Not Tested *ND = Non-Detected* *VOC = Appendix I volatile organic compounds*

MW06-37 and MW06-38 and MW06-39

Date	*dichlorodifluoromethane* ug/L	*bis(2-ethylhexyl)phthalate* ug/L	*beta (BHC)* ug/L	*VOC* (yes/ND)
3/17/2008	NT	NT	NT	ND
6/4/2008	NT	NT	NT	ND
7/22/2008	<1	<6	<0.05	ND
9/12/2008	<1	<6	<0.05	ND
12/11/2008	<1	<6	<0.05	ND
3/4/2009	NT	NT	NT	ND
9/21/2009	NT	NT	NT	ND
3/25/2010	NT	NT	NT	ND
9/25/2010	NT	NT	NT	ND
3/30/2011	NT	NT	NT	ND
9/15/2011	NT	NT	NT	ND
3/7/2012	NT	NT	NT	ND
9/12/2012	NT	NT	NT	ND
3/20/2013	NT	NT	NT	ND
9/27/2013	NT	NT	NT	ND
3/14/2014	NT	NT	NT	ND
9/19/2014	NT	NT	NT	ND
3/17/2015	NT	NT	NT	ND
9/11/2015	NT	NT	NT	ND
3/16/2016	NT	NT	NT	ND
9/8/2016	NT	NT	NT	ND
3/17/2017	NT	NT	NT	ND
9/19/2017	NT	NT	NT	ND
3/8/2018	NT	NT	NT	ND
9/24/2018	NT	NT	NT	ND
3/25/2019	NT	NT	NT	ND
9/3/2019	NT	NT	NT	ND
3/26/2020	NT	NT	NT	ND
9/4/2020	NT	NT	NT	ND
3/6/2021	NT	NT	NT	ND
9/7/2021	NT	NT	NT	ND
3/28/2022	NT	NT	NT	ND
9/14/2022	NT	NT	NT	ND
3/20/2023	NT	NT	NT	ND
9/12/2023	NT	NT	NT	ND
3/12/2024	NT	NT	NT	ND
9/30/2024	NT	NT	NT	ND

NT = Not Tested *ND = Non-Detected* *VOC = Appendix I volatile organic compounds*

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

CORRECTIVE MEASURES MONITORING EVALUATION

North Side Corrective Action Improvement System

North Side Corrective Action Improvement System consists of an East-West groundwater collection line immediately north of the waste boundary. Figure 3 illustrates the extent of the groundwater collection line.

As summarized in the tables above, VOC compounds are detected in the groundwater collection trench itself (SRAMP#1) and commonly in the point of compliance corrective action monitoring point (MW98-25) immediately adjacent and downgradient of the North Side Corrective Action Improvement System. Verified VOC compounds have *not* been detected at the sentinel points MW06-37, MW06-38, MW06-39, or in the PECS performance sampling point SRAMP #2, to date.

Review of the detected compounds at SRAMP #1 and MW98-25 indicate that the detected VOC compounds have historically exceeded the GWPS at times.

The VOC detections *above* the Statewide Standard (Appendix F.1) are summarized as:

SRAMP #1
benzene (9/09, 3/11, 9/13, 9/15, 3/21, 3/23)

MW98-25
benzene (3/08, 6/08, 7/08, 12/08, 3/09, 9/09, 3/10, 9/10, 3/12, 9/14)
vinyl chloride (3/08, 6/08, 12/08, 3/09)
bis(2-ethylhexyl)phthalate (12/08, 9/13)

The Confidence Interval of Corrective Action Monitoring points are utilized to determine the success of the on-going Corrective Measures. A Corrective Action for a recorded SSL is complete when the 95% UCL value is below the applicable GWPS for a minimum of three (3) years.

The Corrective Action Monitoring Evaluation of the recorded SSL (cobalt at MW98-25) based on the 95% UCL Values is summarized below. The occurrences of the 95% UCL exceeding the GWPS are highlighted in yellow.

Monitoring Well	Compound	Date	Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	95% UCL (ug/L)	GWPS (ug/L)
MW98-25	Cobalt	3/16/16	4.7	1.5	0.000	26.390	**4.4**
MW98-25	Cobalt	9/8/16	29.1	1.5	0.000	26.390	**4.4**
MW98-25	Cobalt	3/17/17	14.6	1.5	3.420	27.280	**4.4**
MW98-25	Cobalt	9/19/17	6.2	4.4	0.495	26.805	**4.4**
MW98-25	Cobalt	3/8/18	10.3	4.8	3.317	26.783	**4.8**
MW98-25	Cobalt	9/24/18	11.6	4.8	6.576	14.774	**4.8**
MW98-25	Cobalt	3/25/19	13.9	4.8	6.701	14.299	**4.8**
MW98-25	Cobalt	9/3/19	8.5	4.8	8.402	13.748	**4.8**
MW98-25	Cobalt	3/23/20	22.2	3.2	7.149	20.951	**3.2**
MW98-25	Cobalt	9/4/20	7.6	3.2	5.164	20.936	**3.2**

MW98-25	Cobalt	3/9/21	11.7	3.2	4.617	20.383	**3.2**
MW98-25	Cobalt	9/7/21	12.8	3.2	6.317	20.833	**3.2**
MW98-25	Cobalt	3/28/22	10.9	5.8	8.115	13.385	**5.8**
MW98-25	Cobalt	9/14/22	19.4	*7.0*	9.137	18.263	**7.0**
MW98-25	Cobalt	3/20/23	11.2	*7.0*	8.903	18.247	**7.0**
MW98-25	Cobalt	9/12/23	15.2	*7.0*	9.473	18.877	**7.0**
MW98-25	Cobalt	3/12/24	10.7	*7.0*	9.358	18.892	**7.0**
MW98-25	Cobalt	9/30/24	11.0	*7.0*	9.523	14.527	**7.0**

VOC

There are no recorded SSL for VOC in the past 3 years in the north side collection system, indicating that the remedy is complete for VOC. Benzene remains undetected at SRAMP #2 which is the outfall of the approved Passive Engineered Conveyance System below SRAMP #1 and at MW06-37, MW06-38, or MW06-39, the Corrective Action Step-out Wells.

Inorganic Compounds

SRAMP#1 is the discharge from the actual corrective action collection pipe installed at or near the waste boundary, while MW98-25 is the Point of Compliance Corrective Action Monitoring Well located immediately downgradient of the remedy at the point of compliance.

Assessment statistics prepared for the inorganic compounds at MW98-25 (Table above) indicate that the 95% UCL for cobalt remains above the GWPS indicating the remedy is not yet complete for cobalt.

Cobalt remain well within limits at MW06-37, MW06-38, and MW06-39 (the step-out corrective action monitoring wells to MW98-25).

2015 Additional Corrective Measures Feasibility Study

The Corrective Actions on the north side of the facility described as the Leachate Extraction/Groundwater Collection Project dated February 4, 2008 was accepted by IDNR on July 17, 2008.

On October 29, 2012, a North Side Corrective Action Improvement Plan was submitted to IDNR. This plan was approved by Permit Amendment #8, dated October 28, 2013. The Improvement Plan included the exploratory drilling within the northwest corner of the fill area (a former borrow area) in order to make a determination as to whether leachate extraction from this portion of the landfill would be beneficial. The findings were reported to IDNR May 12, 2015 (Doc# 83373) and additional leachate extraction was not recommended.

<u>GU-3</u>

Based on the detected VOC at GU-3, this tile line discharge was placed in the Corrective Action Monitoring System and a Passive Engineered Conveyance System (PECS) below the discharge end of GU-3 was constructed on December 29, 2021. Record information for the PECS was submitted to IDNR on May 5, 2022 (Doc #103162). Approval of the PECS and inclusion of the PECS sampling point PECS-3 was approved by IDNR in the Permit Revision (Special Provision X.4.u) on May 17, 2022 (Doc #103223).

The VOC detections *above* the Statewide Standard at GU-3 (Appendix F.1) are summarized as:

benzene (12/21, 3/22, 9/22, 9/24)
vinyl chloride (12/21, 3/22)

Based on the nickel SSI at GU-3 that was verified at the end of 2024, the statistical evaluation of GU-3 will be expanded to include intrawell statistical evaluations in 2025 in lieu of the intrerwell statistical evaluations. This has been an accepted response in cases where the interwell statistical evaluations indicate the GU water quality (23.5 ug/L in this case) exceeds the prediction limit (17.4 ug/L), but is well below the drinking water standard (100 ug/L).

The Confidence Limit Evaluation of the nickel at GU-3 demonstrates that the 95% LCL/95% UCL values are well below the GWPS as summarized below. There are no occurrences of nickel 95%LCL or 95% UCL exceeding the GWPS and therefore, SSL are not documented at GU-3.

Monitoring Well	Compound	Date	Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	95% UCL (ug/L)	GWPS (ug/L)
GU-3	Nickel	9/13/21	15.2	17.4	---	---	100.0
GU-3	Nickel	12/3/21	12.4	17.4	---	---	100.0
GU-3	Nickel	3/28/22	12.7	17.4	---	---	100.0
GU-3	Nickel	9/15/22	21.1	17.4	11.857	18.843	100.0
GU-3	Nickel	3/20/23	submerged	17.4	11.857	18.843	100.0
GU-3	Nickel	9/12/23	submerged	17.4	11.857	18.843	100.0
GU-3	Nickel	3/12/24	submerged	17.4	11.857	18.843	100.0
GU-3	Nickel	9/30/24	36.8	17.4	7.300	34.200	100.0
GU-3	Nickel	12/9/24	23.5	17.4	7.300	34.200	100.0

The Corrective Action Monitoring Evaluation of the recorded VOC SSL (benzene at GU-3) is based on the successful removal of benzene in the PECS (documented benzene removal at PECS-3).

MONITORING WELL MAINTENANCE PERFORMANCE EVALUATION

The HMSP and the existing HMSP monitoring points are interpreted to be effective for on-going detection, assessment, and corrective action system monitoring at the facility. Monitoring Well Maintenance Performance Reevaluation activities associated with the HMSP monitoring wells are discussed in the information presented in Appendix A.

LEACHATE COLLECTION SYSTEM PERFORMANCE EVALUATION

See Appendix G.

GAS MONITORING EVALUATION

See Appendix H.

Section 4.0 Recommendations

It is recommended that the detection monitoring continue to be performed on a semi-annual basis at the detection monitoring points listed in Table 1 of Section 1.0.

It is recommended that the assessment monitoring continue to be performed on a semi-annual basis at assessment monitoring point MW96-21. It is recommended that SRAMP#1 and GU-3 continue to be discharged to the respective Passive Engineered Conveyance System (PECS) for treatment.

It is recommended that underdrain discharges (GU-1 (aka GWD-1), GU-3, and GU-4) at this site be evaluated by intrawell statistical evaluations moving forward.

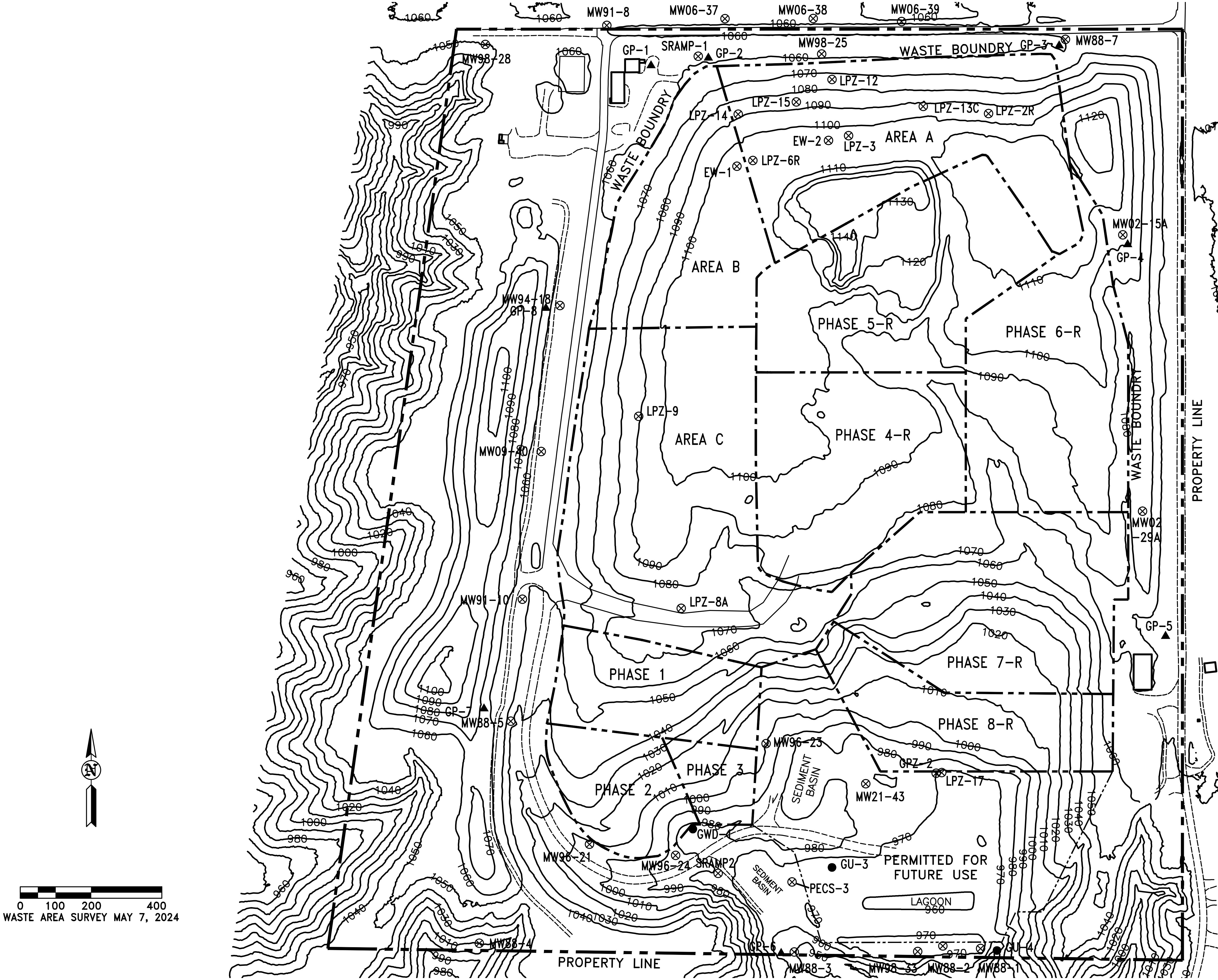
It is recommended that Corrective Action Monitoring at MW98-25, MW06-37, MW06-38, MW06-39, SRAMP #2, and PEC-3 continue to be performed on a semi-annual basis. Further, the Corrective Action System should be evaluated at the end of 2025 to determine whether the Upper Confidence Interval (95% UCL) for cobalt at MW98-25 decreases to a value below the GWPS. The assessment statistics should be summarized for each semi-annual collection episode and should continue to include a running summary of the 95% LCL/UCL values moving forward.

The PECS Performance should be evaluated based on the results of testing from SRAMP#2 and PECS-3.

The sediment filling the sedimentation basin needs to be routinely monitored and routinely removed to maintain the sediment storage that is available. If so, the sampling point at the end of PECS-3 will not be submerged.

It is recommended that the prediction limits for arsenic (50.6 ug/L), for cobalt (7.0 ug/L), and for vanadium (40.6 ug/L) be utilized as the Site-Specific GWPS. For all other compounds, it is recommended that the published IAC 567, Chapter 137 Statewide Standard be utilized as the GWPS.

Figures



SITE PLAN

BOONE COUNTY SANITARY LANDFILL
BOONE, IOWA

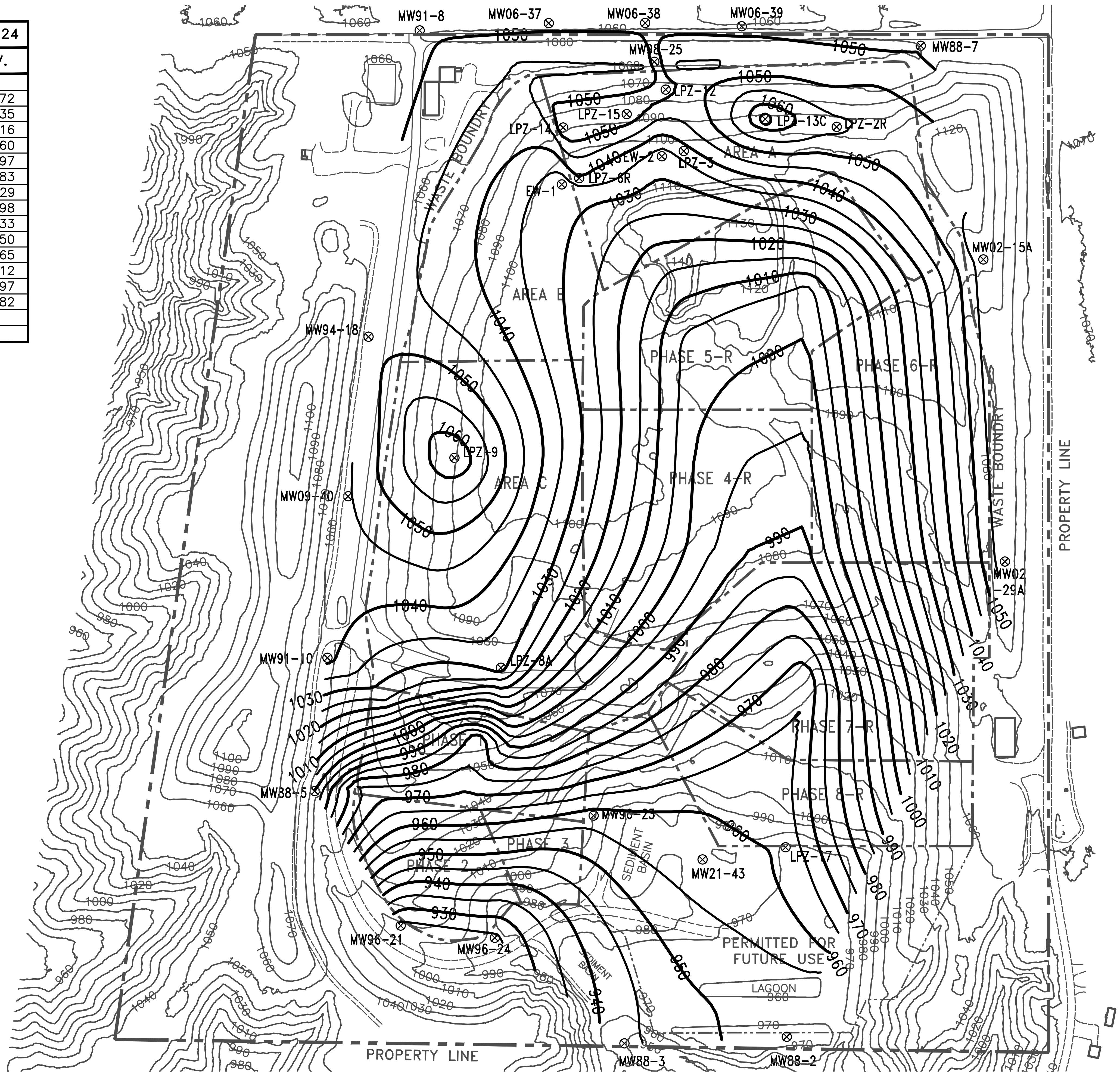
FIGURE: 1

NO.	REVISION	DATE

DRAWN	PROJECT NO.	DATE
DRA	6007	12-18-24

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

WATER ELEVATION, SEPTEMBER 30, 2024			
WELL	ELEV.	WELL	ELEV.
MW88-2	954.11	MW06-39	1051.72
MW88-3	943.85	MW09-40	1044.35
MW88-5	999.70	MW21-43	958.16
MW88-7	1052.89	LPZ-2R	1056.60
MW91-8	1051.59	LPZ-3	1078.97
MW91-10	1041.77	LPZ-6R	1039.83
MW94-18	1047.35	LPZ-8A	1032.29
MW96-21	923.40	LPZ-9	1064.98
MW96-23	957.53	LPZ-12	1052.33
MW96-24	923.65	LPZ-13C	1065.50
MW98-25	1052.10	LPZ-14	1054.65
MW02-15A	1057.66	LPZ-15	1054.12
MW02-29A	1058.53	EW-1	1030.97
MW06-37	1051.31	EW-2	1031.82
MW06-38	1051.43		



0 100 200 400
WASTE AREA SURVEY MAY 7, 2024

FIGURE: 2

NO.	REVISION	DATE

DRAWN DRA | PROJECT NO. 6007 | DATE 12-18-24

GROUNDWATER CONTOURS

BOONE COUNTY SANITARY LANDFILL
BOONE, IOWA

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

Appendix A
Monitoring Well Maintenance and Performance Re-evaluation

MONITORING WELL MAINTENANCE AND PERFORMANCE REEVALUATION

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

Years	1996	2001	2006	2007	2008	2009	2010	2011	2012
Annual water-quality report	X	X	X	X	X	X	X	X	X
High and low water levels	X	X	X	X	X	X	X	X	X
Six-month water levels	X	X	X	X	X	X	X	X	X
Well-depth measurement	X	X	X	X	X	X	X	X	X
Evaluation of recharge rates and chemistry	X	X	X			X	X		X

X, completed; O, scheduled

Years	2013	2014	2015	2016	2017	2018	2019	2020	2021
Annual water-quality report	X	X	X	X	X	X	X	X	X
High and low water levels	X	X	X	X	X	X	X	X	X
Six-month water levels	X	X	X	X	X	X	X	X	X
Well-depth measurement	X	X	X	X	X	X	X	X	X
Evaluation of recharge rates and chemistry		X		X		X		X	

Years	2022	2023	2024	2025	2026	2027	2028	2029	2030
Annual water-quality report	X	X	X	O	O	O	O	O	O
High and low water levels	X	X	X	O	O	O	O	O	O
Six-month water levels	X	X	X	O	O	O	O	O	O
Well-depth measurement	X	X	X	O	O	O	O	O	O
Evaluation of recharge rates and chemistry	X		X		O		O		O

Monitoring Well Performance Evaluation Reports dated June 19, 1996, March 5, 2001, and April 7, 2006 were prepared and submitted in accordance with previous rules (prior to 2007). The 2006 Report concluded that the integrity of all MW's was intact, and that no changes in the HMSP were recommended. Since 2007, monitoring well reevaluation has been performed in accordance with IAC 567-113.10(2)"f."

Water elevation data is summarized in Appendix A.1. Review of the water elevation data for 2024 does not indicate excessive variability compared to historic water elevation data. A Groundwater Contour Map dated September, 2024 is included in the body of this report as Figure 2. The Groundwater Contour Map illustrates the water table surface and the effects of the groundwater diversion system in Phase 4-R/5-R/6-R/7-R/8-R Expansion Areas.

The water elevation data summarized in Appendix A.1 includes calculation of the average water elevation at each monitoring well and identifies both the maximum and minimum recorded water elevation at each monitoring well.

Based on the apparent static condition of the water table across the site, the conclusions of the previous Monitoring Well Maintenance Performance Reevaluations, and the existing water elevation database, it appears that the semi-annual water elevation data is sufficient to adequately monitor the hydrologic condition of the site.

Monitoring well recharge reevaluation is due biennially according to 113.10(2)f. and was performed March 12, 2024.

Wells were pumped on March 12, 2024 and well recovery data was recorded during recharge. Review of the recovery data indicate that the wells recover to 90%, or more, within a 12 to 24-hour period following pumping activities. This is unchanged over time.

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

Well	Feet of Sediment 9/30/2024
MW96-21	1.50
MW96-23	1.79
MW96-24	3.22
MW98-28	3.47

Summary

Based on the recorded data, recharge to the individual wells remains sufficient to promote collection of representative water quality samples and the wells are functioning as intended. It is our interpretation that the integrity of all existing monitoring wells is intact.

APPENDIX A.1 Water Elevation Data

Water Level Data
Boone County Sanitary Landfill

Well/TOC	MW85-2	1055	MW88-1	974.1 973.8	MW88-2	974.47 975.41	MW88-3	952.93	MW88-4	1007.58
	Water Depth	Water Elevation	Water Depth	Water Elevation	Water Depth	Water Elevation	Water Depth	Water Elevation	Water Depth	Water Elevation
12/07/88			34.11	939.99	19.41	955.06	9.78	943.15	dry	dry
05/31/89	14.95	1040.05	35.00	939.1	19.50	954.97	9.00	943.93	dry	dry
06/05/89	15.00	1040	34.30	939.8	19.50	954.97	9.00	943.93	dry	dry
09/13/89	16.00	1039	35.00	939.1	20.33	954.14	10.04	942.89	dry	dry
03/27/90	13.60	1041.4	34.66	939.44	19.67	954.8	10.40	942.53	dry	dry
04/06/90	12.92	1042.08	34.75	939.35	19.50	954.97	10.30	942.63	dry	dry
09/20/90	10.20	1044.8	34.10	940	19.40	955.07	6.80	946.13	dry	dry
04/17/91	7.30	1047.7	33.70	940.4	17.30	957.17	4.80	948.13	dry	dry
09/25/91	11.80	1043.2	34.33	939.77	19.70	954.77	8.10	944.83	dry	dry
01/10/92	9.40	1045.6	34.05	940.05	19.05	955.42	8.60	944.33	dry	dry
01/17/92										
01/24/92										
01/31/92										
02/07/92										
02/21/92										
03/02/1992	8.80	1046.2	33.93	940.17	18.38	956.09	8.08	944.85	dry	dry
03/13/92	7.20	1047.8	33.80	940.3	17.70	956.77	7.55	945.38	dry	dry
03/27/92	8.40	1046.6	34.00	940.1	18.40	956.07	7.95	944.98	dry	dry
04/26/92	7.60	1047.4	33.95	940.15	17.90	956.57	7.70	945.23	dry	dry
09/22/92	10.00	1045	33.70	940.4	19.00	955.47	8.50	944.43	dry	dry
06/11/93	7.75	1047.25	33.50	940.6	17.50	956.97	5.30	947.63	dry	dry
09/30/93	7.90	1047.1	33.00	941.1	17.50	956.97	5.50	947.43	dry	dry
12/09/93	10.40	1044.6	33.40	940.7	19.00	955.47	7.00	945.93	dry	dry
04/07/94	11.45	1043.55							dry	dry
05/23/94										
06/06/94										
06/08/94										
09/21/94	12.34	1042.66	33.60	940.5	19.16	955.31	7.20	945.73	dry	dry
11/01/94	10.80	1044.2	33.40	940.7	18.60	955.87	6.10	946.83	dry	dry
12/05/94	11.86	1043.14	33.70	940.4	19.22	955.25	4.90	948.03	dry	dry
03/02/95	12.30	1042.7	33.77	940.33	19.10	955.37	6.40	946.53	dry	dry
06/22/95	9.20	1045.8	33.64	940.46	18.37	956.1	4.00	948.93	dry	dry
09/13/95	10.62	1044.38	33.94	940.16	18.8	955.67	6.4	946.53	dry	dry
03/21/96	12.75	1042.25	34.15	939.95	18.7	955.77	7.4	945.53	dry	dry
05/03/96									dry	dry
09/03/96	10.5	1044.5								
01/06/1997	9.2	1045.8	34	940.1	18.2	956.27	4.8	948.13	60.95	946.63
03/19/1997	9.28	1045.72	33.75	940.35	17.15	957.32	3	949.93	60.8	946.78
06/18/1997										
09/01/1997	12.2	1042.8	34	940.1	19	955.47	4.5	948.43	59.7	947.88
03/03/1998	11.35	1043.65	33.6	940.5	18	956.47	6.65	946.28	60.9	946.68
07/30/1998	NT	NT	NT	NT	17.2	957.27	4.51	948.42	NT	NT
08/25/1998	NT	NT	NT	NT	18.5	955.97	5.1	947.83	NT	NT
09/15/1998	NT	NT	NT	NT	18.6	955.87	5.6	947.33	NT	NT
10/29/1999	NT	NT	NT	NT	19.27	955.2	NT	NT	NT	NT
12/27/1999	NT	NT	NT	NT	19.3	955.17	NT	NT	NT	NT
03/14/2000	12.4	1042.6	33.9	940.2	19.1	955.37	6.85	946.08	60.75	946.83
06/29/2000	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/18/2000	13.9	1041.1	34.42	939.68	19.7	954.77	6.15	946.78	81.47	926.11
12/20/2000	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
02/08/2001	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/22/2001	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/20/2001	13.1	1041.9	34	940.1	19.4	955.07	8	944.93	NT	NT
03/15/2002	13	1042	34.45	939.65	19.8	954.67	10.1	942.83	62.25	945.33
09/16/2002	12.9	1042.1	34.75	939.35	19.8	954.67	9	943.93	NT	NT
03/11/2003	13.7	1041.3	34.98	939.12	19.9	954.57	10.3	942.63	dry	dry
09/16/2003	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/09/2004	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/14/2004	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/04/2005	11.67	1043.33	34.38	939.72	18.85	955.62	10.45	942.48	dry	dry
09/15/2005	12.57	1042.43	34.57	939.53	19.88	954.59	9.69	943.24	dry@64.3	dry
02/08/2006	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
03/29/2006	12.38	1042.62	34.55	939.55	19.7	954.77	10.2	942.73	dry@64.3	dry
09/13/2006	11.6	1043.4	34.5	939.6	19.2	955.27	9.39	943.54	dry@64.3	dry
03/29/2007	11.4	1043.6	34.19	939.91	17.92	956.55	8.44	944.49	DRY	DRY
09/13/2007	11.55	1043.45	34	940.1	18.95	955.52	8.05	944.88	59.58	948
03/17/2008	12.05	1042.95	34.4	939.7	19.1	955.37	7.2	945.73	60.3	947.28
06/02/2008	NT	NT	NT	NT	16.05	958.42	27.6	925.33	NT	NT
07/21/2008	11	1044	33.55	940.55	17.8	956.67	5.75	947.18	NT	NT
09/12/2008	11.55	1043.45	33.9	940.2	18.95	955.52	6.4	946.53	NT	NT
12/18/2008	11.45	1043.55	34.05	940.05	18.75	955.72	6.9	946.03	58.7	948.88
03/04/2009	11.75	1043.25	34	940.1	18.25	956.22	6.4	946.53	59.05	948.53
05/04/2009	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
07/01/2009	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/20/2009	12	1043	33.7	940.4	18.9	955.57	6.45	946.48	58.78	948.8
03/26/2010	10.4	1044.6	33.7	940.4	15.75	958.72	3.8	949.13	58.8	948.78
09/17/2010	11.25	1043.75	NT	NT	18.5	955.97	4.1	948.83	57.45	950.13
03/29/2011	10.4	1044.6	NT	NT	18.2	956.27	6.7	946.23	59.15	948.43
09/13/2011	12.4	1042.6	33.4	940.4	12.4	962.07	7	945.93	59	948.58
03/06/2012	12	1043	33.7	NT	19.4	955.07	8.2	944.73	60	947.58
09/11/2012	16.6	1038.4	35.15	938.65	19.9	954.57	9.1	943.83	60.9	946.68
03/19/2013	13.15	1041.85	34.3	939.5	19.35	955.12	10.25	942.68	61.5	946.08
09/26/2013	13.6	1041.4	36.12	937.68	19.11	955.36	9.1	943.83	61.4	946.18
03/12/2014	14.7	1040.3	35.5	938.3	19.3	955.17	10.8	942.13	61.4	946.18
09/18/2014	10.3	1044.7	34.3	939.5	17.7	956.77	8.85	944.08	61.22	946.36
03/17/2015	11.45	1043.55	34.1	939.7	18	956.47	8.3	944.63	60.8	946.78
09/11/2015	9.8	1045.2	33.32	940.48	16.7	957.77	6.61	946.32	59.23	948.35
03/16/2016	10.27	1044.73	33.3	940.5	15.3	959.17	5.57	947.36	57.95	949.63
09/08/2016	10.45	1044.55	33.45	940.35	16.2	958.27	10.01	942.92	58.73	948.85
03/17/2017	10.25	1044.75	33.6	940.2	15.55	958.92	7.45	945.48	59.35	948.23
09/19/2017	12.5	1042.5	34.1	939.7	18.27	956.2	7.85	945.08	58.68	948.9
03/08/2018	10.89	1044.11	33.81	939.99	18.11	956.36	9.04	943.89	59.35	948.23
09/24/2018	10.07	1044.93	33.23	940.57	16.17	958.3	6.72	946.21	59.06	948.52
03/25/2019	10.55	1044.45	33.49	940.31	14.98	959.49	5.71	947.22	58.92	948.66
09/03/2019	11.1	1043.9	33.25	940.55	16.35	958.12	6.21	946.72	57.8	949.78
03/23/2020	9.3	1045.7	33.19	940.61	14.68	959.79	6.32	946.61	59.15	948.43
09/04/2020	12.75	1042.25	34.33	939.47	18.56	955.91	8.11	944.82	58.87	948.71
03/09/2021	9.38	1045.62	33.99	939.81	17.86	956.61	8.39	944.54	60.05	947.53
09/07/2021	12.21	1042.79	34.1	939.7			8.9	944.03	60.15	947.43
03/28/2022	9.93	1045.07	35.4	938.4	18.8	956.61	10.21	942.72	59.85	947.73
09/14/2022	12.41	1042.59	35.93	937.87	20.69	954.72	8.36	944.57	59.95	947.63
03/20/2023	11.12	1043.88	34.95	938.85	19.75	955.66	9.09	943.84	61.01	946.57
09/12/2023	13.6	1041.4	36.68	937.12	20.65	954.76	8.82	944.11	60.21	947.37
03/12/2024	13.06	1041.94	35.66	938.14	20.41	955	9.99	942.94	62.6	944.98
09/30/2024	14.56	1040.44	37.32	936.48	21.3	954.11	9.08	943.85	62.51	945.07
						new elevation 8/3/22				
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Average	11.46	1043.55	34.19	939.79	18.46	956.08	7.81	945.12	60.44	947.15
Std. Dev.	1.92	1.92	0.79	0.84	1.48	1.42	2.89	2.89	3.51	3.51
	16.80%	0.18%	2.31%	0.09%	8.04%	0.15%	36.98%	0.31%	5.80%	0.37%
Maximum	16.60	1047.80	37.32	941.10	21.30	962.07	27.60	949.93	81.47	950.13
Minimum	7.20	1038.40	33.00	936.48	12.40	954.11	3.00	925.33	57.45	926.11

Water Level Data
Boone County Sanitary Landfill

Note: well was extended
October, 1999.

Well/TOC	MW88-5	1054.28	MW88-6	1058.41	MW88-7	1061.45 1063.49 1063.24	MW91-8	1060.82	MW91-9	1061.12
	Water Depth	Water Elevation	Water Depth	Water Elevation	Water Depth	Water Elevation	Water Depth	Water Elevation	Water Depth	Water Elevation
12/07/88	32.86	1021.42	4.07	1054.34	11.50	1049.95				
05/31/89	38.50	1015.78	8.50	1049.91	11.00	1050.45				
06/05/89	49.00	1005.28	5.00	1053.41	13.75	1047.7				
09/13/89	39.66	1014.62	6.17	1052.24	12.50	1048.95				
03/27/90	41.30	1012.98	4.30	1054.11	9.40	1052.05				
04/06/90	44.75	1009.53	4.75	1053.66	10.50	1050.95				
09/20/90	34.80	1019.48	5.80	1052.61	7.30	1054.15				
04/17/91	36.00	1018.28	3.40	1055.01	4.60	1056.85				
09/25/91	45.90	1008.38	7.00	1051.41	8.80	1052.65				
01/10/92	46.10	1008.18	5.80	1052.61		1061.45	7.30	1053.52	4.00	1057.12
01/17/92							7.95	1052.87	4.85	1056.27
01/24/92							7.30	1053.52	4.40	1056.72
01/31/92							7.40	1053.42	5.25	1055.87
02/07/92							7.40	1053.42	5.10	1056.02
02/21/92							7.10	1053.72	4.00	1057.12
03/02/1992	45.60	1008.68	5.25	1053.16	4.25	1057.2	7.00	1053.82	4.40	1056.72
03/13/92	45.45	1008.83	4.85	1053.56	3.80	1057.65	6.60	1054.22	4.30	1056.82
03/27/92	45.50	1008.78	5.70	1052.71	4.50	1056.95	6.80	1054.02	4.70	1056.42
04/26/92	45.40	1008.88	5.30	1053.11	4.00	1057.45	7.05	1053.77	4.35	1056.77
09/22/92	49.10	1005.18	7.40	1051.01	5.00	1056.45				
06/11/93	48.00	1006.28	5.00	1053.41	4.25	1057.2				
09/30/93	48.10	1006.18	5.10	1053.31	4.20	1057.25	6.50	1054.32	4.40	1056.72
12/09/93	49.30	1004.98	6.60	1051.81	4.90	1056.55				
04/07/94	50.80	1003.48	7.00	1051.41	4.90	1056.55				
05/23/94										
06/06/94										
06/08/94	50.95	1003.33			4.60	1056.85	9.60	1051.22		
09/21/94	51.90	1002.38	8.00	1050.41	5.60	1055.85	6.80	1054.02	9.70	1051.42
11/01/94	52.10	1002.18	6.60	1051.81	5.04	1056.41	6.20	1054.62	8.30	1052.82
12/05/94	51.40	1002.88	7.50	1050.91	5.00	1056.45	7.30	1053.52	9.30	1051.82
03/02/95	51.50	1002.78	7.65	1050.76	4.90	1056.55	7.38	1053.44		1061.12
06/22/95	49.40	1004.88	6.68	1051.73			6.30	1054.52	9.35	1051.77
09/13/95	49.9	1004.38	8.72	1049.69	5.6	1055.85	8.21	1052.61	14.5	1046.62
03/21/96	dry	dry	8	1050.41	5.1	1056.35	7.4	1053.42	9.5	1051.62
05/03/96	dry	dry			5.25	1056.2	6.95	1053.87		
09/03/96			6.69	1051.72	5.15	1056.3	6.7	1054.12	8.65	1052.47
01/06/1997	54.25	1000.03	6.17	1052.24	4.6	1056.85	5.5	1055.32	frozen	frozen
03/19/1997	49.85	1004.43	5.7	1052.71	4.3	1057.15	4.85	1055.97	8.75	1052.37
06/18/1997	49.9	1004.38								
09/01/1997	51.05	1003.23	8.5	1049.91	6.2	1055.25	8.45	1052.37	9.4	1051.72
03/03/1998	52.75	1001.53	5.65	1052.76	3.75	1057.7	4.5	1056.32	7.7	1053.42
07/30/1998	48.2	1006.08	NT	NT	NT	NT	5.6	1055.22	NT	NT
08/25/1998	48.6	1005.68	NT	NT	NT	NT	9.6	1051.22	NT	NT
09/15/1998	49.3	1004.98	NT	NT	NT	NT	7.5	1053.32	NT	NT
10/29/1999	52.25	1002.03	NT	NT	7.1	1056.39	8.6	1052.22	NT	NT
12/27/1999	53.21	1001.07	NT	NT	7.17	1056.32	9.2	1051.62	NT	NT
03/14/2000	52.65	1001.63	7.35	1051.06	6.45	1057.04	7	1053.82	9.15	1051.97
06/29/2000	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/18/2000	52.31	1001.97	9.25	1049.16	8.44	1055.05	9.66	1051.16	11.04	1050.08
12/20/2000	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
02/08/2001	53.91	1000.37	NT	NT	7.5	1055.99	8.56	1052.26	NT	NT
03/22/2001	51.64	1002.64	NT	NT	6.4	1057.09	7.3	1053.52	NT	NT
09/20/2001	53.5	1000.78	5.5	1052.91	6.35	1057.14	7.15	1053.67	7.25	1053.87
03/15/2002	53.9	1000.38	4.3	1054.11	4.8	1058.69	6.05	1054.77	5.85	1055.27
09/16/2002	53.35	1000.93	6	1052.41	6.6	1056.89	8	1052.82	7.8	1053.32
03/11/2003	54.1	1000.18	7.5	1050.91	6.9	1056.59	9.4	1051.42	9.2	1051.92
09/16/2003	51.93	1002.35	NT	NT	7.73	1055.76	7.9	1052.92	NT	NT
03/09/2004	50.49	1003.79	NT	NT	4.19	1059.3	4.16	1056.66	NT	NT
09/14/2004	52.35	1001.93	NT	NT	7	1056.49	6.25	1054.57	NT	NT
03/04/2005	51.95	1002.33	4.21	1054.2	4.94	1058.55	6.21	1054.61	5.96	1055.16
09/15/2005	52.52	1001.76	5.81	1052.6	6.19	1057.3	7.81	1053.01	7.56	1053.56
02/08/2006	51.89	1002.39	NT	NT	5.41	1058.08	6.86	1053.96	NT	NT
03/29/2006	52.09	1002.19	3.1	1055.31	4.1	1059.39	4.98	1055.84	4.78	1056.34
09/13/2006	50.6	1003.68	2.03	1056.38	4.52	1058.97	4.1	1056.72	3.85	1057.27
03/29/2007	51.53	1002.75	1.43	1056.98	4.18	1059.31	3.4	1057.42	3.16	1057.96
09/13/2007	51.98	1002.3	4.6	1053.81	5.75	1057.74	6.58	1054.24	6.37	1054.75
03/17/2008	51.35	1002.93	1.45	1056.96	4.5	1058.99	3.25	1057.57	3.1	1058.02
06/02/2008	NT	NT	NT	NT	4.45	1059.04	2.91	1057.91	NT	NT
07/21/2008	50	1004.28	0.6	1057.81	3.05	1060.44	2.5	1058.32	2.35	1058.77
09/12/2008	50.6	1003.68	NT	NT	7.9	1055.59	7.42	1053.4	NT	NT
12/18/2008	51.35	1002.93	3.7	1054.71	6.75	1056.74	5.8	1055.02	5.5	1055.62
03/04/2009	51.65	1002.63	2.3	1056.11	7.1	1056.39	6.45	1054.37	6.1	1055.02
05/04/2009	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
07/01/2009	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/20/2009	52.25	1002.03	5.35	1053.06	7.86	1055.63	5.45	1055.37	7.1	1054.02
03/26/2010	50.9	1003.38	2.55	1055.86	4.4	1059.09	4.6	1056.22	4.35	1056.77
09/17/2010	50.65	1003.63	2.8	1055.61	5.3	1058.19	7.4	1053.42	4.7	1056.42
03/29/2011	51.9	1002.38	4.1	1054.31	5.8	1057.69	6.3	1054.52	6.1	1055.02
09/13/2011	52.6	1001.68	6.6	1051.81	8.05	1055.44	8.1	1052.72	8.3	1052.82
03/06/2012	53.25	1001.03	5	1053.41	5.7	1057.79	6.6	1054.22	6.5	1054.62
09/11/2012	55	999.28	8.9	1049.51	11.5	1051.99	10.75	1050.07	11.65	1049.47
03/19/2013	55.85	998.43	2	1056.41	5.4	1058.09	3.75	1057.07	3.65	1057.47
09/26/2013	53.78	1000.5	7.6	1050.81	10.88	1052.61	9.45	1051.37	9.25	1051.87
03/12/2014	55.95	998.33	3	1055.41	9.2	1054.29	4.6	1056.22	4.7	1056.42
09/18/2014	52.2	1002.08	2.5	1055.91	5.55	1057.94	4.75	1056.07	4.45	1056.67
03/17/2015	51.75	1002.53	3.4	1055.01	5.4	1058.09	5.4	1055.42	5.3	1055.82
09/11/2015	51.44	1002.84	1.85	1056.56	4.45	1059.04	3.98	1056.84	3.8	1057.32
03/16/2016	51.25	1003.03	2.9	1055.51	4.67	1058.82	4.9	1055.92	4.85	1056.27
09/08/2016	52.4	1001.88	2.16	1056.25	4.11	1059.38	4.04	1056.78	3.97	1057.15
03/17/2017	51.95	1002.33	3.22	1055.19	5.7	1057.54	4.85	1055.97	5.11	1056.01
09/19/2017	53.87	1000.41	6.97	1051.44	9.8	1053.44	9.05	1051.77	8.81	1052.31
03/08/2018	52.92	1001.36	2.85	1055.56	5.3	1057.94	4.86	1055.96	4.75	1056.37
09/24/2018	52.1	1002.18	3.7	1054.71	6.19	1057.05	5.68	1055.14	5.58	1055.54
03/25/2019	51.81	1002.47	2.07	1056.34	4.49	1058.75	4.06	1056.76	3.96	1057.16
09/03/2019	51.48	1002.8	5.85	1052.56	8.3	1054.94	7.84	1052.98	7.71	1053.41
03/23/2020	51.67	1002.61	1.6	1056.81	3.85	1059.39	3.55	1057.27	3.5	1057.62
09/04/2020	53.9	1000.38	8.36	1050.05	10.38	1052.86	10.32	1050.5	10.21	1050.91
03/09/2021	54.62	999.66	1.79	1056.62	4.11	1059.13	3.65	1057.17	3.65	1057.47
09/07/2021	54.08	1000.2	7.3	1051.11	9.18	1054.06	10.27	1050.55	9.15	1051.97
03/28/2022	55.15	999.13	2.28	1056.13	4.12	1059.12	4.25	1056.57	4.15	1056.97
09/14/2022	51.3	1002.98	7.32	1051.09	9.38	1053.86	9.3	1051.52	9.19	1051.93
03/20/2023	54.87	999.41	1.52	1056.89	4.4	1058.84	3.59	1057.23	3.4	1057.72
09/12/2023	53.49	1000.79	5.76	1052.65	9.26	1053.98	7.89	1052.93	7.95	1053.17
03/12/2024	55.43	998.85	4.59	1053.82	7.28	1055.96	6.7	1054.12	6.45	1054.67
09/30/2024	54.58	999.7	7.12	1051.29	10.35	1052.89	9.23	1051.59	8.99	1052.13
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Average	50.50	1003.78	5.06	1053.35	6.36	1056.42	6.59	1054.23	6.40	1054.81
Std. Dev.	4.36	4.36	2.19	2.19	2.32	2.53	1.91	1.91	2.49	2.59
	8.64%	0.43%	43.26%	0.21%	36.45%	0.24%	29.07%	0.18%	38.97%	0.25%
Maximum	55.95	1021.42	9.25	1057.81	13.75	1061.45	10.75	1058.32	14.50	1061.12
Minimum	32.86	998.33	0.60	1049.16	3.05	1047.70	2.50	1050.07	2.35	1046.62

Water Level Data
Boone County Sanitary Landfill

Well/TOC	MW91-10	1056.8	MW91-11	1056.58	MW94-15	1064.45	MW94-18	1058.85	MW94-19	966.9
						1069.59				970.9
					MW02-15A	1105.3				
	Water Depth	Water Elevation	Water Depth	Water Elevation	Water Depth	Water Elevation	Water Depth	Water Elevation	Water Depth	Water Elevation
12/07/88										
05/31/89					Note: well was extended				Note: well was extende	
06/05/89					October, 1999.				October, 1999.	
09/13/89										
03/27/90										
04/06/90										
09/20/90										
04/17/91										
09/25/91										
01/10/92	8.90	1047.9	30.50	1026.08						
01/17/92	7.95	1048.85	9.55	1047.03						
01/24/92	8.40	1048.4	9.80	1046.78						
01/31/92	9.10	1047.7	10.05	1046.53						
02/07/92	9.30	1047.5	10.40	1046.18						
02/21/92	8.60	1048.2	10.40	1046.18						
03/02/1992	8.45	1048.35	9.80	1046.78						
03/13/92	7.30	1049.5	8.25	1048.33						
03/27/92	8.00	1048.8	9.50	1047.08						
04/26/92	7.80	1049	9.00	1047.58						
09/22/92										
06/11/93										
09/30/93	8.10	1048.7	8.95	1047.63						
12/09/93										
04/07/94										
05/23/94					6.00	1058.45	8.40	1050.45		
06/06/94					6.20	1058.25	9.30	1049.55		
06/08/94	11.80	1045			5.95	1058.5	9.10	1049.75		
09/21/94	12.50	1044.3	13.50	1043.08	7.44	1057.01	10.24	1048.61	22.24	944.66
11/01/94	10.50	1046.3	11.80	1044.78	5.90	1058.55	9.20	1049.65		
12/05/94	11.80	1045	12.96	1043.62	6.14	1058.31	9.60	1049.25	19.90	947
03/02/95	12.15	1044.65	13.38	1043.2	6.06	1058.39	9.54	1049.31	21.20	945.7
06/22/95	9.64	1047.16	10.30	1046.28	6.00	1058.45	8.85	1050	19.10	947.8
09/13/95	11.37	1045.43	12.26	1044.32	7.3	1057.15	9.9	1048.95	20.81	946.09
03/21/96	12.6	1044.2	13.85	1042.73	6.4	1058.05	9.6	1049.25	22.70	944.2
05/03/96	12.3	1044.5					9.67	1049.18		
09/03/96	10.75	1046.05	11.6	1044.98	6.6	1057.85	9.2	1049.65		
01/06/1997	10.00	1046.8	10.3	1046.28	5.8	1058.65	8.5	1050.35	19.88	947.02
03/19/1997	9.50	1047.3	10.3	1046.28	5.6	1058.85	8.43	1050.42	18.06	948.84
06/18/1997									17.8	949.1
09/01/1997	12.22	1044.58	13.3	1043.28	7.9	1056.55	9.95	1048.9	19.8	947.1
03/03/1998	10.90	1045.9	12.65	1043.93	5.67	1058.78	8.5	1050.35	22	944.9
07/30/1998	8.20	1048.6	NT	NT	6	1058.45	8.6	1050.25	17.2	949.7
08/25/1998	10.30	1046.5	NT	NT	7	1057.45	9	1049.85	17.8	949.1
09/15/1998	13.40	1043.4	NT	NT	8	1056.45	9.7	1049.15	19.9	947
10/29/1999	13.00	1043.8	NT	NT	10.2	1059.39	9.6	1049.25	25.7	945.2
12/27/1999	13.10	1043.7	NT	NT	11.2	1058.39	10.25	1048.6	25.2	945.7
03/14/2000	13.00	1043.8	13.9	1042.68	10.15	1059.44	10.2	1048.65	26.5	944.4
06/29/2000	NT	NT	NT	NT	9.7	1059.89	NT	NT	NT	NT
09/18/2000	13.90	1042.9	14.99	1041.59	10.87	1058.72	11.45	1047.4	25.6	945.3
12/20/2000	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
02/08/2001	13.10	1043.7	NT	NT	12	1057.59	10.14	1048.71	27.51	943.39
03/22/2001	11.46	1045.34	NT	NT	11.15	1058.44	9.39	1049.46	26.96	943.94
09/20/2001	13.40	1043.4	14.65	1041.93	10.45	1059.14	10.4	1048.45	27.65	943.25
03/15/2002	13	1043.8	14.5	1042.08	10.9	1058.69	10.1	1048.75	29.45	941.45
09/16/2002	13.8	1043	14.42	1042.16	45.95	1059.35	10.6	1048.25	28.6	942.3
03/11/2003	14.45	1042.35	15.3	1041.28	48.2	1057.1	10.1	1048.75	30	940.9
09/16/2003	14.51	1042.29	NT	NT	46.76	1058.54	10.83	1048.02	29.49	941.41
03/09/2004	11.85	1044.95	NT	NT	43.79	1061.51	9.1	1049.75	30.29	940.61
09/14/2004	12.9	1043.9	NT	NT	45.6	1059.7	10.15	1048.7	29.8	941.1
03/04/2005	12.05	1044.75	13.25	1043.33	42.03	1063.27	9.8	1049.05	29.73	941.17
09/15/2005	13.16	1043.64	14.19	1042.39	46.1	1059.2	10.06	1048.79	29.05	941.85
02/08/2006	12.97	1043.83	NT	NT	44.75	1060.55	9.88	1048.97	29.52	941.38
03/29/2006	12.36	1044.44	13.97	1042.61	43.45	1061.85	9.64	1049.21	29.45	941.45
09/13/2006	10.76	1046.04	13.2	1043.38	43.2	1062.1	9.47	1049.38	28.59	942.31
03/29/2007	11.63	1045.17	12.99	1043.59	42.62	1062.68	9.61	1049.24	27.12	943.78
09/13/2007	11	1045.8	13.15	1043.43	43.6	1061.7	9.58	1049.27	27.6	943.3
03/17/2008	12.85	1043.95	13.7	1042.88	43.5	1061.8	9.9	1048.95	25.38	945.52
06/02/2008	10.82	1045.98	NT	NT	42.13	1063.17	8.32	1050.53	23.39	947.51
07/21/2008	8.7	1048.1	12.6	1043.98	42.75	1062.55	9.05	1049.8	25.15	945.75
09/12/2008	12.55	1044.25	13.15	1043.43	45.74	1059.56	10.1	1048.75	25.5	945.4
12/18/2008	12.2	1044.6	13	1043.58	44.35	1060.95	9.7	1049.15	26.18	944.72
03/04/2009	12.5	1044.3	13.31	1043.27	44.75	1060.55	9.9	1048.95	25.68	941.22
05/04/2009	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
07/01/2009	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/20/2009	13	1043.8	13.6	1042.98	45.8	1059.5	10.2	1048.65	25.85	941.05
03/26/2010	11.2	1045.6	12.05	1044.53	42.2	1063.1	9.25	1049.6	22.56	944.34
09/17/2010	12.05	1044.75	12.9	1043.68	43	1062.3	9.55	1049.3	23.35	943.55
03/29/2011	12.4	1044.4	13.55	1043.03	42.75	1062.55	9.6	1049.25	25.9	941
09/13/2011	13.3	1043.5	14	1042.58	46.15	1059.15	10.35	1048.5	26.55	940.35
03/06/2012	12.3	1044.5	13.6	1042.98	43.6	1061.7	9.55	1049.3	27.7	939.2
09/11/2012	14.9	1041.9	15.85	1040.73	48.5	1056.8	12.1	1046.75	29	937.9
03/19/2013	12.7	1044.1	14.8	1041.78	49.4	1055.9	9.95	1048.9	29.2	937.7
09/26/2013	14.1	1042.7	15.2	1041.38	48.3	1057	12.15	1046.7	28.45	938.45
03/12/2014	15	1041.8	16.3	1040.28	50.3	1055	10.6	1048.25	30.1	936.8
09/18/2014	10.5	1046.3	11.9	1044.68	43.65	1061.65	9.5	1049.35	27.4	939.5
03/17/2015	11.65	1045.15	13.1	1043.48	44.25	1061.05	9.7	1049.15	27.65	939.25
09/11/2015	10.2	1046.6	11.4	1045.18	42	1063.3	9.15	1049.7	25.73	941.17
03/16/2016	11.11	1045.69	11.9	1044.68	41.55	1063.75	9.5	1049.35	24.55	942.35
09/08/2016	10.96	1045.84	12.07	1044.51	43.79	1061.51	9.3	1049.55	26.42	940.48
03/17/2017	10.76	1046.04	11.9	1044.68	41.22	1064.08	9.28	1049.57	26.65	940.25
09/19/2017	13.21	1043.59	14.12	1042.46	47.49	1057.81	11.35	1047.5	27.2	939.7
03/08/2018	11.34	1045.46	12.5	1044.08	42.61	1062.69	9.5	1049.35	28.03	938.87
09/24/2018	10.95	1045.85	11.68	1044.9	43.33	1061.97	9.23	1049.62	25.85	941.05
03/25/2019	10.85	1045.95	12.15	1044.43	41.31	1063.99	9.25	1049.6	24.52	942.38
09/03/2019	12.25	1044.55	12.72	1043.86	45.42	1059.88	10.51	1048.34		
03/23/2020	9.57	1047.23	10.91	1045.67	40.62	1064.68	8.39	1050.46		
09/04/2020	13.32	1043.48	14.36	1042.22	47.26	1058.04	11.8	1047.05		
03/09/2021	9.31	1047.49	10.96	1045.62	43.81	1061.49	8.61	1050.24		
09/07/2021	12.78	1044.02	13.81	1042.77	47.97	1057.33	10.63	1048.22		
03/28/2022	9.7	1047.1	11.5	1045.08	43.27	1062.03	8.58	1050.27		
09/14/2022	13.08	1043.72	14.02	1042.56	47.39	1057.91	10.7	1048.15		
03/20/2023	10.83	1045.97	12.7	1043.88	42.6	1062.7	8.78	1050.07		
09/12/2023	14.08	1042.72	15.17	1041.41	46.35	1058.95	10.96	1047.89		
03/12/2024	13.58	1043.22	14.63	1041.95	45.21	1060.09	9.79	1049.06		
09/30/2024	15.03	1041.77	16.16	1040.42	47.64	1057.66	11.5	1047.35		
Average	11.56	1045.24	12.93	1043.65	31.59	1059.81	9.76	1049.09	25.44	943.13
Std. Dev.	1.88	1.88	2.78	2.78	17.75	2.24	0.84	0.84	3.60	3.12
	16.24%	0.18%	21.48%	0.27%	56.19%	0.21%	8.65%	0.08%	14.15%	0.33%
Maximum	15.03	1049.50	30.50	1048.33	50.30	1064.68	12.15	1050.53	30.29	949.70
Minimum	7.30	1041.77	8.25	1026.08	5.60	1055.00	8.32	1046.70	17.20	936.80

Water Level Data
Boone County Sanitary Landfill

Well/TOC	MW96-21	1011.06	MW96-22	988.73	MW96-23	986.39 1007.33	MW96-24	988.56	MW98-25	1059.38
	Water Depth	Water Elevation	Water Depth	Water Elevation	Water Depth	Water Elevation	Water Depth	Water Elevation	Water Depth	Water Elevation
12/07/88										
05/31/89					Note: well was extended					
06/05/89					October, 1999.					
09/13/89										
03/27/90										
04/06/90										
09/20/90										
04/17/91										
09/25/91										
01/10/92										
01/17/92										
01/24/92										
01/31/92										
02/07/92										
02/21/92										
03/02/1992										
03/13/92										
03/27/92										
04/26/92										
09/22/92										
06/11/93										
09/30/93										
12/09/93										
04/07/94										
05/23/94										
06/06/94										
06/08/94										
09/21/94										
11/01/94										
12/05/94										
03/02/95										
06/22/95										
09/13/95										
03/21/96										
05/03/96										
09/03/96										
01/06/1997	87.53	923.53	51.35	937.38	30.55	955.84	64.95	923.61		
03/19/1997	87.05	924.01	49	939.73	30.35	956.04	64.3	924.26		
06/18/1997	87.2	923.86	50.67	938.06	30.3	956.09	64.5	924.06		
09/01/1997	87.2	923.86	52.6	936.13	30.5	955.89	64.45	924.11		
03/03/1998	87.2	923.86	52.55	936.18	30.71	955.68	64.5	924.06	5.9	1053.48
07/30/1998	87.8	923.26	64.5	924.23	29.1	957.29	44.5	944.06	6.1	1053.28
08/25/1998	86.8	924.26	77.3	911.43	30.3	956.09	50.2	938.36	6.2	1053.18
09/15/1998	87.2	923.86	52.55	936.18	30.3	956.09	64.45	924.11	7	1052.38
10/29/1999	87.44	923.62	64.74	923.99	52.04	955.29	52.83	935.73	6.7	1052.68
12/27/1999	87.35	923.71	64.65	924.08	51.85	955.48	52.7	935.86	6.55	1052.83
03/14/2000	87.15	923.91	52.75	935.98	51.7	955.63	64.5	924.06	6.2	1053.18
06/29/2000	NT	NT	NT	NT	NT	NT	NT	NT	5.98	1053.4
09/18/2000	87.48	923.58	52.71	936.02	51.97	955.36	64.82	923.74	7.83	1051.55
12/20/2000	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
02/08/2001	87.19	923.87	52.65	936.08	51.9	955.43	64.5	924.06	6.4	1052.98
03/22/2001	87.23	923.83	52.6	936.13	51.9	955.43	64.09	924.47	6.4	1052.98
09/20/2001	87.35	923.71	52.7	936.03	51.7	955.63	64.65	923.91	6.2	1053.18
03/15/2002	87.7	923.36	52.6	936.13	52.4	954.93	65.2	923.36	6.42	1052.96
09/16/2002	87.6	923.46	52.6	936.13	52	955.33	64.8	923.76	6.5	1052.88
03/11/2003	87.65	923.41	52.55	936.18	52.15	955.18	64.9	923.66	5.6	1053.78
09/16/2003	87.7	923.36	52.53	936.2	ddry	dry	65.03	923.53	6.95	1052.43
03/09/2004	87.9	923.16	52.97	935.76	ddry	dry	65.32	923.24	6.06	1053.32
09/14/2004	87.9	923.16	dry	dry	ddry	dry	65.15	923.41	6.6	1052.78
03/04/2005	88.1	922.96	dry	dry	52.1	955.23	65.4	923.16	6.33	1053.05
09/15/2005	88.06	923	52.94	935.79	52.58	954.75	65.39	923.17	7.36	1052.02
02/08/2006	87.93	923.13	52.95	935.78	52.53	954.8	65.2	923.36	7.56	1051.82
03/29/2006	88.2	922.86	dry	dry	52.4	954.93	65.5	923.06	6.47	1052.91
09/13/2006	88.08	922.98	52.96	935.77	52.5	954.83	65.43	923.13	7.05	1052.33
03/29/2007	88.24	922.82	dry	dry	52.54	954.79	65.63	922.93	6.7	1052.68
09/13/2007	88.1	922.96	DRY	DRY	52.65	954.68	65.45	923.11	5.85	1053.53
03/17/2008	87.9	923.16	DRY	DRY	52.7	954.63	65.25	923.31	6.4	1052.98
06/02/2008	87.68	923.38	DRY	DRY	51.9	955.43	64.96	923.6	5.22	1054.16
07/21/2008	87.55	923.51	DRY	DRY	52.2	955.13	64.95	923.61	6.2	1053.18
09/12/2008	87.45	923.61	DRY	DRY	52.2	955.13	64.79	923.77	7.05	1052.33
12/18/2008	87.4	923.66	DRY	DRY	52.2	955.13	64.7	923.86	6.32	1053.06
03/04/2009	87.17	923.89	DRY	DRY	51.8	955.53	64.28	924.28	6.4	1052.98
05/04/2009	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
07/01/2009	NT	NT	NT	NT	NT	NT	64.6	923.96	NT	NT
09/20/2009	86.95	924.11	DRY	DRY	51.85	955.48	64.2	924.36	6.92	1052.46
03/26/2010	87.2	923.86	DRY@52.8	DRY	51.8	955.53	64.4	924.16	6.25	1053.13
09/17/2010	87.2	923.86	52.5	936.23	51.9	955.43	64.35	924.21	5.85	1053.53
03/29/2011	87.2	923.86	52.6	936.13	52.2	955.13	64.3	924.26	6.1	1053.28
09/13/2011	87.1	923.96	52.6	936.13	52.1	955.23	64.3	924.26	6.6	1052.78
03/06/2012	86.9	924.16	53.2	935.53	51.6	955.73	64	924.56	5.4	1053.98
09/11/2012	87.2	923.86	53.2	935.53	52	955.33	64.4	924.16	8.25	1051.13
03/19/2013	87.6	923.46	52.6	936.13	52.05	955.28	64.85	923.71	5.75	1053.63
09/26/2013	87.5	923.56	52.58	936.15	51.55	955.78	64.6	923.96	7.75	1051.63
03/12/2014	87.5	923.56	47.65	941.08	51.9	955.43	64.95	923.61	7.3	1052.08
09/18/2014	87.65	923.41	52.65	936.08	51.85	955.48	65.15	923.41	5.15	1054.23
03/17/2015	NR	NR	52.7	936.03	52.15	955.18	65.4	923.16	5.55	1053.83
09/11/2015	NR	NR	52.7	936.03	52.33	955	65	923.56	5.55	1053.83
03/16/2016	NR	NR	52.6	936.13	49.45	957.88	64.7	923.86	5.35	1054.03
09/08/2016	NR	NR	52.6	936.13	48.96	958.37	64.48	924.08	6.43	1052.95
03/17/2017	90.34	920.72	52.55	936.18	48.65	958.68	64.25	924.31	9.25	1050.13
09/19/2017	90.22	920.84	52.53	936.2	48.93	958.4	64.15	924.41	8.05	1051.33
03/08/2018	90.71	920.35	52.67	936.06	50.13	957.2	64.54	924.02	9.36	1050.02
09/24/2018	87.35	923.71	52.65	936.08	48.21	959.12	64.26	924.3	9.55	1049.83
03/25/2019	87.6	923.46	52.62	936.11	48.43	958.9	64.55	924.01	7.9	1051.48
09/03/2019	87.09	923.97	52.6	936.13	48.02	959.31	63.93	924.63	6.9	1052.48
03/23/2020	87.3	923.76	52.72	936.01	48.24	959.09	64.17	924.39	8.16	1051.22
09/04/2020	87.21	923.85	52.72	936.01	49.48	957.85	64.54	924.02	7.85	1051.53
03/09/2021	87.17	923.89	52.8	935.93	49.18	958.15	64.08	924.48	4.9	1054.48
09/07/2021	87.31	923.75	52.73	936	49.6	957.73	64.25	924.31	7.2	1052.18
03/28/2022	87.75	923.31	52.8	935.93	51.27	956.06	64.69	923.87	5.43	1053.95
09/14/2022	87.72	923.34	52.81	935.92	50.29	957.04	64.76	923.8	6.95	1052.43
03/20/2023	87.48	923.58	52.85	935.88	50.64	956.69	64.58	923.98	5.5	1053.88
09/12/2023	87.66	923.4	51.12	937.61	49.8	957.53	54.75	933.81	6.84	1052.54
03/12/2024	87.64	923.42	53.2	935.53	50.19	957.14	64.72	923.84	5.79	1053.59
09/30/2024	87.81	923.25	52.9	935.83	49.8	957.53	64.91	923.65	7.28	1052.1
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Average	87.64	923.42	53.61	935.12	48.49	956.14	63.67	924.89	6.64	1052.74
Std. Dev.	0.72	0.72	4.47	4.47	7.14	1.30	3.78	3.78	1.00	1.00
	0.82%	0.08%	8.33%	0.48%	14.72%	0.14%	5.94%	0.41%	15.00%	0.09%
Maximum	90.71	924.26	77.30	941.08	52.70	959.31	65.63	944.06	9.55	1054.48
Minimum	86.80	920.35	47.65	911.43	29.10	954.63	44.50	922.93	4.90	1049.83

Water Level Data
Boone County Sanitary Landfill

Well/TOC	MW98-26	1059.33	MW98-27	1063.18	MW98-28	1052.51	MW98-29 MW02-29A	1068.86 1088.7	MW98-30 MW02-30A	1069.71 1088.7
	Water Depth	Water Elevation	Water Depth	Water Elevation	Water Depth	Water Elevation	Water Depth	Water Elevation	Water Depth	Water Elevation
12/07/88										
05/31/89										
06/05/89										
09/13/89										
03/27/90										
04/06/90										
09/20/90										
04/17/91										
09/25/91										
01/10/92										
01/17/92										
01/24/92										
01/31/92										
02/07/92										
02/21/92										
03/02/1992										
03/13/92										
03/27/92										
04/26/92										
09/22/92										
06/11/93										
09/30/93										
12/09/93										
04/07/94										
05/23/94										
06/06/94										
06/08/94										
09/21/94										
11/01/94										
12/05/94										
03/02/95										
06/22/95										
09/13/95										
03/21/96										
05/03/96										
09/03/96										
01/06/1997										
03/19/1997										
06/18/1997										
09/01/1997										
03/03/1998	48.8	1010.53	47.75	1015.43			9.7	1059.16	18.4	1051.31
07/30/1998	11.9	1047.43	NT	NT			6.2	1062.66	12.3	1057.41
08/25/1998	12	1047.33	NT	NT			8	1060.86	13	1056.71
09/15/1998	12.3	1047.03	NT	NT			9.2	1059.66	14.4	1055.31
10/29/1999	11.9	1047.43	NT	NT			9.1	1059.76	14.3	1055.41
12/27/1999	11.7	1047.63	NT	NT	127.2	925.31	9.9	1058.96	14.75	1054.96
03/14/2000	11.45	1047.88	47.3	1015.88	127.1	925.41	10	1058.86	15.58	1054.13
06/29/2000	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/18/2000	12.76	1046.57	48.03	1015.15	127.16	925.35	10.78	1058.08	16.42	1053.29
12/20/2000	NT	NT	NT	NT	NT	NT	11.37	1057.49	NT	NT
02/08/2001	NT	NT	NT	NT	127.04	925.47	11.6	1057.26	NT	NT
03/22/2001	NT	NT	NT	NT	127.18	925.33	10.76	1058.1	NT	NT
09/20/2001	4.85	1054.48	47.38	1015.8	NT	NT	9.9	1058.96	16.15	1053.56
03/15/2002	7.35	1051.98	48.4	1014.78	127.4	925.11	11	1057.86	19.2	1050.51
09/16/2002	8.6	1050.73	47.9	1015.28	127.4	925.11	29.8	1058.9	32.55	1056.15
03/11/2003	7.38	1051.95	48.5	1014.68	127.5	925.01	31.4	1057.3	34.4	1054.3
09/16/2003	NT	NT	NT	NT	127.1	925.41	30.22	1058.48	NT	NT
03/09/2004	NT	NT	NT	NT	127.18	925.33	29.1	1059.6	NT	NT
09/14/2004	NT	NT	NT	NT	128	924.51	29.2	1059.5	32.1	NT
03/04/2005	9.75	1049.58	47.6	1015.58	127.79	924.72	29.03	1059.67	32.1	1056.6
09/15/2005	13.23	1046.1	47.66	1015.52	127.61	924.9	29.77	1058.93	32.33	1056.37
02/08/2006	NT	NT	NT	NT	127.39	925.12	29.33	1059.37	NT	NT
03/29/2006	10.96	1048.37	47.53	1015.65	127.8	924.71	29	1059.7	32.34	1056.36
09/13/2006	11.7	1047.63	47.3	1015.88	127.25	925.26	28.42	1060.28	31.75	1056.95
03/29/2007	10.98	1048.35	46.53	1016.65	125.38	927.13	27.68	1061.02	31.19	1057.51
09/13/2007	12.3	1047.03	46.75	1016.43	38.3	1014.21	28.68	1060.02	31.7	1057
03/17/2008	11.5	1047.83	46.8	1016.38	126.05	926.46	29.2	1059.5	32.2	1056.5
06/02/2008	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
07/21/2008	11.15	1048.18	44.7	1018.48	NT	NT	27.6	1061.1	30.9	1057.8
09/12/2008	11.85	1047.48	45.53	1017.65	126.17	926.34	29.04	1059.66	31.56	1057.14
12/18/2008	11.3	1048.03	45.9	1017.28	126	926.51	28.8	1059.9	31.4	1057.3
03/04/2009	11.7	1047.63	46.4	1016.78	113.65	938.86	29	1059.7	31.9	1037.81
05/04/2009	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
07/01/2009	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
09/20/2009	11.75	1047.58	46.25	1016.93	126.05	926.46	29.5	1059.2	32.1	1037.61
03/26/2010	10.9	1048.43	45.3	1017.88	125.6	926.91	27.05	1061.65	30.3	1039.41
09/17/2010	11.3	1048.03	44.4	1018.78	112.6	939.91	28.3	1060.4	30.95	1038.76
03/29/2011	11.6	1047.73	46	1017.18	101.1	951.41	28.4	1060.3	31.35	1038.36
09/13/2011	12	1047.33	46.1	1017.08	46.95	1005.56	29.8	1058.9	32.25	1037.46
03/06/2012	11.3	1048.03	47.2	1015.98	125.55	926.96	29.9	1058.8	32.8	1036.91
09/11/2012	12.5	1046.83	48.3	1014.88	126	926.51	31.35	1057.35	33.75	1035.96
03/19/2013	12.4	1046.93	49.8	1013.38	126.3	926.21	31.6	1057.1	34.45	1035.26
09/26/2013	12.25	1047.08	48.15	1015.03	125.8	926.71	30.9	1057.8	33.27	1036.44
03/12/2014	12.45	1046.88	50	1013.18	126.25	926.26	32.8	1055.9	35	1034.71
09/18/2014	11.36	1047.97	47.65	1015.53	115.15	937.36	27.85	1060.85	30.75	1038.96
03/17/2015	11.25	1048.08	46.7	1016.48	17.1	1035.41	29.2	1059.5	31.8	1037.91
09/11/2015	10.2	1049.13	44.6	1018.58	11.25	1041.26	27.13	1061.57	30	1039.71
03/16/2016	4.9	1054.43	42.87	1020.31	109.9	942.61	27.1	1061.6	29.6	1040.11
09/08/2016	8.9	1050.43	44.45	1018.73	124.64	927.87	28.4	1060.3	30.53	1039.18
03/17/2017	10.82	1048.51	44.87	1018.31	124.81	927.7	27.4	1061.3	29.95	1039.76
09/19/2017	13	1046.33	46.22	1016.96	125.25	927.26	30.4	1058.3	32.52	1037.19
03/08/2018	12.6	1046.73	46.46	1016.72	124.48	928.03	29.75	1058.95	32.14	1037.57
09/24/2018	12.8	1046.53	45.34	1017.84	125.24	927.27	28.31	1060.39	30.9	1038.81
03/25/2019	13.12	1046.21	45.33	1017.85	90.74	961.77	27.34	1061.36	30.8	1038.91
09/03/2019	14.23	1045.1	44.91	1018.27	124.48	928.03	28.85	1059.85	30.95	1038.76
03/23/2020	13.24	1046.09	45.09	1018.09	121.84	930.67	25.95	1062.75	29.74	1039.97
09/04/2020	14.4	1044.93	46.76	1016.42	125.16	927.35	30.08	1058.62	31.99	1037.72
03/09/2021	12.11	1047.22	47.92	1015.26	125.48	927.03	29.59	1059.11	32.3	1037.41
09/07/2021	12.45	1046.88	46.86	1016.32	125.1	927.41	29.62	1059.08	32	1037.71
03/28/2022	10.7	1048.63	47.49	1015.69	125.36	927.15	28.31	1060.39	31.37	1038.34
09/14/2022	12.1	1047.23	46.45	1016.73	125.55	926.96	29.75	1058.95	31.8	1037.91
03/20/2023	11.04	1048.29	47.54	1015.64	125.5	927.01	28.26	1060.44	31.3	1038.41
09/12/2023	12.15	1047.18	48	1015.18	125.72	926.79	29.36	1059.34	31.59	1038.12
03/12/2024	11.28	1048.05	47.75	1015.43	125.66	926.85	29.55	1059.15	32	1037.71
09/30/2024	12.32	1047.01	47.21	1015.97	125.81	926.7	30.17	1058.53	32.3	1037.41
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Average	12.05	1047.28	46.73	1016.45	116.61	935.90	25.00	1059.48	28.83	1045.16
Std. Dev.	5.37	5.37	1.41	1.41	26.39	26.39	8.01	1.34	6.45	8.77
	44.58%	0.51%	3.03%	0.14%	22.64%	2.82%	32.06%	0.13%	22.38%	0.84%
Maximum	48.80	1054.48	50.00	1020.31	128.00	1041.26	32.80	1062.75	35.00	1057.80
Minimum	4.85	1010.53	42.87	1013.18	11.25	924.51	6.20	1055.90	12.30	1034.71

Water Level Data
Boone County Sanitary Landfill

Well/TOC	MW98-33	981.62 981.49	MW06-37	1060.75	MW06-38	1061.53	MW06-39	1060.78	MW09-40	1056.5	MW16-42	977.24
	Water Depth	Water Elevation	Water Depth	Water Elevation	Water Depth	Water Elevation	Water Depth	Water Elevation	Water Depth	Water Elevation	Water Depth	Water Elevation
12/07/88												
05/31/89												
06/05/89												
09/13/89												
03/27/90												
04/06/90												
09/20/90												
04/17/91												
09/25/91												
01/10/92												
01/17/92												
01/24/92												
01/31/92												
02/07/92												
02/21/92												
03/02/1992												
03/13/92												
03/27/92												
04/26/92												
09/22/92												
06/11/93												
09/30/93												
12/09/93												
04/07/94												
05/23/94												
06/06/94												
06/08/94												
09/21/94												
11/01/94												
12/05/94												
03/02/95												
06/22/95												
09/13/95												
03/21/96												
05/03/96												
09/03/96												
01/06/1997												
03/19/1997												
06/18/1997												
09/01/1997												
03/03/1998	59.5	922.12										
07/30/1998	59	922.62										
08/25/1998	59.2	922.42										
09/15/1998	59.4	922.22										
10/29/1999	59.5	922.12										
12/27/1999	59.77	921.85										
03/14/2000	59.48	922.14										
06/29/2000	NT	NT										
09/18/2000	60.1	921.52										
12/20/2000	NT	NT										
02/08/2001	NT	NT										
03/22/2001	NT	NT										
09/20/2001	59.95	921.67										
03/15/2002	59.95	921.67										
09/16/2002	60.4	921.22										
03/11/2003	60	921.62										
09/16/2003	NT	NT										
03/09/2004	NT	NT										
09/14/2004	NT	NT										
03/04/2005	60.2	921.42										
09/15/2005	60.58	921.04										
02/08/2006	NT	NT	7.41	1053.34	8.68	1052.85	9.4	1051.38				
03/29/2006	60.53	921.09	7.56	1053.19	7	1054.53	5.8	1054.98				
09/13/2006	59.26	922.36	5.08	1055.67	7.38	1054.15	5.76	1055.02				
03/29/2007	59.61	922.01	5.19	1055.56	5.59	1055.94	3.65	1057.13				
09/13/2007	59.6	922.02	7.3	1053.45	7.91	1053.62	7	1053.78				
03/17/2008	60	921.62	5.5	1055.25	6.8	1054.73	5.4	1055.38				
06/02/2008	NT	NT	4.93	1055.82	5.7	1055.83	4.05	1056.73				
07/21/2008	59.75	921.87	3	1057.75	3.9	1057.63	4.25	1056.53				
09/12/2008	60.09	921.53	7.99	1052.76	8.8	1052.73	8.25	1052.53				
12/18/2008	59.2	922.42	6.7	1054.05	7.9	1053.63	6.7	1054.08				
03/04/2009	59.9	921.72	6.9	1053.85	7.87	1053.66	6.18	1054.6				
05/04/2009	NT	NT	NT	NT	NT	NT	NT	NT	8.2	1048.3		
07/01/2009	NT	NT	NT	NT	NT	NT	NT	NT	8.15	1048.35		
09/20/2009	60.05	921.57	7.8	1052.95	8.45	1053.08	7.35	1053.43	8.7	1047.8		
03/26/2010	59.55	922.07	5.85	1054.9	6.7	1054.83	4.6	1056.18	7.7	1048.8		
09/17/2010	59.65	921.97	5.25	1055.5	6.3	1055.23	5.8	1054.98	9.1	1047.4		
03/29/2011	61.8	919.82	6.8	1053.95	7.8	1053.73	6.6	1054.18	9.55	1046.95		
09/13/2011	60.55	921.07	8.6	1052.15	9.1	1052.43	8.25	1052.53	10.7	1045.8		
03/06/2012	60.8	920.82	7.8	1052.95	8.23	1053.3	6.75	1054.03	9.35	1047.15		
09/11/2012	60.6	921.02	10.45	1050.3	11.6	1049.93	10.3	1050.48	12.85	1043.65		
03/19/2013	59.85	921.77	4.05	1056.7	5.2	1056.33	5.1	1055.68	10.15	1046.35		
09/26/2013	59.85	921.77	9.6	1051.15	10.92	1050.61	9.85	1050.93	12.75	1043.75		
03/12/2014	60.1	921.52	9	1051.75	9.8	1051.73	7.7	1053.08	13.5	1043		
09/18/2014	59.15	922.47	6.2	1054.55	6.05	1055.48	6.1	1054.68	8.55	1047.95		
03/17/2015	59.4	922.22	6.95	1053.8	7.5	1054.03	6	1054.78	9.45	1047.05		
09/11/2015	58.3	923.32	5.3	1055.45	5.3	1056.23	4.68	1056.1	7.82	1048.68		
03/16/2016	58.05	923.57	6.62	1054.13	7.4	1054.13	6	1054.78	9.2	1047.3	14.65	962.59
09/08/2016	58.18	923.44	5.93	1054.82	5.62	1055.91	5.95	1054.83	7.98	1048.52	14.05	963.19
03/17/2017	58.03	923.59	6.25	1054.5	7.22	1054.31	5.61	1055.17	8.97	1047.53	13.95	963.29
09/19/2017	58.38	923.24	9.8	1050.95	10.91	1050.62	10.46	1050.32	11.91	1044.59	14.15	963.09
03/08/2018	58.12	923.5	5.75	1055	6.37	1055.16	6.2	1054.58	9.41	1047.09	13.95	963.29
09/24/2018	55.87	925.75	7.24	1053.51	7.45	1054.08	7.02	1053.76	8.8	1047.7	13.19	964.05
03/25/2019	57.95	923.67	5.73	1055.02	6.52	1055.01	5.12	1055.66	8.97	1047.53	13.52	963.72
09/03/2019	58.14	923.48	8.17	1052.58	8.94	1052.59	8.16	1052.62	10.3	1046.2	13.05	964.19
03/23/2020	57.84	923.78	4.82	1055.93	5.06	1056.47	3.69	1057.09	7.48	1049.02	13.2	964.04
09/04/2020	58.81	922.81	10.2	1050.55	11.33	1050.2	10.16	1050.62	12.17	1044.33	14.76	962.48
03/09/2021	58.48	923.14	4.66	1056.09	5.54	1055.99	4.92	1055.86	8.83	1047.67		
09/07/2021			9.2	1051.55	9.65	1051.88	9	1051.78	11.67	1044.83		
03/28/2022			5.7	1055.05	6.45	1055.08	5.11	1055.67	6.81	1049.69		
09/14/2022	60.98	920.51	9.35	1051.4	9.87	1051.66	9.12	1051.66	11.21	1045.29		
03/20/2023	60.72	920.77	5.5	1055.25	6.38	1055.15	5.18	1055.6	6.51	1049.99		
09/12/2023	60.98	920.51	8.8	1051.95	9.6	1051.93	9.09	1051.69	10.89	1045.61		
03/12/2024	60.2	921.29	7.43	1053.32	8.19	1053.34	7.15	1053.63	10.05	1046.45		
09/30/2024	60.02	921.47	9.44	1051.31	10.1	1051.43	9.06	1051.72	12.15	1044.35		
		new elevation 8/3/22										
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Average	59.53	922.08	6.95	1053.80	7.69	1053.84	6.73	1054.05	9.69	1046.81	13.85	963.39
Std. Dev.	1.03	1.04	1.78	1.78	1.85	1.85	1.88	1.88	1.78	1.78	0.57	0.57
	1.73%	0.11%	25.58%	0.17%	23.99%	0.18%	27.92%	0.18%	18.35%	0.17%	4.10%	0.06%
Maximum	61.80	925.75	10.45	1057.75	11.60	1057.63	10.46	1057.13	13.50	1049.99	14.76	964.19
Minimum	55.87	919.82	3.00	1050.30	3.90	1049.93	3.65	1050.32	6.51	1043.00	13.05	962.48

Water Level Data
Boone County Sanitary l

Well/TOC MW21-43 978.29

	Water Depth	Water Elevation
12/07/88		
05/31/89		
06/05/89		
09/13/89		
03/27/90		
04/06/90		
09/20/90		
04/17/91		
09/25/91		
01/10/92		
01/17/92		
01/24/92		
01/31/92		
02/07/92		
02/21/92		
03/02/1992		
03/13/92		
03/27/92		
04/26/92		
09/22/92		
06/11/93		
09/30/93		
12/09/93		
04/07/94		
05/23/94		
06/06/94		
06/08/94		
09/21/94		
11/01/94		
12/05/94		
03/02/95		
06/22/95		
09/13/95		
03/21/96		
05/03/96		
09/03/96		
01/06/1997		
03/19/1997		
06/18/1997		
09/01/1997		
03/03/1998		
07/30/1998		
08/25/1998		
09/15/1998		
10/29/1999		
12/27/1999		
03/14/2000		
06/29/2000		
09/18/2000		
12/20/2000		
02/08/2001		
03/22/2001		
09/20/2001		
03/15/2002		
09/16/2002		
03/11/2003		
09/16/2003		
03/09/2004		
09/14/2004		
03/04/2005		
09/15/2005		
02/08/2006		
03/29/2006		
09/13/2006		
03/29/2007		
09/13/2007		
03/17/2008		
06/02/2008		
07/21/2008		
09/12/2008		
12/18/2008		
03/04/2009		
05/04/2009		
07/01/2009		
09/20/2009		
03/26/2010		
09/17/2010		
03/29/2011		
09/13/2011		
03/06/2012		
09/11/2012		
03/19/2013		
09/26/2013		
03/12/2014		
09/18/2014		
03/17/2015		
09/11/2015		
03/16/2016		
09/08/2016		
03/17/2017		
09/19/2017		
03/08/2018		
09/24/2018		
03/25/2019		
09/03/2019		
03/23/2020		
09/04/2020		
03/09/2021		
09/07/2021		
03/28/2022	21.75	956.54
09/14/2022	20.69	957.6
03/20/2023	21.2	957.09
09/12/2023	20.07	958.22
03/12/2024	20.78	957.51
09/30/2024	20.13	958.16

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Average	20.77	957.52
Std. Dev.	0.58	0.58
	2.82%	0.06%
Maximum	21.75	958.22
Minimum	20.07	956.54

Appendix B

Monitoring Activities Information

APPENDIX B.1 – Summary of All Well Testing Activities

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

WELL	**3/17/08**	**6/04/08**	**7/23/08**	**9/12/08**	**12/10/08**
MW91-8	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
MW02-15A	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
MW98-28	NT	NT	NT	NT	NT
MW94-18	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
MW09-40	Installed 3/09	Installed 3/09	Installed 3/09	Installed 3/09	Installed 3/09
MW91-10	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
MW96-21	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
MW96-24	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
MW96-23	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
MW09-41	Installed 3/09	Installed 3/09	Installed 3/09	Installed 3/09	Installed 3/09
MW00-36	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
MW94-19	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
MW88-3	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
MW88-2	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
SRAMP 1	NT	NT	Appendix I	Appendix I	Appendix I
GWD-1	Dry	Dry	Dry	Dry	Dry
GWD-2	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
MW98-25	Appendix I	Appendix I	**Appendix II**	**Appendix II**	**Appendix II**
MW06-37	Appendix I	Appendix I	**Appendix II**	**Appendix II**	**Appendix II**
MW06-38	Appendix I	Appendix I	**Appendix II**	**Appendix II**	**Appendix II**
MW06-39	Appendix I	Appendix I	**Appendix II**	**Appendix II**	**Appendix II**
Duplicate	N/A	N/A	MW94-19	MW02-15A	MW91-8

WELL	**3/4/09**	**5/04/09**	**7/1/09**	**9/20/09**	**12/29/09**
MW91-8	Appendix I	NT	NT	Appendix I	NT
MW02-15A	Appendix I	NT	NT	Appendix I	NT
MW98-28	NT	NT	NT	NT	Appendix I
MW94-18	Appendix I	NT	NT	Appendix I	NT
MW09-40	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
MW91-10	Appendix I	NT	NT	Appendix I	NT
MW96-21	Appendix I	NT	NT	Appendix I	NT
MW96-24	Appendix I	NT	Zinc	Appendix I	NT
MW96-23	Appendix I	NT	NT	Appendix I	NT
MW09-41	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
MW00-36	Appendix I	**Appendix II**	NT	**Appendix II**	NT
MW94-19	Appendix I	NT	NT	Appendix I	NT
MW88-3	Appendix I	NT	NT	Appendix I	NT
MW88-2	Appendix I	NT	NT	Appendix I	NT
SRAMP 1	Appendix I	NT	NT	**Appendix II**	NT
GWD-1	Dry	Dry	Dry	Dry	Dry
GWD-2	Appendix I	VOC's	VOC's	**Appendix II**	NT
MW98-25	**Appendix II**	NT	NT	**Appendix I +**	NT
MW06-37	Appendix I	NT	NT	Appendix I	NT
MW06-38	Appendix I	NT	NT	Appendix I	NT
MW06-39	Appendix I	NT	NT	Appendix I	NT
Duplicate	MW94-19	N/A	N/A	MW94-18	N/A

+ = dichlorodifluoromethane, bis(2-ethylhexyl)phthalate, beta (BHC)
++= bis(2-ethylhexyl)phthalate

WELL	**3/25/10**	**5/03/10**	**6/2/10**	**7/15/10**	**9/25/10**
MW91-8	Appendix I	NT	NT	NT	Appendix I
MW02-15A	Appendix I	NT	NT	NT	Appendix I
MW98-28	Appendix I	Appendix I	NT	Appendix I	Appendix I
MW94-18	Appendix I	NT	NT	NT	Appendix I
MW09-40	Appendix I	NT	NT	NT	Appendix I
MW91-10	Appendix I	NT	NT	NT	Appendix I
MW96-21	Appendix I	NT	NT	NT	Appendix I
MW96-24	Appendix I	NT	NT	NT	Appendix I
MW96-23	Appendix I	NT	NT	NT	Appendix I
MW09-41	Appendix I	NT	NT	NT	Appendix I
MW00-36	Appendix I	NT	NT	NT	**Appendix II**
MW94-19	Appendix I	NT	NT	NT	Appendix I
MW88-3	Appendix I	NT	NT	NT	Appendix I
MW88-2	Appendix I	NT	NT	NT	Appendix I
SRAMP 1	NT	NT	NT	NT	**Appendix II**
GWD-1	Dry	NT	NT	Dry	Dry
GWD-2	**Appendix II**	NT	VOCs	VOCs	**Appendix II**
MW98-25	**Appendix I+**	NT	NT	NT	**Appendix I+**
MW06-37	Appendix I	NT	NT	NT	Appendix I
MW06-38	Appendix I	NT	NT	NT	Appendix I
MW06-39	Appendix I	NT	NT	NT	Appendix I
Duplicate	MW98-25	N/A	N/A	N/A	MW88-2

WELL	**3/30/11**	**9/15/11**	**3/7/12**	**9/12/12**	**3/20/13**
MW91-8	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
MW02-15A	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
MW98-28	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
MW94-18	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
MW09-40	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
MW91-10	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
MW96-21	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
MW96-24	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
MW96-23	Appendix I	**Appendix II**	**Appendix II**	**Appendix ++**	**Appendix ++**
MW09-41	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
MW00-36	**Appendix I++**	**Appendix I++**	**Appendix I+**	**Appendix I++**	**Appendix I++**
MW94-19	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
MW88-3	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
MW88-2	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
SRAMP 1	Appendix I	**Appendix I+**	**Appendix I+**	**Appendix I+**	**Appendix I+**
SRAMP 2	--	--	--	--	Approved 10-28-13
GWD-1	Dry	Dry	Dry	Dry	Dry
MW98-25	**Appendix I+**	**Appendix I+**	**Appendix I+**	**Appendix I+**	**Appendix I+**
MW06-37	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
MW06-38	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
MW06-39	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
Duplicate	MW91-8	SRAMP-1	MW91-10	MW06-38	MW00-36

+ = dichlorodifluoromethane, bis(2-ethylhexyl)phthalate, beta (BHC)
++= bis(2-ethylhexyl)phthalate

WELL	**9/27/13**	**3/13/14**	**6/10/14**	**8/8/14**	**9/19/14**	**11/18/14**
MW91-8	Appendix I	Appendix I			Appendix I	Appendix I
MW02-15A	Appendix I	Appendix I			Appendix I	Appendix I
MW98-28	Appendix I	Appendix I			Appendix I	Appendix I
MW94-18	Appendix I	Appendix I			Appendix I	
MW09-40	Appendix I	Appendix I			Appendix I	
MW91-10	Appendix I	Appendix I			Appendix I	
MW96-21	Appendix I	Appendix I			Appendix I	
MW96-24	Appendix I	Appendix I			Appendix I	
MW96-23	Appendix I(2)	Appendix I(2)			Appendix I(2)	
MW09-41	**damaged**	**damaged**			**Abandoned**	
MW00-36	Appendix I(2)	Appendix I(2)			Appendix I(2)	
MW94-19	Appendix I	Appendix I			Appendix I	
MW88-3	Appendix I	Appendix I			Appendix I	
MW88-2	Appendix I	Appendix I			Appendix I	Appendix I
SRAMP 1	Appendix I(1)	Appendix I(1)			Appendix I(1)	
SRAMP 2	Approved 10/2013	Appendix I(1)	Appendix I	Appendix I	Appendix I	Appendix I
GWD-1	Dry	Dry			Dry	
MW98-25	Appendix I(1)	Appendix I(1)			Appendix I(1)	
MW06-37	Appendix I	Appendix I			Appendix I	
MW06-38	Appendix I	Appendix I			Appendix I	
MW06-39	Appendix I	Appendix I			Appendix I	
Duplicate	MW98-25	MW98-25			MW94-18	

WELL	**3/17/2015**	**6/29/2015**	**9/11/2015**	**11/9/2015**
MW91-8	Appendix I	Appendix I	Appendix I	
MW02-15A	Appendix I	Appendix I	Appendix I	
MW98-28	Appendix I	Appendix I	Appendix I	
MW94-18	Appendix I		Appendix I	
MW09-40	Appendix I		Appendix I	
MW91-10	Appendix I		Appendix I	
MW96-21	**damaged**		**damaged**	
MW96-24	Appendix I		Appendix I	
MW96-23	Appendix I(2)		Appendix I(2)	**Resample - As**
MW00-36	Appendix I(2)		**Abandoned**	
MW94-19	Appendix I		Appendix I	
MW88-3	Appendix I		Appendix I	
MW88-2	Appendix I	Appendix I	Appendix I	
SRAMP 1	Appendix I(1)		Appendix I(1)	
SRAMP 2	Appendix I		Appendix I(1)	
GWD-1	Dry		Dry	
MW98-25	Appendix I(1)		Appendix I(1)	
MW06-37	Appendix I		Appendix I	
MW06-38	Appendix I		Appendix I	
MW06-39	Appendix I		Appendix I	
Duplicate	SRAMP 2		MW91-10	

(1) = dichlorodifluoromethane, bis(2-ethylhexyl)phthalate, beta (BHC)
(2) = bis(2-ethylhexyl)phthalate

WELL	**3/16/2016**	**6/7/2016**	**9/8/2016**	**9/28/2016**
MW88-2 (b)	Appendix I		Appendix I	
MW91-8 (b)	Appendix I	resample	Appendix I	
MW02-15A (b)	Appendix I		Appendix I	
MW98-28 (b)	Appendix I		Appendix I	
MW02-30A (b)	Appendix I	Appendix I	Appendix I	
MW94-18	Appendix I		Appendix I	
MW09-40	Appendix I		Appendix I	
MW91-10	Appendix I		Appendix I	
MW96-21	**damaged**		**damaged**	Appendix I
MW96-24	Appendix I		Appendix I	
MW94-19	Appendix I		Appendix I	
MW88-3	Appendix I		Appendix I	
MW16-42	Appendix I	Appendix I	Appendix I	
GWD-1	dry		dry	
MW96-23	Appendix I(2)		Appendix I(2)	
SRAMP 1	Appendix I(1)		Appendix I(1)	
SRAMP 2	Appendix I(1)		Appendix I(1)	
MW98-25	Appendix I(1)		Appendix I(1)	
MW06-37	Appendix I		Appendix I	
MW06-38	Appendix I		Appendix I	
MW06-39	Appendix I		Appendix I	
Duplicate	Appendix I		Appendix I	

(1) = dichlorodifluoromethane, bis(2-ethylhexyl)phthalate, beta (BHC)
(2) = bis(2-ethylhexyl)phthalate

WELL	**3/17/2017**	**6/8/2017**	**9/19/2017**	**12/1/2017**
MW88-2 (b)	Appendix I		Appendix I	
MW91-8 (b)	Appendix I		Appendix I	acetone
MW02-15A (b)	Appendix I		Appendix I	
MW98-28 (b)	Appendix I		Appendix I	
MW02-30A (b)	Appendix I		Appendix I	
MW94-18	Appendix I		Appendix I	
MW09-40	Appendix I		Appendix I	
MW91-10	Appendix I		Appendix I	
MW96-21	**damaged**		**Appendix II**	
MW96-24	Appendix I		Appendix I	
MW94-19	Appendix I		Appendix I	
MW88-3	Appendix I	cobalt	Appendix I	
MW16-42	Appendix I	barium	**Appendix II**	
GWD-1	dry		dry	
MW96-23	Appendix I		Appendix I	
SRAMP 1	Appendix I(1)		Dry	
SRAMP 2	Appendix I(1)		Dry	
MW98-25	**Appendix II**		Appendix I(1)	
MW06-37	Appendix I		Appendix I	
MW06-38	Appendix I		Appendix I	
MW06-39	Appendix I		Appendix I	
GU-3	Buried		Buried	
Duplicate	Appendix I		Appendix I	

(1) = dichlorodifluoromethane, bis(2-ethylhexyl)phthalate, beta (BHC)
(2) = bis(2-ethylhexyl)phthalate

WELL	**3/8/2018**	**5/19/2018**	**8/9/2018**	**9/24/2018**	**12/20/2018**
MW88-2 (b)	Appendix I			Appendix I	
MW91-8 (b)	Appendix I			Appendix I	
MW02-15A (b)	Appendix I			Appendix I	
MW98-28 (b)	Appendix I			Appendix I	
MW02-30A (b)	Appendix I			Appendix I	
MW94-18	Appendix I			Appendix I	
MW09-40	Appendix I			Appendix I	
MW91-10	Appendix I			Appendix I	
MW96-21	Appendix I			**Appendix II**	(3)
MW96-24	Appendix I			Appendix I	
MW94-19	Appendix I			Appendix I	
MW88-3	Appendix I			Appendix I	
MW16-42	flooded	Appendix I	barium	**Appendix II**	(2)
GWD-1	dry			dry	
MW96-23	Appendix I			Appendix I	
SRAMP 1	dry			dry	
SRAMP 2	Appendix I			Appendix I(1)	(4)
MW98-25	Appendix I			Appendix I(1)	
MW06-37	Appendix I			Appendix I	
MW06-38	Appendix I			Appendix I	
MW06-39	Appendix I			Appendix I	
GU-3	buried			buried	
Duplicate	At MW-39			At MW88-3	

(1) = dichlorodifluoromethane
(2) = bis(2-ethylhexyl)phthalate
(3) = Appendix I metals
(4) = ethylbenzene, xylenes

WELL	**3/25/2019**	**9/3/2019**	**12/3/2019**	**3/23/2020**	**9/4/2020**
MW88-2 (b)	Appendix I	Appendix I		Appendix I	Appendix I
MW91-8 (b)	Appendix I	Appendix I		Appendix I	Appendix I
MW02-15A (b)	Appendix I	Appendix I		Appendix I	Appendix I
MW98-28 (b)	Appendix I	Appendix I		Appendix I	Appendix I
MW02-30A (b)	Appendix I	Appendix I		Appendix I	Appendix I
MW94-18	Appendix I	Appendix I		Appendix I	Appendix I
MW09-40	Appendix I	Appendix I		Appendix I	Appendix I
MW91-10	Appendix I	Appendix I		Appendix I	Appendix I
MW96-21	Appendix I	Appendix I		Appendix I	Appendix I
MW96-24	Appendix I	Appendix I		Appendix I	Appendix I
MW94-19	Appendix I	**damaged**		**damaged**	**damaged**
MW88-3	Appendix I	Appendix I		Appendix I	Appendix I
MW16-42	Appendix I	Appendix I		Appendix I	Appendix I
GWD-1	dry	dry		dry	dry
MW96-23	Appendix I	Appendix I		Appendix I	Appendix I
SRAMP 1	Appendix I(1)	Appendix I(1)		dry	dry
SRAMP 2	Appendix I(1)	dry		Appendix I(1)	dry
MW98-25	Appendix I(1)	Appendix I(1)		Appendix I(1)	Appendix I(1)
MW06-37	Appendix I	Appendix I	lead	Appendix I	Appendix I
MW06-38	Appendix I	Appendix I		Appendix I	Appendix I
MW06-39	Appendix I	Appendix I		Appendix I	Appendix I
GU-3	buried	buried		buried	buried
Duplicate	At MW-25	At MW-25		At MW91-8	At MW88-3

(1) = dichlorodifluoromethane

WELL	**3/9/2021**	**6/7/2021**	**8/30/2021**	**9/7/2021**	**9/13/2021**	**12/3/2021**
MW88-2 (b)	Appendix I			damaged		
MW91-8 (b)	Appendix I			Appendix I		
MW02-15A (b)	Appendix I			Appendix I		
MW98-28 (b)	Appendix I			Appendix I		
MW02-30A (b)	Appendix I			Appendix I		
MW94-18	Appendix I	R- Cu		Appendix I		
MW09-40	Appendix I			Appendix I		R- Ni
MW91-10	Appendix I	R- Cu		Appendix I		
MW96-21	Appendix I			Appendix I		
MW96-24	Appendix I			Appendix I		R- Ba
MW88-3	Appendix I			Appendix I		
GWD-1	dry			dry		
MW96-23	Appendix I			Appendix I		
SRAMP 1	Appendix I(1)			dry		
SRAMP 2	Appendix I(1)			dry		
MW98-25	Appendix I(1)			Appendix I(1)		
MW06-37	Appendix I			Appendix I		R- Cd
MW06-38	Appendix I			Appendix I		
MW06-39	Appendix I			Appendix I		
GU-3	submerged	submerged	submerged	submerged	Appendix I	Appendix I
GU-4	---		Appendix I	Appendix I		
Duplicate	At MW-3			At MW-18		

WELL	**3/28/2022**	**4/18/2022**	**6/23/2022**	**6/24/2022**	**9/14/2022**	**12/1/2022**
MW88-2 (b)	Appendix I				Appendix I	
MW91-8 (b)	Appendix I				Appendix I	
MW02-15A (b)	Appendix I				Appendix I	
MW98-28 (b)	Appendix I				Appendix I	
MW02-30A (b)	Appendix I				Appendix I	
MW94-18	Appendix I				Appendix I	
MW09-40	Appendix I				Appendix I	
MW91-10	Appendix I				Appendix I	
MW96-21	Appendix I				Appendix I	
MW96-24	Appendix I				Appendix I	
MW88-3	Appendix I				Appendix I	
GWD-1	dry				dry	
MW96-23	Appendix I				Appendix I	
MW21-43	Appendix I				Appendix I	
SRAMP 1	Appendix I(1)				Appendix I(1)	
SRAMP 2	Appendix I(1)				Appendix I(1)	
MW98-25	Appendix I(1)				**Appendix II**	
MW06-37	Appendix I				Appendix I	
MW06-38	Appendix I				Appendix I	
MW06-39	Appendix I				Appendix I	
GU-3	Pilot Study		submerged	submerged	Appendix I	
PECS-3	App I VOC	App I VOC	submerged	submerged	submerged	submerged
GU-4	Pilot Study		Benzene	Pilot Study	Appendix I	Toluene
Duplicate	At MW-40				At MW-37	

(1) = dichlorodifluoromethane

WELL	**3/20/2023**	**9/12/2023**	**3/12/2024**	**9/30/2024**	**11/25/2024**	**12/9/2024**
MW88-2 (b)	Appendix I	Appendix I	Appendix I	Appendix I		
MW91-8 (b)	Appendix I	Appendix I	Appendix I	Appendix I		
MW02-15A (b)	Appendix I	Appendix I	Appendix I	Appendix I		
MW98-28 (b)	Appendix I	Appendix I	Appendix I	Appendix I		
MW02-30A (b)	Appendix I	Appendix I	Appendix I	Appendix I		
MW94-18	Appendix I	Appendix I	Appendix I	Appendix I		
MW09-40	Appendix I	Appendix I	Appendix I	Appendix I		
MW91-10	Appendix I	Appendix I	Appendix I	Appendix I		
MW96-21	Appendix I	**Appendix II**	Appendix I	Appendix I		
MW96-24	Appendix I	Appendix I	Appendix I	Appendix I		
MW88-3	Appendix I	Appendix I	Appendix I	Appendix I	R-Cd	
GWD-1	dry	dry	dry	dry		
MW96-23	Appendix I	Appendix I	Appendix I	Appendix I		
MW21-43	Appendix I	Appendix I	Appendix I	Appendix I		
SRAMP 1	Appendix I(1)	Appendix I(1)	dry	dry		
SRAMP 2	App I VOC(1)	App I VOC(1)	App I VOC(1)	dry		
MW98-25	Appendix I(1)	Appendix I(1)	Appendix I(1)	Appendix I(1)		
MW06-37	Appendix I	Appendix I	Appendix I	Appendix I		
MW06-38	Appendix I	Appendix I	Appendix I	Appendix I		
MW06-39	Appendix I	Appendix I	Appendix I	Appendix I		
GU-3	submerged	submerged	submerged	Appendix I		Appendix I
PECS-3	submerged	submerged	Dry	App I VOC		App I VOC
GU-4	Appendix I	Appendix I	Appendix I	buried	Appendix I	
Duplicate	At MW-18	At MW-10	Appendix I	Appendix I		

(1) = dichlorodifluoromethane

APPENDIX B.2 - Field Sampling Forms

BOONE COUNTY SANITARY LANDFILL
PERMIT # 08-SDP-1-75P

3/12/2024 Sampled by: Todd Whipple Weather: Partly Sunny, Calm, 50-70 degrees

IDNR Form 542-1322

Primary Sampling Method: No-Purge for Appendix I

Monitoring Well: MW88-2 (dg) **Secondary Sampling Method:** Purge & Sample for all analytes beyond Appendix I

GENERAL INFORMATION

TOC	975.41
Well Depth	34.04
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	975.41
Well Depth	34.04
Top Screen	951.37
Bottom Screen	941.37
Bottom Well	941.37
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	28.00
Top sample	947.41
Bottom sample	943.41
Turbidity(NTU)	16.30

Date	Time	Water Level	Water Elevation	Notes
3/12/2024	11:10	20.41	955	

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		16.30
Appendix I	Metals	150	150		16.30
Appendix I	VOC	240	240		16.30
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	BEHP	1892			
Supplemental					
Total			400	0	

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

TOC	975.41	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	34.04	Before purging	3/12/2024	11:10	20.41	955.00	3	1.4	no
		After purging				975.41			
		Top of Screen July 1988				951.37			
						24.04	feet above (+) or below (-) top screen		
		Bottom of Well July 1988				941.37			
		Bottom of Well	3/12/2024		34.04	941.37			
						0.00	feet sedimentation		
		Before Sampling	3/12/2024	11:22	30.10	945.31			
		Recovery	3/12/2024	15:35	21.06	954.35			
		Recovery				975.41			
		Recovery				975.41			
		Recovery				975.41			

IDNR Form 542-1322

Monitoring Well: MW88-3 (dg)

Primary Sampling Method: No-Purge for Appendix I

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

GENERAL INFORMATION

TOC	952.93
Well Depth	27.50
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	952.93
Well Depth	27.50
Top Screen	936.20
Bottom Screen	925.70
Bottom Well	925.70
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	21.00
Top sample	931.93
Bottom sample	927.93
Turbidity(NTU)	5.04

Date	Time	Water Level	Water Elevation	Notes
3/12/2024	10:29	9.99	942.94	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		5.04
Appendix I	Metals	150	150		5.04
Appendix I	VOC	240	240		5.04
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	BEHP	946			
Supplemental					
Total			400	0	

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

TOC	952.93
Well Depth	27.50

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	3/12/2024	10:29	9.99	942.94	3	1.1	NO
After purging				952.93			
Top of Screen July 1988				936.20			
				16.73	feet above (+) or below (-) top screen		
Bottom of Well July 1988				925.70			
Bottom of Well	3/12/2024		27.50	925.43			
				-0.27	feet sedimentation		
Before Sampling				952.93			
Recovery	3/12/2024	10:39	24.70	928.23			
Recovery	3/12/2024	15:30	10.28	942.65			
Recovery				952.93			
Recovery				952.93			

IDNR Form 542-1322

Monitoring Well: MW91-8 (dg)

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

GENERAL INFORMATION

TOC	1061.12
Well Depth	20.82
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	1061.12
Well Depth	20.00
Top Screen	1050.30
Bottom Screen	1040.30
Bottom Well	1040.30
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	15.00
Top sample	1046.12
Bottom sample	1042.12
Turbidity(NTU)	2.82

Date	Time	Water Level	Water Elevation	Notes
3/12/2024	13:54	6.70	1054.42	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		2.82
Appendix I	Metals	150	150		2.82
Appendix I	VOC	240	240		2.82
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	BEHP	946			
Supplemental					
Total			400	0	

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

TOC	1061.12	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	20.82	Before purging	3/12/2024	13:54	6.7	1054.42	2.5	1.1	NO
		After purging				1061.12			
		Top of Screen December 1991				1050.30			
						10.82	feet above (+) or below (-) top screen		
		Bottom of Well December 1991				1040.30			
		Bottom of Well	3/12/2024		20.00	1041.12			
						0.82	feet sedimentation		
		Before Sampling				1061.12			
		Recovery	3/12/2024	14:06	11.95	1049.17			
		Recovery	3/12/2024	14:30	6.72	1054.40			
		Recovery				1061.12			
		Recovery				1061.12			

IDNR Form 542-1322

Monitoring Well: MW91-10 (dg)

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

GENERAL INFORMATION

TOC	1056.58
Well Depth	20.08
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	1056.58
Well Depth	20.00
Top Screen	1046.50
Bottom Screen	1036.50
Bottom Well	1036.50
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	15.00
Top sample	1041.58
Bottom sample	1037.58
Turbidity(NTU)	2.85

Date	Time	Water Level	Water Elevation	Notes
3/12/2024	8:50	13.58	1043.00	

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		2.85
Appendix I	Metals	150	150		2.85
Appendix I	VOC	240	240		2.85
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	BEHP	946			
Supplemental					
Total			400	0	

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

TOC	1056.58
Well Depth	20.08

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	3/12/2024	8:50	13.58	1043.00	2	1.9	NO
After purging				1056.58			
Top of Screen December 1991				1046.50			
				10.08	feet above (+) or below (-) top screen		
Bottom of Well December 1991				1036.50			
Bottom of Well	3/12/2024		20.00	1036.58			
				0.08	feet sedimentation		
Before Sampling				1056.58			
Recovery	3/12/2024	8:57	18.20	1038.38			
Recovery	3/12/2024	15:12	13.40	1043.18			
Recovery				1056.58			
Recovery				1056.58			

IDNR Form 542-1322

Monitoring Well: MW94-18 (dg)

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

GENERAL INFORMATION

TOC	1058.75
Well Depth	20.58
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	1058.75
Well Depth	20.10
Top Screen	1046.50
Bottom Screen	1038.65
Bottom Well	1038.65
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	15.00
Top sample	1043.75
Bottom sample	1039.75
Turbidity(NTU)	7.16

Date	Time	Water Level	Water Elevation	Notes
3/12/2024	8:15	9.79	1048.96	

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		7.16
Appendix I	Metals	150	150		7.16
Appendix I	VOC	240	240		7.16
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	BEHP	946			
Supplemental					
Total			400	0	

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

TOC	1058.75
Well Depth	20.58

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	3/12/2024	8:15	9.79	1048.96	3	1.7	no
After purging				1058.75			
Top of Screen March 1994				1046.50			
				12.25	feet above (+) or below (-) top screen		
Bottom of Well March 1994				1038.17			
Bottom of Well	3/12/2024		20.10	1038.65			
				0.48	feet sedimentation		
Before Sampling				1058.75			
Recovery	3/12/2024	8:27	13.30	1045.45			
Recovery	3/12/2024	15:07	9.78	1048.97			
Recovery				1058.75			
Recovery				1058.75			

IDNR Form 542-1322

Monitoring Well: MW96-21 (dg)

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

GENERAL INFORMATION

TOC	1010.96
Well Depth	102.70
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1010.96	
Well Depth	102.70	
Top Screen	933.26	
Bottom Screen	908.26	
Bottom Well	908.26	
Sampler Length (ft)	4.00	
Sampler Volume (mL)	440.00	
Feet cordage	94.00	
Top sample	916.96	
Bottom sample	912.96	
Turbidity(NTU)	608.30	hit bottom - no metals tests

Date	Time	Water Level	Water Elevation	Notes
3/12/2024	7:40	87.64	923.32	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		608.30
Appendix I	Metals	150	150		608.30
Appendix I	VOC	240	240		608.30
Full Appendix II	10 more containers	5620	5620		
TSS	TSS	1000			
Supplemental	BEHP	946			
Supplemental					
Total			6020	0	

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

TOC	1010.96
Well Depth	102.70

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	3/12/2024	7:40	87.64	923.32	8	3.3	no
After purging				1010.96			
Top of Screen December 1996				933.26			
				77.70	feet above (+) or below (-) top screen		
Bottom of Well December 1996				908.26			
Bottom of Well	3/12/2024		101.20	909.76			
				1.50	feet sedimentation		
Before Sampling				1010.96			
Recovery	3/12/2024	7:57	88.40	922.56	No significant draw down		
Recovery				1010.96			
Recovery				1010.96			
Recovery				1010.96			

IDNR Form 542-1322

Monitoring Well: MW96-23 (dg)

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

GENERAL INFORMATION

TOC	1007.53
Well Depth	67.59
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	1007.53
Well Depth	66.00
Top Screen	949.74
Bottom Screen	939.74
Bottom Well	939.74
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	60.00
Top sample	947.53
Bottom sample	943.53
Turbidity(NTU)	4.31

Date	Time	Water Level	Water Elevation	Notes
3/12/2024	9:49	50.19	957.34	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		4.31
Appendix I	Metals	150	150		4.31
Appendix I	VOC	240	240		4.31
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	BEHP	946			
Supplemental					
Total			400	0	

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

TOC	1007.53
Well Depth	67.59

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	3/12/2024	9:49	50.19	957.34	4	1.4	no
After purging				1007.53			
Top of Screen December 1996				949.74			
				57.79	feet above (+) or below (-) top screen		
Bottom of Well December 1996				939.74			
Bottom of Well	3/12/2024		66.00	941.53			
				1.79	feet sedimentation		
Before Sampling				1007.53			
Recovery	3/12/2024	10:04	54.00	953.53			
Recovery	3/12/2024	15:20	50.53	957.00			
Recovery				1007.53			
Recovery				1007.53			

IDNR Form 542-1322

Monitoring Well: MW96-24 (dg)

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

GENERAL INFORMATION

TOC	988.56
Well Depth	77.62
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	988.56
Well Depth	74.40
Top Screen	920.94
Bottom Screen	910.94
Bottom Well	910.94
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	68.00
Top sample	920.56
Bottom sample	916.56
Turbidity(NTU)	4.19

Date	Time	Water Level	Water Elevation	Notes
3/12/2024	9:25	64.72	923.84	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		4.19
Appendix I	Metals	150	150		4.19
Appendix I	VOC	240	240		4.19
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	BEHP	946			
Supplemental					
Total			400	0	

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

TOC	988.56
Well Depth	77.62

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	3/12/2024	9:25	64.72	923.84	3	1.4	No
After purging				988.56			
Top of Screen December 1996				920.94			
				67.62	feet above (+) or below (-) top screen		
Bottom of Well December 1996				910.94			
Bottom of Well	3/12/2024		74.40	914.16			
				3.22	feet sedimentation		
Before Sampling				988.56			
Recovery	3/12/2024	9:38	72.90	915.66			
Recovery	3/12/2024	15:17	64.72	923.84			
Recovery				988.56			
Recovery				988.56			

IDNR Form 542-1322

Monitoring Well: MW98-25 (dg)

Primary Sampling Method: No-Purge for Appendix I

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

GENERAL INFORMATION

TOC	1059.38
Well Depth	19.40
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	1059.38	
Well Depth	19.00	
Top Screen	1050.48	
Bottom Screen	1039.98	
Bottom Well	1039.98	
Sampler Length (ft)	4.00	
Sampler Volume (mL)	440.00	
Feet cordage	14.00	
Top sample	13.50	
Bottom sample	9.50	
Turbidity(NTU)	259.10	red

Date	Time	Water Level	Water Elevation	Notes
3/12/2024	13:05	5.79	1053.59	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		259.10
Appendix I	Metals	150	150		259.10
Appendix I	VOC	240	240		259.10
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	BEHP	946			
Supplemental	beta-BHC	946			
Total			400	0	

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

		2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
TOC	1059.38								
Well Depth	19.40	Before purging	3/12/2024	13:05	5.79	1053.59	3	1.4	no
		After purging				1059.38			
		Top of Screen February 1998				1050.48			
						8.90	feet above (+) or below (-) top screen		
		Bottom of Well February 1998				1039.98			
		Bottom of Well	3/12/2024		19.00	1040.38			
						0.40	feet sedimentation		
		Before Sampling				1059.38			
		Recovery	3/12/2024	13:13	10.60	1048.78			
		Recovery	3/12/2024	15:17	6.05	1053.33			
		Recovery				1059.38			
		Recovery				1059.38			

IDNR Form 542-1322

Monitoring Well: MW98-28 (ug)

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

GENERAL INFORMATION

TOC	1052.51
Well Depth	152.27
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1052.51
Well Depth	148.80
Top Screen	925.24
Bottom Screen	900.24
Bottom Well	900.24
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	140.00
Top sample	912.51
Bottom sample	908.51
Turbidity(NTU)	11.17

Date	Time	Water Level	Water Elevation	Notes
3/12/2024	13:30	125.66	926.85	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		11.17
Appendix I	Metals	150	150		11.17
Appendix I	VOC	240	240		11.17
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	BEHP	946			
Supplemental	beta-BHC	946			
Total			400	0	

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

TOC	1052.51
Well Depth	152.27

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	3/12/2024	13:30	125.66	926.85	3	0.7	no
After purging				1052.51			
Top of Screen December 1998				925.24			
				127.27	feet above (+) or below (-) top screen		
Bottom of Well December 1998				900.24			
Bottom of Well	3/12/2024		148.80	903.71			
				3.47	feet sedimentation		
Before Sampling				1052.51			
Recovery	3/12/2024	13:45	132.08	920.43			
Recovery	3/12/2024	14:33	130.47	922.04			
Recovery				1052.51			
Recovery				1052.51			

IDNR Form 542-1322

Monitoring Well: MW98-29A (ug)

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

GENERAL INFORMATION

TOC	1088.8
Well Depth	68.00
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	1088.8
Well Depth	68.00
Top Screen	1035.70
Bottom Screen	1020.70
Bottom Well	1020.20
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	
Top sample	1088.80
Bottom sample	1084.80
Turbidity(NTU)	

Date	Time	Water Level	Water Elevation	Notes
3/12/2024		29.55	1059.25	WL ONLY

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		
Appendix I	Metals	150	150		
Appendix I	VOC	240	240		
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	BEHP	946			
Supplemental	beta-BHC	946			
Total			400		

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

TOC	1088.8
Well Depth	68.00

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging				1088.80		0.0	no
After purging				1088.80			
Top of Screen December 1998				1035.70			
				53.10	feet above (+) or below (-) top screen		
Bottom of Well December 1998				1020.70			
Bottom of Well				1088.80			
				68.10	feet sedimentation		
Recovery				1088.80			
Recovery				1088.80			
Recovery				1088.80			
Recovery				1088.80			
Before Sampling				1088.80			

IDNR Form 542-1322

Monitoring Well: MW98-30A (ug)

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

GENERAL INFORMATION

TOC	1088.65
Well Depth	116.40
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	1088.65
Well Depth	116.40
Top Screen	992.25
Bottom Screen	972.25
Bottom Well	971.37
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	110.00
Top sample	978.65
Bottom sample	974.65
Turbidity(NTU)	2.93

Date	Time	Water Level	Water Elevation	Notes
3/12/2024	12:05	32	1056.65	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		2.93
Appendix I	Metals	150	150		2.93
Appendix I	VOC	240	240		2.93
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	BEHP	946			
Supplemental	beta-BHC	946			
Total			400	0	

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

TOC	1088.65
Well Depth	116.40

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	3/12/2024	12:05	32.00	1056.65	5	0.4	no
After purging				1088.65			
Top of Screen December 1998				992.25			
				96.40	feet above (+) or below (-) top screen		
Bottom of Well December 1998				972.25			
Bottom of Well	3/12/2024		117.80	971.00			
				-1.25	feet sedimentation		
Before Sampling				1088.65			
Recovery	3/12/2024	12:19	68.03	1020.62			
Recovery	3/12/2024	15:45	46.76	1041.89			
Recovery				1088.65			
Recovery				1088.65			

IDNR Form 542-1322

Monitoring Well: MW02-15A (ug)

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

GENERAL INFORMATION

TOC	1105.82
Well Depth	62.25
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	1105.82
Well Depth	62.60
Top Screen	1053.51
Bottom Screen	1043.51
Bottom Well	1043.51
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	57.00
Top sample	1048.82
Bottom sample	1044.82
Turbidity(NTU)	3.53

Date	Time	Water Level	Water Elevation	Notes
3/12/2024	12:28	45.21	1060.61	

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		3.53
Appendix I	Metals	150	150		3.53
Appendix I	VOC	240	240		3.53
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	BEHP	946			
Supplemental	beta-BHC	946			
Total			400	0	

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

TOC	1105.82
Well Depth	62.25

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	3/12/2024	12:28	45.21	1060.61	3	1.1	NO
After purging				1105.82			
Top of Screen June 2002				1053.51			
				52.31	feet above (+) or below (-) top screen		
Bottom of Well June 2002				1043.51			
Bottom of Well	3/12/2024		62.60	1043.22			
				-0.29	feet sedimentation		
Before Sampling				1105.82			
Recovery	3/12/2024	12:38	57.20	1048.62			
Recovery	3/12/2024	15:47	45.85	1059.97			
Recovery				1105.82			
Recovery				1105.82			

IDNR Form 542-1322

Monitoring Well: MW06-37 (dg)

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

GENERAL INFORMATION

TOC	1060.75
Well Depth	22.85
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1060.75
Well Depth	22.60
Top Screen	1047.90
Bottom Screen	1037.90
Bottom Well	1037.90
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	17.00
Top sample	1043.75
Bottom sample	1039.75
Turbidity(NTU)	2.01

Date	Time	Water Level	Water Elevation	Notes
3/12/2024	14:15	7.43	1053.32	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		2.01
Appendix I	Metals	150	150		2.01
Appendix I	VOC	240	240		2.01
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	BEHP	946			
Supplemental	beta-BHC	946			
Total			400	0	

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

TOC	1060.75
Well Depth	22.85

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	3/12/2024	14:15	7.43	1053.32	3	1.2	NO
After purging				1060.75			
Top of Screen February 2006				1047.90			
				12.85	feet above (+) or below (-) top screen		
Bottom of Well February 2006				1037.90			
Bottom of Well	3/12/2024		22.60	1038.15			
				0.25	feet sedimentation		
Before Sampling				1060.75			
Recovery	3/12/2024	14:23	14.09	1046.66			
Recovery	3/12/2024	15:28	7.45	1053.30			
Recovery				1060.75			
Recovery				1060.75			

IDNR Form 542-1322

Monitoring Well: MW06-38 (dg)

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

GENERAL INFORMATION

TOC	1061.53
Well Depth	22.92
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	1061.53
Well Depth	16.65
Top Screen	1047.90
Bottom Screen	1037.90
Bottom Well	1037.90
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	17.00
Top sample	1044.53
Bottom sample	1040.53
Turbidity(NTU)	3.70

Date	Time	Water Level	Water Elevation	Notes
3/12/2024	14:28	8.19	1053.34	

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		3.70
Appendix I	Metals	150	150		3.70
Appendix I	VOC	240	240		3.70
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	BEHP	946			
Supplemental	beta-BHC	946			
Total			400	0	

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

TOC	1061.53
Well Depth	22.92

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	3/12/2024	14:28	8.19	1053.34	3	1.2	no
After purging				1061.53			
Top of Screen February 2006				1048.61			
				12.92	feet above (+) or below (-) top screen		
Bottom of Well February 2006				1038.61			
Bottom of Well	3/12/2024		22.50	1039.03			
				0.42	feet sedimentation		
Before Sampling				1061.53			
Recovery	3/12/2024	14:36	11.60	1049.93			
Recovery	3/12/2024	15:26	8.21	1053.32			
Recovery				1061.53			
Recovery				1061.53			

IDNR Form 542-1322

Monitoring Well: MW06-39 (dg)

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

GENERAL INFORMATION

TOC	1060.78
Well Depth	27.83
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	1060.78
Well Depth	27.50
Top Screen	1047.95
Bottom Screen	1032.95
Bottom Well	1032.95
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	22.00
Top sample	1038.78
Bottom sample	1034.78
Turbidity(NTU)	2.52

Date	Time	Water Level	Water Elevation	Notes
3/12/2024	14:42	7.15	1053.63	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		2.52
Appendix I	Metals	150	150		2.52
Appendix I	VOC	240	240		2.52
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	BEHP	946			
Supplemental	beta-BHC	946			
Total			400	0	

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

TOC	1060.78
Well Depth	27.83

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	3/12/2024	14:42	7.15	1053.63	3	0.9	NO
After purging				1060.78			
Top of Screen February 2006				1047.95			
				12.83	feet above (+) or below (-) top screen		
Bottom of Well February 2006				1032.95			
Bottom of Well	3/12/2024		27.50	1033.28			
				0.33	feet sedimentation		
Before Sampling				1060.78			
Recovery	3/12/2024	14:54	15.40	1045.38			
Recovery	3/12/2024	15:25	9.20	1051.58			
Recovery				1060.78			
Recovery				1060.78			

IDNR Form 542-1322

Monitoring Well: MW09-40 (dg)

Primary Sampling Method: No-Purge for Appendix I

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

GENERAL INFORMATION

TOC	1056.5
Well Depth	20.00
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1056.5
Well Depth	20.10
Top Screen	1046.50
Bottom Screen	1036.50
Bottom Well	1036.50
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	15.00
Top sample	1041.50
Bottom sample	1037.50
Turbidity(NTU)	2.98

Date	Time	Water Level	Water Elevation	Notes
3/12/2024	8:34	10.05	1046.45	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		2.98
Appendix I	Metals	150	150		2.98
Appendix I	VOC	240	240		2.98
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	BEHP	946			
Supplemental	beta-BHC	946			
Total			400	0	

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

TOC	1056.5
Well Depth	20.00

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	3/12/2024	8:34	10.05	1046.45	3	1.8	NO
After purging				1056.50			
Top of Screen March 2009				1046.50			
				10.00	feet above (+) or below (-) top screen		
Bottom of Well March 2009				1036.50			
Bottom of Well	3/12/2024		20.10	1036.40			
				-0.10	feet sedimentation		
Before Sampling				1056.50			
Recovery	3/12/2024	8:42	14.10	1042.40			
Recovery	3/12/2024	15:09	10.14	1046.36			
Recovery				1056.50			
Recovery				1056.50			

IDNR Form 542-1322

Monitoring Well: MW 21-43 (dg)

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

GENERAL INFORMATION

TOC	978.29
Well Depth	30.25
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	978.29
Well Depth	30.25
Top Screen	958.04
Bottom Screen	948.04
Bottom Well	948.04
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	24.50
Top sample	953.79
Bottom sample	949.79
Turbidity(NTU)	4.33

Date	Time	Water Level	Water Elevation	Notes
3/12/2024	11:40	20.78	957.51	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		4.33
Appendix I	Metals	150	150		4.33
Appendix I	VOC	240	240		4.33
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	BEHP	946			
Supplemental	beta-BHC	946			
Total			400	0	

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

TOC	978.29
Well Depth	30.25

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	3/12/2024	11:40	20.78	957.51	3	1.9	No
After purging				978.29			
Top of Screen Dec 2021				958.04			
				20.25	feet above (+) or below (-) top screen		
Bottom of WellDec 2021				948.04			
Bottom of Well	3/12/2024		30.25	948.04			
				0.00	feet sedimentation		
Before Sampling				978.29			
Recovery	3/12/2024	11:48	23.65	954.64			
Recovery	3/12/2024	15:23	20.78	957.51			
Recovery				978.29			
Recovery				978.29			

BOONE COUNTY SANITARY LANDFILL
PERMIT # 08-SDP-1-75P

3/12/2024 Sampled by: Todd Whipple Weather: Partly Sunny, Calm, 50-70 degrees

IDNR Form 542-1324

	Date	Time	Type	Flowing	Quantity			Discolored	Odor	Litter
GWD-1	3/12/2024		tile	dry	dry			No	No	No
							pH	Conductivity	Temp.(C)	Turbidity (NTU)
							NT	NT	NT	NT

IDNR Form 542-1324

	Date	Time	Type	Flowing	Quantity			Discolored	Odor	Litter
SRAMP 1	3/12/2024		pipe discharge	dry				No	No	No
							pH	Conductivity	Temp.(C)	Turbidity (NTU)
							NT	NT	NT	NT

IDNR Form 542-1324

	Date	Time	Type	Flowing	Quantity			Discolored	Odor	Litter
SRAMP 2	3/12/2024	10:15	tile	yes	250 mL/4 sec			No	No	No
							pH	Conductivity	Temp.(C)	Turbidity (NTU)
							NT	NT	NT	2.63

IDNR Form 542-1324

	Date	Time	Type	Flowing	Quantity			Discolored	Odor	Litter
GU-3	3/12/2024		tile	submerged	submerged			No	No	No
							pH	DO	Temp.(C)	Turbidity (NTU)
							NT	NT	NT	NT

IDNR Form 542-1324

	Date	Time	Type	Flowing	Quantity			Discolored	Odor	Litter
GU-4	3/12/2024	10:55	tile	yes	250 mL/5 sec			No	No	No
							pH	DO	Temp.(C)	Turbidity (NTU)
							NT	NT	NT	2.31

IDNR Form 542-1324

	Date	Time	Type	Flowing	Quantity			Discolored	Odor	Litter
PEC-3	3/12/2024		channel	dry	dry			No	No	No
							pH	Conductivity	Temp.(C)	Turbidity (NTU)
							NT	NT	NT	NT

BOONE COUNTY SANITARY LANDFILL
PERMIT # 08-SDP-1-75P

9/30/2024 Sampled by: Todd Whipple Weather: Sunny, Calm, 60-85 degrees

IDNR Form 542-1322

Monitoring Well: MW88-2 (dg)

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

GENERAL INFORMATION

TOC	975.41
Well Depth	34.04
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	975.41
Well Depth	34.04
Top Screen	951.37
Bottom Screen	941.37
Bottom Well	941.37
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	29.00
Top sample	946.41
Bottom sample	942.41
Turbidity(NTU)	7.51

Date	Time	Water Level	Water Elevation	Notes
9/30/2024	11:34	21.3	954.11	

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		7.51
Appendix I	Metals	150	150		7.51
Appendix I	VOC	240	240		7.51
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	BEHP	1892			
Supplemental					
Total			400	0	

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

TOC	975.41
Well Depth	34.04

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	9/30/2024	11:34	21.3	954.11	0	0.0	
After purging				975.41			
Top of Screen July 1988				951.37			
				24.04	feet above (+) or below (-) top screen		
Bottom of Well July 1988				941.37			
Bottom of Well	9/30/2024		34.04	941.37			
				0.00	feet sedimentation		
Before Sampling				975.41			
Recovery				975.41			
Recovery				975.41			
Recovery				975.41			
Recovery				975.41			

IDNR Form 542-1322

Monitoring Well: MW88-3 (dg)

Primary Sampling Method: No-Purge for Appendix I

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

GENERAL INFORMATION

TOC	952.93
Well Depth	27.50
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	952.93
Well Depth	27.50
Top Screen	936.20
Bottom Screen	925.70
Bottom Well	925.70
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	22.00
Top sample	930.93
Bottom sample	926.93
Turbidity(NTU)	2.57

Date	Time	Water Level	Water Elevation	Notes
9/30/2024	11:23	9.08	943.85	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		2.57
Appendix I	Metals	150	150		2.57
Appendix I	VOC	240	240		2.57
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	BEHP	946			
Supplemental					
Total			400	0	

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

TOC	952.93
Well Depth	27.50

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	9/30/2024	11:23	9.08	943.85		0.0	
After purging				952.93			
Top of Screen July 1988				936.20			
				16.73	feet above (+) or below (-) top screen		
Bottom of Well July 1988				925.70			
Bottom of Well	9/30/2024		27.50	925.43			
				-0.27	feet sedimentation		
Before Sampling				952.93			
Recovery				952.93			
Recovery				952.93			
Recovery				952.93			
Recovery				952.93			

IDNR Form 542-1322

Monitoring Well: MW91-8 (dg)

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

GENERAL INFORMATION

TOC	1061.12
Well Depth	20.82
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	1061.12
Well Depth	20.00
Top Screen	1050.30
Bottom Screen	1040.30
Bottom Well	1040.30
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	15.00
Top sample	1046.12
Bottom sample	1042.12
Turbidity(NTU)	1.98

Date	Time	Water Level	Water Elevation	Notes
9/30/2024	13:21	9.23	1051.89	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		1.98
Appendix I	Metals	150	150		1.98
Appendix I	VOC	240	240		1.98
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	BEHP	946			
Supplemental					
Total			400	0	

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

TOC	1061.12
Well Depth	20.82

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	9/30/2024	13:21	9.23	1051.89		0.0	
After purging				1061.12			
Top of Screen December 1991				1050.30			
				10.82	feet above (+) or below (-) top screen		
Bottom of Well December 1991				1040.30			
Bottom of Well	9/30/2024		20.00	1041.12			
				0.82	feet sedimentation		
Before Sampling				1061.12			
Recovery				1061.12			
Recovery				1061.12			
Recovery				1061.12			
Recovery				1061.12			

IDNR Form 542-1322

Monitoring Well: MW91-10 (dg)

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

GENERAL INFORMATION

TOC	1056.58
Well Depth	20.08
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	1056.58
Well Depth	20.00
Top Screen	1046.50
Bottom Screen	1036.50
Bottom Well	1036.50
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	15.00
Top sample	1041.58
Bottom sample	1037.58
Turbidity(NTU)	2.35

Date	Time	Water Level	Water Elevation	Notes
9/30/2024	9:24	15.03	1041.55	

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		2.35
Appendix I	Metals	150	150		2.35
Appendix I	VOC	240	240		2.35
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	BEHP	946			
Supplemental					
Total			400	0	

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

TOC	1056.58
Well Depth	20.08

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	9/30/2024	9:24	15.03	1041.55		0.0	
After purging				1056.58			
Top of Screen December 1991				1046.50			
				10.08	feet above (+) or below (-) top screen		
Bottom of Well December 1991				1036.50			
Bottom of Well	9/30/2024		20.00	1036.58			
				0.08	feet sedimentation		
Before Sampling				1056.58			
Recovery				1056.58			
Recovery				1056.58			
Recovery				1056.58			
Recovery				1056.58			

IDNR Form 542-1322

Monitoring Well: MW94-18 (dg)

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

GENERAL INFORMATION

TOC	1058.75
Well Depth	20.58
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	1058.75
Well Depth	20.10
Top Screen	1046.50
Bottom Screen	1038.65
Bottom Well	1038.65
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	15.00
Top sample	1043.75
Bottom sample	1039.75
Turbidity(NTU)	1.80

Date	Time	Water Level	Water Elevation	Notes
9/30/2024	8:54	11.5	1047.25	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		1.80
Appendix I	Metals	150	150		1.80
Appendix I	VOC	240	240		1.80
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	BEHP	946			
Supplemental					
Total			400	0	

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

TOC	1058.75
Well Depth	20.58

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	9/30/2024	8:54	11.5	1047.25		0.0	
After purging				1058.75			
Top of Screen March 1994				1046.50			
				12.25	feet above (+) or below (-) top screen		
Bottom of Well March 1994				1038.17			
Bottom of Well	9/30/2024		20.10	1038.65			
				0.48	feet sedimentation		
Before Sampling				1058.75			
Recovery				1058.75			
Recovery				1058.75			
Recovery				1058.75			
Recovery				1058.75			

IDNR Form 542-1322

Monitoring Well: MW96-21 (dg)

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

GENERAL INFORMATION

TOC	1010.96
Well Depth	102.70
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1010.96
Well Depth	102.70
Top Screen	933.26
Bottom Screen	908.26
Bottom Well	908.26
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	94.00
Top sample	916.96
Bottom sample	912.96
Turbidity(NTU)	115.50

Date	Time	Water Level	Water Elevation	Notes
9/30/2024	9:53	87.81	923.15	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		115.50
Appendix I	Metals	150	150		115.50
Appendix I	VOC	240	240		115.50
Full Appendix II	10 more containers	5620	5620		
TSS	TSS	1000			
Supplemental	BEHP	946			
Supplemental					
Total			6020	0	

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

TOC	1010.96
Well Depth	102.70

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	9/30/2024	9:53	87.81	923.15		0.0	
After purging				1010.96			
Top of Screen December 1996				933.26			
				77.70	feet above (+) or below (-) top screen		
Bottom of Well December 1996				908.26			
Bottom of Well	9/30/2024		101.20	909.76			
				1.50	feet sedimentation		
Before Sampling				1010.96			
Recovery				1010.96	No significant draw down		
Recovery				1010.96			
Recovery				1010.96			
Recovery				1010.96			

IDNR Form 542-1322

Monitoring Well: MW96-23 (dg)

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

GENERAL INFORMATION

TOC	1007.53
Well Depth	67.59
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	1007.53
Well Depth	66.00
Top Screen	949.74
Bottom Screen	939.74
Bottom Well	939.74
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	60.00
Top sample	947.53
Bottom sample	943.53
Turbidity(NTU)	8.21

Date	Time	Water Level	Water Elevation	Notes
9/30/2024	10:36	49.8	957.73	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		8.21
Appendix I	Metals	150	150		8.21
Appendix I	VOC	240	240		8.21
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	BEHP	946			
Supplemental					
Total			400	0	

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

TOC	1007.53
Well Depth	67.59

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	9/30/2024	10:36	49.8	957.73		0.0	
After purging				1007.53			
Top of Screen December 1996				949.74			
				57.79	feet above (+) or below (-) top screen		
Bottom of Well December 1996				939.74			
Bottom of Well	9/30/2024		66.00	941.53			
				1.79	feet sedimentation		
Before Sampling				1007.53			
Recovery				1007.53			
Recovery				1007.53			
Recovery				1007.53			
Recovery				1007.53			

IDNR Form 542-1322

Monitoring Well: MW96-24 (dg)

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

GENERAL INFORMATION

TOC	988.56
Well Depth	77.62
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	988.56
Well Depth	74.40
Top Screen	920.94
Bottom Screen	910.94
Bottom Well	910.94
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	68.00
Top sample	920.56
Bottom sample	916.56
Turbidity(NTU)	3.13

Date	Time	Water Level	Water Elevation	Notes
9/30/2024	10:10	64.91	923.65	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		3.13
Appendix I	Metals	150	150		3.13
Appendix I	VOC	240	240		3.13
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	BEHP	946			
Supplemental					
Total			400	0	

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

TOC	988.56
Well Depth	77.62

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	9/30/2024	10:10	64.91	923.65		0.0	
After purging				988.56			
Top of Screen December 1996				920.94			
				67.62	feet above (+) or below (-) top screen		
Bottom of Well December 1996				910.94			
Bottom of Well	9/30/2024		74.40	914.16			
				3.22	feet sedimentation		
Before Sampling				988.56			
Recovery				988.56			
Recovery				988.56			
Recovery				988.56			
Recovery				988.56			

IDNR Form 542-1322

Monitoring Well: MW98-25 (dg)

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

GENERAL INFORMATION

TOC	1059.38
Well Depth	19.40
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	1059.38
Well Depth	19.00
Top Screen	1050.48
Bottom Screen	1039.98
Bottom Well	1039.98
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	14.00
Top sample	13.50
Bottom sample	9.50
Turbidity(NTU)	8.20

Date	Time	Water Level	Water Elevation	Notes
9/30/2024	8:21	7.28	1052.1	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		8.20
Appendix I	Metals	150	150		8.20
Appendix I	VOC	240	240		8.20
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	BEHP	946			
Supplemental	beta-BHC	946			
Total			400	0	

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

TOC	1059.38
Well Depth	19.40

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	9/30/2024	8:21	7.28	1052.10		0.0	
After purging				1059.38			
Top of Screen February 1998				1050.48			
				8.90	feet above (+) or below (-) top screen		
Bottom of Well February 1998				1039.98			
Bottom of Well	9/30/2024		19.00	1040.38			
				0.40	feet sedimentation		
Before Sampling				1059.38			
Recovery				1059.38			
Recovery				1059.38			
Recovery				1059.38			
Recovery				1059.38			

IDNR Form 542-1322

Monitoring Well: MW98-28 (ug)

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

GENERAL INFORMATION

TOC	1052.51
Well Depth	152.27
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1052.51
Well Depth	148.80
Top Screen	925.24
Bottom Screen	900.24
Bottom Well	900.24
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	140.00
Top sample	912.51
Bottom sample	908.51
Turbidity(NTU)	49.16

Date	Time	Water Level	Water Elevation	Notes
9/30/2024	7:31	125.81	926.7	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		49.16
Appendix I	Metals	150	150		49.16
Appendix I	VOC	240	240		49.16
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	BEHP	946			
Supplemental	beta-BHC	946			
Total			400	0	

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

TOC	1052.51
Well Depth	152.27

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	9/30/2024	7:31	125.81	926.70		0.0	
After purging				1052.51			
Top of Screen December 1998				925.24			
				127.27	feet above (+) or below (-) top screen		
Bottom of Well December 1998				900.24			
Bottom of Well	9/30/2024		148.80	903.71			
				3.47	feet sedimentation		
Before Sampling				1052.51			
Recovery				1052.51			
Recovery				1052.51			
Recovery				1052.51			
Recovery				1052.51			

IDNR Form 542-1322

Monitoring Well: MW98-29A (ug)

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

GENERAL INFORMATION

TOC	1088.8
Well Depth	68.00
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	1088.8
Well Depth	68.00
Top Screen	1035.70
Bottom Screen	1020.70
Bottom Well	1020.20
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	
Top sample	1088.80
Bottom sample	1084.80
Turbidity(NTU)	

Date	Time	Water Level	Water Elevation	Notes
9/30/2024		30.17	1058.63	WL ONLY

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		
Appendix I	Metals	150	150		
Appendix I	VOC	240	240		
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	BEHP	946			
Supplemental	beta-BHC	946			
Total			400		

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

TOC	1088.8
Well Depth	68.00

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging				1088.80		0.0	no
After purging				1088.80			
Top of Screen December 1998				1035.70			
				53.10	feet above (+) or below (-) top screen		
Bottom of Well December 1998				1020.70			
Bottom of Well				1088.80			
				68.10	feet sedimentation		
Recovery				1088.80			
Recovery				1088.80			
Recovery				1088.80			
Recovery				1088.80			
Before Sampling				1088.80			

IDNR Form 542-1322

Monitoring Well: MW98-30A (ug)

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

GENERAL INFORMATION

TOC	1088.65
Well Depth	116.40
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	1088.65
Well Depth	116.40
Top Screen	992.25
Bottom Screen	972.25
Bottom Well	971.37
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	110.00
Top sample	978.65
Bottom sample	974.65
Turbidity(NTU)	3.05

Date	Time	Water Level	Water Elevation	Notes
9/30/2024	12:33	32.3	1056.35	

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		3.05
Appendix I	Metals	150	150		3.05
Appendix I	VOC	240	240		3.05
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	BEHP	946			
Supplemental	beta-BHC	946			
Total			400	0	

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

TOC	1088.65
Well Depth	116.40

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	9/30/2024	12:33	32.30	1056.35		0.0	
After purging				1088.65			
Top of Screen December 1998				992.25			
				96.40	feet above (+) or below (-) top screen		
Bottom of Well December 1998				972.25			
Bottom of Well	9/30/2024		117.80	971.00			
				-1.25	feet sedimentation		
Before Sampling				1088.65			
Recovery				1088.65			
Recovery				1088.65			
Recovery				1088.65			
Recovery				1088.65			

IDNR Form 542-1322

Monitoring Well: MW02-15A (ug)

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

GENERAL INFORMATION

TOC	1105.82
Well Depth	62.25
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	1105.82
Well Depth	62.60
Top Screen	1053.51
Bottom Screen	1043.51
Bottom Well	1043.51
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	56.00
Top sample	1049.82
Bottom sample	1045.82
Turbidity(NTU)	4.98

Date	Time	Water Level	Water Elevation	Notes
9/30/2024	12:48	47.64	1058.18	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		4.98
Appendix I	Metals	150	150		4.98
Appendix I	VOC	240	240		4.98
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	BEHP	946			
Supplemental	beta-BHC	946			
Total			400	0	

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

TOC	1105.82
Well Depth	62.25

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	9/30/2024	12:48	47.64	1058.18		0.0	
After purging				1105.82			
Top of Screen June 2002				1053.51			
				52.31	feet above (+) or below (-) top screen		
Bottom of Well June 2002				1043.51			
Bottom of Well	9/30/2024		62.60	1043.22			
				-0.29	feet sedimentation		
Before Sampling				1105.82			
Recovery				1105.82			
Recovery				1105.82			
Recovery				1105.82			
Recovery				1105.82			

IDNR Form 542-1322

Monitoring Well: MW06-37 (dg)

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

GENERAL INFORMATION

TOC	1060.75
Well Depth	22.85
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1060.75
Well Depth	22.60
Top Screen	1047.90
Bottom Screen	1037.90
Bottom Well	1037.90
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	17.00
Top sample	1043.75
Bottom sample	1039.75
Turbidity(NTU)	2.78

Date	Time	Water Level	Water Elevation	Notes
9/30/2024	14:14	9.44	1051.31	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		2.78
Appendix I	Metals	150	150		2.78
Appendix I	VOC	240	240		2.78
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	BEHP	946			
Supplemental	beta-BHC	946			
Total			400	0	

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

TOC	1060.75
Well Depth	22.85

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	9/30/2024	14:14	9.44	1051.31		0.0	
After purging				1060.75			
Top of Screen February 2006				1047.90			
				12.85	feet above (+) or below (-) top screen		
Bottom of Well February 2006				1037.90			
Bottom of Well	9/30/2024		22.60	1038.15			
				0.25	feet sedimentation		
Before Sampling				1060.75			
Recovery				1060.75			
Recovery				1060.75			
Recovery				1060.75			
Recovery				1060.75			

IDNR Form 542-1322

Monitoring Well: MW06-38 (dg)

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

GENERAL INFORMATION

TOC	1061.53
Well Depth	22.92
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	1061.53
Well Depth	16.65
Top Screen	1047.90
Bottom Screen	1037.90
Bottom Well	1037.90
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	17.00
Top sample	1044.53
Bottom sample	1040.53
Turbidity(NTU)	2.56

Date	Time	Water Level	Water Elevation	Notes
9/30/2024	14:02	10.1	1051.43	

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		2.56
Appendix I	Metals	150	150		2.56
Appendix I	VOC	240	240		2.56
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	BEHP	946			
Supplemental	beta-BHC	946			
Total			400	0	

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

TOC	1061.53
Well Depth	22.92

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	9/30/2024	14:02	10.1	1051.43		0.0	
After purging				1061.53			
Top of Screen February 2006				1048.61			
				12.92	feet above (+) or below (-) top screen		
Bottom of Well February 2006				1038.61			
Bottom of Well	9/30/2024		22.50	1039.03			
				0.42	feet sedimentation		
Before Sampling				1061.53			
Recovery				1061.53			
Recovery				1061.53			
Recovery				1061.53			
Recovery				1061.53			

IDNR Form 542-1322

Monitoring Well: MW06-39 (dg)

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

GENERAL INFORMATION

TOC	1060.78
Well Depth	27.83
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	1060.78
Well Depth	27.50
Top Screen	1047.95
Bottom Screen	1032.95
Bottom Well	1032.95
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	22.00
Top sample	1038.78
Bottom sample	1034.78
Turbidity(NTU)	2.92

Date	Time	Water Level	Water Elevation	Notes
9/30/2024	13:51	9.06	1051.72	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		2.92
Appendix I	Metals	150	150		2.92
Appendix I	VOC	240	240		2.92
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	BEHP	946			
Supplemental	beta-BHC	946			
Total			400	0	

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

TOC	1060.78
Well Depth	27.83

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	9/30/2024	13:51	9.06	1051.72		0.0	
After purging				1060.78			
Top of Screen February 2006				1047.95			
				12.83	feet above (+) or below (-) top screen		
Bottom of Well February 2006				1032.95			
Bottom of Well	9/30/2024		27.50	1033.28			
				0.33	feet sedimentation		
Before Sampling				1060.78			
Recovery				1060.78			
Recovery				1060.78			
Recovery				1060.78			
Recovery				1060.78			

IDNR Form 542-1322

Monitoring Well:	MW09-40 (dg)
Primary Sampling Method:	No-Purge for Appendix I
Secondary Sampling Method:	Purge & Sample for all analytes beyond Appendix I

GENERAL INFORMATION

TOC	1056.5
Well Depth	20.00
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1056.5
Well Depth	20.10
Top Screen	1046.50
Bottom Screen	1036.50
Bottom Well	1036.50
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	15.00
Top sample	1041.50
Bottom sample	1037.50
Turbidity(NTU)	2.79

Date	Time	Water Level	Water Elevation	Notes
9/30/2024	9:10	12.15	1044.35	

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		2.79
Appendix I	Metals	150	150		2.79
Appendix I	VOC	240	240		2.79
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	BEHP	946			
Supplemental	beta-BHC	946			
Total			400	0	

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

TOC	1056.5
Well Depth	20.00

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	9/30/2024	9:10	12.15	1044.35		0.0	
After purging				1056.50			
Top of Screen March 2009				1046.50			
				10.00	feet above (+) or below (-) top screen		
Bottom of Well March 2009				1036.50			
Bottom of Well	9/30/2024		20.10	1036.40			
				-0.10	feet sedimentation		
Before Sampling				1056.50			
Recovery				1056.50			
Recovery				1056.50			
Recovery				1056.50			
Recovery				1056.50			

IDNR Form 542-1322

Monitoring Well: MW 21-43 (dg)

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

GENERAL INFORMATION

TOC	978.29
Well Depth	30.25
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	978.29
Well Depth	30.25
Top Screen	958.04
Bottom Screen	948.04
Bottom Well	948.04
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	25.00
Top sample	953.29
Bottom sample	949.29
Turbidity(NTU)	2.61

Date	Time	Water Level	Water Elevation	Notes
9/30/2024	12:09	20.13	958.16	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		2.61
Appendix I	Metals	150	150		2.61
Appendix I	VOC	240	240		2.61
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	BEHP	946			
Supplemental	beta-BHC	946			
Total			400	0	

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

TOC	978.29
Well Depth	30.25

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	9/30/2024	12:09	20.13	958.16		0.0	
After purging				978.29			
Top of Screen Dec 2021				958.04			
				20.25	feet above (+) or below (-) top screen		
Bottom of WellDec 2021				948.04			
Bottom of Well	9/30/2024		30.25	948.04			
				0.00	feet sedimentation		
Before Sampling				978.29			
Recovery				978.29			
Recovery				978.29			
Recovery				978.29			
Recovery				978.29			

BOONE COUNTY SANITARY LANDFILL
PERMIT # 08-SDP-1-75P

9/30/2024 Sampled by: Todd Whipple Weather: Sunny, Calm, 60-85 degrees

IDNR Form 542-1324

	Date	Time	Type	Flowing	Quantity	Discolored	Odor	Litter
GWD-1	9/30/2024		tile	dry	dry	No	No	No

pH	Conductivity	Temp.(C)	Turbidity (NTU)
NT	NT	NT	NT

IDNR Form 542-1324

	Date	Time	Type	Flowing	Quantity	Discolored	Odor	Litter
SRAMP 1	9/30/2024		pipe discharge	dry		No	No	No

pH	Conductivity	Temp.(C)	Turbidity (NTU)
NT	NT	NT	NT

IDNR Form 542-1324

	Date	Time	Type	Flowing	Quantity	Discolored	Odor	Litter
SRAMP 2	9/30/2024	10:15	tile	dry		No	No	No

pH	Conductivity	Temp.(C)	Turbidity (NTU)
NT	NT	NT	2.63

IDNR Form 542-1324

	Date	Time	Type	Flowing	Quantity	Discolored	Odor	Litter
GU-3	9/30/2024	10:51	tile	yes	250 mL/10 sec	No	No	No

pH	DO	Temp.(C)	Turbidity (NTU)
NT	NT	NT	1.87

IDNR Form 542-1324

	Date	Time	Type	Flowing	Quantity	Discolored	Odor	Litter
GU-4	9/30/2024		tile	buried		No	No	No

pH	DO	Temp.(C)	Turbidity (NTU)
NT	NT	NT	NT

IDNR Form 542-1324

	Date	Time	Type	Flowing	Quantity	Discolored	Odor	Litter
PEC-3	9/30/2024	10:57	channel	yes	250 mL/10 sec	No	No	No

pH	Conductivity	Temp.(C)	Turbidity (NTU)
NT	NT	NT	24.07

BOONE COUNTY SANITARY LANDFILL
PERMIT # 08-SDP-1-75P

11/25/2024	Sampled by: Todd Whipple	Weather:	Sunny, slight breeze, 35 degrees
12/9/2024	Sampled by: Glenn Hunter	Weather:	Sunny, slight breeze, 35 degrees

IDNR Form 542-1322

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

Monitoring Well: MW88-3 (dg)

GENERAL INFORMATION

TOC	952.93
Well Depth	27.50
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	952.93
Well Depth	27.50
Top Screen	936.20
Bottom Screen	925.70
Bottom Well	925.70
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	22.00
Top sample	930.93
Bottom sample	926.93
Turbidity(NTU)	2.14

Date	Time	Water Level	Water Elevation	Notes
11/25/2024	14:00	9.85	943.08	

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		2.14
Appendix I	Metals	150	150		2.14
Appendix I	VOC	240	240		2.14
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	BEHP	946			
Supplemental					
Total			400	0	

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

		2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
TOC	952.93	Before purging	11/25/2024	14:00	9.85	943.08		0.0	
Well Depth	27.50	After purging				952.93			
		Top of Screen July 1988				936.20			
						16.73	feet above (+) or below (-) top screen		
		Bottom of Well July 1988				925.70			
		Bottom of Well	11/25/2024		27.50	925.43			
						-0.27	feet sedimentation		
		Before Sampling				952.93			
		Recovery				952.93			
		Recovery				952.93			
		Recovery				952.93			
		Recovery				952.93			

IDNR Form 542-1324

	Date	Time	Type	Flowing	Quantity		Discolored	Odor	Litter
GU-3	12/9/2024	14:05	tile	yes	250 mL/5 sec		No	No	No
						pH	DO	Temp.(C)	Turbidity (NTU)
						NT	NT	NT	26.2

IDNR Form 542-1324

	Date	Time	Type	Flowing	Quantity		Discolored	Odor	Litter
GU-4	11/25/2024		tile	yes	250 mL/5 sec		No	No	No
						pH	DO	Temp.(C)	Turbidity (NTU)
						NT	NT	NT	5.29

IDNR Form 542-1324

	Date	Time	Type	Flowing	Quantity		Discolored	Odor	Litter
PEC-3	12/9/2024	14:10	channel	yes	250 mL/1 sec		No	No	No
						pH	Conductivity	Temp.(C)	Turbidity (NTU)
						NT	NT	NT	NT

Appendix C

Analytical Laboratory Data Summary

Table 1

Analytical Data Summary for GU-3

Constituents	Units	9/13/2021	12/3/2021	3/28/2022	9/15/2022	9/30/2024
1,1,1,2-tetrachloroethane	ug/L	<1	<1		<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1		<1	<1
1,1,2-trichloroethane	ug/L	<1	<1		<1	<1
1,1-dichloroethane	ug/L	<1	<1		<1	<1
1,1-dichloroethylene	ug/L	<1	<1	<1	<1	<1
1,2,3-trichloropropane	ug/L	<1	<1		<1	<1
1,2-dibromo-3-chloropropane	ug/L	<5	<5		<5	<5
1,2-dibromoethane	ug/L	<1	<1		<1	<1
1,2-dichlorobenzene	ug/L	<1	<1		<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1
1,4-dichlorobenzene	ug/L	<1	<1		<1	<1
2-butanone (mek)	ug/L	<5	<10		<10	<10
2-hexanone (mbk)	ug/L	<5	<5		<5	<5
4-methyl-2-pentanone (mibk)	ug/L	<5	<5		<5	<5
Acetone	ug/L	<10	<10		<10	<10
Acrylonitrile	ug/L	<5	<5		<5	<5
Aluminum, total	ug/L			269		
Antimony, total	ug/L	<2	<2		<2	<2
Arsenic, total	ug/L	6.1	9.1	6.0	6.3	<4.0
Barium, total	ug/L	478	415		365	488
Benzene	ug/L	1.3	6.0	6.2	6.1	6.0
Beryllium, total	ug/L	<4	<4	<4	<4	<4
BOD	mg/L			<14		
Boron, total	ug/L			285		
Bromochloromethane	ug/L	<1	<1		<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1		<1	<1
Cadmium, total	ug/L	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	ug/L	<1	<1		<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1
Chloride	mg/L			20.8		
Chlorobenzene	ug/L	<1.0	<1.0	1.8	1.7	1.3
Chloroethane	ug/L	1.4	2.0		1.6	1.1
Chloroform	ug/L	<1	<1	<1	<1	<1
Chloromethane	ug/L	<1	<1		<1	<1
Chromium, total	ug/L	<8	<8		<8	<8
Cis-1,2-dichloroethylene	ug/L	1.0	10.5		11.9	4.3
Cis-1,3-dichloropropene	ug/L	<1	<1		<1	<1
Cobalt, total	ug/L	4.5	2.7	1.4	2.8	<.4
Copper, total	ug/L	6.5	<4.0	<4.0	<4.0	<4.0
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1		<1	<1
Ethylbenzene	ug/L	<1.0	<1.0	<1.0	1.8	<1.0
Fluoride	mg/L			.2		
Iron, total	ug/L			17000		
Lead, total	ug/L	5.1	<4.0	<4.0	<4.0	<4.0
Lithium, total	ug/L			<50		
Manganese, Total	ug/L			637		
Methyl iodide	ug/L	<1	<1		<1	<1
Methylene chloride	ug/L	<5	<5		<5	<5
Molybdenum, total	ug/L			<4		
Nickel, total	ug/L	15.2	12.4	12.7	21.1	36.8
Nitrogen, ammonia	mg/L			3.63		
Nitrogen, Kjeldahl, total	mg/L			3.67		
Nitrogen, Nitrate+Nitrite	mg/L			.12		
Selenium, total	ug/L	<4	<4	<4	<4	<4
Silica, dissolved	ug/L			40000		
Silver, total	ug/L	<4	<4		<4	<4
Styrene	ug/L	<1	<1		<1	<1
Sulfate	mg/L			144		
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1
Thallium, total	ug/L	<2	<2		<2	<2
Toluene	ug/L	<1	<1	<1	<1	<1
Total suspended solids	mg/L			48		
Trans-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1		<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5		<5	<5
Trichloroethylene	ug/L	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1		<1	<1
Vanadium, total	ug/L	<20	<20	<20	<20	<20
Vinyl acetate	ug/L	<5	<5		<5	<5
Vinyl chloride	ug/L	<1.0	3.6	3.0	1.9	1.2
Xylenes, total	ug/L	<2	<2		<2	<2
Zinc, total	ug/L	32.9	<20.0	<20.0	<20.0	<20.0

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

Table 2

Analytical Data Summary for GU-4

Constituents	Units	8/30/2021	3/28/2022	6/23/2022	6/24/2022	9/14/2022	12/1/2022	3/20/2023	9/12/2023	3/12/2024
1,1,1,2-tetrachloroethane	ug/L	<1				<1		<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1		<1	<1		<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1				<1		<1	<1	<1
1,1,2-trichloroethane	ug/L	<1				<1		<1	<1	<1
1,1-dichloroethane	ug/L	<1				<1		<1	<1	<1
1,1-dichloroethylene	ug/L	<1	<1		<1	<1		<1	<1	<1
1,2,3-trichloropropane	ug/L	<1				<1		<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L	<5				<5		<5	<5	<5
1,2-dibromoethane	ug/L	<1				<1		<1	<1	<1
1,2-dichlorobenzene	ug/L	<1				<1		<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1		<1	<1		<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1		<1	<1		<1	<1	<1
1,4-dichlorobenzene	ug/L	<1				<1		<1	<1	<1
2-butanone (mek)	ug/L	<5				<10		<10	<10	<10
2-hexanone (mbk)	ug/L	<5				<5		<5	<5	<5
4-methyl-2-pentanone (mibk)	ug/L	<5				<5		<5	<5	<5
Acetone	ug/L	<10				<10		<10	<10	<10
Acrylonitrile	ug/L	<5				<5		<5	<5	<5
Aluminum, total	ug/L		24800		<50					
Antimony, total	ug/L	<2				<2		<2	<2	<2
Arsenic, total	ug/L	<4.0	27.3		<4.0	<4.0		5.6	5.9	<4.0
Barium, total	ug/L	441				483		465	501	368
Benzene	ug/L	<1.0	1.4	<1.0	<1.0	<1.0		<1.0	<1.0	<1.0
Beryllium, total	ug/L	<4	<4		<4	<4		<4	<4	<4
BOD	mg/L		837		40					
Boron, total	ug/L		1830		485					
Bromochloromethane	ug/L	<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
Cadmium, total	ug/L	<.8	1.2		<.8	<.8		<.8	<.8	<.8
Carbon disulfide	ug/L	<1				<1		<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1		<1	<1		<1	<1	<1
Chloride	mg/L		242.0		42.7					
Chlorobenzene	ug/L	<1	<1		<1	<1		<1	<1	<1
Chloroethane	ug/L	<1				<1		<1	<1	<1
Chloroform	ug/L	<1	<1		<1	<1		<1	<1	<1
Chloromethane	ug/L	<1				<1		<1	<1	<1
Chromium, total	ug/L	<8				<8		<8	<8	<8
Cis-1,2-dichloroethylene	ug/L	<1				<1		<1	<1	<1
Cis-1,3-dichloropropene	ug/L	<1				<1		<1	<1	<1
Cobalt, total	ug/L	1.3	24.9		.8	4.9		3.3	1.2	<.4
Copper, total	ug/L	<4.0	42.8		<4.0	<4.0		5.5	<4.0	<4.0
Dibromochloromethane	ug/L	<1	<1		<1	<1		<1	<1	<1
Dibromomethane	ug/L	<1				<1		<1	<1	<1
Ethylbenzene	ug/L	<1	<1		<1	<1		<1	<1	<1
Fluoride	mg/L		.4		.2					
Iron, total	ug/L		40700		2840					
Lead, total	ug/L	<4.0	22.5		<4.0	<4.0		<4.0	<4.0	<4.0
Lithium, total	ug/L		83		<50					
Manganese, Total	ug/L		3630		560					
Methyl iodide	ug/L	<1				<1		<1	<1	<1
Methylene chloride	ug/L	<5				<5		<5	<5	<5
Molybdenum, total	ug/L		7.8		<4.0					
Nickel, total	ug/L	<4.0	93.2		7.4	4.3		12.1	4.4	<4.0
Nitrogen, ammonia	mg/L		44.5		10.4					
Nitrogen, Kjeldahl, total	mg/L		46.20		9.13					
Nitrogen, Nitrate+Nitrite	mg/L		.29		.61					
Selenium, total	ug/L	<4	<4		<4	<4		<4	<4	<4
Silica, dissolved	ug/L		39600		28900					
Silver, total	ug/L	<4				<4		<4	<4	<4
Styrene	ug/L	<1				<1		<1	<1	<1
Sulfate	mg/L		324		211					
Tetrachloroethylene	ug/L	<1	<1		<1	<1		<1	<1	<1
Thallium, total	ug/L	<2				<2		<2	<2	<2
Toluene	ug/L	<1.0	<1.0		<1.0	1.9	<1.0	<1.0	<1.0	<1.0
Total suspended solids	mg/L		13400		4					
Trans-1,2-dichloroethylene	ug/L	<1	<1		<1	<1		<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1				<1		<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5				<5		<5	<5	<5
Trichloroethylene	ug/L	<1	<1		<1	<1		<1	<1	<1
Trichlorofluoromethane	ug/L	<1				<1		<1	<1	<1
Vanadium, total	ug/L	<20.0	69.3		<20.0	<20.0		<20.0	<20.0	<20.0
Vinyl acetate	ug/L	<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
Zinc, total	ug/L	131.0	1140.0		61.3	<20.0		131.0	47.2	70.7

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

Table 3

Analytical Data Summary for MW02-15A

Constituents	Units	3/13/2014	9/18/2014	11/13/2014	3/17/2015	6/29/2015	9/11/2015	3/16/2016	9/8/2016	3/17/2017
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Antimony, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Barium, total	ug/L	39.3	33.4	33.1	30.2	28.7	34.8	40.4	44.8	43.5
Benzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	ug/L	<.8	<.8	<.8	<.8	<.8	<.8	3.6	<.8	<.8
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	ug/L	<8	<8	<8	<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	<4.0	<.8	<.8	<.8	<.8	.8	<.8	1.4	1.5
Copper, total	ug/L	<4.0	7.8	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	ug/L	<4.0	22.3	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Methyl iodide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	ug/L	6.4	10.4	<4.0	<4.0	5.6	8.3	10.3	14.0	11.9
Selenium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total suspended solids	mg/L		7		6					
Trans-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	ug/L	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	<8.0	11.3	<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 3

Analytical Data Summary for MW02-15A

Constituents	9/19/2017	3/8/2018	9/24/2018	3/25/2019	9/3/2019	3/23/2020	9/4/2020	3/9/2021	9/7/2021	3/28/2022
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<1	<1	<1	<1	<1	<5	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Barium, total	36.0	31.9	32.2	30.0	30.4	32.0	40.0	38.9	75.3	46.2
Benzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	.9	<.8
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	<.8	<.8	<.8	<.8	.9	1.6	2.8	5.8	5.7	3.2
Copper, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	26.0	<4.0	<4.0
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Methyl iodide	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	<4.0	<4.0	5.7	9.9	9.1	9.7	9.9	9.6	17.3	11.3
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total suspended solids										
Trans-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	<8.0	9.3	<8.0	<8.0	<8.0	<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 3

Analytical Data Summary for MW02-15A

Constituents	9/14/2022	3/20/2023	9/12/2023	3/12/2024	9/30/2024
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1
1,1-dichloroethylene	<1	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<5	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1	<1
2-butanone (mek)	<10	<10	<10	<10	<10
2-hexanone (mbk)	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5
Acetone	<10	<10	<10	<10	<10
Acrylonitrile	<5	<5	<5	<5	<5
Antimony, total	<2	<2	<2	<2	<2
Arsenic, total	<4	<4	<4	<4	<4
Barium, total	39.2	42.8	35.9	38.9	34.9
Benzene	<1	<1	<1	<1	<1
Beryllium, total	<4	<4	<4	<4	<4
Bromochloromethane	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1
Cadmium, total	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1
Chlorobenzene	<1	<1	<1	<1	<1
Chloroethane	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1
Chromium, total	<8	<8	<8	<8	<8
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1
Cobalt, total	6.2	3.6	1.1	1.2	.9
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	<4.0	<4.0	<4.0	<4.0	<4.0
Methyl iodide	<1	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5	<5
Nickel, total	8.8	9.8	8.4	6.6	6.3
Selenium, total	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4
Styrene	<1	<1	<1	<1	<1
Tetrachloroethylene	<1	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2	<2
Toluene	<1	<1	<1	<1	<1
Total suspended solids					
Trans-1,2-dichloroethylene	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2
Zinc, total	<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 4

Analytical Data Summary for MW02-30A

Constituents	Units	3/16/2016	6/7/2016	9/8/2016	3/17/2017	9/19/2017	3/8/2018	9/24/2018	3/25/2019	9/3/2019
1,1,1,2-tetrachloroethane	ug/L		<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L		<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L		<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L		<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L		<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	ug/L		<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	ug/L		<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L		<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromoethane	ug/L		<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L		<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L		<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L		<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	ug/L		<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	ug/L		<5	<5	<5	<5	<5	<5	<5	<5
2-hexanone (mbk)	ug/L		<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	ug/L		<5	<5	<5	<5	<5	<5	<5	<5
Acetone	ug/L		<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	ug/L		<5	<5	<5	<5	<5	<5	<5	<5
Antimony, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	ug/L	43.9	34.2	37.5	30.0	24.3	25.7	26.2	30.9	32.7
Barium, total	ug/L	85.6	71.3	62.8	35.6	77.3	79.6	96.5	131.0	91.8
Benzene	ug/L		<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bromochloromethane	ug/L		<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L		<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L		<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L		<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	ug/L	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	ug/L		1.7	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
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	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0
Cis-1,2-dichloroethylene	ug/L		<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L		<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	1.0	1.2	<.8	<.8	<.8	<.8	1.8	3.2	.8
Copper, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	4.8	13.5	<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	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	8.9	<4.0
Methyl iodide	ug/L		<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	ug/L		<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	9.4	<4.0
Selenium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	ug/L		<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	ug/L		<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<2	<2
Toluene	ug/L		<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,2-dichloroethylene	ug/L		<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L		<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L		<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	ug/L		<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L		<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	ug/L	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	ug/L		<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L		<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	ug/L		<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	<8.0	8.7	9.9	<8.0	<8.0	<8.0	12.9	59.9	16.3

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

Table 4

Analytical Data Summary for MW02-30A

Constituents	3/23/2020	9/4/2020	3/9/2021	9/7/2021	3/28/2022	9/14/2022	3/20/2023	9/12/2023	3/12/2024
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	<5	<5	<5	<5	<10	<10	<10	<10	<10
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	29.1	43.5	27.6	36.6	34.4	50.6	50.1	27.9	44.3
Barium, total	102.0	93.4	81.5	88.2	93.4	159.0	207.0	71.8	120.0
Benzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	<.8	<.8	<.8	<.8	<.8	.8	1.8	<.8	<.8
Carbon disulfide	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	<8.0	<8.0	<8.0	<8.0	<8.0	9.0	10.6	<8.0	<8.0
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	2.3	.4	1.5	<.4	.4	7.0	4.5	<.4	.6
Copper, total	9.3	<4.0	9.4	<4.0	<4.0	19.5	18.3	<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	7.0	<4.0	<4.0	<4.0	<4.0	14.8	22.3	<4.0	<4.0
Methyl iodide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	7.0	<4.0	4.3	<4.0	<4.0	12.4	12.9	<4.0	<4.0
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	28.5	<20.0	<20.0	<20.0	<20.0	52.8	144.0	<20.0	<20.0

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

Table 4

Analytical Data Summary for MW02-30A

Constituents	9/30/2024
1,1,1,2-tetrachloroethane	<1
1,1,1-trichloroethane	<1
1,1,2,2-tetrachloroethane	<1
1,1,2-trichloroethane	<1
1,1-dichloroethane	<1
1,1-dichloroethylene	<1
1,2,3-trichloropropane	<1
1,2-dibromo-3-chloropropane	<5
1,2-dibromoethane	<1
1,2-dichlorobenzene	<1
1,2-dichloroethane	<1
1,2-dichloropropane	<1
1,4-dichlorobenzene	<1
2-butanone (mek)	<10
2-hexanone (mbk)	<5
4-methyl-2-pentanone (mibk)	<5
Acetone	<10
Acrylonitrile	<5
Antimony, total	<2
Arsenic, total	41.0
Barium, total	86.8
Benzene	<1
Beryllium, total	<4
Bromochloromethane	<1
Bromodichloromethane	<1
Bromoform	<1
Bromomethane	<1
Cadmium, total	<.8
Carbon disulfide	<1.0
Carbon tetrachloride	<1
Chlorobenzene	<1
Chloroethane	<1
Chloroform	<1
Chloromethane	<1
Chromium, total	<8.0
Cis-1,2-dichloroethylene	<1
Cis-1,3-dichloropropene	<1
Cobalt, total	<.4
Copper, total	<4.0
Dibromochloromethane	<1
Dibromomethane	<1
Ethylbenzene	<1
Lead, total	<4.0
Methyl iodide	<1
Methylene chloride	<5
Nickel, total	<4.0
Selenium, total	<4
Silver, total	<4
Styrene	<1
Tetrachloroethylene	<1
Thallium, total	<2
Toluene	<1
Trans-1,2-dichloroethylene	<1
Trans-1,3-dichloropropene	<1
Trans-1,4-dichloro-2-butene	<5
Trichloroethylene	<1
Trichlorofluoromethane	<1
Vanadium, total	<20
Vinyl acetate	<5
Vinyl chloride	<1
Xylenes, total	<2
Zinc, total	<20.0

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

Table 5

Analytical Data Summary for MW06-37

Constituents	Units	3/13/2014	9/19/2014	3/17/2015	9/11/2015	3/16/2016	9/8/2016	3/17/2017	9/19/2017	3/8/2018
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Antimony, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Barium, total	ug/L	160	105	143	117	142	117	135	133	128
Benzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	ug/L	<.8	<.8	<.8	<.8	1.2	<.8	1.6	<.8	<.8
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	ug/L	<8	<8	<8	<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	<4.0	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Copper, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Methyl iodide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	ug/L	<4.0	<4.0	<4.0	<4.0	7.1	<4.0	<4.0	<4.0	<4.0
Selenium, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total suspended solids	mg/L		60	11						
Trans-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	ug/L	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0

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

Table 5

Analytical Data Summary for MW06-37

Constituents	9/24/2018	3/25/2019	9/3/2019	12/3/2019	3/23/2020	9/4/2020	3/9/2021	9/7/2021	12/3/2021	3/28/2022
1,1,1,2-tetrachloroethane	<1	<1	<1		<1	<1	<1	<1		<1
1,1,1-trichloroethane	<1	<1	<1		<1	<1	<1	<1		<1
1,1,2,2-tetrachloroethane	<1	<1	<1		<1	<1	<1	<1		<1
1,1,2-trichloroethane	<1	<1	<1		<1	<1	<1	<1		<1
1,1-dichloroethane	<1	<1	<1		<1	<1	<1	<1		<1
1,1-dichloroethylene	<1	<1	<1		<1	<1	<1	<1		<1
1,2,3-trichloropropane	<1	<1	<1		<1	<1	<1	<1		<1
1,2-dibromo-3-chloropropane	<1	<1	<1		<5	<5	<5	<5		<5
1,2-dibromoethane	<1	<1	<1		<1	<1	<1	<1		<1
1,2-dichlorobenzene	<1	<1	<1		<1	<1	<1	<1		<1
1,2-dichloroethane	<1	<1	<1		<1	<1	<1	<1		<1
1,2-dichloropropane	<1	<1	<1		<1	<1	<1	<1		<1
1,4-dichlorobenzene	<1	<1	<1		<1	<1	<1	<1		<1
2-butanone (mek)	<5	<5	<5		<5	<5	<5	<5		<10
2-hexanone (mbk)	<5	<5	<5		<5	<5	<5	<5		<5
4-methyl-2-pentanone (mibk)	<5	<5	<5		<5	<5	<5	<5		<5
Acetone	<10	<10	<10		<10	<10	<10	<10		<10
Acrylonitrile	<5	<5	<5		<5	<5	<5	<5		<5
Antimony, total	<2	<2	<2		<2	<2	<2	<2		<2
Arsenic, total	<4	<4	<4		<4	<4	<4	<4		<4
Barium, total	116	126	120		126	172	109	123		119
Benzene	<1	<1	<1		<1	<1	<1	<1		<1
Beryllium, total	<4	<4	<4		<4	<4	<4	<4		<4
Bromochloromethane	<1	<1	<1		<1	<1	<1	<1		<1
Bromodichloromethane	<1	<1	<1		<1	<1	<1	<1		<1
Bromoform	<1	<1	<1		<1	<1	<1	<1		<1
Bromomethane	<1	<1	<1		<1	<1	<1	<1		<1
Cadmium, total	<.8	<.8	<.8		<.8	<.8	<.8	5.5	<.8	<.8
Carbon disulfide	<1	<1	<1		<1	<1	<1	<1		<1
Carbon tetrachloride	<1	<1	<1		<1	<1	<1	<1		<1
Chlorobenzene	<1	<1	<1		<1	<1	<1	<1		<1
Chloroethane	<1	<1	<1		<1	<1	<1	<1		<1
Chloroform	<1	<1	<1		<1	<1	<1	<1		<1
Chloromethane	<1	<1	<1		<1	<1	<1	<1		<1
Chromium, total	<8	<8	<8		<8	<8	<8	<8		<8
Cis-1,2-dichloroethylene	<1	<1	<1		<1	<1	<1	<1		<1
Cis-1,3-dichloropropene	<1	<1	<1		<1	<1	<1	<1		<1
Cobalt, total	<.8	<.8	<.8		<.8	<.4	<.4	<.4		.4
Copper, total	<4	<4	<4		<4	<4	<4	<4		<4
Dibromochloromethane	<1	<1	<1		<1	<1	<1	<1		<1
Dibromomethane	<1	<1	<1		<1	<1	<1	<1		<1
Ethylbenzene	<1	<1	<1		<1	<1	<1	<1		<1
Lead, total	<4	<4	17	<4	<4	<4	<4	<4		<4
Methyl iodide	<1	<1	<1		<1	<1	<1	<1		<1
Methylene chloride	<5	<5	<5		<5	<5	<5	<5		<5
Nickel, total	<4.0	<4.0	<4.0		<4.0	<4.0	<4.0	<4.0		<4.0
Selenium, total	<4.0	<4.0	<4.0		<4.0	<4.0	4.9	<4.0		4.9
Silver, total	<4	<4	<4		<4	<4	<4	<4		<4
Styrene	<1	<1	<1		<1	<1	<1	<1		<1
Tetrachloroethylene	<1	<1	<1		<1	<1	<1	<1		<1
Thallium, total	<4	<2	<2		<2	<2	<2	<2		<2
Toluene	<1	<1	<1		<1	<1	<1	<1		<1
Total suspended solids										
Trans-1,2-dichloroethylene	<1	<1	<1		<1	<1	<1	<1		<1
Trans-1,3-dichloropropene	<1	<1	<1		<1	<1	<1	<1		<1
Trans-1,4-dichloro-2-butene	<5	<5	<5		<5	<5	<5	<5		<5
Trichloroethylene	<1	<1	<1		<1	<1	<1	<1		<1
Trichlorofluoromethane	<1	<1	<1		<1	<1	<1	<1		<1
Vanadium, total	<20	<20	<20		<20	<20	<20	<20		<20
Vinyl acetate	<5	<5	<5		<5	<5	<5	<5		<5
Vinyl chloride	<1	<1	<1		<1	<1	<1	<1		<1
Xylenes, total	<2	<2	<2		<2	<2	<2	<2		<2
Zinc, total	<8.0	<8.0	9.1		<20.0	<20.0	<20.0	<20.0		<20.0

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

Table 5

Analytical Data Summary for MW06-37

Constituents	9/14/2022	3/20/2023	9/13/2023	3/12/2024	9/30/2024
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1
1,1-dichloroethylene	<1	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<5	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1	<1
2-butanone (mek)	<10	<10	<10	<10	<10
2-hexanone (mbk)	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5
Acetone	<10	<10	<10	<10	<10
Acrylonitrile	<5	<5	<5	<5	<5
Antimony, total	<2	<2	<2	<2	<2
Arsenic, total	<4	<4	<4	<4	<4
Barium, total	117	109	120	128	116
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	.9	<.8	<.8
Carbon disulfide	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1
Chlorobenzene	<1	<1	<1	<1	<1
Chloroethane	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1
Chromium, total	<8	<8	<8	<8	<8
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1
Cobalt, total	5.0	<.4	<.4	<.4	<.4
Copper, total	<4	<4	<4	<4	<4
Dibromochloromethane	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1	<1
Lead, total	<4	<4	<4	<4	<4
Methyl iodide	<1	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5	<5
Nickel, total	<4.0	<4.0	<4.0	<4.0	<4.0
Selenium, total	<4.0	<4.0	<4.0	<4.0	<4.0
Silver, total	<4	<4	<4	<4	<4
Styrene	<1	<1	<1	<1	<1
Tetrachloroethylene	<1	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2	<2
Toluene	<1	<1	<1	<1	<1
Total suspended solids					
Trans-1,2-dichloroethylene	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2
Zinc, total	<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 6

Analytical Data Summary for MW06-38

Constituents	Units	3/13/2014	9/18/2014	3/17/2015	9/11/2015	3/16/2016	9/8/2016	3/17/2017	9/19/2017	3/8/2018
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Antimony, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Barium, total	ug/L	207	224	209	233	208	199	196	208	205
Benzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	ug/L	<.8	<.8	<.8	.8	1.2	<.8	<.8	<.8	<.8
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	ug/L	<8	<8	<8	<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	<4.0	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Copper, total	ug/L	11.2	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Methyl iodide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Selenium, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total suspended solids	mg/L		237	14						
Trans-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	ug/L	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	10.0	8.2	<8.0	14.3	<8.0	<8.0	<8.0	<8.0	<8.0

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

Table 6

Analytical Data Summary for MW06-38

Constituents	9/24/2018	3/25/2019	9/3/2019	3/23/2020	9/4/2020	3/9/2021	9/7/2021	3/28/2022	9/14/2022	3/20/2023
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<1	<1	<1	<5	<5	<5	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	<5	<5	<5	<5	<5	<5	<5	<10	<10	<10
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Barium, total	209	199	199	208	205	202	209	193	187	184
Benzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.8	1.7	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	<.8	<.8	<.8	<.8	<.4	<.4	<.4	.5	6.3	<.4
Copper, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Methyl iodide	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Selenium, total	<4.0	4.0	<4.0	<4.0	4.4	<4.0	<4.0	<4.0	<4.0	<4.0
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4	<2	<2	<2	<2	<2	<2	<2	<2	<2
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total suspended solids										
Trans-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	<8.0	<8.0	<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 6

Analytical Data Summary for MW06-38

Constituents	9/13/2023	3/12/2024	9/30/2024
1,1,1,2-tetrachloroethane	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1
1,1-dichloroethane	<1	<1	<1
1,1-dichloroethylene	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1
1,2-dibromo-3-chloropropane	<5	<5	<5
1,2-dibromoethane	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1
1,2-dichloroethane	<1	<1	<1
1,2-dichloropropane	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1
2-butanone (mek)	<10	<10	<10
2-hexanone (mbk)	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5
Acetone	<10	<10	<10
Acrylonitrile	<5	<5	<5
Antimony, total	<2	<2	<2
Arsenic, total	<4	<4	<4
Barium, total	196	196	188
Benzene	<1	<1	<1
Beryllium, total	<4	<4	<4
Bromochloromethane	<1	<1	<1
Bromodichloromethane	<1	<1	<1
Bromoform	<1	<1	<1
Bromomethane	<1	<1	<1
Cadmium, total	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1
Carbon tetrachloride	<1	<1	<1
Chlorobenzene	<1	<1	<1
Chloroethane	<1	<1	<1
Chloroform	<1	<1	<1
Chloromethane	<1	<1	<1
Chromium, total	<8	<8	<8
Cis-1,2-dichloroethylene	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1
Cobalt, total	<.4	<.4	<.4
Copper, total	<4.0	<4.0	<4.0
Dibromochloromethane	<1	<1	<1
Dibromomethane	<1	<1	<1
Ethylbenzene	<1	<1	<1
Lead, total	<4	<4	<4
Methyl iodide	<1	<1	<1
Methylene chloride	<5	<5	<5
Nickel, total	<4	<4	<4
Selenium, total	<4.0	<4.0	<4.0
Silver, total	<4	<4	<4
Styrene	<1	<1	<1
Tetrachloroethylene	<1	<1	<1
Thallium, total	<2	<2	<2
Toluene	<1	<1	<1
Total suspended solids			
Trans-1,2-dichloroethylene	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5
Trichloroethylene	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1
Vanadium, total	<20	<20	<20
Vinyl acetate	<5	<5	<5
Vinyl chloride	<1	<1	<1
Xylenes, total	<2	<2	<2
Zinc, total	<20.0	<20.0	<20.0

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

Table 7

Analytical Data Summary for MW06-39

Constituents	Units	3/13/2014	9/18/2014	3/17/2015	9/11/2015	3/16/2016	9/8/2016	3/17/2017	9/19/2017	3/8/2018
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Antimony, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Barium, total	ug/L	200	174	187	172	207	185	193	206	216
Benzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	ug/L	<.8	<.8	<.8	<.8	1.7	<.8	<.8	<.8	<.8
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	ug/L	<8	<8	<8	<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	<4.0	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Copper, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Methyl iodide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Selenium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total suspended solids	mg/L		39	4						
Trans-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	ug/L	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	<8.0	48.5	<8.0	38.7	12.6	<8.0	<8.0	<8.0	<8.0

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

Table 7

Analytical Data Summary for MW06-39

Constituents	9/24/2018	3/25/2019	9/3/2019	3/23/2020	9/4/2020	3/9/2021	9/7/2021	3/28/2022	9/14/2022	3/20/2023
1,1,1,2-tetrachloroethane	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<1	<5	<1	<5	<5	<5	<5	<5	<5	<5
1,2-dibromoethane	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	<5	<25	<5	<5	<5	<5	<5	<10	<10	<10
2-hexanone (mbk)	<5	<25	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<25	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	<5	<25	<5	<5	<5	<5	<5	<5	<5	<5
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Barium, total	178	223	196	209	189	207	178	207	171	190
Benzene	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bromochloromethane	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethylene	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	<.8	<.8	<.8	<.8	<.4	<.4	<.4	.6	3.6	<.4
Copper, total	<4.0	<4.0	<4.0	<4.0	<4.0	4.4	<4.0	<4.0	<4.0	<4.0
Dibromochloromethane	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Methyl iodide	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	<5	<25	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4	<2	<2	<2	<2	<2	<2	<2	<2	<2
Toluene	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
Total suspended solids										
Trans-1,2-dichloroethylene	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<25	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	<5	<25	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	<8.0	<8.0	<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 7

Analytical Data Summary for MW06-39

Constituents	9/13/2023	3/12/2024	9/30/2024
1,1,1,2-tetrachloroethane	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1
1,1-dichloroethane	<1	<1	<1
1,1-dichloroethylene	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1
1,2-dibromo-3-chloropropane	<5	<5	<5
1,2-dibromoethane	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1
1,2-dichloroethane	<1	<1	<1
1,2-dichloropropane	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1
2-butanone (mek)	<10	<10	<10
2-hexanone (mbk)	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5
Acetone	<10	<10	<10
Acrylonitrile	<5	<5	<5
Antimony, total	<2	<2	<2
Arsenic, total	<4	<4	<4
Barium, total	178	174	160
Benzene	<1	<1	<1
Beryllium, total	<4	<4	<4
Bromochloromethane	<1	<1	<1
Bromodichloromethane	<1	<1	<1
Bromoform	<1	<1	<1
Bromomethane	<1	<1	<1
Cadmium, total	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1
Carbon tetrachloride	<1	<1	<1
Chlorobenzene	<1	<1	<1
Chloroethane	<1	<1	<1
Chloroform	<1	<1	<1
Chloromethane	<1	<1	<1
Chromium, total	<8	<8	<8
Cis-1,2-dichloroethylene	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1
Cobalt, total	<.4	<.4	<.4
Copper, total	<4.0	<4.0	<4.0
Dibromochloromethane	<1	<1	<1
Dibromomethane	<1	<1	<1
Ethylbenzene	<1	<1	<1
Lead, total	<4	<4	<4
Methyl iodide	<1	<1	<1
Methylene chloride	<5	<5	<5
Nickel, total	<4	<4	<4
Selenium, total	<4	<4	<4
Silver, total	<4	<4	<4
Styrene	<1	<1	<1
Tetrachloroethylene	<1	<1	<1
Thallium, total	<2	<2	<2
Toluene	<1	<1	<1
Total suspended solids			
Trans-1,2-dichloroethylene	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5
Trichloroethylene	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1
Vanadium, total	<20	<20	<20
Vinyl acetate	<5	<5	<5
Vinyl chloride	<1	<1	<1
Xylenes, total	<2	<2	<2
Zinc, total	<20.0	<20.0	<20.0

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

Table 8

Analytical Data Summary for MW09-40

Constituents	Units	3/13/2014	9/18/2014	3/17/2015	9/11/2015	3/16/2016	9/8/2016	3/17/2017	9/19/2017	3/8/2018
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Antimony, total	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Arsenic, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Barium, total	ug/L	39.4	34.0	29.2	34.9	31.4	37.1	32.6	39.7	35.1
Benzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	ug/L	<.8	<.8	<.8	<.8	<.8	<.8	<.8	1.6	<.8
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	ug/L	<8	<8	<8	<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	<4.0	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Copper, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Methyl iodide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	ug/L	<4.0	5.4	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Selenium, total	ug/L	<4.0	8.8	5.7	4.8	4.9	<4.0	<4.0	<4.0	<4.0
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total suspended solids	mg/L		126	8						
Trans-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	ug/L	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	<8	14	<8	<8	<8	<8	<8	<8	<8

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

Table 8

Analytical Data Summary for MW09-40

Constituents	9/24/2018	3/25/2019	9/3/2019	3/23/2020	9/4/2020	3/9/2021	9/7/2021	12/3/2021	3/28/2022	9/14/2022
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-dichloroethylene	<1	<1	<1	<1	<1	<1	<1		<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1		<1	<1
1,2-dibromo-3-chloropropane	<1	<1	<1	<5	<5	<5	<5		<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1	<1	<1		<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1		<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1		<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1		<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1		<1	<1
2-butanone (mek)	<5	<5	<5	<5	<5	<5	<5		<10	<10
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5	<5		<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5	<5	<5		<5	<5
Acetone	<10	<10	<10	<10	<10	<10	<10		<10	<10
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5		<5	<5
Antimony, total	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0		<2.0	<2.0
Arsenic, total	<4	<4	<4	<4	<4	<4	<4		<4	<4
Barium, total	30.2	27.3	28.2	33.2	30.6	29.6	36.8		21.4	22.7
Benzene	<1	<1	<1	<1	<1	<1	<1		<1	<1
Beryllium, total	<4	<4	<4	<4	<4	<4	<4		<4	<4
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1		<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1		<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1		<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1		<1	<1
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.8	<.8		.9	<.8
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1		<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1		<1	<1
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1		<1	<1
Chloroethane	<1	<1	<1	<1	<1	<1	<1		<1	<1
Chloroform	<1	<1	<1	<1	<1	<1	<1		<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1		<1	<1
Chromium, total	<8	<8	<8	<8	<8	<8	<8		<8	<8
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1		<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1		<1	<1
Cobalt, total	<.8	<.8	<.8	<.8	<.4	<.4	2.0		.7	3.4
Copper, total	<4	<4	<4	<4	<4	17	<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	19.4	7.5	<4.0	<4.0
Selenium, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0		<4.0	<4.0
Silver, total	<4	<4	<4	<4	<4	<4	<4		<4	<4
Styrene	<1	<1	<1	<1	<1	<1	<1		<1	<1
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1		<1	<1
Thallium, total	<4	<2	<2	<2	<2	<2	<2		<2	<2
Toluene	<1	<1	<1	<1	<1	<1	<1		<1	<1
Total suspended solids										
Trans-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1		<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1		<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5		<5	<5
Trichloroethylene	<1	<1	<1	<1	<1	<1	<1		<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1		<1	<1
Vanadium, total	<20	<20	<20	<20	<20	<20	<20		<20	<20
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5		<5	<5
Vinyl chloride	<1	<1	<1	<1	<1	<1	<1		<1	<1
Xylenes, total	<2	<2	<2	<2	<2	<2	<2		<2	<2
Zinc, total	<8	<8	<8	<20	<20	<20	<20		<20	<20

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

Table 8

Analytical Data Summary for MW09-40

Constituents	3/20/2023	9/12/2023	3/12/2024	9/30/2024
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-dichloroethylene	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1
2-butanone (mek)	<10	<10	<10	<10
2-hexanone (mbk)	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5
Acetone	<10	<10	<10	<10
Acrylonitrile	<5	<5	<5	<5
Antimony, total	2.4	<2.0	<2.0	<2.0
Arsenic, total	<4	<4	<4	<4
Barium, total	13.0	23.9	21.3	23.4
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-dichloroethylene	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1
Cobalt, total	<.4	<.4	<.4	<.4
Copper, total	<4	<4	<4	<4
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	<4.0	<4.0	<4.0	<4.0
Silver, total	<4	<4	<4	<4
Styrene	<1	<1	<1	<1
Tetrachloroethylene	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2
Toluene	<1	<1	<1	<1
Total suspended solids				
Trans-1,2-dichloroethylene	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2
Zinc, total	<20	<20	<20	<20

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

Table 9

Analytical Data Summary for MW09-42

Constituents	Units	3/16/2016	6/7/2016	9/8/2016	3/17/2017	6/8/2017	9/20/2017	5/19/2018	8/9/2018	9/24/2018
(3 4)-methylphenol	ug/L						<8			<8
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1		<1	<1		<1
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1		<1	<1		<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1		<1	<1		<1
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1		<1	<1		<1
1,1-dichloroethane	ug/L	<1	<1	<1	<1		<1	<1		<1
1,1-dichloroethylene	ug/L	<1	<1	<1	<1		<1	<1		<1
1,1-dichloropropene	ug/L						<1			<1
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1		<1	<1		<1
1,2,4,5-tetrachlorobenzene	ug/L						<8			<8
1,2,4-trichlorobenzene	ug/L						<1			<1
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1		<1	<1		<1
1,2-dibromoethane	ug/L	<1	<1	<1	<1		<1	<1		<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1		<1	<1		<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1		<1	<1		<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1		<1	<1		<1
1,2-dinitrobenzene	ug/L						<8			<8
1,3,5-trinitrobenzene	ug/L						<8			<8
1,3-dichlorobenzene	ug/L						<1			<1
1,3-dichloropropane	ug/L						<1			<1
1,3-dinitrobenzene	ug/L						<8			<8
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1		<1	<1		<1
1,4-naphthoquinone	ug/L						<8			<8
1,4-phenylenediamine	ug/L						<8			<8
1-naphthylamine	ug/L						<8			<8
2,2-dichloropropane	ug/L						<1			<1
2,3,4,6-tetrachlorophenol	ug/L						<8			<8
2,4,5-t	ug/L						<.5			<.5
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	<10	<10	<10		<10	<10		<10
Acetonitrile	ug/L						<10			<10
Acetophenone	ug/L						<8			<8
Acrolein	ug/L						<10			<10
Acrylonitrile	ug/L	<5	<5	<5	<5		<5	<5		<5
Aldrin	ug/L						<.05			<.05
Allyl chloride	ug/L						<1			<1
Alpha-bhc	ug/L						<.05			<.05
Anthracene	ug/L						<8			<8

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

Table 9

Analytical Data Summary for MW09-42

Constituents	12/20/2018	3/25/2019	9/3/2019	3/23/2020	9/4/2020
(3 4)-methylphenol					
1,1,1,2-tetrachloroethane		<1	<1	<1	<1
1,1,1-trichloroethane		<1	<1	<1	<1
1,1,2,2-tetrachloroethane		<1	<1	<1	<1
1,1,2-trichloroethane		<1	<1	<1	<1
1,1-dichloroethane		<1	<1	<1	<1
1,1-dichloroethylene		<1	<1	<1	<1
1,1-dichloropropene					
1,2,3-trichloropropane		<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene					
1,2,4-trichlorobenzene					
1,2-dibromo-3-chloropropane		<1	<1	<5	<5
1,2-dibromoethane		<1	<1	<1	<1
1,2-dichlorobenzene		<1	<1	<1	<1
1,2-dichloroethane		<1	<1	<1	<1
1,2-dichloropropane		<1	<1	<1	<1
1,2-dinitrobenzene					
1,3,5-trinitrobenzene					
1,3-dichlorobenzene					
1,3-dichloropropane					
1,3-dinitrobenzene					
1,4-dichlorobenzene		<1	<1	<1	<1
1,4-naphthoquinone					
1,4-phenylenediamine					
1-naphthylamine					
2,2-dichloropropane					
2,3,4,6-tetrachlorophenol					
2,4,5-t					
2,4,5-tp (silvex)					
2,4,5-trichlorophenol					
2,4,6-trichlorophenol					
2,4-d					
2,4-dichlorophenol					
2,4-dimethylphenol					
2,4-dinitrophenol					
2,4-dinitrotoluene					
2,6-dichlorophenol					
2,6-dinitrotoluene					
2-acetylaminofluorene					
2-butanone (mek)		<5	<5	<5	<5
2-chloronaphthalene					
2-chlorophenol					
2-hexanone (mbk)		<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
4-nitroaniline					
4-nitrophenol					
5-nitro-o-toluidine					
7,12-dimethylbenz(a)anthracene					
Acenaphthene					
Acenaphthylene					
Acetone		<10	<10	<10	<10
Acetonitrile					
Acetophenone					
Acrolein					
Acrylonitrile		<5	<5	<5	<5
Aldrin					
Allyl chloride					
Alpha-bhc					
Anthracene					

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

Table 9

Analytical Data Summary for MW09-42

Constituents	Units	3/16/2016	6/7/2016	9/8/2016	3/17/2017	6/8/2017	9/20/2017	5/19/2018	8/9/2018	9/24/2018
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	4.0	<4.0	<4.0	4.2		<4.0	6.7		<4.0
Azobenzene	ug/L						<8			<8
Barium, total	ug/L	727	829	597	759	1940	611	940	594	583
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-chloroisopropyl) ether	ug/L						<8			<8
Bis(2-ethylhexyl) phthalate	ug/L						<6			7
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	2.7	<.8	<.8	<.8		<.8	<.8		<.8
Carbon disulfide	ug/L	<1	<1	<1	<1		<1	<1		<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1		<1	<1		<1
Chlordane	ug/L						<.1			<.1
Chlorobenzene	ug/L	<1	<1	<1	<1		<1	<1		<1
Chlorobenzilate	ug/L						<8			<8
Chloroethane	ug/L	<1	<1	<1	<1		<1	<1		<1
Chloroform	ug/L	<1	<1	<1	<1		<1	<1		<1
Chloromethane	ug/L	<1	<1	<1	<1		<1	<1		<1
Chloroprene	ug/L						<1			<1
Chromium, total	ug/L	<8	<8	<8	<8		<8	<8		<8
Chrysene	ug/L						<8			<8
Cis-1,2-dichloroethylene	ug/L	<1	<1	<1	<1		<1	<1		<1
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1		<1	<1		<1
Cobalt, total	ug/L	<.8	<.8	<.8	<.8		<.8	.8		<.8
Copper, total	ug/L	<4	<4	<4	<4		<4	<4		<4
Cyanide, total	mg/L						<.005			<.005
Delta-bhc	ug/L						<.05			<.05
Diallate	ug/L						<8			<8
Dibenzo(a,h)anthracene	ug/L						<8			<8
Dibenzofuran	ug/L						<8			<8
Dibromochloromethane	ug/L	<1	<1	<1	<1		<1	<1		<1
Dibromomethane	ug/L	<1	<1	<1	<1		<1	<1		<1
Dichlorodifluoromethane	ug/L						<1			<1
Dieldrin	ug/L						<.05			<.05
Diethyl phthalate	ug/L						<8			<8
Dimethoate	ug/L						<.4			<.4
Dimethylphthalate	ug/L						<8			<8
Di-n-butyl phthalate	ug/L						<8			<8
Di-n-octyl phthalate	ug/L						<8			<8
Dinoseb	ug/L						<.5			<.5
Diphenylamine	ug/L						<8			<8
Disulfoton	ug/L						<.4			<.4
Endosulfan i	ug/L						<.05			<.05
Endosulfan ii	ug/L						<.05			<.05
Endosulfan sulfate	ug/L						<.05			<.05
Endrin	ug/L						<.05			<.05
Endrin aldehyde	ug/L						<.05			<.05
Ethyl methacrylate	ug/L						<10			<10
Ethyl methanesulfonate	ug/L						<8			<8
Ethylbenzene	ug/L	<1	<1	<1	<1		<1	<1		<1
Famphur	ug/L						<.4			<.4
Fluoranthene	ug/L						<8			<8
Fluorene	ug/L						<8			<8
Gamma-bhc (lindane)	ug/L						<.05			<.05
Heptachlor	ug/L						<.05			<.05
Heptachlor epoxide	ug/L						<.05			<.05
Hexachlorobenzene	ug/L						<.05			<.05

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

Table 9

Analytical Data Summary for MW09-42

Constituents	12/20/2018	3/25/2019	9/3/2019	3/23/2020	9/4/2020
Antimony, total		<2	<2	<2	<2
Arochlor 1016					
Arochlor 1221					
Arochlor 1232					
Arochlor 1242					
Arochlor 1248					
Arochlor 1254					
Arochlor 1260					
Arsenic, total		6.3	7.8	6.7	5.4
Azobenzene					
Barium, total		871	1090	987	801
Benzene		<1	<1	<1	<1
Benzo(a)anthracene					
Benzo(a)pyrene					
Benzo(b)fluoranthene					
Benzo(g,h,i)perylene					
Benzo(k)fluoranthene					
Benzyl alcohol					
Beryllium, total		<4	<4	<4	<4
Beta-bhc					
Bis (2-chloroethoxy) methane					
Bis(2-chloroethyl) ether					
Bis(2-chloroisopropyl) ether					
Bis(2-ethylhexyl) phthalate	<6				
Bromochloromethane		<1	<1	<1	<1
Bromodichloromethane		<1	<1	<1	<1
Bromoform		<1	<1	<1	<1
Bromomethane		<1	<1	<1	<1
Butyl benzyl phthalate					
Cadmium, total		<.8	<.8	<.8	<.8
Carbon disulfide		<1	<1	<1	<1
Carbon tetrachloride		<1	<1	<1	<1
Chlordane					
Chlorobenzene		<1	<1	<1	<1
Chlorobenzilate					
Chloroethane		<1	<1	<1	<1
Chloroform		<1	<1	<1	<1
Chloromethane		<1	<1	<1	<1
Chloroprene					
Chromium, total		<8	<8	<8	<8
Chrysene					
Cis-1,2-dichloroethylene		<1	<1	<1	<1
Cis-1,3-dichloropropene		<1	<1	<1	<1
Cobalt, total		<.8	<.8	<.8	<.4
Copper, total		<4	<4	<4	<4
Cyanide, total					
Delta-bhc					
Diallate					
Dibenzo(a,h)anthracene					
Dibenzofuran					
Dibromochloromethane		<1	<1	<1	<1
Dibromomethane		<1	<1	<1	<1
Dichlorodifluoromethane					
Dieldrin					
Diethyl phthalate					
Dimethoate					
Dimethylphthalate					
Di-n-butyl phthalate					
Di-n-octyl phthalate					
Dinoseb					
Diphenylamine					
Disulfoton					
Endosulfan i					
Endosulfan ii					
Endosulfan sulfate					
Endrin					
Endrin aldehyde					
Ethyl methacrylate					
Ethyl methanesulfonate					
Ethylbenzene		<1	<1	<1	<1
Famphur					
Fluoranthene					
Fluorene					
Gamma-bhc (lindane)					
Heptachlor					
Heptachlor epoxide					
Hexachlorobenzene					

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

Table 9

Analytical Data Summary for MW09-42

Constituents	Units	3/16/2016	6/7/2016	9/8/2016	3/17/2017	6/8/2017	9/20/2017	5/19/2018	8/9/2018	9/24/2018
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	<4	<4	<4		<4	<4		<4
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
Parathion	ug/L						<.4			<.4
P-dimethylaminoazobenzene	ug/L						<8			<8
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	<8		<4
Styrene	ug/L	<1	<1	<1	<1		<1	<1		<1
Sulfide, total	mg/L						<1.0			<.1
Tetrachloroethylene	ug/L	<1	<1	<1	<1		<1	<1		<1
Thallium, total	ug/L	<4	<4	<4	<4		<4	<4		<4
Thionazin	ug/L						<.4			<.4
Tin, total	ug/L						<20			<20
Toluene	ug/L	<1	<1	<1	<1		<1	<1		<1
Toxaphene	ug/L						<.2			<.2
Trans-1,2-dichloroethylene	ug/L	<1	<1	<1	<1		<1	<1		<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1		<1	<1		<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5		<5	<5		<5
Trichloroethylene	ug/L	<1	<1	<1	<1		<1	<1		<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1		<1	<1		<1
Vanadium, total	ug/L	<20	<20	<20	<20		<20	<20		<20
Vinyl acetate	ug/L	<5	<5	<5	<5		<5	<5		<5
Vinyl chloride	ug/L	<1	<1	<1	<1		<1	<1		<1
Xylenes, total	ug/L	<2	<2	<2	<2		<2	<2		<2
Zinc, total	ug/L	<8.0	10.7	<8.0	<8.0		<8.0	12.8		<8.0

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

Table 9

Analytical Data Summary for MW09-42

Constituents	12/20/2018	3/25/2019	9/3/2019	3/23/2020	9/4/2020
Hexachlorobutadiene					
Hexachlorocyclopentadiene					
Hexachloroethane					
Hexachloropropene					
Indeno(1,2,3-cd)pyrene					
Isobutanol					
Isodrin					
Isophorone					
Isosafrole					
Kepone					
Lead, total		<4	<4	<4	<4
Mercury, total					
Methacrylonitrile					
Methapyrilene					
Methoxychlor					
Methyl iodide		<1	<1	<1	<1
Methyl methacrylate					
Methyl methanesulfonate					
Methyl parathion					
Methylene chloride		<5	<5	<5	<5
Naphthalene					
Nickel, total		<4	<4	<4	<4
Nitrobenzene					
N-nitrosodiethylamine					
N-nitrosodimethylamine					
N-nitrosodi-n-butylamine					
N-nitroso-di-n-propylamine					
N-nitrosodiphenylamine					
N-nitrosomethylethylamine					
N-nitrosopiperidine					
N-nitrosopyrrolidine					
O,o,o-triethyl phosphorothioate					
O-toluidine					
Parathion					
P-dimethylaminoazobenzene					
Pentachlorobenzene					
Pentachloronitrobenzene (pcnb)					
Pentachlorophenol					
Phenacetin					
Phenanthrene					
Phenol					
Phorate					
Pronamide					
Propionitrile					
Pyrene					
Safrole					
Selenium, total		<4	<4	<4	<4
Silver, total		<4	<4	<4	<4
Styrene		<1	<1	<1	<1
Sulfide, total					
Tetrachloroethylene		<1	<1	<1	<1
Thallium, total		<2	<2	<2	<2
Thionazin					
Tin, total					
Toluene		<1	<1	<1	<1
Toxaphene					
Trans-1,2-dichloroethylene		<1	<1	<1	<1
Trans-1,3-dichloropropene		<1	<1	<1	<1
Trans-1,4-dichloro-2-butene		<5	<5	<5	<5
Trichloroethylene		<1	<1	<1	<1
Trichlorofluoromethane		<1	<1	<1	<1
Vanadium, total		<20	<20	<20	<20
Vinyl acetate		<5	<5	<5	<5
Vinyl chloride		<1	<1	<1	<1
Xylenes, total		<2	<2	<2	<2
Zinc, total		<8.0	<8.0	<20.0	<20.0

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

Table 10

Analytical Data Summary for MW21-43

Constituents	Units	3/28/2022	9/14/2022	3/20/2023	9/12/2023	3/12/2024	9/30/2024
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L	<5	<5	<5	<5	<5	<5
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1
2-butanone (mek)	ug/L	<10	<10	<10	<10	<10	<10
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5	<5	<5
Acetone	ug/L	<10	<10	<10	<10	<10	<10
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5
Antimony, total	ug/L	<2	<2	<2	<2	<2	<2
Arsenic, total	ug/L	<4.0	<4.0	6.5	10.7	6.4	9.8
Barium, total	ug/L	296	195	190	307	226	177
Benzene	ug/L	<1	<1	<1	<1	<1	<1
Beryllium, total	ug/L	<4	<4	<4	<4	<4	<4
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1
Cadmium, total	ug/L	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<1	<1	<1	<1	<1	<1
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1
Chromium, total	ug/L	<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	2.8	3.2	<.4	.7	<.4	.4
Copper, total	ug/L	<4.0	5.5	4.6	<4.0	4.0	<4.0
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1
Lead, total	ug/L	<4	<4	<4	<4	<4	<4
Methyl iodide	ug/L	<1	<1	<1	<1	<1	<1
Methylene chloride	ug/L	<5	<5	<5	<5	<5	<5
Nickel, total	ug/L	9.8	6.2	4.2	9.9	6.4	8.1
Selenium, total	ug/L	<4	<4	<4	<4	<4	<4
Silver, total	ug/L	<4	<4	<4	<4	<4	<4
Styrene	ug/L	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<2	<2	<2	<2	<2	<2
Toluene	ug/L	<1	<1	<1	<1	<1	<1
Trans-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5	<5
Trichloroethylene	ug/L	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1
Vanadium, total	ug/L	<20	<20	<20	<20	<20	<20
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1
Xylenes, total	ug/L	<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	<20	<20	<20	<20	<20	<20

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

Table 11

Analytical Data Summary for MW88-2

Constituents	Units	3/13/2014	9/18/2014	11/13/2014	3/17/2015	6/29/2015	9/11/2015	3/16/2016	9/8/2016	3/17/2017
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Antimony, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	ug/L	10.5	16.1	7.4	<4.0	<4.0	<4.0	<4.0	6.6	<4.0
Barium, total	ug/L	426.0	661.0	751.0	595.0	451.0	296.0	95.8	411.0	179.0
Benzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	ug/L	<.8	<.8	<.8	<.8	<.8	<.8	4.6	<.8	1.1
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	ug/L	<8	<8	<8	<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	<4.0	<.8	<.8	<.8	<.8	<.8	<.8	<.8	.8
Copper, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Methyl iodide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	5.1	<4.0	<4.0
Selenium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total suspended solids	mg/L		595		39					
Trans-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	ug/L	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	<8.0	<8.0	<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 11

Analytical Data Summary for MW88-2

Constituents	9/19/2017	3/8/2018	9/24/2018	3/25/2019	9/3/2019	3/23/2020	9/4/2020	3/9/2021	3/28/2022	9/14/2022
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<1	<1	<1	<1	<1	<5	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	<5	<5	<5	<5	<5	<5	<5	<5	<10	<10
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	<4.0	6.1	24.3	11.0	10.6	<4.0	<4.0	10.4	<4.0	<4.0
Barium, total	684.0	632.0	371.0	273.0	97.7	75.7	623.0	874.0	274.0	376.0
Benzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	2.5	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	<.8	<.8	<.8	1.0	1.5	<.8	<.4	<.4	.9	2.6
Copper, total	9.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	33.6	<4.0	<4.0
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Methyl iodide	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	<4.0	<4.0	<4.0	4.6	8.1	<4.0	<4.0	<4.0	<4.0	<4.0
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total suspended solids										
Trans-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	13.1	<8.0	<8.0	39.1	23.6	<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 11

Analytical Data Summary for MW88-2

Constituents	3/20/2023	9/12/2023	3/12/2024	9/30/2024
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-dichloroethylene	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1
2-butanone (mek)	<10	<10	<10	<10
2-hexanone (mbk)	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5
Acetone	<10	<10	<10	<10
Acrylonitrile	<5	<5	<5	<5
Antimony, total	<2	<2	<2	<2
Arsenic, total	<4.0	5.1	12.7	19.3
Barium, total	152.0	287.0	270.0	357.0
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-dichloroethylene	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1
Cobalt, total	.8	.4	.8	<.4
Copper, total	<4.0	<4.0	<4.0	<4.0
Dibromochloromethane	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1
Lead, total	<4	<4	<4	<4
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
Styrene	<1	<1	<1	<1
Tetrachloroethylene	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2
Toluene	<1	<1	<1	<1
Total suspended solids				
Trans-1,2-dichloroethylene	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2
Zinc, total	<20.0	<20.0	<20.0	<20.0

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

Table 12

Analytical Data Summary for MW88-3

Constituents	Units	3/13/2014	9/18/2014	3/17/2015	9/11/2015	3/16/2016	9/8/2016	3/17/2017	6/8/2017	9/19/2017
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-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1		<1
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1		<1
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1		<1
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1		<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1		<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1		<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1		<1
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1		<1
2-butanone (mek)	ug/L	<5	<5	<5	<5	<5	<5	<5		<5
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5	<5	<5		<5
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5	<5	<5	<5		<5
Acetone	ug/L	<10	<10	<10	<10	<10	<10	<10		<10
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5		<5
Antimony, total	ug/L	<2	<2	<2	<2	<2	<2	<2		<2
Arsenic, total	ug/L	<4.0	<4.0	13.5	<4.0	<4.0	<4.0	9.6		<4.0
Barium, total	ug/L	129.0	107.0	167.0	97.4	111.0	113.0	169.0		158.0
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	1.2	<.8	<.8	1.8	<.8	<.8		<.8
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1	<1		<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1		<1
Chlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1		<1
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1		<1
Chloroform	ug/L	<1	<1	<1	<1	<1	<1	<1		<1
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1		<1
Chromium, total	ug/L	<8	<8	<8	<8	<8	<8	<8		<8
Cis-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1		<1
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1		<1
Cobalt, total	ug/L	<4.0	.9	1.1	<.8	<.8	<.8	1.8	.9	2.2
Copper, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0		<4.0
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1		<1
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	6		<4
Selenium, total	ug/L	<4	<4	<4	<4	<4	<4	<4		<4
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4		<4
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1		<1
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1		<1
Thallium, total	ug/L	<4	<4	<4	<4	<4	<4	<4		<4
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1		<1
Total suspended solids	mg/L		408	81						
Trans-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1		<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1		<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5	<5	<5		<5
Trichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1		<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1		<1
Vanadium, total	ug/L	<20	<20	<20	<20	<20	<20	<20		<20
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5		<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1		<1
Xylenes, total	ug/L	<2	<2	<2	<2	<2	<2	<2		<2
Zinc, total	ug/L	<8.0	13.3	<8.0	<8.0	<8.0	<8.0	<8.0		<8.0

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

Table 12

Analytical Data Summary for MW88-3

Constituents	3/8/2018	9/24/2018	3/25/2019	9/3/2019	3/23/2020	9/4/2020	3/9/2021	9/7/2021	3/28/2022	9/14/2022
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<1	<1	<1	<1	<5	<5	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	<5	<5	<5	<5	<5	<5	<5	<5	<10	<10
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Barium, total	155.0	123.0	127.0	150.0	145.0	128.0	139.0	155.0	153.0	155.0
Benzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	<.8	.8	<.8	<.8	<.8	<.4	<.4	.8	.4	6.8
Copper, total	15.4	<4.0	<4.0	<4.0	<4.0	<4.0	13.0	<4.0	4.7	<4.0
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Methyl iodide	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4	<4	<2	<2	<2	<2	<2	<2	<2	<2
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total suspended solids										
Trans-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	13.2	<8.0	<8.0	<8.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 12

Analytical Data Summary for MW88-3

Constituents	3/20/2023	9/12/2023	3/12/2024	9/30/2024
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-dichloroethylene	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1
2-butanone (mek)	<10	<10	<10	<10
2-hexanone (mbk)	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5
Acetone	<10	<10	<10	<10
Acrylonitrile	<5	<5	<5	<5
Antimony, total	<2	<2	<2	<2
Arsenic, total	<4.0	<4.0	<4.0	<4.0
Barium, total	129.0	126.0	134.0	136.0
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	5.6
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-dichloroethylene	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1
Cobalt, total	<.4	.4	<.4	<.4
Copper, total	<4.0	<4.0	18.5	<4.0
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	<4	<4	<4
Selenium, total	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4
Styrene	<1	<1	<1	<1
Tetrachloroethylene	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2
Toluene	<1	<1	<1	<1
Total suspended solids				
Trans-1,2-dichloroethylene	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2
Zinc, total	<20.0	<20.0	<20.0	<20.0

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

Table 13

Analytical Data Summary for MW91-10

Constituents	Units	3/13/2014	9/18/2014	3/17/2015	9/11/2015	3/16/2016	9/8/2016	3/17/2017	9/19/2017	3/8/2018
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Antimony, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Barium, total	ug/L	97.6	92.6	58.1	79.8	71.9	72.6	68.5	72.6	68.3
Benzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	ug/L	<.8	<.8	<.8	.8	2.6	<.8	.9	<.8	<.8
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	ug/L	<8	<8	<8	<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	7.6	<.8	1.2	<.8	<.8	<.8	<.8	<.8	<.8
Copper, total	ug/L	12.2	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Methyl iodide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	ug/L	10.4	<4.0	6.8	<4.0	<4.0	<4.0	<4.0	5.4	<4.0
Selenium, total	ug/L	<4.0	<4.0	4.3	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total suspended solids	mg/L		25	33						
Trans-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	ug/L	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	28.6	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0

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

Table 13

Analytical Data Summary for MW91-10

Constituents	9/24/2018	3/25/2019	9/3/2019	3/23/2020	9/4/2020	3/9/2021	9/7/2021	3/28/2022	9/14/2022	3/20/2023
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<1	<1	<1	<5	<5	<5	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	<5	<5	<5	<5	<5	<5	<5	<10	<10	<10
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Barium, total	62.0	65.0	70.7	66.5	51.1	46.6	50.0	43.8	44.5	39.2
Benzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	<.8	<.8	<.8	<.8	<.4	<.4	<.4	<.4	2.3	<.4
Copper, total	<4.0	<4.0	<4.0	<4.0	<4.0	29.0	<4.0	<4.0	<4.0	<4.0
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Methyl iodide	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Selenium, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	4.0	<4.0
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4	<2	<2	<2	<2	<2	<2	<2	<2	<2
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total suspended solids										
Trans-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	<8.0	<8.0	<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 13

Analytical Data Summary for MW91-10

Constituents	9/12/2023	3/12/2024	9/30/2024
1,1,1,2-tetrachloroethane	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1
1,1-dichloroethane	<1	<1	<1
1,1-dichloroethylene	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1
1,2-dibromo-3-chloropropane	<5	<5	<5
1,2-dibromoethane	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1
1,2-dichloroethane	<1	<1	<1
1,2-dichloropropane	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1
2-butanone (mek)	<10	<10	<10
2-hexanone (mbk)	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5
Acetone	<10	<10	<10
Acrylonitrile	<5	<5	<5
Antimony, total	<2	<2	<2
Arsenic, total	<4	<4	<4
Barium, total	45.4	40.7	39.8
Benzene	<1	<1	<1
Beryllium, total	<4	<4	<4
Bromochloromethane	<1	<1	<1
Bromodichloromethane	<1	<1	<1
Bromoform	<1	<1	<1
Bromomethane	<1	<1	<1
Cadmium, total	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1
Carbon tetrachloride	<1	<1	<1
Chlorobenzene	<1	<1	<1
Chloroethane	<1	<1	<1
Chloroform	<1	<1	<1
Chloromethane	<1	<1	<1
Chromium, total	<8	<8	<8
Cis-1,2-dichloroethylene	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1
Cobalt, total	<.4	<.4	<.4
Copper, total	<4.0	<4.0	<4.0
Dibromochloromethane	<1	<1	<1
Dibromomethane	<1	<1	<1
Ethylbenzene	<1	<1	<1
Lead, total	<4	<4	<4
Methyl iodide	<1	<1	<1
Methylene chloride	<5	<5	<5
Nickel, total	<4.0	<4.0	<4.0
Selenium, total	<4.0	<4.0	4.4
Silver, total	<4	<4	<4
Styrene	<1	<1	<1
Tetrachloroethylene	<1	<1	<1
Thallium, total	<2	<2	<2
Toluene	<1	<1	<1
Total suspended solids			
Trans-1,2-dichloroethylene	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5
Trichloroethylene	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1
Vanadium, total	<20	<20	<20
Vinyl acetate	<5	<5	<5
Vinyl chloride	<1	<1	<1
Xylenes, total	<2	<2	<2
Zinc, total	<20.0	<20.0	<20.0

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

Table 14

Analytical Data Summary for MW91-8

Constituents	Units	3/13/2014	9/19/2014	11/13/2014	3/17/2015	6/29/2015	9/11/2015	3/16/2016	6/7/2016	9/8/2016
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<2	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<2	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<2	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<2	<1
1,1-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<2	<1
1,1-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<2	<1
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<2	<1
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<2	<1
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<2	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<2	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<2	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<2	<1
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<2	<1
2-butanone (mek)	ug/L	<5	<5	<5	<5	<5	<5	<5	<10	<5
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<10	<5
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<10	<5
Acetone	ug/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20.0	<10.0
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5	<10	<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	83.4	84.7	106.0	102.0	97.8	104.0	103.0		147.0
Benzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<2	<1
Beryllium, total	ug/L	<4	<4	<4	<4	<4	<4	<4		<4
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<2	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<2	<1
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<2	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<2	<1
Cadmium, total	ug/L	<.8	<.8	<.8	2.3	<.8	2.4	1.4		<.8
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1	<1	<2	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<2	<1
Chlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<2	<1
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<2	<1
Chloroform	ug/L	<1	<1	<1	<1	<1	<1	<1	<2	<1
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<2	<1
Chromium, total	ug/L	<8	<8	<8	<8	<8	<8	<8		<8
Cis-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<2	<1
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<2	<1
Cobalt, total	ug/L	<4.0	<.8	<.8	<.8	<.8	<.8	<.8		<.8
Copper, total	ug/L	<4	<4	<4	<4	<4	<4	<4		<4
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<2	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<2	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<2	<1
Lead, total	ug/L	<4	<4	<4	<4	<4	<4	<4		<4
Methyl iodide	ug/L	<1	<1	<1	<1	<1	<1	<1	<2	<1
Methylene chloride	ug/L	<5	<5	<5	<5	<5	<5	<5	<10	<5
Nickel, total	ug/L	<4	<4	<4	<4	<4	<4	<4		<4
Selenium, total	ug/L	4.3	5.1	<4.0	<4.0	<4.0	<4.0	<4.0		<4.0
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4		<4
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<2	<1
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<2	<1
Thallium, total	ug/L	<4	<4	<4	<4	<4	<4	<4		<4
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<2	<1
Total suspended solids	mg/L		28		14					
Trans-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<2	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<2	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5	<5	33	<10	<5
Trichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<2	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<2	<1
Vanadium, total	ug/L	<20	<20	<20	<20	<20	<20	<20		<20
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5	<10	<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<2	<1
Xylenes, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<4	<2
Zinc, total	ug/L	<8.0	<8.0	<20.0	<8.0	<8.0	<8.0	<8.0		<8.0

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

Table 14

Analytical Data Summary for MW91-8

Constituents	3/17/2017	9/19/2017	12/1/2017	3/8/2018	9/24/2018	3/25/2019	9/3/2019	3/23/2020	9/4/2020	3/9/2021
1,1,1,2-tetrachloroethane	<1	<1		<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1		<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1		<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1		<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1		<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	<1	<1		<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1		<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<1	<1		<1	<1	<1	<1	<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	<10.0	12.4	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Acrylonitrile	<5	<5		<5	<5	<5	<5	<5	<5	<5
Antimony, total	<2	<2		<2	<2	<2	<2	<2	<2	<2
Arsenic, total	<4	<4		<4	<4	<4	<4	<4	<4	<4
Barium, total	93.5	108.0		96.0	96.9	88.4	103.0	92.9	95.3	90.7
Benzene	<1	<1		<1	<1	<1	<1	<1	<1	<1
Beryllium, total	<4	<4		<4	<4	<4	<4	<4	<4	<4
Bromochloromethane	<1	<1		<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1		<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1		<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1		<1	<1	<1	<1	<1	<1	<1
Cadmium, total	1.3	2.2		<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	<1	<1		<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1		<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	<1	<1		<1	<1	<1	<1	<1	<1	<1
Chloroethane	<1	<1		<1	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1		<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1		<1	<1	<1	<1	<1	<1	<1
Chromium, total	<8	<8		<8	<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethylene	<1	<1		<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1		<1	<1	<1	<1	<1	<1	<1
Cobalt, total	<.8	<.8		<.8	<.8	<.8	<.8	<.8	<.4	<.4
Copper, total	<4	<4		<4	<4	<4	<4	<4	<4	<4
Dibromochloromethane	<1	<1		<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1		<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	<1	<1		<1	<1	<1	<1	<1	<1	<1
Lead, total	<4	<4		<4	<4	<4	<4	<4	<4	<4
Methyl iodide	<1	<1		<1	<1	<1	<1	<1	<1	<1
Methylene chloride	<5	<5		<5	<5	<5	<5	<5	<5	<5
Nickel, total	<4	<4		<4	<4	<4	<4	<4	<4	<4
Selenium, total	<4.0	<4.0		<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Silver, total	<4	<4		<4	<4	<4	<4	<4	<4	<4
Styrene	<1	<1		<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	<1	<1		<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4	<4		<4	<4	<2	<2	<2	<2	<2
Toluene	<1	<1		<1	<1	<1	<1	<1	<1	<1
Total suspended solids										
Trans-1,2-dichloroethylene	<1	<1		<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1		<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5		<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	<1	<1		<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1		<1	<1	<1	<1	<1	<1	<1
Vanadium, total	<20	<20		<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	<5	<5		<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1		<1	<1	<1	<1	<1	<1	<1
Xylenes, total	<2	<2		<2	<2	<2	<2	<2	<2	<2
Zinc, total	8.7	<8.0		<8.0	<8.0	<8.0	<8.0	<20.0	<20.0	<20.0

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

Table 14

Analytical Data Summary for MW91-8

Constituents	9/7/2021	3/28/2022	9/14/2022	3/20/2023	9/13/2023	3/12/2024	9/30/2024
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<5	<5	<5	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	<5	<10	<10	<10	<10	<10	<10
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5	<5	<5
Acetone	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5
Antimony, total	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	<4	<4	<4	<4	<4	<4	<4
Barium, total	118.0	101.0	125.0	109.0	123.0	107.0	109.0
Benzene	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	<4	<4	<4	<4	<4	<4	<4
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1
Chloroethane	<1	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1
Chromium, total	<8	<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	<.4	<.4	2.7	<.4	<.4	<.4	<.4
Copper, total	<4	<4	<4	<4	<4	<4	<4
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1
Lead, total	<4	<4	<4	<4	<4	<4	<4
Methyl iodide	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5	<5	<5	<5
Nickel, total	<4	<4	<4	<4	<4	<4	<4
Selenium, total	4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Silver, total	<4	<4	<4	<4	<4	<4	<4
Styrene	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2	<2	<2	<2
Toluene	<1	<1	<1	<1	<1	<1	<1
Total suspended solids							
Trans-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2	<2	<2
Zinc, total	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 15

Analytical Data Summary for MW94-18

Constituents	Units	3/13/2014	9/18/2014	3/17/2015	9/11/2015	3/16/2016	9/8/2016	3/17/2017	9/19/2017	3/8/2018
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Antimony, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Barium, total	ug/L	41.5	47.6	33.1	42.9	42.3	42.3	37.7	42.4	29.6
Benzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	ug/L	<.8	<.8	<.8	<.8	3.1	<.8	<.8	<.8	<.8
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	ug/L	<8	<8	<8	<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	<4.0	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Copper, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Methyl iodide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Selenium, total	ug/L	<4.0	<4.0	4.4	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total suspended solids	mg/L		43	10						
Trans-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	ug/L	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0

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

Table 15

Analytical Data Summary for MW94-18

Constituents	9/24/2018	3/25/2019	9/3/2019	3/23/2020	9/4/2020	3/9/2021	9/7/2021	3/28/2022	9/14/2022	3/20/2023
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<1	<1	<1	<5	<5	<5	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	<5	<5	<5	<5	<5	<5	<5	<10	<10	<10
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Barium, total	32.0	26.2	31.3	<4.0	25.6	23.6	31.4	23.3	31.6	22.4
Benzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	<.8	<.8	<.8	<.8	<.4	<.4	<.4	<.4	2.1	<.4
Copper, total	<4.0	<4.0	<4.0	<4.0	<4.0	46.2	<4.0	<4.0	<4.0	<4.0
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Methyl iodide	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Selenium, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	4.3	<4.0	<4.0	4.0
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4	<2	<2	<2	<2	<2	<2	<2	<2	<2
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total suspended solids										
Trans-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	<8.0	<8.0	16.4	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 15

Analytical Data Summary for MW94-18

Constituents	9/12/2023	3/12/2024	9/30/2024
1,1,1,2-tetrachloroethane	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1
1,1-dichloroethane	<1	<1	<1
1,1-dichloroethylene	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1
1,2-dibromo-3-chloropropane	<5	<5	<5
1,2-dibromoethane	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1
1,2-dichloroethane	<1	<1	<1
1,2-dichloropropane	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1
2-butanone (mek)	<10	<10	<10
2-hexanone (mbk)	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5
Acetone	<10	<10	<10
Acrylonitrile	<5	<5	<5
Antimony, total	<2	<2	<2
Arsenic, total	<4	<4	<4
Barium, total	39.7	24.4	27.6
Benzene	<1	<1	<1
Beryllium, total	<4	<4	<4
Bromochloromethane	<1	<1	<1
Bromodichloromethane	<1	<1	<1
Bromoform	<1	<1	<1
Bromomethane	<1	<1	<1
Cadmium, total	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1
Carbon tetrachloride	<1	<1	<1
Chlorobenzene	<1	<1	<1
Chloroethane	<1	<1	<1
Chloroform	<1	<1	<1
Chloromethane	<1	<1	<1
Chromium, total	<8	<8	<8
Cis-1,2-dichloroethylene	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1
Cobalt, total	<.4	<.4	<.4
Copper, total	<4.0	5.7	<4.0
Dibromochloromethane	<1	<1	<1
Dibromomethane	<1	<1	<1
Ethylbenzene	<1	<1	<1
Lead, total	<4	<4	<4
Methyl iodide	<1	<1	<1
Methylene chloride	<5	<5	<5
Nickel, total	<4	<4	<4
Selenium, total	<4.0	<4.0	<4.0
Silver, total	<4	<4	<4
Styrene	<1	<1	<1
Tetrachloroethylene	<1	<1	<1
Thallium, total	<2	<2	<2
Toluene	<1	<1	<1
Total suspended solids			
Trans-1,2-dichloroethylene	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5
Trichloroethylene	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1
Vanadium, total	<20	<20	<20
Vinyl acetate	<5	<5	<5
Vinyl chloride	<1	<1	<1
Xylenes, total	<2	<2	<2
Zinc, total	<20.0	<20.0	<20.0

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

Table 16

Analytical Data Summary for MW94-19

Constituents	Units	3/13/2014	9/18/2014	3/17/2015	9/11/2015	3/16/2016	9/8/2016	3/17/2017	9/19/2017	3/8/2018
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Antimony, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Barium, total	ug/L	174.0	93.2	82.0	66.0	81.7	75.8	96.3	108.0	83.3
Benzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	ug/L	3.2	<.8	<.8	.8	1.0	<.8	3.1	<.8	<.8
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	ug/L	<8	<8	<8	<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	5.7	<.8	<.8	1.0	.9	<.8	1.0	1.3	<.8
Copper, total	ug/L	21.3	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Methyl iodide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	ug/L	39.7	4.2	<4.0	6.0	10.5	6.2	10.0	8.1	<4.0
Selenium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total suspended solids	mg/L		207	29						
Trans-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	ug/L	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	49.3	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0

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

Table 16

Analytical Data Summary for MW94-19

Constituents	9/24/2018	3/25/2019
1,1,1,2-tetrachloroethane	<1	<1
1,1,1-trichloroethane	<1	<1
1,1,2,2-tetrachloroethane	<1	<1
1,1,2-trichloroethane	<1	<1
1,1-dichloroethane	<1	<1
1,1-dichloroethylene	<1	<1
1,2,3-trichloropropane	<1	<1
1,2-dibromo-3-chloropropane	<1	<1
1,2-dibromoethane	<1	<1
1,2-dichlorobenzene	<1	<1
1,2-dichloroethane	<1	<1
1,2-dichloropropane	<1	<1
1,4-dichlorobenzene	<1	<1
2-butanone (mek)	<5	<5
2-hexanone (mbk)	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5
Acetone	<10	<10
Acrylonitrile	<5	<5
Antimony, total	<2	<2
Arsenic, total	<4	<4
Barium, total	86.7	84.3
Benzene	<1	<1
Beryllium, total	<4	<4
Bromochloromethane	<1	<1
Bromodichloromethane	<1	<1
Bromoform	<1	<1
Bromomethane	<1	<1
Cadmium, total	<.8	<.8
Carbon disulfide	<1	<1
Carbon tetrachloride	<1	<1
Chlorobenzene	<1	<1
Chloroethane	<1	<1
Chloroform	<1	<1
Chloromethane	<1	<1
Chromium, total	<8	<8
Cis-1,2-dichloroethylene	<1	<1
Cis-1,3-dichloropropene	<1	<1
Cobalt, total	<.8	<.8
Copper, total	<4.0	<4.0
Dibromochloromethane	<1	<1
Dibromomethane	<1	<1
Ethylbenzene	<1	<1
Lead, total	<4	<4
Methyl iodide	<1	<1
Methylene chloride	<5	<5
Nickel, total	<4.0	8.5
Selenium, total	<4	<4
Silver, total	<4	<4
Styrene	<1	<1
Tetrachloroethylene	<1	<1
Thallium, total	<4	<2
Toluene	<1	<1
Total suspended solids		
Trans-1,2-dichloroethylene	<1	<1
Trans-1,3-dichloropropene	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5
Trichloroethylene	<1	<1
Trichlorofluoromethane	<1	<1
Vanadium, total	<20	<20
Vinyl acetate	<5	<5
Vinyl chloride	<1	<1
Xylenes, total	<2	<2
Zinc, total	<8.0	<8.0

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

Table 17

Analytical Data Summary for MW96-21

Constituents	Units	3/14/2014	9/18/2014	3/17/2017	9/20/2017	3/8/2018	9/24/2018	12/20/2018	3/25/2019
(3 4)-methylphenol	ug/L				<8		<8		
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1		<1
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1		<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1		<1
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1		<1
1,1-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1		<1
1,1-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1		<1
1,1-dichloropropene	ug/L				<1		<1		
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1	<1		<1
1,2,4,5-tetrachlorobenzene	ug/L				<8		<8		
1,2,4-trichlorobenzene	ug/L				<1		<1		
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1	<1	<1		<1
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1		<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1		<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1		<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1		<1
1,2-dinitrobenzene	ug/L				<8		<8		
1,3,5-trinitrobenzene	ug/L				<8		<8		
1,3-dichlorobenzene	ug/L				<1		<1		
1,3-dichloropropane	ug/L				<1		<1		
1,3-dinitrobenzene	ug/L				<8		<8		
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1		<1
1,4-naphthoquinone	ug/L				<8		<8		
1,4-phenylenediamine	ug/L				<8		<8		
1-naphthylamine	ug/L				<8		<8		
2,2-dichloropropane	ug/L				<1		<1		
2,3,4,6-tetrachlorophenol	ug/L				<8		<8		
2,4,5-t	ug/L				<.5		<.5		
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	<10	<10	<10	<10	<10		<10
Acetonitrile	ug/L				<10		<10		
Acetophenone	ug/L				<8		<8		
Acrolein	ug/L				<10		<10		
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5		<5
Aldrin	ug/L				<.05		<.05		
Allyl chloride	ug/L				<1		<1		
Alpha-bhc	ug/L				<.05		<.05		
Anthracene	ug/L				<8		<8		

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

Table 17

Analytical Data Summary for MW96-21

Constituents	9/3/2019	3/23/2020	9/4/2020	3/9/2021	9/7/2021	3/28/2022	9/14/2022	3/20/2023	9/12/2023
(3 4)-methylphenol									<8
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<5	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<5	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<5	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<5	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1	<5	<1	<1	<1
1,1-dichloroethylene	<1	<1	<1	<1	<1	<5	<1	<1	<1
1,1-dichloropropene									<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<5	<1	<1	<1
1,2,4,5-tetrachlorobenzene									<8
1,2,4-trichlorobenzene									<1
1,2-dibromo-3-chloropropane	<1	<5	<5	<5	<5	<25	<5	<5	<1
1,2-dibromoethane	<1	<1	<1	<1	<1	<5	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<5	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<5	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<5	<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	<5	<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	<50	<10	<10	<5
2-chloronaphthalene									<8
2-chlorophenol									<8
2-hexanone (mbk)	<5	<5	<5	<5	<5	<25	<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	<25	<5	<5	<5
4-nitroaniline									<8
4-nitrophenol									<8
5-nitro-o-toluidine									<8
7,12-dimethylbenz(a)anthracene									<8
Acenaphthene									<8
Acenaphthylene									<8
Acetone	<10	<10	<10	<10	<10	<50	<10	<10	<10
Acetonitrile									<10
Acetophenone									<8
Acrolein									<10
Acrylonitrile	<5	<5	<5	<5	<5	<25	<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 17

Analytical Data Summary for MW96-21

Constituents	3/12/2024	9/30/2024
(3 4)-methylphenol	<8	
1,1,1,2-tetrachloroethane	<1	<1
1,1,1-trichloroethane	<1	<1
1,1,2,2-tetrachloroethane	<1	<1
1,1,2-trichloroethane	<1	<1
1,1-dichloroethane	<1	<1
1,1-dichloroethylene	<1	<1
1,1-dichloropropene	<1	
1,2,3-trichloropropane	<1	<1
1,2,4,5-tetrachlorobenzene	<8	
1,2,4-trichlorobenzene	<1	
1,2-dibromo-3-chloropropane	<1	<5
1,2-dibromoethane	<1	<1
1,2-dichlorobenzene	<1	<1
1,2-dichloroethane	<1	<1
1,2-dichloropropane	<1	<1
1,2-dinitrobenzene	<8	
1,3,5-trinitrobenzene	<8	
1,3-dichlorobenzene	<1	
1,3-dichloropropane	<1	
1,3-dinitrobenzene	<8	
1,4-dichlorobenzene	<1	<1
1,4-naphthoquinone	<8	
1,4-phenylenediamine	<8	
1-naphthylamine	<8	
2,2-dichloropropane	<1	
2,3,4,6-tetrachlorophenol	<8	
2,4,5-t	<.5	
2,4,5-tp (silvex)	<.5	
2,4,5-trichlorophenol	<8	
2,4,6-trichlorophenol	<8	
2,4-d	<2	
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
2-chloronaphthalene	<8	
2-chlorophenol	<8	
2-hexanone (mbk)	<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
4-nitroaniline	<8	
4-nitrophenol	<8	
5-nitro-o-toluidine	<8	
7,12-dimethylbenz(a)anthracene	<8	
Acenaphthene	<8	
Acenaphthylene	<8	
Acetone	<10	<10
Acetonitrile	<10	
Acetophenone	<8	
Acrolein	<10	
Acrylonitrile	<5	<5
Aldrin	<.05	
Allyl chloride	<1	
Alpha-bhc	<.05	
Anthracene	<8	

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

Table 17

Analytical Data Summary for MW96-21

Constituents	Units	3/14/2014	9/18/2014	3/17/2017	9/20/2017	3/8/2018	9/24/2018	12/20/2018	3/25/2019
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	7.1	30.7	8.8	13.1	12.7		13.6	11.7
Azobenzene	ug/L				<8		<8		
Barium, total	ug/L	238	441	196	285	267		245	267
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	<4.0	<4.0	<4.0	<4.0	<4.0		<4.0	<4.0
Beta-bhc	ug/L				<.05		<.05		
Bis (2-chloroethoxy) methane	ug/L				<8		<8		
Bis(2-chloroethyl) ether	ug/L				<8		<8		
Bis(2-chloroisopropyl) ether	ug/L				<8		<8		
Bis(2-ethylhexyl) phthalate	ug/L				<6		<6		
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1		<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	2.5	<.8	<.8		<.8	<.8
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1		<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1		<1
Chlordane	ug/L				<.1		<.1		
Chlorobenzene	ug/L	<1	<1	<1	<1	<1	<1		<1
Chlorobenzilate	ug/L				<8		<8		
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1		<1
Chloroform	ug/L	<1	<1	<1	<1	<1	<1		<1
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1		<1
Chloroprene	ug/L				<1		<1		
Chromium, total	ug/L	<8.0	<8.0	<8.0	<8.0	<8.0		<8.0	<8.0
Chrysene	ug/L				<8		<8		
Cis-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1		<1
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1		<1
Cobalt, total	ug/L	<4.0	2.5	1.8	<.8	<.8		1.1	1.0
Copper, total	ug/L	<4.0	5.9	<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 17

Analytical Data Summary for MW96-21

Constituents	9/3/2019	3/23/2020	9/4/2020	3/9/2021	9/7/2021	3/28/2022	9/14/2022	3/20/2023	9/12/2023
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arochlor 1016									<.2
Arochlor 1221									<.2
Arochlor 1232									<.2
Arochlor 1242									<.2
Arochlor 1248									<.2
Arochlor 1254									<.2
Arochlor 1260									<.2
Arsenic, total	16.7	27.9	21.7	17.0	29.3	80.6	13.3	45.4	12.7
Azobenzene									<8
Barium, total	295	318	263	253	275	1990	248	421	224
Benzene	<1	<1	<1	<1	<1	<5	<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	<4.0	<4.0	<4.0	<4.0	<4.0	6.2	<4.0	<4.0	<4.0
Beta-bhc									<.05
Bis (2-chloroethoxy) methane									<8
Bis(2-chloroethyl) ether									<8
Bis(2-chloroisopropyl) ether									<8
Bis(2-ethylhexyl) phthalate									<6
Bromochloromethane	<1	<1	<1	<1	<1	<5	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<5	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<5	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<5	<1	<1	<1
Butyl benzyl phthalate									<8
Cadmium, total	<.8	<.8	<.8	<.8	<.8	4.4	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1	<1	<5	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<5	<1	<1	<1
Chlordane									<.1
Chlorobenzene	<1	<1	<1	<1	<1	<5	<1	<1	<1
Chlorobenzilate									<8
Chloroethane	<1	<1	<1	<1	<1	<5	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<5	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<5	<1	<1	<1
Chloroprene									<1
Chromium, total	<8.0	<8.0	<8.0	<8.0	<8.0	148.0	<8.0	10.2	<8.0
Chrysene									<8
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1	<5	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<5	<1	<1	<1
Cobalt, total	2.5	.8	<.4	<.4	.4	79.4	2.5	4.3	.8
Copper, total	6.7	5.5	<4.0	4.2	<4.0	190.0	5.2	10.4	<4.0
Cyanide, total									<.005
Delta-bhc									<.05
Diallate									<8
Dibenzo(a,h)anthracene									<8
Dibenzofuran									<8
Dibromochloromethane	<1	<1	<1	<1	<1	<5	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<5	<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	<5	<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 17

Analytical Data Summary for MW96-21

Constituents	3/12/2024	9/30/2024
Antimony, total		<2
Arochlor 1016	<.2	
Arochlor 1221	<.2	
Arochlor 1232	<.2	
Arochlor 1242	<.2	
Arochlor 1248	<.2	
Arochlor 1254	<.2	
Arochlor 1260	<.2	
Arsenic, total		27.0
Azobenzene	<8	
Barium, total		369
Benzene	<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		<4.0
Beta-bhc	<.05	
Bis (2-chloroethoxy) methane	<8	
Bis(2-chloroethyl) ether	<8	
Bis(2-chloroisopropyl) ether	<8	
Bis(2-ethylhexyl) phthalate	<6	
Bromochloromethane	<1	<1
Bromodichloromethane	<1	<1
Bromoform	<1	<1
Bromomethane	<1	<1
Butyl benzyl phthalate	<8	
Cadmium, total		<.8
Carbon disulfide	<1	<1
Carbon tetrachloride	<1	<1
Chlordane	<.1	
Chlorobenzene	<1	<1
Chlorobenzilate	<8	
Chloroethane	<1	<1
Chloroform	<1	<1
Chloromethane	<1	<1
Chloroprene	<1	
Chromium, total		9.5
Chrysene	<8	
Cis-1,2-dichloroethylene	<1	<1
Cis-1,3-dichloropropene	<1	<1
Cobalt, total		4.0
Copper, total		11.4
Cyanide, total	<.005	
Delta-bhc	<.05	
Diallate	<8	
Dibenzo(a,h)anthracene	<8	
Dibenzofuran	<8	
Dibromochloromethane	<1	<1
Dibromomethane	<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
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 17

Analytical Data Summary for MW96-21

Constituents	Units	3/14/2014	9/18/2014	3/17/2017	9/20/2017	3/8/2018	9/24/2018	12/20/2018	3/25/2019
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	<4.0	8.4	<4.0	<4.0	<4.0		<4.0	<4.0
Mercury, total	ug/L				<.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	7.5	6.3	<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		
Parathion	ug/L				<.4		<.4		
P-dimethylaminoazobenzene	ug/L				<8		<8		
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	<4.0	<4.0	<4.0	<4.0	<4.0		<4.0	<4.0
Silver, total	ug/L	<4	<4	<4	<4	<4		<4	<4
Styrene	ug/L	<1	<1	<1	<1	<1	<1		<1
Sulfide, total	mg/L				<1.00		.11		
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1		<1
Thallium, total	ug/L	<4	<4	<4	<4	<4		<4	<2
Thionazin	ug/L				<.4		<.4		
Tin, total	ug/L				<20				
Toluene	ug/L	<1	<1	<1	<1	<1	<1		<1
Total suspended solids	mg/L		542						
Toxaphene	ug/L				<.2		<.2		
Trans-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1		<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1		<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5	<5		<5
Trichloroethylene	ug/L	<1	<1	<1	<1	<1	<1		<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1		<1
Vanadium, total	ug/L	<20	<20	<20	<20	<20		<20	<20
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5		<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1		<1
Xylenes, total	ug/L	<2	<2	<2	<2	<2	<2		<2
Zinc, total	ug/L	<8.0	22.0	<8.0	<8.0	<8.0		31.0	20.6

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

Table 17

Analytical Data Summary for MW96-21

Constituents	9/3/2019	3/23/2020	9/4/2020	3/9/2021	9/7/2021	3/28/2022	9/14/2022	3/20/2023	9/12/2023
Hexachlorobutadiene									<8
Hexachlorocyclopentadiene									<8
Hexachloroethane									<8
Hexachloropropene									<8
Indeno(1,2,3-cd)pyrene									<8
Isobutanol									<1000
Isodrin									<8
Isophorone									<8
Isosafrole									<8
Kepone									<8
Lead, total	<4.0	<4.0	<4.0	<4.0	<4.0	171.0	<4.0	6.7	<4.0
Mercury, total									<.5
Methacrylonitrile									<1
Methapyrilene									<8
Methoxychlor									<.05
Methyl iodide	<1	<1	<1	<1	<1	<5	<1	<1	<2
Methyl methacrylate									<1
Methyl methanesulfonate									<8
Methyl parathion									<.4
Methylene chloride	<5	<5	<5	<5	<5	<25	<5	<5	<5
Naphthalene									<8
Nickel, total	6.7	<4.0	<4.0	<4.0	<4.0	195.0	<4.0	12.4	<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
Parathion									<.4
P-dimethylaminoazobenzene									<8
Pentachlorobenzene									<8
Pentachloronitrobenzene (pcnb)									<8
Pentachlorophenol									<8
Phenacetin									<8
Phenanthrene									<8
Phenol									<8
Phorate									<.4
Pronamide									<8
Propionitrile									<10
Pyrene									<8
Safrole									<8
Selenium, total	<4.0	<4.0	<4.0	<4.0	<4.0	13.7	<4.0	<4.0	<4.0
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	<1	<1	<1	<1	<1	<5	<1	<1	<1
Sulfide, total									<.10
Tetrachloroethylene	<1	<1	<1	<1	<1	<5	<1	<1	<1
Thallium, total	<2	<2	<2	<2	<2	2	<2	<2	<2
Thionazin									<.4
Tin, total									<20
Toluene	<1	<1	<1	<1	<1	<5	<1	<1	<1
Total suspended solids									
Toxaphene									<.2
Trans-1,2-dichloroethylene	<1	<1	<1	<1	<1	<5	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<5	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<25	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1	<1	<5	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<5	<1	<1	<1
Vanadium, total	<20	<20	<20	<20	<20	216	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5	<5	<25	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1	<5	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2	<10	<2	<2	<2
Zinc, total	18.5	<20.0	<20.0	<20.0	<20.0	399.0	<20.0	26.2	<20.0

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

Table 17

Analytical Data Summary for MW96-21

Constituents	3/12/2024	9/30/2024
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		6.2
Mercury, total		
Methacrylonitrile	<1	
Methapyrilene	<8	
Methoxychlor	<.05	
Methyl iodide	<2	<1
Methyl methacrylate	<1	
Methyl methanesulfonate	<8	
Methyl parathion	<.4	
Methylene chloride	<5	<5
Naphthalene	<8	
Nickel, total		11.3
Nitrobenzene	<8	
N-nitrosodiethylamine	<8	
N-nitrosodimethylamine	<8	
N-nitrosodi-n-butylamine	<8	
N-nitroso-di-n-propylamine	<8	
N-nitrosodiphenylamine	<8	
N-nitrosomethylethylamine	<8	
N-nitrosopiperidine	<8	
N-nitrosopyrrolidine	<8	
O,o,o-triethyl phosphorothioate	<.4	
O-toluidine	<8	
Parathion	<.4	
P-dimethylaminoazobenzene	<8	
Pentachlorobenzene	<8	
Pentachloronitrobenzene (pcnb)	<8	
Pentachlorophenol	<8	
Phenacetin	<8	
Phenanthrene	<8	
Phenol	<8	
Phorate	<.4	
Pronamide	<8	
Propionitrile	<10	
Pyrene	<8	
Safrole	<8	
Selenium, total		<4.0
Silver, total		<4
Styrene	<1	<1
Sulfide, total	<.15	
Tetrachloroethylene	<1	<1
Thallium, total		<2
Thionazin	<.4	
Tin, total		
Toluene	<1	<1
Total suspended solids		
Toxaphene	<.2	
Trans-1,2-dichloroethylene	<1	<1
Trans-1,3-dichloropropene	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5
Trichloroethylene	<1	<1
Trichlorofluoromethane	<1	<1
Vanadium, total		<20
Vinyl acetate	<5	<5
Vinyl chloride	<1	<1
Xylenes, total	<2	<2
Zinc, total		34.1

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

Table 18

Analytical Data Summary for MW96-23

Constituents	Units	3/13/2014	9/18/2014	3/17/2015	9/10/2015	11/9/2015	3/16/2016	9/8/2016	3/17/2017	9/19/2017
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-dichloroethylene	ug/L	<1	<1	<1	<1		<1	<1	<1	<1
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1		<1	<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1		<1	<1	<1	<1
1,2-dibromoethane	ug/L	<1	<1	<1	<1		<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1		<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1		<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1		<1	<1	<1	<1
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1		<1	<1	<1	<1
2-butanone (mek)	ug/L	<5	<5	<5	<5		<5	<5	<5	<5
2-hexanone (mbk)	ug/L	<5	<5	<5	<5		<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5		<5	<5	<5	<5
Acetone	ug/L	<10	<10	<10	<10		<10	<10	<10	<10
Acrylonitrile	ug/L	<5	<5	<5	<5		<5	<5	<5	<5
Antimony, total	ug/L	<2.0	<2.0	<2.0	<2.0		<2.0	<2.0	<2.0	<2.0
Arsenic, total	ug/L	20.2	38.5	33.6	29.3	29.0	30.0	24.6	30.4	19.3
Barium, total	ug/L	637	784	697	668		656	639	642	602
Benzene	ug/L	<1	<1	<1	<1		<1	<1	<1	<1
Beryllium, total	ug/L	<4	<4	<4	<4		<4	<4	<4	<4
Bis(2-ethylhexyl) phthalate	ug/L	<10	<10	<10	<10		<10	<10		
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	<8.0	<8.0	<8.0	<8.0		<8.0	<8.0	<8.0	<8.0
Cis-1,2-dichloroethylene	ug/L	<1	<1	<1	<1		<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1		<1	<1	<1	<1
Cobalt, total	ug/L	<4.0	3.0	<.8	<.8		<.8	<.8	<.8	<.8
Copper, total	ug/L	<4.0	8.8	<4.0	<4.0		<4.0	<4.0	<4.0	<4.0
Dibromochloromethane	ug/L	<1	<1	<1	<1		<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1		<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1		<1	<1	<1	<1
Lead, total	ug/L	<4.0	4.6	<4.0	<4.0		<4.0	<4.0	<4.0	<4.0
Methyl iodide	ug/L	<1	<1	<1	<1		<1	<1	<1	<1
Methylene chloride	ug/L	<5	<5	<5	<5		<5	<5	<5	<5
Nickel, total	ug/L	<4.0	9.4	<4.0	<4.0		<4.0	<4.0	<4.0	<4.0
Selenium, total	ug/L	<4	<4	<4	<4		<4	<4	<4	<4
Silver, total	ug/L	<4	<4	<4	<4		<4	<4	<4	<4
Styrene	ug/L	<1	<1	<1	<1		<1	<1	<1	<1
Tetrachloroethylene	ug/L	<1	<1	<1	<1		<1	<1	<1	<1
Thallium, total	ug/L	<4	<4	<4	<4		<4	<4	<4	<4
Toluene	ug/L	<1	<1	<1	<1		<1	<1	<1	<1
Total suspended solids	mg/L		266	33						
Trans-1,2-dichloroethylene	ug/L	<1	<1	<1	<1		<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1		<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5		<5	<5	<5	<5
Trichloroethylene	ug/L	<1	<1	<1	<1		<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1		<1	<1	<1	<1
Vanadium, total	ug/L	<20.0	<20.0	<20.0	<20.0		<20.0	<20.0	<20.0	<20.0
Vinyl acetate	ug/L	<5	<5	<5	<5		<5	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1	<1		<1	<1	<1	<1
Xylenes, total	ug/L	<2	<2	<2	<2		<2	<2	<2	<2
Zinc, total	ug/L	12.7	27.2	<8.0	<8.0		<8.0	<8.0	<8.0	<8.0

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

Table 18

Analytical Data Summary for MW96-23

Constituents	3/8/2018	9/24/2018	3/25/2019	9/3/2019	3/23/2020	9/4/2020	3/9/2021	9/7/2021	3/28/2022	9/14/2022
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<1	<1	<1	<1	<5	<5	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	<5	<5	<5	<5	<5	<5	<5	<5	<10	<10
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Antimony, total	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	2.3	<2.0
Arsenic, total	24.0	15.4	34.5	35.8	31.4	30.5	35.8	25.3	32.2	30.1
Barium, total	616	522	722	726	700	631	696	582	735	653
Benzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bis(2-ethylhexyl) phthalate										
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	1.0	<.8
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	13.8	<8.0
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	<.8	<.8	<.8	<.8	<.8	<.4	<.4	<.4	4.8	3.0
Copper, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	6.1	<4.0	15.3	<4.0
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	5.3	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	7.4	<4.0
Methyl iodide	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	15.0	<4.0
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4	<4	<2	<2	<2	<2	<2	<2	<2	<2
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total suspended solids										
Trans-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	21.2	<20.0
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	<8.0	<8.0	<8.0	<8.0	<20.0	<20.0	<20.0	<20.0	42.8	<20.0

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

Table 18

Analytical Data Summary for MW96-23

Constituents	3/20/2023	9/12/2023	3/12/2024	9/30/2024
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-dichloroethylene	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1
2-butanone (mek)	<10	<10	<10	<10
2-hexanone (mbk)	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5
Acetone	<10	<10	<10	<10
Acrylonitrile	<5	<5	<5	<5
Antimony, total	<2.0	<2.0	<2.0	<2.0
Arsenic, total	28.1	32.5	33.0	39.2
Barium, total	624	681	644	632
Benzene	<1	<1	<1	<1
Beryllium, total	<4	<4	<4	<4
Bis(2-ethylhexyl) phthalate				
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	<8.0	<8.0	<8.0	<8.0
Cis-1,2-dichloroethylene	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1
Cobalt, total	<.4	<.4	<.4	<.4
Copper, total	<4.0	<4.0	<4.0	<4.0
Dibromochloromethane	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1
Lead, total	<4.0	<4.0	<4.0	<4.0
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
Styrene	<1	<1	<1	<1
Tetrachloroethylene	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2
Toluene	<1	<1	<1	<1
Total suspended solids				
Trans-1,2-dichloroethylene	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1
Vanadium, total	<20.0	<20.0	<20.0	<20.0
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 19

Analytical Data Summary for MW96-24

Constituents	Units	3/13/2014	9/18/2014	3/17/2015	9/11/2015	3/16/2016	9/8/2016	3/17/2017	9/20/2017	3/8/2018
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Antimony, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Barium, total	ug/L	497	863	566	546	605	540	443	612	613
Benzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	ug/L	<.8	<.8	<.8	<.8	1.3	<.8	<.8	<.8	<.8
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	ug/L	<8	<8	<8	<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	<4.0	.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Copper, total	ug/L	<4.0	5.4	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Methyl iodide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	ug/L	<4.0	5.7	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Selenium, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total suspended solids	mg/L		250	44						
Trans-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	ug/L	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	<8.0	14.1	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0

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

Table 19

Analytical Data Summary for MW96-24

Constituents	9/24/2018	3/25/2019	9/3/2019	3/23/2020	9/4/2020	3/9/2021	9/7/2021	12/3/2021	3/28/2022	9/14/2022
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-dichloroethylene	<1	<1	<1	<1	<1	<1	<1		<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1		<1	<1
1,2-dibromo-3-chloropropane	<1	<1	<1	<5	<5	<5	<5		<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1	<1	<1		<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1		<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1		<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1		<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1		<1	<1
2-butanone (mek)	<5	<5	<5	<5	<5	<5	<5		<10	<10
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5	<5		<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5	<5	<5		<5	<5
Acetone	<10	<10	<10	<10	<10	<10	<10		<10	<10
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5		<5	<5
Antimony, total	<2	<2	<2	<2	<2	<2	<2		<2	<2
Arsenic, total	<4.0	<4.0	<4.0	<4.0	4.0	<4.0	6.7		<4.0	<4.0
Barium, total	488	575	606	503	537	499	1050	434	534	561
Benzene	<1	<1	<1	<1	<1	<1	<1		<1	<1
Beryllium, total	<4	<4	<4	<4	<4	<4	<4		<4	<4
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1		<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1		<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1		<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1		<1	<1
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.8	<.8		<.8	<.8
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1		<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1		<1	<1
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1		<1	<1
Chloroethane	<1	<1	<1	<1	<1	<1	<1		<1	<1
Chloroform	<1	<1	<1	<1	<1	<1	<1		<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1		<1	<1
Chromium, total	<8	<8	<8	<8	<8	<8	<8		<8	<8
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1		<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1		<1	<1
Cobalt, total	<.8	<.8	<.8	<.8	<.4	<.4	<.4		.6	2.7
Copper, total	<4.0	<4.0	<4.0	<4.0	<4.0	6.3	<4.0		<4.0	<4.0
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1		<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1		<1	<1
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1		<1	<1
Lead, total	<4	<4	<4	<4	<4	<4	<4		<4	<4
Methyl iodide	<1	<1	<1	<1	<1	<1	<1		<1	<1
Methylene chloride	<5	<5	<5	<5	<5	<5	<5		<5	<5
Nickel, total	<4.0	5.3	<4.0	<4.0	<4.0	<4.0	<4.0		<4.0	<4.0
Selenium, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	5.5		<4.0	<4.0
Silver, total	<4	<4	<4	<4	<4	<4	<4		<4	<4
Styrene	<1	<1	<1	<1	<1	<1	<1		<1	<1
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1		<1	<1
Thallium, total	<4	<2	<2	<2	<2	<2	<2		<2	<2
Toluene	<1	<1	<1	<1	<1	<1	<1		<1	<1
Total suspended solids										
Trans-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1		<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1		<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5		<5	<5
Trichloroethylene	<1	<1	<1	<1	<1	<1	<1		<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1		<1	<1
Vanadium, total	<20	<20	<20	<20	<20	<20	<20		<20	<20
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5		<5	<5
Vinyl chloride	<1	<1	<1	<1	<1	<1	<1		<1	<1
Xylenes, total	<2	<2	<2	<2	<2	<2	<2		<2	<2
Zinc, total	<8.0	<8.0	<8.0	<20.0	<20.0	<20.0	<20.0		<20.0	<20.0

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

Table 19

Analytical Data Summary for MW96-24

Constituents	3/20/2023	9/12/2023	3/12/2024	9/30/2024
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-dichloroethylene	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1
2-butanone (mek)	<10	<10	<10	<10
2-hexanone (mbk)	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5
Acetone	<10	<10	<10	<10
Acrylonitrile	<5	<5	<5	<5
Antimony, total	<2	<2	<2	<2
Arsenic, total	<4.0	<4.0	<4.0	<4.0
Barium, total	618	576	541	559
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-dichloroethylene	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1
Cobalt, total	<.4	<.4	<.4	<.4
Copper, total	<4.0	<4.0	<4.0	<4.0
Dibromochloromethane	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1
Lead, total	<4	<4	<4	<4
Methyl iodide	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5
Nickel, total	<4.0	<4.0	<4.0	<4.0
Selenium, total	<4.0	<4.0	<4.0	<4.0
Silver, total	<4	<4	<4	<4
Styrene	<1	<1	<1	<1
Tetrachloroethylene	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2
Toluene	<1	<1	<1	<1
Total suspended solids				
Trans-1,2-dichloroethylene	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2
Zinc, total	<20.0	<20.0	<20.0	<20.0

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

Table 20

Analytical Data Summary for MW98-25

Constituents	Units	3/13/2014	9/18/2014	3/17/2015	9/11/2015	3/16/2016	9/8/2016	3/18/2017	9/19/2017	3/8/2018
(3 4)-methylphenol	ug/L							<8		
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloropropene	ug/L							<1		
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene	ug/L							<8		
1,2,4-trichlorobenzene	ug/L							<1		
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-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	<1.0	<1.0	2.1	2.0	1.7	<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	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-chloronaphthalene	ug/L							<8		
2-chlorophenol	ug/L							<8		
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-methylnaphthalene	ug/L							<8		
2-methylphenol	ug/L							<8		
2-naphthylamine	ug/L							<8		
2-nitroaniline	ug/L							<8		
2-nitrophenol	ug/L							<8		
3,3´-dichlorobenzidine	ug/L							<8		
3,3'-dimethylbenzidine	ug/L							<8		
3-methylcholanthrene	ug/L							<8		
3-nitroaniline	ug/L							<8		
4,4´-ddd	ug/L							<.05		
4,4´-dde	ug/L							<.05		
4,4´-ddt	ug/L							<.05		
4,6-dinitro-2-methylphenol	ug/L							<8		
4-aminobiphenyl	ug/L							<8		
4-bromophenyl phenyl ether	ug/L							<8		
4-chloro-3-methylphenol	ug/L							<8		
4-chloroaniline	ug/L							<8		
4-chlorophenyl phenyl ether	ug/L							<8		
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-nitroaniline	ug/L							<8		
4-nitrophenol	ug/L							<8		
5-nitro-o-toluidine	ug/L							<8		
7,12-dimethylbenz(a)anthracene	ug/L							<8		
Acenaphthene	ug/L							<8		
Acenaphthylene	ug/L							<8		
Acetone	ug/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	46.5
Acetonitrile	ug/L							<10		
Acetophenone	ug/L							<8		
Acrolein	ug/L							<10		
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Aldrin	ug/L							<.05		
Allyl chloride	ug/L							<1		
Alpha-bhc	ug/L							<.05		
Anthracene	ug/L							<8		

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

Table 20

Analytical Data Summary for MW98-25

Constituents	9/24/2018	3/25/2019	9/3/2019	3/23/2020	9/4/2020	3/9/2021	9/7/2021	3/28/2022	9/14/2022
(3 4)-methylphenol									<8
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1.0	<1.0	<1.0	<1.0	1.1	1.8	2.3	1.5	<1.0
1,1-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloropropene									<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene									<8
1,2,4-trichlorobenzene									<1
1,2-dibromo-3-chloropropane	<1	<1	<1	<5	<5	<5	<5	<5	<1
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	2.9	<1.0	<1.0	<1.0	1.3	1.1	2.0	1.2	<1.0
1,4-naphthoquinone									<8
1,4-phenylenediamine									<8
1-naphthylamine									<8
2,2-dichloropropane									<1
2,3,4,6-tetrachlorophenol									<8
2,4,5-t									<.5
2,4,5-tp (silvex)									<.5
2,4,5-trichlorophenol									<8
2,4,6-trichlorophenol									<8
2,4-d									<2
2,4-dichlorophenol									<8
2,4-dimethylphenol									<8
2,4-dinitrophenol									<8
2,4-dinitrotoluene									<8
2,6-dichlorophenol									<8
2,6-dinitrotoluene									<8
2-acetylaminofluorene									<8
2-butanone (mek)	<5	<5	<5	<5	<5	<5	<5	<10	<5
2-chloronaphthalene									<8
2-chlorophenol									<8
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-methylnaphthalene									<8
2-methylphenol									<8
2-naphthylamine									<8
2-nitroaniline									<8
2-nitrophenol									<8
3,3´-dichlorobenzidine									<8
3,3'-dimethylbenzidine									<8
3-methylcholanthrene									<8
3-nitroaniline									<8
4,4´-ddd									<.05
4,4´-dde									<.05
4,4´-ddt									<.05
4,6-dinitro-2-methylphenol									<8
4-aminobiphenyl									<8
4-bromophenyl phenyl ether									<8
4-chloro-3-methylphenol									<8
4-chloroaniline									<8
4-chlorophenyl phenyl ether									<8
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-nitroaniline									<8
4-nitrophenol									<8
5-nitro-o-toluidine									<8
7,12-dimethylbenz(a)anthracene									<8
Acenaphthene									<8
Acenaphthylene									<8
Acetone	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Acetonitrile									<10
Acetophenone									<8
Acrolein									<10
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5
Aldrin									<.05
Allyl chloride									<1
Alpha-bhc									<.05
Anthracene									<8

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

Table 20

Analytical Data Summary for MW98-25

Constituents	3/20/2023	9/12/2023	3/12/2024	9/30/2024
(3 4)-methylphenol				
1,1,1,2-tetrachloroethane	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1
1,1-dichloroethane	1.7	1.6	1.1	1.2
1,1-dichloroethylene	<1	<1	<1	<1
1,1-dichloropropene				
1,2,3-trichloropropane	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene				
1,2,4-trichlorobenzene				
1,2-dibromo-3-chloropropane	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1
1,2-dinitrobenzene				
1,3,5-trinitrobenzene				
1,3-dichlorobenzene				
1,3-dichloropropane				
1,3-dinitrobenzene				
1,4-dichlorobenzene	1.2	2.4	1.6	1.8
1,4-naphthoquinone				
1,4-phenylenediamine				
1-naphthylamine				
2,2-dichloropropane				
2,3,4,6-tetrachlorophenol				
2,4,5-t				
2,4,5-tp (silvex)				
2,4,5-trichlorophenol				
2,4,6-trichlorophenol				
2,4-d				
2,4-dichlorophenol				
2,4-dimethylphenol				
2,4-dinitrophenol				
2,4-dinitrotoluene				
2,6-dichlorophenol				
2,6-dinitrotoluene				
2-acetylaminofluorene				
2-butanone (mek)	<10	<10	<10	<10
2-chloronaphthalene				
2-chlorophenol				
2-hexanone (mbk)	<5	<5	<5	<5
2-methylnaphthalene				
2-methylphenol				
2-naphthylamine				
2-nitroaniline				
2-nitrophenol				
3,3´-dichlorobenzidine				
3,3'-dimethylbenzidine				
3-methylcholanthrene				
3-nitroaniline				
4,4´-ddd				
4,4´-dde				
4,4´-ddt				
4,6-dinitro-2-methylphenol				
4-aminobiphenyl				
4-bromophenyl phenyl ether				
4-chloro-3-methylphenol				
4-chloroaniline				
4-chlorophenyl phenyl ether				
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5
4-nitroaniline				
4-nitrophenol				
5-nitro-o-toluidine				
7,12-dimethylbenz(a)anthracene				
Acenaphthene				
Acenaphthylene				
Acetone	<10.0	<10.0	<10.0	<10.0
Acetonitrile				
Acetophenone				
Acrolein				
Acrylonitrile	<5	<5	<5	<5
Aldrin				
Allyl chloride				
Alpha-bhc				
Anthracene				

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

Table 20

Analytical Data Summary for MW98-25

Constituents	Units	3/13/2014	9/18/2014	3/17/2015	9/11/2015	3/16/2016	9/8/2016	3/18/2017	9/19/2017	3/8/2018
Antimony, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arochlor 1016	ug/L							<.1		
Arochlor 1221	ug/L							<.2		
Arochlor 1232	ug/L							<.2		
Arochlor 1242	ug/L							<.2		
Arochlor 1248	ug/L							<.2		
Arochlor 1254	ug/L							<.1		
Arochlor 1260	ug/L							<.1		
Arsenic, total	ug/L	<4.0	9.6	18.9	8.7	8.7	<4.0	4.0	4.3	6.8
Azobenzene	ug/L							<8		
Barium, total	ug/L	82.6	98.8	141.0	89.3	105.0	100.0	53.3	61.5	58.9
Benzene	ug/L	1.0	5.6	<1.0	1.3	<1.0	1.4	<1.0	<1.0	1.9
Benzo(a)anthracene	ug/L							<8		
Benzo(a)pyrene	ug/L							<8		
Benzo(b)fluoranthene	ug/L							<8		
Benzo(g,h,i)perylene	ug/L							<8		
Benzo(k)fluoranthene	ug/L							<8		
Benzyl alcohol	ug/L							<8		
Beryllium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Beta-bhc	ug/L	.07	<.05	<.05	<.05	<.05	<.05	<.05	<.05	
Bis (2-chloroethoxy) methane	ug/L							<8		
Bis(2-chloroethyl) ether	ug/L							<8		
Bis(2-chloroisopropyl) ether	ug/L							<8		
Bis(2-ethylhexyl) phthalate	ug/L	<10	<10	<10	<10	<10	<10	<8	6	
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate	ug/L							<8		
Cadmium, total	ug/L	<.8	.9	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlordane	ug/L							<.1		
Chlorobenzene	ug/L	<1.0	1.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chlorobenzilate	ug/L							<8		
Chloroethane	ug/L	2.0	<1.0	<1.0	<1.0	1.9	1.0	<1.0	<1.0	1.1
Chloroform	ug/L	<1	<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	<1.0
Chloroprene	ug/L							<1		
Chromium, total	ug/L	<8.0	10.4	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0
Chrysene	ug/L							<8		
Cis-1,2-dichloroethylene	ug/L	4.8	4.5	5.1	1.4	5.1	2.9	2.1	1.3	2.5
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	14.5	19.0	5.4	13.0	4.7	29.1	14.6	6.2	10.3
Copper, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	5.0	<4.0	<4.0	<4.0
Cyanide, total	mg/L							<.005		
Delta-bhc	ug/L							<.05		
Diallate	ug/L							<8		
Dibenzo(a,h)anthracene	ug/L							<8		
Dibenzofuran	ug/L							<8		
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	1.5	24.3	<1.0	14.7	<1.0	6.6	18.8	6.9	38.4
Dieldrin	ug/L							<.05		
Diethyl phthalate	ug/L							<8		
Dimethoate	ug/L							<.4		
Dimethylphthalate	ug/L							<8		
Di-n-butyl phthalate	ug/L							<8		
Di-n-octyl phthalate	ug/L							<8		
Dinoseb	ug/L							<.5		
Diphenylamine	ug/L							<8		
Disulfoton	ug/L							<.4		
Endosulfan i	ug/L							<.05		
Endosulfan ii	ug/L							<.05		
Endosulfan sulfate	ug/L							<.05		
Endrin	ug/L							<.05		
Endrin aldehyde	ug/L							<.05		
Ethyl methacrylate	ug/L							<10		
Ethyl methanesulfonate	ug/L							<8		
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Famphur	ug/L							<.4		
Fluoranthene	ug/L							<8		
Fluorene	ug/L							<8		
Gamma-bhc (lindane)	ug/L							<.05		
Heptachlor	ug/L							<.05		
Heptachlor epoxide	ug/L							<.05		
Hexachlorobenzene	ug/L							<.05		

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

Table 20

Analytical Data Summary for MW98-25

Constituents	9/24/2018	3/25/2019	9/3/2019	3/23/2020	9/4/2020	3/9/2021	9/7/2021	3/28/2022	9/14/2022
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arochlor 1016									<.1
Arochlor 1221									<.2
Arochlor 1232									<.2
Arochlor 1242									<.2
Arochlor 1248									<.2
Arochlor 1254									<.1
Arochlor 1260									<.1
Arsenic, total	4.4	<4.0	7.9	18.4	6.5	9.8	6.0	29.1	6.6
Azobenzene									<8
Barium, total	62.3	46.0	56.5	81.3	63.5	81.1	84.4	140.0	83.4
Benzene	<1.0	<1.0	<1.0	<1.0	<1.0	1.6	2.7	1.3	<1.0
Benzo(a)anthracene									<8
Benzo(a)pyrene									<8
Benzo(b)fluoranthene									<8
Benzo(g,h,i)perylene									<8
Benzo(k)fluoranthene									<8
Benzyl alcohol									<8
Beryllium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Beta-bhc									<.05
Bis (2-chloroethoxy) methane									<8
Bis(2-chloroethyl) ether									<8
Bis(2-chloroisopropyl) ether									<8
Bis(2-ethylhexyl) phthalate									<6
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate									<8
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlordane									<.1
Chlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.0	<1.0	<1.0
Chlorobenzilate									<8
Chloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.5	<1.0	<1.0
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
Chloroprene									<1
Chromium, total	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0
Chrysene									<8
Cis-1,2-dichloroethylene	2.3	1.0	<1.0	<1.0	2.0	2.5	3.4	2.5	<1.0
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	11.6	13.9	8.5	22.2	7.6	11.7	12.8	10.9	19.4
Copper, total	<4.0	<4.0	<4.0	<4.0	<4.0	78.0	<4.0	<4.0	<4.0
Cyanide, total									<.005
Delta-bhc									<.05
Diallate									<8
Dibenzo(a,h)anthracene									<8
Dibenzofuran									<8
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	1.6	3.8	<1.0	19.4	1.2	8.6	4.8	1.7	<1.0
Dieldrin									<.05
Diethyl phthalate									<8
Dimethoate									<.4
Dimethylphthalate									<8
Di-n-butyl phthalate									<8
Di-n-octyl phthalate									<8
Dinoseb									<.5
Diphenylamine									<8
Disulfoton									<.4
Endosulfan i									<.05
Endosulfan ii									<.05
Endosulfan sulfate									<.05
Endrin									<.05
Endrin aldehyde									<.05
Ethyl methacrylate									<10
Ethyl methanesulfonate									<8
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Famphur									<.4
Fluoranthene									<8
Fluorene									<8
Gamma-bhc (lindane)									<.05
Heptachlor									<.05
Heptachlor epoxide									<.05
Hexachlorobenzene									<.05

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

Table 20

Analytical Data Summary for MW98-25

Constituents	3/20/2023	9/12/2023	3/12/2024	9/30/2024
Antimony, total	<2	<2	<2	<2
Arochlor 1016				
Arochlor 1221				
Arochlor 1232				
Arochlor 1242				
Arochlor 1248				
Arochlor 1254				
Arochlor 1260				
Arsenic, total	14.1	7.8	16.7	6.6
Azobenzene				
Barium, total	95.4	88.2	110.0	90.2
Benzene	<1.0	1.4	<1.0	<1.0
Benzo(a)anthracene				
Benzo(a)pyrene				
Benzo(b)fluoranthene				
Benzo(g,h,i)perylene				
Benzo(k)fluoranthene				
Benzyl alcohol				
Beryllium, total	<4	<4	<4	<4
Beta-bhc				
Bis (2-chloroethoxy) methane				
Bis(2-chloroethyl) ether				
Bis(2-chloroisopropyl) ether				
Bis(2-ethylhexyl) phthalate				
Bromochloromethane	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1
Butyl benzyl phthalate				
Cadmium, total	<.8	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1
Chlordane				
Chlorobenzene	<1.0	1.3	<1.0	1.0
Chlorobenzilate				
Chloroethane	1.7	1.5	1.4	1.0
Chloroform	<1	<1	<1	<1
Chloromethane	<1.0	<1.0	<1.0	1.8
Chloroprene				
Chromium, total	<8.0	<8.0	<8.0	<8.0
Chrysene				
Cis-1,2-dichloroethylene	2.3	2.8	1.4	2.0
Cis-1,3-dichloropropene	<1	<1	<1	<1
Cobalt, total	11.2	15.2	10.7	11.0
Copper, total	<4.0	4.9	<4.0	<4.0
Cyanide, total				
Delta-bhc				
Diallate				
Dibenzo(a,h)anthracene				
Dibenzofuran				
Dibromochloromethane	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1
Dichlorodifluoromethane	3.3	2.1	<1.0	<1.0
Dieldrin				
Diethyl phthalate				
Dimethoate				
Dimethylphthalate				
Di-n-butyl phthalate				
Di-n-octyl phthalate				
Dinoseb				
Diphenylamine				
Disulfoton				
Endosulfan i				
Endosulfan ii				
Endosulfan sulfate				
Endrin				
Endrin aldehyde				
Ethyl methacrylate				
Ethyl methanesulfonate				
Ethylbenzene	<1	<1	<1	<1
Famphur				
Fluoranthene				
Fluorene				
Gamma-bhc (lindane)				
Heptachlor				
Heptachlor epoxide				
Hexachlorobenzene				

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

Table 20

Analytical Data Summary for MW98-25

Constituents	Units	3/13/2014	9/18/2014	3/17/2015	9/11/2015	3/16/2016	9/8/2016	3/18/2017	9/19/2017	3/8/2018
Hexachlorobutadiene	ug/L							<8		
Hexachlorocyclopentadiene	ug/L							<8		
Hexachloroethane	ug/L							<8		
Hexachloropropene	ug/L							<8		
Indeno(1,2,3-cd)pyrene	ug/L							<8		
Isobutanol	ug/L							<1000		
Isodrin	ug/L							<8		
Isophorone	ug/L							<8		
Isosafrole	ug/L							<8		
Kepone	ug/L							<8		
Lead, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Mercury, total	ug/L							<.5		
Methacrylonitrile	ug/L							<1		
Methapyrilene	ug/L							<8		
Methoxychlor	ug/L							<.05		
Methyl iodide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methyl methacrylate	ug/L							<1		
Methyl methanesulfonate	ug/L							<8		
Methyl parathion	ug/L							<.4		
Methylene chloride	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene	ug/L							<8		
Nickel, total	ug/L	51.0	48.1	41.6	36.2	37.9	81.7	34.3	17.0	20.1
Nitrobenzene	ug/L							<8		
N-nitrosodiethylamine	ug/L							<8		
N-nitrosodimethylamine	ug/L							<8		
N-nitrosodi-n-butylamine	ug/L							<8		
N-nitroso-di-n-propylamine	ug/L							<8		
N-nitrosodiphenylamine	ug/L							<8		
N-nitrosomethylethylamine	ug/L							<8		
N-nitrosopiperidine	ug/L							<8		
N-nitrosopyrrolidine	ug/L							<8		
O,o,o-triethyl phosphorothioate	ug/L							<.4		
O-toluidine	ug/L							<8		
Parathion	ug/L							<.4		
P-dimethylaminoazobenzene	ug/L							<8		
Pentachlorobenzene	ug/L							<8		
Pentachloronitrobenzene (pcnb)	ug/L							<8		
Pentachlorophenol	ug/L							<8		
Phenacetin	ug/L							<8		
Phenanthrene	ug/L							<8		
Phenol	ug/L							<8		
Phorate	ug/L							<.4		
Pronamide	ug/L							<8		
Propionitrile	ug/L							<10		
Pyrene	ug/L							<8		
Safrole	ug/L							<8		
Selenium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfide, total	mg/L							<.1		
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Thionazin	ug/L							<.4		
Tin, total	ug/L							<20		
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total suspended solids	mg/L		69	41						
Toxaphene	ug/L							<.2		
Trans-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1.0	3.2	<1.0	<1.0	<1.0	4.4	4.3	1.6	2.5
Vanadium, total	ug/L	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	<8.0	15.6	<8.0	<8.0	<8.0	17.7	<8.0	<8.0	<8.0

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

Table 20

Analytical Data Summary for MW98-25

Constituents	9/24/2018	3/25/2019	9/3/2019	3/23/2020	9/4/2020	3/9/2021	9/7/2021	3/28/2022	9/14/2022
Hexachlorobutadiene									<8
Hexachlorocyclopentadiene									<8
Hexachloroethane									<8
Hexachloropropene									<8
Indeno(1,2,3-cd)pyrene									<8
Isobutanol									<1000
Isodrin									<8
Isophorone									<8
Isosafrole									<8
Kepone									<8
Lead, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Mercury, total									<.5
Methacrylonitrile									<1
Methapyrilene									<8
Methoxychlor									<.05
Methyl iodide	<1	<1	<1	<1	<1	<1	<1	<1	<2
Methyl methacrylate									<1
Methyl methanesulfonate									<8
Methyl parathion									<.4
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene									<8
Nickel, total	24.6	21.2	9.0	29.9	10.5	16.7	20.4	21.9	24.3
Nitrobenzene									<8
N-nitrosodiethylamine									<8
N-nitrosodimethylamine									<8
N-nitrosodi-n-butylamine									<8
N-nitroso-di-n-propylamine									<8
N-nitrosodiphenylamine									<8
N-nitrosomethylethylamine									<8
N-nitrosopiperidine									<8
N-nitrosopyrrolidine									<8
O,o,o-triethyl phosphorothioate									<.4
O-toluidine									<8
Parathion									<.4
P-dimethylaminoazobenzene									<8
Pentachlorobenzene									<8
Pentachloronitrobenzene (pcnb)									<8
Pentachlorophenol									<8
Phenacetin									<8
Phenanthrene									<8
Phenol									<8
Phorate									<.4
Pronamide									<8
Propionitrile									<10
Pyrene									<8
Safrole									<8
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfide, total									<.1
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4	<2	<2	<2	<2	<2	<2	<2	<2
Thionazin									<.4
Tin, total									<20
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total suspended solids									
Toxaphene									<.2
Trans-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1.0	<1.0	<1.0	6.0	1.0	2.6	<1.0	1.0	<1.0
Vanadium, total	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	<8.0	<8.0	11.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 20

Analytical Data Summary for MW98-25

Constituents	3/20/2023	9/12/2023	3/12/2024	9/30/2024
Hexachlorobutadiene				
Hexachlorocyclopentadiene				
Hexachloroethane				
Hexachloropropene				
Indeno(1,2,3-cd)pyrene				
Isobutanol				
Isodrin				
Isophorone				
Isosafrole				
Kepone				
Lead, total	<4	<4	<4	<4
Mercury, total				
Methacrylonitrile				
Methapyrilene				
Methoxychlor				
Methyl iodide	<1	<1	<1	<1
Methyl methacrylate				
Methyl methanesulfonate				
Methyl parathion				
Methylene chloride	<5	<5	<5	<5
Naphthalene				
Nickel, total	23.4	35.7	23.6	26.5
Nitrobenzene				
N-nitrosodiethylamine				
N-nitrosodimethylamine				
N-nitrosodi-n-butylamine				
N-nitroso-di-n-propylamine				
N-nitrosodiphenylamine				
N-nitrosomethylethylamine				
N-nitrosopiperidine				
N-nitrosopyrrolidine				
O,o,o-triethyl phosphorothioate				
O-toluidine				
Parathion				
P-dimethylaminoazobenzene				
Pentachlorobenzene				
Pentachloronitrobenzene (pcnb)				
Pentachlorophenol				
Phenacetin				
Phenanthrene				
Phenol				
Phorate				
Pronamide				
Propionitrile				
Pyrene				
Safrole				
Selenium, total	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4
Styrene	<1	<1	<1	<1
Sulfide, total				
Tetrachloroethylene	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2
Thionazin				
Tin, total				
Toluene	<1	<1	<1	<1
Total suspended solids				
Toxaphene				
Trans-1,2-dichloroethylene	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1
Trichlorofluoromethane	1.2	1.1	1.0	<1.0
Vanadium, total	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2
Zinc, total	<20.0	<20.0	<20.0	<20.0

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

Table 21

Analytical Data Summary for MW98-28

Constituents	Units	3/13/2014	9/18/2014	11/13/2014	3/17/2015	6/29/2015	9/11/2015	3/16/2016	9/8/2016	3/17/2017
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Antimony, total	ug/L	<2.0	<2.0	2.5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Arsenic, total	ug/L	<4.0	18.9	<4.0	<4.0	9.5	<4.0	<4.0	<4.0	<4.0
Barium, total	ug/L	220	536	105	98	305	107	109	144	125
Benzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	ug/L	<.8	11.8	<.8	<.8	1.1	<.8	<.8	<.8	<.8
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	ug/L	<8.0	43.4	<8.0	<8.0	24.9	<8.0	<8.0	<8.0	<8.0
Cis-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	<4.0	81.5	<.8	<.8	27.3	<.8	<.8	1.0	<.8
Copper, total	ug/L	<4.0	97.9	<4.0	<4.0	29.9	<4.0	<4.0	<4.0	<4.0
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	ug/L	<4.0	38.1	<4.0	<4.0	15.6	<4.0	<4.0	<4.0	<4.0
Methyl iodide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	ug/L	4.9	105.0	<4.0	<4.0	42.0	<4.0	<4.0	<4.0	4.0
Selenium, total	ug/L	<4	9	<4	<4	<4	<4	<4	<4	<4
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total suspended solids	mg/L		148		13					
Trans-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	ug/L	<20.0	87.6	<20.0	<20.0	40.6	<20.0	<20.0	<20.0	<20.0
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	<8.0	127.0	<20.0	<8.0	59.4	<8.0	<8.0	8.2	<8.0

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

Table 21

Analytical Data Summary for MW98-28

Constituents	9/19/2017	3/8/2018	9/24/2018	3/25/2019	9/3/2019	3/23/2020	9/4/2020	3/9/2021	9/7/2021	3/28/2022
1,1,1,2-tetrachloroethane	<1	<1		<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1		<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1		<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1		<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1		<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	<1	<1		<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1		<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<1	<1		<1	<1	<5	<5	<5	<5	<5
1,2-dibromoethane	<1	<1		<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1		<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1		<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1		<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1		<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	<5	<5		<5	<5	<5	<5	<5	<5	<10
2-hexanone (mbk)	<5	<5		<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5		<5	<5	<5	<5	<5	<5	<5
Acetone	<10	<10		<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	<5	<5		<5	<5	<5	<5	<5	<5	<5
Antimony, total	4.5	<2.0	2.1	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	2.3
Arsenic, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	8.2	<4.0	<4.0
Barium, total	181	172	169	113	143	119	156	341	147	254
Benzene	<1	<1		<1	<1	<1	<1	<1	<1	<1
Beryllium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bromochloromethane	<1	<1		<1	<1	<1	<1	<1	<1	<1
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	<.8
Carbon disulfide	<1	<1		<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1		<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	<1	<1		<1	<1	<1	<1	<1	<1	<1
Chloroethane	<1	<1		<1	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1		<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1		<1	<1	<1	<1	<1	<1	<1
Chromium, total	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	18.6	<8.0	12.7
Cis-1,2-dichloroethylene	<1	<1		<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1		<1	<1	<1	<1	<1	<1	<1
Cobalt, total	4.4	<.8	4.8	.9	.9	1.6	.5	19.1	.4	4.2
Copper, total	5.4	<4.0	5.1	<4.0	<4.0	<4.0	<4.0	104.0	<4.0	7.6
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	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	11.9	<4.0	<4.0
Methyl iodide	<1	<1		<1	<1	<1	<1	<1	<1	<1
Methylene chloride	<5	<5		<5	<5	<5	<5	<5	<5	<5
Nickel, total	10.2	<4.0	7.6	<4.0	<4.0	6.3	<4.0	33.6	<4.0	17.4
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	<1	<1		<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	<1	<1		<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2
Toluene	<1	<1		<1	<1	<1	<1	<1	<1	<1
Total suspended solids										
Trans-1,2-dichloroethylene	<1	<1		<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1		<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5		<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	<1	<1		<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1		<1	<1	<1	<1	<1	<1	<1
Vanadium, total	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	29.2	<20.0	<20.0
Vinyl acetate	<5	<5		<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1		<1	<1	<1	<1	<1	<1	<1
Xylenes, total	<2	<2		<2	<2	<2	<2	<2	<2	<2
Zinc, total	11.1	<8.0	13.2	<8.0	10.6	<20.0	<20.0	37.6	<20.0	<20.0

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

Table 21

Analytical Data Summary for MW98-28

Constituents	9/14/2022	3/20/2023	9/12/2023	3/12/2024	9/30/2024
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1
1,1-dichloroethylene	<1	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<5	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1	<1
2-butanone (mek)	<10	<10	<10	<10	<10
2-hexanone (mbk)	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5
Acetone	<10	<10	<10	<10	<10
Acrylonitrile	<5	<5	<5	<5	<5
Antimony, total	<2.0	<2.0	<2.0	<2.0	<2.0
Arsenic, total	<4.0	<4.0	<4.0	<4.0	<4.0
Barium, total	236	226	277	246	270
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	<8.0	<8.0	<8.0	<8.0	<8.0
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1
Cobalt, total	4.4	1.1	1.6	.8	3.9
Copper, total	<4.0	<4.0	<4.0	<4.0	4.8
Dibromochloromethane	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1	<1
Lead, total	<4.0	<4.0	<4.0	<4.0	<4.0
Methyl iodide	<1	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5	<5
Nickel, total	4.8	6.6	8.2	5.8	10.1
Selenium, total	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4
Styrene	<1	<1	<1	<1	<1
Tetrachloroethylene	<1	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2	<2
Toluene	<1	<1	<1	<1	<1
Total suspended solids					
Trans-1,2-dichloroethylene	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1
Vanadium, total	<20.0	<20.0	<20.0	<20.0	<20.0
Vinyl acetate	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2
Zinc, total	<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 22

Analytical Data Summary for PEC-3

Constituents	Units	3/28/2022	4/18/2022	9/30/2024
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1
1,1-dichloroethane	ug/L	<1	<1	<1
1,1-dichloroethylene	ug/L	<1	<1	<1
1,2,3-trichloropropane	ug/L	<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L	<5	<5	<5
1,2-dibromoethane	ug/L	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1
1,4-dichlorobenzene	ug/L	<1	<1	<1
2-butanone (mek)	ug/L	<10	<10	<10
2-hexanone (mbk)	ug/L	<5	<5	<5
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5
Acetone	ug/L	<10	<10	<10
Acrylonitrile	ug/L	<5	<5	<5
Benzene	ug/L	1.5	<1.0	<1.0
Bromochloromethane	ug/L	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1
Bromoform	ug/L	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1
Carbon disulfide	ug/L	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1
Chlorobenzene	ug/L	<1	<1	<1
Chloroethane	ug/L	<1	<1	<1
Chloroform	ug/L	<1	<1	<1
Chloromethane	ug/L	<1	<1	<1
Cis-1,2-dichloroethylene	ug/L	3.2	<1.0	<1.0
Cis-1,3-dichloropropene	ug/L	<1	<1	<1
Dibromochloromethane	ug/L	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1
Methyl iodide	ug/L	<1	<1	<1
Methylene chloride	ug/L	<5	<5	<5
Styrene	ug/L	<1	<1	<1
Tetrachloroethylene	ug/L	<1	<1	<1
Toluene	ug/L	<1	<1	<1
Trans-1,2-dichloroethylene	ug/L	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5
Trichloroethylene	ug/L	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1
Vinyl acetate	ug/L	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1
Xylenes, total	ug/L	<2	<2	<2

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

Table 23

Analytical Data Summary for Sramp 1

Constituents	Units	3/13/2014	9/19/2014	3/17/2015	9/11/2015	3/16/2016	9/8/2016	3/18/2017	9/19/2017	3/25/2019
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	ug/L	<1.0	<1.0	2.2	6.4	3.9	4.6	2.7	<1.0	<1.0
2-butanone (mek)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	ug/L	<10.0	<10.0	<10.0	<10.0	82.1	<10.0	<10.0	<10.0	19.3
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Antimony, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	ug/L	<4.0	<4.0	11.2	13.5	15.4	9.3	8.0	<4.0	7.4
Barium, total	ug/L	81.2	63.8	95.1	76.2	105.0	174.0	155.0	140.0	133.0
Benzene	ug/L	<1.0	<1.0	2.6	6.2	5.0	2.2	2.0	<1.0	1.2
Beryllium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Beta-bhc	ug/L	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	
Bis(2-ethylhexyl) phthalate	ug/L	<10	<10	<10	<10	<10	<10	<10	<6	
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	ug/L	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<1.0	<1.0	<1.0	2.4	1.9	1.4	1.1	<1.0	1.5
Chloroethane	ug/L	<1.0	<1.0	<1.0	1.4	1.9	2.0	1.6	<1.0	2.6
Chloroform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	ug/L	<8	<8	<8	<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethylene	ug/L	<1.0	<1.0	1.4	2.7	2.5	2.8	2.1	<1.0	4.0
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	<4.0	5.5	7.2	4.9	20.1	7.1	8.1	1.5	7.7
Copper, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	<1.0	<1.0	16.7	40.6	16.5	40.7	34.8	3.1	38.4
Ethylbenzene	ug/L	<1.0	<1.0	<1.0	<1.0	2.1	<1.0	<1.0	<1.0	<1.0
Lead, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Methyl iodide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	ug/L	33.7	19.5	23.1	12.4	27.9	24.9	23.9	6.7	18.2
Selenium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<2
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total suspended solids	mg/L		6	62						
Trans-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1.0	<1.0	<1.0	7.3	39.1	24.2	17.9	2.1	22.5
Vanadium, total	ug/L	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	ug/L	<2.0	<2.0	<2.0	<2.0	2.4	<2.0	<2.0	<2.0	<2.0
Zinc, total	ug/L	285.0	44.1	20.7	<8.0	<8.0	9.9	<8.0	<8.0	<8.0

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

Table 23

Analytical Data Summary for Sramp 1

Constituents	9/3/2019	3/9/2021	3/28/2022	3/20/2023
1,1,1,2-tetrachloroethane	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1
1,1-dichloroethane	<1.0	2.6	1.4	1.4
1,1-dichloroethylene	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<1	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1
1,4-dichlorobenzene	<1.0	5.8	5.0	6.5
2-butanone (mek)	<5	<5	<10	<10
2-hexanone (mbk)	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5
Acetone	<10.0	<10.0	23.5	<10.0
Acrylonitrile	<5	<5	<5	<5
Antimony, total	<2	<2	<2	<2
Arsenic, total	43.1	4.7	6.1	7.2
Barium, total	200.0	80.4	77.1	82.9
Benzene	1.2	5.7	4.8	5.7
Beryllium, total	<4	<4	<4	<4
Beta-bhc				
Bis(2-ethylhexyl) phthalate				
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	<1.0	1.7	1.4	1.7
Chloroethane	2.5	2.6	1.6	2.0
Chloroform	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1
Chromium, total	<8	<8	<8	<8
Cis-1,2-dichloroethylene	2.4	4.4	3.0	3.0
Cis-1,3-dichloropropene	<1	<1	<1	<1
Cobalt, total	8.9	2.7	2.1	1.8
Copper, total	<4	<4	<4	<4
Dibromochloromethane	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1
Dichlorodifluoromethane	<1.0	50.7	12.2	18.4
Ethylbenzene	<1.0	1.9	<1.0	<1.0
Lead, total	<4	<4	<4	<4
Methyl iodide	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5
Nickel, total	26.0	6.4	7.6	7.5
Selenium, total	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4
Styrene	<1	<1	<1	<1
Tetrachloroethylene	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2
Toluene	<1	<1	<1	<1
Total suspended solids				
Trans-1,2-dichloroethylene	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1
Trichlorofluoromethane	<1.0	28.0	8.1	9.1
Vanadium, total	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1
Xylenes, total	<2.0	<2.0	<2.0	<2.0
Zinc, total	<8.0	<20.0	<20.0	<20.0

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

Table 24

Analytical Data Summary for SRAMP 2

Constituents	Units	3/13/2014	6/10/2014	8/7/2014	9/19/2014	11/13/2014	3/17/2015	9/11/2015	3/16/2016	9/8/2016
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	ug/L	82.2	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Antimony, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Barium, total	ug/L	24.0	58.3	99.7	73.9	52.7	63.5	92.8	110.0	98.3
Benzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Beta-bhc	ug/L	<.05						<.05	<.05	<.05
Bis(2-ethylhexyl) phthalate	ug/L	<10						<10	<10	<10
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	ug/L	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	ug/L	<8	<8	<8	<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	<4.0	<4.0	<4.0	<.8	<.8	<.8	<.8	<.8	<.8
Copper, total	ug/L	5.1	<4.0	<4.0	<4.0	10.4	<4.0	<4.0	<4.0	<4.0
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	<1						<1	<1	<1
Ethylbenzene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Lead, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Methyl iodide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	ug/L	<4.0	7.8	5.9	4.7	4.4	4.9	<4.0	4.2	4.8
Selenium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total suspended solids	mg/L				<2		<2			
Trans-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	ug/L	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Zinc, total	ug/L	9.7	<8.0	9.1	<8.0	<20.0	<8.0	<8.0	<8.0	<8.0

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

Table 24

Analytical Data Summary for SRAMP 2

Constituents	3/18/2017	3/8/2018	9/24/2018	12/20/2018	3/25/2019	3/23/2020	3/9/2021	3/28/2022	3/20/2023
1,1,1,2-tetrachloroethane	<1	<1	<1		<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1		<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1		<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1		<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1		<1	<1	<1	<1	<1
1,1-dichloroethylene	<1	<1	<1		<1	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1		<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<1	<1	<1		<1	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1		<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1		<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1		<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1		<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1		<1	<1	<1	<1	<1
2-butanone (mek)	<5	<5	<5		<5	<5	<5	<10	<10
2-hexanone (mbk)	<5	<5	<5		<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5		<5	<5	<5	<5	<5
Acetone	<10.0	<10.0	<10.0		<10.0	<10.0	<10.0	<10.0	<10.0
Acrylonitrile	<5	<5	<5		<5	<5	<5	<5	<5
Antimony, total	<2	<2	<2		<2	<2	<2	<2	
Arsenic, total	<4	<4	<4		<4	<4	<4	<4	
Barium, total	86.9	61.0	84.1		81.3	77.9	36.6	50.2	
Benzene	<1	<1	<1		<1	<1	<1	<1	<1
Beryllium, total	<4	<4	<4		<4	<4	<4	<4	
Beta-bhc	<.05								
Bis(2-ethylhexyl) phthalate	<10								
Bromochloromethane	<1	<1	<1		<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1		<1	<1	<1	<1	<1
Bromoform	<1	<1	<1		<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1		<1	<1	<1	<1	<1
Cadmium, total	<.8	<.8	<.8		<.8	<.8	<.8	<.8	
Carbon disulfide	<1	<1	<1		<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1		<1	<1	<1	<1	<1
Chlorobenzene	<1	<1	<1		<1	<1	<1	<1	<1
Chloroethane	<1	<1	<1		<1	<1	<1	<1	<1
Chloroform	<1	<1	<1		<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1		<1	<1	<1	<1	<1
Chromium, total	<8	<8	<8		<8	<8	<8	<8	
Cis-1,2-dichloroethylene	<1	<1	<1		<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1		<1	<1	<1	<1	<1
Cobalt, total	<.8	1.1	<.8		<.8	<.8	<.4	.6	
Copper, total	<4.0	<4.0	<4.0		<4.0	<4.0	<4.0	<4.0	
Dibromochloromethane	<1	<1	<1		<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1		<1	<1	<1	<1	<1
Dichlorodifluoromethane	<1	<1	<1		<1	<1	<1	<1	<1
Ethylbenzene	<1.0	<1.0	1.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Lead, total	<4	<4	<4		<4	<4	<4	<4	
Methyl iodide	<1	<1	<1		<1	<1	<1	<1	<1
Methylene chloride	<5	<5	<5		<5	<5	<5	<5	<5
Nickel, total	4.3	7.5	4.5		14.7	<4.0	<4.0	4.8	
Selenium, total	<4	<4	<4		<4	<4	<4	<4	
Silver, total	<4	<4	<4		<4	<4	<4	<4	
Styrene	<1	<1	<1		<1	<1	<1	<1	<1
Tetrachloroethylene	<1	<1	<1		<1	<1	<1	<1	<1
Thallium, total	<4	<4	<4		<2	<2	<2	<2	
Toluene	<1	<1	<1		<1	<1	<1	<1	<1
Total suspended solids									
Trans-1,2-dichloroethylene	<1	<1	<1		<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1		<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5		<5	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1		<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1		<1	<1	<1	<1	<1
Vanadium, total	<20	<20	<20		<20	<20	<20	<20	
Vinyl acetate	<5	<5	<5		<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1		<1	<1	<1	<1	<1
Xylenes, total	<2.0	<2.0	8.1	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Zinc, total	<8.0	13.3	<8.0		<8.0	<20.0	<20.0	<20.0	

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

Table 24

Analytical Data Summary for SRAMP 2

Constituents	3/12/2024
1,1,1,2-tetrachloroethane	<1
1,1,1-trichloroethane	<1
1,1,2,2-tetrachloroethane	<1
1,1,2-trichloroethane	<1
1,1-dichloroethane	<1
1,1-dichloroethylene	<1
1,2,3-trichloropropane	<1
1,2-dibromo-3-chloropropane	<5
1,2-dibromoethane	<1
1,2-dichlorobenzene	<1
1,2-dichloroethane	<1
1,2-dichloropropane	<1
1,4-dichlorobenzene	<1
2-butanone (mek)	<10
2-hexanone (mbk)	<5
4-methyl-2-pentanone (mibk)	<5
Acetone	<10.0
Acrylonitrile	<5
Antimony, total	
Arsenic, total	
Barium, total	
Benzene	<1
Beryllium, total	
Beta-bhc	
Bis(2-ethylhexyl) phthalate	
Bromochloromethane	<1
Bromodichloromethane	<1
Bromoform	<1
Bromomethane	<1
Cadmium, total	
Carbon disulfide	<1
Carbon tetrachloride	<1
Chlorobenzene	<1
Chloroethane	<1
Chloroform	<1
Chloromethane	<1
Chromium, total	
Cis-1,2-dichloroethylene	<1
Cis-1,3-dichloropropene	<1
Cobalt, total	
Copper, total	
Dibromochloromethane	<1
Dibromomethane	<1
Dichlorodifluoromethane	<1
Ethylbenzene	<1.0
Lead, total	
Methyl iodide	<1
Methylene chloride	<5
Nickel, total	
Selenium, total	
Silver, total	
Styrene	<1
Tetrachloroethylene	<1
Thallium, total	
Toluene	<1
Total suspended solids	
Trans-1,2-dichloroethylene	<1
Trans-1,3-dichloropropene	<1
Trans-1,4-dichloro-2-butene	<5
Trichloroethylene	<1
Trichlorofluoromethane	<1
Vanadium, total	
Vinyl acetate	<5
Vinyl chloride	<1
Xylenes, total	<2.0
Zinc, total	

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

Appendix D

Statistical Report

APPENDIX D.1 –Spring Statistical Evaluation

GROUND WATER STATISTICS

FOR THE

BOONE COUNTY SANITARY LANDFILL

First Semi-Annual Monitoring Event in 2024

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April 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 Boone County Sanitary Landfill in Boone County, Iowa. The statistical plan was designed to detect a release from the facility at the earliest indication so that it is protective of human health and the environment. The interwell methodology is described and then applied to the Boone 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 Boone County Sanitary Landfill includes upgradient wells MW88-2, MW91-8, MW98-28, MW02-15A, and MW02-30A, and downgradient detection sample points UD-3, GWD-1, MW88-3, MW91-10, MW94-18, MW94-19, MW96-21, MW96-23, and MW96-24. Detections of volatile organic compounds (VOCs) and statistical exceedances at wells along the north edge of the facility prompted a site remedial and mitigating action plan (SRAMP). Monitoring well MW98-25 situated along the north property line, has had verified VOC detections and inorganic exceedances. Sentinel wells SRAMP 1, SRAMP 2, MW06-37, MW06-38, and MW06-39 were installed to monitor the effectiveness of the SRAMP. Additional sample points (MW09-40 and MW09-42) have been added to monitor the downgradient zone to comply with the well spacing requirements of 113.10(2)e(2).

Each of the groundwater monitoring wells is to be sampled at least semiannually and analyzed for the detection monitoring parameters listed in 113.10(5), which includes 15 inorganic constituents and 47 organic compounds, summarized in Table 1 below.

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

Organic Compounds:

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

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

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 Boone 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. As an alternative to nonparametric prediction limits, Poisson prediction limits can be used for small data sets where the detection frequency is less than 25%. Since there was limited background, Poisson prediction limits were previously computed for those rarely detected parameters. Since the Unified Guidance recommends nonparametric limits over Poisson limits, nonparametric limits were used for the current comparisons

Results of the Interwell Statistics

The background data used in this statistical analysis includes the ground water data collected from ground water wells MW88-2, MW91-8, MW98-28, MW02-15A, and MW02-30A during the period from September 2014 through the current data. A summary of the background data from monitoring wells MW88-2, MW91-8, MW98-28, MW02-15A, and MW02-30A, 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 MW09-40, MW88-3, MW91-10, MW94-18, MW96-23, MW96-24, MW21-43, MW98-25, MW06-37, MW06-38, MW06-39, and GU-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.

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

Well	Trace Metal	Result, µg/L	Prediction Limit, µg/L	Prediction Limit Type	Verified/ Awaiting Verification
MW98-25	Cobalt	10.7	7.0000	Nonparametric	Verified
	Nickel	23.6	17.4000	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. The background barium data failed a normal distribution so barium uses a nonparametric site prediction limit. Table 5 is a summary of the statistics and prediction limits determined for the metals. Time series graphs of each of the parameters at each well with the corresponding prediction limits are attached.

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

The verified exceedances were evaluated against the 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 95% LCL for cobalt at MW98-25 (9.358 µg/L) exceeds the Iowa Statewide standard of 2.1 µg/L. The remainder of the calculated 95% LCLs for the verified trace metals are all below the respective ground water standards.

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

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

Well	VOC Detected	Result, µg/L	Reporting Limit, µg/L	Verified/ Awaiting Verification	Ground Water Standard
MW98-25	1,1-Dichloroethane	1.1	1	Verified	140[b]
	1,4-Dichlorobenzene	1.6	1	Verified	75[a]
	Chloroethane	1.4	1	Verified	2800[b]
	cis-1,2-Dichloroethene	1.4	1	Verified	70[a]
	Trichlorofluoromethane	1.0	1	Verified	2000[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% lower confidence limit (LCL) for the mean of the historical data was used to evaluate whether the regulated unit is in compliance with the ground-water protection standards under 40 CFR 264 (e.g. whether the verified constituent is detected at a significant level above the GWPS). An exceedance is verified if the LCL is above the Regulatory GWPS. The 95% LCL for the VOCs are all below the respective ground water standards.

CONCLUSIONS

This report summarizes the statistical analyses used to evaluate the ground water data obtained during the first semi-annual monitoring event in 2024 at Boone County Sanitary Landfill. The ground water data obtained during the first semi-annual monitoring event in 2024 was compared to background using prediction limits. For the most current data, there is a verified site prediction limit exceedance detected for cobalt at MW98-25 and a verified site prediction limit exceedance detected for nickel at MW98-25.

The VOCs were compared to MCLs or PQLs, in lieu of statistical comparisons to historical concentrations. There are verified detections of several VOCs at MW98-25. None of the VOCs statistically exceeded the ground water quality standards.

Attachment A

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

Table 1

Analytical Data Summary for 3/12/2024

Constituents	Units	GU-4	MW02-15A	MW02-30A	MW06-37	MW06-38	MW06-39	MW09-40	MW21-43	MW88-2	MW88-3	MW91-10	MW91-8	MW94-18
(3 4)-methylphenol	ug/L													
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloropropene	ug/L													
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene	ug/L													
1,2,4-trichlorobenzene	ug/L													
1,2-dibromo-3-chloropropane	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dinitrobenzene	ug/L													
1,3,5-trinitrobenzene	ug/L													
1,3-dichlorobenzene	ug/L													
1,3-dichloropropane	ug/L													
1,3-dinitrobenzene	ug/L													
1,4-dichlorobenzene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
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	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-chloronaphthalene	ug/L													
2-chlorophenol	ug/L													
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5	<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													

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

Table 1

Analytical Data Summary for 3/12/2024

Constituents	MW96-21	MW96-23	MW96-24	MW98-25	MW98-28	SRAMP 2
(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	<1.0	<1.0	<1.0	1.1	<1.0	<1.0
1,1-dichloroethylene	<1	<1	<1	<1	<1	<1
1,1-dichloropropene	<1					
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene	<8					
1,2,4-trichlorobenzene	<1					
1,2-dibromo-3-chloropropane	<1	<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	<8					
1,3,5-trinitrobenzene	<8					
1,3-dichlorobenzene	<1					
1,3-dichloropropane	<1					
1,3-dinitrobenzene	<8					
1,4-dichlorobenzene	<1.0	<1.0	<1.0	1.6	<1.0	<1.0
1,4-naphthoquinone	<8					
1,4-phenylenediamine	<8					
1-naphthylamine	<8					
2,2-dichloropropane	<1					
2,3,4,6-tetrachlorophenol	<8					
2,4,5-t	<.5					
2,4,5-tp (silvex)	<.5					
2,4,5-trichlorophenol	<8					
2,4,6-trichlorophenol	<8					
2,4-d	<2					
2,4-dichlorophenol	<8					
2,4-dimethylphenol	<8					
2,4-dinitrophenol	<8					
2,4-dinitrotoluene	<8					
2,6-dichlorophenol	<8					
2,6-dinitrotoluene	<8					
2-acetylaminofluorene	<8					
2-butanone (mek)	<5	<10	<10	<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					

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

Table 1

Analytical Data Summary for 3/12/2024

Constituents	Units	GU-4	MW02-15A	MW02-30A	MW06-37	MW06-38	MW06-39	MW09-40	MW21-43	MW88-2	MW88-3	MW91-10	MW91-8	MW94-18
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	<5	<5	<5	<5	<5
4-nitroaniline	ug/L													
4-nitrophenol	ug/L													
5-nitro-o-toluidine	ug/L													
7,12-dimethylbenz(a)anthracene	ug/L													
Acenaphthene	ug/L													
Acenaphthylene	ug/L													
Acetone	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acetonitrile	ug/L													
Acetophenone	ug/L													
Acrolein	ug/L													
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Aldrin	ug/L													
Allyl chloride	ug/L													
Alpha-bhc	ug/L													
Anthracene	ug/L													
Antimony, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arochlor 1016	ug/L													
Arochlor 1221	ug/L													
Arochlor 1232	ug/L													
Arochlor 1242	ug/L													
Arochlor 1248	ug/L													
Arochlor 1254	ug/L													
Arochlor 1260	ug/L													
Arsenic, total	ug/L	<4.0	<4.0	44.3	<4.0	<4.0	<4.0	<4.0	6.4	12.7	<4.0	<4.0	<4.0	<4.0
Azobenzene	ug/L													
Barium, total	ug/L	368.0	38.9	120.0	128.0	196.0	174.0	21.3	226.0	270.0	134.0	40.7	107.0	24.4
Benzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Benzo(a)anthracene	ug/L													
Benzo(a)pyrene	ug/L													
Benzo(b)fluoranthene	ug/L													
Benzo(g,h,i)perylene	ug/L													
Benzo(k)fluoranthene	ug/L													
Benzyl alcohol	ug/L													
Beryllium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Beta-bhc	ug/L													
Bis (2-chloroethoxy) methane	ug/L													
Bis(2-chloroethyl) ether	ug/L													
Bis(2-chloroisopropyl) ether	ug/L													
Bis(2-ethylhexyl) phthalate	ug/L													
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate	ug/L													
Cadmium, total	ug/L	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1

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

Table 1

Analytical Data Summary for 3/12/2024

Constituents	MW96-21	MW96-23	MW96-24	MW98-25	MW98-28	SRAMP 2
4,4´-ddt	<.05					
4,6-dinitro-2-methylphenol	<8					
4-aminobiphenyl	<8					
4-bromophenyl phenyl ether	<8					
4-chloro-3-methylphenol	<8					
4-chloroaniline	<8					
4-chlorophenyl phenyl ether	<8					
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5	<5
4-nitroaniline	<8					
4-nitrophenol	<8					
5-nitro-o-toluidine	<8					
7,12-dimethylbenz(a)anthracene	<8					
Acenaphthene	<8					
Acenaphthylene	<8					
Acetone	<10	<10	<10	<10	<10	<10
Acetonitrile	<10					
Acetophenone	<8					
Acrolein	<10					
Acrylonitrile	<5	<5	<5	<5	<5	<5
Aldrin	<.05					
Allyl chloride	<1					
Alpha-bhc	<.05					
Anthracene	<8					
Antimony, total		<2	<2	<2	<2	
Arochlor 1016	<.2					
Arochlor 1221	<.2					
Arochlor 1232	<.2					
Arochlor 1242	<.2					
Arochlor 1248	<.2					
Arochlor 1254	<.2					
Arochlor 1260	<.2					
Arsenic, total		33.0	<4.0	16.7	<4.0	
Azobenzene	<8					
Barium, total		644.0	541.0	110.0	246.0	
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	
Beta-bhc	<.05					
Bis (2-chloroethoxy) methane	<8					
Bis(2-chloroethyl) ether	<8					
Bis(2-chloroisopropyl) ether	<8					
Bis(2-ethylhexyl) phthalate	<6					
Bromochloromethane	<1	<1	<1	<1	<1	<1
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	
Carbon disulfide	<1	<1	<1	<1	<1	<1

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

Table 1

Analytical Data Summary for 3/12/2024

Constituents	Units	GU-4	MW02-15A	MW02-30A	MW06-37	MW06-38	MW06-39	MW09-40	MW21-43	MW88-2	MW88-3	MW91-10	MW91-8	MW94-18
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlordane	ug/L													
Chlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzilate	ug/L													
Chloroethane	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroprene	ug/L													
Chromium, total	ug/L	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Chrysene	ug/L													
Cis-1,2-dichloroethylene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	<.4	1.2	.6	<.4	<.4	<.4	<.4	<.4	.8	<.4	<.4	<.4	<.4
Copper, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	4.0	<4.0	18.5	<4.0	<4.0	5.7
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	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L													
Dieldrin	ug/L													
Diethyl phthalate	ug/L													
Dimethoate	ug/L													
Dimethylphthalate	ug/L													
Di-n-butyl phthalate	ug/L													
Di-n-octyl phthalate	ug/L													
Dinoseb	ug/L													
Diphenylamine	ug/L													
Disulfoton	ug/L													
Endosulfan i	ug/L													
Endosulfan ii	ug/L													
Endosulfan sulfate	ug/L													
Endrin	ug/L													
Endrin aldehyde	ug/L													
Ethyl methacrylate	ug/L													
Ethyl methanesulfonate	ug/L													
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Famphur	ug/L													
Fluoranthene	ug/L													
Fluorene	ug/L													
Gamma-bhc (lindane)	ug/L													
Heptachlor	ug/L													
Heptachlor epoxide	ug/L													
Hexachlorobenzene	ug/L													
Hexachlorobutadiene	ug/L													
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													

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

Table 1

Analytical Data Summary for 3/12/2024

Constituents	MW96-21	MW96-23	MW96-24	MW98-25	MW98-28	SRAMP 2
Carbon tetrachloride	<1	<1	<1	<1	<1	<1
Chlordane	<.1					
Chlorobenzene	<1	<1	<1	<1	<1	<1
Chlorobenzilate	<8					
Chloroethane	<1.0	<1.0	<1.0	1.4	<1.0	<1.0
Chloroform	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1
Chloroprene	<1					
Chromium, total		<8	<8	<8	<8	
Chrysene	<8					
Cis-1,2-dichloroethylene	<1.0	<1.0	<1.0	1.4	<1.0	<1.0
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1
Cobalt, total		<.4	<.4	10.7	.8	
Copper, total		<4.0	<4.0	<4.0	<4.0	
Cyanide, total	<.005					
Delta-bhc	<.05					
Diallate	<8					
Dibenzo(a,h)anthracene	<8					
Dibenzofuran	<8					
Dibromochloromethane	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	<1			<1		<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					
Hexachlorobutadiene	<8					
Hexachlorocyclopentadiene	<8					
Hexachloroethane	<8					
Hexachloropropene	<8					
Indeno(1,2,3-cd)pyrene	<8					
Isobutanol	<1000					
Isodrin	<8					
Isophorone	<8					

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

Table 1

Analytical Data Summary for 3/12/2024

Constituents	Units	GU-4	MW02-15A	MW02-30A	MW06-37	MW06-38	MW06-39	MW09-40	MW21-43	MW88-2	MW88-3	MW91-10	MW91-8	MW94-18
Isosafrole	ug/L													
Kepone	ug/L													
Lead, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Methacrylonitrile	ug/L													
Methapyrilene	ug/L													
Methoxychlor	ug/L													
Methyl iodide	ug/L	<1	<1	<1	<1	<1	<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	<5	<5	<5	<5	<5
Naphthalene	ug/L													
Nickel, total	ug/L	<4.0	6.6	<4.0	<4.0	<4.0	<4.0	<4.0	6.4	<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													
Parathion	ug/L													
P-dimethylaminoazobenzene	ug/L													
Pentachlorobenzene	ug/L													
Pentachloronitrobenzene (pcnb)	ug/L													
Pentachlorophenol	ug/L													
Phenacetin	ug/L													
Phenanthrene	ug/L													
Phenol	ug/L													
Phorate	ug/L													
Pronamide	ug/L													
Propionitrile	ug/L													
Pyrene	ug/L													
Safrole	ug/L													
Selenium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfide, total	mg/L													
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Thionazin	ug/L													
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toxaphene	ug/L													
Trans-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	ug/L	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1

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

Table 1

Analytical Data Summary for 3/12/2024

Constituents	MW96-21	MW96-23	MW96-24	MW98-25	MW98-28	SRAMP 2
Isosafrole	<8					
Kepone	<8					
Lead, total		<4	<4	<4	<4	
Methacrylonitrile	<1					
Methapyrilene	<8					
Methoxychlor	<.05					
Methyl iodide	<2	<1	<1	<1	<1	<1
Methyl methacrylate	<1					
Methyl methanesulfonate	<8					
Methyl parathion	<.4					
Methylene chloride	<5	<5	<5	<5	<5	<5
Naphthalene	<8					
Nickel, total		<4.0	<4.0	23.6	5.8	
Nitrobenzene	<8					
N-nitrosodiethylamine	<8					
N-nitrosodimethylamine	<8					
N-nitrosodi-n-butylamine	<8					
N-nitroso-di-n-propylamine	<8					
N-nitrosodiphenylamine	<8					
N-nitrosomethylethylamine	<8					
N-nitrosopiperidine	<8					
N-nitrosopyrrolidine	<8					
O,o,o-triethyl phosphorothioate	<.4					
O-toluidine	<8					
Parathion	<.4					
P-dimethylaminoazobenzene	<8					
Pentachlorobenzene	<8					
Pentachloronitrobenzene (pcnb)	<8					
Pentachlorophenol	<8					
Phenacetin	<8					
Phenanthrene	<8					
Phenol	<8					
Phorate	<.4					
Pronamide	<8					
Propionitrile	<10					
Pyrene	<8					
Safrole	<8					
Selenium, total		<4	<4	<4	<4	
Silver, total		<4	<4	<4	<4	
Styrene	<1	<1	<1	<1	<1	<1
Sulfide, total	<.15					
Tetrachloroethylene	<1	<1	<1	<1	<1	<1
Thallium, total		<2	<2	<2	<2	
Thionazin	<.4					
Toluene	<1	<1	<1	<1	<1	<1
Toxaphene	<.2					
Trans-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	1	<1	<1
Vanadium, total		<20	<20	<20	<20	
Vinyl acetate	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1	<1

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

Table 1

Analytical Data Summary for 3/12/2024

Constituents	Units	GU-4	MW02-15A	MW02-30A	MW06-37	MW06-38	MW06-39	MW09-40	MW21-43	MW88-2	MW88-3	MW91-10	MW91-8	MW94-18
Xylenes, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	70.7	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 1

Analytical Data Summary for 3/12/2024

Constituents	MW96-21	MW96-23	MW96-24	MW98-25	MW98-28	SRAMP 2
Xylenes, total	<2	<2	<2	<2	<2	<2
Zinc, total		<20.0	<20.0	<20.0	<20.0	

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

Attachment B

Summary Tables and Graphs for the Interwell Comparisons

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Antimony, total	ug/L	MW02-15A	09/18/2014	ND	2.0000		
Antimony, total	ug/L	MW02-15A	11/13/2014	ND	2.0000		
Antimony, total	ug/L	MW02-15A	03/17/2015	ND	2.0000		
Antimony, total	ug/L	MW02-15A	06/29/2015	ND	2.0000		
Antimony, total	ug/L	MW02-15A	09/11/2015	ND	2.0000		
Antimony, total	ug/L	MW02-15A	03/16/2016	ND	2.0000		
Antimony, total	ug/L	MW02-15A	09/08/2016	ND	2.0000		
Antimony, total	ug/L	MW02-15A	03/17/2017	ND	2.0000		
Antimony, total	ug/L	MW02-15A	09/19/2017	ND	2.0000		
Antimony, total	ug/L	MW02-15A	03/08/2018	ND	2.0000		
Antimony, total	ug/L	MW02-15A	09/24/2018	ND	2.0000		
Antimony, total	ug/L	MW02-15A	03/25/2019	ND	2.0000		
Antimony, total	ug/L	MW02-15A	09/03/2019	ND	2.0000		
Antimony, total	ug/L	MW02-15A	03/23/2020	ND	2.0000		
Antimony, total	ug/L	MW02-15A	09/04/2020	ND	2.0000		
Antimony, total	ug/L	MW02-15A	03/09/2021	ND	2.0000		
Antimony, total	ug/L	MW02-15A	09/07/2021	ND	2.0000		
Antimony, total	ug/L	MW02-15A	03/28/2022	ND	2.0000		
Antimony, total	ug/L	MW02-15A	09/14/2022	ND	2.0000		
Antimony, total	ug/L	MW02-15A	03/20/2023	ND	2.0000		
Antimony, total	ug/L	MW02-15A	09/12/2023	ND	2.0000		
Antimony, total	ug/L	MW02-15A	03/12/2024	ND	2.0000		
Arsenic, total	ug/L	MW02-15A	09/18/2014	ND	4.0000		
Arsenic, total	ug/L	MW02-15A	11/13/2014	ND	4.0000		
Arsenic, total	ug/L	MW02-15A	03/17/2015	ND	4.0000		
Arsenic, total	ug/L	MW02-15A	06/29/2015	ND	4.0000		
Arsenic, total	ug/L	MW02-15A	09/11/2015	ND	4.0000		
Arsenic, total	ug/L	MW02-15A	03/16/2016	ND	4.0000		
Arsenic, total	ug/L	MW02-15A	09/08/2016	ND	4.0000		
Arsenic, total	ug/L	MW02-15A	03/17/2017	ND	4.0000		
Arsenic, total	ug/L	MW02-15A	09/19/2017	ND	4.0000		
Arsenic, total	ug/L	MW02-15A	03/08/2018	ND	4.0000		
Arsenic, total	ug/L	MW02-15A	09/24/2018	ND	4.0000		
Arsenic, total	ug/L	MW02-15A	03/25/2019	ND	4.0000		
Arsenic, total	ug/L	MW02-15A	09/03/2019	ND	4.0000		
Arsenic, total	ug/L	MW02-15A	03/23/2020	ND	4.0000		
Arsenic, total	ug/L	MW02-15A	09/04/2020	ND	4.0000		
Arsenic, total	ug/L	MW02-15A	03/09/2021	ND	4.0000		
Arsenic, total	ug/L	MW02-15A	09/07/2021	ND	4.0000		
Arsenic, total	ug/L	MW02-15A	03/28/2022	ND	4.0000		
Arsenic, total	ug/L	MW02-15A	09/14/2022	ND	4.0000		
Arsenic, total	ug/L	MW02-15A	03/20/2023	ND	4.0000		
Arsenic, total	ug/L	MW02-15A	09/12/2023	ND	4.0000		
Arsenic, total	ug/L	MW02-15A	03/12/2024	ND	4.0000		
Barium, total	ug/L	MW02-15A	09/18/2014		33.4000		
Barium, total	ug/L	MW02-15A	11/13/2014		33.1000		
Barium, total	ug/L	MW02-15A	03/17/2015		30.2000		
Barium, total	ug/L	MW02-15A	06/29/2015		28.7000		
Barium, total	ug/L	MW02-15A	09/11/2015		34.8000		
Barium, total	ug/L	MW02-15A	03/16/2016		40.4000		
Barium, total	ug/L	MW02-15A	09/08/2016		44.8000		
Barium, total	ug/L	MW02-15A	03/17/2017		43.5000		
Barium, total	ug/L	MW02-15A	09/19/2017		36.0000		
Barium, total	ug/L	MW02-15A	03/08/2018		31.9000		
Barium, total	ug/L	MW02-15A	09/24/2018		32.2000		
Barium, total	ug/L	MW02-15A	03/25/2019		30.0000		
Barium, total	ug/L	MW02-15A	09/03/2019		30.4000		
Barium, total	ug/L	MW02-15A	03/23/2020		32.0000		
Barium, total	ug/L	MW02-15A	09/04/2020		40.0000		
Barium, total	ug/L	MW02-15A	03/09/2021		38.9000		
Barium, total	ug/L	MW02-15A	09/07/2021		75.3000		
Barium, total	ug/L	MW02-15A	03/28/2022		46.2000		
Barium, total	ug/L	MW02-15A	09/14/2022		39.2000		
Barium, total	ug/L	MW02-15A	03/20/2023		42.8000		
Barium, total	ug/L	MW02-15A	09/12/2023		35.9000		
Barium, total	ug/L	MW02-15A	03/12/2024		38.9000		
Beryllium, total	ug/L	MW02-15A	09/18/2014	ND	4.0000		
Beryllium, total	ug/L	MW02-15A	11/13/2014	ND	4.0000		
Beryllium, total	ug/L	MW02-15A	03/17/2015	ND	4.0000		
Beryllium, total	ug/L	MW02-15A	06/29/2015	ND	4.0000		
Beryllium, total	ug/L	MW02-15A	09/11/2015	ND	4.0000		
Beryllium, total	ug/L	MW02-15A	03/16/2016	ND	4.0000		
Beryllium, total	ug/L	MW02-15A	09/08/2016	ND	4.0000		
Beryllium, total	ug/L	MW02-15A	03/17/2017	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	MW02-15A	09/19/2017	ND	4.0000		
Beryllium, total	ug/L	MW02-15A	03/08/2018	ND	4.0000		
Beryllium, total	ug/L	MW02-15A	09/24/2018	ND	4.0000		
Beryllium, total	ug/L	MW02-15A	03/25/2019	ND	4.0000		
Beryllium, total	ug/L	MW02-15A	09/03/2019	ND	4.0000		
Beryllium, total	ug/L	MW02-15A	03/23/2020	ND	4.0000		
Beryllium, total	ug/L	MW02-15A	09/04/2020	ND	4.0000		
Beryllium, total	ug/L	MW02-15A	03/09/2021	ND	4.0000		
Beryllium, total	ug/L	MW02-15A	09/07/2021	ND	4.0000		
Beryllium, total	ug/L	MW02-15A	03/28/2022	ND	4.0000		
Beryllium, total	ug/L	MW02-15A	09/14/2022	ND	4.0000		
Beryllium, total	ug/L	MW02-15A	03/20/2023	ND	4.0000		
Beryllium, total	ug/L	MW02-15A	09/12/2023	ND	4.0000		
Beryllium, total	ug/L	MW02-15A	03/12/2024	ND	4.0000		
Cadmium, total	ug/L	MW02-15A	09/18/2014	ND	0.8000		
Cadmium, total	ug/L	MW02-15A	11/13/2014	ND	0.8000		
Cadmium, total	ug/L	MW02-15A	03/17/2015	ND	0.8000		
Cadmium, total	ug/L	MW02-15A	06/29/2015	ND	0.8000		
Cadmium, total	ug/L	MW02-15A	09/11/2015	ND	0.8000		
Cadmium, total	ug/L	MW02-15A	03/16/2016		3.6000		*
Cadmium, total	ug/L	MW02-15A	09/08/2016	ND	0.8000		
Cadmium, total	ug/L	MW02-15A	03/17/2017	ND	0.8000		
Cadmium, total	ug/L	MW02-15A	09/19/2017	ND	0.8000		
Cadmium, total	ug/L	MW02-15A	03/08/2018	ND	0.8000		
Cadmium, total	ug/L	MW02-15A	09/24/2018	ND	0.8000		
Cadmium, total	ug/L	MW02-15A	03/25/2019	ND	0.8000		
Cadmium, total	ug/L	MW02-15A	09/03/2019	ND	0.8000		
Cadmium, total	ug/L	MW02-15A	03/23/2020	ND	0.8000		
Cadmium, total	ug/L	MW02-15A	09/04/2020	ND	0.8000		
Cadmium, total	ug/L	MW02-15A	03/09/2021	ND	0.8000		
Cadmium, total	ug/L	MW02-15A	09/07/2021		0.9000		
Cadmium, total	ug/L	MW02-15A	03/28/2022	ND	0.8000		
Cadmium, total	ug/L	MW02-15A	09/14/2022	ND	0.8000		
Cadmium, total	ug/L	MW02-15A	03/20/2023	ND	0.8000		
Cadmium, total	ug/L	MW02-15A	09/12/2023	ND	0.8000		
Cadmium, total	ug/L	MW02-15A	03/12/2024	ND	0.8000		
Chromium, total	ug/L	MW02-15A	09/18/2014	ND	8.0000		
Chromium, total	ug/L	MW02-15A	11/13/2014	ND	8.0000		
Chromium, total	ug/L	MW02-15A	03/17/2015	ND	8.0000		
Chromium, total	ug/L	MW02-15A	06/29/2015	ND	8.0000		
Chromium, total	ug/L	MW02-15A	09/11/2015	ND	8.0000		
Chromium, total	ug/L	MW02-15A	03/16/2016	ND	8.0000		
Chromium, total	ug/L	MW02-15A	09/08/2016	ND	8.0000		
Chromium, total	ug/L	MW02-15A	03/17/2017	ND	8.0000		
Chromium, total	ug/L	MW02-15A	09/19/2017	ND	8.0000		
Chromium, total	ug/L	MW02-15A	03/08/2018	ND	8.0000		
Chromium, total	ug/L	MW02-15A	09/24/2018	ND	8.0000		
Chromium, total	ug/L	MW02-15A	03/25/2019	ND	8.0000		
Chromium, total	ug/L	MW02-15A	09/03/2019	ND	8.0000		
Chromium, total	ug/L	MW02-15A	03/23/2020	ND	8.0000		
Chromium, total	ug/L	MW02-15A	09/04/2020	ND	8.0000		
Chromium, total	ug/L	MW02-15A	03/09/2021	ND	8.0000		
Chromium, total	ug/L	MW02-15A	09/07/2021	ND	8.0000		
Chromium, total	ug/L	MW02-15A	03/28/2022	ND	8.0000		
Chromium, total	ug/L	MW02-15A	09/14/2022	ND	8.0000		
Chromium, total	ug/L	MW02-15A	03/20/2023	ND	8.0000		
Chromium, total	ug/L	MW02-15A	09/12/2023	ND	8.0000		
Chromium, total	ug/L	MW02-15A	03/12/2024	ND	8.0000		
Cobalt, total	ug/L	MW02-15A	09/18/2014	ND	0.8000		
Cobalt, total	ug/L	MW02-15A	11/13/2014	ND	0.8000		
Cobalt, total	ug/L	MW02-15A	03/17/2015	ND	0.8000		
Cobalt, total	ug/L	MW02-15A	06/29/2015	ND	0.8000		
Cobalt, total	ug/L	MW02-15A	09/11/2015		0.8000		
Cobalt, total	ug/L	MW02-15A	03/16/2016	ND	0.8000		
Cobalt, total	ug/L	MW02-15A	09/08/2016		1.4000		
Cobalt, total	ug/L	MW02-15A	03/17/2017		1.5000		
Cobalt, total	ug/L	MW02-15A	09/19/2017	ND	0.8000		
Cobalt, total	ug/L	MW02-15A	03/08/2018	ND	0.8000		
Cobalt, total	ug/L	MW02-15A	09/24/2018	ND	0.8000		
Cobalt, total	ug/L	MW02-15A	03/25/2019	ND	0.8000		
Cobalt, total	ug/L	MW02-15A	09/03/2019		0.9000		
Cobalt, total	ug/L	MW02-15A	03/23/2020		1.6000		
Cobalt, total	ug/L	MW02-15A	09/04/2020		2.8000		
Cobalt, total	ug/L	MW02-15A	03/09/2021		5.8000		

* - 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	MW02-15A	09/07/2021		5.7000		
Cobalt, total	ug/L	MW02-15A	03/28/2022		3.2000		
Cobalt, total	ug/L	MW02-15A	09/14/2022		6.2000		
Cobalt, total	ug/L	MW02-15A	03/20/2023		3.6000		
Cobalt, total	ug/L	MW02-15A	09/12/2023		1.1000		
Cobalt, total	ug/L	MW02-15A	03/12/2024		1.2000		
Copper, total	ug/L	MW02-15A	09/18/2014		7.8000		
Copper, total	ug/L	MW02-15A	11/13/2014	ND	4.0000		
Copper, total	ug/L	MW02-15A	03/17/2015	ND	4.0000		
Copper, total	ug/L	MW02-15A	06/29/2015	ND	4.0000		
Copper, total	ug/L	MW02-15A	09/11/2015	ND	4.0000		
Copper, total	ug/L	MW02-15A	03/16/2016	ND	4.0000		
Copper, total	ug/L	MW02-15A	09/08/2016	ND	4.0000		
Copper, total	ug/L	MW02-15A	03/17/2017	ND	4.0000		
Copper, total	ug/L	MW02-15A	09/19/2017	ND	4.0000		
Copper, total	ug/L	MW02-15A	03/08/2018	ND	4.0000		
Copper, total	ug/L	MW02-15A	09/24/2018	ND	4.0000		
Copper, total	ug/L	MW02-15A	03/25/2019	ND	4.0000		
Copper, total	ug/L	MW02-15A	09/03/2019	ND	4.0000		
Copper, total	ug/L	MW02-15A	03/23/2020	ND	4.0000		
Copper, total	ug/L	MW02-15A	09/04/2020	ND	4.0000		
Copper, total	ug/L	MW02-15A	03/09/2021		26.0000		*
Copper, total	ug/L	MW02-15A	09/07/2021	ND	4.0000		
Copper, total	ug/L	MW02-15A	03/28/2022	ND	4.0000		
Copper, total	ug/L	MW02-15A	09/14/2022	ND	4.0000		
Copper, total	ug/L	MW02-15A	03/20/2023	ND	4.0000		
Copper, total	ug/L	MW02-15A	09/12/2023	ND	4.0000		
Copper, total	ug/L	MW02-15A	03/12/2024	ND	4.0000		
Lead, total	ug/L	MW02-15A	09/18/2014		22.3000		*
Lead, total	ug/L	MW02-15A	11/13/2014	ND	4.0000		
Lead, total	ug/L	MW02-15A	03/17/2015	ND	4.0000		
Lead, total	ug/L	MW02-15A	06/29/2015	ND	4.0000		
Lead, total	ug/L	MW02-15A	09/11/2015	ND	4.0000		
Lead, total	ug/L	MW02-15A	03/16/2016	ND	4.0000		
Lead, total	ug/L	MW02-15A	09/08/2016	ND	4.0000		
Lead, total	ug/L	MW02-15A	03/17/2017	ND	4.0000		
Lead, total	ug/L	MW02-15A	09/19/2017	ND	4.0000		
Lead, total	ug/L	MW02-15A	03/08/2018	ND	4.0000		
Lead, total	ug/L	MW02-15A	09/24/2018	ND	4.0000		
Lead, total	ug/L	MW02-15A	03/25/2019	ND	4.0000		
Lead, total	ug/L	MW02-15A	09/03/2019	ND	4.0000		
Lead, total	ug/L	MW02-15A	03/23/2020	ND	4.0000		
Lead, total	ug/L	MW02-15A	09/04/2020	ND	4.0000		
Lead, total	ug/L	MW02-15A	03/09/2021	ND	4.0000		
Lead, total	ug/L	MW02-15A	09/07/2021	ND	4.0000		
Lead, total	ug/L	MW02-15A	03/28/2022	ND	4.0000		
Lead, total	ug/L	MW02-15A	09/14/2022	ND	4.0000		
Lead, total	ug/L	MW02-15A	03/20/2023	ND	4.0000		
Lead, total	ug/L	MW02-15A	09/12/2023	ND	4.0000		
Lead, total	ug/L	MW02-15A	03/12/2024	ND	4.0000		
Nickel, total	ug/L	MW02-15A	09/18/2014		10.4000		
Nickel, total	ug/L	MW02-15A	11/13/2014	ND	4.0000		
Nickel, total	ug/L	MW02-15A	03/17/2015	ND	4.0000		
Nickel, total	ug/L	MW02-15A	06/29/2015		5.6000		
Nickel, total	ug/L	MW02-15A	09/11/2015		8.3000		
Nickel, total	ug/L	MW02-15A	03/16/2016		10.3000		
Nickel, total	ug/L	MW02-15A	09/08/2016		14.0000		
Nickel, total	ug/L	MW02-15A	03/17/2017		11.9000		
Nickel, total	ug/L	MW02-15A	09/19/2017	ND	4.0000		
Nickel, total	ug/L	MW02-15A	03/08/2018	ND	4.0000		
Nickel, total	ug/L	MW02-15A	09/24/2018		5.7000		
Nickel, total	ug/L	MW02-15A	03/25/2019		9.9000		
Nickel, total	ug/L	MW02-15A	09/03/2019		9.1000		
Nickel, total	ug/L	MW02-15A	03/23/2020		9.7000		
Nickel, total	ug/L	MW02-15A	09/04/2020		9.9000		
Nickel, total	ug/L	MW02-15A	03/09/2021		9.6000		
Nickel, total	ug/L	MW02-15A	09/07/2021		17.3000		
Nickel, total	ug/L	MW02-15A	03/28/2022		11.3000		
Nickel, total	ug/L	MW02-15A	09/14/2022		8.8000		
Nickel, total	ug/L	MW02-15A	03/20/2023		9.8000		
Nickel, total	ug/L	MW02-15A	09/12/2023		8.4000		
Nickel, total	ug/L	MW02-15A	03/12/2024		6.6000		
Selenium, total	ug/L	MW02-15A	09/18/2014	ND	4.0000		
Selenium, total	ug/L	MW02-15A	11/13/2014	ND	4.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Selenium, total	ug/L	MW02-15A	03/17/2015	ND	4.0000		
Selenium, total	ug/L	MW02-15A	06/29/2015	ND	4.0000		
Selenium, total	ug/L	MW02-15A	09/11/2015	ND	4.0000		
Selenium, total	ug/L	MW02-15A	03/16/2016	ND	4.0000		
Selenium, total	ug/L	MW02-15A	09/08/2016	ND	4.0000		
Selenium, total	ug/L	MW02-15A	03/17/2017	ND	4.0000		
Selenium, total	ug/L	MW02-15A	09/19/2017	ND	4.0000		
Selenium, total	ug/L	MW02-15A	03/08/2018	ND	4.0000		
Selenium, total	ug/L	MW02-15A	09/24/2018	ND	4.0000		
Selenium, total	ug/L	MW02-15A	03/25/2019	ND	4.0000		
Selenium, total	ug/L	MW02-15A	09/03/2019	ND	4.0000		
Selenium, total	ug/L	MW02-15A	03/23/2020	ND	4.0000		
Selenium, total	ug/L	MW02-15A	09/04/2020	ND	4.0000		
Selenium, total	ug/L	MW02-15A	03/09/2021	ND	4.0000		
Selenium, total	ug/L	MW02-15A	09/07/2021	ND	4.0000		
Selenium, total	ug/L	MW02-15A	03/28/2022	ND	4.0000		
Selenium, total	ug/L	MW02-15A	09/14/2022	ND	4.0000		
Selenium, total	ug/L	MW02-15A	03/20/2023	ND	4.0000		
Selenium, total	ug/L	MW02-15A	09/12/2023	ND	4.0000		
Selenium, total	ug/L	MW02-15A	03/12/2024	ND	4.0000		
Silver, total	ug/L	MW02-15A	09/18/2014	ND	4.0000		
Silver, total	ug/L	MW02-15A	11/13/2014	ND	4.0000		
Silver, total	ug/L	MW02-15A	03/17/2015	ND	4.0000		
Silver, total	ug/L	MW02-15A	06/29/2015	ND	4.0000		
Silver, total	ug/L	MW02-15A	09/11/2015	ND	4.0000		
Silver, total	ug/L	MW02-15A	03/16/2016	ND	4.0000		
Silver, total	ug/L	MW02-15A	09/08/2016	ND	4.0000		
Silver, total	ug/L	MW02-15A	03/17/2017	ND	4.0000		
Silver, total	ug/L	MW02-15A	09/19/2017	ND	4.0000		
Silver, total	ug/L	MW02-15A	03/08/2018	ND	4.0000		
Silver, total	ug/L	MW02-15A	09/24/2018	ND	4.0000		
Silver, total	ug/L	MW02-15A	03/25/2019	ND	4.0000		
Silver, total	ug/L	MW02-15A	09/03/2019	ND	4.0000		
Silver, total	ug/L	MW02-15A	03/23/2020	ND	4.0000		
Silver, total	ug/L	MW02-15A	09/04/2020	ND	4.0000		
Silver, total	ug/L	MW02-15A	03/09/2021	ND	4.0000		
Silver, total	ug/L	MW02-15A	09/07/2021	ND	4.0000		
Silver, total	ug/L	MW02-15A	03/28/2022	ND	4.0000		
Silver, total	ug/L	MW02-15A	09/14/2022	ND	4.0000		
Silver, total	ug/L	MW02-15A	03/20/2023	ND	4.0000		
Silver, total	ug/L	MW02-15A	09/12/2023	ND	4.0000		
Silver, total	ug/L	MW02-15A	03/12/2024	ND	4.0000		
Thallium, total	ug/L	MW02-15A	09/18/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW02-15A	11/13/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW02-15A	03/17/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW02-15A	06/29/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW02-15A	09/11/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW02-15A	03/16/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW02-15A	09/08/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW02-15A	03/17/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW02-15A	09/19/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW02-15A	03/08/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW02-15A	09/24/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW02-15A	03/25/2019	ND	2.0000		
Thallium, total	ug/L	MW02-15A	09/03/2019	ND	2.0000		
Thallium, total	ug/L	MW02-15A	03/23/2020	ND	2.0000		
Thallium, total	ug/L	MW02-15A	09/04/2020	ND	2.0000		
Thallium, total	ug/L	MW02-15A	03/09/2021	ND	2.0000		
Thallium, total	ug/L	MW02-15A	09/07/2021	ND	2.0000		
Thallium, total	ug/L	MW02-15A	03/28/2022	ND	2.0000		
Thallium, total	ug/L	MW02-15A	09/14/2022	ND	2.0000		
Thallium, total	ug/L	MW02-15A	03/20/2023	ND	2.0000		
Thallium, total	ug/L	MW02-15A	09/12/2023	ND	2.0000		
Thallium, total	ug/L	MW02-15A	03/12/2024	ND	2.0000		
Vanadium, total	ug/L	MW02-15A	09/18/2014	ND	20.0000		
Vanadium, total	ug/L	MW02-15A	11/13/2014	ND	20.0000		
Vanadium, total	ug/L	MW02-15A	03/17/2015	ND	20.0000		
Vanadium, total	ug/L	MW02-15A	06/29/2015	ND	20.0000		
Vanadium, total	ug/L	MW02-15A	09/11/2015	ND	20.0000		
Vanadium, total	ug/L	MW02-15A	03/16/2016	ND	20.0000		
Vanadium, total	ug/L	MW02-15A	09/08/2016	ND	20.0000		
Vanadium, total	ug/L	MW02-15A	03/17/2017	ND	20.0000		
Vanadium, total	ug/L	MW02-15A	09/19/2017	ND	20.0000		
Vanadium, total	ug/L	MW02-15A	03/08/2018	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	MW02-15A	09/24/2018	ND	20.0000		
Vanadium, total	ug/L	MW02-15A	03/25/2019	ND	20.0000		
Vanadium, total	ug/L	MW02-15A	09/03/2019	ND	20.0000		
Vanadium, total	ug/L	MW02-15A	03/23/2020	ND	20.0000		
Vanadium, total	ug/L	MW02-15A	09/04/2020	ND	20.0000		
Vanadium, total	ug/L	MW02-15A	03/09/2021	ND	20.0000		
Vanadium, total	ug/L	MW02-15A	09/07/2021	ND	20.0000		
Vanadium, total	ug/L	MW02-15A	03/28/2022	ND	20.0000		
Vanadium, total	ug/L	MW02-15A	09/14/2022	ND	20.0000		
Vanadium, total	ug/L	MW02-15A	03/20/2023	ND	20.0000		
Vanadium, total	ug/L	MW02-15A	09/12/2023	ND	20.0000		
Vanadium, total	ug/L	MW02-15A	03/12/2024	ND	20.0000		
Zinc, total	ug/L	MW02-15A	09/18/2014		11.3000		
Zinc, total	ug/L	MW02-15A	11/13/2014	ND	20.0000		
Zinc, total	ug/L	MW02-15A	03/17/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW02-15A	06/29/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW02-15A	09/11/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW02-15A	03/16/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW02-15A	09/08/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW02-15A	03/17/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW02-15A	09/19/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW02-15A	03/08/2018		9.3000		
Zinc, total	ug/L	MW02-15A	09/24/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW02-15A	03/25/2019	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW02-15A	09/03/2019	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW02-15A	03/23/2020	ND	20.0000		
Zinc, total	ug/L	MW02-15A	09/04/2020	ND	20.0000		
Zinc, total	ug/L	MW02-15A	03/09/2021	ND	20.0000		
Zinc, total	ug/L	MW02-15A	09/07/2021	ND	20.0000		
Zinc, total	ug/L	MW02-15A	03/28/2022	ND	20.0000		
Zinc, total	ug/L	MW02-15A	09/14/2022	ND	20.0000		
Zinc, total	ug/L	MW02-15A	03/20/2023	ND	20.0000		
Zinc, total	ug/L	MW02-15A	09/12/2023	ND	20.0000		
Zinc, total	ug/L	MW02-15A	03/12/2024	ND	20.0000		
Antimony, total	ug/L	MW02-30A	03/16/2016	ND	2.0000		
Antimony, total	ug/L	MW02-30A	06/07/2016	ND	2.0000		
Antimony, total	ug/L	MW02-30A	09/08/2016	ND	2.0000		
Antimony, total	ug/L	MW02-30A	03/17/2017	ND	2.0000		
Antimony, total	ug/L	MW02-30A	09/19/2017	ND	2.0000		
Antimony, total	ug/L	MW02-30A	03/08/2018	ND	2.0000		
Antimony, total	ug/L	MW02-30A	09/24/2018	ND	2.0000		
Antimony, total	ug/L	MW02-30A	03/25/2019	ND	2.0000		
Antimony, total	ug/L	MW02-30A	09/03/2019	ND	2.0000		
Antimony, total	ug/L	MW02-30A	03/23/2020	ND	2.0000		
Antimony, total	ug/L	MW02-30A	09/04/2020	ND	2.0000		
Antimony, total	ug/L	MW02-30A	03/09/2021	ND	2.0000		
Antimony, total	ug/L	MW02-30A	09/07/2021	ND	2.0000		
Antimony, total	ug/L	MW02-30A	03/28/2022	ND	2.0000		
Antimony, total	ug/L	MW02-30A	09/14/2022	ND	2.0000		
Antimony, total	ug/L	MW02-30A	03/20/2023	ND	2.0000		
Antimony, total	ug/L	MW02-30A	09/12/2023	ND	2.0000		
Antimony, total	ug/L	MW02-30A	03/12/2024	ND	2.0000		
Arsenic, total	ug/L	MW02-30A	03/16/2016		43.9000		
Arsenic, total	ug/L	MW02-30A	06/07/2016		34.2000		
Arsenic, total	ug/L	MW02-30A	09/08/2016		37.5000		
Arsenic, total	ug/L	MW02-30A	03/17/2017		30.0000		
Arsenic, total	ug/L	MW02-30A	09/19/2017		24.3000		
Arsenic, total	ug/L	MW02-30A	03/08/2018		25.7000		
Arsenic, total	ug/L	MW02-30A	09/24/2018		26.2000		
Arsenic, total	ug/L	MW02-30A	03/25/2019		30.9000		
Arsenic, total	ug/L	MW02-30A	09/03/2019		32.7000		
Arsenic, total	ug/L	MW02-30A	03/23/2020		29.1000		
Arsenic, total	ug/L	MW02-30A	09/04/2020		43.5000		
Arsenic, total	ug/L	MW02-30A	03/09/2021		27.6000		
Arsenic, total	ug/L	MW02-30A	09/07/2021		36.6000		
Arsenic, total	ug/L	MW02-30A	03/28/2022		34.4000		
Arsenic, total	ug/L	MW02-30A	09/14/2022		50.6000		
Arsenic, total	ug/L	MW02-30A	03/20/2023		50.1000		
Arsenic, total	ug/L	MW02-30A	09/12/2023		27.9000		
Arsenic, total	ug/L	MW02-30A	03/12/2024		44.3000		
Barium, total	ug/L	MW02-30A	03/16/2016		85.6000		
Barium, total	ug/L	MW02-30A	06/07/2016		71.3000		
Barium, total	ug/L	MW02-30A	09/08/2016		62.8000		
Barium, total	ug/L	MW02-30A	03/17/2017		35.6000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Barium, total	ug/L	MW02-30A	09/19/2017		77.3000		
Barium, total	ug/L	MW02-30A	03/08/2018		79.6000		
Barium, total	ug/L	MW02-30A	09/24/2018		96.5000		
Barium, total	ug/L	MW02-30A	03/25/2019		131.0000		
Barium, total	ug/L	MW02-30A	09/03/2019		91.8000		
Barium, total	ug/L	MW02-30A	03/23/2020		102.0000		
Barium, total	ug/L	MW02-30A	09/04/2020		93.4000		
Barium, total	ug/L	MW02-30A	03/09/2021		81.5000		
Barium, total	ug/L	MW02-30A	09/07/2021		88.2000		
Barium, total	ug/L	MW02-30A	03/28/2022		93.4000		
Barium, total	ug/L	MW02-30A	09/14/2022		159.0000		
Barium, total	ug/L	MW02-30A	03/20/2023		207.0000		
Barium, total	ug/L	MW02-30A	09/12/2023		71.8000		
Barium, total	ug/L	MW02-30A	03/12/2024		120.0000		
Beryllium, total	ug/L	MW02-30A	03/16/2016	ND	4.0000		
Beryllium, total	ug/L	MW02-30A	06/07/2016	ND	4.0000		
Beryllium, total	ug/L	MW02-30A	09/08/2016	ND	4.0000		
Beryllium, total	ug/L	MW02-30A	03/17/2017	ND	4.0000		
Beryllium, total	ug/L	MW02-30A	09/19/2017	ND	4.0000		
Beryllium, total	ug/L	MW02-30A	03/08/2018	ND	4.0000		
Beryllium, total	ug/L	MW02-30A	09/24/2018	ND	4.0000		
Beryllium, total	ug/L	MW02-30A	03/25/2019	ND	4.0000		
Beryllium, total	ug/L	MW02-30A	09/03/2019	ND	4.0000		
Beryllium, total	ug/L	MW02-30A	03/23/2020	ND	4.0000		
Beryllium, total	ug/L	MW02-30A	09/04/2020	ND	4.0000		
Beryllium, total	ug/L	MW02-30A	03/09/2021	ND	4.0000		
Beryllium, total	ug/L	MW02-30A	09/07/2021	ND	4.0000		
Beryllium, total	ug/L	MW02-30A	03/28/2022	ND	4.0000		
Beryllium, total	ug/L	MW02-30A	09/14/2022	ND	4.0000		
Beryllium, total	ug/L	MW02-30A	03/20/2023	ND	4.0000		
Beryllium, total	ug/L	MW02-30A	09/12/2023	ND	4.0000		
Beryllium, total	ug/L	MW02-30A	03/12/2024	ND	4.0000		
Cadmium, total	ug/L	MW02-30A	03/16/2016	ND	0.8000		
Cadmium, total	ug/L	MW02-30A	06/07/2016	ND	0.8000		
Cadmium, total	ug/L	MW02-30A	09/08/2016	ND	0.8000		
Cadmium, total	ug/L	MW02-30A	03/17/2017	ND	0.8000		
Cadmium, total	ug/L	MW02-30A	09/19/2017	ND	0.8000		
Cadmium, total	ug/L	MW02-30A	03/08/2018	ND	0.8000		
Cadmium, total	ug/L	MW02-30A	09/24/2018	ND	0.8000		
Cadmium, total	ug/L	MW02-30A	03/25/2019	ND	0.8000		
Cadmium, total	ug/L	MW02-30A	09/03/2019	ND	0.8000		
Cadmium, total	ug/L	MW02-30A	03/23/2020	ND	0.8000		
Cadmium, total	ug/L	MW02-30A	09/04/2020	ND	0.8000		
Cadmium, total	ug/L	MW02-30A	03/09/2021	ND	0.8000		
Cadmium, total	ug/L	MW02-30A	09/07/2021	ND	0.8000		
Cadmium, total	ug/L	MW02-30A	03/28/2022	ND	0.8000		
Cadmium, total	ug/L	MW02-30A	09/14/2022		0.8000		
Cadmium, total	ug/L	MW02-30A	03/20/2023		1.8000		
Cadmium, total	ug/L	MW02-30A	09/12/2023	ND	0.8000		
Cadmium, total	ug/L	MW02-30A	03/12/2024	ND	0.8000		
Chromium, total	ug/L	MW02-30A	03/16/2016	ND	8.0000		
Chromium, total	ug/L	MW02-30A	06/07/2016	ND	8.0000		
Chromium, total	ug/L	MW02-30A	09/08/2016	ND	8.0000		
Chromium, total	ug/L	MW02-30A	03/17/2017	ND	8.0000		
Chromium, total	ug/L	MW02-30A	09/19/2017	ND	8.0000		
Chromium, total	ug/L	MW02-30A	03/08/2018	ND	8.0000		
Chromium, total	ug/L	MW02-30A	09/24/2018	ND	8.0000		
Chromium, total	ug/L	MW02-30A	03/25/2019	ND	8.0000		
Chromium, total	ug/L	MW02-30A	09/03/2019	ND	8.0000		
Chromium, total	ug/L	MW02-30A	03/23/2020	ND	8.0000		
Chromium, total	ug/L	MW02-30A	09/04/2020	ND	8.0000		
Chromium, total	ug/L	MW02-30A	03/09/2021	ND	8.0000		
Chromium, total	ug/L	MW02-30A	09/07/2021	ND	8.0000		
Chromium, total	ug/L	MW02-30A	03/28/2022	ND	8.0000		
Chromium, total	ug/L	MW02-30A	09/14/2022		9.0000		
Chromium, total	ug/L	MW02-30A	03/20/2023		10.6000		
Chromium, total	ug/L	MW02-30A	09/12/2023	ND	8.0000		
Chromium, total	ug/L	MW02-30A	03/12/2024	ND	8.0000		
Cobalt, total	ug/L	MW02-30A	03/16/2016		1.0000		
Cobalt, total	ug/L	MW02-30A	06/07/2016		1.2000		
Cobalt, total	ug/L	MW02-30A	09/08/2016	ND	0.8000		
Cobalt, total	ug/L	MW02-30A	03/17/2017	ND	0.8000		
Cobalt, total	ug/L	MW02-30A	09/19/2017	ND	0.8000		
Cobalt, total	ug/L	MW02-30A	03/08/2018	ND	0.8000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Cobalt, total	ug/L	MW02-30A	09/24/2018		1.8000		
Cobalt, total	ug/L	MW02-30A	03/25/2019		3.2000		
Cobalt, total	ug/L	MW02-30A	09/03/2019		0.8000		
Cobalt, total	ug/L	MW02-30A	03/23/2020		2.3000		
Cobalt, total	ug/L	MW02-30A	09/04/2020		0.4000		
Cobalt, total	ug/L	MW02-30A	03/09/2021		1.5000		
Cobalt, total	ug/L	MW02-30A	09/07/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW02-30A	03/28/2022		0.4000		
Cobalt, total	ug/L	MW02-30A	09/14/2022		7.0000		
Cobalt, total	ug/L	MW02-30A	03/20/2023		4.5000		
Cobalt, total	ug/L	MW02-30A	09/12/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW02-30A	03/12/2024		0.6000		
Copper, total	ug/L	MW02-30A	03/16/2016	ND	4.0000		
Copper, total	ug/L	MW02-30A	06/07/2016	ND	4.0000		
Copper, total	ug/L	MW02-30A	09/08/2016	ND	4.0000		
Copper, total	ug/L	MW02-30A	03/17/2017	ND	4.0000		
Copper, total	ug/L	MW02-30A	09/19/2017	ND	4.0000		
Copper, total	ug/L	MW02-30A	03/08/2018	ND	4.0000		
Copper, total	ug/L	MW02-30A	09/24/2018		4.8000		
Copper, total	ug/L	MW02-30A	03/25/2019		13.5000		
Copper, total	ug/L	MW02-30A	09/03/2019	ND	4.0000		
Copper, total	ug/L	MW02-30A	03/23/2020		9.3000		
Copper, total	ug/L	MW02-30A	09/04/2020	ND	4.0000		
Copper, total	ug/L	MW02-30A	03/09/2021		9.4000		
Copper, total	ug/L	MW02-30A	09/07/2021	ND	4.0000		
Copper, total	ug/L	MW02-30A	03/28/2022	ND	4.0000		
Copper, total	ug/L	MW02-30A	09/14/2022		19.5000		
Copper, total	ug/L	MW02-30A	03/20/2023		18.3000		
Copper, total	ug/L	MW02-30A	09/12/2023	ND	4.0000		
Copper, total	ug/L	MW02-30A	03/12/2024	ND	4.0000		
Lead, total	ug/L	MW02-30A	03/16/2016	ND	4.0000		
Lead, total	ug/L	MW02-30A	06/07/2016	ND	4.0000		
Lead, total	ug/L	MW02-30A	09/08/2016	ND	4.0000		
Lead, total	ug/L	MW02-30A	03/17/2017	ND	4.0000		
Lead, total	ug/L	MW02-30A	09/19/2017	ND	4.0000		
Lead, total	ug/L	MW02-30A	03/08/2018	ND	4.0000		
Lead, total	ug/L	MW02-30A	09/24/2018	ND	4.0000		
Lead, total	ug/L	MW02-30A	03/25/2019		8.9000		
Lead, total	ug/L	MW02-30A	09/03/2019	ND	4.0000		
Lead, total	ug/L	MW02-30A	03/23/2020		7.0000		
Lead, total	ug/L	MW02-30A	09/04/2020	ND	4.0000		
Lead, total	ug/L	MW02-30A	03/09/2021	ND	4.0000		
Lead, total	ug/L	MW02-30A	09/07/2021	ND	4.0000		
Lead, total	ug/L	MW02-30A	03/28/2022	ND	4.0000		
Lead, total	ug/L	MW02-30A	09/14/2022		14.8000		
Lead, total	ug/L	MW02-30A	03/20/2023		22.3000		
Lead, total	ug/L	MW02-30A	09/12/2023	ND	4.0000		
Lead, total	ug/L	MW02-30A	03/12/2024	ND	4.0000		
Nickel, total	ug/L	MW02-30A	03/16/2016	ND	4.0000		
Nickel, total	ug/L	MW02-30A	06/07/2016	ND	4.0000		
Nickel, total	ug/L	MW02-30A	09/08/2016	ND	4.0000		
Nickel, total	ug/L	MW02-30A	03/17/2017	ND	4.0000		
Nickel, total	ug/L	MW02-30A	09/19/2017	ND	4.0000		
Nickel, total	ug/L	MW02-30A	03/08/2018	ND	4.0000		
Nickel, total	ug/L	MW02-30A	09/24/2018	ND	4.0000		
Nickel, total	ug/L	MW02-30A	03/25/2019		9.4000		
Nickel, total	ug/L	MW02-30A	09/03/2019	ND	4.0000		
Nickel, total	ug/L	MW02-30A	03/23/2020		7.0000		
Nickel, total	ug/L	MW02-30A	09/04/2020	ND	4.0000		
Nickel, total	ug/L	MW02-30A	03/09/2021		4.3000		
Nickel, total	ug/L	MW02-30A	09/07/2021	ND	4.0000		
Nickel, total	ug/L	MW02-30A	03/28/2022	ND	4.0000		
Nickel, total	ug/L	MW02-30A	09/14/2022		12.4000		
Nickel, total	ug/L	MW02-30A	03/20/2023		12.9000		
Nickel, total	ug/L	MW02-30A	09/12/2023	ND	4.0000		
Nickel, total	ug/L	MW02-30A	03/12/2024	ND	4.0000		
Selenium, total	ug/L	MW02-30A	03/16/2016	ND	4.0000		
Selenium, total	ug/L	MW02-30A	06/07/2016	ND	4.0000		
Selenium, total	ug/L	MW02-30A	09/08/2016	ND	4.0000		
Selenium, total	ug/L	MW02-30A	03/17/2017	ND	4.0000		
Selenium, total	ug/L	MW02-30A	09/19/2017	ND	4.0000		
Selenium, total	ug/L	MW02-30A	03/08/2018	ND	4.0000		
Selenium, total	ug/L	MW02-30A	09/24/2018	ND	4.0000		
Selenium, total	ug/L	MW02-30A	03/25/2019	ND	4.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Selenium, total	ug/L	MW02-30A	09/03/2019	ND	4.0000		
Selenium, total	ug/L	MW02-30A	03/23/2020	ND	4.0000		
Selenium, total	ug/L	MW02-30A	09/04/2020	ND	4.0000		
Selenium, total	ug/L	MW02-30A	03/09/2021	ND	4.0000		
Selenium, total	ug/L	MW02-30A	09/07/2021	ND	4.0000		
Selenium, total	ug/L	MW02-30A	03/28/2022	ND	4.0000		
Selenium, total	ug/L	MW02-30A	09/14/2022	ND	4.0000		
Selenium, total	ug/L	MW02-30A	03/20/2023	ND	4.0000		
Selenium, total	ug/L	MW02-30A	09/12/2023	ND	4.0000		
Selenium, total	ug/L	MW02-30A	03/12/2024	ND	4.0000		
Silver, total	ug/L	MW02-30A	03/16/2016	ND	4.0000		
Silver, total	ug/L	MW02-30A	06/07/2016	ND	4.0000		
Silver, total	ug/L	MW02-30A	09/08/2016	ND	4.0000		
Silver, total	ug/L	MW02-30A	03/17/2017	ND	4.0000		
Silver, total	ug/L	MW02-30A	09/19/2017	ND	4.0000		
Silver, total	ug/L	MW02-30A	03/08/2018	ND	4.0000		
Silver, total	ug/L	MW02-30A	09/24/2018	ND	4.0000		
Silver, total	ug/L	MW02-30A	03/25/2019	ND	4.0000		
Silver, total	ug/L	MW02-30A	09/03/2019	ND	4.0000		
Silver, total	ug/L	MW02-30A	03/23/2020	ND	4.0000		
Silver, total	ug/L	MW02-30A	09/04/2020	ND	4.0000		
Silver, total	ug/L	MW02-30A	03/09/2021	ND	4.0000		
Silver, total	ug/L	MW02-30A	09/07/2021	ND	4.0000		
Silver, total	ug/L	MW02-30A	03/28/2022	ND	4.0000		
Silver, total	ug/L	MW02-30A	09/14/2022	ND	4.0000		
Silver, total	ug/L	MW02-30A	03/20/2023	ND	4.0000		
Silver, total	ug/L	MW02-30A	09/12/2023	ND	4.0000		
Silver, total	ug/L	MW02-30A	03/12/2024	ND	4.0000		
Thallium, total	ug/L	MW02-30A	03/16/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW02-30A	06/07/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW02-30A	09/08/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW02-30A	03/17/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW02-30A	09/19/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW02-30A	03/08/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW02-30A	09/24/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW02-30A	03/25/2019	ND	2.0000		
Thallium, total	ug/L	MW02-30A	09/03/2019	ND	2.0000		
Thallium, total	ug/L	MW02-30A	03/23/2020	ND	2.0000		
Thallium, total	ug/L	MW02-30A	09/04/2020	ND	2.0000		
Thallium, total	ug/L	MW02-30A	03/09/2021	ND	2.0000		
Thallium, total	ug/L	MW02-30A	09/07/2021	ND	2.0000		
Thallium, total	ug/L	MW02-30A	03/28/2022	ND	2.0000		
Thallium, total	ug/L	MW02-30A	09/14/2022	ND	2.0000		
Thallium, total	ug/L	MW02-30A	03/20/2023	ND	2.0000		
Thallium, total	ug/L	MW02-30A	09/12/2023	ND	2.0000		
Thallium, total	ug/L	MW02-30A	03/12/2024	ND	2.0000		
Vanadium, total	ug/L	MW02-30A	03/16/2016	ND	20.0000		
Vanadium, total	ug/L	MW02-30A	06/07/2016	ND	20.0000		
Vanadium, total	ug/L	MW02-30A	09/08/2016	ND	20.0000		
Vanadium, total	ug/L	MW02-30A	03/17/2017	ND	20.0000		
Vanadium, total	ug/L	MW02-30A	09/19/2017	ND	20.0000		
Vanadium, total	ug/L	MW02-30A	03/08/2018	ND	20.0000		
Vanadium, total	ug/L	MW02-30A	09/24/2018	ND	20.0000		
Vanadium, total	ug/L	MW02-30A	03/25/2019	ND	20.0000		
Vanadium, total	ug/L	MW02-30A	09/03/2019	ND	20.0000		
Vanadium, total	ug/L	MW02-30A	03/23/2020	ND	20.0000		
Vanadium, total	ug/L	MW02-30A	09/04/2020	ND	20.0000		
Vanadium, total	ug/L	MW02-30A	03/09/2021	ND	20.0000		
Vanadium, total	ug/L	MW02-30A	09/07/2021	ND	20.0000		
Vanadium, total	ug/L	MW02-30A	03/28/2022	ND	20.0000		
Vanadium, total	ug/L	MW02-30A	09/14/2022	ND	20.0000		
Vanadium, total	ug/L	MW02-30A	03/20/2023	ND	20.0000		
Vanadium, total	ug/L	MW02-30A	09/12/2023	ND	20.0000		
Vanadium, total	ug/L	MW02-30A	03/12/2024	ND	20.0000		
Zinc, total	ug/L	MW02-30A	03/16/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW02-30A	06/07/2016		8.7000		
Zinc, total	ug/L	MW02-30A	09/08/2016		9.9000		
Zinc, total	ug/L	MW02-30A	03/17/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW02-30A	09/19/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW02-30A	03/08/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW02-30A	09/24/2018		12.9000		
Zinc, total	ug/L	MW02-30A	03/25/2019		59.9000		
Zinc, total	ug/L	MW02-30A	09/03/2019		16.3000		
Zinc, total	ug/L	MW02-30A	03/23/2020		28.5000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Zinc, total	ug/L	MW02-30A	09/04/2020	ND	20.0000		
Zinc, total	ug/L	MW02-30A	03/09/2021	ND	20.0000		
Zinc, total	ug/L	MW02-30A	09/07/2021	ND	20.0000		
Zinc, total	ug/L	MW02-30A	03/28/2022	ND	20.0000		
Zinc, total	ug/L	MW02-30A	09/14/2022		52.8000		
Zinc, total	ug/L	MW02-30A	03/20/2023		144.0000		
Zinc, total	ug/L	MW02-30A	09/12/2023	ND	20.0000		
Zinc, total	ug/L	MW02-30A	03/12/2024	ND	20.0000		
Antimony, total	ug/L	MW88-2	09/18/2014	ND	2.0000		
Antimony, total	ug/L	MW88-2	11/13/2014	ND	2.0000		
Antimony, total	ug/L	MW88-2	03/17/2015	ND	2.0000		
Antimony, total	ug/L	MW88-2	06/29/2015	ND	2.0000		
Antimony, total	ug/L	MW88-2	09/11/2015	ND	2.0000		
Antimony, total	ug/L	MW88-2	03/16/2016	ND	2.0000		
Antimony, total	ug/L	MW88-2	09/08/2016	ND	2.0000		
Antimony, total	ug/L	MW88-2	03/17/2017	ND	2.0000		
Antimony, total	ug/L	MW88-2	09/19/2017	ND	2.0000		
Antimony, total	ug/L	MW88-2	03/08/2018	ND	2.0000		
Antimony, total	ug/L	MW88-2	09/24/2018	ND	2.0000		
Antimony, total	ug/L	MW88-2	03/25/2019	ND	2.0000		
Antimony, total	ug/L	MW88-2	09/03/2019	ND	2.0000		
Antimony, total	ug/L	MW88-2	03/23/2020	ND	2.0000		
Antimony, total	ug/L	MW88-2	09/04/2020	ND	2.0000		
Antimony, total	ug/L	MW88-2	03/09/2021	ND	2.0000		
Antimony, total	ug/L	MW88-2	03/28/2022	ND	2.0000		
Antimony, total	ug/L	MW88-2	09/14/2022	ND	2.0000		
Antimony, total	ug/L	MW88-2	03/20/2023	ND	2.0000		
Antimony, total	ug/L	MW88-2	09/12/2023	ND	2.0000		
Antimony, total	ug/L	MW88-2	03/12/2024	ND	2.0000		
Arsenic, total	ug/L	MW88-2	09/18/2014		16.1000		
Arsenic, total	ug/L	MW88-2	11/13/2014		7.4000		
Arsenic, total	ug/L	MW88-2	03/17/2015	ND	4.0000		
Arsenic, total	ug/L	MW88-2	06/29/2015	ND	4.0000		
Arsenic, total	ug/L	MW88-2	09/11/2015	ND	4.0000		
Arsenic, total	ug/L	MW88-2	03/16/2016	ND	4.0000		
Arsenic, total	ug/L	MW88-2	09/08/2016		6.6000		
Arsenic, total	ug/L	MW88-2	03/17/2017	ND	4.0000		
Arsenic, total	ug/L	MW88-2	09/19/2017	ND	4.0000		
Arsenic, total	ug/L	MW88-2	03/08/2018		6.1000		
Arsenic, total	ug/L	MW88-2	09/24/2018		24.3000		
Arsenic, total	ug/L	MW88-2	03/25/2019		11.0000		
Arsenic, total	ug/L	MW88-2	09/03/2019		10.6000		
Arsenic, total	ug/L	MW88-2	03/23/2020	ND	4.0000		
Arsenic, total	ug/L	MW88-2	09/04/2020	ND	4.0000		
Arsenic, total	ug/L	MW88-2	03/09/2021		10.4000		
Arsenic, total	ug/L	MW88-2	03/28/2022	ND	4.0000		
Arsenic, total	ug/L	MW88-2	09/14/2022	ND	4.0000		
Arsenic, total	ug/L	MW88-2	03/20/2023	ND	4.0000		
Arsenic, total	ug/L	MW88-2	09/12/2023		5.1000		
Arsenic, total	ug/L	MW88-2	03/12/2024		12.7000		
Barium, total	ug/L	MW88-2	09/18/2014		661.0000		
Barium, total	ug/L	MW88-2	11/13/2014		751.0000		
Barium, total	ug/L	MW88-2	03/17/2015		595.0000		
Barium, total	ug/L	MW88-2	06/29/2015		451.0000		
Barium, total	ug/L	MW88-2	09/11/2015		296.0000		
Barium, total	ug/L	MW88-2	03/16/2016		95.8000		
Barium, total	ug/L	MW88-2	09/08/2016		411.0000		
Barium, total	ug/L	MW88-2	03/17/2017		179.0000		
Barium, total	ug/L	MW88-2	09/19/2017		684.0000		
Barium, total	ug/L	MW88-2	03/08/2018		632.0000		
Barium, total	ug/L	MW88-2	09/24/2018		371.0000		
Barium, total	ug/L	MW88-2	03/25/2019		273.0000		
Barium, total	ug/L	MW88-2	09/03/2019		97.7000		
Barium, total	ug/L	MW88-2	03/23/2020		75.7000		
Barium, total	ug/L	MW88-2	09/04/2020		623.0000		
Barium, total	ug/L	MW88-2	03/09/2021		874.0000		
Barium, total	ug/L	MW88-2	03/28/2022		274.0000		
Barium, total	ug/L	MW88-2	09/14/2022		376.0000		
Barium, total	ug/L	MW88-2	03/20/2023		152.0000		
Barium, total	ug/L	MW88-2	09/12/2023		287.0000		
Barium, total	ug/L	MW88-2	03/12/2024		270.0000		
Beryllium, total	ug/L	MW88-2	09/18/2014	ND	4.0000		
Beryllium, total	ug/L	MW88-2	11/13/2014	ND	4.0000		
Beryllium, total	ug/L	MW88-2	03/17/2015	ND	4.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Beryllium, total	ug/L	MW88-2	06/29/2015	ND	4.0000		
Beryllium, total	ug/L	MW88-2	09/11/2015	ND	4.0000		
Beryllium, total	ug/L	MW88-2	03/16/2016	ND	4.0000		
Beryllium, total	ug/L	MW88-2	09/08/2016	ND	4.0000		
Beryllium, total	ug/L	MW88-2	03/17/2017	ND	4.0000		
Beryllium, total	ug/L	MW88-2	09/19/2017	ND	4.0000		
Beryllium, total	ug/L	MW88-2	03/08/2018	ND	4.0000		
Beryllium, total	ug/L	MW88-2	09/24/2018	ND	4.0000		
Beryllium, total	ug/L	MW88-2	03/25/2019	ND	4.0000		
Beryllium, total	ug/L	MW88-2	09/03/2019	ND	4.0000		
Beryllium, total	ug/L	MW88-2	03/23/2020	ND	4.0000		
Beryllium, total	ug/L	MW88-2	09/04/2020	ND	4.0000		
Beryllium, total	ug/L	MW88-2	03/09/2021	ND	4.0000		
Beryllium, total	ug/L	MW88-2	03/28/2022	ND	4.0000		
Beryllium, total	ug/L	MW88-2	09/14/2022	ND	4.0000		
Beryllium, total	ug/L	MW88-2	03/20/2023	ND	4.0000		
Beryllium, total	ug/L	MW88-2	09/12/2023	ND	4.0000		
Beryllium, total	ug/L	MW88-2	03/12/2024	ND	4.0000		
Cadmium, total	ug/L	MW88-2	09/18/2014	ND	0.8000		
Cadmium, total	ug/L	MW88-2	11/13/2014	ND	0.8000		
Cadmium, total	ug/L	MW88-2	03/17/2015	ND	0.8000		
Cadmium, total	ug/L	MW88-2	06/29/2015	ND	0.8000		
Cadmium, total	ug/L	MW88-2	09/11/2015	ND	0.8000		
Cadmium, total	ug/L	MW88-2	03/16/2016		4.6000		*
Cadmium, total	ug/L	MW88-2	09/08/2016	ND	0.8000		
Cadmium, total	ug/L	MW88-2	03/17/2017		1.1000		
Cadmium, total	ug/L	MW88-2	09/19/2017		2.5000		*
Cadmium, total	ug/L	MW88-2	03/08/2018	ND	0.8000		
Cadmium, total	ug/L	MW88-2	09/24/2018	ND	0.8000		
Cadmium, total	ug/L	MW88-2	03/25/2019	ND	0.8000		
Cadmium, total	ug/L	MW88-2	09/03/2019	ND	0.8000		
Cadmium, total	ug/L	MW88-2	03/23/2020	ND	0.8000		
Cadmium, total	ug/L	MW88-2	09/04/2020	ND	0.8000		
Cadmium, total	ug/L	MW88-2	03/09/2021	ND	0.8000		
Cadmium, total	ug/L	MW88-2	03/28/2022	ND	0.8000		
Cadmium, total	ug/L	MW88-2	09/14/2022	ND	0.8000		
Cadmium, total	ug/L	MW88-2	03/20/2023	ND	0.8000		
Cadmium, total	ug/L	MW88-2	09/12/2023	ND	0.8000		
Cadmium, total	ug/L	MW88-2	03/12/2024	ND	0.8000		
Chromium, total	ug/L	MW88-2	09/18/2014	ND	8.0000		
Chromium, total	ug/L	MW88-2	11/13/2014	ND	8.0000		
Chromium, total	ug/L	MW88-2	03/17/2015	ND	8.0000		
Chromium, total	ug/L	MW88-2	06/29/2015	ND	8.0000		
Chromium, total	ug/L	MW88-2	09/11/2015	ND	8.0000		
Chromium, total	ug/L	MW88-2	03/16/2016	ND	8.0000		
Chromium, total	ug/L	MW88-2	09/08/2016	ND	8.0000		
Chromium, total	ug/L	MW88-2	03/17/2017	ND	8.0000		
Chromium, total	ug/L	MW88-2	09/19/2017	ND	8.0000		
Chromium, total	ug/L	MW88-2	03/08/2018	ND	8.0000		
Chromium, total	ug/L	MW88-2	09/24/2018	ND	8.0000		
Chromium, total	ug/L	MW88-2	03/25/2019	ND	8.0000		
Chromium, total	ug/L	MW88-2	09/03/2019	ND	8.0000		
Chromium, total	ug/L	MW88-2	03/23/2020	ND	8.0000		
Chromium, total	ug/L	MW88-2	09/04/2020	ND	8.0000		
Chromium, total	ug/L	MW88-2	03/09/2021	ND	8.0000		
Chromium, total	ug/L	MW88-2	03/28/2022	ND	8.0000		
Chromium, total	ug/L	MW88-2	09/14/2022	ND	8.0000		
Chromium, total	ug/L	MW88-2	03/20/2023	ND	8.0000		
Chromium, total	ug/L	MW88-2	09/12/2023	ND	8.0000		
Chromium, total	ug/L	MW88-2	03/12/2024	ND	8.0000		
Cobalt, total	ug/L	MW88-2	09/18/2014	ND	0.8000		
Cobalt, total	ug/L	MW88-2	11/13/2014	ND	0.8000		
Cobalt, total	ug/L	MW88-2	03/17/2015	ND	0.8000		
Cobalt, total	ug/L	MW88-2	06/29/2015	ND	0.8000		
Cobalt, total	ug/L	MW88-2	09/11/2015	ND	0.8000		
Cobalt, total	ug/L	MW88-2	03/16/2016	ND	0.8000		
Cobalt, total	ug/L	MW88-2	09/08/2016	ND	0.8000		
Cobalt, total	ug/L	MW88-2	03/17/2017		0.8000		
Cobalt, total	ug/L	MW88-2	09/19/2017	ND	0.8000		
Cobalt, total	ug/L	MW88-2	03/08/2018	ND	0.8000		
Cobalt, total	ug/L	MW88-2	09/24/2018	ND	0.8000		
Cobalt, total	ug/L	MW88-2	03/25/2019		1.0000		
Cobalt, total	ug/L	MW88-2	09/03/2019		1.5000		
Cobalt, total	ug/L	MW88-2	03/23/2020	ND	0.8000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Cobalt, total	ug/L	MW88-2	09/04/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW88-2	03/09/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW88-2	03/28/2022		0.9000		
Cobalt, total	ug/L	MW88-2	09/14/2022		2.6000		
Cobalt, total	ug/L	MW88-2	03/20/2023		0.8000		
Cobalt, total	ug/L	MW88-2	09/12/2023		0.4000		
Cobalt, total	ug/L	MW88-2	03/12/2024		0.8000		
Copper, total	ug/L	MW88-2	09/18/2014	ND	4.0000		
Copper, total	ug/L	MW88-2	11/13/2014	ND	4.0000		
Copper, total	ug/L	MW88-2	03/17/2015	ND	4.0000		
Copper, total	ug/L	MW88-2	06/29/2015	ND	4.0000		
Copper, total	ug/L	MW88-2	09/11/2015	ND	4.0000		
Copper, total	ug/L	MW88-2	03/16/2016	ND	4.0000		
Copper, total	ug/L	MW88-2	09/08/2016	ND	4.0000		
Copper, total	ug/L	MW88-2	03/17/2017	ND	4.0000		
Copper, total	ug/L	MW88-2	09/19/2017		9.0000		
Copper, total	ug/L	MW88-2	03/08/2018	ND	4.0000		
Copper, total	ug/L	MW88-2	09/24/2018	ND	4.0000		
Copper, total	ug/L	MW88-2	03/25/2019	ND	4.0000		
Copper, total	ug/L	MW88-2	09/03/2019	ND	4.0000		
Copper, total	ug/L	MW88-2	03/23/2020	ND	4.0000		
Copper, total	ug/L	MW88-2	09/04/2020	ND	4.0000		
Copper, total	ug/L	MW88-2	03/09/2021		33.6000		*
Copper, total	ug/L	MW88-2	03/28/2022	ND	4.0000		
Copper, total	ug/L	MW88-2	09/14/2022	ND	4.0000		
Copper, total	ug/L	MW88-2	03/20/2023	ND	4.0000		
Copper, total	ug/L	MW88-2	09/12/2023	ND	4.0000		
Copper, total	ug/L	MW88-2	03/12/2024	ND	4.0000		
Lead, total	ug/L	MW88-2	09/18/2014	ND	4.0000		
Lead, total	ug/L	MW88-2	11/13/2014	ND	4.0000		
Lead, total	ug/L	MW88-2	03/17/2015	ND	4.0000		
Lead, total	ug/L	MW88-2	06/29/2015	ND	4.0000		
Lead, total	ug/L	MW88-2	09/11/2015	ND	4.0000		
Lead, total	ug/L	MW88-2	03/16/2016	ND	4.0000		
Lead, total	ug/L	MW88-2	09/08/2016	ND	4.0000		
Lead, total	ug/L	MW88-2	03/17/2017	ND	4.0000		
Lead, total	ug/L	MW88-2	09/19/2017	ND	4.0000		
Lead, total	ug/L	MW88-2	03/08/2018	ND	4.0000		
Lead, total	ug/L	MW88-2	09/24/2018	ND	4.0000		
Lead, total	ug/L	MW88-2	03/25/2019	ND	4.0000		
Lead, total	ug/L	MW88-2	09/03/2019	ND	4.0000		
Lead, total	ug/L	MW88-2	03/23/2020	ND	4.0000		
Lead, total	ug/L	MW88-2	09/04/2020	ND	4.0000		
Lead, total	ug/L	MW88-2	03/09/2021	ND	4.0000		
Lead, total	ug/L	MW88-2	03/28/2022	ND	4.0000		
Lead, total	ug/L	MW88-2	09/14/2022	ND	4.0000		
Lead, total	ug/L	MW88-2	03/20/2023	ND	4.0000		
Lead, total	ug/L	MW88-2	09/12/2023	ND	4.0000		
Lead, total	ug/L	MW88-2	03/12/2024	ND	4.0000		
Nickel, total	ug/L	MW88-2	09/18/2014	ND	4.0000		
Nickel, total	ug/L	MW88-2	11/13/2014	ND	4.0000		
Nickel, total	ug/L	MW88-2	03/17/2015	ND	4.0000		
Nickel, total	ug/L	MW88-2	06/29/2015	ND	4.0000		
Nickel, total	ug/L	MW88-2	09/11/2015	ND	4.0000		
Nickel, total	ug/L	MW88-2	03/16/2016		5.1000		
Nickel, total	ug/L	MW88-2	09/08/2016	ND	4.0000		
Nickel, total	ug/L	MW88-2	03/17/2017	ND	4.0000		
Nickel, total	ug/L	MW88-2	09/19/2017	ND	4.0000		
Nickel, total	ug/L	MW88-2	03/08/2018	ND	4.0000		
Nickel, total	ug/L	MW88-2	09/24/2018	ND	4.0000		
Nickel, total	ug/L	MW88-2	03/25/2019		4.6000		
Nickel, total	ug/L	MW88-2	09/03/2019		8.1000		
Nickel, total	ug/L	MW88-2	03/23/2020	ND	4.0000		
Nickel, total	ug/L	MW88-2	09/04/2020	ND	4.0000		
Nickel, total	ug/L	MW88-2	03/09/2021	ND	4.0000		
Nickel, total	ug/L	MW88-2	03/28/2022	ND	4.0000		
Nickel, total	ug/L	MW88-2	09/14/2022	ND	4.0000		
Nickel, total	ug/L	MW88-2	03/20/2023	ND	4.0000		
Nickel, total	ug/L	MW88-2	09/12/2023	ND	4.0000		
Nickel, total	ug/L	MW88-2	03/12/2024	ND	4.0000		
Selenium, total	ug/L	MW88-2	09/18/2014	ND	4.0000		
Selenium, total	ug/L	MW88-2	11/13/2014	ND	4.0000		
Selenium, total	ug/L	MW88-2	03/17/2015	ND	4.0000		
Selenium, total	ug/L	MW88-2	06/29/2015	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	MW88-2	09/11/2015	ND	4.0000		
Selenium, total	ug/L	MW88-2	03/16/2016	ND	4.0000		
Selenium, total	ug/L	MW88-2	09/08/2016	ND	4.0000		
Selenium, total	ug/L	MW88-2	03/17/2017	ND	4.0000		
Selenium, total	ug/L	MW88-2	09/19/2017	ND	4.0000		
Selenium, total	ug/L	MW88-2	03/08/2018	ND	4.0000		
Selenium, total	ug/L	MW88-2	09/24/2018	ND	4.0000		
Selenium, total	ug/L	MW88-2	03/25/2019	ND	4.0000		
Selenium, total	ug/L	MW88-2	09/03/2019	ND	4.0000		
Selenium, total	ug/L	MW88-2	03/23/2020	ND	4.0000		
Selenium, total	ug/L	MW88-2	09/04/2020	ND	4.0000		
Selenium, total	ug/L	MW88-2	03/09/2021	ND	4.0000		
Selenium, total	ug/L	MW88-2	03/28/2022	ND	4.0000		
Selenium, total	ug/L	MW88-2	09/14/2022	ND	4.0000		
Selenium, total	ug/L	MW88-2	03/20/2023	ND	4.0000		
Selenium, total	ug/L	MW88-2	09/12/2023	ND	4.0000		
Selenium, total	ug/L	MW88-2	03/12/2024	ND	4.0000		
Silver, total	ug/L	MW88-2	09/18/2014	ND	4.0000		
Silver, total	ug/L	MW88-2	11/13/2014	ND	4.0000		
Silver, total	ug/L	MW88-2	03/17/2015	ND	4.0000		
Silver, total	ug/L	MW88-2	06/29/2015	ND	4.0000		
Silver, total	ug/L	MW88-2	09/11/2015	ND	4.0000		
Silver, total	ug/L	MW88-2	03/16/2016	ND	4.0000		
Silver, total	ug/L	MW88-2	09/08/2016	ND	4.0000		
Silver, total	ug/L	MW88-2	03/17/2017	ND	4.0000		
Silver, total	ug/L	MW88-2	09/19/2017	ND	4.0000		
Silver, total	ug/L	MW88-2	03/08/2018	ND	4.0000		
Silver, total	ug/L	MW88-2	09/24/2018	ND	4.0000		
Silver, total	ug/L	MW88-2	03/25/2019	ND	4.0000		
Silver, total	ug/L	MW88-2	09/03/2019	ND	4.0000		
Silver, total	ug/L	MW88-2	03/23/2020	ND	4.0000		
Silver, total	ug/L	MW88-2	09/04/2020	ND	4.0000		
Silver, total	ug/L	MW88-2	03/09/2021	ND	4.0000		
Silver, total	ug/L	MW88-2	03/28/2022	ND	4.0000		
Silver, total	ug/L	MW88-2	09/14/2022	ND	4.0000		
Silver, total	ug/L	MW88-2	03/20/2023	ND	4.0000		
Silver, total	ug/L	MW88-2	09/12/2023	ND	4.0000		
Silver, total	ug/L	MW88-2	03/12/2024	ND	4.0000		
Thallium, total	ug/L	MW88-2	09/18/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW88-2	11/13/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW88-2	03/17/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW88-2	06/29/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW88-2	09/11/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW88-2	03/16/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW88-2	09/08/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW88-2	03/17/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW88-2	09/19/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW88-2	03/08/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW88-2	09/24/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW88-2	03/25/2019	ND	2.0000		
Thallium, total	ug/L	MW88-2	09/03/2019	ND	2.0000		
Thallium, total	ug/L	MW88-2	03/23/2020	ND	2.0000		
Thallium, total	ug/L	MW88-2	09/04/2020	ND	2.0000		
Thallium, total	ug/L	MW88-2	03/09/2021	ND	2.0000		
Thallium, total	ug/L	MW88-2	03/28/2022	ND	2.0000		
Thallium, total	ug/L	MW88-2	09/14/2022	ND	2.0000		
Thallium, total	ug/L	MW88-2	03/20/2023	ND	2.0000		
Thallium, total	ug/L	MW88-2	09/12/2023	ND	2.0000		
Thallium, total	ug/L	MW88-2	03/12/2024	ND	2.0000		
Vanadium, total	ug/L	MW88-2	09/18/2014	ND	20.0000		
Vanadium, total	ug/L	MW88-2	11/13/2014	ND	20.0000		
Vanadium, total	ug/L	MW88-2	03/17/2015	ND	20.0000		
Vanadium, total	ug/L	MW88-2	06/29/2015	ND	20.0000		
Vanadium, total	ug/L	MW88-2	09/11/2015	ND	20.0000		
Vanadium, total	ug/L	MW88-2	03/16/2016	ND	20.0000		
Vanadium, total	ug/L	MW88-2	09/08/2016	ND	20.0000		
Vanadium, total	ug/L	MW88-2	03/17/2017	ND	20.0000		
Vanadium, total	ug/L	MW88-2	09/19/2017	ND	20.0000		
Vanadium, total	ug/L	MW88-2	03/08/2018	ND	20.0000		
Vanadium, total	ug/L	MW88-2	09/24/2018	ND	20.0000		
Vanadium, total	ug/L	MW88-2	03/25/2019	ND	20.0000		
Vanadium, total	ug/L	MW88-2	09/03/2019	ND	20.0000		
Vanadium, total	ug/L	MW88-2	03/23/2020	ND	20.0000		
Vanadium, total	ug/L	MW88-2	09/04/2020	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	MW88-2	03/09/2021	ND	20.0000		
Vanadium, total	ug/L	MW88-2	03/28/2022	ND	20.0000		
Vanadium, total	ug/L	MW88-2	09/14/2022	ND	20.0000		
Vanadium, total	ug/L	MW88-2	03/20/2023	ND	20.0000		
Vanadium, total	ug/L	MW88-2	09/12/2023	ND	20.0000		
Vanadium, total	ug/L	MW88-2	03/12/2024	ND	20.0000		
Zinc, total	ug/L	MW88-2	09/18/2014	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW88-2	11/13/2014	ND	20.0000		
Zinc, total	ug/L	MW88-2	03/17/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW88-2	06/29/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW88-2	09/11/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW88-2	03/16/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW88-2	09/08/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW88-2	03/17/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW88-2	09/19/2017		13.1000		
Zinc, total	ug/L	MW88-2	03/08/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW88-2	09/24/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW88-2	03/25/2019		39.1000		
Zinc, total	ug/L	MW88-2	09/03/2019		23.6000		
Zinc, total	ug/L	MW88-2	03/23/2020	ND	20.0000		
Zinc, total	ug/L	MW88-2	09/04/2020	ND	20.0000		
Zinc, total	ug/L	MW88-2	03/09/2021	ND	20.0000		
Zinc, total	ug/L	MW88-2	03/28/2022	ND	20.0000		
Zinc, total	ug/L	MW88-2	09/14/2022	ND	20.0000		
Zinc, total	ug/L	MW88-2	03/20/2023	ND	20.0000		
Zinc, total	ug/L	MW88-2	09/12/2023	ND	20.0000		
Zinc, total	ug/L	MW88-2	03/12/2024	ND	20.0000		
Antimony, total	ug/L	MW91-8	09/19/2014	ND	2.0000		
Antimony, total	ug/L	MW91-8	11/13/2014	ND	2.0000		
Antimony, total	ug/L	MW91-8	03/17/2015	ND	2.0000		
Antimony, total	ug/L	MW91-8	06/29/2015	ND	2.0000		
Antimony, total	ug/L	MW91-8	09/11/2015	ND	2.0000		
Antimony, total	ug/L	MW91-8	03/16/2016	ND	2.0000		
Antimony, total	ug/L	MW91-8	09/08/2016	ND	2.0000		
Antimony, total	ug/L	MW91-8	03/17/2017	ND	2.0000		
Antimony, total	ug/L	MW91-8	09/19/2017	ND	2.0000		
Antimony, total	ug/L	MW91-8	03/08/2018	ND	2.0000		
Antimony, total	ug/L	MW91-8	09/24/2018	ND	2.0000		
Antimony, total	ug/L	MW91-8	03/25/2019	ND	2.0000		
Antimony, total	ug/L	MW91-8	09/03/2019	ND	2.0000		
Antimony, total	ug/L	MW91-8	03/23/2020	ND	2.0000		
Antimony, total	ug/L	MW91-8	09/04/2020	ND	2.0000		
Antimony, total	ug/L	MW91-8	03/09/2021	ND	2.0000		
Antimony, total	ug/L	MW91-8	09/07/2021	ND	2.0000		
Antimony, total	ug/L	MW91-8	03/28/2022	ND	2.0000		
Antimony, total	ug/L	MW91-8	09/14/2022	ND	2.0000		
Antimony, total	ug/L	MW91-8	03/20/2023	ND	2.0000		
Antimony, total	ug/L	MW91-8	09/13/2023	ND	2.0000		
Antimony, total	ug/L	MW91-8	03/12/2024	ND	2.0000		
Arsenic, total	ug/L	MW91-8	09/19/2014	ND	4.0000		
Arsenic, total	ug/L	MW91-8	11/13/2014	ND	4.0000		
Arsenic, total	ug/L	MW91-8	03/17/2015	ND	4.0000		
Arsenic, total	ug/L	MW91-8	06/29/2015	ND	4.0000		
Arsenic, total	ug/L	MW91-8	09/11/2015	ND	4.0000		
Arsenic, total	ug/L	MW91-8	03/16/2016	ND	4.0000		
Arsenic, total	ug/L	MW91-8	09/08/2016	ND	4.0000		
Arsenic, total	ug/L	MW91-8	03/17/2017	ND	4.0000		
Arsenic, total	ug/L	MW91-8	09/19/2017	ND	4.0000		
Arsenic, total	ug/L	MW91-8	03/08/2018	ND	4.0000		
Arsenic, total	ug/L	MW91-8	09/24/2018	ND	4.0000		
Arsenic, total	ug/L	MW91-8	03/25/2019	ND	4.0000		
Arsenic, total	ug/L	MW91-8	09/03/2019	ND	4.0000		
Arsenic, total	ug/L	MW91-8	03/23/2020	ND	4.0000		
Arsenic, total	ug/L	MW91-8	09/04/2020	ND	4.0000		
Arsenic, total	ug/L	MW91-8	03/09/2021	ND	4.0000		
Arsenic, total	ug/L	MW91-8	09/07/2021	ND	4.0000		
Arsenic, total	ug/L	MW91-8	03/28/2022	ND	4.0000		
Arsenic, total	ug/L	MW91-8	09/14/2022	ND	4.0000		
Arsenic, total	ug/L	MW91-8	03/20/2023	ND	4.0000		
Arsenic, total	ug/L	MW91-8	09/13/2023	ND	4.0000		
Arsenic, total	ug/L	MW91-8	03/12/2024	ND	4.0000		
Barium, total	ug/L	MW91-8	09/19/2014		84.7000		
Barium, total	ug/L	MW91-8	11/13/2014		106.0000		
Barium, total	ug/L	MW91-8	03/17/2015		102.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Barium, total	ug/L	MW91-8	06/29/2015		97.8000		
Barium, total	ug/L	MW91-8	09/11/2015		104.0000		
Barium, total	ug/L	MW91-8	03/16/2016		103.0000		
Barium, total	ug/L	MW91-8	09/08/2016		147.0000		
Barium, total	ug/L	MW91-8	03/17/2017		93.5000		
Barium, total	ug/L	MW91-8	09/19/2017		108.0000		
Barium, total	ug/L	MW91-8	03/08/2018		96.0000		
Barium, total	ug/L	MW91-8	09/24/2018		96.9000		
Barium, total	ug/L	MW91-8	03/25/2019		88.4000		
Barium, total	ug/L	MW91-8	09/03/2019		103.0000		
Barium, total	ug/L	MW91-8	03/23/2020		92.9000		
Barium, total	ug/L	MW91-8	09/04/2020		95.3000		
Barium, total	ug/L	MW91-8	03/09/2021		90.7000		
Barium, total	ug/L	MW91-8	09/07/2021		118.0000		
Barium, total	ug/L	MW91-8	03/28/2022		101.0000		
Barium, total	ug/L	MW91-8	09/14/2022		125.0000		
Barium, total	ug/L	MW91-8	03/20/2023		109.0000		
Barium, total	ug/L	MW91-8	09/13/2023		123.0000		
Barium, total	ug/L	MW91-8	03/12/2024		107.0000		
Beryllium, total	ug/L	MW91-8	09/19/2014	ND	4.0000		
Beryllium, total	ug/L	MW91-8	11/13/2014	ND	4.0000		
Beryllium, total	ug/L	MW91-8	03/17/2015	ND	4.0000		
Beryllium, total	ug/L	MW91-8	06/29/2015	ND	4.0000		
Beryllium, total	ug/L	MW91-8	09/11/2015	ND	4.0000		
Beryllium, total	ug/L	MW91-8	03/16/2016	ND	4.0000		
Beryllium, total	ug/L	MW91-8	09/08/2016	ND	4.0000		
Beryllium, total	ug/L	MW91-8	03/17/2017	ND	4.0000		
Beryllium, total	ug/L	MW91-8	09/19/2017	ND	4.0000		
Beryllium, total	ug/L	MW91-8	03/08/2018	ND	4.0000		
Beryllium, total	ug/L	MW91-8	09/24/2018	ND	4.0000		
Beryllium, total	ug/L	MW91-8	03/25/2019	ND	4.0000		
Beryllium, total	ug/L	MW91-8	09/03/2019	ND	4.0000		
Beryllium, total	ug/L	MW91-8	03/23/2020	ND	4.0000		
Beryllium, total	ug/L	MW91-8	09/04/2020	ND	4.0000		
Beryllium, total	ug/L	MW91-8	03/09/2021	ND	4.0000		
Beryllium, total	ug/L	MW91-8	09/07/2021	ND	4.0000		
Beryllium, total	ug/L	MW91-8	03/28/2022	ND	4.0000		
Beryllium, total	ug/L	MW91-8	09/14/2022	ND	4.0000		
Beryllium, total	ug/L	MW91-8	03/20/2023	ND	4.0000		
Beryllium, total	ug/L	MW91-8	09/13/2023	ND	4.0000		
Beryllium, total	ug/L	MW91-8	03/12/2024	ND	4.0000		
Cadmium, total	ug/L	MW91-8	09/19/2014	ND	0.8000		
Cadmium, total	ug/L	MW91-8	11/13/2014	ND	0.8000		
Cadmium, total	ug/L	MW91-8	03/17/2015		2.3000		
Cadmium, total	ug/L	MW91-8	06/29/2015	ND	0.8000		
Cadmium, total	ug/L	MW91-8	09/11/2015		2.4000		
Cadmium, total	ug/L	MW91-8	03/16/2016		1.4000		
Cadmium, total	ug/L	MW91-8	09/08/2016	ND	0.8000		
Cadmium, total	ug/L	MW91-8	03/17/2017		1.3000		
Cadmium, total	ug/L	MW91-8	09/19/2017		2.2000		
Cadmium, total	ug/L	MW91-8	03/08/2018	ND	0.8000		
Cadmium, total	ug/L	MW91-8	09/24/2018	ND	0.8000		
Cadmium, total	ug/L	MW91-8	03/25/2019	ND	0.8000		
Cadmium, total	ug/L	MW91-8	09/03/2019	ND	0.8000		
Cadmium, total	ug/L	MW91-8	03/23/2020	ND	0.8000		
Cadmium, total	ug/L	MW91-8	09/04/2020	ND	0.8000		
Cadmium, total	ug/L	MW91-8	03/09/2021	ND	0.8000		
Cadmium, total	ug/L	MW91-8	09/07/2021	ND	0.8000		
Cadmium, total	ug/L	MW91-8	03/28/2022	ND	0.8000		
Cadmium, total	ug/L	MW91-8	09/14/2022	ND	0.8000		
Cadmium, total	ug/L	MW91-8	03/20/2023	ND	0.8000		
Cadmium, total	ug/L	MW91-8	09/13/2023	ND	0.8000		
Cadmium, total	ug/L	MW91-8	03/12/2024	ND	0.8000		
Chromium, total	ug/L	MW91-8	09/19/2014	ND	8.0000		
Chromium, total	ug/L	MW91-8	11/13/2014	ND	8.0000		
Chromium, total	ug/L	MW91-8	03/17/2015	ND	8.0000		
Chromium, total	ug/L	MW91-8	06/29/2015	ND	8.0000		
Chromium, total	ug/L	MW91-8	09/11/2015	ND	8.0000		
Chromium, total	ug/L	MW91-8	03/16/2016	ND	8.0000		
Chromium, total	ug/L	MW91-8	09/08/2016	ND	8.0000		
Chromium, total	ug/L	MW91-8	03/17/2017	ND	8.0000		
Chromium, total	ug/L	MW91-8	09/19/2017	ND	8.0000		
Chromium, total	ug/L	MW91-8	03/08/2018	ND	8.0000		
Chromium, total	ug/L	MW91-8	09/24/2018	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	MW91-8	03/25/2019	ND	8.0000		
Chromium, total	ug/L	MW91-8	09/03/2019	ND	8.0000		
Chromium, total	ug/L	MW91-8	03/23/2020	ND	8.0000		
Chromium, total	ug/L	MW91-8	09/04/2020	ND	8.0000		
Chromium, total	ug/L	MW91-8	03/09/2021	ND	8.0000		
Chromium, total	ug/L	MW91-8	09/07/2021	ND	8.0000		
Chromium, total	ug/L	MW91-8	03/28/2022	ND	8.0000		
Chromium, total	ug/L	MW91-8	09/14/2022	ND	8.0000		
Chromium, total	ug/L	MW91-8	03/20/2023	ND	8.0000		
Chromium, total	ug/L	MW91-8	09/13/2023	ND	8.0000		
Chromium, total	ug/L	MW91-8	03/12/2024	ND	8.0000		
Cobalt, total	ug/L	MW91-8	09/19/2014	ND	0.8000		
Cobalt, total	ug/L	MW91-8	11/13/2014	ND	0.8000		
Cobalt, total	ug/L	MW91-8	03/17/2015	ND	0.8000		
Cobalt, total	ug/L	MW91-8	06/29/2015	ND	0.8000		
Cobalt, total	ug/L	MW91-8	09/11/2015	ND	0.8000		
Cobalt, total	ug/L	MW91-8	03/16/2016	ND	0.8000		
Cobalt, total	ug/L	MW91-8	09/08/2016	ND	0.8000		
Cobalt, total	ug/L	MW91-8	03/17/2017	ND	0.8000		
Cobalt, total	ug/L	MW91-8	09/19/2017	ND	0.8000		
Cobalt, total	ug/L	MW91-8	03/08/2018	ND	0.8000		
Cobalt, total	ug/L	MW91-8	09/24/2018	ND	0.8000		
Cobalt, total	ug/L	MW91-8	03/25/2019	ND	0.8000		
Cobalt, total	ug/L	MW91-8	09/03/2019	ND	0.8000		
Cobalt, total	ug/L	MW91-8	03/23/2020	ND	0.8000		
Cobalt, total	ug/L	MW91-8	09/04/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW91-8	03/09/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW91-8	09/07/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW91-8	03/28/2022	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW91-8	09/14/2022		2.7000		*
Cobalt, total	ug/L	MW91-8	03/20/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW91-8	09/13/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW91-8	03/12/2024	ND	0.4000	0.8000	**
Copper, total	ug/L	MW91-8	09/19/2014	ND	4.0000		
Copper, total	ug/L	MW91-8	11/13/2014	ND	4.0000		
Copper, total	ug/L	MW91-8	03/17/2015	ND	4.0000		
Copper, total	ug/L	MW91-8	06/29/2015	ND	4.0000		
Copper, total	ug/L	MW91-8	09/11/2015	ND	4.0000		
Copper, total	ug/L	MW91-8	03/16/2016	ND	4.0000		
Copper, total	ug/L	MW91-8	09/08/2016	ND	4.0000		
Copper, total	ug/L	MW91-8	03/17/2017	ND	4.0000		
Copper, total	ug/L	MW91-8	09/19/2017	ND	4.0000		
Copper, total	ug/L	MW91-8	03/08/2018	ND	4.0000		
Copper, total	ug/L	MW91-8	09/24/2018	ND	4.0000		
Copper, total	ug/L	MW91-8	03/25/2019	ND	4.0000		
Copper, total	ug/L	MW91-8	09/03/2019	ND	4.0000		
Copper, total	ug/L	MW91-8	03/23/2020	ND	4.0000		
Copper, total	ug/L	MW91-8	09/04/2020	ND	4.0000		
Copper, total	ug/L	MW91-8	03/09/2021	ND	4.0000		
Copper, total	ug/L	MW91-8	09/07/2021	ND	4.0000		
Copper, total	ug/L	MW91-8	03/28/2022	ND	4.0000		
Copper, total	ug/L	MW91-8	09/14/2022	ND	4.0000		
Copper, total	ug/L	MW91-8	03/20/2023	ND	4.0000		
Copper, total	ug/L	MW91-8	09/13/2023	ND	4.0000		
Copper, total	ug/L	MW91-8	03/12/2024	ND	4.0000		
Lead, total	ug/L	MW91-8	09/19/2014	ND	4.0000		
Lead, total	ug/L	MW91-8	11/13/2014	ND	4.0000		
Lead, total	ug/L	MW91-8	03/17/2015	ND	4.0000		
Lead, total	ug/L	MW91-8	06/29/2015	ND	4.0000		
Lead, total	ug/L	MW91-8	09/11/2015	ND	4.0000		
Lead, total	ug/L	MW91-8	03/16/2016	ND	4.0000		
Lead, total	ug/L	MW91-8	09/08/2016	ND	4.0000		
Lead, total	ug/L	MW91-8	03/17/2017	ND	4.0000		
Lead, total	ug/L	MW91-8	09/19/2017	ND	4.0000		
Lead, total	ug/L	MW91-8	03/08/2018	ND	4.0000		
Lead, total	ug/L	MW91-8	09/24/2018	ND	4.0000		
Lead, total	ug/L	MW91-8	03/25/2019	ND	4.0000		
Lead, total	ug/L	MW91-8	09/03/2019	ND	4.0000		
Lead, total	ug/L	MW91-8	03/23/2020	ND	4.0000		
Lead, total	ug/L	MW91-8	09/04/2020	ND	4.0000		
Lead, total	ug/L	MW91-8	03/09/2021	ND	4.0000		
Lead, total	ug/L	MW91-8	09/07/2021	ND	4.0000		
Lead, total	ug/L	MW91-8	03/28/2022	ND	4.0000		
Lead, total	ug/L	MW91-8	09/14/2022	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	
Lead, total	ug/L	MW91-8	03/20/2023	ND	4.0000		
Lead, total	ug/L	MW91-8	09/13/2023	ND	4.0000		
Lead, total	ug/L	MW91-8	03/12/2024	ND	4.0000		
Nickel, total	ug/L	MW91-8	09/19/2014	ND	4.0000		
Nickel, total	ug/L	MW91-8	11/13/2014	ND	4.0000		
Nickel, total	ug/L	MW91-8	03/17/2015	ND	4.0000		
Nickel, total	ug/L	MW91-8	06/29/2015	ND	4.0000		
Nickel, total	ug/L	MW91-8	09/11/2015	ND	4.0000		
Nickel, total	ug/L	MW91-8	03/16/2016	ND	4.0000		
Nickel, total	ug/L	MW91-8	09/08/2016	ND	4.0000		
Nickel, total	ug/L	MW91-8	03/17/2017	ND	4.0000		
Nickel, total	ug/L	MW91-8	09/19/2017	ND	4.0000		
Nickel, total	ug/L	MW91-8	03/08/2018	ND	4.0000		
Nickel, total	ug/L	MW91-8	09/24/2018	ND	4.0000		
Nickel, total	ug/L	MW91-8	03/25/2019	ND	4.0000		
Nickel, total	ug/L	MW91-8	09/03/2019	ND	4.0000		
Nickel, total	ug/L	MW91-8	03/23/2020	ND	4.0000		
Nickel, total	ug/L	MW91-8	09/04/2020	ND	4.0000		
Nickel, total	ug/L	MW91-8	03/09/2021	ND	4.0000		
Nickel, total	ug/L	MW91-8	09/07/2021	ND	4.0000		
Nickel, total	ug/L	MW91-8	03/28/2022	ND	4.0000		
Nickel, total	ug/L	MW91-8	09/14/2022	ND	4.0000		
Nickel, total	ug/L	MW91-8	03/20/2023	ND	4.0000		
Nickel, total	ug/L	MW91-8	09/13/2023	ND	4.0000		
Nickel, total	ug/L	MW91-8	03/12/2024	ND	4.0000		
Selenium, total	ug/L	MW91-8	09/19/2014		5.1000		
Selenium, total	ug/L	MW91-8	11/13/2014	ND	4.0000		
Selenium, total	ug/L	MW91-8	03/17/2015	ND	4.0000		
Selenium, total	ug/L	MW91-8	06/29/2015	ND	4.0000		
Selenium, total	ug/L	MW91-8	09/11/2015	ND	4.0000		
Selenium, total	ug/L	MW91-8	03/16/2016	ND	4.0000		
Selenium, total	ug/L	MW91-8	09/08/2016	ND	4.0000		
Selenium, total	ug/L	MW91-8	03/17/2017	ND	4.0000		
Selenium, total	ug/L	MW91-8	09/19/2017	ND	4.0000		
Selenium, total	ug/L	MW91-8	03/08/2018	ND	4.0000		
Selenium, total	ug/L	MW91-8	09/24/2018	ND	4.0000		
Selenium, total	ug/L	MW91-8	03/25/2019	ND	4.0000		
Selenium, total	ug/L	MW91-8	09/03/2019	ND	4.0000		
Selenium, total	ug/L	MW91-8	03/23/2020	ND	4.0000		
Selenium, total	ug/L	MW91-8	09/04/2020	ND	4.0000		
Selenium, total	ug/L	MW91-8	03/09/2021	ND	4.0000		
Selenium, total	ug/L	MW91-8	09/07/2021		4.0000		
Selenium, total	ug/L	MW91-8	03/28/2022	ND	4.0000		
Selenium, total	ug/L	MW91-8	09/14/2022	ND	4.0000		
Selenium, total	ug/L	MW91-8	03/20/2023	ND	4.0000		
Selenium, total	ug/L	MW91-8	09/13/2023	ND	4.0000		
Selenium, total	ug/L	MW91-8	03/12/2024	ND	4.0000		
Silver, total	ug/L	MW91-8	09/19/2014	ND	4.0000		
Silver, total	ug/L	MW91-8	11/13/2014	ND	4.0000		
Silver, total	ug/L	MW91-8	03/17/2015	ND	4.0000		
Silver, total	ug/L	MW91-8	06/29/2015	ND	4.0000		
Silver, total	ug/L	MW91-8	09/11/2015	ND	4.0000		
Silver, total	ug/L	MW91-8	03/16/2016	ND	4.0000		
Silver, total	ug/L	MW91-8	09/08/2016	ND	4.0000		
Silver, total	ug/L	MW91-8	03/17/2017	ND	4.0000		
Silver, total	ug/L	MW91-8	09/19/2017	ND	4.0000		
Silver, total	ug/L	MW91-8	03/08/2018	ND	4.0000		
Silver, total	ug/L	MW91-8	09/24/2018	ND	4.0000		
Silver, total	ug/L	MW91-8	03/25/2019	ND	4.0000		
Silver, total	ug/L	MW91-8	09/03/2019	ND	4.0000		
Silver, total	ug/L	MW91-8	03/23/2020	ND	4.0000		
Silver, total	ug/L	MW91-8	09/04/2020	ND	4.0000		
Silver, total	ug/L	MW91-8	03/09/2021	ND	4.0000		
Silver, total	ug/L	MW91-8	09/07/2021	ND	4.0000		
Silver, total	ug/L	MW91-8	03/28/2022	ND	4.0000		
Silver, total	ug/L	MW91-8	09/14/2022	ND	4.0000		
Silver, total	ug/L	MW91-8	03/20/2023	ND	4.0000		
Silver, total	ug/L	MW91-8	09/13/2023	ND	4.0000		
Silver, total	ug/L	MW91-8	03/12/2024	ND	4.0000		
Thallium, total	ug/L	MW91-8	09/19/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW91-8	11/13/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW91-8	03/17/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW91-8	06/29/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW91-8	09/11/2015	ND	4.0000	2.0000	**

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Thallium, total	ug/L	MW91-8	03/16/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW91-8	09/08/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW91-8	03/17/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW91-8	09/19/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW91-8	03/08/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW91-8	09/24/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW91-8	03/25/2019	ND	2.0000		
Thallium, total	ug/L	MW91-8	09/03/2019	ND	2.0000		
Thallium, total	ug/L	MW91-8	03/23/2020	ND	2.0000		
Thallium, total	ug/L	MW91-8	09/04/2020	ND	2.0000		
Thallium, total	ug/L	MW91-8	03/09/2021	ND	2.0000		
Thallium, total	ug/L	MW91-8	09/07/2021	ND	2.0000		
Thallium, total	ug/L	MW91-8	03/28/2022	ND	2.0000		
Thallium, total	ug/L	MW91-8	09/14/2022	ND	2.0000		
Thallium, total	ug/L	MW91-8	03/20/2023	ND	2.0000		
Thallium, total	ug/L	MW91-8	09/13/2023	ND	2.0000		
Thallium, total	ug/L	MW91-8	03/12/2024	ND	2.0000		
Vanadium, total	ug/L	MW91-8	09/19/2014	ND	20.0000		
Vanadium, total	ug/L	MW91-8	11/13/2014	ND	20.0000		
Vanadium, total	ug/L	MW91-8	03/17/2015	ND	20.0000		
Vanadium, total	ug/L	MW91-8	06/29/2015	ND	20.0000		
Vanadium, total	ug/L	MW91-8	09/11/2015	ND	20.0000		
Vanadium, total	ug/L	MW91-8	03/16/2016	ND	20.0000		
Vanadium, total	ug/L	MW91-8	09/08/2016	ND	20.0000		
Vanadium, total	ug/L	MW91-8	03/17/2017	ND	20.0000		
Vanadium, total	ug/L	MW91-8	09/19/2017	ND	20.0000		
Vanadium, total	ug/L	MW91-8	03/08/2018	ND	20.0000		
Vanadium, total	ug/L	MW91-8	09/24/2018	ND	20.0000		
Vanadium, total	ug/L	MW91-8	03/25/2019	ND	20.0000		
Vanadium, total	ug/L	MW91-8	09/03/2019	ND	20.0000		
Vanadium, total	ug/L	MW91-8	03/23/2020	ND	20.0000		
Vanadium, total	ug/L	MW91-8	09/04/2020	ND	20.0000		
Vanadium, total	ug/L	MW91-8	03/09/2021	ND	20.0000		
Vanadium, total	ug/L	MW91-8	09/07/2021	ND	20.0000		
Vanadium, total	ug/L	MW91-8	03/28/2022	ND	20.0000		
Vanadium, total	ug/L	MW91-8	09/14/2022	ND	20.0000		
Vanadium, total	ug/L	MW91-8	03/20/2023	ND	20.0000		
Vanadium, total	ug/L	MW91-8	09/13/2023	ND	20.0000		
Vanadium, total	ug/L	MW91-8	03/12/2024	ND	20.0000		
Zinc, total	ug/L	MW91-8	09/19/2014	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW91-8	11/13/2014	ND	20.0000		
Zinc, total	ug/L	MW91-8	03/17/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW91-8	06/29/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW91-8	09/11/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW91-8	03/16/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW91-8	09/08/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW91-8	03/17/2017		8.7000		
Zinc, total	ug/L	MW91-8	09/19/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW91-8	03/08/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW91-8	09/24/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW91-8	03/25/2019	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW91-8	09/03/2019	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW91-8	03/23/2020	ND	20.0000		
Zinc, total	ug/L	MW91-8	09/04/2020	ND	20.0000		
Zinc, total	ug/L	MW91-8	03/09/2021	ND	20.0000		
Zinc, total	ug/L	MW91-8	09/07/2021	ND	20.0000		
Zinc, total	ug/L	MW91-8	03/28/2022	ND	20.0000		
Zinc, total	ug/L	MW91-8	09/14/2022	ND	20.0000		
Zinc, total	ug/L	MW91-8	03/20/2023	ND	20.0000		
Zinc, total	ug/L	MW91-8	09/13/2023	ND	20.0000		
Zinc, total	ug/L	MW91-8	03/12/2024	ND	20.0000		
Antimony, total	ug/L	MW98-28	09/18/2014	ND	2.0000		
Antimony, total	ug/L	MW98-28	11/13/2014		2.5000		
Antimony, total	ug/L	MW98-28	03/17/2015	ND	2.0000		
Antimony, total	ug/L	MW98-28	06/29/2015	ND	2.0000		
Antimony, total	ug/L	MW98-28	09/11/2015	ND	2.0000		
Antimony, total	ug/L	MW98-28	03/16/2016	ND	2.0000		
Antimony, total	ug/L	MW98-28	09/08/2016	ND	2.0000		
Antimony, total	ug/L	MW98-28	03/17/2017	ND	2.0000		
Antimony, total	ug/L	MW98-28	09/19/2017		4.5000		
Antimony, total	ug/L	MW98-28	03/08/2018	ND	2.0000		
Antimony, total	ug/L	MW98-28	09/24/2018		2.1000		
Antimony, total	ug/L	MW98-28	03/25/2019	ND	2.0000		
Antimony, total	ug/L	MW98-28	09/03/2019	ND	2.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Antimony, total	ug/L	MW98-28	03/23/2020	ND	2.0000		
Antimony, total	ug/L	MW98-28	09/04/2020	ND	2.0000		
Antimony, total	ug/L	MW98-28	03/09/2021	ND	2.0000		
Antimony, total	ug/L	MW98-28	09/07/2021	ND	2.0000		
Antimony, total	ug/L	MW98-28	03/28/2022		2.3000		
Antimony, total	ug/L	MW98-28	09/14/2022	ND	2.0000		
Antimony, total	ug/L	MW98-28	03/20/2023	ND	2.0000		
Antimony, total	ug/L	MW98-28	09/12/2023	ND	2.0000		
Antimony, total	ug/L	MW98-28	03/12/2024	ND	2.0000		
Arsenic, total	ug/L	MW98-28	09/18/2014		18.9000		*
Arsenic, total	ug/L	MW98-28	11/13/2014	ND	4.0000		
Arsenic, total	ug/L	MW98-28	03/17/2015	ND	4.0000		
Arsenic, total	ug/L	MW98-28	06/29/2015		9.5000		
Arsenic, total	ug/L	MW98-28	09/11/2015	ND	4.0000		
Arsenic, total	ug/L	MW98-28	03/16/2016	ND	4.0000		
Arsenic, total	ug/L	MW98-28	09/08/2016	ND	4.0000		
Arsenic, total	ug/L	MW98-28	03/17/2017	ND	4.0000		
Arsenic, total	ug/L	MW98-28	09/19/2017	ND	4.0000		
Arsenic, total	ug/L	MW98-28	03/08/2018	ND	4.0000		
Arsenic, total	ug/L	MW98-28	09/24/2018	ND	4.0000		
Arsenic, total	ug/L	MW98-28	03/25/2019	ND	4.0000		
Arsenic, total	ug/L	MW98-28	09/03/2019	ND	4.0000		
Arsenic, total	ug/L	MW98-28	03/23/2020	ND	4.0000		
Arsenic, total	ug/L	MW98-28	09/04/2020	ND	4.0000		
Arsenic, total	ug/L	MW98-28	03/09/2021		8.2000		
Arsenic, total	ug/L	MW98-28	09/07/2021	ND	4.0000		
Arsenic, total	ug/L	MW98-28	03/28/2022	ND	4.0000		
Arsenic, total	ug/L	MW98-28	09/14/2022	ND	4.0000		
Arsenic, total	ug/L	MW98-28	03/20/2023	ND	4.0000		
Arsenic, total	ug/L	MW98-28	09/12/2023	ND	4.0000		
Arsenic, total	ug/L	MW98-28	03/12/2024	ND	4.0000		
Barium, total	ug/L	MW98-28	09/18/2014		536.0000		
Barium, total	ug/L	MW98-28	11/13/2014		105.0000		
Barium, total	ug/L	MW98-28	03/17/2015		98.0000		
Barium, total	ug/L	MW98-28	06/29/2015		305.0000		
Barium, total	ug/L	MW98-28	09/11/2015		107.0000		
Barium, total	ug/L	MW98-28	03/16/2016		109.0000		
Barium, total	ug/L	MW98-28	09/08/2016		144.0000		
Barium, total	ug/L	MW98-28	03/17/2017		125.0000		
Barium, total	ug/L	MW98-28	09/19/2017		181.0000		
Barium, total	ug/L	MW98-28	03/08/2018		172.0000		
Barium, total	ug/L	MW98-28	09/24/2018		169.0000		
Barium, total	ug/L	MW98-28	03/25/2019		113.0000		
Barium, total	ug/L	MW98-28	09/03/2019		143.0000		
Barium, total	ug/L	MW98-28	03/23/2020		119.0000		
Barium, total	ug/L	MW98-28	09/04/2020		156.0000		
Barium, total	ug/L	MW98-28	03/09/2021		341.0000		
Barium, total	ug/L	MW98-28	09/07/2021		147.0000		
Barium, total	ug/L	MW98-28	03/28/2022		254.0000		
Barium, total	ug/L	MW98-28	09/14/2022		236.0000		
Barium, total	ug/L	MW98-28	03/20/2023		226.0000		
Barium, total	ug/L	MW98-28	09/12/2023		277.0000		
Barium, total	ug/L	MW98-28	03/12/2024		246.0000		
Beryllium, total	ug/L	MW98-28	09/18/2014	ND	4.0000		
Beryllium, total	ug/L	MW98-28	11/13/2014	ND	4.0000		
Beryllium, total	ug/L	MW98-28	03/17/2015	ND	4.0000		
Beryllium, total	ug/L	MW98-28	06/29/2015	ND	4.0000		
Beryllium, total	ug/L	MW98-28	09/11/2015	ND	4.0000		
Beryllium, total	ug/L	MW98-28	03/16/2016	ND	4.0000		
Beryllium, total	ug/L	MW98-28	09/08/2016	ND	4.0000		
Beryllium, total	ug/L	MW98-28	03/17/2017	ND	4.0000		
Beryllium, total	ug/L	MW98-28	09/19/2017	ND	4.0000		
Beryllium, total	ug/L	MW98-28	03/08/2018	ND	4.0000		
Beryllium, total	ug/L	MW98-28	09/24/2018	ND	4.0000		
Beryllium, total	ug/L	MW98-28	03/25/2019	ND	4.0000		
Beryllium, total	ug/L	MW98-28	09/03/2019	ND	4.0000		
Beryllium, total	ug/L	MW98-28	03/23/2020	ND	4.0000		
Beryllium, total	ug/L	MW98-28	09/04/2020	ND	4.0000		
Beryllium, total	ug/L	MW98-28	03/09/2021	ND	4.0000		
Beryllium, total	ug/L	MW98-28	09/07/2021	ND	4.0000		
Beryllium, total	ug/L	MW98-28	03/28/2022	ND	4.0000		
Beryllium, total	ug/L	MW98-28	09/14/2022	ND	4.0000		
Beryllium, total	ug/L	MW98-28	03/20/2023	ND	4.0000		
Beryllium, total	ug/L	MW98-28	09/12/2023	ND	4.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Beryllium, total	ug/L	MW98-28	03/12/2024	ND	4.0000		
Cadmium, total	ug/L	MW98-28	09/18/2014		11.8000		*
Cadmium, total	ug/L	MW98-28	11/13/2014	ND	0.8000		
Cadmium, total	ug/L	MW98-28	03/17/2015	ND	0.8000		
Cadmium, total	ug/L	MW98-28	06/29/2015		1.1000		
Cadmium, total	ug/L	MW98-28	09/11/2015	ND	0.8000		
Cadmium, total	ug/L	MW98-28	03/16/2016	ND	0.8000		
Cadmium, total	ug/L	MW98-28	09/08/2016	ND	0.8000		
Cadmium, total	ug/L	MW98-28	03/17/2017	ND	0.8000		
Cadmium, total	ug/L	MW98-28	09/19/2017	ND	0.8000		
Cadmium, total	ug/L	MW98-28	03/08/2018	ND	0.8000		
Cadmium, total	ug/L	MW98-28	09/24/2018	ND	0.8000		
Cadmium, total	ug/L	MW98-28	03/25/2019	ND	0.8000		
Cadmium, total	ug/L	MW98-28	09/03/2019	ND	0.8000		
Cadmium, total	ug/L	MW98-28	03/23/2020	ND	0.8000		
Cadmium, total	ug/L	MW98-28	09/04/2020	ND	0.8000		
Cadmium, total	ug/L	MW98-28	03/09/2021	ND	0.8000		
Cadmium, total	ug/L	MW98-28	09/07/2021	ND	0.8000		
Cadmium, total	ug/L	MW98-28	03/28/2022	ND	0.8000		
Cadmium, total	ug/L	MW98-28	09/14/2022	ND	0.8000		
Cadmium, total	ug/L	MW98-28	03/20/2023	ND	0.8000		
Cadmium, total	ug/L	MW98-28	09/12/2023	ND	0.8000		
Cadmium, total	ug/L	MW98-28	03/12/2024	ND	0.8000		
Chromium, total	ug/L	MW98-28	09/18/2014		43.4000		*
Chromium, total	ug/L	MW98-28	11/13/2014	ND	8.0000		
Chromium, total	ug/L	MW98-28	03/17/2015	ND	8.0000		
Chromium, total	ug/L	MW98-28	06/29/2015		24.9000		*
Chromium, total	ug/L	MW98-28	09/11/2015	ND	8.0000		
Chromium, total	ug/L	MW98-28	03/16/2016	ND	8.0000		
Chromium, total	ug/L	MW98-28	09/08/2016	ND	8.0000		
Chromium, total	ug/L	MW98-28	03/17/2017	ND	8.0000		
Chromium, total	ug/L	MW98-28	09/19/2017	ND	8.0000		
Chromium, total	ug/L	MW98-28	03/08/2018	ND	8.0000		
Chromium, total	ug/L	MW98-28	09/24/2018	ND	8.0000		
Chromium, total	ug/L	MW98-28	03/25/2019	ND	8.0000		
Chromium, total	ug/L	MW98-28	09/03/2019	ND	8.0000		
Chromium, total	ug/L	MW98-28	03/23/2020	ND	8.0000		
Chromium, total	ug/L	MW98-28	09/04/2020	ND	8.0000		
Chromium, total	ug/L	MW98-28	03/09/2021		18.6000		
Chromium, total	ug/L	MW98-28	09/07/2021	ND	8.0000		
Chromium, total	ug/L	MW98-28	03/28/2022		12.7000		
Chromium, total	ug/L	MW98-28	09/14/2022	ND	8.0000		
Chromium, total	ug/L	MW98-28	03/20/2023	ND	8.0000		
Chromium, total	ug/L	MW98-28	09/12/2023	ND	8.0000		
Chromium, total	ug/L	MW98-28	03/12/2024	ND	8.0000		
Cobalt, total	ug/L	MW98-28	09/18/2014		81.5000		*
Cobalt, total	ug/L	MW98-28	11/13/2014	ND	0.8000		
Cobalt, total	ug/L	MW98-28	03/17/2015	ND	0.8000		
Cobalt, total	ug/L	MW98-28	06/29/2015		27.3000		*
Cobalt, total	ug/L	MW98-28	09/11/2015	ND	0.8000		
Cobalt, total	ug/L	MW98-28	03/16/2016	ND	0.8000		
Cobalt, total	ug/L	MW98-28	09/08/2016		1.0000		
Cobalt, total	ug/L	MW98-28	03/17/2017	ND	0.8000		
Cobalt, total	ug/L	MW98-28	09/19/2017		4.4000		
Cobalt, total	ug/L	MW98-28	03/08/2018	ND	0.8000		
Cobalt, total	ug/L	MW98-28	09/24/2018		4.8000		
Cobalt, total	ug/L	MW98-28	03/25/2019		0.9000		
Cobalt, total	ug/L	MW98-28	09/03/2019		0.9000		
Cobalt, total	ug/L	MW98-28	03/23/2020		1.6000		
Cobalt, total	ug/L	MW98-28	09/04/2020		0.5000		
Cobalt, total	ug/L	MW98-28	03/09/2021		19.1000		*
Cobalt, total	ug/L	MW98-28	09/07/2021		0.4000		
Cobalt, total	ug/L	MW98-28	03/28/2022		4.2000		
Cobalt, total	ug/L	MW98-28	09/14/2022		4.4000		
Cobalt, total	ug/L	MW98-28	03/20/2023		1.1000		
Cobalt, total	ug/L	MW98-28	09/12/2023		1.6000		
Cobalt, total	ug/L	MW98-28	03/12/2024		0.8000		
Copper, total	ug/L	MW98-28	09/18/2014		97.9000		*
Copper, total	ug/L	MW98-28	11/13/2014	ND	4.0000		
Copper, total	ug/L	MW98-28	03/17/2015	ND	4.0000		
Copper, total	ug/L	MW98-28	06/29/2015		29.9000		*
Copper, total	ug/L	MW98-28	09/11/2015	ND	4.0000		
Copper, total	ug/L	MW98-28	03/16/2016	ND	4.0000		
Copper, total	ug/L	MW98-28	09/08/2016	ND	4.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Copper, total	ug/L	MW98-28	03/17/2017	ND	4.0000		
Copper, total	ug/L	MW98-28	09/19/2017		5.4000		
Copper, total	ug/L	MW98-28	03/08/2018	ND	4.0000		
Copper, total	ug/L	MW98-28	09/24/2018		5.1000		
Copper, total	ug/L	MW98-28	03/25/2019	ND	4.0000		
Copper, total	ug/L	MW98-28	09/03/2019	ND	4.0000		
Copper, total	ug/L	MW98-28	03/23/2020	ND	4.0000		
Copper, total	ug/L	MW98-28	09/04/2020	ND	4.0000		
Copper, total	ug/L	MW98-28	03/09/2021		104.0000		*
Copper, total	ug/L	MW98-28	09/07/2021	ND	4.0000		
Copper, total	ug/L	MW98-28	03/28/2022		7.6000		
Copper, total	ug/L	MW98-28	09/14/2022	ND	4.0000		
Copper, total	ug/L	MW98-28	03/20/2023	ND	4.0000		
Copper, total	ug/L	MW98-28	09/12/2023	ND	4.0000		
Copper, total	ug/L	MW98-28	03/12/2024	ND	4.0000		
Lead, total	ug/L	MW98-28	09/18/2014		38.1000		*
Lead, total	ug/L	MW98-28	11/13/2014	ND	4.0000		
Lead, total	ug/L	MW98-28	03/17/2015	ND	4.0000		
Lead, total	ug/L	MW98-28	06/29/2015		15.6000		*
Lead, total	ug/L	MW98-28	09/11/2015	ND	4.0000		
Lead, total	ug/L	MW98-28	03/16/2016	ND	4.0000		
Lead, total	ug/L	MW98-28	09/08/2016	ND	4.0000		
Lead, total	ug/L	MW98-28	03/17/2017	ND	4.0000		
Lead, total	ug/L	MW98-28	09/19/2017	ND	4.0000		
Lead, total	ug/L	MW98-28	03/08/2018	ND	4.0000		
Lead, total	ug/L	MW98-28	09/24/2018	ND	4.0000		
Lead, total	ug/L	MW98-28	03/25/2019	ND	4.0000		
Lead, total	ug/L	MW98-28	09/03/2019	ND	4.0000		
Lead, total	ug/L	MW98-28	03/23/2020	ND	4.0000		
Lead, total	ug/L	MW98-28	09/04/2020	ND	4.0000		
Lead, total	ug/L	MW98-28	03/09/2021		11.9000		
Lead, total	ug/L	MW98-28	09/07/2021	ND	4.0000		
Lead, total	ug/L	MW98-28	03/28/2022	ND	4.0000		
Lead, total	ug/L	MW98-28	09/14/2022	ND	4.0000		
Lead, total	ug/L	MW98-28	03/20/2023	ND	4.0000		
Lead, total	ug/L	MW98-28	09/12/2023	ND	4.0000		
Lead, total	ug/L	MW98-28	03/12/2024	ND	4.0000		
Nickel, total	ug/L	MW98-28	09/18/2014		105.0000		*
Nickel, total	ug/L	MW98-28	11/13/2014	ND	4.0000		
Nickel, total	ug/L	MW98-28	03/17/2015	ND	4.0000		
Nickel, total	ug/L	MW98-28	06/29/2015		42.0000		*
Nickel, total	ug/L	MW98-28	09/11/2015	ND	4.0000		
Nickel, total	ug/L	MW98-28	03/16/2016	ND	4.0000		
Nickel, total	ug/L	MW98-28	09/08/2016	ND	4.0000		
Nickel, total	ug/L	MW98-28	03/17/2017		4.0000		
Nickel, total	ug/L	MW98-28	09/19/2017		10.2000		
Nickel, total	ug/L	MW98-28	03/08/2018	ND	4.0000		
Nickel, total	ug/L	MW98-28	09/24/2018		7.6000		
Nickel, total	ug/L	MW98-28	03/25/2019	ND	4.0000		
Nickel, total	ug/L	MW98-28	09/03/2019	ND	4.0000		
Nickel, total	ug/L	MW98-28	03/23/2020		6.3000		
Nickel, total	ug/L	MW98-28	09/04/2020	ND	4.0000		
Nickel, total	ug/L	MW98-28	03/09/2021		33.6000		*
Nickel, total	ug/L	MW98-28	09/07/2021	ND	4.0000		
Nickel, total	ug/L	MW98-28	03/28/2022		17.4000		
Nickel, total	ug/L	MW98-28	09/14/2022		4.8000		
Nickel, total	ug/L	MW98-28	03/20/2023		6.6000		
Nickel, total	ug/L	MW98-28	09/12/2023		8.2000		
Nickel, total	ug/L	MW98-28	03/12/2024		5.8000		
Selenium, total	ug/L	MW98-28	09/18/2014		9.0000		
Selenium, total	ug/L	MW98-28	11/13/2014	ND	4.0000		
Selenium, total	ug/L	MW98-28	03/17/2015	ND	4.0000		
Selenium, total	ug/L	MW98-28	06/29/2015	ND	4.0000		
Selenium, total	ug/L	MW98-28	09/11/2015	ND	4.0000		
Selenium, total	ug/L	MW98-28	03/16/2016	ND	4.0000		
Selenium, total	ug/L	MW98-28	09/08/2016	ND	4.0000		
Selenium, total	ug/L	MW98-28	03/17/2017	ND	4.0000		
Selenium, total	ug/L	MW98-28	09/19/2017	ND	4.0000		
Selenium, total	ug/L	MW98-28	03/08/2018	ND	4.0000		
Selenium, total	ug/L	MW98-28	09/24/2018	ND	4.0000		
Selenium, total	ug/L	MW98-28	03/25/2019	ND	4.0000		
Selenium, total	ug/L	MW98-28	09/03/2019	ND	4.0000		
Selenium, total	ug/L	MW98-28	03/23/2020	ND	4.0000		
Selenium, total	ug/L	MW98-28	09/04/2020	ND	4.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Selenium, total	ug/L	MW98-28	03/09/2021	ND	4.0000		
Selenium, total	ug/L	MW98-28	09/07/2021	ND	4.0000		
Selenium, total	ug/L	MW98-28	03/28/2022	ND	4.0000		
Selenium, total	ug/L	MW98-28	09/14/2022	ND	4.0000		
Selenium, total	ug/L	MW98-28	03/20/2023	ND	4.0000		
Selenium, total	ug/L	MW98-28	09/12/2023	ND	4.0000		
Selenium, total	ug/L	MW98-28	03/12/2024	ND	4.0000		
Silver, total	ug/L	MW98-28	09/18/2014	ND	4.0000		
Silver, total	ug/L	MW98-28	11/13/2014	ND	4.0000		
Silver, total	ug/L	MW98-28	03/17/2015	ND	4.0000		
Silver, total	ug/L	MW98-28	06/29/2015	ND	4.0000		
Silver, total	ug/L	MW98-28	09/11/2015	ND	4.0000		
Silver, total	ug/L	MW98-28	03/16/2016	ND	4.0000		
Silver, total	ug/L	MW98-28	09/08/2016	ND	4.0000		
Silver, total	ug/L	MW98-28	03/17/2017	ND	4.0000		
Silver, total	ug/L	MW98-28	09/19/2017	ND	4.0000		
Silver, total	ug/L	MW98-28	03/08/2018	ND	4.0000		
Silver, total	ug/L	MW98-28	09/24/2018	ND	4.0000		
Silver, total	ug/L	MW98-28	03/25/2019	ND	4.0000		
Silver, total	ug/L	MW98-28	09/03/2019	ND	4.0000		
Silver, total	ug/L	MW98-28	03/23/2020	ND	4.0000		
Silver, total	ug/L	MW98-28	09/04/2020	ND	4.0000		
Silver, total	ug/L	MW98-28	03/09/2021	ND	4.0000		
Silver, total	ug/L	MW98-28	09/07/2021	ND	4.0000		
Silver, total	ug/L	MW98-28	03/28/2022	ND	4.0000		
Silver, total	ug/L	MW98-28	09/14/2022	ND	4.0000		
Silver, total	ug/L	MW98-28	03/20/2023	ND	4.0000		
Silver, total	ug/L	MW98-28	09/12/2023	ND	4.0000		
Silver, total	ug/L	MW98-28	03/12/2024	ND	4.0000		
Thallium, total	ug/L	MW98-28	09/18/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW98-28	11/13/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW98-28	03/17/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW98-28	06/29/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW98-28	09/11/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW98-28	03/16/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW98-28	09/08/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW98-28	03/17/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW98-28	09/19/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW98-28	03/08/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW98-28	09/24/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW98-28	03/25/2019	ND	2.0000		
Thallium, total	ug/L	MW98-28	09/03/2019	ND	2.0000		
Thallium, total	ug/L	MW98-28	03/23/2020	ND	2.0000		
Thallium, total	ug/L	MW98-28	09/04/2020	ND	2.0000		
Thallium, total	ug/L	MW98-28	03/09/2021	ND	2.0000		
Thallium, total	ug/L	MW98-28	09/07/2021	ND	2.0000		
Thallium, total	ug/L	MW98-28	03/28/2022	ND	2.0000		
Thallium, total	ug/L	MW98-28	09/14/2022	ND	2.0000		
Thallium, total	ug/L	MW98-28	03/20/2023	ND	2.0000		
Thallium, total	ug/L	MW98-28	09/12/2023	ND	2.0000		
Thallium, total	ug/L	MW98-28	03/12/2024	ND	2.0000		
Vanadium, total	ug/L	MW98-28	09/18/2014		87.6000		*
Vanadium, total	ug/L	MW98-28	11/13/2014	ND	20.0000		
Vanadium, total	ug/L	MW98-28	03/17/2015	ND	20.0000		
Vanadium, total	ug/L	MW98-28	06/29/2015		40.6000		
Vanadium, total	ug/L	MW98-28	09/11/2015	ND	20.0000		
Vanadium, total	ug/L	MW98-28	03/16/2016	ND	20.0000		
Vanadium, total	ug/L	MW98-28	09/08/2016	ND	20.0000		
Vanadium, total	ug/L	MW98-28	03/17/2017	ND	20.0000		
Vanadium, total	ug/L	MW98-28	09/19/2017	ND	20.0000		
Vanadium, total	ug/L	MW98-28	03/08/2018	ND	20.0000		
Vanadium, total	ug/L	MW98-28	09/24/2018	ND	20.0000		
Vanadium, total	ug/L	MW98-28	03/25/2019	ND	20.0000		
Vanadium, total	ug/L	MW98-28	09/03/2019	ND	20.0000		
Vanadium, total	ug/L	MW98-28	03/23/2020	ND	20.0000		
Vanadium, total	ug/L	MW98-28	09/04/2020	ND	20.0000		
Vanadium, total	ug/L	MW98-28	03/09/2021		29.2000		
Vanadium, total	ug/L	MW98-28	09/07/2021	ND	20.0000		
Vanadium, total	ug/L	MW98-28	03/28/2022	ND	20.0000		
Vanadium, total	ug/L	MW98-28	09/14/2022	ND	20.0000		
Vanadium, total	ug/L	MW98-28	03/20/2023	ND	20.0000		
Vanadium, total	ug/L	MW98-28	09/12/2023	ND	20.0000		
Vanadium, total	ug/L	MW98-28	03/12/2024	ND	20.0000		
Zinc, total	ug/L	MW98-28	09/18/2014		127.0000		*

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Zinc, total	ug/L	MW98-28	11/13/2014	ND	20.0000		
Zinc, total	ug/L	MW98-28	03/17/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW98-28	06/29/2015		59.4000		
Zinc, total	ug/L	MW98-28	09/11/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW98-28	03/16/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW98-28	09/08/2016		8.2000		
Zinc, total	ug/L	MW98-28	03/17/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW98-28	09/19/2017		11.1000		
Zinc, total	ug/L	MW98-28	03/08/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW98-28	09/24/2018		13.2000		
Zinc, total	ug/L	MW98-28	03/25/2019	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW98-28	09/03/2019		10.6000		
Zinc, total	ug/L	MW98-28	03/23/2020	ND	20.0000		
Zinc, total	ug/L	MW98-28	09/04/2020	ND	20.0000		
Zinc, total	ug/L	MW98-28	03/09/2021		37.6000		
Zinc, total	ug/L	MW98-28	09/07/2021	ND	20.0000		
Zinc, total	ug/L	MW98-28	03/28/2022	ND	20.0000		
Zinc, total	ug/L	MW98-28	09/14/2022	ND	20.0000		
Zinc, total	ug/L	MW98-28	03/20/2023	ND	20.0000		
Zinc, total	ug/L	MW98-28	09/12/2023	ND	20.0000		
Zinc, total	ug/L	MW98-28	03/12/2024	ND	20.0000		

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

Table 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Antimony, total	ug/L	GU-4	03/12/2024	ND	2.0000		4.5000
Arsenic, total	ug/L	GU-4	03/12/2024	ND	4.0000		50.6000
Barium, total	ug/L	GU-4	03/12/2024		368.0000		874.0000
Beryllium, total	ug/L	GU-4	03/12/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	GU-4	03/12/2024	ND	0.8000		2.4000
Chromium, total	ug/L	GU-4	03/12/2024	ND	8.0000		18.6000
Cobalt, total	ug/L	GU-4	03/12/2024	ND	0.4000		7.0000
Copper, total	ug/L	GU-4	03/12/2024	ND	4.0000		19.5000
Lead, total	ug/L	GU-4	03/12/2024	ND	4.0000		22.3000
Nickel, total	ug/L	GU-4	03/12/2024	ND	4.0000		17.4000
Selenium, total	ug/L	GU-4	03/12/2024	ND	4.0000		9.0000
Silver, total	ug/L	GU-4	03/12/2024	ND	4.0000		4.0000
Thallium, total	ug/L	GU-4	03/12/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	GU-4	03/12/2024	ND	20.0000		40.6000
Zinc, total	ug/L	GU-4	03/12/2024		70.7000		144.0000
Antimony, total	ug/L	MW06-37	03/12/2024	ND	2.0000		4.5000
Arsenic, total	ug/L	MW06-37	03/12/2024	ND	4.0000		50.6000
Barium, total	ug/L	MW06-37	03/12/2024		128.0000		874.0000
Beryllium, total	ug/L	MW06-37	03/12/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW06-37	03/12/2024	ND	0.8000		2.4000
Chromium, total	ug/L	MW06-37	03/12/2024	ND	8.0000		18.6000
Cobalt, total	ug/L	MW06-37	03/12/2024	ND	0.4000		7.0000
Copper, total	ug/L	MW06-37	03/12/2024	ND	4.0000		19.5000
Lead, total	ug/L	MW06-37	03/12/2024	ND	4.0000		22.3000
Nickel, total	ug/L	MW06-37	03/12/2024	ND	4.0000		17.4000
Selenium, total	ug/L	MW06-37	03/12/2024	ND	4.0000		9.0000
Silver, total	ug/L	MW06-37	03/12/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW06-37	03/12/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW06-37	03/12/2024	ND	20.0000		40.6000
Zinc, total	ug/L	MW06-37	03/12/2024	ND	20.0000		144.0000
Antimony, total	ug/L	MW06-38	03/12/2024	ND	2.0000		4.5000
Arsenic, total	ug/L	MW06-38	03/12/2024	ND	4.0000		50.6000
Barium, total	ug/L	MW06-38	03/12/2024		196.0000		874.0000
Beryllium, total	ug/L	MW06-38	03/12/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW06-38	03/12/2024	ND	0.8000		2.4000
Chromium, total	ug/L	MW06-38	03/12/2024	ND	8.0000		18.6000
Cobalt, total	ug/L	MW06-38	03/12/2024	ND	0.4000		7.0000
Copper, total	ug/L	MW06-38	03/12/2024	ND	4.0000		19.5000
Lead, total	ug/L	MW06-38	03/12/2024	ND	4.0000		22.3000
Nickel, total	ug/L	MW06-38	03/12/2024	ND	4.0000		17.4000
Selenium, total	ug/L	MW06-38	03/12/2024	ND	4.0000		9.0000
Silver, total	ug/L	MW06-38	03/12/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW06-38	03/12/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW06-38	03/12/2024	ND	20.0000		40.6000
Zinc, total	ug/L	MW06-38	03/12/2024	ND	20.0000		144.0000
Antimony, total	ug/L	MW06-39	03/12/2024	ND	2.0000		4.5000
Arsenic, total	ug/L	MW06-39	03/12/2024	ND	4.0000		50.6000
Barium, total	ug/L	MW06-39	03/12/2024		174.0000		874.0000
Beryllium, total	ug/L	MW06-39	03/12/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW06-39	03/12/2024	ND	0.8000		2.4000
Chromium, total	ug/L	MW06-39	03/12/2024	ND	8.0000		18.6000
Cobalt, total	ug/L	MW06-39	03/12/2024	ND	0.4000		7.0000
Copper, total	ug/L	MW06-39	03/12/2024	ND	4.0000		19.5000
Lead, total	ug/L	MW06-39	03/12/2024	ND	4.0000		22.3000
Nickel, total	ug/L	MW06-39	03/12/2024	ND	4.0000		17.4000
Selenium, total	ug/L	MW06-39	03/12/2024	ND	4.0000		9.0000
Silver, total	ug/L	MW06-39	03/12/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW06-39	03/12/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW06-39	03/12/2024	ND	20.0000		40.6000
Zinc, total	ug/L	MW06-39	03/12/2024	ND	20.0000		144.0000
Antimony, total	ug/L	MW09-40	03/12/2024	ND	2.0000		4.5000
Arsenic, total	ug/L	MW09-40	03/12/2024	ND	4.0000		50.6000
Barium, total	ug/L	MW09-40	03/12/2024		21.3000		874.0000
Beryllium, total	ug/L	MW09-40	03/12/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW09-40	03/12/2024	ND	0.8000		2.4000
Chromium, total	ug/L	MW09-40	03/12/2024	ND	8.0000		18.6000
Cobalt, total	ug/L	MW09-40	03/12/2024	ND	0.4000		7.0000
Copper, total	ug/L	MW09-40	03/12/2024	ND	4.0000		19.5000
Lead, total	ug/L	MW09-40	03/12/2024	ND	4.0000		22.3000
Nickel, total	ug/L	MW09-40	03/12/2024	ND	4.0000		17.4000
Selenium, total	ug/L	MW09-40	03/12/2024	ND	4.0000		9.0000
Silver, total	ug/L	MW09-40	03/12/2024	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	MW09-40	03/12/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW09-40	03/12/2024	ND	20.0000		40.6000
Zinc, total	ug/L	MW09-40	03/12/2024	ND	20.0000		144.0000
Antimony, total	ug/L	MW21-43	03/12/2024	ND	2.0000		4.5000
Arsenic, total	ug/L	MW21-43	03/12/2024		6.4000		50.6000
Barium, total	ug/L	MW21-43	03/12/2024		226.0000		874.0000
Beryllium, total	ug/L	MW21-43	03/12/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW21-43	03/12/2024	ND	0.8000		2.4000
Chromium, total	ug/L	MW21-43	03/12/2024	ND	8.0000		18.6000
Cobalt, total	ug/L	MW21-43	03/12/2024	ND	0.4000		7.0000
Copper, total	ug/L	MW21-43	03/12/2024		4.0000		19.5000
Lead, total	ug/L	MW21-43	03/12/2024	ND	4.0000		22.3000
Nickel, total	ug/L	MW21-43	03/12/2024		6.4000		17.4000
Selenium, total	ug/L	MW21-43	03/12/2024	ND	4.0000		9.0000
Silver, total	ug/L	MW21-43	03/12/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW21-43	03/12/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW21-43	03/12/2024	ND	20.0000		40.6000
Zinc, total	ug/L	MW21-43	03/12/2024	ND	20.0000		144.0000
Antimony, total	ug/L	MW88-3	03/12/2024	ND	2.0000		4.5000
Arsenic, total	ug/L	MW88-3	03/12/2024	ND	4.0000		50.6000
Barium, total	ug/L	MW88-3	03/12/2024		134.0000		874.0000
Beryllium, total	ug/L	MW88-3	03/12/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW88-3	03/12/2024	ND	0.8000		2.4000
Chromium, total	ug/L	MW88-3	03/12/2024	ND	8.0000		18.6000
Cobalt, total	ug/L	MW88-3	03/12/2024	ND	0.4000		7.0000
Copper, total	ug/L	MW88-3	03/12/2024		18.5000		19.5000
Lead, total	ug/L	MW88-3	03/12/2024	ND	4.0000		22.3000
Nickel, total	ug/L	MW88-3	03/12/2024	ND	4.0000		17.4000
Selenium, total	ug/L	MW88-3	03/12/2024	ND	4.0000		9.0000
Silver, total	ug/L	MW88-3	03/12/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW88-3	03/12/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW88-3	03/12/2024	ND	20.0000		40.6000
Zinc, total	ug/L	MW88-3	03/12/2024	ND	20.0000		144.0000
Antimony, total	ug/L	MW91-10	03/12/2024	ND	2.0000		4.5000
Arsenic, total	ug/L	MW91-10	03/12/2024	ND	4.0000		50.6000
Barium, total	ug/L	MW91-10	03/12/2024		40.7000		874.0000
Beryllium, total	ug/L	MW91-10	03/12/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW91-10	03/12/2024	ND	0.8000		2.4000
Chromium, total	ug/L	MW91-10	03/12/2024	ND	8.0000		18.6000
Cobalt, total	ug/L	MW91-10	03/12/2024	ND	0.4000		7.0000
Copper, total	ug/L	MW91-10	03/12/2024	ND	4.0000		19.5000
Lead, total	ug/L	MW91-10	03/12/2024	ND	4.0000		22.3000
Nickel, total	ug/L	MW91-10	03/12/2024	ND	4.0000		17.4000
Selenium, total	ug/L	MW91-10	03/12/2024	ND	4.0000		9.0000
Silver, total	ug/L	MW91-10	03/12/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW91-10	03/12/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW91-10	03/12/2024	ND	20.0000		40.6000
Zinc, total	ug/L	MW91-10	03/12/2024	ND	20.0000		144.0000
Antimony, total	ug/L	MW94-18	03/12/2024	ND	2.0000		4.5000
Arsenic, total	ug/L	MW94-18	03/12/2024	ND	4.0000		50.6000
Barium, total	ug/L	MW94-18	03/12/2024		24.4000		874.0000
Beryllium, total	ug/L	MW94-18	03/12/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW94-18	03/12/2024	ND	0.8000		2.4000
Chromium, total	ug/L	MW94-18	03/12/2024	ND	8.0000		18.6000
Cobalt, total	ug/L	MW94-18	03/12/2024	ND	0.4000		7.0000
Copper, total	ug/L	MW94-18	03/12/2024		5.7000		19.5000
Lead, total	ug/L	MW94-18	03/12/2024	ND	4.0000		22.3000
Nickel, total	ug/L	MW94-18	03/12/2024	ND	4.0000		17.4000
Selenium, total	ug/L	MW94-18	03/12/2024	ND	4.0000		9.0000
Silver, total	ug/L	MW94-18	03/12/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW94-18	03/12/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW94-18	03/12/2024	ND	20.0000		40.6000
Zinc, total	ug/L	MW94-18	03/12/2024	ND	20.0000		144.0000
Antimony, total	ug/L	MW96-23	03/12/2024	ND	2.0000		4.5000
Arsenic, total	ug/L	MW96-23	03/12/2024		33.0000		50.6000
Barium, total	ug/L	MW96-23	03/12/2024		644.0000		874.0000
Beryllium, total	ug/L	MW96-23	03/12/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW96-23	03/12/2024	ND	0.8000		2.4000
Chromium, total	ug/L	MW96-23	03/12/2024	ND	8.0000		18.6000
Cobalt, total	ug/L	MW96-23	03/12/2024	ND	0.4000		7.0000
Copper, total	ug/L	MW96-23	03/12/2024	ND	4.0000		19.5000
Lead, total	ug/L	MW96-23	03/12/2024	ND	4.0000		22.3000

* - Current value failed - awaiting verification.
** - Current value passed - previous exceedance not verified.
*** - Current value failed - exceedance verified.
**** - Current value passed - awaiting one more verification.
***** - Insufficient background data to compute prediction limit.
ND = Not Detected, Result = detection limit.

Table 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Nickel, total	ug/L	MW96-23	03/12/2024	ND	4.0000		17.4000
Selenium, total	ug/L	MW96-23	03/12/2024	ND	4.0000		9.0000
Silver, total	ug/L	MW96-23	03/12/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW96-23	03/12/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW96-23	03/12/2024	ND	20.0000		40.6000
Zinc, total	ug/L	MW96-23	03/12/2024	ND	20.0000		144.0000
Antimony, total	ug/L	MW96-24	03/12/2024	ND	2.0000		4.5000
Arsenic, total	ug/L	MW96-24	03/12/2024	ND	4.0000		50.6000
Barium, total	ug/L	MW96-24	03/12/2024		541.0000		874.0000
Beryllium, total	ug/L	MW96-24	03/12/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW96-24	03/12/2024	ND	0.8000		2.4000
Chromium, total	ug/L	MW96-24	03/12/2024	ND	8.0000		18.6000
Cobalt, total	ug/L	MW96-24	03/12/2024	ND	0.4000		7.0000
Copper, total	ug/L	MW96-24	03/12/2024	ND	4.0000		19.5000
Lead, total	ug/L	MW96-24	03/12/2024	ND	4.0000		22.3000
Nickel, total	ug/L	MW96-24	03/12/2024	ND	4.0000		17.4000
Selenium, total	ug/L	MW96-24	03/12/2024	ND	4.0000		9.0000
Silver, total	ug/L	MW96-24	03/12/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW96-24	03/12/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW96-24	03/12/2024	ND	20.0000		40.6000
Zinc, total	ug/L	MW96-24	03/12/2024	ND	20.0000		144.0000
Antimony, total	ug/L	MW98-25	03/12/2024	ND	2.0000		4.5000
Arsenic, total	ug/L	MW98-25	03/12/2024		16.7000		50.6000
Barium, total	ug/L	MW98-25	03/12/2024		110.0000		874.0000
Beryllium, total	ug/L	MW98-25	03/12/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW98-25	03/12/2024	ND	0.8000		2.4000
Chromium, total	ug/L	MW98-25	03/12/2024	ND	8.0000		18.6000
Cobalt, total	ug/L	MW98-25	03/12/2024		10.7000	***	7.0000
Copper, total	ug/L	MW98-25	03/12/2024	ND	4.0000		19.5000
Lead, total	ug/L	MW98-25	03/12/2024	ND	4.0000		22.3000
Nickel, total	ug/L	MW98-25	03/12/2024		23.6000	***	17.4000
Selenium, total	ug/L	MW98-25	03/12/2024	ND	4.0000		9.0000
Silver, total	ug/L	MW98-25	03/12/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW98-25	03/12/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW98-25	03/12/2024	ND	20.0000		40.6000
Zinc, total	ug/L	MW98-25	03/12/2024	ND	20.0000		144.0000

* - 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	4	105	0.038	4	368	0.011
Arsenic, total	30	104	0.288	101	371	0.272
Barium, total	105	105	1.000	368	369	0.997
Beryllium, total	0	105	0.000	0	370	0.000
Cadmium, total	10	101	0.099	49	371	0.132
Chromium, total	4	103	0.039	12	368	0.033
Cobalt, total	46	101	0.455	85	371	0.229
Copper, total	11	100	0.110	72	370	0.195
Lead, total	5	102	0.049	32	371	0.086
Nickel, total	35	102	0.343	161	371	0.434
Selenium, total	3	105	0.029	16	370	0.043
Silver, total	0	105	0.000	0	368	0.000
Thallium, total	0	105	0.000	1	368	0.003
Vanadium, total	2	104	0.019	25	370	0.068
Zinc, total	20	104	0.192	114	371	0.307

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	4	105	0.038	1.635	1.142					2.326	normal	nonpar
Arsenic, total	30	104	0.288	1.786	0.293					2.326	normal	nonpar
Barium, total	105	105	1.000	5.645	2.804					2.326	non-norm	nonpar
Beryllium, total	0	105	0.000									nonpar
Cadmium, total	10	101	0.099	1.279	1.388					2.326	normal	nonpar
Chromium, total	4	103	0.039									nonpar
Cobalt, total	46	101	0.455	4.579	0.685					2.326	lognor	nonpar
Copper, total	11	100	0.110	0.347	0.419					2.326	normal	nonpar
Lead, total	5	102	0.049	0.192	0.717					2.326	normal	nonpar
Nickel, total	35	102	0.343	1.761	0.229					2.326	normal	nonpar
Selenium, total	3	105	0.029									nonpar
Silver, total	0	105	0.000									nonpar
Thallium, total	0	105	0.000									nonpar
Vanadium, total	2	104	0.019									nonpar
Zinc, total	20	104	0.192	1.923	0.131					2.326	normal	nonpar

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

Table 5

Summary Statistics and Prediction Limits

Constituent	Units	Detect	N	Mean	SD	alpha	Factor	Pred Limit	Type		Conf
Antimony, total	ug/L	4	105					4.5000	nonpar		0.99
Arsenic, total	ug/L	30	104					50.6000	nonpar		0.99
Barium, total	ug/L	105	105					874.0000	nonpar		0.99
Beryllium, total	ug/L	0	105					4.0000	nonpar	***	0.99
Cadmium, total	ug/L	10	101					2.4000	nonpar		0.99
Chromium, total	ug/L	4	103					18.6000	nonpar		0.99
Cobalt, total	ug/L	46	101					7.0000	nonpar		0.99
Copper, total	ug/L	11	100					19.5000	nonpar		0.99
Lead, total	ug/L	5	102					22.3000	nonpar		0.99
Nickel, total	ug/L	35	102					17.4000	nonpar		0.99
Selenium, total	ug/L	3	105					9.0000	nonpar		0.99
Silver, total	ug/L	0	105					4.0000	nonpar	***	0.99
Thallium, total	ug/L	0	105					2.0000	nonpar	***	0.99
Vanadium, total	ug/L	2	104					40.6000	nonpar		0.99
Zinc, total	ug/L	20	104					144.0000	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
Cadmium, total	ug/L	MW02-15A	03/16/2016	3.6000		09/18/2014-03/12/2024	22	0.5162
Copper, total	ug/L	MW02-15A	03/09/2021	26.0000		09/18/2014-03/12/2024	22	0.5162
Cadmium, total	ug/L	MW88-2	03/16/2016	4.6000		09/18/2014-03/12/2024	21	0.5381
Cadmium, total	ug/L	MW88-2	09/19/2017	2.5000		09/18/2014-03/12/2024	21	0.5381
Cobalt, total	ug/L	MW91-8	09/14/2022	2.7000		09/19/2014-03/12/2024	22	0.5162
Arsenic, total	ug/L	MW98-28	09/18/2014	18.9000		09/18/2014-03/12/2024	22	0.5162
Chromium, total	ug/L	MW98-28	09/18/2014	43.4000		09/18/2014-03/12/2024	22	0.5263
Chromium, total	ug/L	MW98-28	06/29/2015	24.9000		09/18/2014-03/12/2024	22	0.5263
Copper, total	ug/L	MW98-28	06/29/2015	29.9000		09/18/2014-03/12/2024	20	0.5381
Lead, total	ug/L	MW98-28	06/29/2015	15.6000		09/18/2014-03/12/2024	21	0.5263
Nickel, total	ug/L	MW98-28	03/09/2021	33.6000		09/18/2014-03/12/2024	20	0.5381

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
Cobalt, total	ug/L	MW98-25	03/17/2008	46.0000	*	7.0000
Cobalt, total	ug/L	MW98-25	06/04/2008	42.0000	*	7.0000
Cobalt, total	ug/L	MW98-25	07/23/2008	51.0000	*	7.0000
Cobalt, total	ug/L	MW98-25	09/12/2008	24.2000	*	7.0000
Cobalt, total	ug/L	MW98-25	12/11/2008	29.3000	*	7.0000
Cobalt, total	ug/L	MW98-25	03/04/2009	33.9000	*	7.0000
Cobalt, total	ug/L	MW98-25	09/20/2009	23.7000	*	7.0000
Cobalt, total	ug/L	MW98-25	03/26/2010	33.6000	*	7.0000
Cobalt, total	ug/L	MW98-25	09/24/2010	25.4000	*	7.0000
Cobalt, total	ug/L	MW98-25	03/30/2011	35.4000	*	7.0000
Cobalt, total	ug/L	MW98-25	09/14/2011	30.0000	*	7.0000
Cobalt, total	ug/L	MW98-25	03/07/2012	33.1000	*	7.0000
Cobalt, total	ug/L	MW98-25	09/12/2012	8.9000	*	7.0000
Cobalt, total	ug/L	MW98-25	03/20/2013	12.3000	*	7.0000
Cobalt, total	ug/L	MW98-25	09/27/2013	10.0000	*	7.0000
Cobalt, total	ug/L	MW98-25	03/13/2014	14.5000	*	7.0000
Cobalt, total	ug/L	MW98-25	09/18/2014	19.0000	*	7.0000
Cobalt, total	ug/L	MW98-25	03/17/2015	5.4000		7.0000
Cobalt, total	ug/L	MW98-25	09/11/2015	13.0000	*	7.0000
Cobalt, total	ug/L	MW98-25	03/16/2016	4.7000		7.0000
Cobalt, total	ug/L	MW98-25	09/08/2016	29.1000	*	7.0000
Cobalt, total	ug/L	MW98-25	03/18/2017	14.6000	*	7.0000
Cobalt, total	ug/L	MW98-25	09/19/2017	6.2000		7.0000
Cobalt, total	ug/L	MW98-25	03/08/2018	10.3000	*	7.0000
Cobalt, total	ug/L	MW98-25	09/24/2018	11.6000	*	7.0000
Cobalt, total	ug/L	MW98-25	03/25/2019	13.9000	*	7.0000
Cobalt, total	ug/L	MW98-25	09/03/2019	8.5000	*	7.0000
Cobalt, total	ug/L	MW98-25	03/23/2020	22.2000	*	7.0000
Cobalt, total	ug/L	MW98-25	09/04/2020	7.6000	*	7.0000
Cobalt, total	ug/L	MW98-25	03/09/2021	11.7000	*	7.0000
Cobalt, total	ug/L	MW98-25	09/07/2021	12.8000	*	7.0000
Cobalt, total	ug/L	MW98-25	03/28/2022	10.9000	*	7.0000
Cobalt, total	ug/L	MW98-25	09/14/2022	19.4000	*	7.0000
Cobalt, total	ug/L	MW98-25	03/20/2023	11.2000	*	7.0000
Cobalt, total	ug/L	MW98-25	09/12/2023	15.2000	*	7.0000
Cobalt, total	ug/L	MW98-25	03/12/2024	10.7000	*	7.0000
Nickel, total	ug/L	MW98-25	03/17/2008	111.0000	*	17.4000
Nickel, total	ug/L	MW98-25	06/04/2008	86.0000	*	17.4000
Nickel, total	ug/L	MW98-25	07/23/2008	110.0000	*	17.4000
Nickel, total	ug/L	MW98-25	09/12/2008	81.1000	*	17.4000
Nickel, total	ug/L	MW98-25	12/11/2008	60.7000	*	17.4000
Nickel, total	ug/L	MW98-25	03/04/2009	69.6000	*	17.4000
Nickel, total	ug/L	MW98-25	09/20/2009	53.1000	*	17.4000
Nickel, total	ug/L	MW98-25	03/26/2010	84.0000	*	17.4000
Nickel, total	ug/L	MW98-25	09/24/2010	56.5000	*	17.4000
Nickel, total	ug/L	MW98-25	03/30/2011	85.8000	*	17.4000
Nickel, total	ug/L	MW98-25	09/14/2011	70.5000	*	17.4000
Nickel, total	ug/L	MW98-25	03/07/2012	75.7000	*	17.4000
Nickel, total	ug/L	MW98-25	09/12/2012	46.5000	*	17.4000
Nickel, total	ug/L	MW98-25	03/20/2013	41.5000	*	17.4000
Nickel, total	ug/L	MW98-25	09/27/2013	55.2000	*	17.4000
Nickel, total	ug/L	MW98-25	03/13/2014	51.0000	*	17.4000
Nickel, total	ug/L	MW98-25	09/18/2014	48.1000	*	17.4000
Nickel, total	ug/L	MW98-25	03/17/2015	41.6000	*	17.4000
Nickel, total	ug/L	MW98-25	09/11/2015	36.2000	*	17.4000
Nickel, total	ug/L	MW98-25	03/16/2016	37.9000	*	17.4000
Nickel, total	ug/L	MW98-25	09/08/2016	81.7000	*	17.4000
Nickel, total	ug/L	MW98-25	03/18/2017	34.3000	*	17.4000
Nickel, total	ug/L	MW98-25	09/19/2017	17.0000		17.4000
Nickel, total	ug/L	MW98-25	03/08/2018	20.1000	*	17.4000
Nickel, total	ug/L	MW98-25	09/24/2018	24.6000	*	17.4000
Nickel, total	ug/L	MW98-25	03/25/2019	21.2000	*	17.4000
Nickel, total	ug/L	MW98-25	09/03/2019	9.0000		17.4000
Nickel, total	ug/L	MW98-25	03/23/2020	29.9000	*	17.4000
Nickel, total	ug/L	MW98-25	09/04/2020	10.5000		17.4000
Nickel, total	ug/L	MW98-25	03/09/2021	16.7000		17.4000
Nickel, total	ug/L	MW98-25	09/07/2021	20.4000	*	17.4000
Nickel, total	ug/L	MW98-25	03/28/2022	21.9000	*	17.4000
Nickel, total	ug/L	MW98-25	09/14/2022	24.3000	*	17.4000
Nickel, total	ug/L	MW98-25	03/20/2023	23.4000	*	17.4000
Nickel, total	ug/L	MW98-25	09/12/2023	35.7000	*	17.4000

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

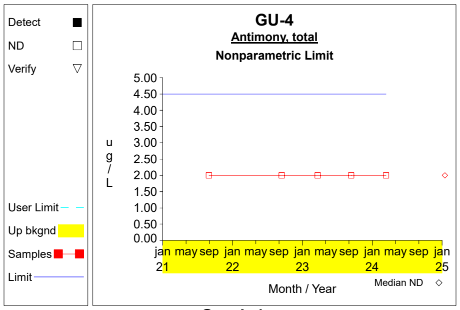
Table 8

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

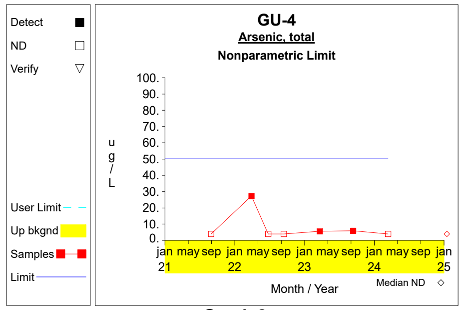
Constituent	Units	Well	Date	Result		Pred. Limit
Nickel, total	ug/L	MW98-25	03/12/2024	23.6000	*	17.4000

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

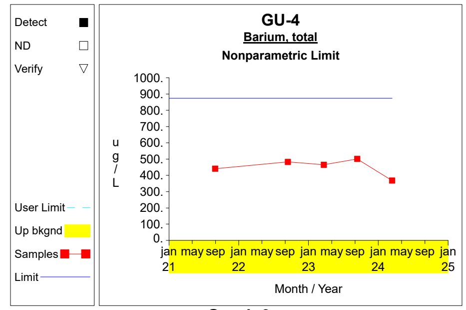
Up vs. Down Prediction Limits



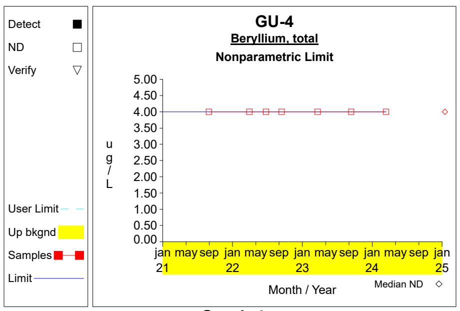
Graph 1



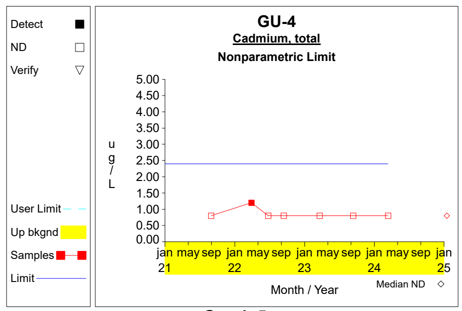
Graph 2



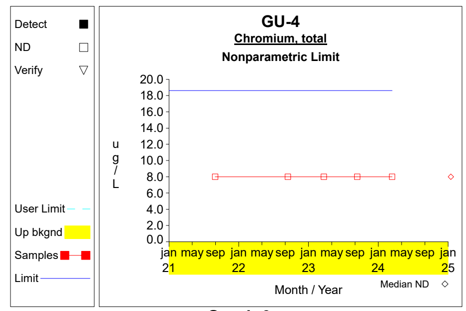
Graph 3



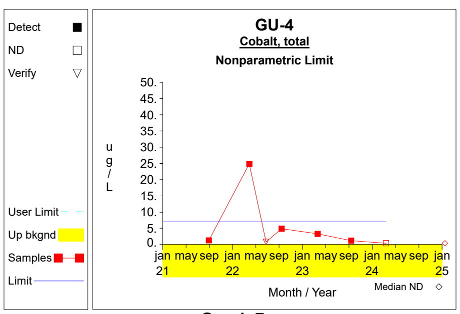
Graph 4



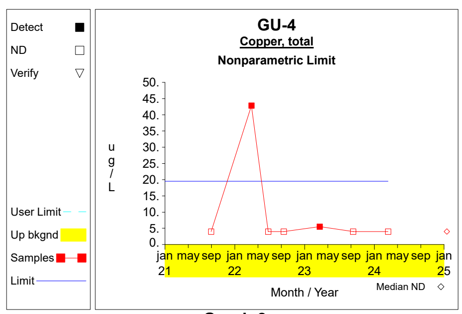
Graph 5



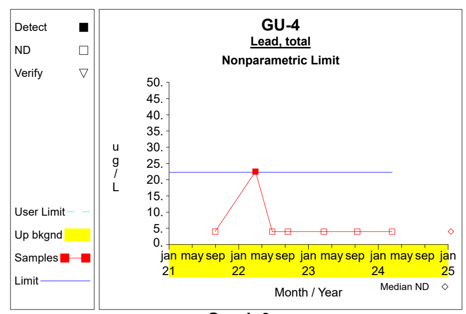
Graph 6



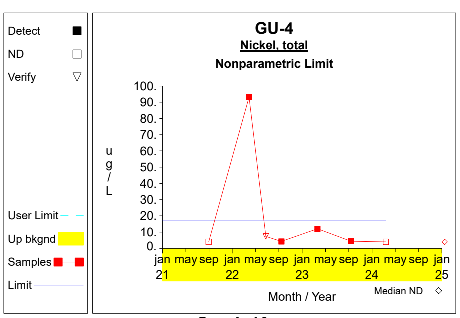
Graph 7



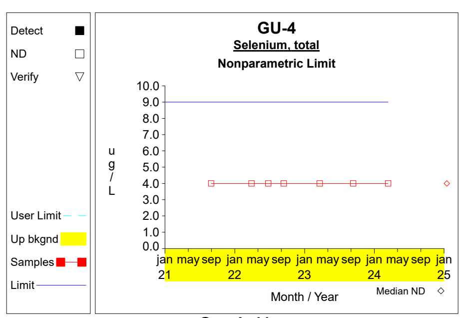
Graph 8



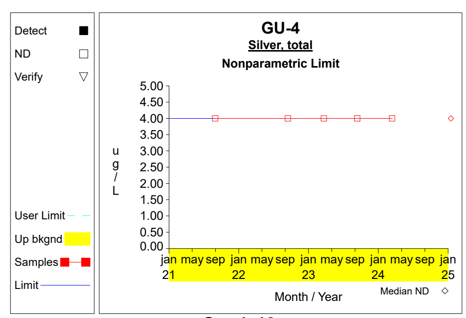
Graph 9



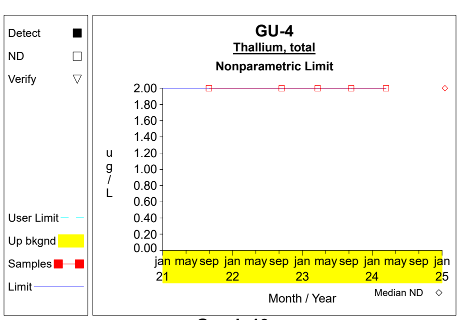
Graph 10



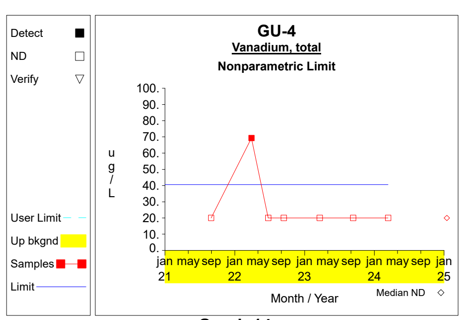
Graph 11



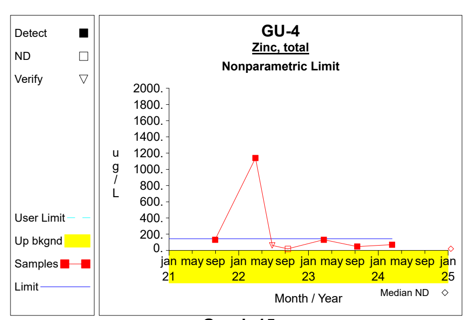
Graph 12



Graph 13

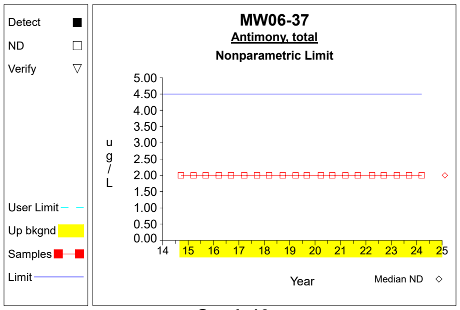


Graph 14

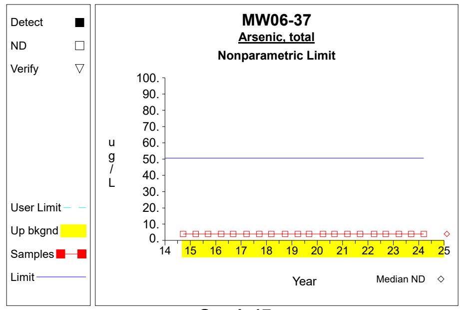


Graph 15

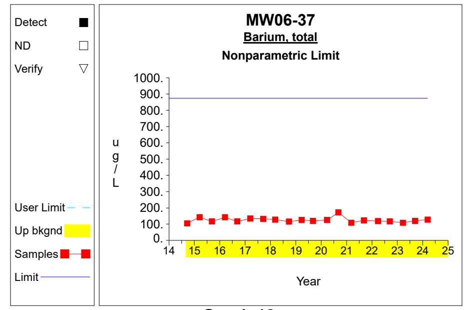
Up vs. Down Prediction Limits



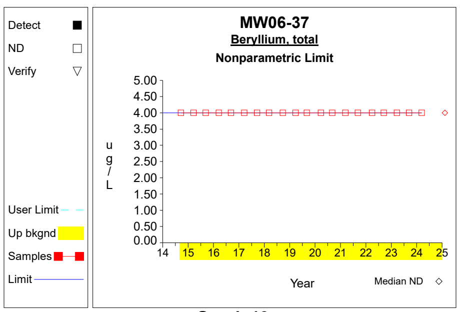
Graph 16



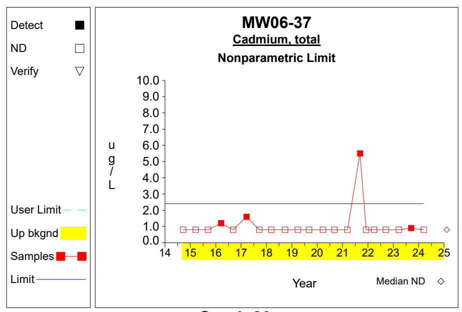
Graph 17



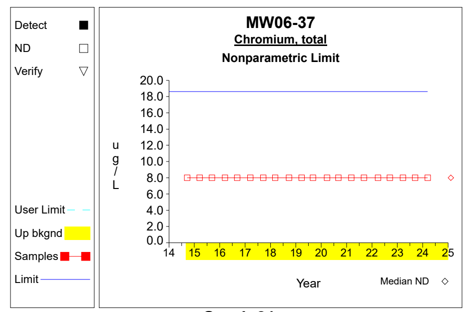
Graph 18



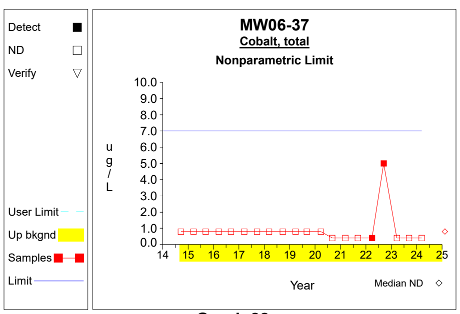
Graph 19



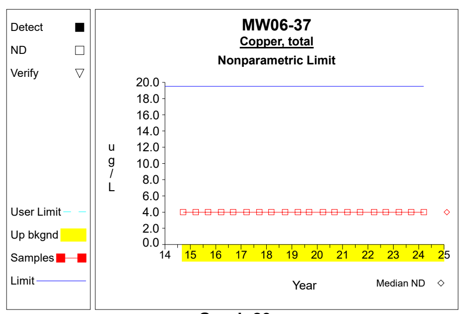
Graph 20



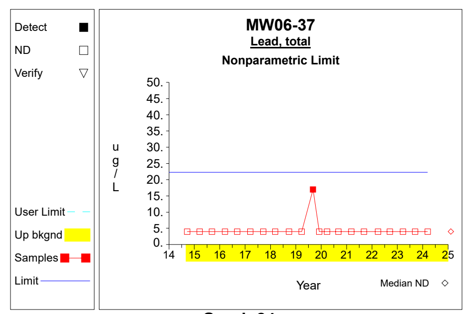
Graph 21



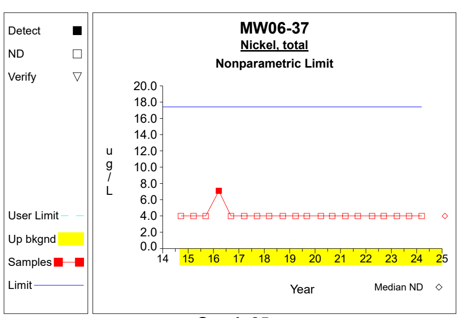
Graph 22



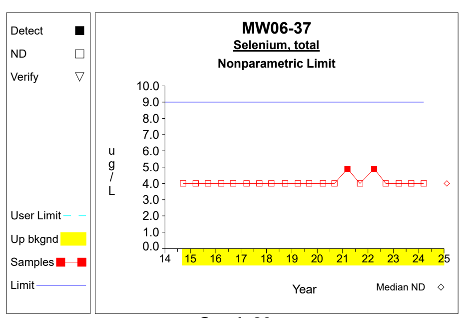
Graph 23



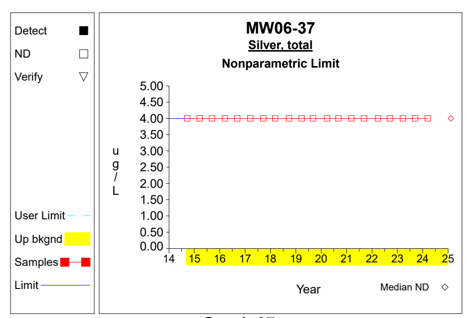
Graph 24



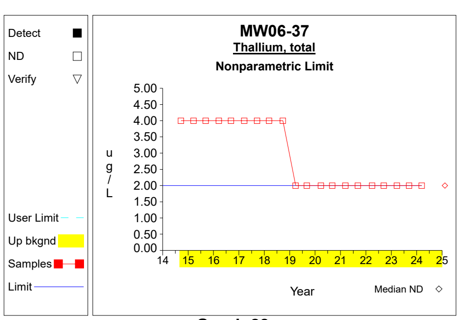
Graph 25



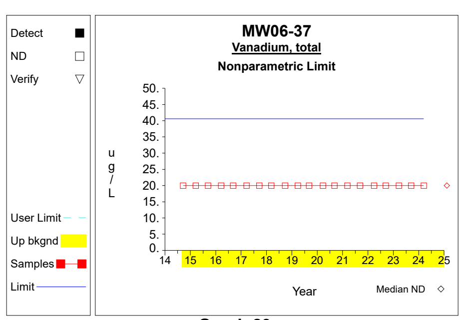
Graph 26



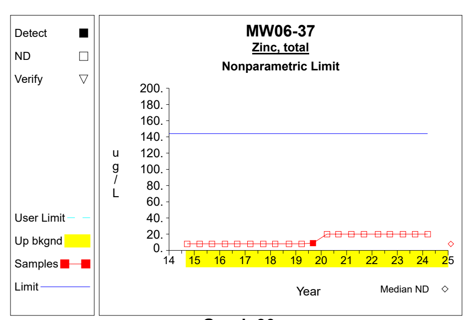
Graph 27



Graph 28

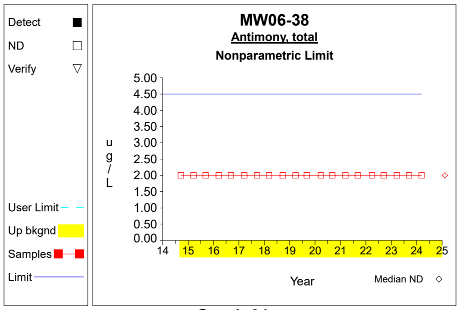


Graph 29

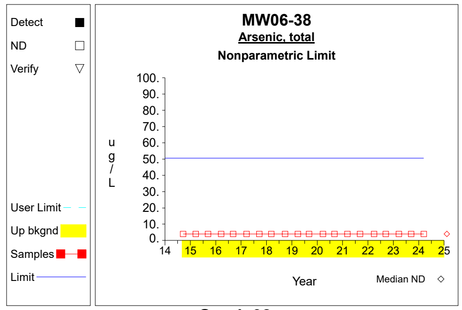


Graph 30

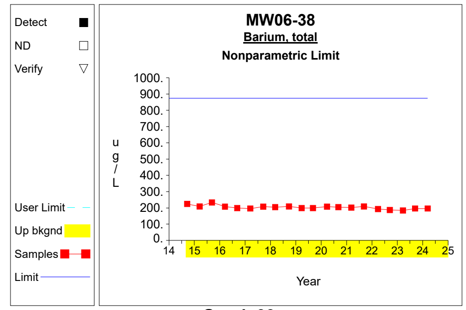
Up vs. Down Prediction Limits



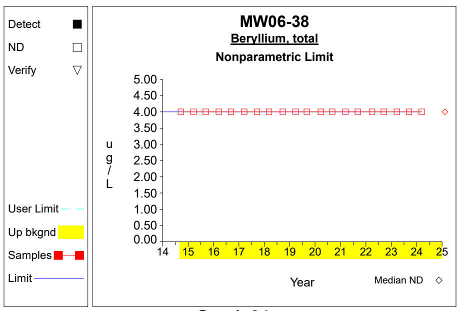
Graph 31



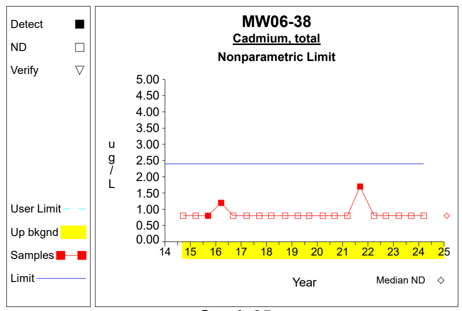
Graph 32



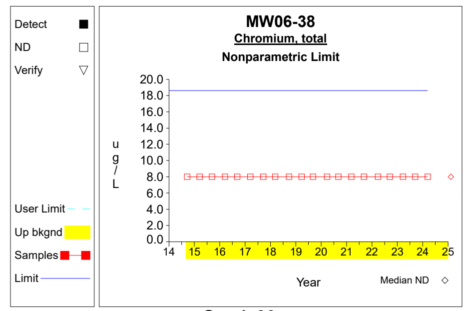
Graph 33



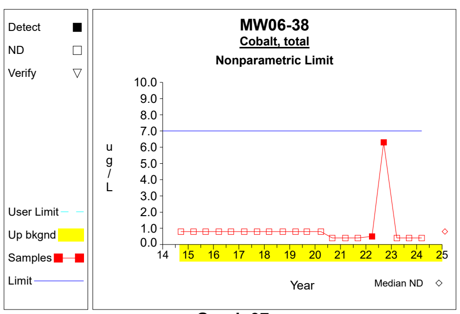
Graph 34



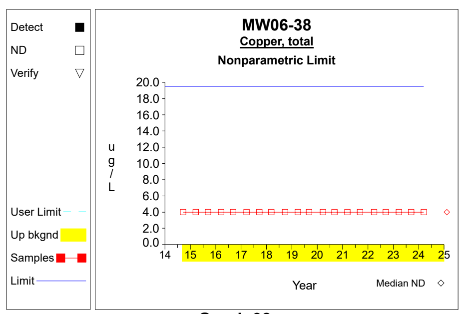
Graph 35



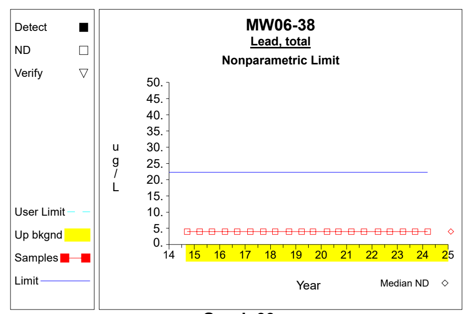
Graph 36



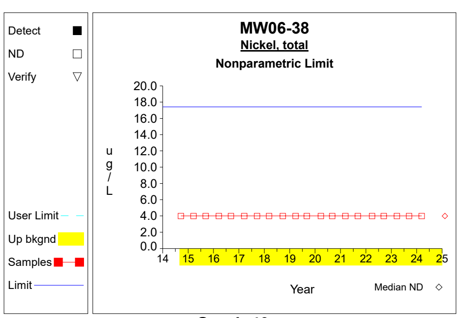
Graph 37



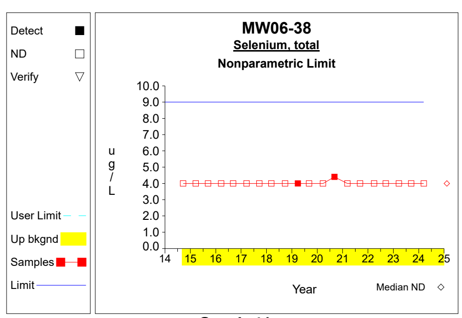
Graph 38



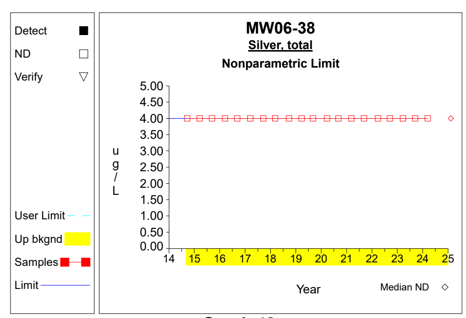
Graph 39



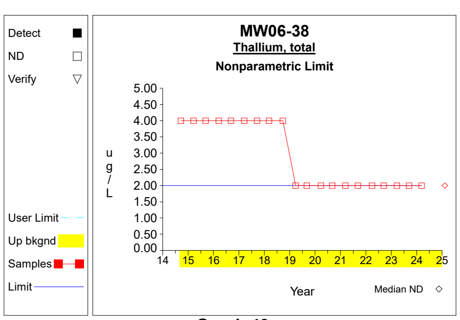
Graph 40



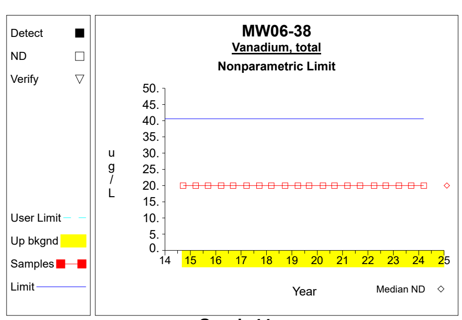
Graph 41



Graph 42



Graph 43



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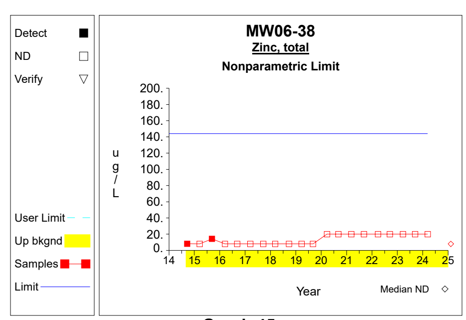
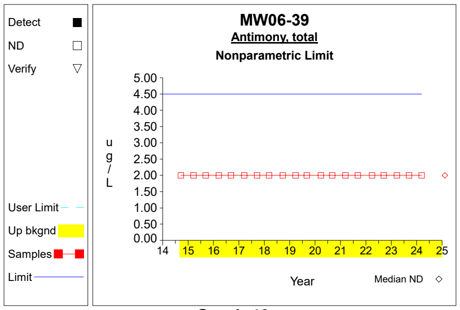


Graph 45

Boone County [GW] April 2024

Up vs. Down Prediction Limits



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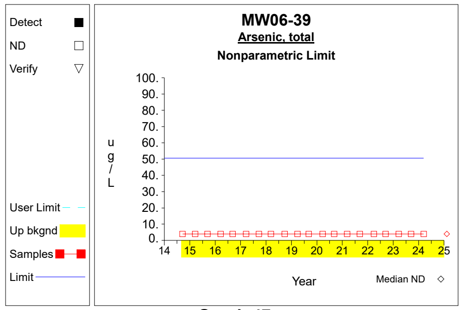
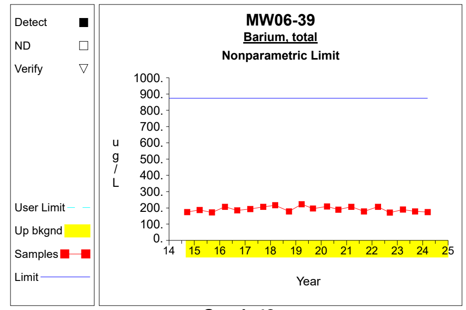


Graph 47



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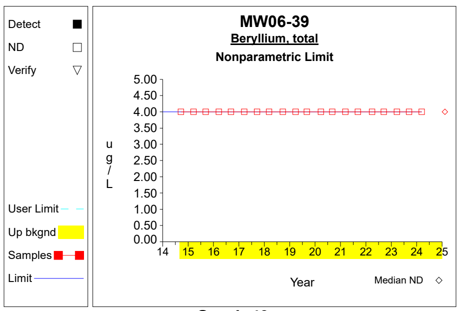
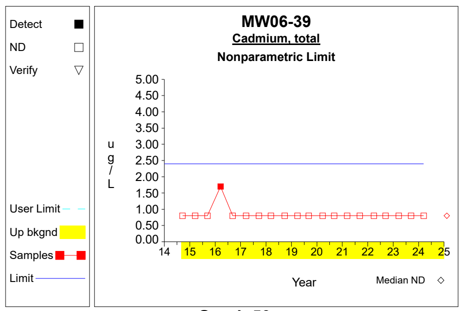


Graph 49



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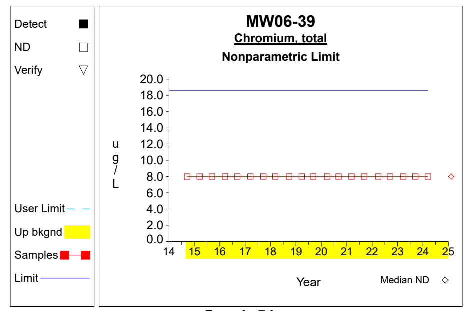

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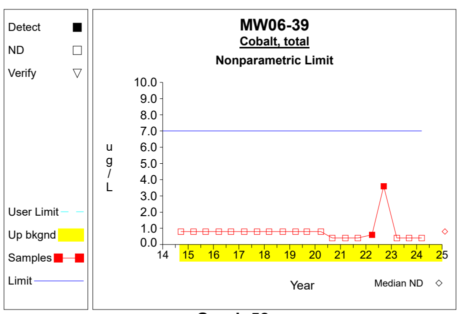

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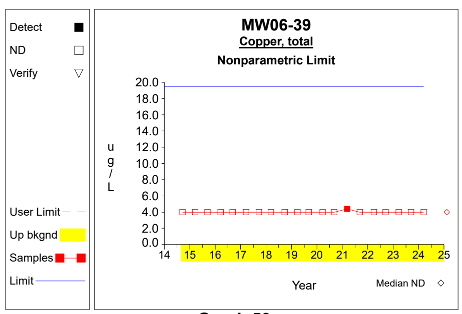

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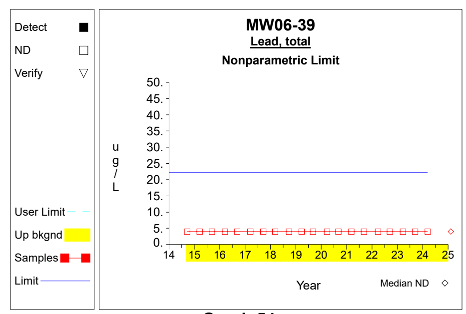

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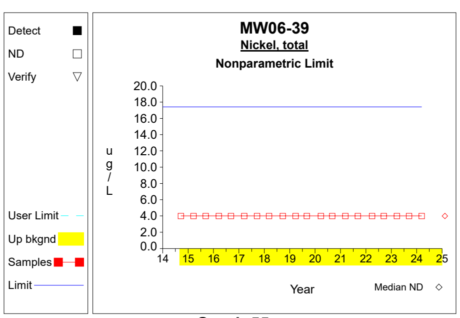

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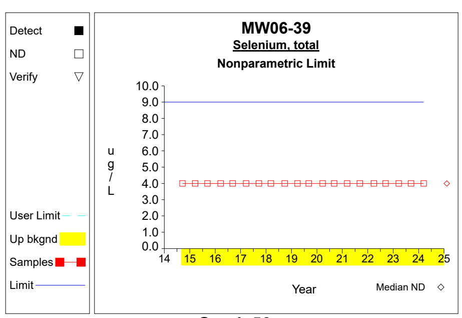

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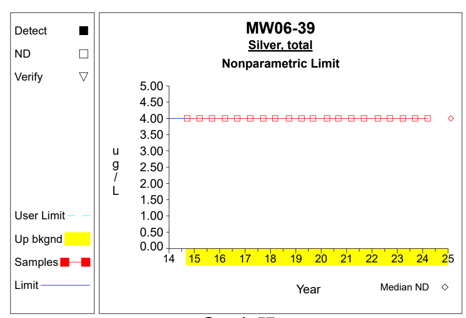

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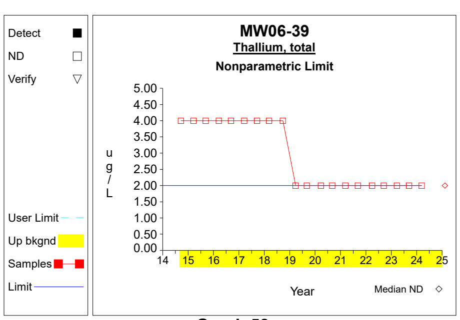

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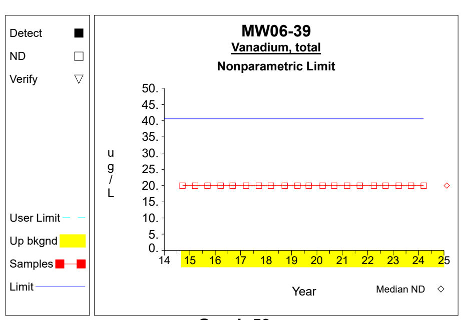

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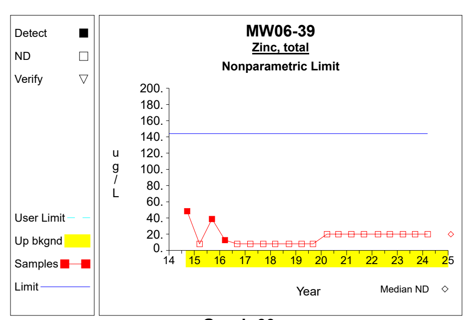

Graph 60

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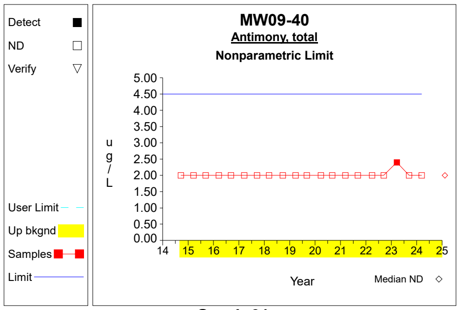
Boone County [GW] April 2024

Up vs. Down Prediction Limits



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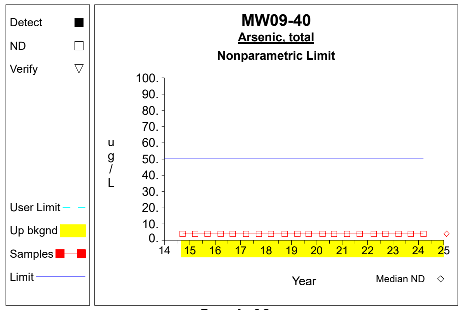
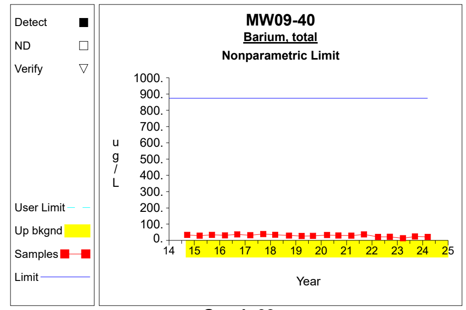


Graph 62



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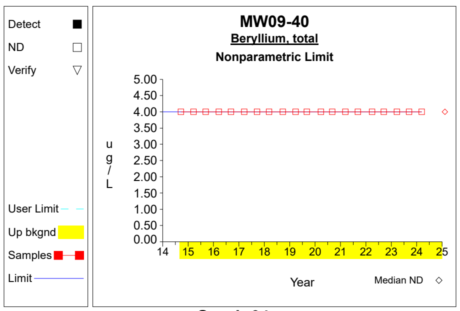
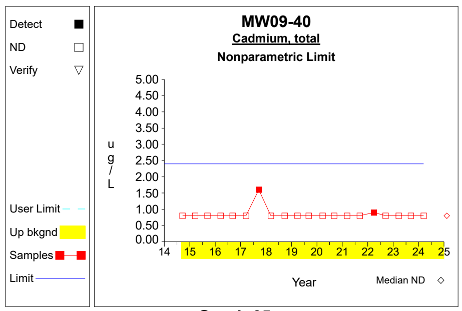


Graph 64



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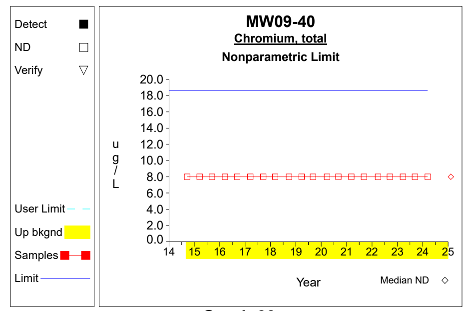

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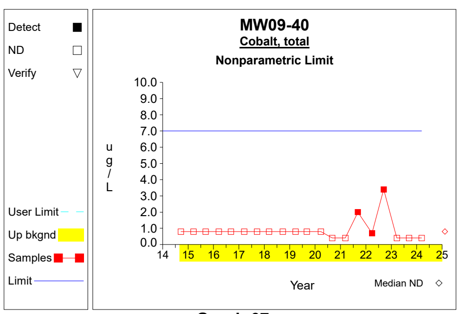

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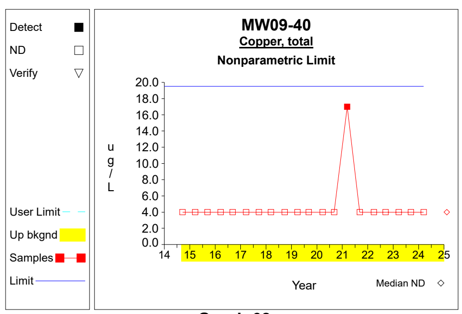

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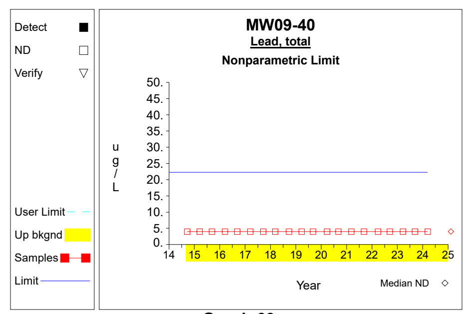

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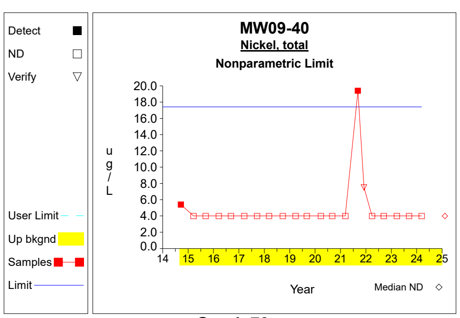

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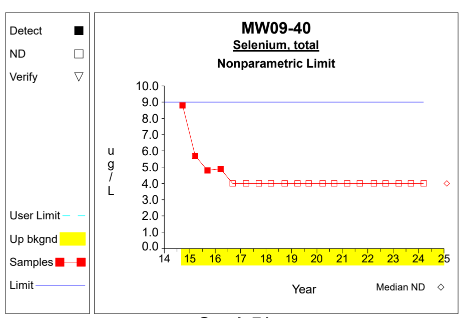

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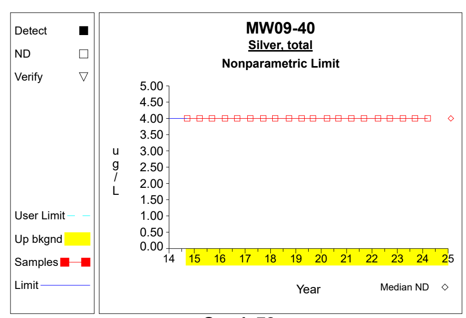

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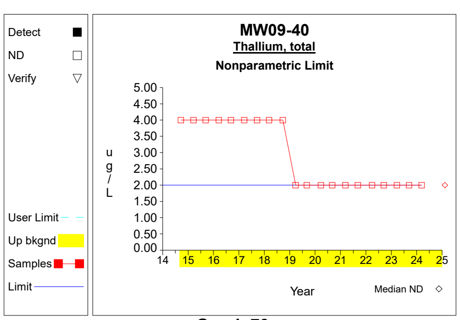

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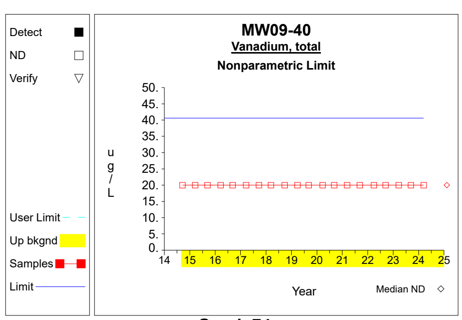

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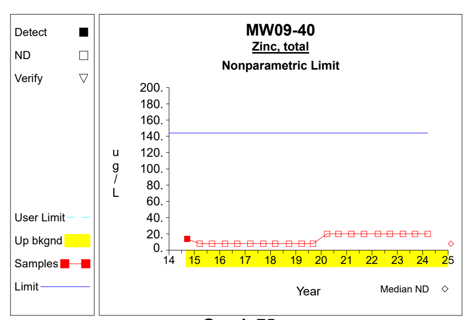

Graph 75

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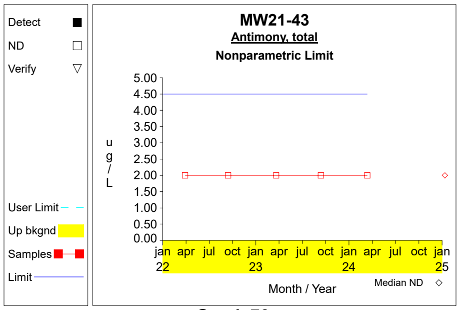
Up vs. Down Prediction Limits



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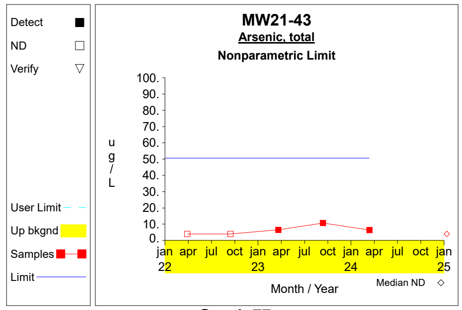
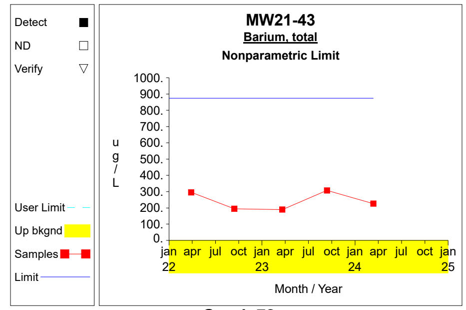


Graph 77



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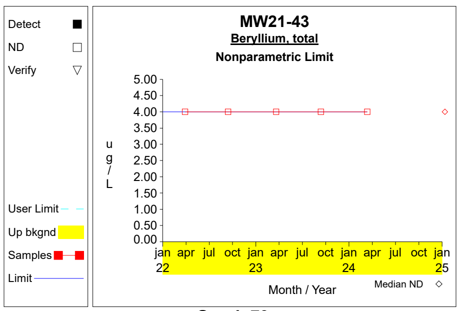

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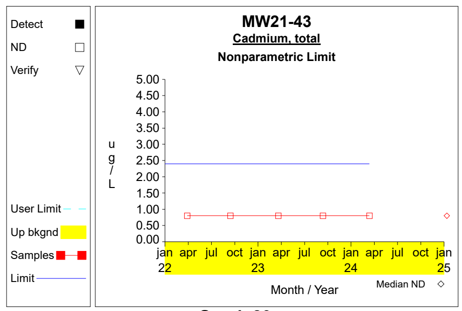

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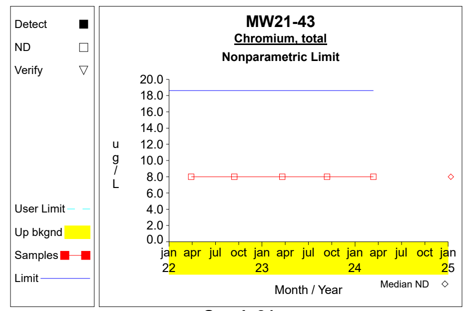

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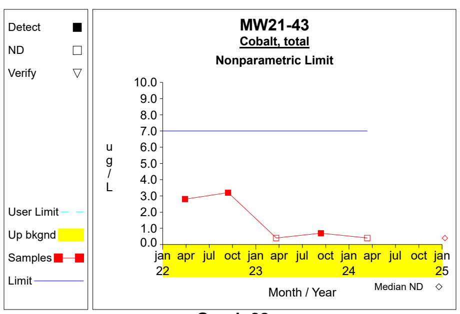

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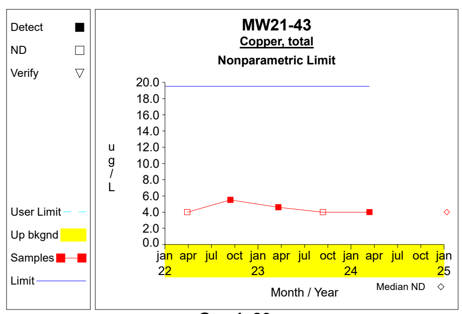

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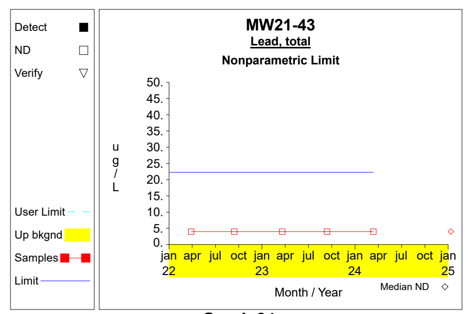

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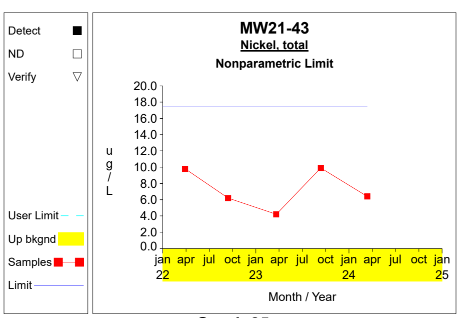

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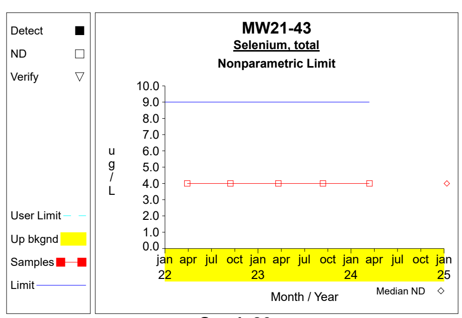
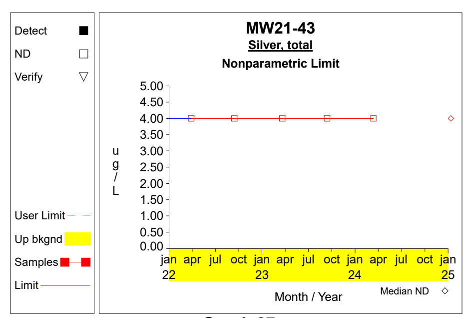
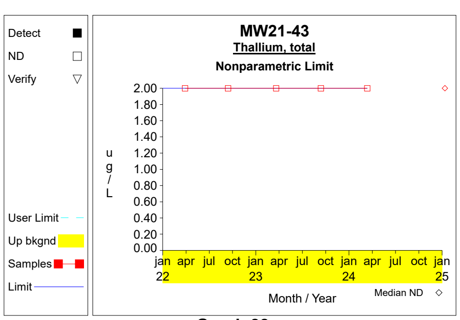


Graph 86



Graph 87



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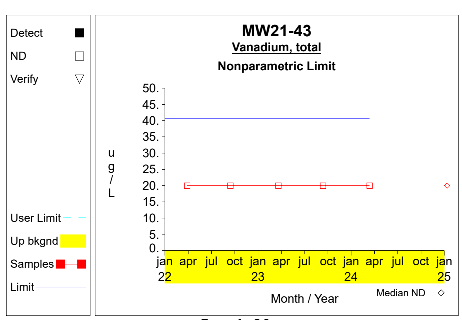

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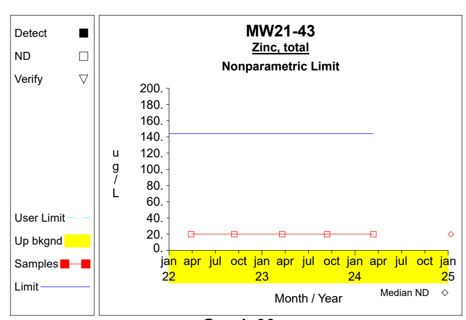
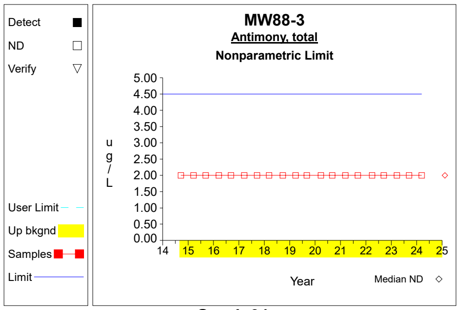
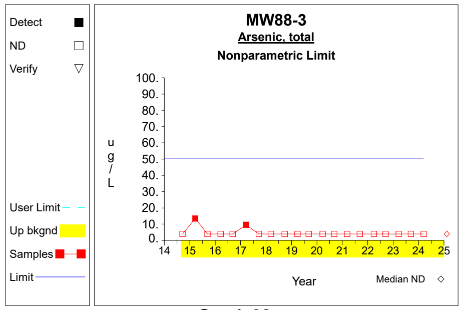


Graph 90

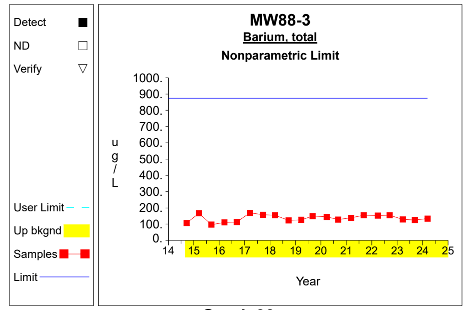
Up vs. Down Prediction Limits



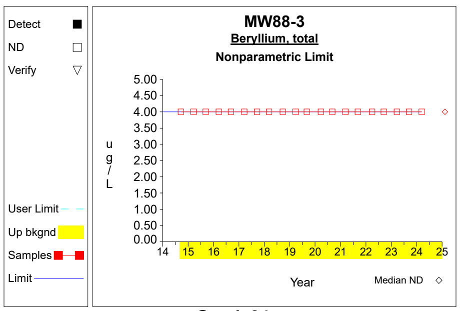
Graph 91



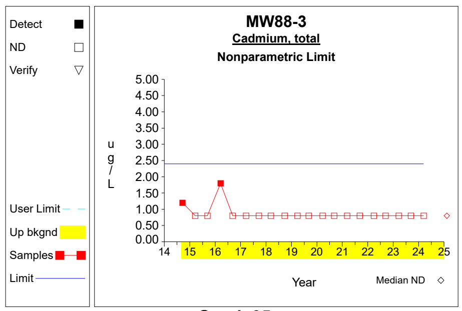
Graph 92



Graph 93



Graph 94



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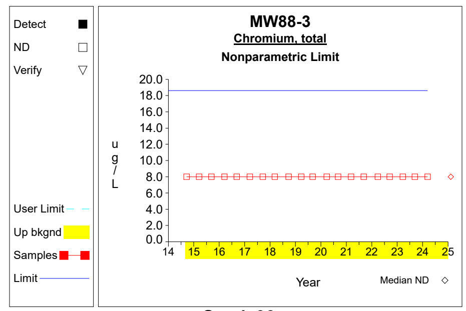

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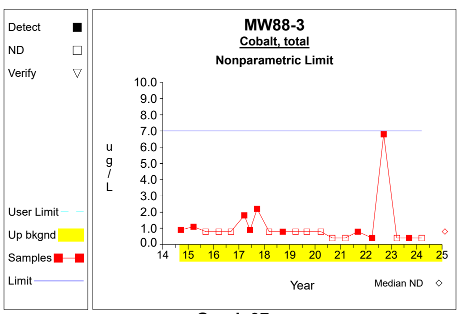

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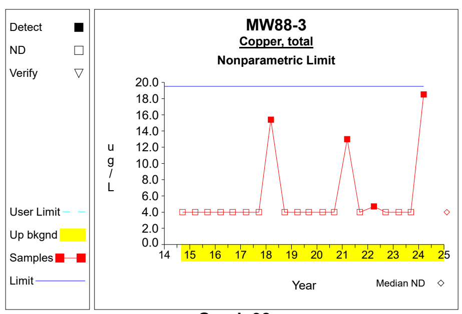
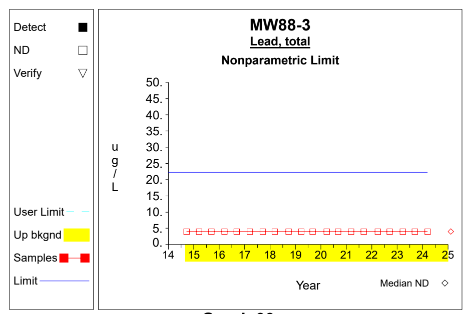


Graph 98



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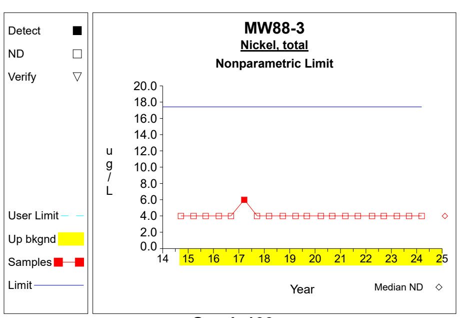
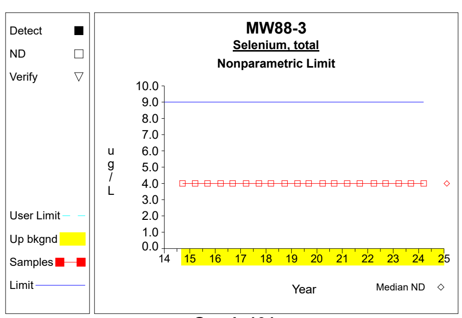


Graph 100



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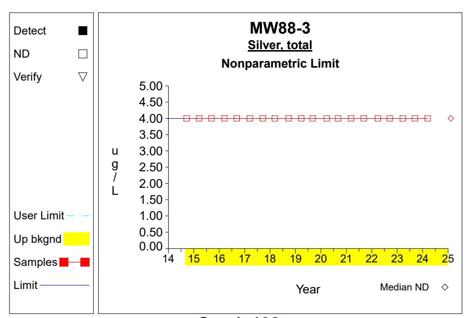

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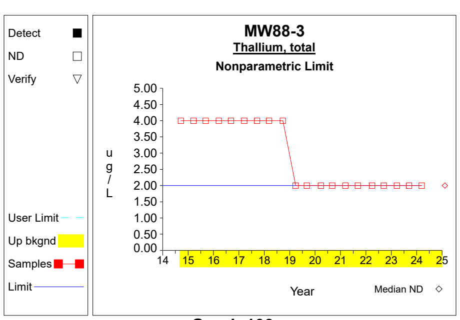
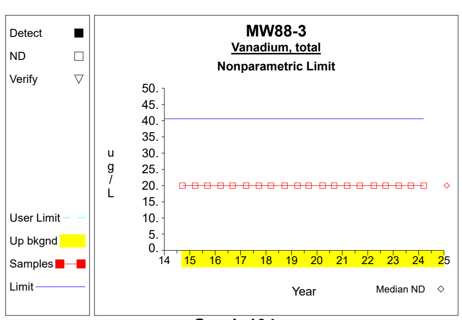
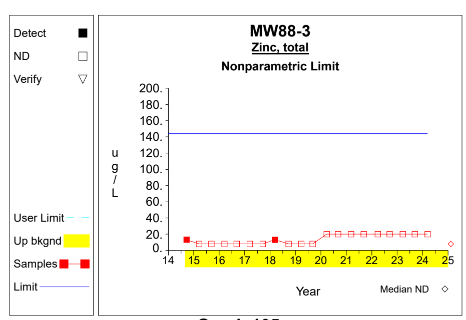


Graph 103

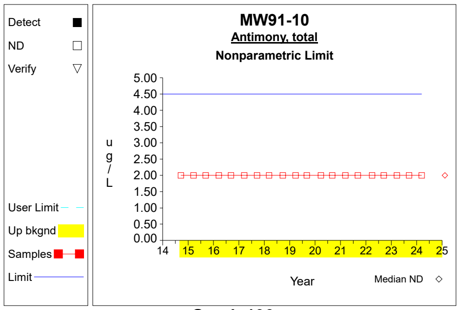


Graph 104

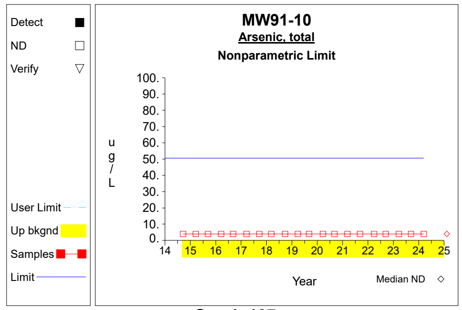


Graph 105

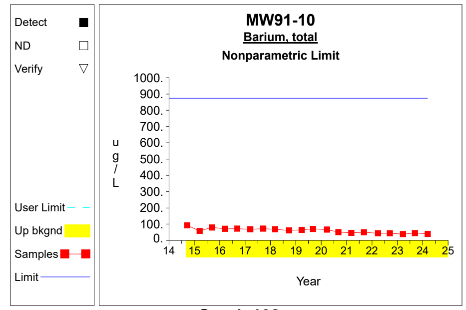
Up vs. Down Prediction Limits



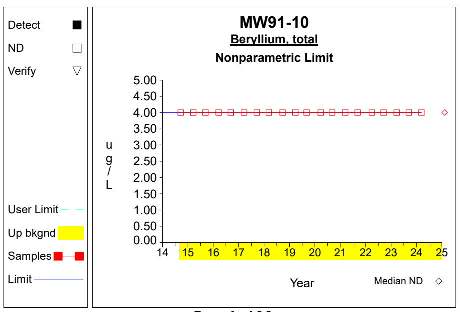
Graph 106



Graph 107



Graph 108



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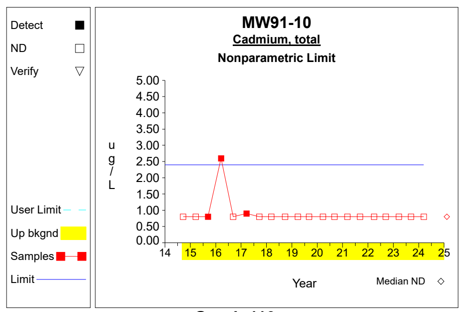

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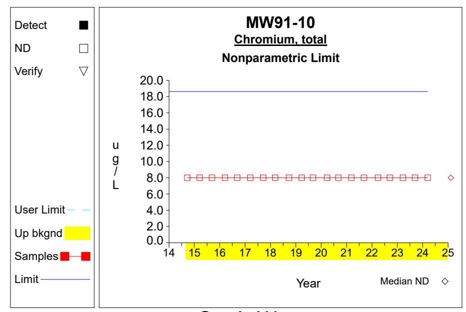
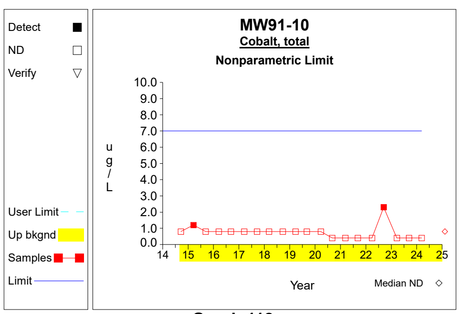
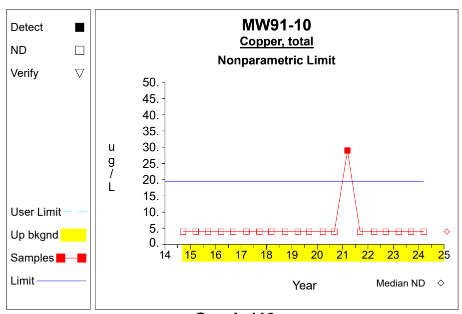


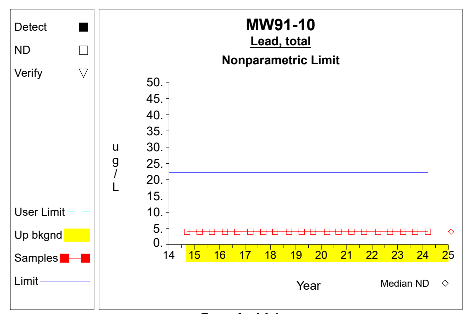
Graph 111



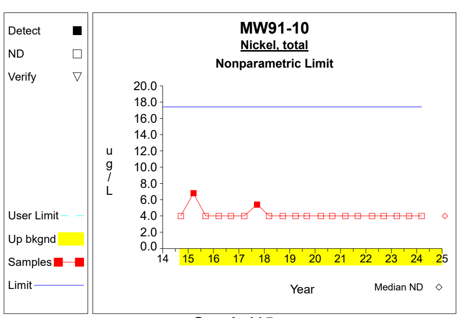
Graph 112



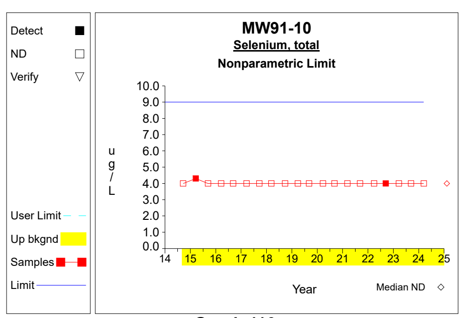
Graph 113



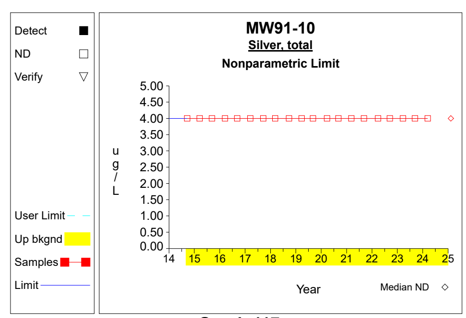
Graph 114



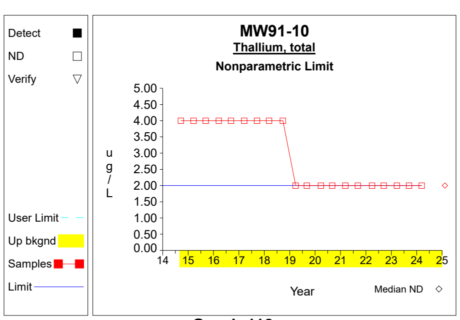
Graph 115



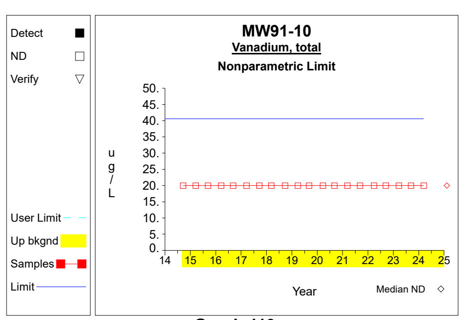
Graph 116



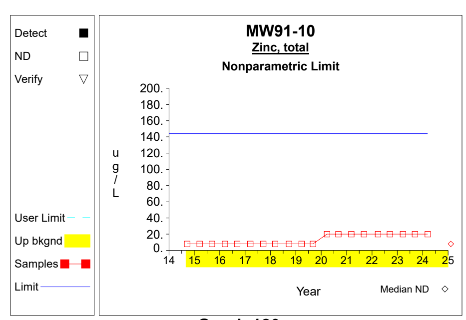
Graph 117



Graph 118



Graph 119



Graph 120

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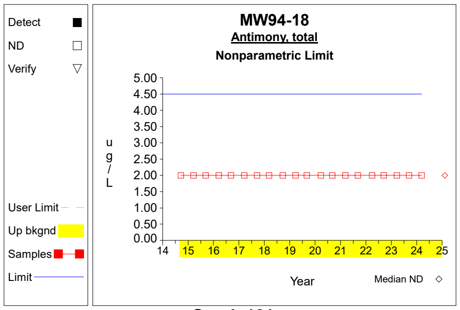
Up vs. Down Prediction Limits



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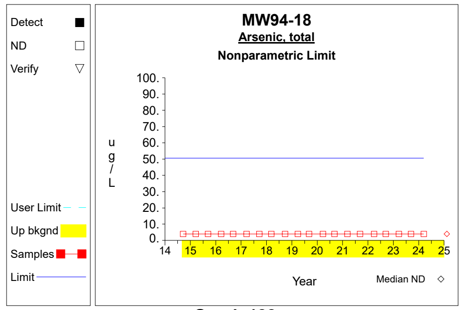

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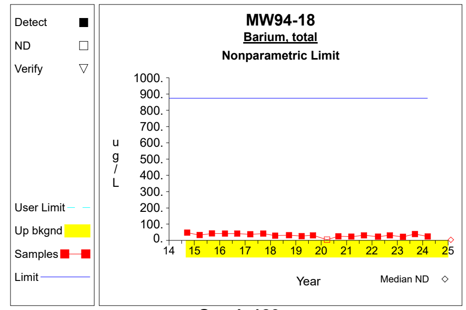

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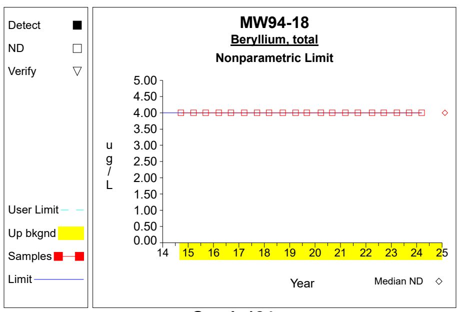

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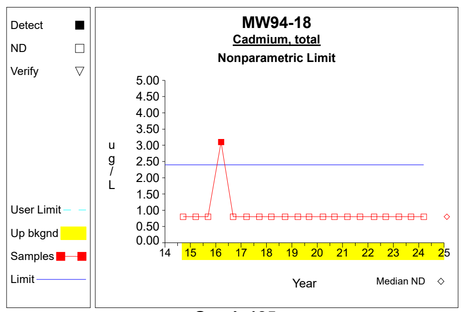

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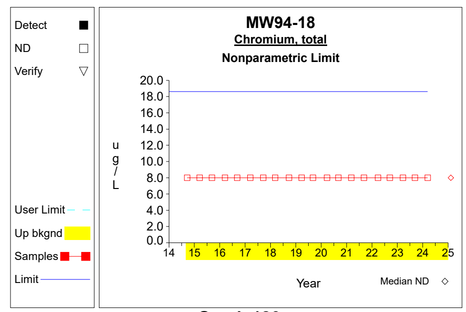

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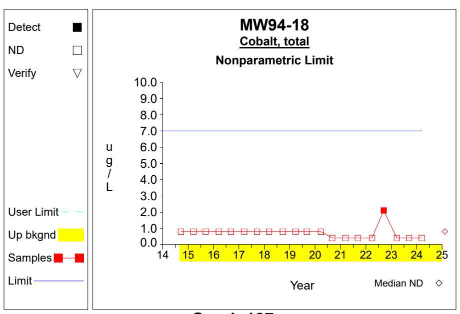

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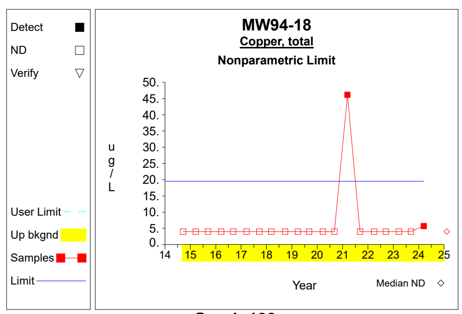

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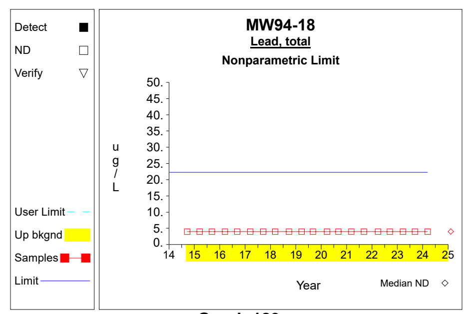

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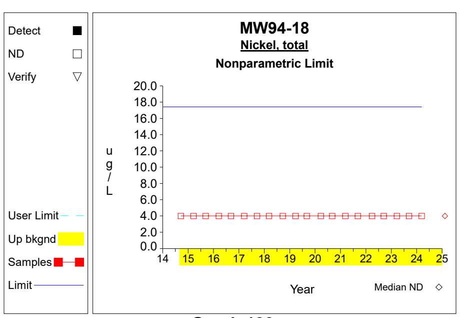

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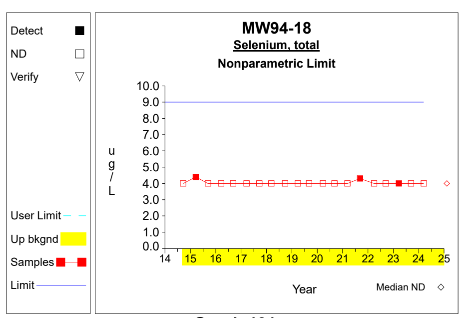

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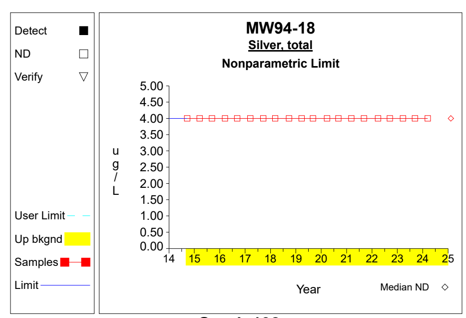

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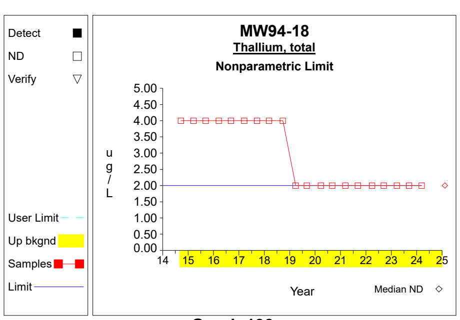

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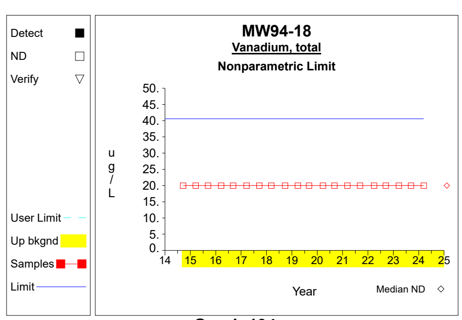

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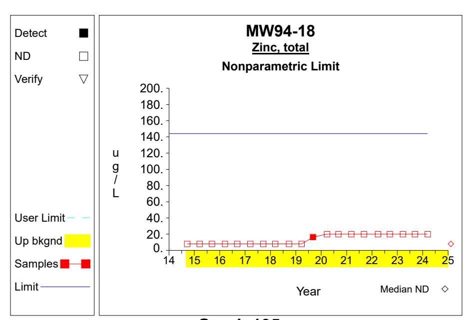

Graph 135

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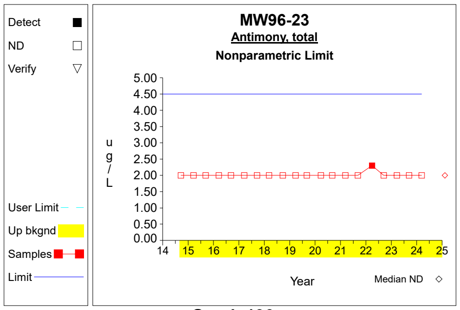
Up vs. Down Prediction Limits



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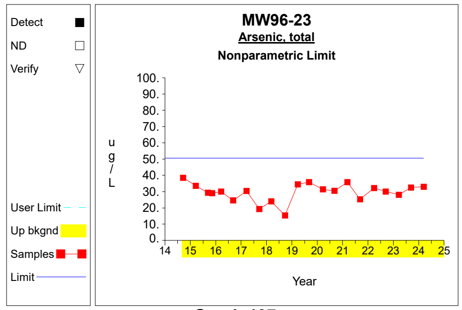

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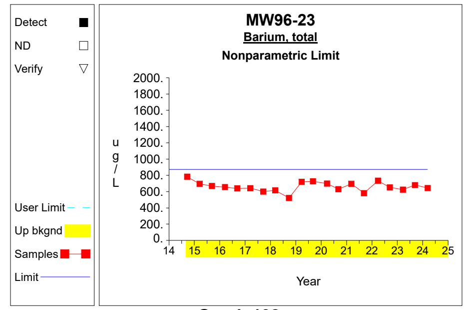

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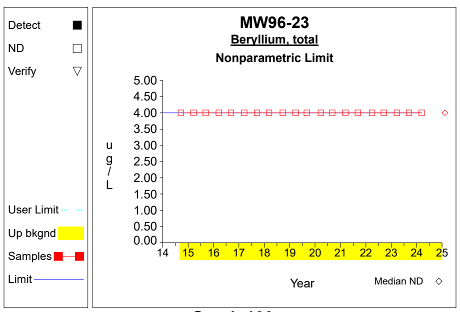

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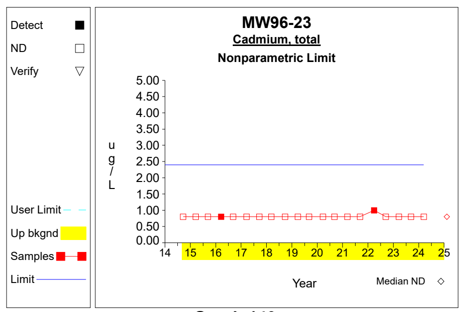

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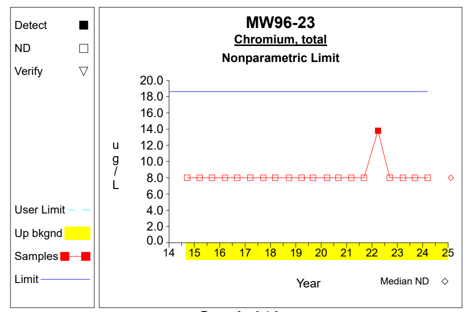

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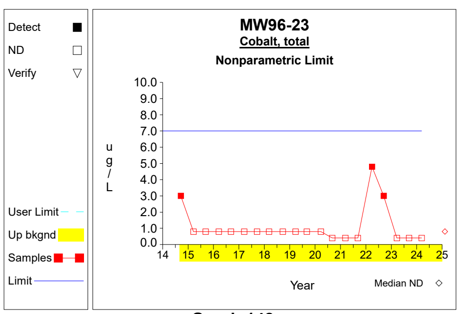

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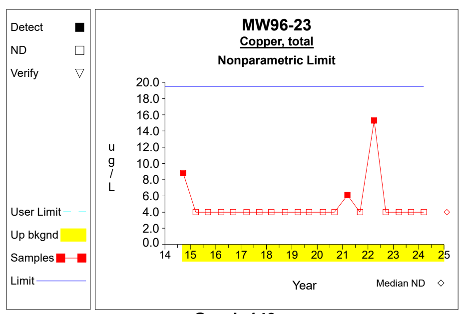

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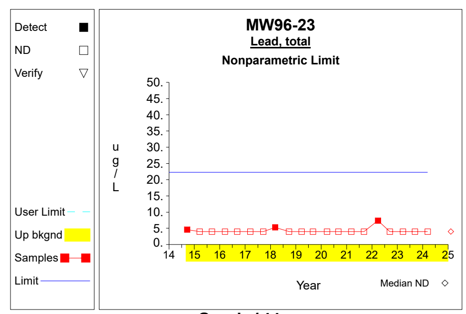

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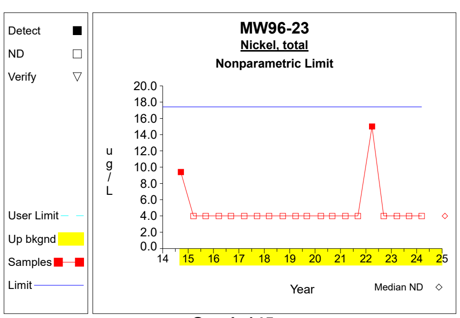

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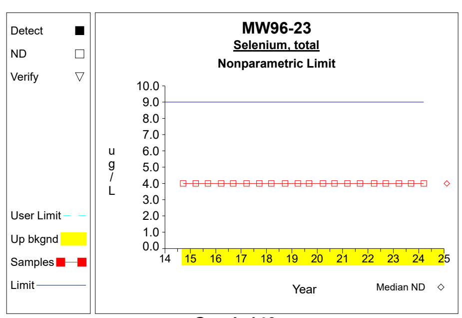

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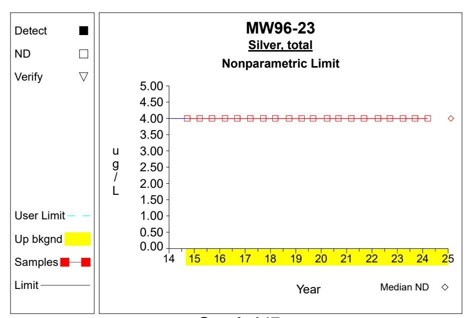

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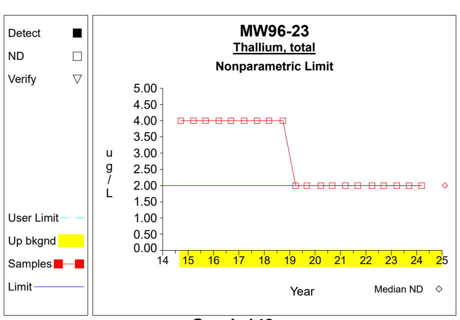

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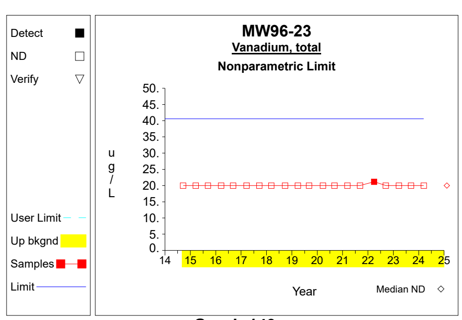

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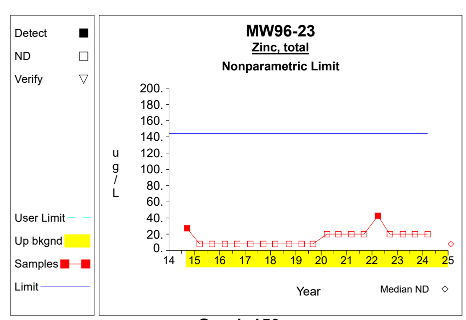

Graph 150

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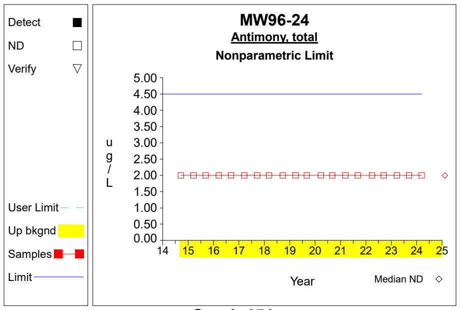
Up vs. Down Prediction Limits



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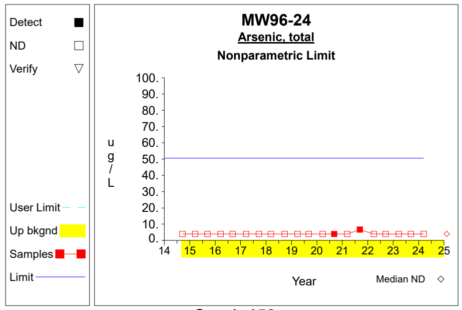
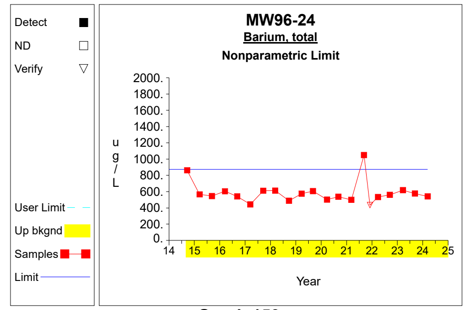


Graph 152



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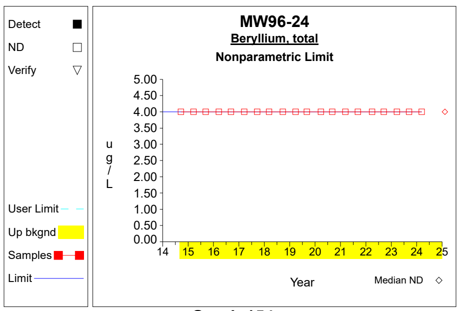

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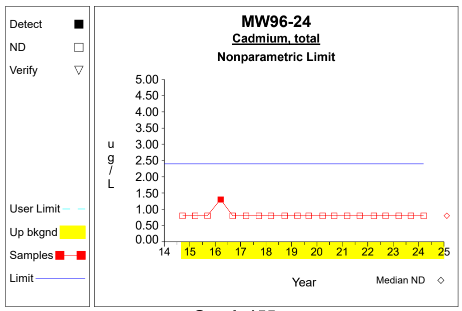

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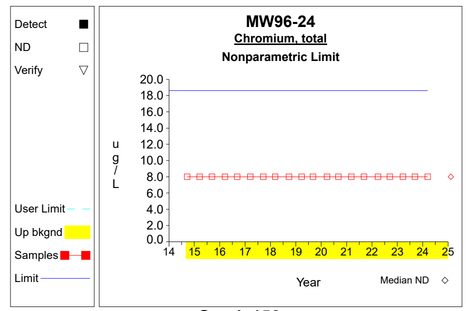

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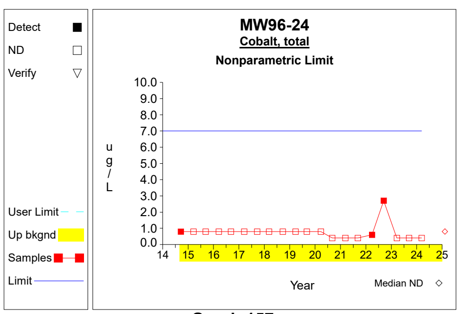

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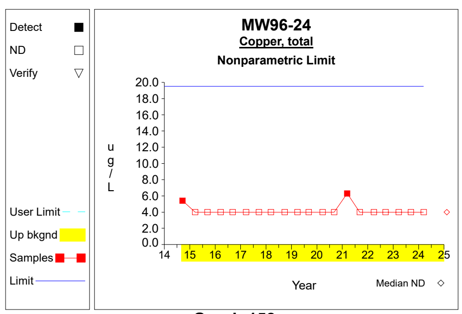

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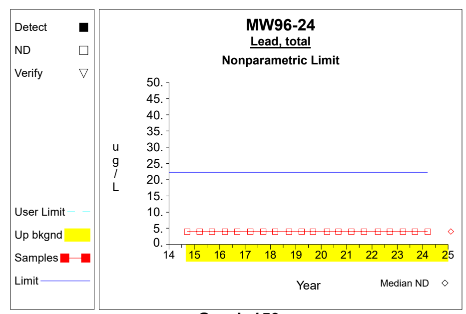

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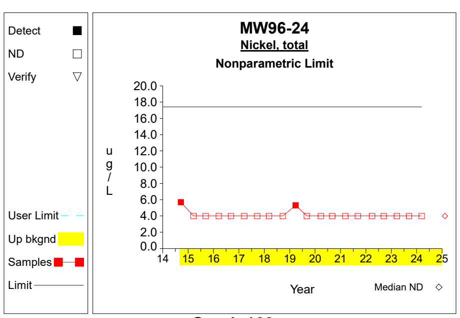

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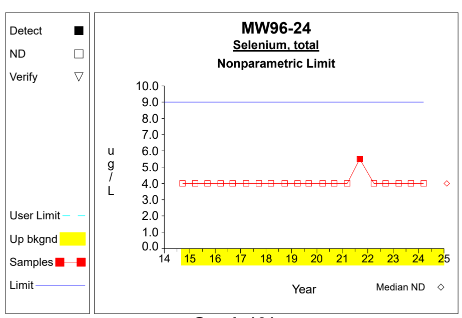

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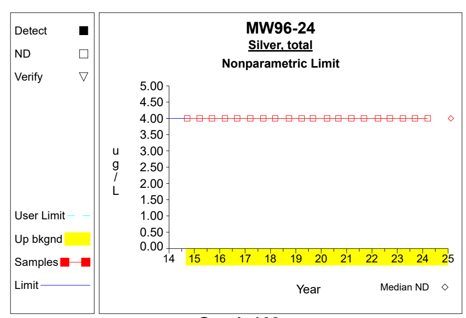

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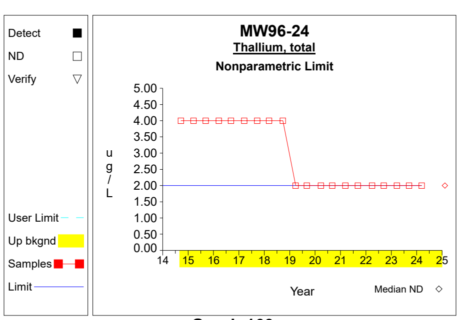

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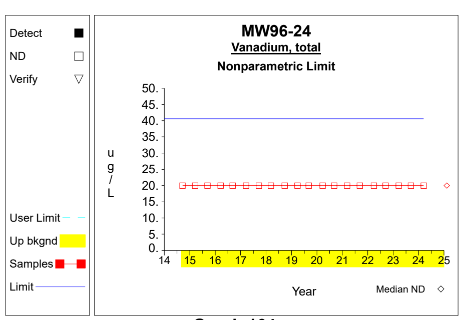

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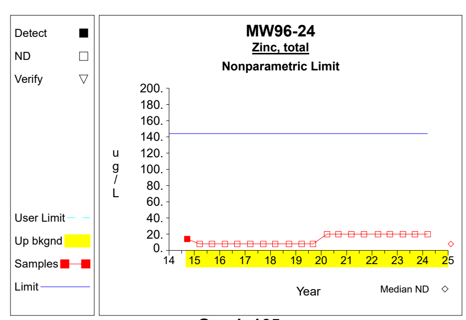
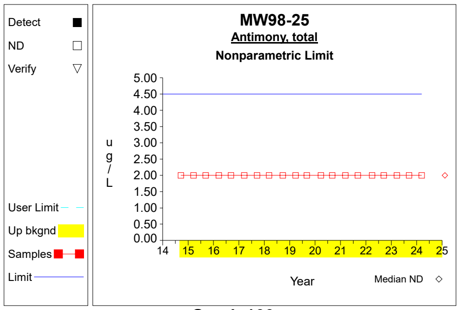


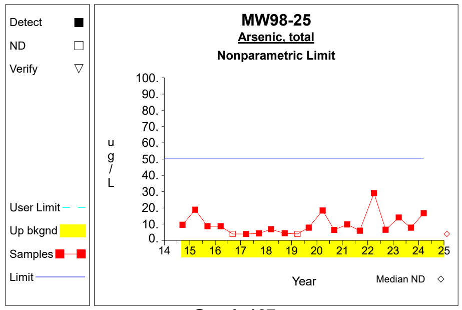
Graph 165

Boone County [GW] April 2024

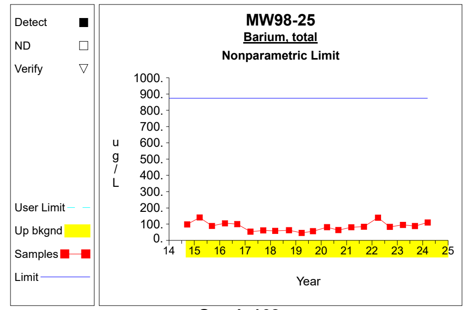
Up vs. Down Prediction Limits



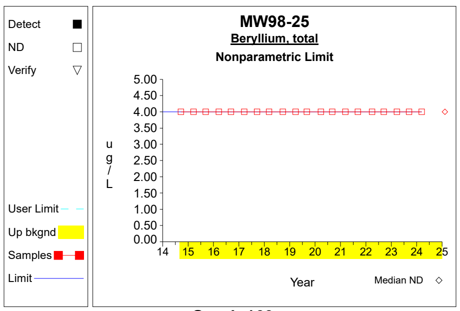
Graph 166



Graph 167



Graph 168



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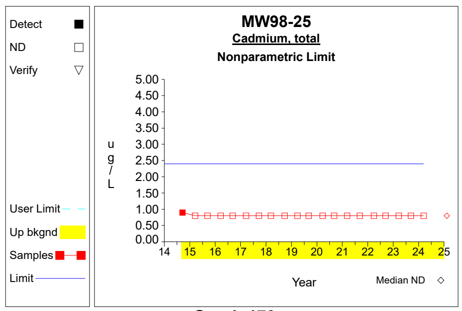

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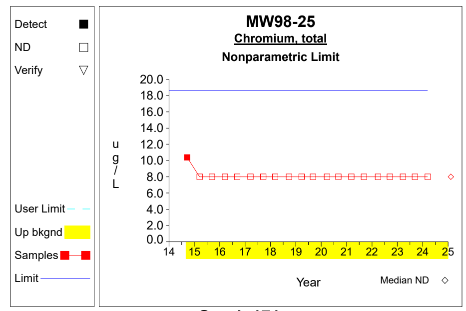

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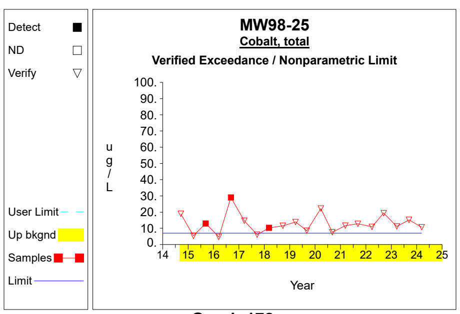

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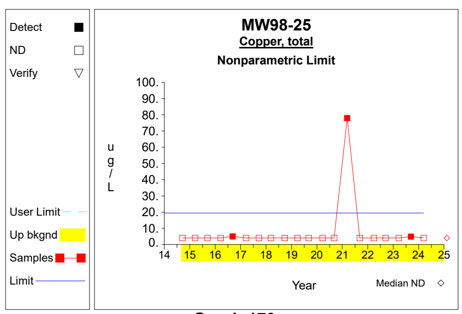

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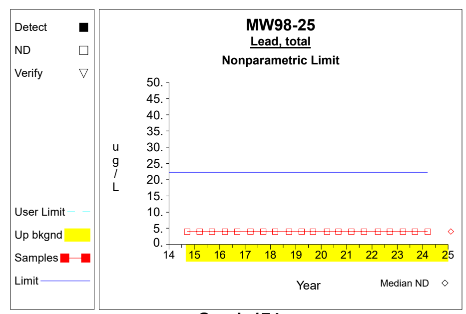

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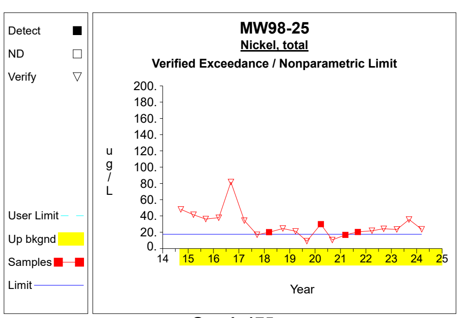

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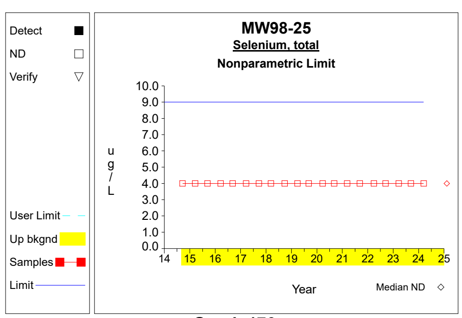
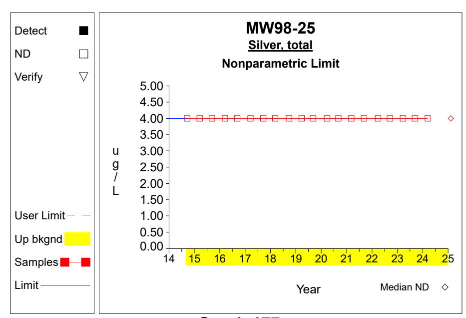
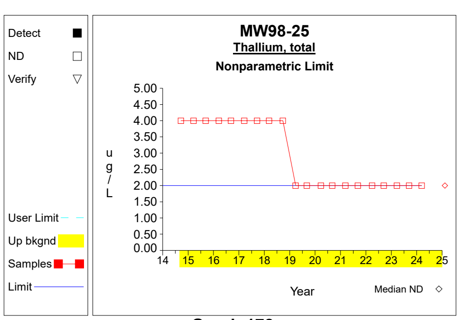


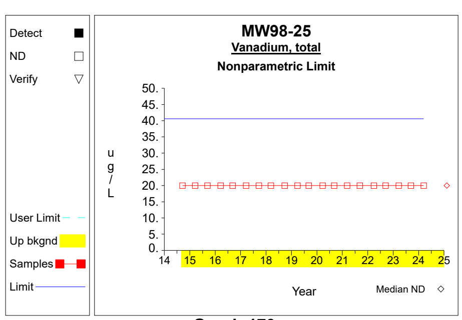
Graph 176



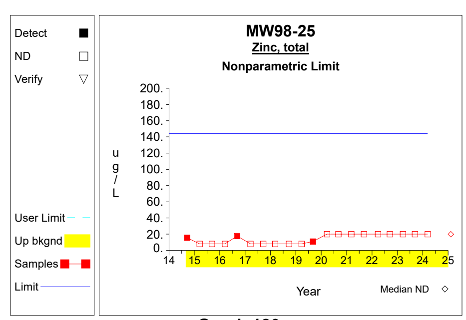
Graph 177



Graph 178



Graph 179



Graph 180

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

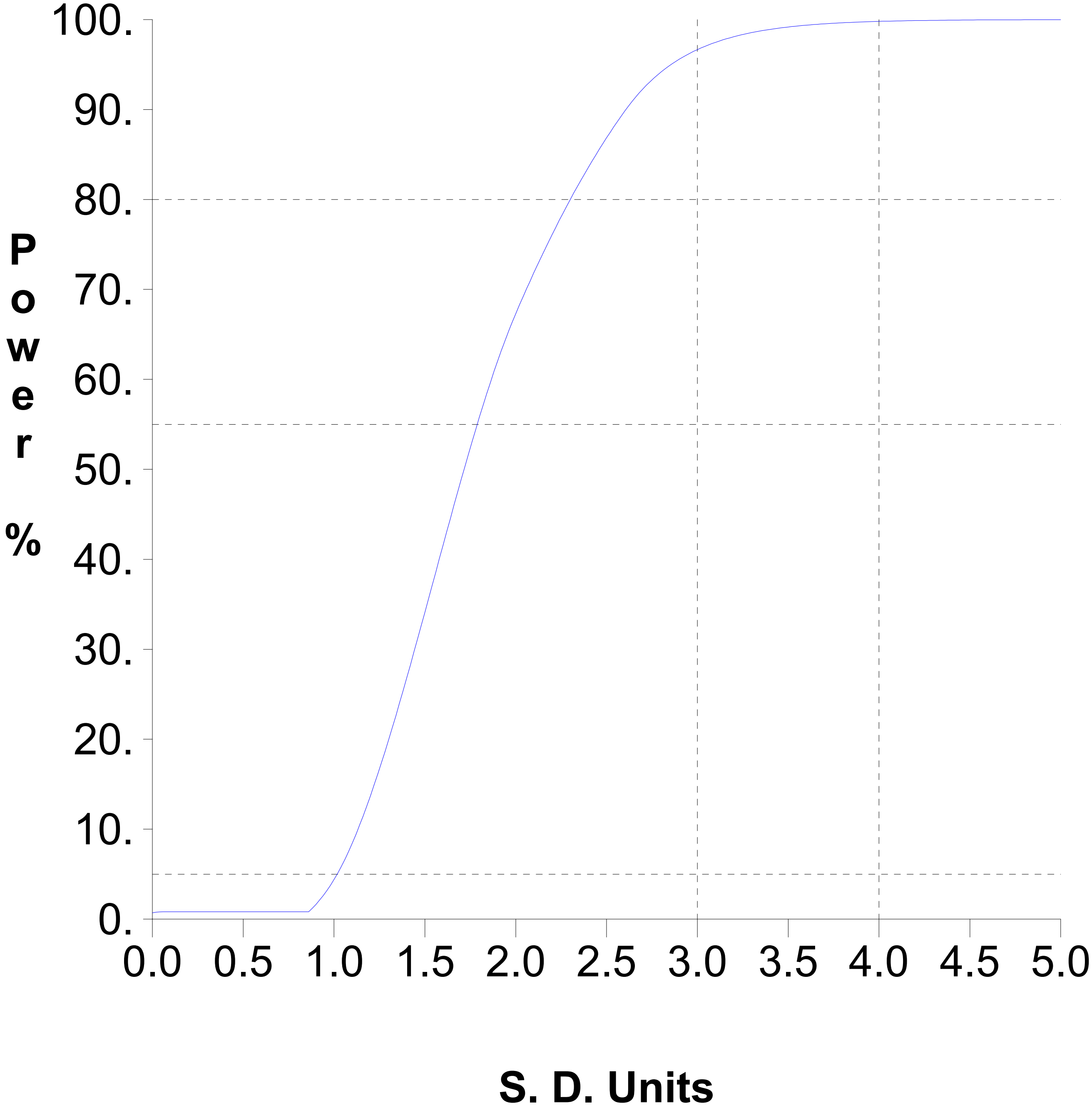


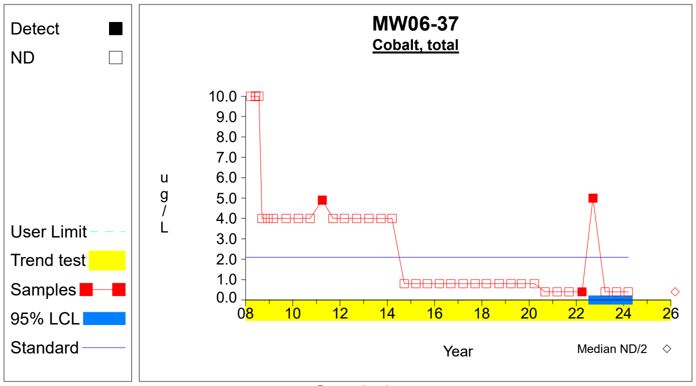
Table 1

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

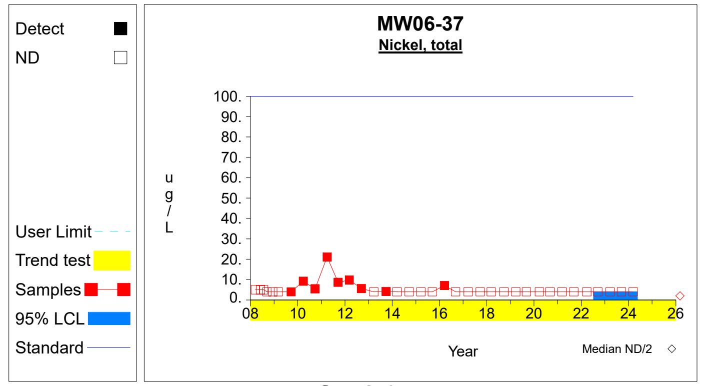
Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend	
Cobalt, total	ug/L	MW06-37	4	1.550	2.300	1.176	0.000	4.255	2.100		
Nickel, total	ug/L	MW06-37	4	2.000	0.000	1.176	2.000	2.000	100.000		
Cobalt, total	ug/L	MW09-40	4	1.150	1.500	1.176	0.000	2.914	2.100		
Nickel, total	ug/L	MW09-40	4	2.000	0.000	1.176	2.000	2.000	100.000		
Cobalt, total	ug/L	MW88-3	4	2.800	2.771	1.176	0.000	6.060	2.100		
Nickel, total	ug/L	MW88-3	4	2.000	0.000	1.176	2.000	2.000	100.000		
Cobalt, total	ug/L	MW91-10	4	0.875	0.950	1.176	0.000	1.992	2.100		
Nickel, total	ug/L	MW91-10	4	2.000	0.000	1.176	2.000	2.000	100.000		
Cobalt, total	ug/L	MW94-18	4	0.825	0.850	1.176	0.000	1.825	2.100		
Nickel, total	ug/L	MW94-18	4	2.000	0.000	1.176	2.000	2.000	100.000		
Cobalt, total	ug/L	MW96-24	4	0.975	1.150	1.176	0.000	2.328	2.100		
Nickel, total	ug/L	MW96-24	4	2.000	0.000	1.176	2.000	2.000	100.000		
Cobalt, total	ug/L	MW98-25	4	14.125	4.052	1.176	9.358	18.892	2.100	dec	**
Nickel, total	ug/L	MW98-25	4	26.750	5.979	1.176	19.717	33.783	100.000	dec	

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

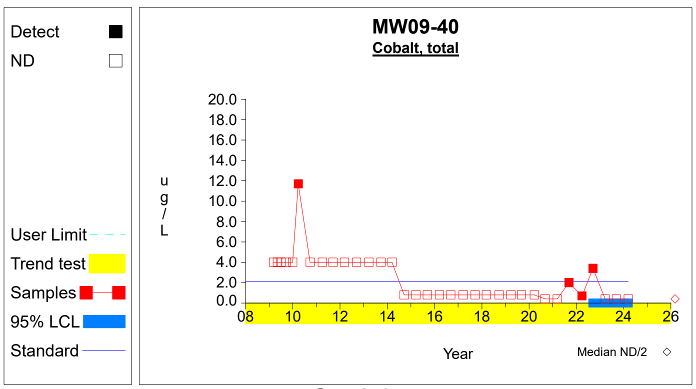
Confidence Limits (Assessment)



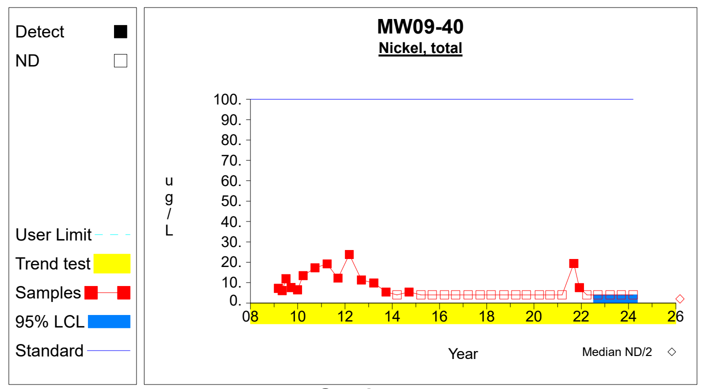
Graph 1



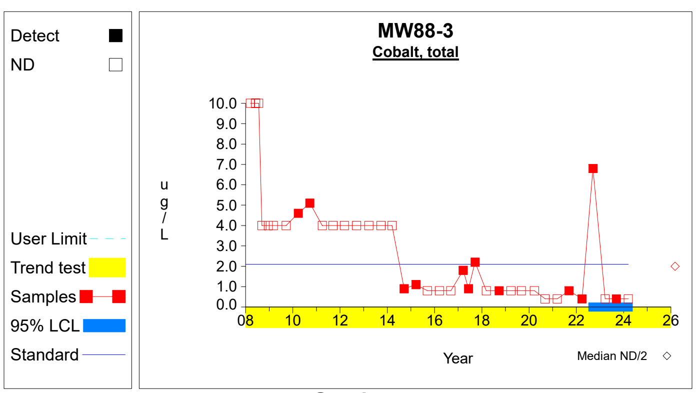
Graph 2



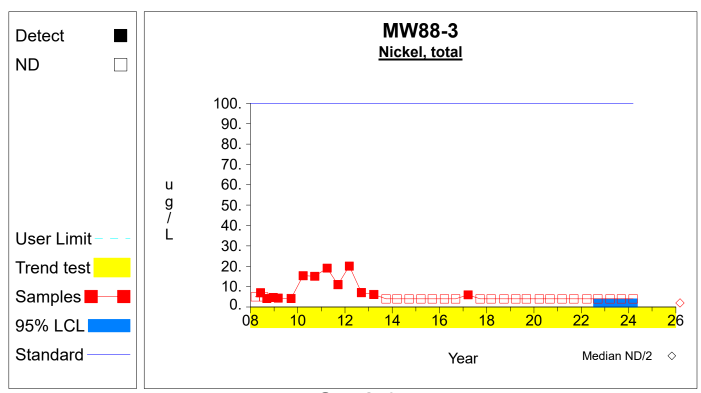
Graph 3



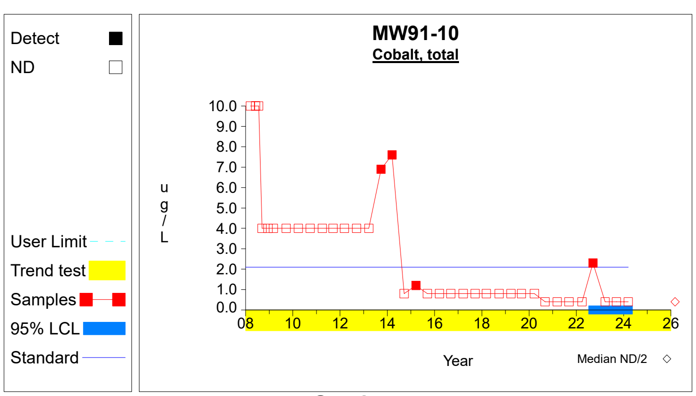
Graph 4



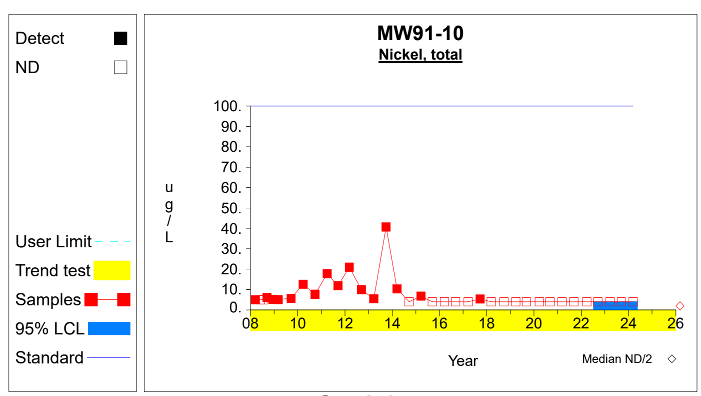
Graph 5



Graph 6



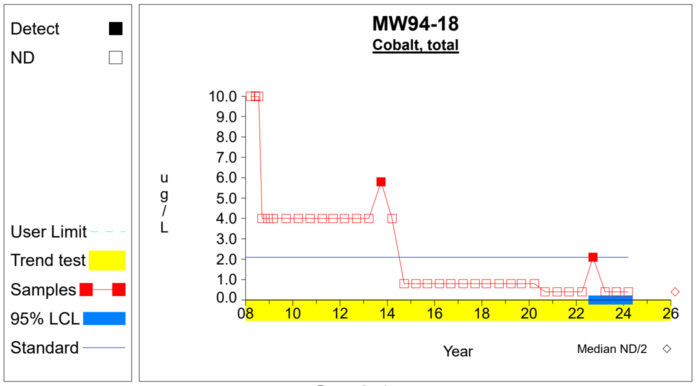
Graph 7



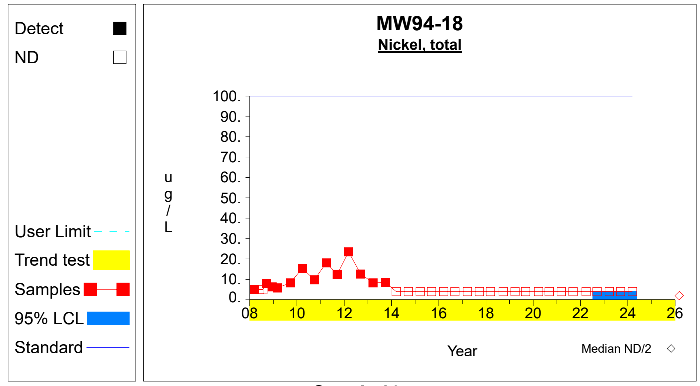
Graph 8

Prepared by: Otter Creek Environmental

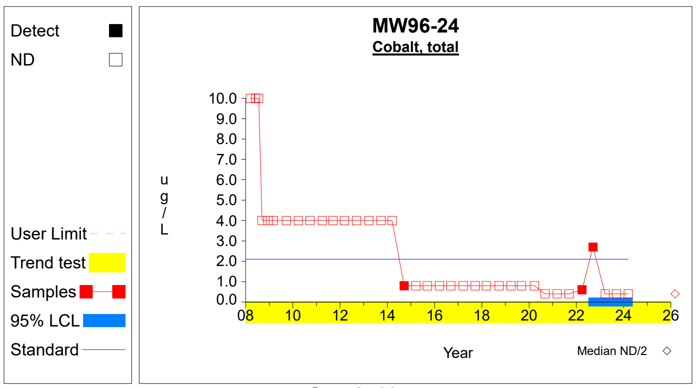
Confidence Limits (Assessment)



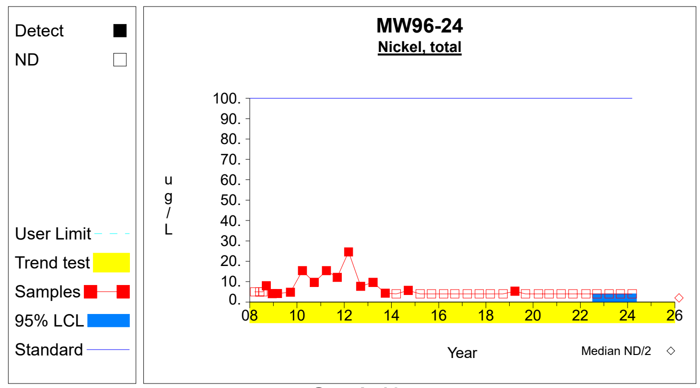
Graph 9



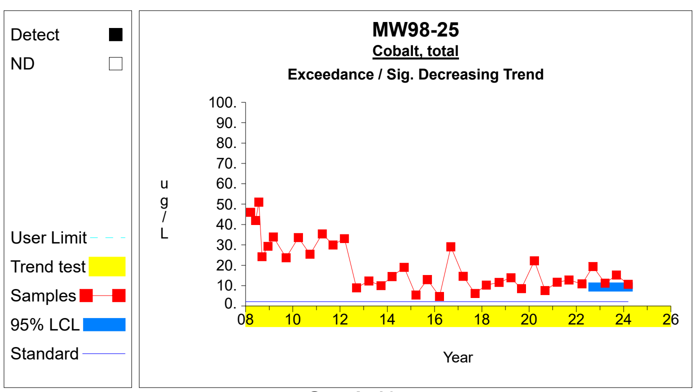
Graph 10



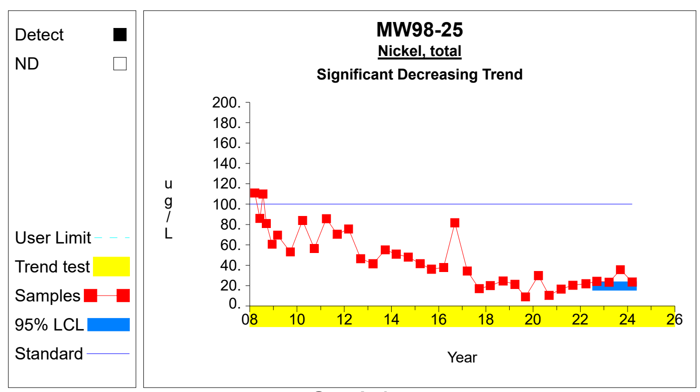
Graph 11



Graph 12



Graph 13



Graph 14

Attachment C

Summary Table of Historical VOC Detections

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Benzene	GU-3	9/13/2021		1.3	1.0	ug/L
Benzene	GU-3	12/03/2021		6.0	1.0	ug/L
Benzene	GU-3	3/28/2022		6.2	1.0	ug/L
Benzene	GU-3	9/15/2022		6.1	1.0	ug/L
Chlorobenzene	GU-3	3/28/2022		1.8	1.0	ug/L
Chlorobenzene	GU-3	9/15/2022		1.7	1.0	ug/L
Chloroethane	GU-3	9/13/2021		1.4	1.0	ug/L
Chloroethane	GU-3	12/03/2021		2.0	1.0	ug/L
Chloroethane	GU-3	9/15/2022		1.6	1.0	ug/L
Cis-1,2-dichloroethylene	GU-3	9/13/2021		1.0	1.0	ug/L
Cis-1,2-dichloroethylene	GU-3	12/03/2021		10.5	1.0	ug/L
Cis-1,2-dichloroethylene	GU-3	9/15/2022		11.9	1.0	ug/L
Ethylbenzene	GU-3	9/15/2022		1.8	1.0	ug/L
Vinyl chloride	GU-3	12/03/2021		3.6	1.0	ug/L
Vinyl chloride	GU-3	3/28/2022		3.0	1.0	ug/L
Vinyl chloride	GU-3	9/15/2022		1.9	1.0	ug/L
Benzene	GU-4	3/28/2022		1.4	1.0	ug/L
Toluene	GU-4	9/14/2022		1.9	1.0	ug/L
Acetone	GWD-2	3/14/2008		35.5	10.0	ug/L
Benzene	GWD-2	3/14/2008		1.3	1.0	ug/L
Benzene	GWD-2	7/22/2008		1.1	1.0	ug/L
Benzene	GWD-2	9/12/2008		1.2	1.0	ug/L
Benzene	GWD-2	12/18/2008		1.1	1.0	ug/L
Benzene	GWD-2	3/04/2009		1.3	1.0	ug/L
Benzene	GWD-2	9/21/2010		1.6	1.0	ug/L
Bis(2-ethylhexyl) phthalate	GWD-2	10/01/2010		9	8	ug/L
Chloroethane	GWD-2	3/14/2008		1.2	1.0	ug/L
Chloroethane	GWD-2	7/22/2008		1.2	1.0	ug/L
Chloroethane	GWD-2	9/12/2008		1.3	1.0	ug/L
Chloroethane	GWD-2	12/18/2008		1.1	1.0	ug/L
Chloroethane	GWD-2	3/04/2009		1.1	1.0	ug/L
Chloroethane	GWD-2	7/01/2009		1.0	1.0	ug/L
Chloroethane	GWD-2	9/27/2009		2.2	1.0	ug/L
Chloroethane	GWD-2	3/24/2010		4.2	1.0	ug/L
Chloroethane	GWD-2	6/02/2010		7.5	1.0	ug/L
Chloroethane	GWD-2	7/15/2010		5.9	1.0	ug/L
Chloroethane	GWD-2	9/21/2010		24.8	1.0	ug/L
Vinyl chloride	GWD-2	3/14/2008		1.6	1.0	ug/L
Vinyl chloride	GWD-2	6/03/2008		1.0	1.0	ug/L
Vinyl chloride	GWD-2	7/22/2008		1.4	1.0	ug/L
Vinyl chloride	GWD-2	9/12/2008		1.5	1.0	ug/L
Vinyl chloride	GWD-2	12/18/2008		2.2	1.0	ug/L
Vinyl chloride	GWD-2	3/04/2009		2.1	1.0	ug/L
Vinyl chloride	GWD-2	5/05/2009		1.2	1.0	ug/L
Vinyl chloride	GWD-2	7/01/2009		1.1	1.0	ug/L
Vinyl chloride	GWD-2	9/27/2009		1.9	1.0	ug/L
Carbon disulfide	MW02-30A	6/07/2016		1.7	1.0	ug/L
2,4,6-tribromophenol	MW06-37	7/23/2008		96.8	8.0	ug/L
2,4,6-tribromophenol	MW06-37	9/12/2008		93.1	8.0	ug/L
2,4,6-tribromophenol	MW06-37	12/11/2008		83.5	8.0	ug/L
2,4,6-tribromophenol	MW06-38	7/23/2008		83.2	8.0	ug/L
2,4,6-tribromophenol	MW06-38	9/12/2008		93.7	8.0	ug/L
2,4,6-tribromophenol	MW06-38	12/11/2008		85.8	8.0	ug/L
2,4,6-tribromophenol	MW06-39	7/23/2008		78.9	8.0	ug/L
2,4,6-tribromophenol	MW06-39	9/12/2008		100.0	8.0	ug/L
2,4,6-tribromophenol	MW06-39	12/11/2008		92.0	8.0	ug/L
Bis(2-ethylhexyl) phthalate	MW09-42	9/24/2018		7	6	ug/L
Acetone	MW91-8	9/19/2017		12.4	10.0	ug/L
Trans-1,4-dichloro-2-butene	MW91-8	3/16/2016		33	5	ug/L
1,1,1-trichloroethane	MW94-18	12/23/1994		2	1	ug/L
1,1,1-trichloroethane	MW94-18	3/17/1995		2	1	ug/L
1,1-dichloroethane	MW96-23	9/27/2013		1.3	1.0	ug/L
Bis(2-ethylhexyl) phthalate	MW96-23	3/07/2012		10	8	ug/L
1,1-dichloroethane	MW98-25	9/04/2020		1.1	1.0	ug/L
1,1-dichloroethane	MW98-25	3/09/2021		1.8	1.0	ug/L
1,1-dichloroethane	MW98-25	9/07/2021		2.3	1.0	ug/L
1,1-dichloroethane	MW98-25	3/28/2022		1.5	1.0	ug/L
1,1-dichloroethane	MW98-25	3/20/2023		1.7	1.0	ug/L
1,1-dichloroethane	MW98-25	9/12/2023		1.6	1.0	ug/L
1,1-dichloroethane	MW98-25	3/12/2024		1.1	1.0	ug/L
1,4-dichlorobenzene	MW98-25	9/20/2007		1.4	1.0	ug/L
1,4-dichlorobenzene	MW98-25	6/04/2008		1.4	1.0	ug/L
1,4-dichlorobenzene	MW98-25	7/23/2008		1.3	1.0	ug/L
1,4-dichlorobenzene	MW98-25	9/12/2008		1.3	1.0	ug/L
1,4-dichlorobenzene	MW98-25	12/11/2008		1.4	1.0	ug/L
1,4-dichlorobenzene	MW98-25	3/04/2009		1.1	1.0	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
1,4-dichlorobenzene	MW98-25	3/04/2009		1.4	1.0	ug/L
1,4-dichlorobenzene	MW98-25	9/20/2009		1.7	1.0	ug/L
1,4-dichlorobenzene	MW98-25	3/26/2010		2.1	1.0	ug/L
1,4-dichlorobenzene	MW98-25	9/24/2010		2.6	1.0	ug/L
1,4-dichlorobenzene	MW98-25	9/14/2011		1.3	1.0	ug/L
1,4-dichlorobenzene	MW98-25	3/07/2012		1.8	1.0	ug/L
1,4-dichlorobenzene	MW98-25	9/08/2016		2.1	1.0	ug/L
1,4-dichlorobenzene	MW98-25	3/18/2017		2.0	1.0	ug/L
1,4-dichlorobenzene	MW98-25	9/19/2017		1.7	1.0	ug/L
1,4-dichlorobenzene	MW98-25	9/24/2018		2.9	1.0	ug/L
1,4-dichlorobenzene	MW98-25	9/04/2020		1.3	1.0	ug/L
1,4-dichlorobenzene	MW98-25	3/09/2021		1.1	1.0	ug/L
1,4-dichlorobenzene	MW98-25	9/07/2021		2.0	1.0	ug/L
1,4-dichlorobenzene	MW98-25	3/28/2022		1.2	1.0	ug/L
1,4-dichlorobenzene	MW98-25	3/20/2023		1.2	1.0	ug/L
1,4-dichlorobenzene	MW98-25	9/12/2023		2.4	1.0	ug/L
1,4-dichlorobenzene	MW98-25	3/12/2024		1.6	1.0	ug/L
2,4,6-tribromophenol	MW98-25	7/23/2008		105.0	8.0	ug/L
2,4,6-tribromophenol	MW98-25	9/12/2008		120.0	8.0	ug/L
2,4,6-tribromophenol	MW98-25	12/11/2008		97.1	8.0	ug/L
Acetone	MW98-25	6/04/2008		12.1	10.0	ug/L
Acetone	MW98-25	3/30/2011		54.0	10.0	ug/L
Acetone	MW98-25	3/07/2012		14.8	10.0	ug/L
Acetone	MW98-25	3/08/2018		46.5	10.0	ug/L
Benzene	MW98-25	3/09/2004		4.2	1.0	ug/L
Benzene	MW98-25	9/14/2004		3.3	1.0	ug/L
Benzene	MW98-25	3/30/2006		2.5	1.0	ug/L
Benzene	MW98-25	9/15/2006		2.0	1.0	ug/L
Benzene	MW98-25	9/20/2007		2.4	1.0	ug/L
Benzene	MW98-25	3/17/2008		6.0	1.0	ug/L
Benzene	MW98-25	6/04/2008		8.9	1.0	ug/L
Benzene	MW98-25	7/23/2008		5.5	1.0	ug/L
Benzene	MW98-25	9/12/2008		5.0	1.0	ug/L
Benzene	MW98-25	12/11/2008		7.6	1.0	ug/L
Benzene	MW98-25	3/04/2009		6.4	1.0	ug/L
Benzene	MW98-25	3/04/2009		6.5	1.0	ug/L
Benzene	MW98-25	9/20/2009		6.1	1.0	ug/L
Benzene	MW98-25	3/26/2010		6.4	1.0	ug/L
Benzene	MW98-25	9/24/2010		5.6	1.0	ug/L
Benzene	MW98-25	3/30/2011		4.7	1.0	ug/L
Benzene	MW98-25	9/14/2011		4.0	1.0	ug/L
Benzene	MW98-25	3/07/2012		5.8	1.0	ug/L
Benzene	MW98-25	9/27/2013		1.6	1.0	ug/L
Benzene	MW98-25	3/13/2014		1.0	1.0	ug/L
Benzene	MW98-25	9/18/2014		5.6	1.0	ug/L
Benzene	MW98-25	9/11/2015		1.3	1.0	ug/L
Benzene	MW98-25	9/08/2016		1.4	1.0	ug/L
Benzene	MW98-25	3/08/2018		1.9	1.0	ug/L
Benzene	MW98-25	3/09/2021		1.6	1.0	ug/L
Benzene	MW98-25	9/07/2021		2.7	1.0	ug/L
Benzene	MW98-25	3/28/2022		1.3	1.0	ug/L
Benzene	MW98-25	9/12/2023		1.4	1.0	ug/L
Beta-bhc	MW98-25	9/12/2008		.14	.05	ug/L
Beta-bhc	MW98-25	3/13/2014		.07	.05	ug/L
Bis(2-ethylhexyl) phthalate	MW98-25	12/11/2008		13	8	ug/L
Bis(2-ethylhexyl) phthalate	MW98-25	9/27/2013		10	10	ug/L
Bis(2-ethylhexyl) phthalate	MW98-25	9/19/2017		6	6	ug/L
Chlorobenzene	MW98-25	3/17/2008		1.1	1.0	ug/L
Chlorobenzene	MW98-25	6/04/2008		2.8	1.0	ug/L
Chlorobenzene	MW98-25	7/23/2008		2.2	1.0	ug/L
Chlorobenzene	MW98-25	9/12/2008		2.4	1.0	ug/L
Chlorobenzene	MW98-25	12/11/2008		2.3	1.0	ug/L
Chlorobenzene	MW98-25	3/04/2009		1.9	1.0	ug/L
Chlorobenzene	MW98-25	3/04/2009		1.8	1.0	ug/L
Chlorobenzene	MW98-25	3/26/2010		1.4	1.0	ug/L
Chlorobenzene	MW98-25	9/24/2010		2.1	1.0	ug/L
Chlorobenzene	MW98-25	9/14/2011		1.2	1.0	ug/L
Chlorobenzene	MW98-25	3/07/2012		1.3	1.0	ug/L
Chlorobenzene	MW98-25	9/18/2014		1.3	1.0	ug/L
Chlorobenzene	MW98-25	9/07/2021		1.0	1.0	ug/L
Chlorobenzene	MW98-25	9/12/2023		1.3	1.0	ug/L
Chloroethane	MW98-25	3/17/2008		4.2	1.0	ug/L
Chloroethane	MW98-25	6/04/2008		2.5	1.0	ug/L
Chloroethane	MW98-25	7/23/2008		2.1	1.0	ug/L
Chloroethane	MW98-25	9/12/2008		2.3	1.0	ug/L
Chloroethane	MW98-25	12/11/2008		2.2	1.0	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Chloroethane	MW98-25	3/04/2009		2.4	1.0	ug/L
Chloroethane	MW98-25	3/04/2009		2.5	1.0	ug/L
Chloroethane	MW98-25	9/20/2009		1.8	1.0	ug/L
Chloroethane	MW98-25	3/26/2010		2.0	1.0	ug/L
Chloroethane	MW98-25	9/24/2010		2.2	1.0	ug/L
Chloroethane	MW98-25	3/30/2011		1.2	1.0	ug/L
Chloroethane	MW98-25	9/14/2011		1.9	1.0	ug/L
Chloroethane	MW98-25	3/07/2012		2.2	1.0	ug/L
Chloroethane	MW98-25	9/12/2012		1.8	1.0	ug/L
Chloroethane	MW98-25	9/27/2013		1.9	1.0	ug/L
Chloroethane	MW98-25	3/13/2014		2.0	1.0	ug/L
Chloroethane	MW98-25	3/16/2016		1.9	1.0	ug/L
Chloroethane	MW98-25	9/08/2016		1.0	1.0	ug/L
Chloroethane	MW98-25	3/08/2018		1.1	1.0	ug/L
Chloroethane	MW98-25	9/07/2021		1.5	1.0	ug/L
Chloroethane	MW98-25	3/20/2023		1.7	1.0	ug/L
Chloroethane	MW98-25	9/12/2023		1.5	1.0	ug/L
Chloroethane	MW98-25	3/12/2024		1.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	3/17/2008		8.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	6/04/2008		6.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	7/23/2008		6.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	9/12/2008		6.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	12/11/2008		5.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	3/04/2009		5.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	3/04/2009		5.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	9/20/2009		5.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	3/26/2010		4.6	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	9/24/2010		7.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	3/30/2011		6.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	9/14/2011		6.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	3/07/2012		6.7	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	9/12/2012		3.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	3/20/2013		2.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	9/27/2013		4.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	3/13/2014		4.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	9/18/2014		4.5	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	3/17/2015		5.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	9/11/2015		1.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	3/16/2016		5.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	9/08/2016		2.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	3/18/2017		2.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	9/19/2017		1.3	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	3/08/2018		2.5	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	9/24/2018		2.3	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	3/25/2019		1.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	9/04/2020		2.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	3/09/2021		2.5	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	9/07/2021		3.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	3/28/2022		2.5	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	3/20/2023		2.3	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	9/12/2023		2.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	3/12/2024		1.4	1.0	ug/L
Dichlorodifluoromethane	MW98-25	7/23/2008		6.2	1.0	ug/L
Dichlorodifluoromethane	MW98-25	9/12/2008		2.6	1.0	ug/L
Dichlorodifluoromethane	MW98-25	3/04/2009		21.6	1.0	ug/L
Dichlorodifluoromethane	MW98-25	9/27/2009		16.6	1.0	ug/L
Dichlorodifluoromethane	MW98-25	3/26/2010		34.6	1.0	ug/L
Dichlorodifluoromethane	MW98-25	9/24/2010		28.2	1.0	ug/L
Dichlorodifluoromethane	MW98-25	3/30/2011		32.0	1.0	ug/L
Dichlorodifluoromethane	MW98-25	9/14/2011		12.6	1.0	ug/L
Dichlorodifluoromethane	MW98-25	3/07/2012		34.5	1.0	ug/L
Dichlorodifluoromethane	MW98-25	9/12/2012		4.2	1.0	ug/L
Dichlorodifluoromethane	MW98-25	3/20/2013		13.0	1.0	ug/L
Dichlorodifluoromethane	MW98-25	9/27/2013		1.3	1.0	ug/L
Dichlorodifluoromethane	MW98-25	3/13/2014		1.5	1.0	ug/L
Dichlorodifluoromethane	MW98-25	9/18/2014		24.3	1.0	ug/L
Dichlorodifluoromethane	MW98-25	9/11/2015		14.7	1.0	ug/L
Dichlorodifluoromethane	MW98-25	9/08/2016		6.6	1.0	ug/L
Dichlorodifluoromethane	MW98-25	3/18/2017		18.8	1.0	ug/L
Dichlorodifluoromethane	MW98-25	9/19/2017		6.9	1.0	ug/L
Dichlorodifluoromethane	MW98-25	3/08/2018		38.4	1.0	ug/L
Dichlorodifluoromethane	MW98-25	9/24/2018		1.6	1.0	ug/L
Dichlorodifluoromethane	MW98-25	3/25/2019		3.8	1.0	ug/L
Dichlorodifluoromethane	MW98-25	3/23/2020		19.4	1.0	ug/L
Dichlorodifluoromethane	MW98-25	9/04/2020		1.2	1.0	ug/L
Dichlorodifluoromethane	MW98-25	3/09/2021		8.6	1.0	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Dichlorodifluoromethane	MW98-25	9/07/2021		4.8	1.0	ug/L
Dichlorodifluoromethane	MW98-25	3/28/2022		1.7	1.0	ug/L
Dichlorodifluoromethane	MW98-25	3/20/2023		3.3	1.0	ug/L
Dichlorodifluoromethane	MW98-25	9/12/2023		2.1	1.0	ug/L
Ethylbenzene	MW98-25	6/04/2008		2.2	1.0	ug/L
Ethylbenzene	MW98-25	12/11/2008		1.8	1.0	ug/L
Ethylbenzene	MW98-25	9/20/2009		1.2	1.0	ug/L
Ethylbenzene	MW98-25	3/26/2010		2.6	1.0	ug/L
Toluene	MW98-25	6/04/2008		1.2	1.0	ug/L
Toluene	MW98-25	3/26/2010		1.2	1.0	ug/L
Toluene	MW98-25	9/24/2010		1.3	1.0	ug/L
Trichloroethylene	MW98-25	6/04/2008		1.2	1.0	ug/L
Trichlorofluoromethane	MW98-25	6/04/2008		28.7	1.0	ug/L
Trichlorofluoromethane	MW98-25	9/12/2008		2.4	1.0	ug/L
Trichlorofluoromethane	MW98-25	3/04/2009		16.0	1.0	ug/L
Trichlorofluoromethane	MW98-25	3/04/2009		16.4	1.0	ug/L
Trichlorofluoromethane	MW98-25	3/26/2010		27.0	1.0	ug/L
Trichlorofluoromethane	MW98-25	9/24/2010		12.1	1.0	ug/L
Trichlorofluoromethane	MW98-25	3/30/2011		19.3	1.0	ug/L
Trichlorofluoromethane	MW98-25	9/14/2011		5.0	1.0	ug/L
Trichlorofluoromethane	MW98-25	3/07/2012		16.4	1.0	ug/L
Trichlorofluoromethane	MW98-25	9/12/2012		1.0	1.0	ug/L
Trichlorofluoromethane	MW98-25	3/20/2013		6.2	1.0	ug/L
Trichlorofluoromethane	MW98-25	9/27/2013		1.9	1.0	ug/L
Trichlorofluoromethane	MW98-25	9/18/2014		3.2	1.0	ug/L
Trichlorofluoromethane	MW98-25	9/08/2016		4.4	1.0	ug/L
Trichlorofluoromethane	MW98-25	3/18/2017		4.3	1.0	ug/L
Trichlorofluoromethane	MW98-25	9/19/2017		1.6	1.0	ug/L
Trichlorofluoromethane	MW98-25	3/08/2018		2.5	1.0	ug/L
Trichlorofluoromethane	MW98-25	3/23/2020		6.0	1.0	ug/L
Trichlorofluoromethane	MW98-25	9/04/2020		1.0	1.0	ug/L
Trichlorofluoromethane	MW98-25	3/09/2021		2.6	1.0	ug/L
Trichlorofluoromethane	MW98-25	3/28/2022		1.0	1.0	ug/L
Trichlorofluoromethane	MW98-25	3/20/2023		1.2	1.0	ug/L
Trichlorofluoromethane	MW98-25	9/12/2023		1.1	1.0	ug/L
Trichlorofluoromethane	MW98-25	3/12/2024		1.0	1.0	ug/L
Vinyl chloride	MW98-25	3/17/2008		2.8	1.0	ug/L
Vinyl chloride	MW98-25	6/04/2008		2.8	1.0	ug/L
Vinyl chloride	MW98-25	7/23/2008		1.9	1.0	ug/L
Vinyl chloride	MW98-25	12/11/2008		2.4	1.0	ug/L
Vinyl chloride	MW98-25	3/04/2009		2.5	1.0	ug/L
Vinyl chloride	MW98-25	3/04/2009		2.3	1.0	ug/L
Vinyl chloride	MW98-25	3/26/2010		1.6	1.0	ug/L
Vinyl chloride	MW98-25	9/24/2010		1.7	1.0	ug/L
Vinyl chloride	MW98-25	3/30/2011		1.5	1.0	ug/L
Vinyl chloride	MW98-25	9/14/2011		1.0	1.0	ug/L
Vinyl chloride	MW98-25	3/07/2012		1.4	1.0	ug/L
Xylenes, total	MW98-25	6/04/2008		5.5	2.0	ug/L
Xylenes, total	MW98-25	7/23/2008		2.5	2.0	ug/L
Benzene	PEC-3	3/28/2022		1.5	1.0	ug/L
Cis-1,2-dichloroethylene	PEC-3	3/28/2022		3.2	1.0	ug/L
1,1-dichloroethane	Sramp 1	9/21/2009		1.1	1.0	ug/L
1,1-dichloroethane	Sramp 1	3/30/2011		1.0	1.0	ug/L
1,1-dichloroethane	Sramp 1	3/09/2021		2.6	1.0	ug/L
1,1-dichloroethane	Sramp 1	3/28/2022		1.4	1.0	ug/L
1,1-dichloroethane	Sramp 1	3/20/2023		1.4	1.0	ug/L
1,1-dichloroethylene	Sramp 1	12/12/2008		1	1	ug/L
1,2,4-trichlorobenzene	Sramp 1	9/21/2009		5.2	1.0	ug/L
1,4-dichlorobenzene	Sramp 1	7/21/2008		1.8	1.0	ug/L
1,4-dichlorobenzene	Sramp 1	9/12/2008		1.8	1.0	ug/L
1,4-dichlorobenzene	Sramp 1	12/12/2008		1.6	1.0	ug/L
1,4-dichlorobenzene	Sramp 1	3/04/2009		1.4	1.0	ug/L
1,4-dichlorobenzene	Sramp 1	9/21/2009		2.8	1.0	ug/L
1,4-dichlorobenzene	Sramp 1	9/24/2010		3.4	1.0	ug/L
1,4-dichlorobenzene	Sramp 1	3/30/2011		3.5	1.0	ug/L
1,4-dichlorobenzene	Sramp 1	9/14/2011		2.7	1.0	ug/L
1,4-dichlorobenzene	Sramp 1	3/07/2012		1.3	1.0	ug/L
1,4-dichlorobenzene	Sramp 1	3/20/2013		4.0	1.0	ug/L
1,4-dichlorobenzene	Sramp 1	9/26/2013		3.3	1.0	ug/L
1,4-dichlorobenzene	Sramp 1	3/17/2015		2.2	1.0	ug/L
1,4-dichlorobenzene	Sramp 1	9/11/2015		6.4	1.0	ug/L
1,4-dichlorobenzene	Sramp 1	3/16/2016		3.9	1.0	ug/L
1,4-dichlorobenzene	Sramp 1	9/08/2016		4.6	1.0	ug/L
1,4-dichlorobenzene	Sramp 1	3/18/2017		2.7	1.0	ug/L
1,4-dichlorobenzene	Sramp 1	3/09/2021		5.8	1.0	ug/L
1,4-dichlorobenzene	Sramp 1	3/28/2022		5.0	1.0	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
1,4-dichlorobenzene	Sramp 1	3/20/2023		6.5	1.0	ug/L
Acetone	Sramp 1	3/30/2011		40.1	10.0	ug/L
Acetone	Sramp 1	3/16/2016		82.1	10.0	ug/L
Acetone	Sramp 1	3/25/2019		19.3	10.0	ug/L
Acetone	Sramp 1	3/28/2022		23.5	10.0	ug/L
Benzene	Sramp 1	7/21/2008		4.7	1.0	ug/L
Benzene	Sramp 1	9/12/2008		3.6	1.0	ug/L
Benzene	Sramp 1	3/04/2009		1.3	1.0	ug/L
Benzene	Sramp 1	9/21/2009		7.6	1.0	ug/L
Benzene	Sramp 1	9/24/2010		4.2	1.0	ug/L
Benzene	Sramp 1	3/30/2011		5.8	1.0	ug/L
Benzene	Sramp 1	3/20/2013		3.5	1.0	ug/L
Benzene	Sramp 1	9/26/2013		6.0	1.0	ug/L
Benzene	Sramp 1	3/17/2015		2.6	1.0	ug/L
Benzene	Sramp 1	9/11/2015		6.2	1.0	ug/L
Benzene	Sramp 1	3/16/2016		5.0	1.0	ug/L
Benzene	Sramp 1	9/08/2016		2.2	1.0	ug/L
Benzene	Sramp 1	3/18/2017		2.0	1.0	ug/L
Benzene	Sramp 1	3/25/2019		1.2	1.0	ug/L
Benzene	Sramp 1	9/03/2019		1.2	1.0	ug/L
Benzene	Sramp 1	3/09/2021		5.7	1.0	ug/L
Benzene	Sramp 1	3/28/2022		4.8	1.0	ug/L
Benzene	Sramp 1	3/20/2023		5.7	1.0	ug/L
Chlorobenzene	Sramp 1	7/21/2008		1.6	1.0	ug/L
Chlorobenzene	Sramp 1	9/12/2008		1.8	1.0	ug/L
Chlorobenzene	Sramp 1	9/21/2009		2.8	1.0	ug/L
Chlorobenzene	Sramp 1	9/24/2010		1.5	1.0	ug/L
Chlorobenzene	Sramp 1	3/30/2011		1.5	1.0	ug/L
Chlorobenzene	Sramp 1	3/20/2013		1.1	1.0	ug/L
Chlorobenzene	Sramp 1	9/26/2013		2.1	1.0	ug/L
Chlorobenzene	Sramp 1	9/11/2015		2.4	1.0	ug/L
Chlorobenzene	Sramp 1	3/16/2016		1.9	1.0	ug/L
Chlorobenzene	Sramp 1	9/08/2016		1.4	1.0	ug/L
Chlorobenzene	Sramp 1	3/18/2017		1.1	1.0	ug/L
Chlorobenzene	Sramp 1	3/25/2019		1.5	1.0	ug/L
Chlorobenzene	Sramp 1	3/09/2021		1.7	1.0	ug/L
Chlorobenzene	Sramp 1	3/28/2022		1.4	1.0	ug/L
Chlorobenzene	Sramp 1	3/20/2023		1.7	1.0	ug/L
Chloroethane	Sramp 1	7/21/2008		1.5	1.0	ug/L
Chloroethane	Sramp 1	9/12/2008		1.0	1.0	ug/L
Chloroethane	Sramp 1	3/04/2009		1.4	1.0	ug/L
Chloroethane	Sramp 1	9/21/2009		1.4	1.0	ug/L
Chloroethane	Sramp 1	3/30/2011		1.3	1.0	ug/L
Chloroethane	Sramp 1	9/14/2011		1.2	1.0	ug/L
Chloroethane	Sramp 1	9/26/2013		2.2	1.0	ug/L
Chloroethane	Sramp 1	9/11/2015		1.4	1.0	ug/L
Chloroethane	Sramp 1	3/16/2016		1.9	1.0	ug/L
Chloroethane	Sramp 1	9/08/2016		2.0	1.0	ug/L
Chloroethane	Sramp 1	3/18/2017		1.6	1.0	ug/L
Chloroethane	Sramp 1	3/25/2019		2.6	1.0	ug/L
Chloroethane	Sramp 1	9/03/2019		2.5	1.0	ug/L
Chloroethane	Sramp 1	3/09/2021		2.6	1.0	ug/L
Chloroethane	Sramp 1	3/28/2022		1.6	1.0	ug/L
Chloroethane	Sramp 1	3/20/2023		2.0	1.0	ug/L
Cis-1,2-dichloroethylene	Sramp 1	7/21/2008		3.1	1.0	ug/L
Cis-1,2-dichloroethylene	Sramp 1	9/12/2008		2.5	1.0	ug/L
Cis-1,2-dichloroethylene	Sramp 1	12/12/2008		1.7	1.0	ug/L
Cis-1,2-dichloroethylene	Sramp 1	3/04/2009		1.8	1.0	ug/L
Cis-1,2-dichloroethylene	Sramp 1	9/21/2009		2.9	1.0	ug/L
Cis-1,2-dichloroethylene	Sramp 1	9/24/2010		2.3	1.0	ug/L
Cis-1,2-dichloroethylene	Sramp 1	3/30/2011		3.6	1.0	ug/L
Cis-1,2-dichloroethylene	Sramp 1	9/14/2011		2.4	1.0	ug/L
Cis-1,2-dichloroethylene	Sramp 1	3/20/2013		2.3	1.0	ug/L
Cis-1,2-dichloroethylene	Sramp 1	9/26/2013		3.3	1.0	ug/L
Cis-1,2-dichloroethylene	Sramp 1	3/17/2015		1.4	1.0	ug/L
Cis-1,2-dichloroethylene	Sramp 1	9/11/2015		2.7	1.0	ug/L
Cis-1,2-dichloroethylene	Sramp 1	3/16/2016		2.5	1.0	ug/L
Cis-1,2-dichloroethylene	Sramp 1	9/08/2016		2.8	1.0	ug/L
Cis-1,2-dichloroethylene	Sramp 1	3/18/2017		2.1	1.0	ug/L
Cis-1,2-dichloroethylene	Sramp 1	3/25/2019		4.0	1.0	ug/L
Cis-1,2-dichloroethylene	Sramp 1	9/03/2019		2.4	1.0	ug/L
Cis-1,2-dichloroethylene	Sramp 1	3/09/2021		4.4	1.0	ug/L
Cis-1,2-dichloroethylene	Sramp 1	3/28/2022		3.0	1.0	ug/L
Cis-1,2-dichloroethylene	Sramp 1	3/20/2023		3.0	1.0	ug/L
Dichlorodifluoromethane	Sramp 1	9/21/2009		20.4	1.0	ug/L
Dichlorodifluoromethane	Sramp 1	9/24/2010		7.6	1.0	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Dichlorodifluoromethane	Sramp 1	3/07/2012		1.1	1.0	ug/L
Dichlorodifluoromethane	Sramp 1	9/12/2012		2.2	1.0	ug/L
Dichlorodifluoromethane	Sramp 1	3/20/2013		9.5	1.0	ug/L
Dichlorodifluoromethane	Sramp 1	9/26/2013		20.3	1.0	ug/L
Dichlorodifluoromethane	Sramp 1	3/17/2015		16.7	1.0	ug/L
Dichlorodifluoromethane	Sramp 1	9/11/2015		40.6	1.0	ug/L
Dichlorodifluoromethane	Sramp 1	3/16/2016		16.5	1.0	ug/L
Dichlorodifluoromethane	Sramp 1	9/08/2016		40.7	1.0	ug/L
Dichlorodifluoromethane	Sramp 1	3/18/2017		34.8	1.0	ug/L
Dichlorodifluoromethane	Sramp 1	9/19/2017		3.1	1.0	ug/L
Dichlorodifluoromethane	Sramp 1	3/25/2019		38.4	1.0	ug/L
Dichlorodifluoromethane	Sramp 1	3/09/2021		50.7	1.0	ug/L
Dichlorodifluoromethane	Sramp 1	3/28/2022		12.2	1.0	ug/L
Dichlorodifluoromethane	Sramp 1	3/20/2023		18.4	1.0	ug/L
Ethylbenzene	Sramp 1	7/21/2008		2.6	1.0	ug/L
Ethylbenzene	Sramp 1	9/12/2008		2.0	1.0	ug/L
Ethylbenzene	Sramp 1	9/21/2009		7.7	1.0	ug/L
Ethylbenzene	Sramp 1	9/24/2010		2.7	1.0	ug/L
Ethylbenzene	Sramp 1	3/30/2011		2.3	1.0	ug/L
Ethylbenzene	Sramp 1	9/14/2011		1.8	1.0	ug/L
Ethylbenzene	Sramp 1	9/26/2013		3.5	1.0	ug/L
Ethylbenzene	Sramp 1	3/16/2016		2.1	1.0	ug/L
Ethylbenzene	Sramp 1	3/09/2021		1.9	1.0	ug/L
Trichlorofluoromethane	Sramp 1	7/21/2008		26.0	1.0	ug/L
Trichlorofluoromethane	Sramp 1	9/12/2008		12.7	1.0	ug/L
Trichlorofluoromethane	Sramp 1	12/12/2008		17.7	1.0	ug/L
Trichlorofluoromethane	Sramp 1	3/04/2009		26.8	1.0	ug/L
Trichlorofluoromethane	Sramp 1	9/21/2009		14.1	1.0	ug/L
Trichlorofluoromethane	Sramp 1	9/24/2010		3.0	1.0	ug/L
Trichlorofluoromethane	Sramp 1	3/30/2011		7.3	1.0	ug/L
Trichlorofluoromethane	Sramp 1	9/14/2011		2.8	1.0	ug/L
Trichlorofluoromethane	Sramp 1	3/20/2013		4.0	1.0	ug/L
Trichlorofluoromethane	Sramp 1	9/26/2013		3.0	1.0	ug/L
Trichlorofluoromethane	Sramp 1	9/11/2015		7.3	1.0	ug/L
Trichlorofluoromethane	Sramp 1	3/16/2016		39.1	1.0	ug/L
Trichlorofluoromethane	Sramp 1	9/08/2016		24.2	1.0	ug/L
Trichlorofluoromethane	Sramp 1	3/18/2017		17.9	1.0	ug/L
Trichlorofluoromethane	Sramp 1	9/19/2017		2.1	1.0	ug/L
Trichlorofluoromethane	Sramp 1	3/25/2019		22.5	1.0	ug/L
Trichlorofluoromethane	Sramp 1	3/09/2021		28.0	1.0	ug/L
Trichlorofluoromethane	Sramp 1	3/28/2022		8.1	1.0	ug/L
Trichlorofluoromethane	Sramp 1	3/20/2023		9.1	1.0	ug/L
Vinyl chloride	Sramp 1	7/21/2008		1.1	1.0	ug/L
Vinyl chloride	Sramp 1	9/12/2008		1.0	1.0	ug/L
Vinyl chloride	Sramp 1	12/12/2008		1.0	1.0	ug/L
Vinyl chloride	Sramp 1	3/04/2009		1.0	1.0	ug/L
Xylenes, total	Sramp 1	7/21/2008		3.4	2.0	ug/L
Xylenes, total	Sramp 1	9/12/2008		2.8	2.0	ug/L
Xylenes, total	Sramp 1	12/12/2008		2.3	2.0	ug/L
Xylenes, total	Sramp 1	9/21/2009		5.9	2.0	ug/L
Xylenes, total	Sramp 1	9/24/2010		5.7	2.0	ug/L
Xylenes, total	Sramp 1	9/14/2011		3.2	2.0	ug/L
Xylenes, total	Sramp 1	9/26/2013		3.4	2.0	ug/L
Xylenes, total	Sramp 1	3/16/2016		2.4	2.0	ug/L
Acetone	SRAMP 2	3/13/2014		82.2	10.0	ug/L
Ethylbenzene	SRAMP 2	9/24/2018		1.5	1.0	ug/L
Xylenes, total	SRAMP 2	9/24/2018		8.1	2.0	ug/L

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

Attachment D

Assessment Statistics for Detected VOCs

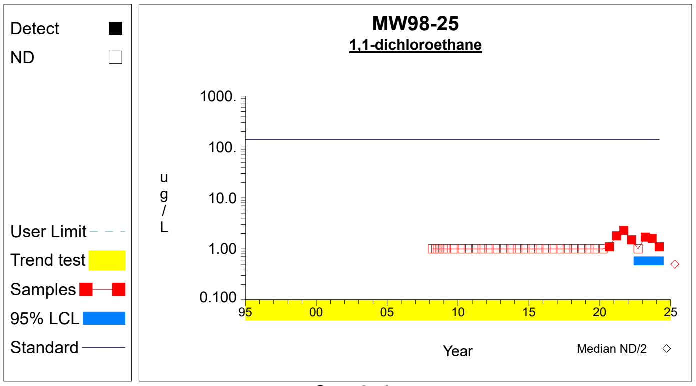
Table 1

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

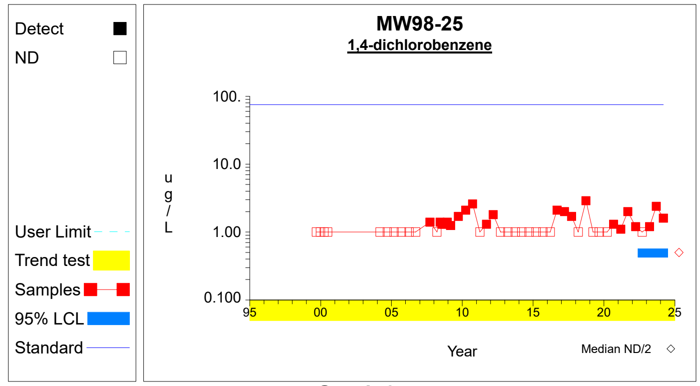
Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend
1,1-dichloroethane	ug/L	MW98-25	4	1.225	0.550	1.176	0.578	1.872	140.000	
1,4-dichlorobenzene	ug/L	MW98-25	4	1.425	0.793	1.176	0.492	2.358	75.000	
Benzene	ug/L	MW98-25	4	0.725	0.450	1.176	0.196	1.254	5.000	
Chlorobenzene	ug/L	MW98-25	4	0.700	0.400	1.176	0.229	1.171	100.000	
Chloroethane	ug/L	MW98-25	4	1.275	0.532	1.176	0.650	1.900	2800.000	dec
Cis-1,2-dichloroethylene	ug/L	MW98-25	4	1.750	1.015	1.176	0.556	2.944	70.000	dec
Dichlorodifluoromethane	ug/L	MW98-25	4	1.600	1.361	1.176	0.000	3.201	1000.000	
Trichlorofluoromethane	ug/L	MW98-25	4	0.950	0.311	1.176	0.584	1.316	2000.000	

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

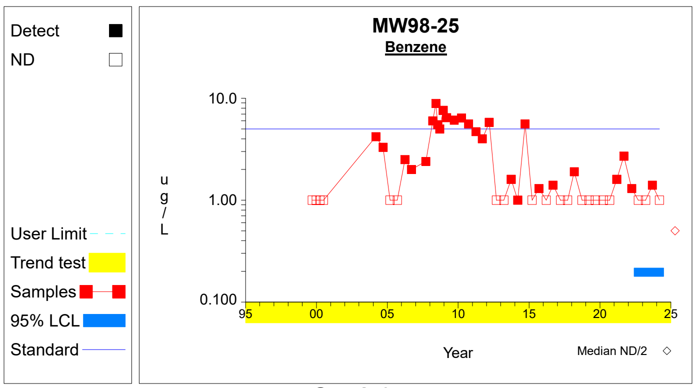
Confidence Limits (Assessment)



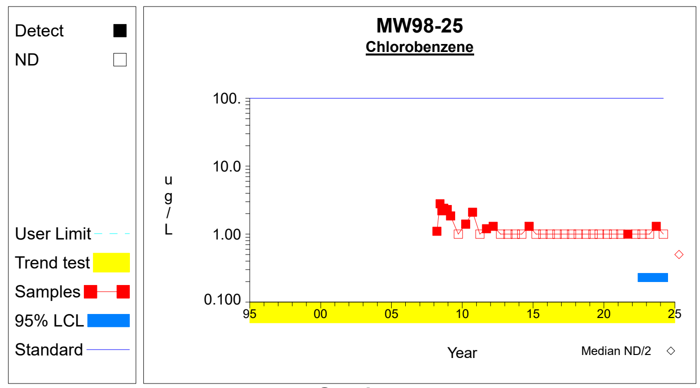
Graph 1



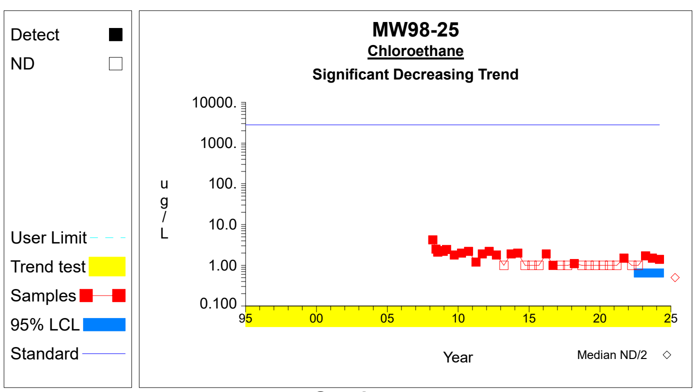
Graph 2



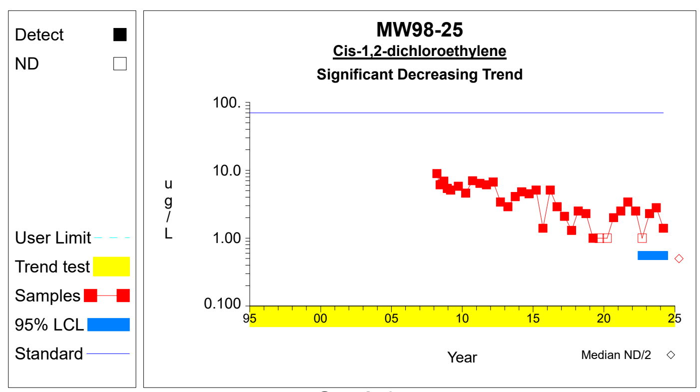
Graph 3



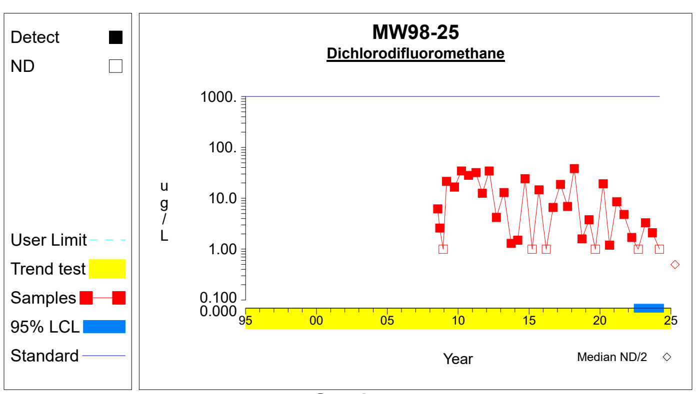
Graph 4



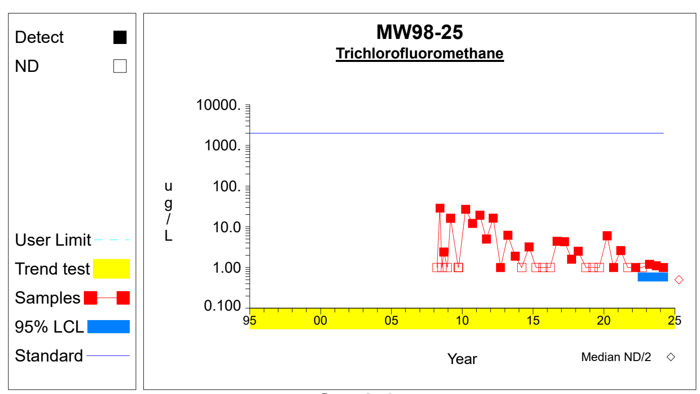
Graph 5



Graph 6



Graph 7



Graph 8

APPENDIX D.2 –Fall Statistical Evaluation

GROUND WATER STATISTICS

FOR THE

BOONE COUNTY SANITARY LANDFILL

Second Semi-Annual Monitoring Event in 2024

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November 2024

INTRODUCTION

This report summarizes the results of the statistical analysis used to evaluate the ground water quality data obtained during the second semi-annual monitoring event in 2024 at the Boone County Sanitary Landfill in Boone County, Iowa. The statistical plan was designed to detect a release from the facility at the earliest indication so that it is protective of human health and the environment. The interwell methodology is described and then applied to the Boone 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 Boone County Sanitary Landfill includes upgradient wells MW88-2, MW91-8, MW98-28, MW02-15A, and MW02-30A, and downgradient detection sample points UD-3, GWD-1, MW88-3, MW91-10, MW94-18, MW94-19, MW96-21, MW96-23, and MW96-24. Detections of volatile organic compounds (VOCs) and statistical exceedances at wells along the north edge of the facility prompted a site remedial and mitigating action plan (SRAMP). Monitoring well MW98-25 situated along the north property line, has had verified VOC detections and inorganic exceedances. Sentinel wells SRAMP 1, SRAMP 2, MW06-37, MW06-38, and MW06-39 were installed to monitor the effectiveness of the SRAMP. Additional sample points (MW09-40 and MW09-42) have been added to monitor the downgradient zone to comply with the well spacing requirements of 113.10(2)e(2).

Each of the groundwater monitoring wells is to be sampled at least semiannually and analyzed for the detection monitoring parameters listed in 113.10(5), which includes 15 inorganic constituents and 47 organic compounds, summarized in Table 1 below.

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

Organic Compounds:

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

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

Inorganic constituents:

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

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

STATISTICAL METHODOLOGIES FOR DETECTION MONITORING

IAC 567, Chapter 113.10(4) provides several options for statistically evaluating the ground water data at those wells that monitor the open cells or contiguous MSWLF units. The preferred methods for comparing ground water data are using either prediction limits or using control charts. The prediction limit method was applied to the Boone 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. As an alternative to nonparametric prediction limits, Poisson prediction limits can be used for small data sets where the detection frequency is less than 25%. Since there was limited background, Poisson prediction limits were previously computed for those rarely detected parameters. Since the Unified Guidance recommends nonparametric limits over Poisson limits, nonparametric limits were used for the current comparisons

Results of the Interwell Statistics

The background data used in this statistical analysis includes the ground water data collected from ground water wells MW88-2, MW91-8, MW98-28, MW02-15A, and MW02-30A during the period from September 2014 through the current data. A summary of the background data from monitoring wells MW88-2, MW91-8, MW98-28, MW02-15A, and MW02-30A, used to determine the site prediction limits, is listed in Attachment B, Table 1 "Upgradient Data". This statistical method compares the current downgradient determinations to site prediction limits and checks for exceedances.

Table 2 "Most Current Downgradient Monitoring Data", summarizes the current data from downgradient wells GU-3, MW06-37, MW06-38, MW06-39, MW09-40, MW21-43, MW88-3, MW91-10, MW94-18, MW96-21, MW96-23, MW96-24, and MW98-25, compared to the site prediction limits. Prediction limit exceedances are flagged with asterisks.

For the most current data, the site prediction limit exceedances detected are summarized in the table below.

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

Well	Trace Metal	Result, µg/L	Prediction Limit, µg/L	Prediction Limit Type	Verified/ Awaiting Verification
GU-3	Nickel	36.8	17.4000	Nonparametric	Awaiting Verification
MW88-3	Cadmium	5.6	2.4000	Nonparametric	Awaiting Verification
MW98-25	Cobalt	11.0	7.0000	Nonparametric	Verified
	Nickel	26.5	17.4000	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. The background barium data failed a normal distribution so barium uses a nonparametric site prediction limit. Table 5 is a summary of the statistics and prediction limits determined for the metals. Time series graphs of each of the parameters at each well with the corresponding prediction limits are attached.

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

The verified exceedances were evaluated against the 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 95% LCL for cobalt at MW98-25 (9.523 µg/L) exceeds the Iowa Statewide standard of 2.1 µg/L. The remainder of the calculated 95% LCLs for the verified trace metals are all below the respective ground water standards.

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 Boone County Landfill during the second semi-annual monitoring event in 2024 are summarized below.

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

Well	VOC Detected	Result, µg/L	Reporting Limit, µg/L	Verified/ Awaiting Verification	Ground Water Standard
GU-3	Benzene	6.0	1	Verified	5[a]
	Chlorobenzene	1.3	1	Verified	100[a]
	Chloroethane	1.1	1	Verified	2800[b]
	cis-1,2-Dichloroethene	4.3	1	Verified	70[a]
	Vinyl chloride	1.2	1	Verified	2[a]
MW98-25	1,1-Dichloroethane	1.2	1	Verified	140[b]
	1,4-Dichlorobenzene	1.8	1	Verified	75[a]
	Chlorobenzene	1.0	1	Awaiting Verification	100[a]
	Chloroethane	1.0	1	Verified	2800[b]
	Chloromethane	1.8	1	Awaiting Verification	
	cis-1,2-Dichloroethene	2.0	1	Verified	70[a]

a - USEPA MCL
b – Iowa Statewide Standard

Historical VOC detections are summarized in Attachment C.

Prior to the current data, GU-3 was last sampled for VOCs in September 2022. The verified VOC detections were evaluated against the GWPS using confidence limits (Attachment D). The 95% lower confidence limit (LCL) for the mean of the historical data was used to evaluate whether the regulated unit is in compliance with the ground-water protection standards under 40 CFR 264 (e.g. whether the verified constituent is detected at a significant level above the GWPS). An exceedance is verified if the LCL is above the Regulatory GWPS.

The 95% LCL for benzene at GU-3 (5.962 µg/L) exceeds the MCL of 5 µg/L. The 95% LCL for the remainder of the verified VOCs are all below the respective ground water standards.

CONCLUSIONS

This report summarizes the statistical analyses used to evaluate the ground water data obtained during the second semi-annual monitoring event in 2024 at Boone County Sanitary Landfill. The ground water data obtained during the second semi-annual monitoring event in 2024 was compared to background using prediction limits. For the most current data, there is a verified site prediction limit exceedances detected for cobalt and nickel at MW98-25. There are verified detections of several VOCs at GU-3 and MW98-25. The 95% LCL for benzene at GU-3 exceeds the GWPS.

Attachment A

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

Table 1

Analytical Data Summary for 9/30/2024

Constituents	Units	GU-3	MW02-15A	MW02-30A	MW06-37	MW06-38	MW06-39	MW09-40	MW21-43	MW88-2
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2-butanone (mek)	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Antimony, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	ug/L	<4.0	<4.0	41.0	<4.0	<4.0	<4.0	<4.0	9.8	19.3
Barium, total	ug/L	488.0	34.9	86.8	116.0	188.0	160.0	23.4	177.0	357.0
Benzene	ug/L	6	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	ug/L	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	1.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroethane	ug/L	1.1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chromium, total	ug/L	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0
Cis-1,2-dichloroethylene	ug/L	4.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	<.4	.9	<.4	<.4	<.4	<.4	<.4	.4	<.4
Copper, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L									
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Methyl iodide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	ug/L	36.8	6.3	<4.0	<4.0	<4.0	<4.0	<4.0	8.1	<4.0
Selenium, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	ug/L	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	1.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Xylenes, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 1

Analytical Data Summary for 9/30/2024

Constituents	MW88-3	MW91-10	MW91-8	MW94-18	MW96-21	MW96-23	MW96-24	MW98-25	MW98-28	PEC-3
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.2	<1.0	<1.0
1,1-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.8	<1.0	<1.0
2-butanone (mek)	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2	
Arsenic, total	<4.0	<4.0	<4.0	<4.0	27.0	39.2	<4.0	6.6	<4.0	
Barium, total	136.0	39.8	109.0	27.6	369.0	632.0	559.0	90.2	270.0	
Benzene	<1	<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	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	5.6	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.0	<1.0	<1.0
Chloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.0	<1.0	<1.0
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.8	<1.0	<1.0
Chromium, total	<8.0	<8.0	<8.0	<8.0	9.5	<8.0	<8.0	<8.0	<8.0	
Cis-1,2-dichloroethylene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.0	<1.0	<1.0
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	<.4	<.4	<.4	<.4	4.0	<.4	<.4	11.0	3.9	
Copper, total	<4.0	<4.0	<4.0	<4.0	11.4	<4.0	<4.0	<4.0	4.8	
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane								<1		
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	<4.0	<4.0	<4.0	<4.0	6.2	<4.0	<4.0	<4.0	<4.0	
Methyl iodide	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	<4.0	<4.0	<4.0	<4.0	11.3	<4.0	<4.0	26.5	10.1	
Selenium, total	<4.0	4.4	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2	<2	<2	<2	<2	<2	
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<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	<5
Vinyl chloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Xylenes, total	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	<20.0	<20.0	<20.0	<20.0	34.1	<20.0	<20.0	<20.0	<20.0	

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

Attachment B

Summary Tables and Graphs for the Interwell Comparisons

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Antimony, total	ug/L	MW02-15A	09/18/2014	ND	2.0000		
Antimony, total	ug/L	MW02-15A	11/13/2014	ND	2.0000		
Antimony, total	ug/L	MW02-15A	03/17/2015	ND	2.0000		
Antimony, total	ug/L	MW02-15A	06/29/2015	ND	2.0000		
Antimony, total	ug/L	MW02-15A	09/11/2015	ND	2.0000		
Antimony, total	ug/L	MW02-15A	03/16/2016	ND	2.0000		
Antimony, total	ug/L	MW02-15A	09/08/2016	ND	2.0000		
Antimony, total	ug/L	MW02-15A	03/17/2017	ND	2.0000		
Antimony, total	ug/L	MW02-15A	09/19/2017	ND	2.0000		
Antimony, total	ug/L	MW02-15A	03/08/2018	ND	2.0000		
Antimony, total	ug/L	MW02-15A	09/24/2018	ND	2.0000		
Antimony, total	ug/L	MW02-15A	03/25/2019	ND	2.0000		
Antimony, total	ug/L	MW02-15A	09/03/2019	ND	2.0000		
Antimony, total	ug/L	MW02-15A	03/23/2020	ND	2.0000		
Antimony, total	ug/L	MW02-15A	09/04/2020	ND	2.0000		
Antimony, total	ug/L	MW02-15A	03/09/2021	ND	2.0000		
Antimony, total	ug/L	MW02-15A	09/07/2021	ND	2.0000		
Antimony, total	ug/L	MW02-15A	03/28/2022	ND	2.0000		
Antimony, total	ug/L	MW02-15A	09/14/2022	ND	2.0000		
Antimony, total	ug/L	MW02-15A	03/20/2023	ND	2.0000		
Antimony, total	ug/L	MW02-15A	09/12/2023	ND	2.0000		
Antimony, total	ug/L	MW02-15A	03/12/2024	ND	2.0000		
Antimony, total	ug/L	MW02-15A	09/30/2024	ND	2.0000		
Arsenic, total	ug/L	MW02-15A	09/18/2014	ND	4.0000		
Arsenic, total	ug/L	MW02-15A	11/13/2014	ND	4.0000		
Arsenic, total	ug/L	MW02-15A	03/17/2015	ND	4.0000		
Arsenic, total	ug/L	MW02-15A	06/29/2015	ND	4.0000		
Arsenic, total	ug/L	MW02-15A	09/11/2015	ND	4.0000		
Arsenic, total	ug/L	MW02-15A	03/16/2016	ND	4.0000		
Arsenic, total	ug/L	MW02-15A	09/08/2016	ND	4.0000		
Arsenic, total	ug/L	MW02-15A	03/17/2017	ND	4.0000		
Arsenic, total	ug/L	MW02-15A	09/19/2017	ND	4.0000		
Arsenic, total	ug/L	MW02-15A	03/08/2018	ND	4.0000		
Arsenic, total	ug/L	MW02-15A	09/24/2018	ND	4.0000		
Arsenic, total	ug/L	MW02-15A	03/25/2019	ND	4.0000		
Arsenic, total	ug/L	MW02-15A	09/03/2019	ND	4.0000		
Arsenic, total	ug/L	MW02-15A	03/23/2020	ND	4.0000		
Arsenic, total	ug/L	MW02-15A	09/04/2020	ND	4.0000		
Arsenic, total	ug/L	MW02-15A	03/09/2021	ND	4.0000		
Arsenic, total	ug/L	MW02-15A	09/07/2021	ND	4.0000		
Arsenic, total	ug/L	MW02-15A	03/28/2022	ND	4.0000		
Arsenic, total	ug/L	MW02-15A	09/14/2022	ND	4.0000		
Arsenic, total	ug/L	MW02-15A	03/20/2023	ND	4.0000		
Arsenic, total	ug/L	MW02-15A	09/12/2023	ND	4.0000		
Arsenic, total	ug/L	MW02-15A	03/12/2024	ND	4.0000		
Arsenic, total	ug/L	MW02-15A	09/30/2024	ND	4.0000		
Barium, total	ug/L	MW02-15A	09/18/2014		33.4000		
Barium, total	ug/L	MW02-15A	11/13/2014		33.1000		
Barium, total	ug/L	MW02-15A	03/17/2015		30.2000		
Barium, total	ug/L	MW02-15A	06/29/2015		28.7000		
Barium, total	ug/L	MW02-15A	09/11/2015		34.8000		
Barium, total	ug/L	MW02-15A	03/16/2016		40.4000		
Barium, total	ug/L	MW02-15A	09/08/2016		44.8000		
Barium, total	ug/L	MW02-15A	03/17/2017		43.5000		
Barium, total	ug/L	MW02-15A	09/19/2017		36.0000		
Barium, total	ug/L	MW02-15A	03/08/2018		31.9000		
Barium, total	ug/L	MW02-15A	09/24/2018		32.2000		
Barium, total	ug/L	MW02-15A	03/25/2019		30.0000		
Barium, total	ug/L	MW02-15A	09/03/2019		30.4000		
Barium, total	ug/L	MW02-15A	03/23/2020		32.0000		
Barium, total	ug/L	MW02-15A	09/04/2020		40.0000		
Barium, total	ug/L	MW02-15A	03/09/2021		38.9000		
Barium, total	ug/L	MW02-15A	09/07/2021		75.3000		
Barium, total	ug/L	MW02-15A	03/28/2022		46.2000		
Barium, total	ug/L	MW02-15A	09/14/2022		39.2000		
Barium, total	ug/L	MW02-15A	03/20/2023		42.8000		
Barium, total	ug/L	MW02-15A	09/12/2023		35.9000		
Barium, total	ug/L	MW02-15A	03/12/2024		38.9000		
Barium, total	ug/L	MW02-15A	09/30/2024		34.9000		
Beryllium, total	ug/L	MW02-15A	09/18/2014	ND	4.0000		
Beryllium, total	ug/L	MW02-15A	11/13/2014	ND	4.0000		
Beryllium, total	ug/L	MW02-15A	03/17/2015	ND	4.0000		
Beryllium, total	ug/L	MW02-15A	06/29/2015	ND	4.0000		
Beryllium, total	ug/L	MW02-15A	09/11/2015	ND	4.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Beryllium, total	ug/L	MW02-15A	03/16/2016	ND	4.0000		
Beryllium, total	ug/L	MW02-15A	09/08/2016	ND	4.0000		
Beryllium, total	ug/L	MW02-15A	03/17/2017	ND	4.0000		
Beryllium, total	ug/L	MW02-15A	09/19/2017	ND	4.0000		
Beryllium, total	ug/L	MW02-15A	03/08/2018	ND	4.0000		
Beryllium, total	ug/L	MW02-15A	09/24/2018	ND	4.0000		
Beryllium, total	ug/L	MW02-15A	03/25/2019	ND	4.0000		
Beryllium, total	ug/L	MW02-15A	09/03/2019	ND	4.0000		
Beryllium, total	ug/L	MW02-15A	03/23/2020	ND	4.0000		
Beryllium, total	ug/L	MW02-15A	09/04/2020	ND	4.0000		
Beryllium, total	ug/L	MW02-15A	03/09/2021	ND	4.0000		
Beryllium, total	ug/L	MW02-15A	09/07/2021	ND	4.0000		
Beryllium, total	ug/L	MW02-15A	03/28/2022	ND	4.0000		
Beryllium, total	ug/L	MW02-15A	09/14/2022	ND	4.0000		
Beryllium, total	ug/L	MW02-15A	03/20/2023	ND	4.0000		
Beryllium, total	ug/L	MW02-15A	09/12/2023	ND	4.0000		
Beryllium, total	ug/L	MW02-15A	03/12/2024	ND	4.0000		
Beryllium, total	ug/L	MW02-15A	09/30/2024	ND	4.0000		
Cadmium, total	ug/L	MW02-15A	09/18/2014	ND	0.8000		
Cadmium, total	ug/L	MW02-15A	11/13/2014	ND	0.8000		
Cadmium, total	ug/L	MW02-15A	03/17/2015	ND	0.8000		
Cadmium, total	ug/L	MW02-15A	06/29/2015	ND	0.8000		
Cadmium, total	ug/L	MW02-15A	09/11/2015	ND	0.8000		
Cadmium, total	ug/L	MW02-15A	03/16/2016		3.6000		*
Cadmium, total	ug/L	MW02-15A	09/08/2016	ND	0.8000		
Cadmium, total	ug/L	MW02-15A	03/17/2017	ND	0.8000		
Cadmium, total	ug/L	MW02-15A	09/19/2017	ND	0.8000		
Cadmium, total	ug/L	MW02-15A	03/08/2018	ND	0.8000		
Cadmium, total	ug/L	MW02-15A	09/24/2018	ND	0.8000		
Cadmium, total	ug/L	MW02-15A	03/25/2019	ND	0.8000		
Cadmium, total	ug/L	MW02-15A	09/03/2019	ND	0.8000		
Cadmium, total	ug/L	MW02-15A	03/23/2020	ND	0.8000		
Cadmium, total	ug/L	MW02-15A	09/04/2020	ND	0.8000		
Cadmium, total	ug/L	MW02-15A	03/09/2021	ND	0.8000		
Cadmium, total	ug/L	MW02-15A	09/07/2021		0.9000		
Cadmium, total	ug/L	MW02-15A	03/28/2022	ND	0.8000		
Cadmium, total	ug/L	MW02-15A	09/14/2022	ND	0.8000		
Cadmium, total	ug/L	MW02-15A	03/20/2023	ND	0.8000		
Cadmium, total	ug/L	MW02-15A	09/12/2023	ND	0.8000		
Cadmium, total	ug/L	MW02-15A	03/12/2024	ND	0.8000		
Cadmium, total	ug/L	MW02-15A	09/30/2024	ND	0.8000		
Chromium, total	ug/L	MW02-15A	09/18/2014	ND	8.0000		
Chromium, total	ug/L	MW02-15A	11/13/2014	ND	8.0000		
Chromium, total	ug/L	MW02-15A	03/17/2015	ND	8.0000		
Chromium, total	ug/L	MW02-15A	06/29/2015	ND	8.0000		
Chromium, total	ug/L	MW02-15A	09/11/2015	ND	8.0000		
Chromium, total	ug/L	MW02-15A	03/16/2016	ND	8.0000		
Chromium, total	ug/L	MW02-15A	09/08/2016	ND	8.0000		
Chromium, total	ug/L	MW02-15A	03/17/2017	ND	8.0000		
Chromium, total	ug/L	MW02-15A	09/19/2017	ND	8.0000		
Chromium, total	ug/L	MW02-15A	03/08/2018	ND	8.0000		
Chromium, total	ug/L	MW02-15A	09/24/2018	ND	8.0000		
Chromium, total	ug/L	MW02-15A	03/25/2019	ND	8.0000		
Chromium, total	ug/L	MW02-15A	09/03/2019	ND	8.0000		
Chromium, total	ug/L	MW02-15A	03/23/2020	ND	8.0000		
Chromium, total	ug/L	MW02-15A	09/04/2020	ND	8.0000		
Chromium, total	ug/L	MW02-15A	03/09/2021	ND	8.0000		
Chromium, total	ug/L	MW02-15A	09/07/2021	ND	8.0000		
Chromium, total	ug/L	MW02-15A	03/28/2022	ND	8.0000		
Chromium, total	ug/L	MW02-15A	09/14/2022	ND	8.0000		
Chromium, total	ug/L	MW02-15A	03/20/2023	ND	8.0000		
Chromium, total	ug/L	MW02-15A	09/12/2023	ND	8.0000		
Chromium, total	ug/L	MW02-15A	03/12/2024	ND	8.0000		
Chromium, total	ug/L	MW02-15A	09/30/2024	ND	8.0000		
Cobalt, total	ug/L	MW02-15A	09/18/2014	ND	0.8000		
Cobalt, total	ug/L	MW02-15A	11/13/2014	ND	0.8000		
Cobalt, total	ug/L	MW02-15A	03/17/2015	ND	0.8000		
Cobalt, total	ug/L	MW02-15A	06/29/2015	ND	0.8000		
Cobalt, total	ug/L	MW02-15A	09/11/2015		0.8000		
Cobalt, total	ug/L	MW02-15A	03/16/2016	ND	0.8000		
Cobalt, total	ug/L	MW02-15A	09/08/2016		1.4000		
Cobalt, total	ug/L	MW02-15A	03/17/2017		1.5000		
Cobalt, total	ug/L	MW02-15A	09/19/2017	ND	0.8000		
Cobalt, total	ug/L	MW02-15A	03/08/2018	ND	0.8000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Cobalt, total	ug/L	MW02-15A	09/24/2018	ND	0.8000		
Cobalt, total	ug/L	MW02-15A	03/25/2019	ND	0.8000		
Cobalt, total	ug/L	MW02-15A	09/03/2019		0.9000		
Cobalt, total	ug/L	MW02-15A	03/23/2020		1.6000		
Cobalt, total	ug/L	MW02-15A	09/04/2020		2.8000		
Cobalt, total	ug/L	MW02-15A	03/09/2021		5.8000		
Cobalt, total	ug/L	MW02-15A	09/07/2021		5.7000		
Cobalt, total	ug/L	MW02-15A	03/28/2022		3.2000		
Cobalt, total	ug/L	MW02-15A	09/14/2022		6.2000		
Cobalt, total	ug/L	MW02-15A	03/20/2023		3.6000		
Cobalt, total	ug/L	MW02-15A	09/12/2023		1.1000		
Cobalt, total	ug/L	MW02-15A	03/12/2024		1.2000		
Cobalt, total	ug/L	MW02-15A	09/30/2024		0.9000		
Copper, total	ug/L	MW02-15A	09/18/2014		7.8000		
Copper, total	ug/L	MW02-15A	11/13/2014	ND	4.0000		
Copper, total	ug/L	MW02-15A	03/17/2015	ND	4.0000		
Copper, total	ug/L	MW02-15A	06/29/2015	ND	4.0000		
Copper, total	ug/L	MW02-15A	09/11/2015	ND	4.0000		
Copper, total	ug/L	MW02-15A	03/16/2016	ND	4.0000		
Copper, total	ug/L	MW02-15A	09/08/2016	ND	4.0000		
Copper, total	ug/L	MW02-15A	03/17/2017	ND	4.0000		
Copper, total	ug/L	MW02-15A	09/19/2017	ND	4.0000		
Copper, total	ug/L	MW02-15A	03/08/2018	ND	4.0000		
Copper, total	ug/L	MW02-15A	09/24/2018	ND	4.0000		
Copper, total	ug/L	MW02-15A	03/25/2019	ND	4.0000		
Copper, total	ug/L	MW02-15A	09/03/2019	ND	4.0000		
Copper, total	ug/L	MW02-15A	03/23/2020	ND	4.0000		
Copper, total	ug/L	MW02-15A	09/04/2020	ND	4.0000		
Copper, total	ug/L	MW02-15A	03/09/2021		26.0000		*
Copper, total	ug/L	MW02-15A	09/07/2021	ND	4.0000		
Copper, total	ug/L	MW02-15A	03/28/2022	ND	4.0000		
Copper, total	ug/L	MW02-15A	09/14/2022	ND	4.0000		
Copper, total	ug/L	MW02-15A	03/20/2023	ND	4.0000		
Copper, total	ug/L	MW02-15A	09/12/2023	ND	4.0000		
Copper, total	ug/L	MW02-15A	03/12/2024	ND	4.0000		
Copper, total	ug/L	MW02-15A	09/30/2024	ND	4.0000		
Lead, total	ug/L	MW02-15A	09/18/2014		22.3000		*
Lead, total	ug/L	MW02-15A	11/13/2014	ND	4.0000		
Lead, total	ug/L	MW02-15A	03/17/2015	ND	4.0000		
Lead, total	ug/L	MW02-15A	06/29/2015	ND	4.0000		
Lead, total	ug/L	MW02-15A	09/11/2015	ND	4.0000		
Lead, total	ug/L	MW02-15A	03/16/2016	ND	4.0000		
Lead, total	ug/L	MW02-15A	09/08/2016	ND	4.0000		
Lead, total	ug/L	MW02-15A	03/17/2017	ND	4.0000		
Lead, total	ug/L	MW02-15A	09/19/2017	ND	4.0000		
Lead, total	ug/L	MW02-15A	03/08/2018	ND	4.0000		
Lead, total	ug/L	MW02-15A	09/24/2018	ND	4.0000		
Lead, total	ug/L	MW02-15A	03/25/2019	ND	4.0000		
Lead, total	ug/L	MW02-15A	09/03/2019	ND	4.0000		
Lead, total	ug/L	MW02-15A	03/23/2020	ND	4.0000		
Lead, total	ug/L	MW02-15A	09/04/2020	ND	4.0000		
Lead, total	ug/L	MW02-15A	03/09/2021	ND	4.0000		
Lead, total	ug/L	MW02-15A	09/07/2021	ND	4.0000		
Lead, total	ug/L	MW02-15A	03/28/2022	ND	4.0000		
Lead, total	ug/L	MW02-15A	09/14/2022	ND	4.0000		
Lead, total	ug/L	MW02-15A	03/20/2023	ND	4.0000		
Lead, total	ug/L	MW02-15A	09/12/2023	ND	4.0000		
Lead, total	ug/L	MW02-15A	03/12/2024	ND	4.0000		
Lead, total	ug/L	MW02-15A	09/30/2024	ND	4.0000		
Nickel, total	ug/L	MW02-15A	09/18/2014		10.4000		
Nickel, total	ug/L	MW02-15A	11/13/2014	ND	4.0000		
Nickel, total	ug/L	MW02-15A	03/17/2015	ND	4.0000		
Nickel, total	ug/L	MW02-15A	06/29/2015		5.6000		
Nickel, total	ug/L	MW02-15A	09/11/2015		8.3000		
Nickel, total	ug/L	MW02-15A	03/16/2016		10.3000		
Nickel, total	ug/L	MW02-15A	09/08/2016		14.0000		
Nickel, total	ug/L	MW02-15A	03/17/2017		11.9000		
Nickel, total	ug/L	MW02-15A	09/19/2017	ND	4.0000		
Nickel, total	ug/L	MW02-15A	03/08/2018	ND	4.0000		
Nickel, total	ug/L	MW02-15A	09/24/2018		5.7000		
Nickel, total	ug/L	MW02-15A	03/25/2019		9.9000		
Nickel, total	ug/L	MW02-15A	09/03/2019		9.1000		
Nickel, total	ug/L	MW02-15A	03/23/2020		9.7000		
Nickel, total	ug/L	MW02-15A	09/04/2020		9.9000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Nickel, total	ug/L	MW02-15A	03/09/2021		9.6000		
Nickel, total	ug/L	MW02-15A	09/07/2021		17.3000		
Nickel, total	ug/L	MW02-15A	03/28/2022		11.3000		
Nickel, total	ug/L	MW02-15A	09/14/2022		8.8000		
Nickel, total	ug/L	MW02-15A	03/20/2023		9.8000		
Nickel, total	ug/L	MW02-15A	09/12/2023		8.4000		
Nickel, total	ug/L	MW02-15A	03/12/2024		6.6000		
Nickel, total	ug/L	MW02-15A	09/30/2024		6.3000		
Selenium, total	ug/L	MW02-15A	09/18/2014	ND	4.0000		
Selenium, total	ug/L	MW02-15A	11/13/2014	ND	4.0000		
Selenium, total	ug/L	MW02-15A	03/17/2015	ND	4.0000		
Selenium, total	ug/L	MW02-15A	06/29/2015	ND	4.0000		
Selenium, total	ug/L	MW02-15A	09/11/2015	ND	4.0000		
Selenium, total	ug/L	MW02-15A	03/16/2016	ND	4.0000		
Selenium, total	ug/L	MW02-15A	09/08/2016	ND	4.0000		
Selenium, total	ug/L	MW02-15A	03/17/2017	ND	4.0000		
Selenium, total	ug/L	MW02-15A	09/19/2017	ND	4.0000		
Selenium, total	ug/L	MW02-15A	03/08/2018	ND	4.0000		
Selenium, total	ug/L	MW02-15A	09/24/2018	ND	4.0000		
Selenium, total	ug/L	MW02-15A	03/25/2019	ND	4.0000		
Selenium, total	ug/L	MW02-15A	09/03/2019	ND	4.0000		
Selenium, total	ug/L	MW02-15A	03/23/2020	ND	4.0000		
Selenium, total	ug/L	MW02-15A	09/04/2020	ND	4.0000		
Selenium, total	ug/L	MW02-15A	03/09/2021	ND	4.0000		
Selenium, total	ug/L	MW02-15A	09/07/2021	ND	4.0000		
Selenium, total	ug/L	MW02-15A	03/28/2022	ND	4.0000		
Selenium, total	ug/L	MW02-15A	09/14/2022	ND	4.0000		
Selenium, total	ug/L	MW02-15A	03/20/2023	ND	4.0000		
Selenium, total	ug/L	MW02-15A	09/12/2023	ND	4.0000		
Selenium, total	ug/L	MW02-15A	03/12/2024	ND	4.0000		
Selenium, total	ug/L	MW02-15A	09/30/2024	ND	4.0000		
Silver, total	ug/L	MW02-15A	09/18/2014	ND	4.0000		
Silver, total	ug/L	MW02-15A	11/13/2014	ND	4.0000		
Silver, total	ug/L	MW02-15A	03/17/2015	ND	4.0000		
Silver, total	ug/L	MW02-15A	06/29/2015	ND	4.0000		
Silver, total	ug/L	MW02-15A	09/11/2015	ND	4.0000		
Silver, total	ug/L	MW02-15A	03/16/2016	ND	4.0000		
Silver, total	ug/L	MW02-15A	09/08/2016	ND	4.0000		
Silver, total	ug/L	MW02-15A	03/17/2017	ND	4.0000		
Silver, total	ug/L	MW02-15A	09/19/2017	ND	4.0000		
Silver, total	ug/L	MW02-15A	03/08/2018	ND	4.0000		
Silver, total	ug/L	MW02-15A	09/24/2018	ND	4.0000		
Silver, total	ug/L	MW02-15A	03/25/2019	ND	4.0000		
Silver, total	ug/L	MW02-15A	09/03/2019	ND	4.0000		
Silver, total	ug/L	MW02-15A	03/23/2020	ND	4.0000		
Silver, total	ug/L	MW02-15A	09/04/2020	ND	4.0000		
Silver, total	ug/L	MW02-15A	03/09/2021	ND	4.0000		
Silver, total	ug/L	MW02-15A	09/07/2021	ND	4.0000		
Silver, total	ug/L	MW02-15A	03/28/2022	ND	4.0000		
Silver, total	ug/L	MW02-15A	09/14/2022	ND	4.0000		
Silver, total	ug/L	MW02-15A	03/20/2023	ND	4.0000		
Silver, total	ug/L	MW02-15A	09/12/2023	ND	4.0000		
Silver, total	ug/L	MW02-15A	03/12/2024	ND	4.0000		
Silver, total	ug/L	MW02-15A	09/30/2024	ND	4.0000		
Thallium, total	ug/L	MW02-15A	09/18/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW02-15A	11/13/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW02-15A	03/17/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW02-15A	06/29/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW02-15A	09/11/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW02-15A	03/16/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW02-15A	09/08/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW02-15A	03/17/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW02-15A	09/19/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW02-15A	03/08/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW02-15A	09/24/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW02-15A	03/25/2019	ND	2.0000		
Thallium, total	ug/L	MW02-15A	09/03/2019	ND	2.0000		
Thallium, total	ug/L	MW02-15A	03/23/2020	ND	2.0000		
Thallium, total	ug/L	MW02-15A	09/04/2020	ND	2.0000		
Thallium, total	ug/L	MW02-15A	03/09/2021	ND	2.0000		
Thallium, total	ug/L	MW02-15A	09/07/2021	ND	2.0000		
Thallium, total	ug/L	MW02-15A	03/28/2022	ND	2.0000		
Thallium, total	ug/L	MW02-15A	09/14/2022	ND	2.0000		
Thallium, total	ug/L	MW02-15A	03/20/2023	ND	2.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Thallium, total	ug/L	MW02-15A	09/12/2023	ND	2.0000		
Thallium, total	ug/L	MW02-15A	03/12/2024	ND	2.0000		
Thallium, total	ug/L	MW02-15A	09/30/2024	ND	2.0000		
Vanadium, total	ug/L	MW02-15A	09/18/2014	ND	20.0000		
Vanadium, total	ug/L	MW02-15A	11/13/2014	ND	20.0000		
Vanadium, total	ug/L	MW02-15A	03/17/2015	ND	20.0000		
Vanadium, total	ug/L	MW02-15A	06/29/2015	ND	20.0000		
Vanadium, total	ug/L	MW02-15A	09/11/2015	ND	20.0000		
Vanadium, total	ug/L	MW02-15A	03/16/2016	ND	20.0000		
Vanadium, total	ug/L	MW02-15A	09/08/2016	ND	20.0000		
Vanadium, total	ug/L	MW02-15A	03/17/2017	ND	20.0000		
Vanadium, total	ug/L	MW02-15A	09/19/2017	ND	20.0000		
Vanadium, total	ug/L	MW02-15A	03/08/2018	ND	20.0000		
Vanadium, total	ug/L	MW02-15A	09/24/2018	ND	20.0000		
Vanadium, total	ug/L	MW02-15A	03/25/2019	ND	20.0000		
Vanadium, total	ug/L	MW02-15A	09/03/2019	ND	20.0000		
Vanadium, total	ug/L	MW02-15A	03/23/2020	ND	20.0000		
Vanadium, total	ug/L	MW02-15A	09/04/2020	ND	20.0000		
Vanadium, total	ug/L	MW02-15A	03/09/2021	ND	20.0000		
Vanadium, total	ug/L	MW02-15A	09/07/2021	ND	20.0000		
Vanadium, total	ug/L	MW02-15A	03/28/2022	ND	20.0000		
Vanadium, total	ug/L	MW02-15A	09/14/2022	ND	20.0000		
Vanadium, total	ug/L	MW02-15A	03/20/2023	ND	20.0000		
Vanadium, total	ug/L	MW02-15A	09/12/2023	ND	20.0000		
Vanadium, total	ug/L	MW02-15A	03/12/2024	ND	20.0000		
Vanadium, total	ug/L	MW02-15A	09/30/2024	ND	20.0000		
Zinc, total	ug/L	MW02-15A	09/18/2014		11.3000		
Zinc, total	ug/L	MW02-15A	11/13/2014	ND	20.0000		
Zinc, total	ug/L	MW02-15A	03/17/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW02-15A	06/29/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW02-15A	09/11/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW02-15A	03/16/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW02-15A	09/08/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW02-15A	03/17/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW02-15A	09/19/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW02-15A	03/08/2018		9.3000		
Zinc, total	ug/L	MW02-15A	09/24/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW02-15A	03/25/2019	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW02-15A	09/03/2019	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW02-15A	03/23/2020	ND	20.0000		
Zinc, total	ug/L	MW02-15A	09/04/2020	ND	20.0000		
Zinc, total	ug/L	MW02-15A	03/09/2021	ND	20.0000		
Zinc, total	ug/L	MW02-15A	09/07/2021	ND	20.0000		
Zinc, total	ug/L	MW02-15A	03/28/2022	ND	20.0000		
Zinc, total	ug/L	MW02-15A	09/14/2022	ND	20.0000		
Zinc, total	ug/L	MW02-15A	03/20/2023	ND	20.0000		
Zinc, total	ug/L	MW02-15A	09/12/2023	ND	20.0000		
Zinc, total	ug/L	MW02-15A	03/12/2024	ND	20.0000		
Zinc, total	ug/L	MW02-15A	09/30/2024	ND	20.0000		
Antimony, total	ug/L	MW02-30A	03/16/2016	ND	2.0000		
Antimony, total	ug/L	MW02-30A	06/07/2016	ND	2.0000		
Antimony, total	ug/L	MW02-30A	09/08/2016	ND	2.0000		
Antimony, total	ug/L	MW02-30A	03/17/2017	ND	2.0000		
Antimony, total	ug/L	MW02-30A	09/19/2017	ND	2.0000		
Antimony, total	ug/L	MW02-30A	03/08/2018	ND	2.0000		
Antimony, total	ug/L	MW02-30A	09/24/2018	ND	2.0000		
Antimony, total	ug/L	MW02-30A	03/25/2019	ND	2.0000		
Antimony, total	ug/L	MW02-30A	09/03/2019	ND	2.0000		
Antimony, total	ug/L	MW02-30A	03/23/2020	ND	2.0000		
Antimony, total	ug/L	MW02-30A	09/04/2020	ND	2.0000		
Antimony, total	ug/L	MW02-30A	03/09/2021	ND	2.0000		
Antimony, total	ug/L	MW02-30A	09/07/2021	ND	2.0000		
Antimony, total	ug/L	MW02-30A	03/28/2022	ND	2.0000		
Antimony, total	ug/L	MW02-30A	09/14/2022	ND	2.0000		
Antimony, total	ug/L	MW02-30A	03/20/2023	ND	2.0000		
Antimony, total	ug/L	MW02-30A	09/12/2023	ND	2.0000		
Antimony, total	ug/L	MW02-30A	03/12/2024	ND	2.0000		
Antimony, total	ug/L	MW02-30A	09/30/2024	ND	2.0000		
Arsenic, total	ug/L	MW02-30A	03/16/2016		43.9000		
Arsenic, total	ug/L	MW02-30A	06/07/2016		34.2000		
Arsenic, total	ug/L	MW02-30A	09/08/2016		37.5000		
Arsenic, total	ug/L	MW02-30A	03/17/2017		30.0000		
Arsenic, total	ug/L	MW02-30A	09/19/2017		24.3000		
Arsenic, total	ug/L	MW02-30A	03/08/2018		25.7000		

*   - 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	MW02-30A	09/24/2018		26.2000		
Arsenic, total	ug/L	MW02-30A	03/25/2019		30.9000		
Arsenic, total	ug/L	MW02-30A	09/03/2019		32.7000		
Arsenic, total	ug/L	MW02-30A	03/23/2020		29.1000		
Arsenic, total	ug/L	MW02-30A	09/04/2020		43.5000		
Arsenic, total	ug/L	MW02-30A	03/09/2021		27.6000		
Arsenic, total	ug/L	MW02-30A	09/07/2021		36.6000		
Arsenic, total	ug/L	MW02-30A	03/28/2022		34.4000		
Arsenic, total	ug/L	MW02-30A	09/14/2022		50.6000		
Arsenic, total	ug/L	MW02-30A	03/20/2023		50.1000		
Arsenic, total	ug/L	MW02-30A	09/12/2023		27.9000		
Arsenic, total	ug/L	MW02-30A	03/12/2024		44.3000		
Arsenic, total	ug/L	MW02-30A	09/30/2024		41.0000		
Barium, total	ug/L	MW02-30A	03/16/2016		85.6000		
Barium, total	ug/L	MW02-30A	06/07/2016		71.3000		
Barium, total	ug/L	MW02-30A	09/08/2016		62.8000		
Barium, total	ug/L	MW02-30A	03/17/2017		35.6000		
Barium, total	ug/L	MW02-30A	09/19/2017		77.3000		
Barium, total	ug/L	MW02-30A	03/08/2018		79.6000		
Barium, total	ug/L	MW02-30A	09/24/2018		96.5000		
Barium, total	ug/L	MW02-30A	03/25/2019		131.0000		
Barium, total	ug/L	MW02-30A	09/03/2019		91.8000		
Barium, total	ug/L	MW02-30A	03/23/2020		102.0000		
Barium, total	ug/L	MW02-30A	09/04/2020		93.4000		
Barium, total	ug/L	MW02-30A	03/09/2021		81.5000		
Barium, total	ug/L	MW02-30A	09/07/2021		88.2000		
Barium, total	ug/L	MW02-30A	03/28/2022		93.4000		
Barium, total	ug/L	MW02-30A	09/14/2022		159.0000		
Barium, total	ug/L	MW02-30A	03/20/2023		207.0000		
Barium, total	ug/L	MW02-30A	09/12/2023		71.8000		
Barium, total	ug/L	MW02-30A	03/12/2024		120.0000		
Barium, total	ug/L	MW02-30A	09/30/2024		86.8000		
Beryllium, total	ug/L	MW02-30A	03/16/2016	ND	4.0000		
Beryllium, total	ug/L	MW02-30A	06/07/2016	ND	4.0000		
Beryllium, total	ug/L	MW02-30A	09/08/2016	ND	4.0000		
Beryllium, total	ug/L	MW02-30A	03/17/2017	ND	4.0000		
Beryllium, total	ug/L	MW02-30A	09/19/2017	ND	4.0000		
Beryllium, total	ug/L	MW02-30A	03/08/2018	ND	4.0000		
Beryllium, total	ug/L	MW02-30A	09/24/2018	ND	4.0000		
Beryllium, total	ug/L	MW02-30A	03/25/2019	ND	4.0000		
Beryllium, total	ug/L	MW02-30A	09/03/2019	ND	4.0000		
Beryllium, total	ug/L	MW02-30A	03/23/2020	ND	4.0000		
Beryllium, total	ug/L	MW02-30A	09/04/2020	ND	4.0000		
Beryllium, total	ug/L	MW02-30A	03/09/2021	ND	4.0000		
Beryllium, total	ug/L	MW02-30A	09/07/2021	ND	4.0000		
Beryllium, total	ug/L	MW02-30A	03/28/2022	ND	4.0000		
Beryllium, total	ug/L	MW02-30A	09/14/2022	ND	4.0000		
Beryllium, total	ug/L	MW02-30A	03/20/2023	ND	4.0000		
Beryllium, total	ug/L	MW02-30A	09/12/2023	ND	4.0000		
Beryllium, total	ug/L	MW02-30A	03/12/2024	ND	4.0000		
Beryllium, total	ug/L	MW02-30A	09/30/2024	ND	4.0000		
Cadmium, total	ug/L	MW02-30A	03/16/2016	ND	0.8000		
Cadmium, total	ug/L	MW02-30A	06/07/2016	ND	0.8000		
Cadmium, total	ug/L	MW02-30A	09/08/2016	ND	0.8000		
Cadmium, total	ug/L	MW02-30A	03/17/2017	ND	0.8000		
Cadmium, total	ug/L	MW02-30A	09/19/2017	ND	0.8000		
Cadmium, total	ug/L	MW02-30A	03/08/2018	ND	0.8000		
Cadmium, total	ug/L	MW02-30A	09/24/2018	ND	0.8000		
Cadmium, total	ug/L	MW02-30A	03/25/2019	ND	0.8000		
Cadmium, total	ug/L	MW02-30A	09/03/2019	ND	0.8000		
Cadmium, total	ug/L	MW02-30A	03/23/2020	ND	0.8000		
Cadmium, total	ug/L	MW02-30A	09/04/2020	ND	0.8000		
Cadmium, total	ug/L	MW02-30A	03/09/2021	ND	0.8000		
Cadmium, total	ug/L	MW02-30A	09/07/2021	ND	0.8000		
Cadmium, total	ug/L	MW02-30A	03/28/2022	ND	0.8000		
Cadmium, total	ug/L	MW02-30A	09/14/2022		0.8000		
Cadmium, total	ug/L	MW02-30A	03/20/2023		1.8000		
Cadmium, total	ug/L	MW02-30A	09/12/2023	ND	0.8000		
Cadmium, total	ug/L	MW02-30A	03/12/2024	ND	0.8000		
Cadmium, total	ug/L	MW02-30A	09/30/2024	ND	0.8000		
Chromium, total	ug/L	MW02-30A	03/16/2016	ND	8.0000		
Chromium, total	ug/L	MW02-30A	06/07/2016	ND	8.0000		
Chromium, total	ug/L	MW02-30A	09/08/2016	ND	8.0000		
Chromium, total	ug/L	MW02-30A	03/17/2017	ND	8.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Chromium, total	ug/L	MW02-30A	09/19/2017	ND	8.0000		
Chromium, total	ug/L	MW02-30A	03/08/2018	ND	8.0000		
Chromium, total	ug/L	MW02-30A	09/24/2018	ND	8.0000		
Chromium, total	ug/L	MW02-30A	03/25/2019	ND	8.0000		
Chromium, total	ug/L	MW02-30A	09/03/2019	ND	8.0000		
Chromium, total	ug/L	MW02-30A	03/23/2020	ND	8.0000		
Chromium, total	ug/L	MW02-30A	09/04/2020	ND	8.0000		
Chromium, total	ug/L	MW02-30A	03/09/2021	ND	8.0000		
Chromium, total	ug/L	MW02-30A	09/07/2021	ND	8.0000		
Chromium, total	ug/L	MW02-30A	03/28/2022	ND	8.0000		
Chromium, total	ug/L	MW02-30A	09/14/2022		9.0000		
Chromium, total	ug/L	MW02-30A	03/20/2023		10.6000		
Chromium, total	ug/L	MW02-30A	09/12/2023	ND	8.0000		
Chromium, total	ug/L	MW02-30A	03/12/2024	ND	8.0000		
Chromium, total	ug/L	MW02-30A	09/30/2024	ND	8.0000		
Cobalt, total	ug/L	MW02-30A	03/16/2016		1.0000		
Cobalt, total	ug/L	MW02-30A	06/07/2016		1.2000		
Cobalt, total	ug/L	MW02-30A	09/08/2016	ND	0.8000		
Cobalt, total	ug/L	MW02-30A	03/17/2017	ND	0.8000		
Cobalt, total	ug/L	MW02-30A	09/19/2017	ND	0.8000		
Cobalt, total	ug/L	MW02-30A	03/08/2018	ND	0.8000		
Cobalt, total	ug/L	MW02-30A	09/24/2018		1.8000		
Cobalt, total	ug/L	MW02-30A	03/25/2019		3.2000		
Cobalt, total	ug/L	MW02-30A	09/03/2019		0.8000		
Cobalt, total	ug/L	MW02-30A	03/23/2020		2.3000		
Cobalt, total	ug/L	MW02-30A	09/04/2020		0.4000		
Cobalt, total	ug/L	MW02-30A	03/09/2021		1.5000		
Cobalt, total	ug/L	MW02-30A	09/07/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW02-30A	03/28/2022		0.4000		
Cobalt, total	ug/L	MW02-30A	09/14/2022		7.0000		
Cobalt, total	ug/L	MW02-30A	03/20/2023		4.5000		
Cobalt, total	ug/L	MW02-30A	09/12/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW02-30A	03/12/2024		0.6000		
Cobalt, total	ug/L	MW02-30A	09/30/2024	ND	0.4000	0.8000	**
Copper, total	ug/L	MW02-30A	03/16/2016	ND	4.0000		
Copper, total	ug/L	MW02-30A	06/07/2016	ND	4.0000		
Copper, total	ug/L	MW02-30A	09/08/2016	ND	4.0000		
Copper, total	ug/L	MW02-30A	03/17/2017	ND	4.0000		
Copper, total	ug/L	MW02-30A	09/19/2017	ND	4.0000		
Copper, total	ug/L	MW02-30A	03/08/2018	ND	4.0000		
Copper, total	ug/L	MW02-30A	09/24/2018		4.8000		
Copper, total	ug/L	MW02-30A	03/25/2019		13.5000		
Copper, total	ug/L	MW02-30A	09/03/2019	ND	4.0000		
Copper, total	ug/L	MW02-30A	03/23/2020		9.3000		
Copper, total	ug/L	MW02-30A	09/04/2020	ND	4.0000		
Copper, total	ug/L	MW02-30A	03/09/2021		9.4000		
Copper, total	ug/L	MW02-30A	09/07/2021	ND	4.0000		
Copper, total	ug/L	MW02-30A	03/28/2022	ND	4.0000		
Copper, total	ug/L	MW02-30A	09/14/2022		19.5000		
Copper, total	ug/L	MW02-30A	03/20/2023		18.3000		
Copper, total	ug/L	MW02-30A	09/12/2023	ND	4.0000		
Copper, total	ug/L	MW02-30A	03/12/2024	ND	4.0000		
Copper, total	ug/L	MW02-30A	09/30/2024	ND	4.0000		
Lead, total	ug/L	MW02-30A	03/16/2016	ND	4.0000		
Lead, total	ug/L	MW02-30A	06/07/2016	ND	4.0000		
Lead, total	ug/L	MW02-30A	09/08/2016	ND	4.0000		
Lead, total	ug/L	MW02-30A	03/17/2017	ND	4.0000		
Lead, total	ug/L	MW02-30A	09/19/2017	ND	4.0000		
Lead, total	ug/L	MW02-30A	03/08/2018	ND	4.0000		
Lead, total	ug/L	MW02-30A	09/24/2018	ND	4.0000		
Lead, total	ug/L	MW02-30A	03/25/2019		8.9000		
Lead, total	ug/L	MW02-30A	09/03/2019	ND	4.0000		
Lead, total	ug/L	MW02-30A	03/23/2020		7.0000		
Lead, total	ug/L	MW02-30A	09/04/2020	ND	4.0000		
Lead, total	ug/L	MW02-30A	03/09/2021	ND	4.0000		
Lead, total	ug/L	MW02-30A	09/07/2021	ND	4.0000		
Lead, total	ug/L	MW02-30A	03/28/2022	ND	4.0000		
Lead, total	ug/L	MW02-30A	09/14/2022		14.8000		*
Lead, total	ug/L	MW02-30A	03/20/2023		22.3000		*
Lead, total	ug/L	MW02-30A	09/12/2023	ND	4.0000		
Lead, total	ug/L	MW02-30A	03/12/2024	ND	4.0000		
Lead, total	ug/L	MW02-30A	09/30/2024	ND	4.0000		
Nickel, total	ug/L	MW02-30A	03/16/2016	ND	4.0000		
Nickel, total	ug/L	MW02-30A	06/07/2016	ND	4.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Nickel, total	ug/L	MW02-30A	09/08/2016	ND	4.0000		
Nickel, total	ug/L	MW02-30A	03/17/2017	ND	4.0000		
Nickel, total	ug/L	MW02-30A	09/19/2017	ND	4.0000		
Nickel, total	ug/L	MW02-30A	03/08/2018	ND	4.0000		
Nickel, total	ug/L	MW02-30A	09/24/2018	ND	4.0000		
Nickel, total	ug/L	MW02-30A	03/25/2019		9.4000		
Nickel, total	ug/L	MW02-30A	09/03/2019	ND	4.0000		
Nickel, total	ug/L	MW02-30A	03/23/2020		7.0000		
Nickel, total	ug/L	MW02-30A	09/04/2020	ND	4.0000		
Nickel, total	ug/L	MW02-30A	03/09/2021		4.3000		
Nickel, total	ug/L	MW02-30A	09/07/2021	ND	4.0000		
Nickel, total	ug/L	MW02-30A	03/28/2022	ND	4.0000		
Nickel, total	ug/L	MW02-30A	09/14/2022		12.4000		
Nickel, total	ug/L	MW02-30A	03/20/2023		12.9000		
Nickel, total	ug/L	MW02-30A	09/12/2023	ND	4.0000		
Nickel, total	ug/L	MW02-30A	03/12/2024	ND	4.0000		
Nickel, total	ug/L	MW02-30A	09/30/2024	ND	4.0000		
Selenium, total	ug/L	MW02-30A	03/16/2016	ND	4.0000		
Selenium, total	ug/L	MW02-30A	06/07/2016	ND	4.0000		
Selenium, total	ug/L	MW02-30A	09/08/2016	ND	4.0000		
Selenium, total	ug/L	MW02-30A	03/17/2017	ND	4.0000		
Selenium, total	ug/L	MW02-30A	09/19/2017	ND	4.0000		
Selenium, total	ug/L	MW02-30A	03/08/2018	ND	4.0000		
Selenium, total	ug/L	MW02-30A	09/24/2018	ND	4.0000		
Selenium, total	ug/L	MW02-30A	03/25/2019	ND	4.0000		
Selenium, total	ug/L	MW02-30A	09/03/2019	ND	4.0000		
Selenium, total	ug/L	MW02-30A	03/23/2020	ND	4.0000		
Selenium, total	ug/L	MW02-30A	09/04/2020	ND	4.0000		
Selenium, total	ug/L	MW02-30A	03/09/2021	ND	4.0000		
Selenium, total	ug/L	MW02-30A	09/07/2021	ND	4.0000		
Selenium, total	ug/L	MW02-30A	03/28/2022	ND	4.0000		
Selenium, total	ug/L	MW02-30A	09/14/2022	ND	4.0000		
Selenium, total	ug/L	MW02-30A	03/20/2023	ND	4.0000		
Selenium, total	ug/L	MW02-30A	09/12/2023	ND	4.0000		
Selenium, total	ug/L	MW02-30A	03/12/2024	ND	4.0000		
Selenium, total	ug/L	MW02-30A	09/30/2024	ND	4.0000		
Silver, total	ug/L	MW02-30A	03/16/2016	ND	4.0000		
Silver, total	ug/L	MW02-30A	06/07/2016	ND	4.0000		
Silver, total	ug/L	MW02-30A	09/08/2016	ND	4.0000		
Silver, total	ug/L	MW02-30A	03/17/2017	ND	4.0000		
Silver, total	ug/L	MW02-30A	09/19/2017	ND	4.0000		
Silver, total	ug/L	MW02-30A	03/08/2018	ND	4.0000		
Silver, total	ug/L	MW02-30A	09/24/2018	ND	4.0000		
Silver, total	ug/L	MW02-30A	03/25/2019	ND	4.0000		
Silver, total	ug/L	MW02-30A	09/03/2019	ND	4.0000		
Silver, total	ug/L	MW02-30A	03/23/2020	ND	4.0000		
Silver, total	ug/L	MW02-30A	09/04/2020	ND	4.0000		
Silver, total	ug/L	MW02-30A	03/09/2021	ND	4.0000		
Silver, total	ug/L	MW02-30A	09/07/2021	ND	4.0000		
Silver, total	ug/L	MW02-30A	03/28/2022	ND	4.0000		
Silver, total	ug/L	MW02-30A	09/14/2022	ND	4.0000		
Silver, total	ug/L	MW02-30A	03/20/2023	ND	4.0000		
Silver, total	ug/L	MW02-30A	09/12/2023	ND	4.0000		
Silver, total	ug/L	MW02-30A	03/12/2024	ND	4.0000		
Silver, total	ug/L	MW02-30A	09/30/2024	ND	4.0000		
Thallium, total	ug/L	MW02-30A	03/16/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW02-30A	06/07/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW02-30A	09/08/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW02-30A	03/17/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW02-30A	09/19/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW02-30A	03/08/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW02-30A	09/24/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW02-30A	03/25/2019	ND	2.0000		
Thallium, total	ug/L	MW02-30A	09/03/2019	ND	2.0000		
Thallium, total	ug/L	MW02-30A	03/23/2020	ND	2.0000		
Thallium, total	ug/L	MW02-30A	09/04/2020	ND	2.0000		
Thallium, total	ug/L	MW02-30A	03/09/2021	ND	2.0000		
Thallium, total	ug/L	MW02-30A	09/07/2021	ND	2.0000		
Thallium, total	ug/L	MW02-30A	03/28/2022	ND	2.0000		
Thallium, total	ug/L	MW02-30A	09/14/2022	ND	2.0000		
Thallium, total	ug/L	MW02-30A	03/20/2023	ND	2.0000		
Thallium, total	ug/L	MW02-30A	09/12/2023	ND	2.0000		
Thallium, total	ug/L	MW02-30A	03/12/2024	ND	2.0000		
Thallium, total	ug/L	MW02-30A	09/30/2024	ND	2.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Vanadium, total	ug/L	MW02-30A	03/16/2016	ND	20.0000		
Vanadium, total	ug/L	MW02-30A	06/07/2016	ND	20.0000		
Vanadium, total	ug/L	MW02-30A	09/08/2016	ND	20.0000		
Vanadium, total	ug/L	MW02-30A	03/17/2017	ND	20.0000		
Vanadium, total	ug/L	MW02-30A	09/19/2017	ND	20.0000		
Vanadium, total	ug/L	MW02-30A	03/08/2018	ND	20.0000		
Vanadium, total	ug/L	MW02-30A	09/24/2018	ND	20.0000		
Vanadium, total	ug/L	MW02-30A	03/25/2019	ND	20.0000		
Vanadium, total	ug/L	MW02-30A	09/03/2019	ND	20.0000		
Vanadium, total	ug/L	MW02-30A	03/23/2020	ND	20.0000		
Vanadium, total	ug/L	MW02-30A	09/04/2020	ND	20.0000		
Vanadium, total	ug/L	MW02-30A	03/09/2021	ND	20.0000		
Vanadium, total	ug/L	MW02-30A	09/07/2021	ND	20.0000		
Vanadium, total	ug/L	MW02-30A	03/28/2022	ND	20.0000		
Vanadium, total	ug/L	MW02-30A	09/14/2022	ND	20.0000		
Vanadium, total	ug/L	MW02-30A	03/20/2023	ND	20.0000		
Vanadium, total	ug/L	MW02-30A	09/12/2023	ND	20.0000		
Vanadium, total	ug/L	MW02-30A	03/12/2024	ND	20.0000		
Vanadium, total	ug/L	MW02-30A	09/30/2024	ND	20.0000		
Zinc, total	ug/L	MW02-30A	03/16/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW02-30A	06/07/2016		8.7000		
Zinc, total	ug/L	MW02-30A	09/08/2016		9.9000		
Zinc, total	ug/L	MW02-30A	03/17/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW02-30A	09/19/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW02-30A	03/08/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW02-30A	09/24/2018		12.9000		
Zinc, total	ug/L	MW02-30A	03/25/2019		59.9000		
Zinc, total	ug/L	MW02-30A	09/03/2019		16.3000		
Zinc, total	ug/L	MW02-30A	03/23/2020		28.5000		
Zinc, total	ug/L	MW02-30A	09/04/2020	ND	20.0000		
Zinc, total	ug/L	MW02-30A	03/09/2021	ND	20.0000		
Zinc, total	ug/L	MW02-30A	09/07/2021	ND	20.0000		
Zinc, total	ug/L	MW02-30A	03/28/2022	ND	20.0000		
Zinc, total	ug/L	MW02-30A	09/14/2022		52.8000		
Zinc, total	ug/L	MW02-30A	03/20/2023		144.0000		
Zinc, total	ug/L	MW02-30A	09/12/2023	ND	20.0000		
Zinc, total	ug/L	MW02-30A	03/12/2024	ND	20.0000		
Zinc, total	ug/L	MW02-30A	09/30/2024	ND	20.0000		
Antimony, total	ug/L	MW88-2	09/18/2014	ND	2.0000		
Antimony, total	ug/L	MW88-2	11/13/2014	ND	2.0000		
Antimony, total	ug/L	MW88-2	03/17/2015	ND	2.0000		
Antimony, total	ug/L	MW88-2	06/29/2015	ND	2.0000		
Antimony, total	ug/L	MW88-2	09/11/2015	ND	2.0000		
Antimony, total	ug/L	MW88-2	03/16/2016	ND	2.0000		
Antimony, total	ug/L	MW88-2	09/08/2016	ND	2.0000		
Antimony, total	ug/L	MW88-2	03/17/2017	ND	2.0000		
Antimony, total	ug/L	MW88-2	09/19/2017	ND	2.0000		
Antimony, total	ug/L	MW88-2	03/08/2018	ND	2.0000		
Antimony, total	ug/L	MW88-2	09/24/2018	ND	2.0000		
Antimony, total	ug/L	MW88-2	03/25/2019	ND	2.0000		
Antimony, total	ug/L	MW88-2	09/03/2019	ND	2.0000		
Antimony, total	ug/L	MW88-2	03/23/2020	ND	2.0000		
Antimony, total	ug/L	MW88-2	09/04/2020	ND	2.0000		
Antimony, total	ug/L	MW88-2	03/09/2021	ND	2.0000		
Antimony, total	ug/L	MW88-2	03/28/2022	ND	2.0000		
Antimony, total	ug/L	MW88-2	09/14/2022	ND	2.0000		
Antimony, total	ug/L	MW88-2	03/20/2023	ND	2.0000		
Antimony, total	ug/L	MW88-2	09/12/2023	ND	2.0000		
Antimony, total	ug/L	MW88-2	03/12/2024	ND	2.0000		
Antimony, total	ug/L	MW88-2	09/30/2024	ND	2.0000		
Arsenic, total	ug/L	MW88-2	09/18/2014		16.1000		
Arsenic, total	ug/L	MW88-2	11/13/2014		7.4000		
Arsenic, total	ug/L	MW88-2	03/17/2015	ND	4.0000		
Arsenic, total	ug/L	MW88-2	06/29/2015	ND	4.0000		
Arsenic, total	ug/L	MW88-2	09/11/2015	ND	4.0000		
Arsenic, total	ug/L	MW88-2	03/16/2016	ND	4.0000		
Arsenic, total	ug/L	MW88-2	09/08/2016		6.6000		
Arsenic, total	ug/L	MW88-2	03/17/2017	ND	4.0000		
Arsenic, total	ug/L	MW88-2	09/19/2017	ND	4.0000		
Arsenic, total	ug/L	MW88-2	03/08/2018		6.1000		
Arsenic, total	ug/L	MW88-2	09/24/2018		24.3000		
Arsenic, total	ug/L	MW88-2	03/25/2019		11.0000		
Arsenic, total	ug/L	MW88-2	09/03/2019		10.6000		
Arsenic, total	ug/L	MW88-2	03/23/2020	ND	4.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Arsenic, total	ug/L	MW88-2	09/04/2020	ND	4.0000		
Arsenic, total	ug/L	MW88-2	03/09/2021		10.4000		
Arsenic, total	ug/L	MW88-2	03/28/2022	ND	4.0000		
Arsenic, total	ug/L	MW88-2	09/14/2022	ND	4.0000		
Arsenic, total	ug/L	MW88-2	03/20/2023	ND	4.0000		
Arsenic, total	ug/L	MW88-2	09/12/2023		5.1000		
Arsenic, total	ug/L	MW88-2	03/12/2024		12.7000		
Arsenic, total	ug/L	MW88-2	09/30/2024		19.3000		
Barium, total	ug/L	MW88-2	09/18/2014		661.0000		
Barium, total	ug/L	MW88-2	11/13/2014		751.0000		
Barium, total	ug/L	MW88-2	03/17/2015		595.0000		
Barium, total	ug/L	MW88-2	06/29/2015		451.0000		
Barium, total	ug/L	MW88-2	09/11/2015		296.0000		
Barium, total	ug/L	MW88-2	03/16/2016		95.8000		
Barium, total	ug/L	MW88-2	09/08/2016		411.0000		
Barium, total	ug/L	MW88-2	03/17/2017		179.0000		
Barium, total	ug/L	MW88-2	09/19/2017		684.0000		
Barium, total	ug/L	MW88-2	03/08/2018		632.0000		
Barium, total	ug/L	MW88-2	09/24/2018		371.0000		
Barium, total	ug/L	MW88-2	03/25/2019		273.0000		
Barium, total	ug/L	MW88-2	09/03/2019		97.7000		
Barium, total	ug/L	MW88-2	03/23/2020		75.7000		
Barium, total	ug/L	MW88-2	09/04/2020		623.0000		
Barium, total	ug/L	MW88-2	03/09/2021		874.0000		
Barium, total	ug/L	MW88-2	03/28/2022		274.0000		
Barium, total	ug/L	MW88-2	09/14/2022		376.0000		
Barium, total	ug/L	MW88-2	03/20/2023		152.0000		
Barium, total	ug/L	MW88-2	09/12/2023		287.0000		
Barium, total	ug/L	MW88-2	03/12/2024		270.0000		
Barium, total	ug/L	MW88-2	09/30/2024		357.0000		
Beryllium, total	ug/L	MW88-2	09/18/2014	ND	4.0000		
Beryllium, total	ug/L	MW88-2	11/13/2014	ND	4.0000		
Beryllium, total	ug/L	MW88-2	03/17/2015	ND	4.0000		
Beryllium, total	ug/L	MW88-2	06/29/2015	ND	4.0000		
Beryllium, total	ug/L	MW88-2	09/11/2015	ND	4.0000		
Beryllium, total	ug/L	MW88-2	03/16/2016	ND	4.0000		
Beryllium, total	ug/L	MW88-2	09/08/2016	ND	4.0000		
Beryllium, total	ug/L	MW88-2	03/17/2017	ND	4.0000		
Beryllium, total	ug/L	MW88-2	09/19/2017	ND	4.0000		
Beryllium, total	ug/L	MW88-2	03/08/2018	ND	4.0000		
Beryllium, total	ug/L	MW88-2	09/24/2018	ND	4.0000		
Beryllium, total	ug/L	MW88-2	03/25/2019	ND	4.0000		
Beryllium, total	ug/L	MW88-2	09/03/2019	ND	4.0000		
Beryllium, total	ug/L	MW88-2	03/23/2020	ND	4.0000		
Beryllium, total	ug/L	MW88-2	09/04/2020	ND	4.0000		
Beryllium, total	ug/L	MW88-2	03/09/2021	ND	4.0000		
Beryllium, total	ug/L	MW88-2	03/28/2022	ND	4.0000		
Beryllium, total	ug/L	MW88-2	09/14/2022	ND	4.0000		
Beryllium, total	ug/L	MW88-2	03/20/2023	ND	4.0000		
Beryllium, total	ug/L	MW88-2	09/12/2023	ND	4.0000		
Beryllium, total	ug/L	MW88-2	03/12/2024	ND	4.0000		
Beryllium, total	ug/L	MW88-2	09/30/2024	ND	4.0000		
Cadmium, total	ug/L	MW88-2	09/18/2014	ND	0.8000		
Cadmium, total	ug/L	MW88-2	11/13/2014	ND	0.8000		
Cadmium, total	ug/L	MW88-2	03/17/2015	ND	0.8000		
Cadmium, total	ug/L	MW88-2	06/29/2015	ND	0.8000		
Cadmium, total	ug/L	MW88-2	09/11/2015	ND	0.8000		
Cadmium, total	ug/L	MW88-2	03/16/2016		4.6000		*
Cadmium, total	ug/L	MW88-2	09/08/2016	ND	0.8000		
Cadmium, total	ug/L	MW88-2	03/17/2017		1.1000		
Cadmium, total	ug/L	MW88-2	09/19/2017		2.5000		*
Cadmium, total	ug/L	MW88-2	03/08/2018	ND	0.8000		
Cadmium, total	ug/L	MW88-2	09/24/2018	ND	0.8000		
Cadmium, total	ug/L	MW88-2	03/25/2019	ND	0.8000		
Cadmium, total	ug/L	MW88-2	09/03/2019	ND	0.8000		
Cadmium, total	ug/L	MW88-2	03/23/2020	ND	0.8000		
Cadmium, total	ug/L	MW88-2	09/04/2020	ND	0.8000		
Cadmium, total	ug/L	MW88-2	03/09/2021	ND	0.8000		
Cadmium, total	ug/L	MW88-2	03/28/2022	ND	0.8000		
Cadmium, total	ug/L	MW88-2	09/14/2022	ND	0.8000		
Cadmium, total	ug/L	MW88-2	03/20/2023	ND	0.8000		
Cadmium, total	ug/L	MW88-2	09/12/2023	ND	0.8000		
Cadmium, total	ug/L	MW88-2	03/12/2024	ND	0.8000		
Cadmium, total	ug/L	MW88-2	09/30/2024	ND	0.8000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Chromium, total	ug/L	MW88-2	09/18/2014	ND	8.0000		
Chromium, total	ug/L	MW88-2	11/13/2014	ND	8.0000		
Chromium, total	ug/L	MW88-2	03/17/2015	ND	8.0000		
Chromium, total	ug/L	MW88-2	06/29/2015	ND	8.0000		
Chromium, total	ug/L	MW88-2	09/11/2015	ND	8.0000		
Chromium, total	ug/L	MW88-2	03/16/2016	ND	8.0000		
Chromium, total	ug/L	MW88-2	09/08/2016	ND	8.0000		
Chromium, total	ug/L	MW88-2	03/17/2017	ND	8.0000		
Chromium, total	ug/L	MW88-2	09/19/2017	ND	8.0000		
Chromium, total	ug/L	MW88-2	03/08/2018	ND	8.0000		
Chromium, total	ug/L	MW88-2	09/24/2018	ND	8.0000		
Chromium, total	ug/L	MW88-2	03/25/2019	ND	8.0000		
Chromium, total	ug/L	MW88-2	09/03/2019	ND	8.0000		
Chromium, total	ug/L	MW88-2	03/23/2020	ND	8.0000		
Chromium, total	ug/L	MW88-2	09/04/2020	ND	8.0000		
Chromium, total	ug/L	MW88-2	03/09/2021	ND	8.0000		
Chromium, total	ug/L	MW88-2	03/28/2022	ND	8.0000		
Chromium, total	ug/L	MW88-2	09/14/2022	ND	8.0000		
Chromium, total	ug/L	MW88-2	03/20/2023	ND	8.0000		
Chromium, total	ug/L	MW88-2	09/12/2023	ND	8.0000		
Chromium, total	ug/L	MW88-2	03/12/2024	ND	8.0000		
Chromium, total	ug/L	MW88-2	09/30/2024	ND	8.0000		
Cobalt, total	ug/L	MW88-2	09/18/2014	ND	0.8000		
Cobalt, total	ug/L	MW88-2	11/13/2014	ND	0.8000		
Cobalt, total	ug/L	MW88-2	03/17/2015	ND	0.8000		
Cobalt, total	ug/L	MW88-2	06/29/2015	ND	0.8000		
Cobalt, total	ug/L	MW88-2	09/11/2015	ND	0.8000		
Cobalt, total	ug/L	MW88-2	03/16/2016	ND	0.8000		
Cobalt, total	ug/L	MW88-2	09/08/2016	ND	0.8000		
Cobalt, total	ug/L	MW88-2	03/17/2017		0.8000		
Cobalt, total	ug/L	MW88-2	09/19/2017	ND	0.8000		
Cobalt, total	ug/L	MW88-2	03/08/2018	ND	0.8000		
Cobalt, total	ug/L	MW88-2	09/24/2018	ND	0.8000		
Cobalt, total	ug/L	MW88-2	03/25/2019		1.0000		
Cobalt, total	ug/L	MW88-2	09/03/2019		1.5000		
Cobalt, total	ug/L	MW88-2	03/23/2020	ND	0.8000		
Cobalt, total	ug/L	MW88-2	09/04/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW88-2	03/09/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW88-2	03/28/2022		0.9000		
Cobalt, total	ug/L	MW88-2	09/14/2022		2.6000		
Cobalt, total	ug/L	MW88-2	03/20/2023		0.8000		
Cobalt, total	ug/L	MW88-2	09/12/2023		0.4000		
Cobalt, total	ug/L	MW88-2	03/12/2024		0.8000		
Cobalt, total	ug/L	MW88-2	09/30/2024	ND	0.4000	0.8000	**
Copper, total	ug/L	MW88-2	09/18/2014	ND	4.0000		
Copper, total	ug/L	MW88-2	11/13/2014	ND	4.0000		
Copper, total	ug/L	MW88-2	03/17/2015	ND	4.0000		
Copper, total	ug/L	MW88-2	06/29/2015	ND	4.0000		
Copper, total	ug/L	MW88-2	09/11/2015	ND	4.0000		
Copper, total	ug/L	MW88-2	03/16/2016	ND	4.0000		
Copper, total	ug/L	MW88-2	09/08/2016	ND	4.0000		
Copper, total	ug/L	MW88-2	03/17/2017	ND	4.0000		
Copper, total	ug/L	MW88-2	09/19/2017		9.0000		
Copper, total	ug/L	MW88-2	03/08/2018	ND	4.0000		
Copper, total	ug/L	MW88-2	09/24/2018	ND	4.0000		
Copper, total	ug/L	MW88-2	03/25/2019	ND	4.0000		
Copper, total	ug/L	MW88-2	09/03/2019	ND	4.0000		
Copper, total	ug/L	MW88-2	03/23/2020	ND	4.0000		
Copper, total	ug/L	MW88-2	09/04/2020	ND	4.0000		
Copper, total	ug/L	MW88-2	03/09/2021		33.6000		*
Copper, total	ug/L	MW88-2	03/28/2022	ND	4.0000		
Copper, total	ug/L	MW88-2	09/14/2022	ND	4.0000		
Copper, total	ug/L	MW88-2	03/20/2023	ND	4.0000		
Copper, total	ug/L	MW88-2	09/12/2023	ND	4.0000		
Copper, total	ug/L	MW88-2	03/12/2024	ND	4.0000		
Copper, total	ug/L	MW88-2	09/30/2024	ND	4.0000		
Lead, total	ug/L	MW88-2	09/18/2014	ND	4.0000		
Lead, total	ug/L	MW88-2	11/13/2014	ND	4.0000		
Lead, total	ug/L	MW88-2	03/17/2015	ND	4.0000		
Lead, total	ug/L	MW88-2	06/29/2015	ND	4.0000		
Lead, total	ug/L	MW88-2	09/11/2015	ND	4.0000		
Lead, total	ug/L	MW88-2	03/16/2016	ND	4.0000		
Lead, total	ug/L	MW88-2	09/08/2016	ND	4.0000		
Lead, total	ug/L	MW88-2	03/17/2017	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	
Lead, total	ug/L	MW88-2	09/19/2017	ND	4.0000		
Lead, total	ug/L	MW88-2	03/08/2018	ND	4.0000		
Lead, total	ug/L	MW88-2	09/24/2018	ND	4.0000		
Lead, total	ug/L	MW88-2	03/25/2019	ND	4.0000		
Lead, total	ug/L	MW88-2	09/03/2019	ND	4.0000		
Lead, total	ug/L	MW88-2	03/23/2020	ND	4.0000		
Lead, total	ug/L	MW88-2	09/04/2020	ND	4.0000		
Lead, total	ug/L	MW88-2	03/09/2021	ND	4.0000		
Lead, total	ug/L	MW88-2	03/28/2022	ND	4.0000		
Lead, total	ug/L	MW88-2	09/14/2022	ND	4.0000		
Lead, total	ug/L	MW88-2	03/20/2023	ND	4.0000		
Lead, total	ug/L	MW88-2	09/12/2023	ND	4.0000		
Lead, total	ug/L	MW88-2	03/12/2024	ND	4.0000		
Lead, total	ug/L	MW88-2	09/30/2024	ND	4.0000		
Nickel, total	ug/L	MW88-2	09/18/2014	ND	4.0000		
Nickel, total	ug/L	MW88-2	11/13/2014	ND	4.0000		
Nickel, total	ug/L	MW88-2	03/17/2015	ND	4.0000		
Nickel, total	ug/L	MW88-2	06/29/2015	ND	4.0000		
Nickel, total	ug/L	MW88-2	09/11/2015	ND	4.0000		
Nickel, total	ug/L	MW88-2	03/16/2016		5.1000		
Nickel, total	ug/L	MW88-2	09/08/2016	ND	4.0000		
Nickel, total	ug/L	MW88-2	03/17/2017	ND	4.0000		
Nickel, total	ug/L	MW88-2	09/19/2017	ND	4.0000		
Nickel, total	ug/L	MW88-2	03/08/2018	ND	4.0000		
Nickel, total	ug/L	MW88-2	09/24/2018	ND	4.0000		
Nickel, total	ug/L	MW88-2	03/25/2019		4.6000		
Nickel, total	ug/L	MW88-2	09/03/2019		8.1000		
Nickel, total	ug/L	MW88-2	03/23/2020	ND	4.0000		
Nickel, total	ug/L	MW88-2	09/04/2020	ND	4.0000		
Nickel, total	ug/L	MW88-2	03/09/2021	ND	4.0000		
Nickel, total	ug/L	MW88-2	03/28/2022	ND	4.0000		
Nickel, total	ug/L	MW88-2	09/14/2022	ND	4.0000		
Nickel, total	ug/L	MW88-2	03/20/2023	ND	4.0000		
Nickel, total	ug/L	MW88-2	09/12/2023	ND	4.0000		
Nickel, total	ug/L	MW88-2	03/12/2024	ND	4.0000		
Nickel, total	ug/L	MW88-2	09/30/2024	ND	4.0000		
Selenium, total	ug/L	MW88-2	09/18/2014	ND	4.0000		
Selenium, total	ug/L	MW88-2	11/13/2014	ND	4.0000		
Selenium, total	ug/L	MW88-2	03/17/2015	ND	4.0000		
Selenium, total	ug/L	MW88-2	06/29/2015	ND	4.0000		
Selenium, total	ug/L	MW88-2	09/11/2015	ND	4.0000		
Selenium, total	ug/L	MW88-2	03/16/2016	ND	4.0000		
Selenium, total	ug/L	MW88-2	09/08/2016	ND	4.0000		
Selenium, total	ug/L	MW88-2	03/17/2017	ND	4.0000		
Selenium, total	ug/L	MW88-2	09/19/2017	ND	4.0000		
Selenium, total	ug/L	MW88-2	03/08/2018	ND	4.0000		
Selenium, total	ug/L	MW88-2	09/24/2018	ND	4.0000		
Selenium, total	ug/L	MW88-2	03/25/2019	ND	4.0000		
Selenium, total	ug/L	MW88-2	09/03/2019	ND	4.0000		
Selenium, total	ug/L	MW88-2	03/23/2020	ND	4.0000		
Selenium, total	ug/L	MW88-2	09/04/2020	ND	4.0000		
Selenium, total	ug/L	MW88-2	03/09/2021	ND	4.0000		
Selenium, total	ug/L	MW88-2	03/28/2022	ND	4.0000		
Selenium, total	ug/L	MW88-2	09/14/2022	ND	4.0000		
Selenium, total	ug/L	MW88-2	03/20/2023	ND	4.0000		
Selenium, total	ug/L	MW88-2	09/12/2023	ND	4.0000		
Selenium, total	ug/L	MW88-2	03/12/2024	ND	4.0000		
Selenium, total	ug/L	MW88-2	09/30/2024	ND	4.0000		
Silver, total	ug/L	MW88-2	09/18/2014	ND	4.0000		
Silver, total	ug/L	MW88-2	11/13/2014	ND	4.0000		
Silver, total	ug/L	MW88-2	03/17/2015	ND	4.0000		
Silver, total	ug/L	MW88-2	06/29/2015	ND	4.0000		
Silver, total	ug/L	MW88-2	09/11/2015	ND	4.0000		
Silver, total	ug/L	MW88-2	03/16/2016	ND	4.0000		
Silver, total	ug/L	MW88-2	09/08/2016	ND	4.0000		
Silver, total	ug/L	MW88-2	03/17/2017	ND	4.0000		
Silver, total	ug/L	MW88-2	09/19/2017	ND	4.0000		
Silver, total	ug/L	MW88-2	03/08/2018	ND	4.0000		
Silver, total	ug/L	MW88-2	09/24/2018	ND	4.0000		
Silver, total	ug/L	MW88-2	03/25/2019	ND	4.0000		
Silver, total	ug/L	MW88-2	09/03/2019	ND	4.0000		
Silver, total	ug/L	MW88-2	03/23/2020	ND	4.0000		
Silver, total	ug/L	MW88-2	09/04/2020	ND	4.0000		
Silver, total	ug/L	MW88-2	03/09/2021	ND	4.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Silver, total	ug/L	MW88-2	03/28/2022	ND	4.0000		
Silver, total	ug/L	MW88-2	09/14/2022	ND	4.0000		
Silver, total	ug/L	MW88-2	03/20/2023	ND	4.0000		
Silver, total	ug/L	MW88-2	09/12/2023	ND	4.0000		
Silver, total	ug/L	MW88-2	03/12/2024	ND	4.0000		
Silver, total	ug/L	MW88-2	09/30/2024	ND	4.0000		
Thallium, total	ug/L	MW88-2	09/18/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW88-2	11/13/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW88-2	03/17/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW88-2	06/29/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW88-2	09/11/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW88-2	03/16/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW88-2	09/08/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW88-2	03/17/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW88-2	09/19/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW88-2	03/08/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW88-2	09/24/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW88-2	03/25/2019	ND	2.0000		
Thallium, total	ug/L	MW88-2	09/03/2019	ND	2.0000		
Thallium, total	ug/L	MW88-2	03/23/2020	ND	2.0000		
Thallium, total	ug/L	MW88-2	09/04/2020	ND	2.0000		
Thallium, total	ug/L	MW88-2	03/09/2021	ND	2.0000		
Thallium, total	ug/L	MW88-2	03/28/2022	ND	2.0000		
Thallium, total	ug/L	MW88-2	09/14/2022	ND	2.0000		
Thallium, total	ug/L	MW88-2	03/20/2023	ND	2.0000		
Thallium, total	ug/L	MW88-2	09/12/2023	ND	2.0000		
Thallium, total	ug/L	MW88-2	03/12/2024	ND	2.0000		
Thallium, total	ug/L	MW88-2	09/30/2024	ND	2.0000		
Vanadium, total	ug/L	MW88-2	09/18/2014	ND	20.0000		
Vanadium, total	ug/L	MW88-2	11/13/2014	ND	20.0000		
Vanadium, total	ug/L	MW88-2	03/17/2015	ND	20.0000		
Vanadium, total	ug/L	MW88-2	06/29/2015	ND	20.0000		
Vanadium, total	ug/L	MW88-2	09/11/2015	ND	20.0000		
Vanadium, total	ug/L	MW88-2	03/16/2016	ND	20.0000		
Vanadium, total	ug/L	MW88-2	09/08/2016	ND	20.0000		
Vanadium, total	ug/L	MW88-2	03/17/2017	ND	20.0000		
Vanadium, total	ug/L	MW88-2	09/19/2017	ND	20.0000		
Vanadium, total	ug/L	MW88-2	03/08/2018	ND	20.0000		
Vanadium, total	ug/L	MW88-2	09/24/2018	ND	20.0000		
Vanadium, total	ug/L	MW88-2	03/25/2019	ND	20.0000		
Vanadium, total	ug/L	MW88-2	09/03/2019	ND	20.0000		
Vanadium, total	ug/L	MW88-2	03/23/2020	ND	20.0000		
Vanadium, total	ug/L	MW88-2	09/04/2020	ND	20.0000		
Vanadium, total	ug/L	MW88-2	03/09/2021	ND	20.0000		
Vanadium, total	ug/L	MW88-2	03/28/2022	ND	20.0000		
Vanadium, total	ug/L	MW88-2	09/14/2022	ND	20.0000		
Vanadium, total	ug/L	MW88-2	03/20/2023	ND	20.0000		
Vanadium, total	ug/L	MW88-2	09/12/2023	ND	20.0000		
Vanadium, total	ug/L	MW88-2	03/12/2024	ND	20.0000		
Vanadium, total	ug/L	MW88-2	09/30/2024	ND	20.0000		
Zinc, total	ug/L	MW88-2	09/18/2014	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW88-2	11/13/2014	ND	20.0000		
Zinc, total	ug/L	MW88-2	03/17/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW88-2	06/29/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW88-2	09/11/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW88-2	03/16/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW88-2	09/08/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW88-2	03/17/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW88-2	09/19/2017		13.1000		
Zinc, total	ug/L	MW88-2	03/08/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW88-2	09/24/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW88-2	03/25/2019		39.1000		
Zinc, total	ug/L	MW88-2	09/03/2019		23.6000		
Zinc, total	ug/L	MW88-2	03/23/2020	ND	20.0000		
Zinc, total	ug/L	MW88-2	09/04/2020	ND	20.0000		
Zinc, total	ug/L	MW88-2	03/09/2021	ND	20.0000		
Zinc, total	ug/L	MW88-2	03/28/2022	ND	20.0000		
Zinc, total	ug/L	MW88-2	09/14/2022	ND	20.0000		
Zinc, total	ug/L	MW88-2	03/20/2023	ND	20.0000		
Zinc, total	ug/L	MW88-2	09/12/2023	ND	20.0000		
Zinc, total	ug/L	MW88-2	03/12/2024	ND	20.0000		
Zinc, total	ug/L	MW88-2	09/30/2024	ND	20.0000		
Antimony, total	ug/L	MW91-8	09/19/2014	ND	2.0000		
Antimony, total	ug/L	MW91-8	11/13/2014	ND	2.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Antimony, total	ug/L	MW91-8	03/17/2015	ND	2.0000		
Antimony, total	ug/L	MW91-8	06/29/2015	ND	2.0000		
Antimony, total	ug/L	MW91-8	09/11/2015	ND	2.0000		
Antimony, total	ug/L	MW91-8	03/16/2016	ND	2.0000		
Antimony, total	ug/L	MW91-8	09/08/2016	ND	2.0000		
Antimony, total	ug/L	MW91-8	03/17/2017	ND	2.0000		
Antimony, total	ug/L	MW91-8	09/19/2017	ND	2.0000		
Antimony, total	ug/L	MW91-8	03/08/2018	ND	2.0000		
Antimony, total	ug/L	MW91-8	09/24/2018	ND	2.0000		
Antimony, total	ug/L	MW91-8	03/25/2019	ND	2.0000		
Antimony, total	ug/L	MW91-8	09/03/2019	ND	2.0000		
Antimony, total	ug/L	MW91-8	03/23/2020	ND	2.0000		
Antimony, total	ug/L	MW91-8	09/04/2020	ND	2.0000		
Antimony, total	ug/L	MW91-8	03/09/2021	ND	2.0000		
Antimony, total	ug/L	MW91-8	09/07/2021	ND	2.0000		
Antimony, total	ug/L	MW91-8	03/28/2022	ND	2.0000		
Antimony, total	ug/L	MW91-8	09/14/2022	ND	2.0000		
Antimony, total	ug/L	MW91-8	03/20/2023	ND	2.0000		
Antimony, total	ug/L	MW91-8	09/13/2023	ND	2.0000		
Antimony, total	ug/L	MW91-8	03/12/2024	ND	2.0000		
Antimony, total	ug/L	MW91-8	09/30/2024	ND	2.0000		
Arsenic, total	ug/L	MW91-8	09/19/2014	ND	4.0000		
Arsenic, total	ug/L	MW91-8	11/13/2014	ND	4.0000		
Arsenic, total	ug/L	MW91-8	03/17/2015	ND	4.0000		
Arsenic, total	ug/L	MW91-8	06/29/2015	ND	4.0000		
Arsenic, total	ug/L	MW91-8	09/11/2015	ND	4.0000		
Arsenic, total	ug/L	MW91-8	03/16/2016	ND	4.0000		
Arsenic, total	ug/L	MW91-8	09/08/2016	ND	4.0000		
Arsenic, total	ug/L	MW91-8	03/17/2017	ND	4.0000		
Arsenic, total	ug/L	MW91-8	09/19/2017	ND	4.0000		
Arsenic, total	ug/L	MW91-8	03/08/2018	ND	4.0000		
Arsenic, total	ug/L	MW91-8	09/24/2018	ND	4.0000		
Arsenic, total	ug/L	MW91-8	03/25/2019	ND	4.0000		
Arsenic, total	ug/L	MW91-8	09/03/2019	ND	4.0000		
Arsenic, total	ug/L	MW91-8	03/23/2020	ND	4.0000		
Arsenic, total	ug/L	MW91-8	09/04/2020	ND	4.0000		
Arsenic, total	ug/L	MW91-8	03/09/2021	ND	4.0000		
Arsenic, total	ug/L	MW91-8	09/07/2021	ND	4.0000		
Arsenic, total	ug/L	MW91-8	03/28/2022	ND	4.0000		
Arsenic, total	ug/L	MW91-8	09/14/2022	ND	4.0000		
Arsenic, total	ug/L	MW91-8	03/20/2023	ND	4.0000		
Arsenic, total	ug/L	MW91-8	09/13/2023	ND	4.0000		
Arsenic, total	ug/L	MW91-8	03/12/2024	ND	4.0000		
Arsenic, total	ug/L	MW91-8	09/30/2024	ND	4.0000		
Barium, total	ug/L	MW91-8	09/19/2014		84.7000		
Barium, total	ug/L	MW91-8	11/13/2014		106.0000		
Barium, total	ug/L	MW91-8	03/17/2015		102.0000		
Barium, total	ug/L	MW91-8	06/29/2015		97.8000		
Barium, total	ug/L	MW91-8	09/11/2015		104.0000		
Barium, total	ug/L	MW91-8	03/16/2016		103.0000		
Barium, total	ug/L	MW91-8	09/08/2016		147.0000		
Barium, total	ug/L	MW91-8	03/17/2017		93.5000		
Barium, total	ug/L	MW91-8	09/19/2017		108.0000		
Barium, total	ug/L	MW91-8	03/08/2018		96.0000		
Barium, total	ug/L	MW91-8	09/24/2018		96.9000		
Barium, total	ug/L	MW91-8	03/25/2019		88.4000		
Barium, total	ug/L	MW91-8	09/03/2019		103.0000		
Barium, total	ug/L	MW91-8	03/23/2020		92.9000		
Barium, total	ug/L	MW91-8	09/04/2020		95.3000		
Barium, total	ug/L	MW91-8	03/09/2021		90.7000		
Barium, total	ug/L	MW91-8	09/07/2021		118.0000		
Barium, total	ug/L	MW91-8	03/28/2022		101.0000		
Barium, total	ug/L	MW91-8	09/14/2022		125.0000		
Barium, total	ug/L	MW91-8	03/20/2023		109.0000		
Barium, total	ug/L	MW91-8	09/13/2023		123.0000		
Barium, total	ug/L	MW91-8	03/12/2024		107.0000		
Barium, total	ug/L	MW91-8	09/30/2024		109.0000		
Beryllium, total	ug/L	MW91-8	09/19/2014	ND	4.0000		
Beryllium, total	ug/L	MW91-8	11/13/2014	ND	4.0000		
Beryllium, total	ug/L	MW91-8	03/17/2015	ND	4.0000		
Beryllium, total	ug/L	MW91-8	06/29/2015	ND	4.0000		
Beryllium, total	ug/L	MW91-8	09/11/2015	ND	4.0000		
Beryllium, total	ug/L	MW91-8	03/16/2016	ND	4.0000		
Beryllium, total	ug/L	MW91-8	09/08/2016	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	MW91-8	03/17/2017	ND	4.0000		
Beryllium, total	ug/L	MW91-8	09/19/2017	ND	4.0000		
Beryllium, total	ug/L	MW91-8	03/08/2018	ND	4.0000		
Beryllium, total	ug/L	MW91-8	09/24/2018	ND	4.0000		
Beryllium, total	ug/L	MW91-8	03/25/2019	ND	4.0000		
Beryllium, total	ug/L	MW91-8	09/03/2019	ND	4.0000		
Beryllium, total	ug/L	MW91-8	03/23/2020	ND	4.0000		
Beryllium, total	ug/L	MW91-8	09/04/2020	ND	4.0000		
Beryllium, total	ug/L	MW91-8	03/09/2021	ND	4.0000		
Beryllium, total	ug/L	MW91-8	09/07/2021	ND	4.0000		
Beryllium, total	ug/L	MW91-8	03/28/2022	ND	4.0000		
Beryllium, total	ug/L	MW91-8	09/14/2022	ND	4.0000		
Beryllium, total	ug/L	MW91-8	03/20/2023	ND	4.0000		
Beryllium, total	ug/L	MW91-8	09/13/2023	ND	4.0000		
Beryllium, total	ug/L	MW91-8	03/12/2024	ND	4.0000		
Beryllium, total	ug/L	MW91-8	09/30/2024	ND	4.0000		
Cadmium, total	ug/L	MW91-8	09/19/2014	ND	0.8000		
Cadmium, total	ug/L	MW91-8	11/13/2014	ND	0.8000		
Cadmium, total	ug/L	MW91-8	03/17/2015		2.3000		
Cadmium, total	ug/L	MW91-8	06/29/2015	ND	0.8000		
Cadmium, total	ug/L	MW91-8	09/11/2015		2.4000		
Cadmium, total	ug/L	MW91-8	03/16/2016		1.4000		
Cadmium, total	ug/L	MW91-8	09/08/2016	ND	0.8000		
Cadmium, total	ug/L	MW91-8	03/17/2017		1.3000		
Cadmium, total	ug/L	MW91-8	09/19/2017		2.2000		
Cadmium, total	ug/L	MW91-8	03/08/2018	ND	0.8000		
Cadmium, total	ug/L	MW91-8	09/24/2018	ND	0.8000		
Cadmium, total	ug/L	MW91-8	03/25/2019	ND	0.8000		
Cadmium, total	ug/L	MW91-8	09/03/2019	ND	0.8000		
Cadmium, total	ug/L	MW91-8	03/23/2020	ND	0.8000		
Cadmium, total	ug/L	MW91-8	09/04/2020	ND	0.8000		
Cadmium, total	ug/L	MW91-8	03/09/2021	ND	0.8000		
Cadmium, total	ug/L	MW91-8	09/07/2021	ND	0.8000		
Cadmium, total	ug/L	MW91-8	03/28/2022	ND	0.8000		
Cadmium, total	ug/L	MW91-8	09/14/2022	ND	0.8000		
Cadmium, total	ug/L	MW91-8	03/20/2023	ND	0.8000		
Cadmium, total	ug/L	MW91-8	09/13/2023	ND	0.8000		
Cadmium, total	ug/L	MW91-8	03/12/2024	ND	0.8000		
Cadmium, total	ug/L	MW91-8	09/30/2024	ND	0.8000		
Chromium, total	ug/L	MW91-8	09/19/2014	ND	8.0000		
Chromium, total	ug/L	MW91-8	11/13/2014	ND	8.0000		
Chromium, total	ug/L	MW91-8	03/17/2015	ND	8.0000		
Chromium, total	ug/L	MW91-8	06/29/2015	ND	8.0000		
Chromium, total	ug/L	MW91-8	09/11/2015	ND	8.0000		
Chromium, total	ug/L	MW91-8	03/16/2016	ND	8.0000		
Chromium, total	ug/L	MW91-8	09/08/2016	ND	8.0000		
Chromium, total	ug/L	MW91-8	03/17/2017	ND	8.0000		
Chromium, total	ug/L	MW91-8	09/19/2017	ND	8.0000		
Chromium, total	ug/L	MW91-8	03/08/2018	ND	8.0000		
Chromium, total	ug/L	MW91-8	09/24/2018	ND	8.0000		
Chromium, total	ug/L	MW91-8	03/25/2019	ND	8.0000		
Chromium, total	ug/L	MW91-8	09/03/2019	ND	8.0000		
Chromium, total	ug/L	MW91-8	03/23/2020	ND	8.0000		
Chromium, total	ug/L	MW91-8	09/04/2020	ND	8.0000		
Chromium, total	ug/L	MW91-8	03/09/2021	ND	8.0000		
Chromium, total	ug/L	MW91-8	09/07/2021	ND	8.0000		
Chromium, total	ug/L	MW91-8	03/28/2022	ND	8.0000		
Chromium, total	ug/L	MW91-8	09/14/2022	ND	8.0000		
Chromium, total	ug/L	MW91-8	03/20/2023	ND	8.0000		
Chromium, total	ug/L	MW91-8	09/13/2023	ND	8.0000		
Chromium, total	ug/L	MW91-8	03/12/2024	ND	8.0000		
Chromium, total	ug/L	MW91-8	09/30/2024	ND	8.0000		
Cobalt, total	ug/L	MW91-8	09/19/2014	ND	0.8000		
Cobalt, total	ug/L	MW91-8	11/13/2014	ND	0.8000		
Cobalt, total	ug/L	MW91-8	03/17/2015	ND	0.8000		
Cobalt, total	ug/L	MW91-8	06/29/2015	ND	0.8000		
Cobalt, total	ug/L	MW91-8	09/11/2015	ND	0.8000		
Cobalt, total	ug/L	MW91-8	03/16/2016	ND	0.8000		
Cobalt, total	ug/L	MW91-8	09/08/2016	ND	0.8000		
Cobalt, total	ug/L	MW91-8	03/17/2017	ND	0.8000		
Cobalt, total	ug/L	MW91-8	09/19/2017	ND	0.8000		
Cobalt, total	ug/L	MW91-8	03/08/2018	ND	0.8000		
Cobalt, total	ug/L	MW91-8	09/24/2018	ND	0.8000		
Cobalt, total	ug/L	MW91-8	03/25/2019	ND	0.8000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Cobalt, total	ug/L	MW91-8	09/03/2019	ND	0.8000		
Cobalt, total	ug/L	MW91-8	03/23/2020	ND	0.8000		
Cobalt, total	ug/L	MW91-8	09/04/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW91-8	03/09/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW91-8	09/07/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW91-8	03/28/2022	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW91-8	09/14/2022		2.7000		*
Cobalt, total	ug/L	MW91-8	03/20/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW91-8	09/13/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW91-8	03/12/2024	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW91-8	09/30/2024	ND	0.4000	0.8000	**
Copper, total	ug/L	MW91-8	09/19/2014	ND	4.0000		
Copper, total	ug/L	MW91-8	11/13/2014	ND	4.0000		
Copper, total	ug/L	MW91-8	03/17/2015	ND	4.0000		
Copper, total	ug/L	MW91-8	06/29/2015	ND	4.0000		
Copper, total	ug/L	MW91-8	09/11/2015	ND	4.0000		
Copper, total	ug/L	MW91-8	03/16/2016	ND	4.0000		
Copper, total	ug/L	MW91-8	09/08/2016	ND	4.0000		
Copper, total	ug/L	MW91-8	03/17/2017	ND	4.0000		
Copper, total	ug/L	MW91-8	09/19/2017	ND	4.0000		
Copper, total	ug/L	MW91-8	03/08/2018	ND	4.0000		
Copper, total	ug/L	MW91-8	09/24/2018	ND	4.0000		
Copper, total	ug/L	MW91-8	03/25/2019	ND	4.0000		
Copper, total	ug/L	MW91-8	09/03/2019	ND	4.0000		
Copper, total	ug/L	MW91-8	03/23/2020	ND	4.0000		
Copper, total	ug/L	MW91-8	09/04/2020	ND	4.0000		
Copper, total	ug/L	MW91-8	03/09/2021	ND	4.0000		
Copper, total	ug/L	MW91-8	09/07/2021	ND	4.0000		
Copper, total	ug/L	MW91-8	03/28/2022	ND	4.0000		
Copper, total	ug/L	MW91-8	09/14/2022	ND	4.0000		
Copper, total	ug/L	MW91-8	03/20/2023	ND	4.0000		
Copper, total	ug/L	MW91-8	09/13/2023	ND	4.0000		
Copper, total	ug/L	MW91-8	03/12/2024	ND	4.0000		
Copper, total	ug/L	MW91-8	09/30/2024	ND	4.0000		
Lead, total	ug/L	MW91-8	09/19/2014	ND	4.0000		
Lead, total	ug/L	MW91-8	11/13/2014	ND	4.0000		
Lead, total	ug/L	MW91-8	03/17/2015	ND	4.0000		
Lead, total	ug/L	MW91-8	06/29/2015	ND	4.0000		
Lead, total	ug/L	MW91-8	09/11/2015	ND	4.0000		
Lead, total	ug/L	MW91-8	03/16/2016	ND	4.0000		
Lead, total	ug/L	MW91-8	09/08/2016	ND	4.0000		
Lead, total	ug/L	MW91-8	03/17/2017	ND	4.0000		
Lead, total	ug/L	MW91-8	09/19/2017	ND	4.0000		
Lead, total	ug/L	MW91-8	03/08/2018	ND	4.0000		
Lead, total	ug/L	MW91-8	09/24/2018	ND	4.0000		
Lead, total	ug/L	MW91-8	03/25/2019	ND	4.0000		
Lead, total	ug/L	MW91-8	09/03/2019	ND	4.0000		
Lead, total	ug/L	MW91-8	03/23/2020	ND	4.0000		
Lead, total	ug/L	MW91-8	09/04/2020	ND	4.0000		
Lead, total	ug/L	MW91-8	03/09/2021	ND	4.0000		
Lead, total	ug/L	MW91-8	09/07/2021	ND	4.0000		
Lead, total	ug/L	MW91-8	03/28/2022	ND	4.0000		
Lead, total	ug/L	MW91-8	09/14/2022	ND	4.0000		
Lead, total	ug/L	MW91-8	03/20/2023	ND	4.0000		
Lead, total	ug/L	MW91-8	09/13/2023	ND	4.0000		
Lead, total	ug/L	MW91-8	03/12/2024	ND	4.0000		
Lead, total	ug/L	MW91-8	09/30/2024	ND	4.0000		
Nickel, total	ug/L	MW91-8	09/19/2014	ND	4.0000		
Nickel, total	ug/L	MW91-8	11/13/2014	ND	4.0000		
Nickel, total	ug/L	MW91-8	03/17/2015	ND	4.0000		
Nickel, total	ug/L	MW91-8	06/29/2015	ND	4.0000		
Nickel, total	ug/L	MW91-8	09/11/2015	ND	4.0000		
Nickel, total	ug/L	MW91-8	03/16/2016	ND	4.0000		
Nickel, total	ug/L	MW91-8	09/08/2016	ND	4.0000		
Nickel, total	ug/L	MW91-8	03/17/2017	ND	4.0000		
Nickel, total	ug/L	MW91-8	09/19/2017	ND	4.0000		
Nickel, total	ug/L	MW91-8	03/08/2018	ND	4.0000		
Nickel, total	ug/L	MW91-8	09/24/2018	ND	4.0000		
Nickel, total	ug/L	MW91-8	03/25/2019	ND	4.0000		
Nickel, total	ug/L	MW91-8	09/03/2019	ND	4.0000		
Nickel, total	ug/L	MW91-8	03/23/2020	ND	4.0000		
Nickel, total	ug/L	MW91-8	09/04/2020	ND	4.0000		
Nickel, total	ug/L	MW91-8	03/09/2021	ND	4.0000		
Nickel, total	ug/L	MW91-8	09/07/2021	ND	4.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Nickel, total	ug/L	MW91-8	03/28/2022	ND	4.0000		
Nickel, total	ug/L	MW91-8	09/14/2022	ND	4.0000		
Nickel, total	ug/L	MW91-8	03/20/2023	ND	4.0000		
Nickel, total	ug/L	MW91-8	09/13/2023	ND	4.0000		
Nickel, total	ug/L	MW91-8	03/12/2024	ND	4.0000		
Nickel, total	ug/L	MW91-8	09/30/2024	ND	4.0000		
Selenium, total	ug/L	MW91-8	09/19/2014		5.1000		
Selenium, total	ug/L	MW91-8	11/13/2014	ND	4.0000		
Selenium, total	ug/L	MW91-8	03/17/2015	ND	4.0000		
Selenium, total	ug/L	MW91-8	06/29/2015	ND	4.0000		
Selenium, total	ug/L	MW91-8	09/11/2015	ND	4.0000		
Selenium, total	ug/L	MW91-8	03/16/2016	ND	4.0000		
Selenium, total	ug/L	MW91-8	09/08/2016	ND	4.0000		
Selenium, total	ug/L	MW91-8	03/17/2017	ND	4.0000		
Selenium, total	ug/L	MW91-8	09/19/2017	ND	4.0000		
Selenium, total	ug/L	MW91-8	03/08/2018	ND	4.0000		
Selenium, total	ug/L	MW91-8	09/24/2018	ND	4.0000		
Selenium, total	ug/L	MW91-8	03/25/2019	ND	4.0000		
Selenium, total	ug/L	MW91-8	09/03/2019	ND	4.0000		
Selenium, total	ug/L	MW91-8	03/23/2020	ND	4.0000		
Selenium, total	ug/L	MW91-8	09/04/2020	ND	4.0000		
Selenium, total	ug/L	MW91-8	03/09/2021	ND	4.0000		
Selenium, total	ug/L	MW91-8	09/07/2021		4.0000		
Selenium, total	ug/L	MW91-8	03/28/2022	ND	4.0000		
Selenium, total	ug/L	MW91-8	09/14/2022	ND	4.0000		
Selenium, total	ug/L	MW91-8	03/20/2023	ND	4.0000		
Selenium, total	ug/L	MW91-8	09/13/2023	ND	4.0000		
Selenium, total	ug/L	MW91-8	03/12/2024	ND	4.0000		
Selenium, total	ug/L	MW91-8	09/30/2024	ND	4.0000		
Silver, total	ug/L	MW91-8	09/19/2014	ND	4.0000		
Silver, total	ug/L	MW91-8	11/13/2014	ND	4.0000		
Silver, total	ug/L	MW91-8	03/17/2015	ND	4.0000		
Silver, total	ug/L	MW91-8	06/29/2015	ND	4.0000		
Silver, total	ug/L	MW91-8	09/11/2015	ND	4.0000		
Silver, total	ug/L	MW91-8	03/16/2016	ND	4.0000		
Silver, total	ug/L	MW91-8	09/08/2016	ND	4.0000		
Silver, total	ug/L	MW91-8	03/17/2017	ND	4.0000		
Silver, total	ug/L	MW91-8	09/19/2017	ND	4.0000		
Silver, total	ug/L	MW91-8	03/08/2018	ND	4.0000		
Silver, total	ug/L	MW91-8	09/24/2018	ND	4.0000		
Silver, total	ug/L	MW91-8	03/25/2019	ND	4.0000		
Silver, total	ug/L	MW91-8	09/03/2019	ND	4.0000		
Silver, total	ug/L	MW91-8	03/23/2020	ND	4.0000		
Silver, total	ug/L	MW91-8	09/04/2020	ND	4.0000		
Silver, total	ug/L	MW91-8	03/09/2021	ND	4.0000		
Silver, total	ug/L	MW91-8	09/07/2021	ND	4.0000		
Silver, total	ug/L	MW91-8	03/28/2022	ND	4.0000		
Silver, total	ug/L	MW91-8	09/14/2022	ND	4.0000		
Silver, total	ug/L	MW91-8	03/20/2023	ND	4.0000		
Silver, total	ug/L	MW91-8	09/13/2023	ND	4.0000		
Silver, total	ug/L	MW91-8	03/12/2024	ND	4.0000		
Silver, total	ug/L	MW91-8	09/30/2024	ND	4.0000		
Thallium, total	ug/L	MW91-8	09/19/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW91-8	11/13/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW91-8	03/17/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW91-8	06/29/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW91-8	09/11/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW91-8	03/16/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW91-8	09/08/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW91-8	03/17/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW91-8	09/19/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW91-8	03/08/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW91-8	09/24/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW91-8	03/25/2019	ND	2.0000		
Thallium, total	ug/L	MW91-8	09/03/2019	ND	2.0000		
Thallium, total	ug/L	MW91-8	03/23/2020	ND	2.0000		
Thallium, total	ug/L	MW91-8	09/04/2020	ND	2.0000		
Thallium, total	ug/L	MW91-8	03/09/2021	ND	2.0000		
Thallium, total	ug/L	MW91-8	09/07/2021	ND	2.0000		
Thallium, total	ug/L	MW91-8	03/28/2022	ND	2.0000		
Thallium, total	ug/L	MW91-8	09/14/2022	ND	2.0000		
Thallium, total	ug/L	MW91-8	03/20/2023	ND	2.0000		
Thallium, total	ug/L	MW91-8	09/13/2023	ND	2.0000		
Thallium, total	ug/L	MW91-8	03/12/2024	ND	2.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Thallium, total	ug/L	MW91-8	09/30/2024	ND	2.0000		
Vanadium, total	ug/L	MW91-8	09/19/2014	ND	20.0000		
Vanadium, total	ug/L	MW91-8	11/13/2014	ND	20.0000		
Vanadium, total	ug/L	MW91-8	03/17/2015	ND	20.0000		
Vanadium, total	ug/L	MW91-8	06/29/2015	ND	20.0000		
Vanadium, total	ug/L	MW91-8	09/11/2015	ND	20.0000		
Vanadium, total	ug/L	MW91-8	03/16/2016	ND	20.0000		
Vanadium, total	ug/L	MW91-8	09/08/2016	ND	20.0000		
Vanadium, total	ug/L	MW91-8	03/17/2017	ND	20.0000		
Vanadium, total	ug/L	MW91-8	09/19/2017	ND	20.0000		
Vanadium, total	ug/L	MW91-8	03/08/2018	ND	20.0000		
Vanadium, total	ug/L	MW91-8	09/24/2018	ND	20.0000		
Vanadium, total	ug/L	MW91-8	03/25/2019	ND	20.0000		
Vanadium, total	ug/L	MW91-8	09/03/2019	ND	20.0000		
Vanadium, total	ug/L	MW91-8	03/23/2020	ND	20.0000		
Vanadium, total	ug/L	MW91-8	09/04/2020	ND	20.0000		
Vanadium, total	ug/L	MW91-8	03/09/2021	ND	20.0000		
Vanadium, total	ug/L	MW91-8	09/07/2021	ND	20.0000		
Vanadium, total	ug/L	MW91-8	03/28/2022	ND	20.0000		
Vanadium, total	ug/L	MW91-8	09/14/2022	ND	20.0000		
Vanadium, total	ug/L	MW91-8	03/20/2023	ND	20.0000		
Vanadium, total	ug/L	MW91-8	09/13/2023	ND	20.0000		
Vanadium, total	ug/L	MW91-8	03/12/2024	ND	20.0000		
Vanadium, total	ug/L	MW91-8	09/30/2024	ND	20.0000		
Zinc, total	ug/L	MW91-8	09/19/2014	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW91-8	11/13/2014	ND	20.0000		
Zinc, total	ug/L	MW91-8	03/17/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW91-8	06/29/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW91-8	09/11/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW91-8	03/16/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW91-8	09/08/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW91-8	03/17/2017		8.7000		
Zinc, total	ug/L	MW91-8	09/19/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW91-8	03/08/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW91-8	09/24/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW91-8	03/25/2019	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW91-8	09/03/2019	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW91-8	03/23/2020	ND	20.0000		
Zinc, total	ug/L	MW91-8	09/04/2020	ND	20.0000		
Zinc, total	ug/L	MW91-8	03/09/2021	ND	20.0000		
Zinc, total	ug/L	MW91-8	09/07/2021	ND	20.0000		
Zinc, total	ug/L	MW91-8	03/28/2022	ND	20.0000		
Zinc, total	ug/L	MW91-8	09/14/2022	ND	20.0000		
Zinc, total	ug/L	MW91-8	03/20/2023	ND	20.0000		
Zinc, total	ug/L	MW91-8	09/13/2023	ND	20.0000		
Zinc, total	ug/L	MW91-8	03/12/2024	ND	20.0000		
Zinc, total	ug/L	MW91-8	09/30/2024	ND	20.0000		
Antimony, total	ug/L	MW98-28	09/18/2014	ND	2.0000		
Antimony, total	ug/L	MW98-28	11/13/2014		2.5000		
Antimony, total	ug/L	MW98-28	03/17/2015	ND	2.0000		
Antimony, total	ug/L	MW98-28	06/29/2015	ND	2.0000		
Antimony, total	ug/L	MW98-28	09/11/2015	ND	2.0000		
Antimony, total	ug/L	MW98-28	03/16/2016	ND	2.0000		
Antimony, total	ug/L	MW98-28	09/08/2016	ND	2.0000		
Antimony, total	ug/L	MW98-28	03/17/2017	ND	2.0000		
Antimony, total	ug/L	MW98-28	09/19/2017		4.5000		
Antimony, total	ug/L	MW98-28	03/08/2018	ND	2.0000		
Antimony, total	ug/L	MW98-28	09/24/2018		2.1000		
Antimony, total	ug/L	MW98-28	03/25/2019	ND	2.0000		
Antimony, total	ug/L	MW98-28	09/03/2019	ND	2.0000		
Antimony, total	ug/L	MW98-28	03/23/2020	ND	2.0000		
Antimony, total	ug/L	MW98-28	09/04/2020	ND	2.0000		
Antimony, total	ug/L	MW98-28	03/09/2021	ND	2.0000		
Antimony, total	ug/L	MW98-28	09/07/2021	ND	2.0000		
Antimony, total	ug/L	MW98-28	03/28/2022		2.3000		
Antimony, total	ug/L	MW98-28	09/14/2022	ND	2.0000		
Antimony, total	ug/L	MW98-28	03/20/2023	ND	2.0000		
Antimony, total	ug/L	MW98-28	09/12/2023	ND	2.0000		
Antimony, total	ug/L	MW98-28	03/12/2024	ND	2.0000		
Antimony, total	ug/L	MW98-28	09/30/2024	ND	2.0000		
Arsenic, total	ug/L	MW98-28	09/18/2014		18.9000		*
Arsenic, total	ug/L	MW98-28	11/13/2014	ND	4.0000		
Arsenic, total	ug/L	MW98-28	03/17/2015	ND	4.0000		
Arsenic, total	ug/L	MW98-28	06/29/2015		9.5000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Arsenic, total	ug/L	MW98-28	09/11/2015	ND	4.0000		
Arsenic, total	ug/L	MW98-28	03/16/2016	ND	4.0000		
Arsenic, total	ug/L	MW98-28	09/08/2016	ND	4.0000		
Arsenic, total	ug/L	MW98-28	03/17/2017	ND	4.0000		
Arsenic, total	ug/L	MW98-28	09/19/2017	ND	4.0000		
Arsenic, total	ug/L	MW98-28	03/08/2018	ND	4.0000		
Arsenic, total	ug/L	MW98-28	09/24/2018	ND	4.0000		
Arsenic, total	ug/L	MW98-28	03/25/2019	ND	4.0000		
Arsenic, total	ug/L	MW98-28	09/03/2019	ND	4.0000		
Arsenic, total	ug/L	MW98-28	03/23/2020	ND	4.0000		
Arsenic, total	ug/L	MW98-28	09/04/2020	ND	4.0000		
Arsenic, total	ug/L	MW98-28	03/09/2021		8.2000		
Arsenic, total	ug/L	MW98-28	09/07/2021	ND	4.0000		
Arsenic, total	ug/L	MW98-28	03/28/2022	ND	4.0000		
Arsenic, total	ug/L	MW98-28	09/14/2022	ND	4.0000		
Arsenic, total	ug/L	MW98-28	03/20/2023	ND	4.0000		
Arsenic, total	ug/L	MW98-28	09/12/2023	ND	4.0000		
Arsenic, total	ug/L	MW98-28	03/12/2024	ND	4.0000		
Arsenic, total	ug/L	MW98-28	09/30/2024	ND	4.0000		
Barium, total	ug/L	MW98-28	09/18/2014		536.0000		
Barium, total	ug/L	MW98-28	11/13/2014		105.0000		
Barium, total	ug/L	MW98-28	03/17/2015		98.0000		
Barium, total	ug/L	MW98-28	06/29/2015		305.0000		
Barium, total	ug/L	MW98-28	09/11/2015		107.0000		
Barium, total	ug/L	MW98-28	03/16/2016		109.0000		
Barium, total	ug/L	MW98-28	09/08/2016		144.0000		
Barium, total	ug/L	MW98-28	03/17/2017		125.0000		
Barium, total	ug/L	MW98-28	09/19/2017		181.0000		
Barium, total	ug/L	MW98-28	03/08/2018		172.0000		
Barium, total	ug/L	MW98-28	09/24/2018		169.0000		
Barium, total	ug/L	MW98-28	03/25/2019		113.0000		
Barium, total	ug/L	MW98-28	09/03/2019		143.0000		
Barium, total	ug/L	MW98-28	03/23/2020		119.0000		
Barium, total	ug/L	MW98-28	09/04/2020		156.0000		
Barium, total	ug/L	MW98-28	03/09/2021		341.0000		
Barium, total	ug/L	MW98-28	09/07/2021		147.0000		
Barium, total	ug/L	MW98-28	03/28/2022		254.0000		
Barium, total	ug/L	MW98-28	09/14/2022		236.0000		
Barium, total	ug/L	MW98-28	03/20/2023		226.0000		
Barium, total	ug/L	MW98-28	09/12/2023		277.0000		
Barium, total	ug/L	MW98-28	03/12/2024		246.0000		
Barium, total	ug/L	MW98-28	09/30/2024		270.0000		
Beryllium, total	ug/L	MW98-28	09/18/2014	ND	4.0000		
Beryllium, total	ug/L	MW98-28	11/13/2014	ND	4.0000		
Beryllium, total	ug/L	MW98-28	03/17/2015	ND	4.0000		
Beryllium, total	ug/L	MW98-28	06/29/2015	ND	4.0000		
Beryllium, total	ug/L	MW98-28	09/11/2015	ND	4.0000		
Beryllium, total	ug/L	MW98-28	03/16/2016	ND	4.0000		
Beryllium, total	ug/L	MW98-28	09/08/2016	ND	4.0000		
Beryllium, total	ug/L	MW98-28	03/17/2017	ND	4.0000		
Beryllium, total	ug/L	MW98-28	09/19/2017	ND	4.0000		
Beryllium, total	ug/L	MW98-28	03/08/2018	ND	4.0000		
Beryllium, total	ug/L	MW98-28	09/24/2018	ND	4.0000		
Beryllium, total	ug/L	MW98-28	03/25/2019	ND	4.0000		
Beryllium, total	ug/L	MW98-28	09/03/2019	ND	4.0000		
Beryllium, total	ug/L	MW98-28	03/23/2020	ND	4.0000		
Beryllium, total	ug/L	MW98-28	09/04/2020	ND	4.0000		
Beryllium, total	ug/L	MW98-28	03/09/2021	ND	4.0000		
Beryllium, total	ug/L	MW98-28	09/07/2021	ND	4.0000		
Beryllium, total	ug/L	MW98-28	03/28/2022	ND	4.0000		
Beryllium, total	ug/L	MW98-28	09/14/2022	ND	4.0000		
Beryllium, total	ug/L	MW98-28	03/20/2023	ND	4.0000		
Beryllium, total	ug/L	MW98-28	09/12/2023	ND	4.0000		
Beryllium, total	ug/L	MW98-28	03/12/2024	ND	4.0000		
Beryllium, total	ug/L	MW98-28	09/30/2024	ND	4.0000		
Cadmium, total	ug/L	MW98-28	09/18/2014		11.8000		*
Cadmium, total	ug/L	MW98-28	11/13/2014	ND	0.8000		
Cadmium, total	ug/L	MW98-28	03/17/2015	ND	0.8000		
Cadmium, total	ug/L	MW98-28	06/29/2015		1.1000		
Cadmium, total	ug/L	MW98-28	09/11/2015	ND	0.8000		
Cadmium, total	ug/L	MW98-28	03/16/2016	ND	0.8000		
Cadmium, total	ug/L	MW98-28	09/08/2016	ND	0.8000		
Cadmium, total	ug/L	MW98-28	03/17/2017	ND	0.8000		
Cadmium, total	ug/L	MW98-28	09/19/2017	ND	0.8000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Cadmium, total	ug/L	MW98-28	03/08/2018	ND	0.8000		
Cadmium, total	ug/L	MW98-28	09/24/2018	ND	0.8000		
Cadmium, total	ug/L	MW98-28	03/25/2019	ND	0.8000		
Cadmium, total	ug/L	MW98-28	09/03/2019	ND	0.8000		
Cadmium, total	ug/L	MW98-28	03/23/2020	ND	0.8000		
Cadmium, total	ug/L	MW98-28	09/04/2020	ND	0.8000		
Cadmium, total	ug/L	MW98-28	03/09/2021	ND	0.8000		
Cadmium, total	ug/L	MW98-28	09/07/2021	ND	0.8000		
Cadmium, total	ug/L	MW98-28	03/28/2022	ND	0.8000		
Cadmium, total	ug/L	MW98-28	09/14/2022	ND	0.8000		
Cadmium, total	ug/L	MW98-28	03/20/2023	ND	0.8000		
Cadmium, total	ug/L	MW98-28	09/12/2023	ND	0.8000		
Cadmium, total	ug/L	MW98-28	03/12/2024	ND	0.8000		
Cadmium, total	ug/L	MW98-28	09/30/2024	ND	0.8000		
Chromium, total	ug/L	MW98-28	09/18/2014		43.4000		*
Chromium, total	ug/L	MW98-28	11/13/2014	ND	8.0000		
Chromium, total	ug/L	MW98-28	03/17/2015	ND	8.0000		
Chromium, total	ug/L	MW98-28	06/29/2015		24.9000		*
Chromium, total	ug/L	MW98-28	09/11/2015	ND	8.0000		
Chromium, total	ug/L	MW98-28	03/16/2016	ND	8.0000		
Chromium, total	ug/L	MW98-28	09/08/2016	ND	8.0000		
Chromium, total	ug/L	MW98-28	03/17/2017	ND	8.0000		
Chromium, total	ug/L	MW98-28	09/19/2017	ND	8.0000		
Chromium, total	ug/L	MW98-28	03/08/2018	ND	8.0000		
Chromium, total	ug/L	MW98-28	09/24/2018	ND	8.0000		
Chromium, total	ug/L	MW98-28	03/25/2019	ND	8.0000		
Chromium, total	ug/L	MW98-28	09/03/2019	ND	8.0000		
Chromium, total	ug/L	MW98-28	03/23/2020	ND	8.0000		
Chromium, total	ug/L	MW98-28	09/04/2020	ND	8.0000		
Chromium, total	ug/L	MW98-28	03/09/2021		18.6000		
Chromium, total	ug/L	MW98-28	09/07/2021	ND	8.0000		
Chromium, total	ug/L	MW98-28	03/28/2022		12.7000		
Chromium, total	ug/L	MW98-28	09/14/2022	ND	8.0000		
Chromium, total	ug/L	MW98-28	03/20/2023	ND	8.0000		
Chromium, total	ug/L	MW98-28	09/12/2023	ND	8.0000		
Chromium, total	ug/L	MW98-28	03/12/2024	ND	8.0000		
Chromium, total	ug/L	MW98-28	09/30/2024	ND	8.0000		
Cobalt, total	ug/L	MW98-28	09/18/2014		81.5000		*
Cobalt, total	ug/L	MW98-28	11/13/2014	ND	0.8000		
Cobalt, total	ug/L	MW98-28	03/17/2015	ND	0.8000		
Cobalt, total	ug/L	MW98-28	06/29/2015		27.3000		*
Cobalt, total	ug/L	MW98-28	09/11/2015	ND	0.8000		
Cobalt, total	ug/L	MW98-28	03/16/2016	ND	0.8000		
Cobalt, total	ug/L	MW98-28	09/08/2016		1.0000		
Cobalt, total	ug/L	MW98-28	03/17/2017	ND	0.8000		
Cobalt, total	ug/L	MW98-28	09/19/2017		4.4000		
Cobalt, total	ug/L	MW98-28	03/08/2018	ND	0.8000		
Cobalt, total	ug/L	MW98-28	09/24/2018		4.8000		
Cobalt, total	ug/L	MW98-28	03/25/2019		0.9000		
Cobalt, total	ug/L	MW98-28	09/03/2019		0.9000		
Cobalt, total	ug/L	MW98-28	03/23/2020		1.6000		
Cobalt, total	ug/L	MW98-28	09/04/2020		0.5000		
Cobalt, total	ug/L	MW98-28	03/09/2021		19.1000		*
Cobalt, total	ug/L	MW98-28	09/07/2021		0.4000		
Cobalt, total	ug/L	MW98-28	03/28/2022		4.2000		
Cobalt, total	ug/L	MW98-28	09/14/2022		4.4000		
Cobalt, total	ug/L	MW98-28	03/20/2023		1.1000		
Cobalt, total	ug/L	MW98-28	09/12/2023		1.6000		
Cobalt, total	ug/L	MW98-28	03/12/2024		0.8000		
Cobalt, total	ug/L	MW98-28	09/30/2024		3.9000		
Copper, total	ug/L	MW98-28	09/18/2014		97.9000		*
Copper, total	ug/L	MW98-28	11/13/2014	ND	4.0000		
Copper, total	ug/L	MW98-28	03/17/2015	ND	4.0000		
Copper, total	ug/L	MW98-28	06/29/2015		29.9000		*
Copper, total	ug/L	MW98-28	09/11/2015	ND	4.0000		
Copper, total	ug/L	MW98-28	03/16/2016	ND	4.0000		
Copper, total	ug/L	MW98-28	09/08/2016	ND	4.0000		
Copper, total	ug/L	MW98-28	03/17/2017	ND	4.0000		
Copper, total	ug/L	MW98-28	09/19/2017		5.4000		
Copper, total	ug/L	MW98-28	03/08/2018	ND	4.0000		
Copper, total	ug/L	MW98-28	09/24/2018		5.1000		
Copper, total	ug/L	MW98-28	03/25/2019	ND	4.0000		
Copper, total	ug/L	MW98-28	09/03/2019	ND	4.0000		
Copper, total	ug/L	MW98-28	03/23/2020	ND	4.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Copper, total	ug/L	MW98-28	09/04/2020	ND	4.0000		
Copper, total	ug/L	MW98-28	03/09/2021		104.0000		*
Copper, total	ug/L	MW98-28	09/07/2021	ND	4.0000		
Copper, total	ug/L	MW98-28	03/28/2022		7.6000		
Copper, total	ug/L	MW98-28	09/14/2022	ND	4.0000		
Copper, total	ug/L	MW98-28	03/20/2023	ND	4.0000		
Copper, total	ug/L	MW98-28	09/12/2023	ND	4.0000		
Copper, total	ug/L	MW98-28	03/12/2024	ND	4.0000		
Copper, total	ug/L	MW98-28	09/30/2024		4.8000		
Lead, total	ug/L	MW98-28	09/18/2014		38.1000		*
Lead, total	ug/L	MW98-28	11/13/2014	ND	4.0000		
Lead, total	ug/L	MW98-28	03/17/2015	ND	4.0000		
Lead, total	ug/L	MW98-28	06/29/2015		15.6000		*
Lead, total	ug/L	MW98-28	09/11/2015	ND	4.0000		
Lead, total	ug/L	MW98-28	03/16/2016	ND	4.0000		
Lead, total	ug/L	MW98-28	09/08/2016	ND	4.0000		
Lead, total	ug/L	MW98-28	03/17/2017	ND	4.0000		
Lead, total	ug/L	MW98-28	09/19/2017	ND	4.0000		
Lead, total	ug/L	MW98-28	03/08/2018	ND	4.0000		
Lead, total	ug/L	MW98-28	09/24/2018	ND	4.0000		
Lead, total	ug/L	MW98-28	03/25/2019	ND	4.0000		
Lead, total	ug/L	MW98-28	09/03/2019	ND	4.0000		
Lead, total	ug/L	MW98-28	03/23/2020	ND	4.0000		
Lead, total	ug/L	MW98-28	09/04/2020	ND	4.0000		
Lead, total	ug/L	MW98-28	03/09/2021		11.9000		
Lead, total	ug/L	MW98-28	09/07/2021	ND	4.0000		
Lead, total	ug/L	MW98-28	03/28/2022	ND	4.0000		
Lead, total	ug/L	MW98-28	09/14/2022	ND	4.0000		
Lead, total	ug/L	MW98-28	03/20/2023	ND	4.0000		
Lead, total	ug/L	MW98-28	09/12/2023	ND	4.0000		
Lead, total	ug/L	MW98-28	03/12/2024	ND	4.0000		
Lead, total	ug/L	MW98-28	09/30/2024	ND	4.0000		
Nickel, total	ug/L	MW98-28	09/18/2014		105.0000		*
Nickel, total	ug/L	MW98-28	11/13/2014	ND	4.0000		
Nickel, total	ug/L	MW98-28	03/17/2015	ND	4.0000		
Nickel, total	ug/L	MW98-28	06/29/2015		42.0000		*
Nickel, total	ug/L	MW98-28	09/11/2015	ND	4.0000		
Nickel, total	ug/L	MW98-28	03/16/2016	ND	4.0000		
Nickel, total	ug/L	MW98-28	09/08/2016	ND	4.0000		
Nickel, total	ug/L	MW98-28	03/17/2017		4.0000		
Nickel, total	ug/L	MW98-28	09/19/2017		10.2000		
Nickel, total	ug/L	MW98-28	03/08/2018	ND	4.0000		
Nickel, total	ug/L	MW98-28	09/24/2018		7.6000		
Nickel, total	ug/L	MW98-28	03/25/2019	ND	4.0000		
Nickel, total	ug/L	MW98-28	09/03/2019	ND	4.0000		
Nickel, total	ug/L	MW98-28	03/23/2020		6.3000		
Nickel, total	ug/L	MW98-28	09/04/2020	ND	4.0000		
Nickel, total	ug/L	MW98-28	03/09/2021		33.6000		*
Nickel, total	ug/L	MW98-28	09/07/2021	ND	4.0000		
Nickel, total	ug/L	MW98-28	03/28/2022		17.4000		
Nickel, total	ug/L	MW98-28	09/14/2022		4.8000		
Nickel, total	ug/L	MW98-28	03/20/2023		6.6000		
Nickel, total	ug/L	MW98-28	09/12/2023		8.2000		
Nickel, total	ug/L	MW98-28	03/12/2024		5.8000		
Nickel, total	ug/L	MW98-28	09/30/2024		10.1000		
Selenium, total	ug/L	MW98-28	09/18/2014		9.0000		
Selenium, total	ug/L	MW98-28	11/13/2014	ND	4.0000		
Selenium, total	ug/L	MW98-28	03/17/2015	ND	4.0000		
Selenium, total	ug/L	MW98-28	06/29/2015	ND	4.0000		
Selenium, total	ug/L	MW98-28	09/11/2015	ND	4.0000		
Selenium, total	ug/L	MW98-28	03/16/2016	ND	4.0000		
Selenium, total	ug/L	MW98-28	09/08/2016	ND	4.0000		
Selenium, total	ug/L	MW98-28	03/17/2017	ND	4.0000		
Selenium, total	ug/L	MW98-28	09/19/2017	ND	4.0000		
Selenium, total	ug/L	MW98-28	03/08/2018	ND	4.0000		
Selenium, total	ug/L	MW98-28	09/24/2018	ND	4.0000		
Selenium, total	ug/L	MW98-28	03/25/2019	ND	4.0000		
Selenium, total	ug/L	MW98-28	09/03/2019	ND	4.0000		
Selenium, total	ug/L	MW98-28	03/23/2020	ND	4.0000		
Selenium, total	ug/L	MW98-28	09/04/2020	ND	4.0000		
Selenium, total	ug/L	MW98-28	03/09/2021	ND	4.0000		
Selenium, total	ug/L	MW98-28	09/07/2021	ND	4.0000		
Selenium, total	ug/L	MW98-28	03/28/2022	ND	4.0000		
Selenium, total	ug/L	MW98-28	09/14/2022	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	
Selenium, total	ug/L	MW98-28	03/20/2023	ND	4.0000		
Selenium, total	ug/L	MW98-28	09/12/2023	ND	4.0000		
Selenium, total	ug/L	MW98-28	03/12/2024	ND	4.0000		
Selenium, total	ug/L	MW98-28	09/30/2024	ND	4.0000		
Silver, total	ug/L	MW98-28	09/18/2014	ND	4.0000		
Silver, total	ug/L	MW98-28	11/13/2014	ND	4.0000		
Silver, total	ug/L	MW98-28	03/17/2015	ND	4.0000		
Silver, total	ug/L	MW98-28	06/29/2015	ND	4.0000		
Silver, total	ug/L	MW98-28	09/11/2015	ND	4.0000		
Silver, total	ug/L	MW98-28	03/16/2016	ND	4.0000		
Silver, total	ug/L	MW98-28	09/08/2016	ND	4.0000		
Silver, total	ug/L	MW98-28	03/17/2017	ND	4.0000		
Silver, total	ug/L	MW98-28	09/19/2017	ND	4.0000		
Silver, total	ug/L	MW98-28	03/08/2018	ND	4.0000		
Silver, total	ug/L	MW98-28	09/24/2018	ND	4.0000		
Silver, total	ug/L	MW98-28	03/25/2019	ND	4.0000		
Silver, total	ug/L	MW98-28	09/03/2019	ND	4.0000		
Silver, total	ug/L	MW98-28	03/23/2020	ND	4.0000		
Silver, total	ug/L	MW98-28	09/04/2020	ND	4.0000		
Silver, total	ug/L	MW98-28	03/09/2021	ND	4.0000		
Silver, total	ug/L	MW98-28	09/07/2021	ND	4.0000		
Silver, total	ug/L	MW98-28	03/28/2022	ND	4.0000		
Silver, total	ug/L	MW98-28	09/14/2022	ND	4.0000		
Silver, total	ug/L	MW98-28	03/20/2023	ND	4.0000		
Silver, total	ug/L	MW98-28	09/12/2023	ND	4.0000		
Silver, total	ug/L	MW98-28	03/12/2024	ND	4.0000		
Silver, total	ug/L	MW98-28	09/30/2024	ND	4.0000		
Thallium, total	ug/L	MW98-28	09/18/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW98-28	11/13/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW98-28	03/17/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW98-28	06/29/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW98-28	09/11/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW98-28	03/16/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW98-28	09/08/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW98-28	03/17/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW98-28	09/19/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW98-28	03/08/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW98-28	09/24/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW98-28	03/25/2019	ND	2.0000		
Thallium, total	ug/L	MW98-28	09/03/2019	ND	2.0000		
Thallium, total	ug/L	MW98-28	03/23/2020	ND	2.0000		
Thallium, total	ug/L	MW98-28	09/04/2020	ND	2.0000		
Thallium, total	ug/L	MW98-28	03/09/2021	ND	2.0000		
Thallium, total	ug/L	MW98-28	09/07/2021	ND	2.0000		
Thallium, total	ug/L	MW98-28	03/28/2022	ND	2.0000		
Thallium, total	ug/L	MW98-28	09/14/2022	ND	2.0000		
Thallium, total	ug/L	MW98-28	03/20/2023	ND	2.0000		
Thallium, total	ug/L	MW98-28	09/12/2023	ND	2.0000		
Thallium, total	ug/L	MW98-28	03/12/2024	ND	2.0000		
Thallium, total	ug/L	MW98-28	09/30/2024	ND	2.0000		
Vanadium, total	ug/L	MW98-28	09/18/2014		87.6000		*
Vanadium, total	ug/L	MW98-28	11/13/2014	ND	20.0000		
Vanadium, total	ug/L	MW98-28	03/17/2015	ND	20.0000		
Vanadium, total	ug/L	MW98-28	06/29/2015		40.6000		
Vanadium, total	ug/L	MW98-28	09/11/2015	ND	20.0000		
Vanadium, total	ug/L	MW98-28	03/16/2016	ND	20.0000		
Vanadium, total	ug/L	MW98-28	09/08/2016	ND	20.0000		
Vanadium, total	ug/L	MW98-28	03/17/2017	ND	20.0000		
Vanadium, total	ug/L	MW98-28	09/19/2017	ND	20.0000		
Vanadium, total	ug/L	MW98-28	03/08/2018	ND	20.0000		
Vanadium, total	ug/L	MW98-28	09/24/2018	ND	20.0000		
Vanadium, total	ug/L	MW98-28	03/25/2019	ND	20.0000		
Vanadium, total	ug/L	MW98-28	09/03/2019	ND	20.0000		
Vanadium, total	ug/L	MW98-28	03/23/2020	ND	20.0000		
Vanadium, total	ug/L	MW98-28	09/04/2020	ND	20.0000		
Vanadium, total	ug/L	MW98-28	03/09/2021		29.2000		
Vanadium, total	ug/L	MW98-28	09/07/2021	ND	20.0000		
Vanadium, total	ug/L	MW98-28	03/28/2022	ND	20.0000		
Vanadium, total	ug/L	MW98-28	09/14/2022	ND	20.0000		
Vanadium, total	ug/L	MW98-28	03/20/2023	ND	20.0000		
Vanadium, total	ug/L	MW98-28	09/12/2023	ND	20.0000		
Vanadium, total	ug/L	MW98-28	03/12/2024	ND	20.0000		
Vanadium, total	ug/L	MW98-28	09/30/2024	ND	20.0000		
Zinc, total	ug/L	MW98-28	09/18/2014		127.0000		*

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Zinc, total	ug/L	MW98-28	11/13/2014	ND	20.0000		
Zinc, total	ug/L	MW98-28	03/17/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW98-28	06/29/2015		59.4000		
Zinc, total	ug/L	MW98-28	09/11/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW98-28	03/16/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW98-28	09/08/2016		8.2000		
Zinc, total	ug/L	MW98-28	03/17/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW98-28	09/19/2017		11.1000		
Zinc, total	ug/L	MW98-28	03/08/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW98-28	09/24/2018		13.2000		
Zinc, total	ug/L	MW98-28	03/25/2019	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW98-28	09/03/2019		10.6000		
Zinc, total	ug/L	MW98-28	03/23/2020	ND	20.0000		
Zinc, total	ug/L	MW98-28	09/04/2020	ND	20.0000		
Zinc, total	ug/L	MW98-28	03/09/2021		37.6000		
Zinc, total	ug/L	MW98-28	09/07/2021	ND	20.0000		
Zinc, total	ug/L	MW98-28	03/28/2022	ND	20.0000		
Zinc, total	ug/L	MW98-28	09/14/2022	ND	20.0000		
Zinc, total	ug/L	MW98-28	03/20/2023	ND	20.0000		
Zinc, total	ug/L	MW98-28	09/12/2023	ND	20.0000		
Zinc, total	ug/L	MW98-28	03/12/2024	ND	20.0000		
Zinc, total	ug/L	MW98-28	09/30/2024	ND	20.0000		

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

Table 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Antimony, total	ug/L	GU-3	09/30/2024	ND	2.0000		4.5000
Arsenic, total	ug/L	GU-3	09/30/2024	ND	4.0000		50.6000
Barium, total	ug/L	GU-3	09/30/2024		488.0000		874.0000
Beryllium, total	ug/L	GU-3	09/30/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	GU-3	09/30/2024	ND	0.8000		2.4000
Chromium, total	ug/L	GU-3	09/30/2024	ND	8.0000		18.6000
Cobalt, total	ug/L	GU-3	09/30/2024	ND	0.4000		7.0000
Copper, total	ug/L	GU-3	09/30/2024	ND	4.0000		19.5000
Lead, total	ug/L	GU-3	09/30/2024	ND	4.0000		11.9000
Nickel, total	ug/L	GU-3	09/30/2024		36.8000	***	17.4000
Selenium, total	ug/L	GU-3	09/30/2024	ND	4.0000		9.0000
Silver, total	ug/L	GU-3	09/30/2024	ND	4.0000		4.0000
Thallium, total	ug/L	GU-3	09/30/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	GU-3	09/30/2024	ND	20.0000		40.6000
Zinc, total	ug/L	GU-3	09/30/2024	ND	20.0000		144.0000
Antimony, total	ug/L	MW06-37	09/30/2024	ND	2.0000		4.5000
Arsenic, total	ug/L	MW06-37	09/30/2024	ND	4.0000		50.6000
Barium, total	ug/L	MW06-37	09/30/2024		116.0000		874.0000
Beryllium, total	ug/L	MW06-37	09/30/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW06-37	09/30/2024	ND	0.8000		2.4000
Chromium, total	ug/L	MW06-37	09/30/2024	ND	8.0000		18.6000
Cobalt, total	ug/L	MW06-37	09/30/2024	ND	0.4000		7.0000
Copper, total	ug/L	MW06-37	09/30/2024	ND	4.0000		19.5000
Lead, total	ug/L	MW06-37	09/30/2024	ND	4.0000		11.9000
Nickel, total	ug/L	MW06-37	09/30/2024	ND	4.0000		17.4000
Selenium, total	ug/L	MW06-37	09/30/2024	ND	4.0000		9.0000
Silver, total	ug/L	MW06-37	09/30/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW06-37	09/30/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW06-37	09/30/2024	ND	20.0000		40.6000
Zinc, total	ug/L	MW06-37	09/30/2024	ND	20.0000		144.0000
Antimony, total	ug/L	MW06-38	09/30/2024	ND	2.0000		4.5000
Arsenic, total	ug/L	MW06-38	09/30/2024	ND	4.0000		50.6000
Barium, total	ug/L	MW06-38	09/30/2024		188.0000		874.0000
Beryllium, total	ug/L	MW06-38	09/30/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW06-38	09/30/2024	ND	0.8000		2.4000
Chromium, total	ug/L	MW06-38	09/30/2024	ND	8.0000		18.6000
Cobalt, total	ug/L	MW06-38	09/30/2024	ND	0.4000		7.0000
Copper, total	ug/L	MW06-38	09/30/2024	ND	4.0000		19.5000
Lead, total	ug/L	MW06-38	09/30/2024	ND	4.0000		11.9000
Nickel, total	ug/L	MW06-38	09/30/2024	ND	4.0000		17.4000
Selenium, total	ug/L	MW06-38	09/30/2024	ND	4.0000		9.0000
Silver, total	ug/L	MW06-38	09/30/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW06-38	09/30/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW06-38	09/30/2024	ND	20.0000		40.6000
Zinc, total	ug/L	MW06-38	09/30/2024	ND	20.0000		144.0000
Antimony, total	ug/L	MW06-39	09/30/2024	ND	2.0000		4.5000
Arsenic, total	ug/L	MW06-39	09/30/2024	ND	4.0000		50.6000
Barium, total	ug/L	MW06-39	09/30/2024		160.0000		874.0000
Beryllium, total	ug/L	MW06-39	09/30/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW06-39	09/30/2024	ND	0.8000		2.4000
Chromium, total	ug/L	MW06-39	09/30/2024	ND	8.0000		18.6000
Cobalt, total	ug/L	MW06-39	09/30/2024	ND	0.4000		7.0000
Copper, total	ug/L	MW06-39	09/30/2024	ND	4.0000		19.5000
Lead, total	ug/L	MW06-39	09/30/2024	ND	4.0000		11.9000
Nickel, total	ug/L	MW06-39	09/30/2024	ND	4.0000		17.4000
Selenium, total	ug/L	MW06-39	09/30/2024	ND	4.0000		9.0000
Silver, total	ug/L	MW06-39	09/30/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW06-39	09/30/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW06-39	09/30/2024	ND	20.0000		40.6000
Zinc, total	ug/L	MW06-39	09/30/2024	ND	20.0000		144.0000
Antimony, total	ug/L	MW09-40	09/30/2024	ND	2.0000		4.5000
Arsenic, total	ug/L	MW09-40	09/30/2024	ND	4.0000		50.6000
Barium, total	ug/L	MW09-40	09/30/2024		23.4000		874.0000
Beryllium, total	ug/L	MW09-40	09/30/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW09-40	09/30/2024	ND	0.8000		2.4000
Chromium, total	ug/L	MW09-40	09/30/2024	ND	8.0000		18.6000
Cobalt, total	ug/L	MW09-40	09/30/2024	ND	0.4000		7.0000
Copper, total	ug/L	MW09-40	09/30/2024	ND	4.0000		19.5000
Lead, total	ug/L	MW09-40	09/30/2024	ND	4.0000		11.9000
Nickel, total	ug/L	MW09-40	09/30/2024	ND	4.0000		17.4000
Selenium, total	ug/L	MW09-40	09/30/2024	ND	4.0000		9.0000
Silver, total	ug/L	MW09-40	09/30/2024	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	MW09-40	09/30/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW09-40	09/30/2024	ND	20.0000		40.6000
Zinc, total	ug/L	MW09-40	09/30/2024	ND	20.0000		144.0000
Antimony, total	ug/L	MW21-43	09/30/2024	ND	2.0000		4.5000
Arsenic, total	ug/L	MW21-43	09/30/2024		9.8000		50.6000
Barium, total	ug/L	MW21-43	09/30/2024		177.0000		874.0000
Beryllium, total	ug/L	MW21-43	09/30/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW21-43	09/30/2024	ND	0.8000		2.4000
Chromium, total	ug/L	MW21-43	09/30/2024	ND	8.0000		18.6000
Cobalt, total	ug/L	MW21-43	09/30/2024		0.4000		7.0000
Copper, total	ug/L	MW21-43	09/30/2024	ND	4.0000		19.5000
Lead, total	ug/L	MW21-43	09/30/2024	ND	4.0000		11.9000
Nickel, total	ug/L	MW21-43	09/30/2024		8.1000		17.4000
Selenium, total	ug/L	MW21-43	09/30/2024	ND	4.0000		9.0000
Silver, total	ug/L	MW21-43	09/30/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW21-43	09/30/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW21-43	09/30/2024	ND	20.0000		40.6000
Zinc, total	ug/L	MW21-43	09/30/2024	ND	20.0000		144.0000
Antimony, total	ug/L	MW88-3	09/30/2024	ND	2.0000		4.5000
Arsenic, total	ug/L	MW88-3	09/30/2024	ND	4.0000		50.6000
Barium, total	ug/L	MW88-3	09/30/2024		136.0000		874.0000
Beryllium, total	ug/L	MW88-3	09/30/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW88-3	09/30/2024		5.6000	*	2.4000
Chromium, total	ug/L	MW88-3	09/30/2024	ND	8.0000		18.6000
Cobalt, total	ug/L	MW88-3	09/30/2024	ND	0.4000		7.0000
Copper, total	ug/L	MW88-3	09/30/2024	ND	4.0000		19.5000
Lead, total	ug/L	MW88-3	09/30/2024	ND	4.0000		11.9000
Nickel, total	ug/L	MW88-3	09/30/2024	ND	4.0000		17.4000
Selenium, total	ug/L	MW88-3	09/30/2024	ND	4.0000		9.0000
Silver, total	ug/L	MW88-3	09/30/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW88-3	09/30/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW88-3	09/30/2024	ND	20.0000		40.6000
Zinc, total	ug/L	MW88-3	09/30/2024	ND	20.0000		144.0000
Antimony, total	ug/L	MW91-10	09/30/2024	ND	2.0000		4.5000
Arsenic, total	ug/L	MW91-10	09/30/2024	ND	4.0000		50.6000
Barium, total	ug/L	MW91-10	09/30/2024		39.8000		874.0000
Beryllium, total	ug/L	MW91-10	09/30/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW91-10	09/30/2024	ND	0.8000		2.4000
Chromium, total	ug/L	MW91-10	09/30/2024	ND	8.0000		18.6000
Cobalt, total	ug/L	MW91-10	09/30/2024	ND	0.4000		7.0000
Copper, total	ug/L	MW91-10	09/30/2024	ND	4.0000		19.5000
Lead, total	ug/L	MW91-10	09/30/2024	ND	4.0000		11.9000
Nickel, total	ug/L	MW91-10	09/30/2024	ND	4.0000		17.4000
Selenium, total	ug/L	MW91-10	09/30/2024		4.4000		9.0000
Silver, total	ug/L	MW91-10	09/30/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW91-10	09/30/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW91-10	09/30/2024	ND	20.0000		40.6000
Zinc, total	ug/L	MW91-10	09/30/2024	ND	20.0000		144.0000
Antimony, total	ug/L	MW94-18	09/30/2024	ND	2.0000		4.5000
Arsenic, total	ug/L	MW94-18	09/30/2024	ND	4.0000		50.6000
Barium, total	ug/L	MW94-18	09/30/2024		27.6000		874.0000
Beryllium, total	ug/L	MW94-18	09/30/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW94-18	09/30/2024	ND	0.8000		2.4000
Chromium, total	ug/L	MW94-18	09/30/2024	ND	8.0000		18.6000
Cobalt, total	ug/L	MW94-18	09/30/2024	ND	0.4000		7.0000
Copper, total	ug/L	MW94-18	09/30/2024	ND	4.0000		19.5000
Lead, total	ug/L	MW94-18	09/30/2024	ND	4.0000		11.9000
Nickel, total	ug/L	MW94-18	09/30/2024	ND	4.0000		17.4000
Selenium, total	ug/L	MW94-18	09/30/2024	ND	4.0000		9.0000
Silver, total	ug/L	MW94-18	09/30/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW94-18	09/30/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW94-18	09/30/2024	ND	20.0000		40.6000
Zinc, total	ug/L	MW94-18	09/30/2024	ND	20.0000		144.0000
Antimony, total	ug/L	MW96-21	09/30/2024	ND	2.0000		4.5000
Arsenic, total	ug/L	MW96-21	09/30/2024		27.0000		50.6000
Barium, total	ug/L	MW96-21	09/30/2024		369.0000		874.0000
Beryllium, total	ug/L	MW96-21	09/30/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW96-21	09/30/2024	ND	0.8000		2.4000
Chromium, total	ug/L	MW96-21	09/30/2024		9.5000		18.6000
Cobalt, total	ug/L	MW96-21	09/30/2024		4.0000		7.0000
Copper, total	ug/L	MW96-21	09/30/2024		11.4000		19.5000
Lead, total	ug/L	MW96-21	09/30/2024		6.2000		11.9000

* - Current value failed - awaiting verification.
** - Current value passed - previous exceedance not verified.
*** - Current value failed - exceedance verified.
**** - Current value passed - awaiting one more verification.
***** - Insufficient background data to compute prediction limit.
ND = Not Detected, Result = detection limit.

Table 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Nickel, total	ug/L	MW96-21	09/30/2024		11.3000		17.4000
Selenium, total	ug/L	MW96-21	09/30/2024	ND	4.0000		9.0000
Silver, total	ug/L	MW96-21	09/30/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW96-21	09/30/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW96-21	09/30/2024	ND	20.0000		40.6000
Zinc, total	ug/L	MW96-21	09/30/2024		34.1000		144.0000
Antimony, total	ug/L	MW96-23	09/30/2024	ND	2.0000		4.5000
Arsenic, total	ug/L	MW96-23	09/30/2024		39.2000		50.6000
Barium, total	ug/L	MW96-23	09/30/2024		632.0000		874.0000
Beryllium, total	ug/L	MW96-23	09/30/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW96-23	09/30/2024	ND	0.8000		2.4000
Chromium, total	ug/L	MW96-23	09/30/2024	ND	8.0000		18.6000
Cobalt, total	ug/L	MW96-23	09/30/2024	ND	0.4000		7.0000
Copper, total	ug/L	MW96-23	09/30/2024	ND	4.0000		19.5000
Lead, total	ug/L	MW96-23	09/30/2024	ND	4.0000		11.9000
Nickel, total	ug/L	MW96-23	09/30/2024	ND	4.0000		17.4000
Selenium, total	ug/L	MW96-23	09/30/2024	ND	4.0000		9.0000
Silver, total	ug/L	MW96-23	09/30/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW96-23	09/30/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW96-23	09/30/2024	ND	20.0000		40.6000
Zinc, total	ug/L	MW96-23	09/30/2024	ND	20.0000		144.0000
Antimony, total	ug/L	MW96-24	09/30/2024	ND	2.0000		4.5000
Arsenic, total	ug/L	MW96-24	09/30/2024	ND	4.0000		50.6000
Barium, total	ug/L	MW96-24	09/30/2024		559.0000		874.0000
Beryllium, total	ug/L	MW96-24	09/30/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW96-24	09/30/2024	ND	0.8000		2.4000
Chromium, total	ug/L	MW96-24	09/30/2024	ND	8.0000		18.6000
Cobalt, total	ug/L	MW96-24	09/30/2024	ND	0.4000		7.0000
Copper, total	ug/L	MW96-24	09/30/2024	ND	4.0000		19.5000
Lead, total	ug/L	MW96-24	09/30/2024	ND	4.0000		11.9000
Nickel, total	ug/L	MW96-24	09/30/2024	ND	4.0000		17.4000
Selenium, total	ug/L	MW96-24	09/30/2024	ND	4.0000		9.0000
Silver, total	ug/L	MW96-24	09/30/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW96-24	09/30/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW96-24	09/30/2024	ND	20.0000		40.6000
Zinc, total	ug/L	MW96-24	09/30/2024	ND	20.0000		144.0000
Antimony, total	ug/L	MW98-25	09/30/2024	ND	2.0000		4.5000
Arsenic, total	ug/L	MW98-25	09/30/2024		6.6000		50.6000
Barium, total	ug/L	MW98-25	09/30/2024		90.2000		874.0000
Beryllium, total	ug/L	MW98-25	09/30/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW98-25	09/30/2024	ND	0.8000		2.4000
Chromium, total	ug/L	MW98-25	09/30/2024	ND	8.0000		18.6000
Cobalt, total	ug/L	MW98-25	09/30/2024		11.0000	***	7.0000
Copper, total	ug/L	MW98-25	09/30/2024	ND	4.0000		19.5000
Lead, total	ug/L	MW98-25	09/30/2024	ND	4.0000		11.9000
Nickel, total	ug/L	MW98-25	09/30/2024		26.5000	***	17.4000
Selenium, total	ug/L	MW98-25	09/30/2024	ND	4.0000		9.0000
Silver, total	ug/L	MW98-25	09/30/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW98-25	09/30/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW98-25	09/30/2024	ND	20.0000		40.6000
Zinc, total	ug/L	MW98-25	09/30/2024	ND	20.0000		144.0000

* - 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	4	110	0.036	4	410	0.010
Arsenic, total	32	109	0.294	137	412	0.333
Barium, total	110	110	1.000	410	411	0.998
Beryllium, total	0	110	0.000	1	411	0.002
Cadmium, total	10	106	0.094	53	412	0.129
Chromium, total	4	108	0.037	17	410	0.041
Cobalt, total	48	106	0.453	101	412	0.245
Copper, total	12	105	0.114	89	411	0.217
Lead, total	3	105	0.029	43	412	0.104
Nickel, total	37	107	0.346	183	412	0.444
Selenium, total	3	110	0.027	18	411	0.044
Silver, total	0	110	0.000	0	410	0.000
Thallium, total	0	110	0.000	2	410	0.005
Vanadium, total	2	109	0.018	28	411	0.068
Zinc, total	20	109	0.183	128	412	0.311

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	4	110	0.036	1.635	1.142					2.326	normal	nonpar
Arsenic, total	32	109	0.294	1.156	0.493					2.326	normal	nonpar
Barium, total	110	110	1.000	5.703	2.908					2.326	non-norm	nonpar
Beryllium, total	0	110	0.000									nonpar
Cadmium, total	10	106	0.094	1.279	1.388					2.326	normal	nonpar
Chromium, total	4	108	0.037									nonpar
Cobalt, total	48	106	0.453	4.692	0.966					2.326	lognor	nonpar
Copper, total	12	105	0.114	0.675	0.612					2.326	normal	nonpar
Lead, total	3	105	0.029									nonpar
Nickel, total	37	107	0.346	1.610	0.185					2.326	normal	nonpar
Selenium, total	3	110	0.027									nonpar
Silver, total	0	110	0.000									nonpar
Thallium, total	0	110	0.000									nonpar
Vanadium, total	2	109	0.018									nonpar
Zinc, total	20	109	0.183	1.923	0.131					2.326	normal	nonpar

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

Table 5

Summary Statistics and Prediction Limits

Constituent	Units	Detect	N	Mean	SD	alpha	Factor	Pred Limit	Type		Conf
Antimony, total	ug/L	4	110					4.5000	nonpar		0.99
Arsenic, total	ug/L	32	109					50.6000	nonpar		0.99
Barium, total	ug/L	110	110					874.0000	nonpar		0.99
Beryllium, total	ug/L	0	110					4.0000	nonpar	***	0.99
Cadmium, total	ug/L	10	106					2.4000	nonpar		0.99
Chromium, total	ug/L	4	108					18.6000	nonpar		0.99
Cobalt, total	ug/L	48	106					7.0000	nonpar		0.99
Copper, total	ug/L	12	105					19.5000	nonpar		0.99
Lead, total	ug/L	3	105					11.9000	nonpar		0.99
Nickel, total	ug/L	37	107					17.4000	nonpar		0.99
Selenium, total	ug/L	3	110					9.0000	nonpar		0.99
Silver, total	ug/L	0	110					4.0000	nonpar	***	0.99
Thallium, total	ug/L	0	110					2.0000	nonpar	***	0.99
Vanadium, total	ug/L	2	109					40.6000	nonpar		0.99
Zinc, total	ug/L	20	109					144.0000	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
Cadmium, total	ug/L	MW02-15A	03/16/2016	3.6000		09/18/2014-09/30/2024	23	0.5065
Copper, total	ug/L	MW02-15A	03/09/2021	26.0000		09/18/2014-09/30/2024	23	0.5065
Lead, total	ug/L	MW02-30A	09/14/2022	14.8000		03/16/2016-09/30/2024	19	0.5643
Lead, total	ug/L	MW02-30A	03/20/2023	22.3000		03/16/2016-09/30/2024	19	0.5643
Cadmium, total	ug/L	MW88-2	03/16/2016	4.6000		09/18/2014-09/30/2024	22	0.5263
Cadmium, total	ug/L	MW88-2	09/19/2017	2.5000		09/18/2014-09/30/2024	22	0.5263
Cobalt, total	ug/L	MW91-8	09/14/2022	2.7000		09/19/2014-09/30/2024	23	0.5065
Arsenic, total	ug/L	MW98-28	09/18/2014	18.9000		09/18/2014-09/30/2024	23	0.5065
Chromium, total	ug/L	MW98-28	09/18/2014	43.4000		09/18/2014-09/30/2024	23	0.5162
Chromium, total	ug/L	MW98-28	06/29/2015	24.9000		09/18/2014-09/30/2024	23	0.5162
Copper, total	ug/L	MW98-28	06/29/2015	29.9000		09/18/2014-09/30/2024	21	0.5263
Lead, total	ug/L	MW98-28	06/29/2015	15.6000		09/18/2014-09/30/2024	22	0.5162
Nickel, total	ug/L	MW98-28	03/09/2021	33.6000		09/18/2014-09/30/2024	21	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
Nickel, total	ug/L	GU-3	09/13/2021		15.2000		17.4000
Nickel, total	ug/L	GU-3	12/03/2021		12.4000		17.4000
Nickel, total	ug/L	GU-3	03/28/2022		12.7000		17.4000
Nickel, total	ug/L	GU-3	09/15/2022		21.1000	*	17.4000
Nickel, total	ug/L	GU-3	09/30/2024		36.8000	*	17.4000
Cadmium, total	ug/L	MW88-3	03/14/2008	ND	1.0000		2.4000
Cadmium, total	ug/L	MW88-3	06/04/2008	ND	1.0000		2.4000
Cadmium, total	ug/L	MW88-3	07/21/2008	ND	1.0000		2.4000
Cadmium, total	ug/L	MW88-3	09/10/2008		5.2000	*	2.4000
Cadmium, total	ug/L	MW88-3	12/18/2008	ND	1.0000		2.4000
Cadmium, total	ug/L	MW88-3	03/04/2009	ND	1.0000		2.4000
Cadmium, total	ug/L	MW88-3	09/20/2009	ND	1.0000		2.4000
Cadmium, total	ug/L	MW88-3	03/24/2010	ND	1.0000		2.4000
Cadmium, total	ug/L	MW88-3	09/21/2010	ND	1.0000		2.4000
Cadmium, total	ug/L	MW88-3	03/30/2011		3.1000	*	2.4000
Cadmium, total	ug/L	MW88-3	09/14/2011	ND	0.8000		2.4000
Cadmium, total	ug/L	MW88-3	03/07/2012	ND	0.8000		2.4000
Cadmium, total	ug/L	MW88-3	09/12/2012	ND	0.8000		2.4000
Cadmium, total	ug/L	MW88-3	03/20/2013		0.8000		2.4000
Cadmium, total	ug/L	MW88-3	09/27/2013		2.0000		2.4000
Cadmium, total	ug/L	MW88-3	03/13/2014	ND	0.8000		2.4000
Cadmium, total	ug/L	MW88-3	09/18/2014		1.2000		2.4000
Cadmium, total	ug/L	MW88-3	03/17/2015	ND	0.8000		2.4000
Cadmium, total	ug/L	MW88-3	09/11/2015	ND	0.8000		2.4000
Cadmium, total	ug/L	MW88-3	03/16/2016		1.8000		2.4000
Cadmium, total	ug/L	MW88-3	09/08/2016	ND	0.8000		2.4000
Cadmium, total	ug/L	MW88-3	03/17/2017	ND	0.8000		2.4000
Cadmium, total	ug/L	MW88-3	09/19/2017	ND	0.8000		2.4000
Cadmium, total	ug/L	MW88-3	03/08/2018	ND	0.8000		2.4000
Cadmium, total	ug/L	MW88-3	09/24/2018	ND	0.8000		2.4000
Cadmium, total	ug/L	MW88-3	03/25/2019	ND	0.8000		2.4000
Cadmium, total	ug/L	MW88-3	09/03/2019	ND	0.8000		2.4000
Cadmium, total	ug/L	MW88-3	03/23/2020	ND	0.8000		2.4000
Cadmium, total	ug/L	MW88-3	09/04/2020	ND	0.8000		2.4000
Cadmium, total	ug/L	MW88-3	03/09/2021	ND	0.8000		2.4000
Cadmium, total	ug/L	MW88-3	09/07/2021	ND	0.8000		2.4000
Cadmium, total	ug/L	MW88-3	03/28/2022	ND	0.8000		2.4000
Cadmium, total	ug/L	MW88-3	09/14/2022	ND	0.8000		2.4000
Cadmium, total	ug/L	MW88-3	03/20/2023	ND	0.8000		2.4000
Cadmium, total	ug/L	MW88-3	09/12/2023	ND	0.8000		2.4000
Cadmium, total	ug/L	MW88-3	03/12/2024	ND	0.8000		2.4000
Cadmium, total	ug/L	MW88-3	09/30/2024		5.6000	*	2.4000
Cobalt, total	ug/L	MW98-25	03/17/2008		46.0000	*	7.0000
Cobalt, total	ug/L	MW98-25	06/04/2008		42.0000	*	7.0000
Cobalt, total	ug/L	MW98-25	07/23/2008		51.0000	*	7.0000
Cobalt, total	ug/L	MW98-25	09/12/2008		24.2000	*	7.0000
Cobalt, total	ug/L	MW98-25	12/11/2008		29.3000	*	7.0000
Cobalt, total	ug/L	MW98-25	03/04/2009		33.9000	*	7.0000
Cobalt, total	ug/L	MW98-25	09/20/2009		23.7000	*	7.0000
Cobalt, total	ug/L	MW98-25	03/26/2010		33.6000	*	7.0000
Cobalt, total	ug/L	MW98-25	09/24/2010		25.4000	*	7.0000
Cobalt, total	ug/L	MW98-25	03/30/2011		35.4000	*	7.0000
Cobalt, total	ug/L	MW98-25	09/14/2011		30.0000	*	7.0000
Cobalt, total	ug/L	MW98-25	03/07/2012		33.1000	*	7.0000
Cobalt, total	ug/L	MW98-25	09/12/2012		8.9000	*	7.0000
Cobalt, total	ug/L	MW98-25	03/20/2013		12.3000	*	7.0000
Cobalt, total	ug/L	MW98-25	09/27/2013		10.0000	*	7.0000
Cobalt, total	ug/L	MW98-25	03/13/2014		14.5000	*	7.0000
Cobalt, total	ug/L	MW98-25	09/18/2014		19.0000	*	7.0000
Cobalt, total	ug/L	MW98-25	03/17/2015		5.4000		7.0000
Cobalt, total	ug/L	MW98-25	09/11/2015		13.0000	*	7.0000
Cobalt, total	ug/L	MW98-25	03/16/2016		4.7000		7.0000
Cobalt, total	ug/L	MW98-25	09/08/2016		29.1000	*	7.0000
Cobalt, total	ug/L	MW98-25	03/18/2017		14.6000	*	7.0000
Cobalt, total	ug/L	MW98-25	09/19/2017		6.2000		7.0000
Cobalt, total	ug/L	MW98-25	03/08/2018		10.3000	*	7.0000
Cobalt, total	ug/L	MW98-25	09/24/2018		11.6000	*	7.0000
Cobalt, total	ug/L	MW98-25	03/25/2019		13.9000	*	7.0000
Cobalt, total	ug/L	MW98-25	09/03/2019		8.5000	*	7.0000
Cobalt, total	ug/L	MW98-25	03/23/2020		22.2000	*	7.0000
Cobalt, total	ug/L	MW98-25	09/04/2020		7.6000	*	7.0000

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

Table 8

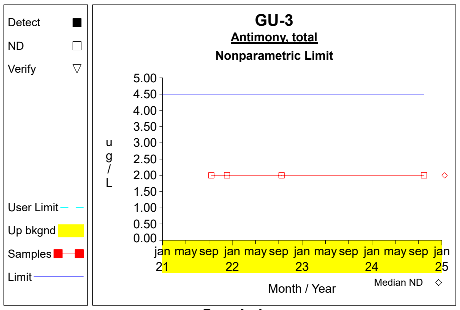
Historical Downgradient Data for Constituent-Well Combinations that Failed the Current Statistical Evaluation or are in Verification Resampling Mode

Constituent	Units	Well	Date		Result		Pred. Limit
Cobalt, total	ug/L	MW98-25	03/09/2021		11.7000	*	7.0000
Cobalt, total	ug/L	MW98-25	09/07/2021		12.8000	*	7.0000
Cobalt, total	ug/L	MW98-25	03/28/2022		10.9000	*	7.0000
Cobalt, total	ug/L	MW98-25	09/14/2022		19.4000	*	7.0000
Cobalt, total	ug/L	MW98-25	03/20/2023		11.2000	*	7.0000
Cobalt, total	ug/L	MW98-25	09/12/2023		15.2000	*	7.0000
Cobalt, total	ug/L	MW98-25	03/12/2024		10.7000	*	7.0000
Cobalt, total	ug/L	MW98-25	09/30/2024		11.0000	*	7.0000
Nickel, total	ug/L	MW98-25	03/17/2008		111.0000	*	17.4000
Nickel, total	ug/L	MW98-25	06/04/2008		86.0000	*	17.4000
Nickel, total	ug/L	MW98-25	07/23/2008		110.0000	*	17.4000
Nickel, total	ug/L	MW98-25	09/12/2008		81.1000	*	17.4000
Nickel, total	ug/L	MW98-25	12/11/2008		60.7000	*	17.4000
Nickel, total	ug/L	MW98-25	03/04/2009		69.6000	*	17.4000
Nickel, total	ug/L	MW98-25	09/20/2009		53.1000	*	17.4000
Nickel, total	ug/L	MW98-25	03/26/2010		84.0000	*	17.4000
Nickel, total	ug/L	MW98-25	09/24/2010		56.5000	*	17.4000
Nickel, total	ug/L	MW98-25	03/30/2011		85.8000	*	17.4000
Nickel, total	ug/L	MW98-25	09/14/2011		70.5000	*	17.4000
Nickel, total	ug/L	MW98-25	03/07/2012		75.7000	*	17.4000
Nickel, total	ug/L	MW98-25	09/12/2012		46.5000	*	17.4000
Nickel, total	ug/L	MW98-25	03/20/2013		41.5000	*	17.4000
Nickel, total	ug/L	MW98-25	09/27/2013		55.2000	*	17.4000
Nickel, total	ug/L	MW98-25	03/13/2014		51.0000	*	17.4000
Nickel, total	ug/L	MW98-25	09/18/2014		48.1000	*	17.4000
Nickel, total	ug/L	MW98-25	03/17/2015		41.6000	*	17.4000
Nickel, total	ug/L	MW98-25	09/11/2015		36.2000	*	17.4000
Nickel, total	ug/L	MW98-25	03/16/2016		37.9000	*	17.4000
Nickel, total	ug/L	MW98-25	09/08/2016		81.7000	*	17.4000
Nickel, total	ug/L	MW98-25	03/18/2017		34.3000	*	17.4000
Nickel, total	ug/L	MW98-25	09/19/2017		17.0000		17.4000
Nickel, total	ug/L	MW98-25	03/08/2018		20.1000	*	17.4000
Nickel, total	ug/L	MW98-25	09/24/2018		24.6000	*	17.4000
Nickel, total	ug/L	MW98-25	03/25/2019		21.2000	*	17.4000
Nickel, total	ug/L	MW98-25	09/03/2019		9.0000		17.4000
Nickel, total	ug/L	MW98-25	03/23/2020		29.9000	*	17.4000
Nickel, total	ug/L	MW98-25	09/04/2020		10.5000		17.4000
Nickel, total	ug/L	MW98-25	03/09/2021		16.7000		17.4000
Nickel, total	ug/L	MW98-25	09/07/2021		20.4000	*	17.4000
Nickel, total	ug/L	MW98-25	03/28/2022		21.9000	*	17.4000
Nickel, total	ug/L	MW98-25	09/14/2022		24.3000	*	17.4000
Nickel, total	ug/L	MW98-25	03/20/2023		23.4000	*	17.4000
Nickel, total	ug/L	MW98-25	09/12/2023		35.7000	*	17.4000
Nickel, total	ug/L	MW98-25	03/12/2024		23.6000	*	17.4000
Nickel, total	ug/L	MW98-25	09/30/2024		26.5000	*	17.4000

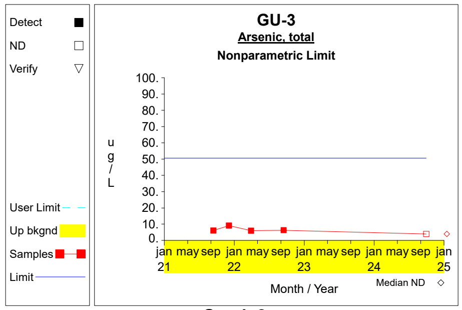
* - Significantly increased over background.
** - Detect at limit for 100% NDs in background (NPPL only).
*** - Manual exclusion.
ND = Not Detected, Result = detection limit.

Boone County [GW] November 2024

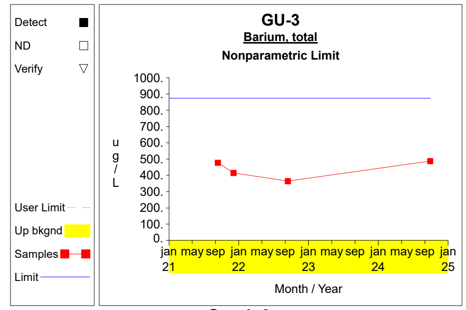
Up vs. Down Prediction Limits



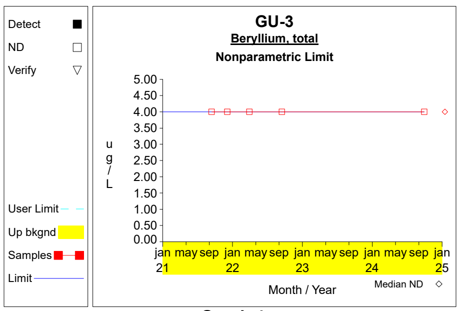
Graph 1



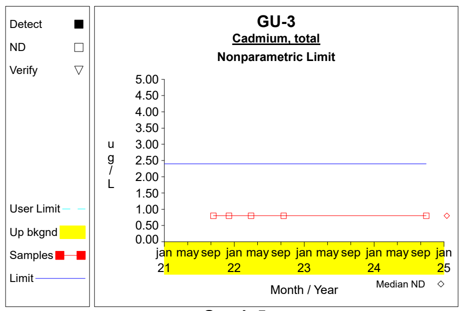
Graph 2



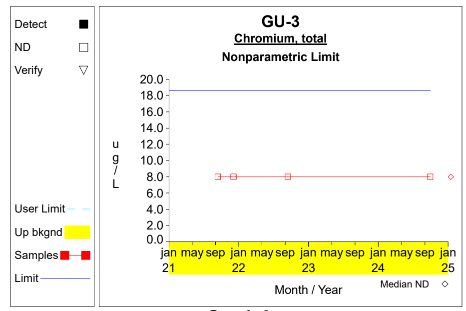
Graph 3



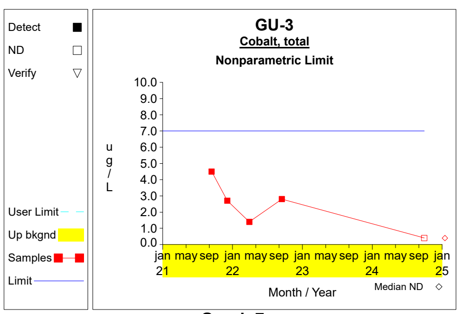
Graph 4



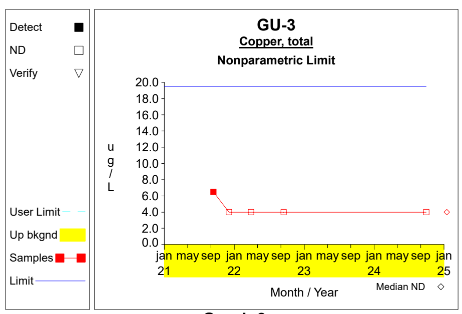
Graph 5



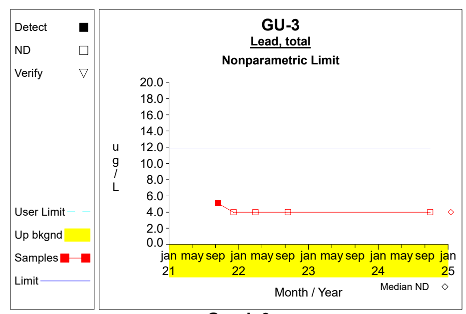
Graph 6



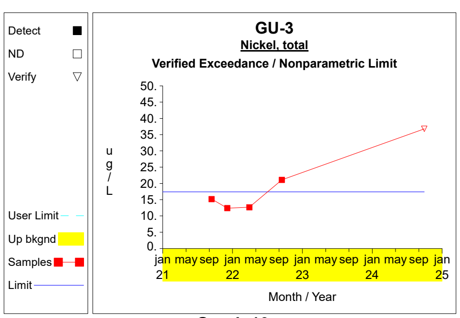
Graph 7



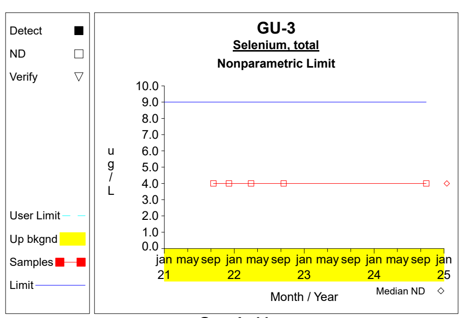
Graph 8



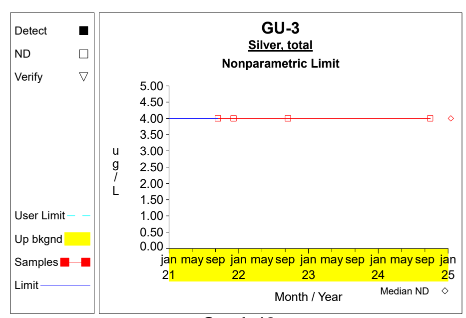
Graph 9



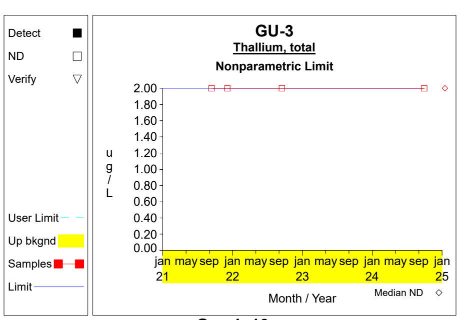
Graph 10



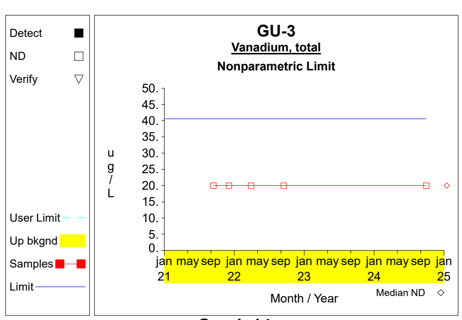
Graph 11



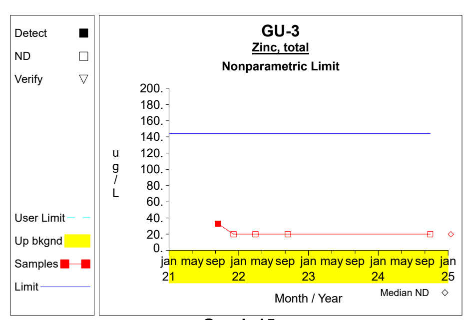
Graph 12



Graph 13



Graph 14



Graph 15

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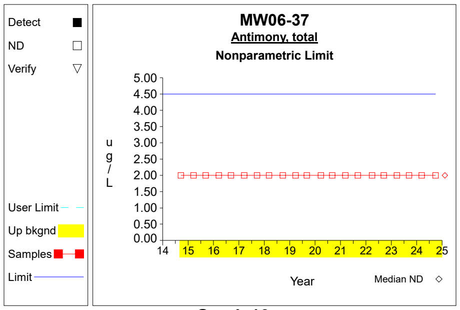
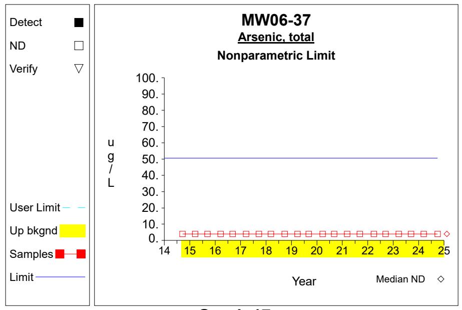
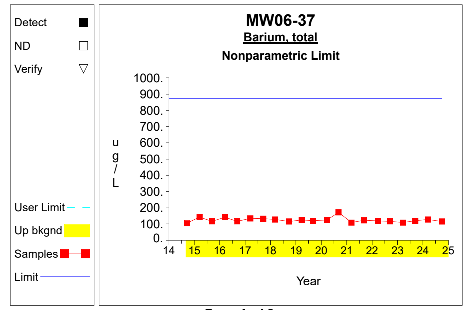
Up vs. Down Prediction Limits



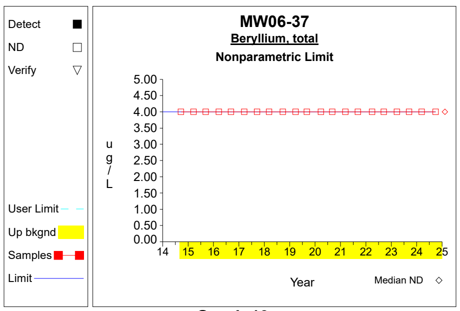
Graph 16



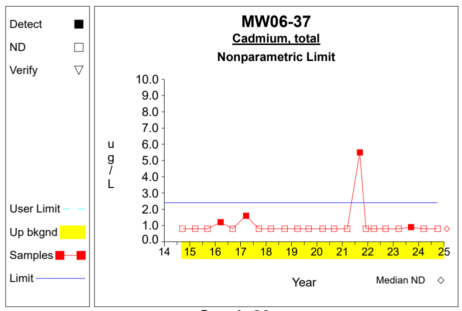
Graph 17



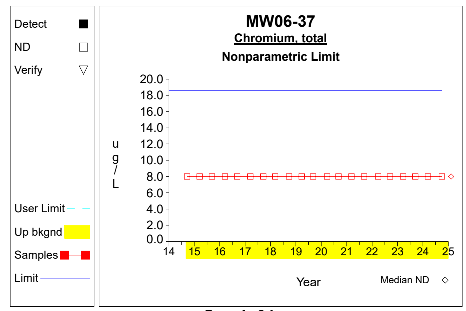
Graph 18



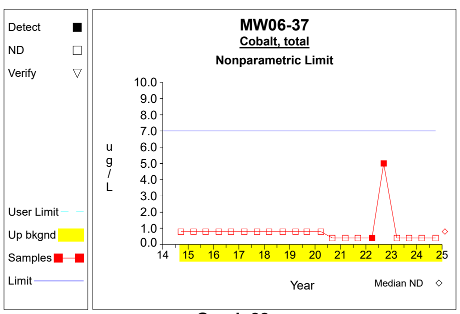
Graph 19



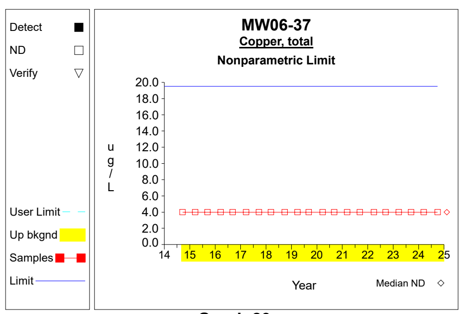
Graph 20



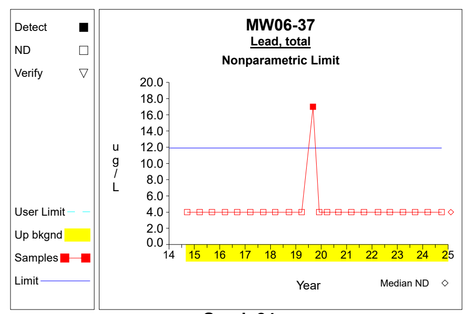
Graph 21



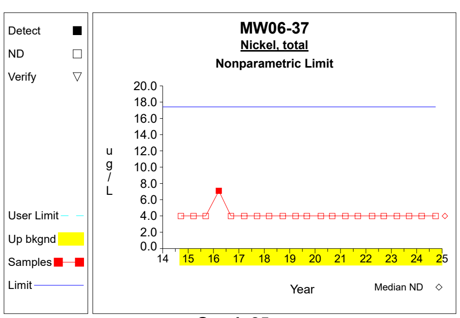
Graph 22



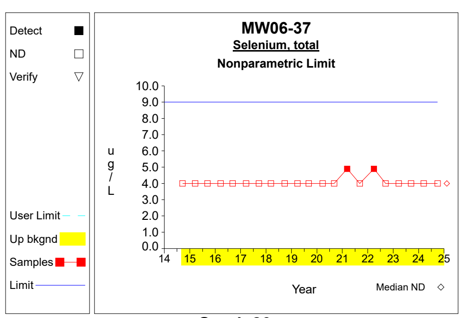
Graph 23



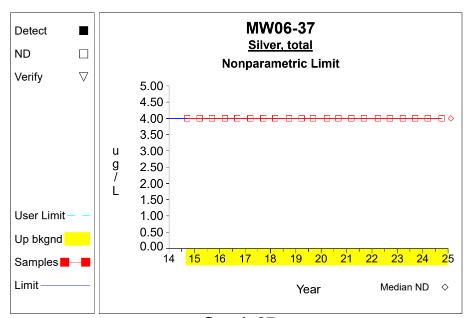
Graph 24



Graph 25



Graph 26



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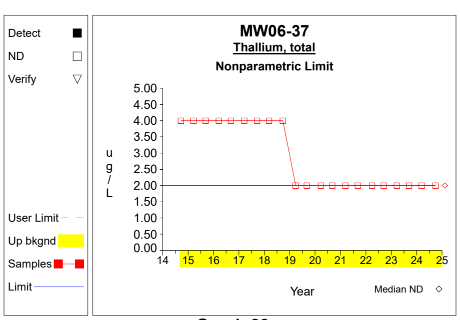
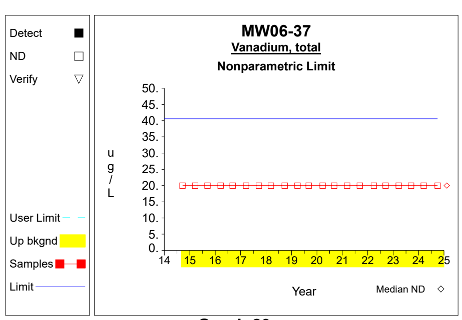
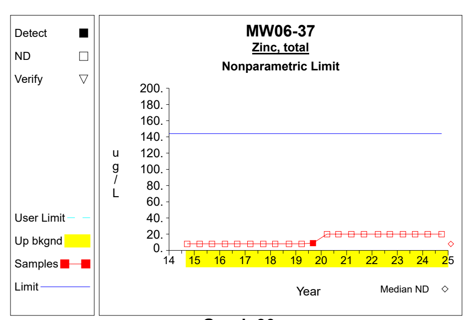


Graph 28



Graph 29



Graph 30

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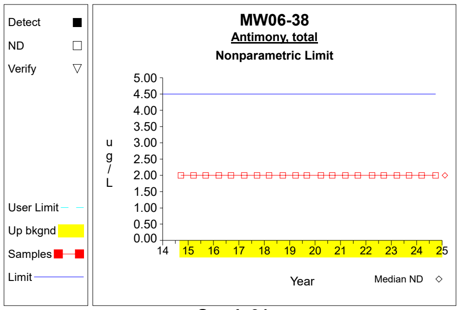
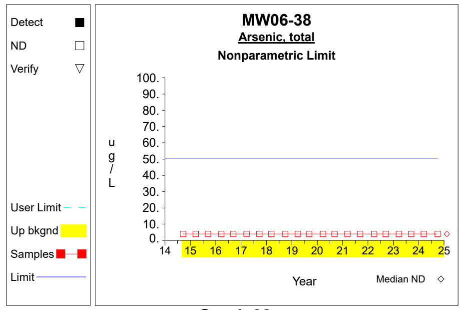
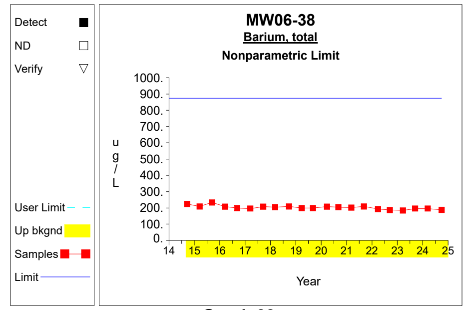
Up vs. Down Prediction Limits



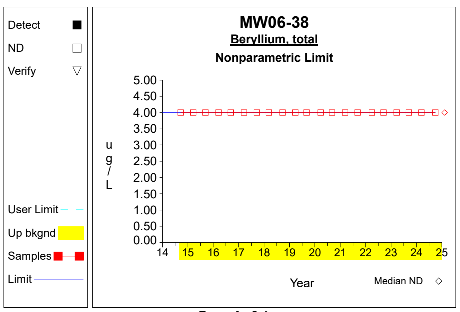
Graph 31



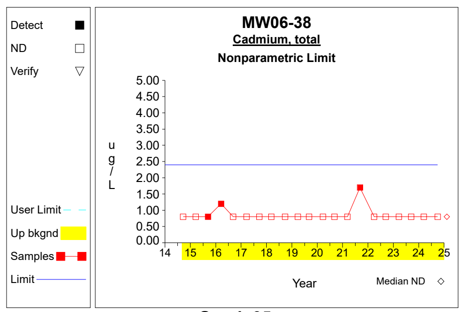
Graph 32



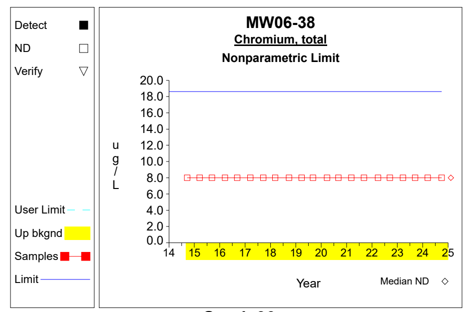
Graph 33



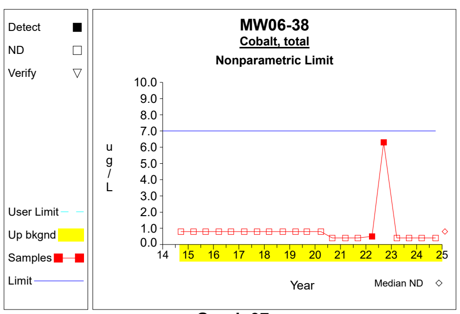
Graph 34



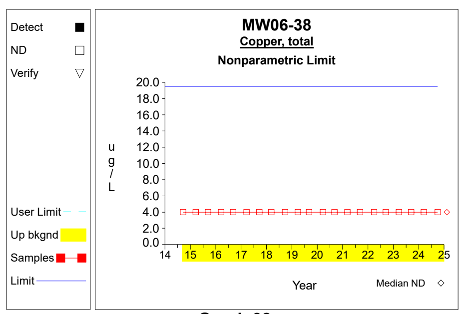
Graph 35



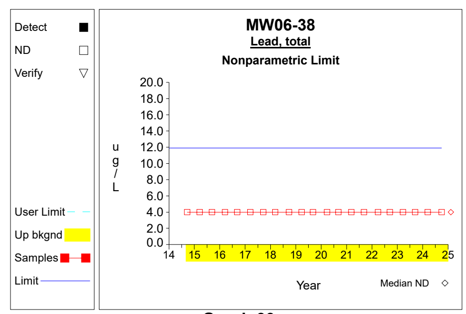
Graph 36



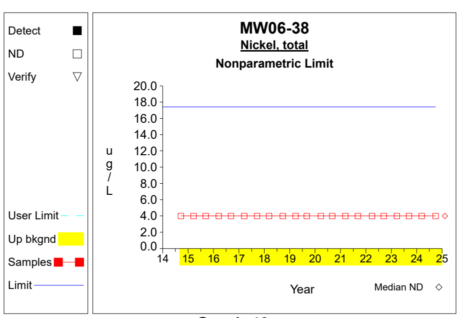
Graph 37



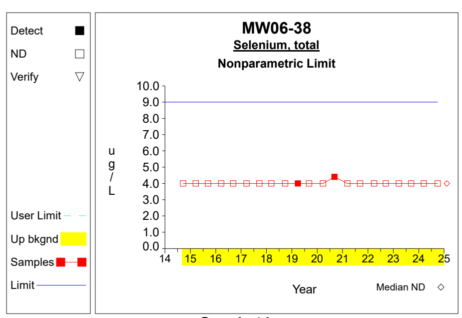
Graph 38



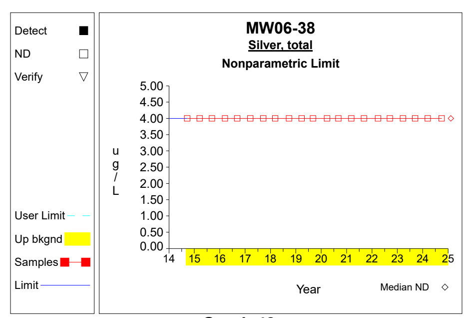
Graph 39



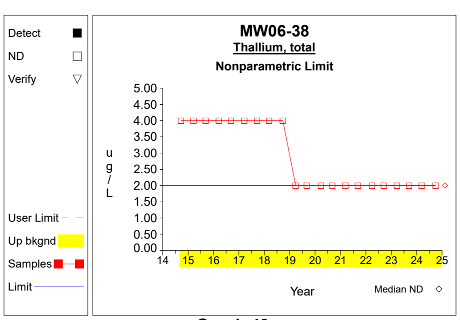
Graph 40



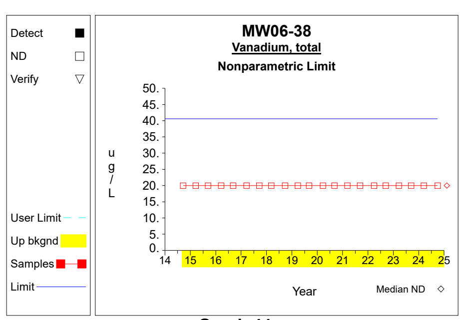
Graph 41



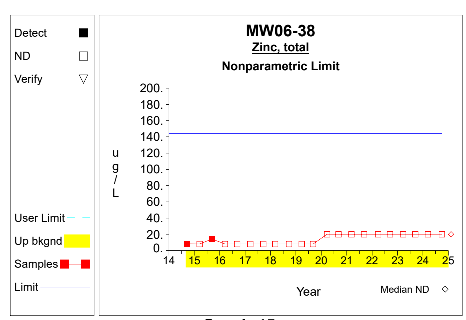
Graph 42



Graph 43



Graph 44



Graph 45

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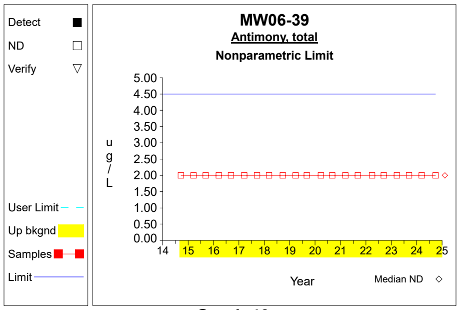
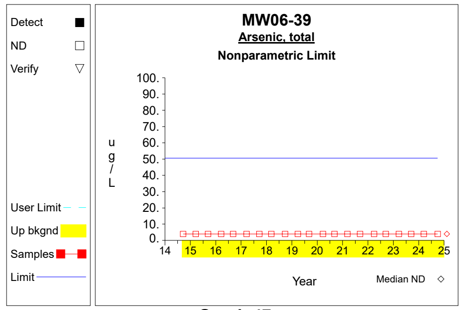
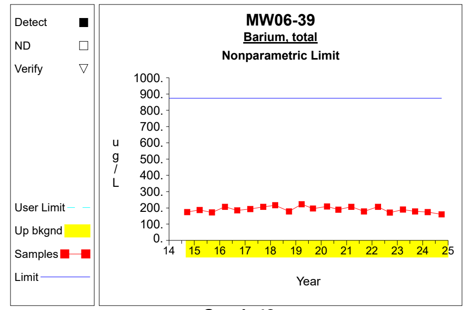
Up vs. Down Prediction Limits



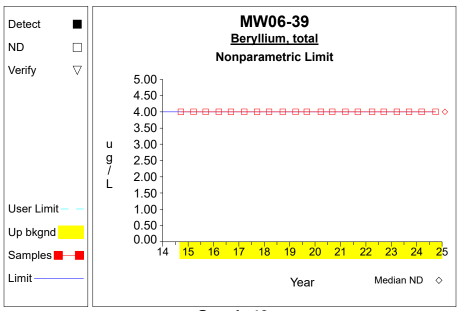
Graph 46



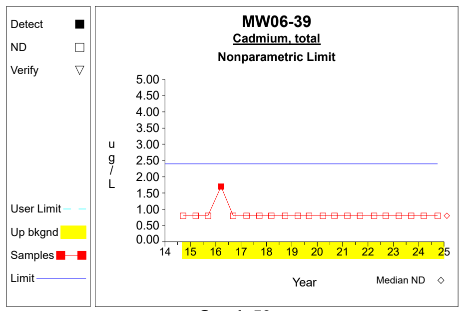
Graph 47



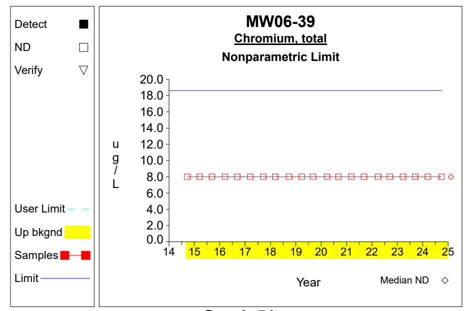
Graph 48



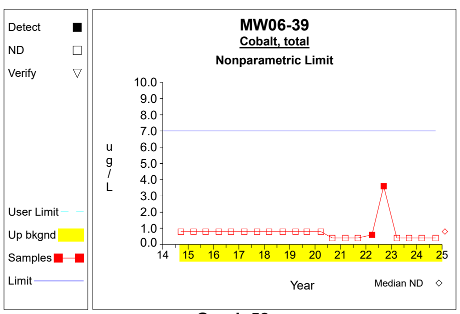
Graph 49



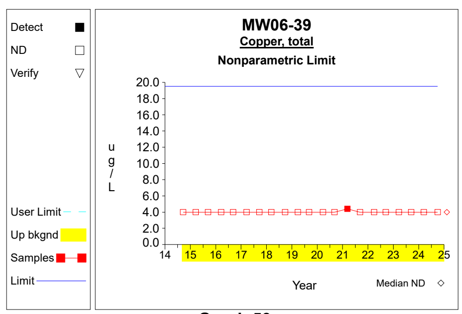
Graph 50



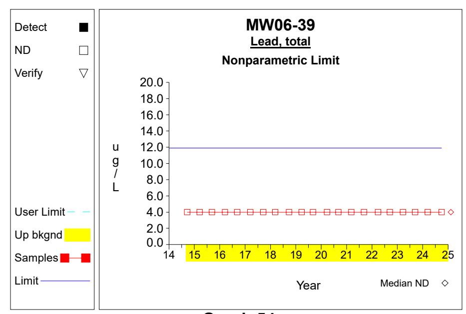
Graph 51



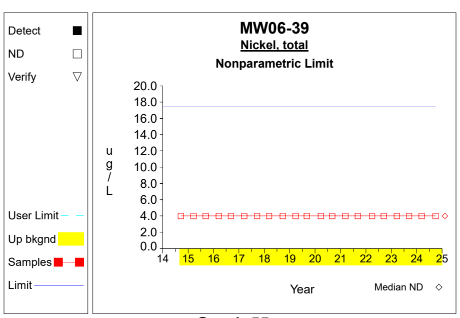
Graph 52



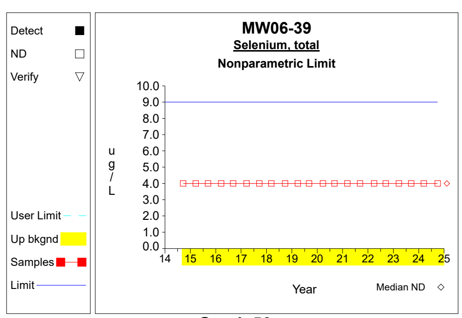
Graph 53



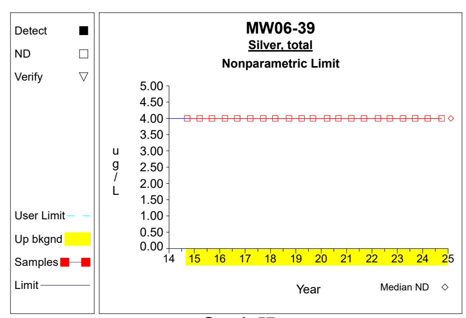
Graph 54



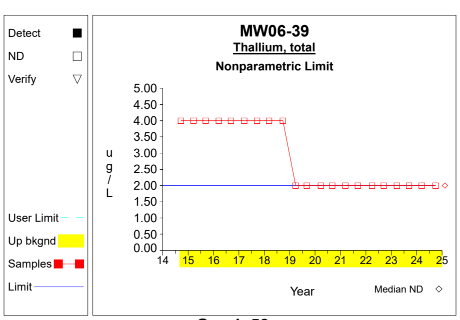
Graph 55



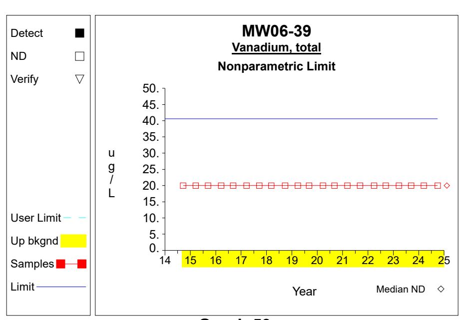
Graph 56



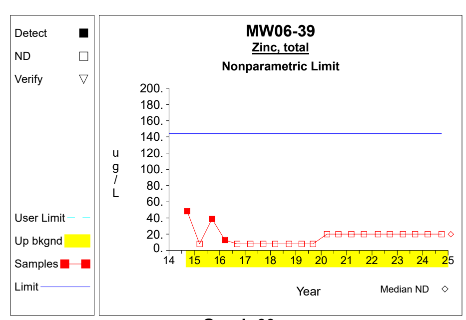
Graph 57



Graph 58



Graph 59



Graph 60

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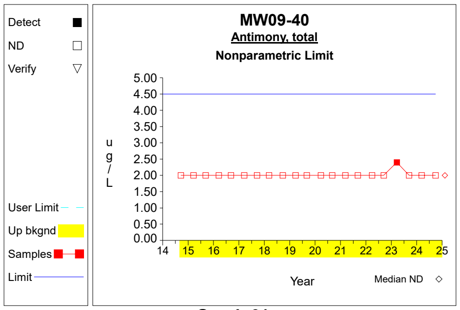
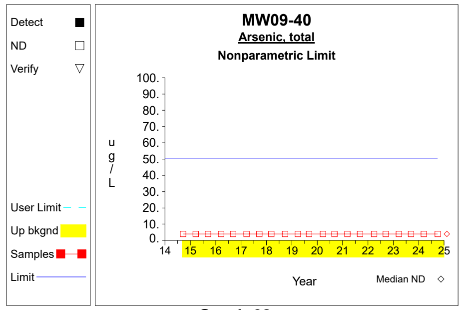
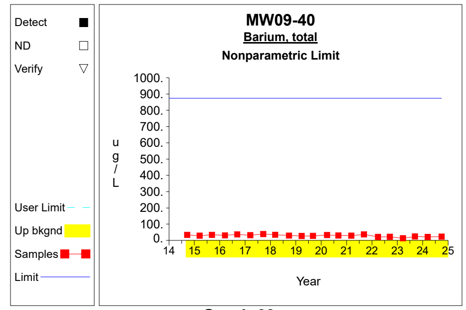
Up vs. Down Prediction Limits



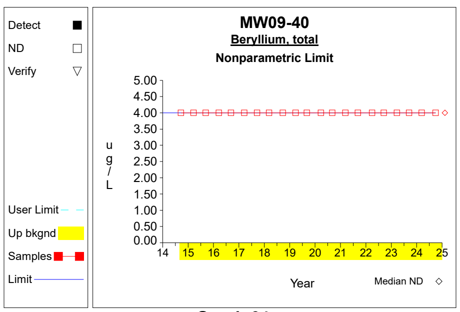
Graph 61



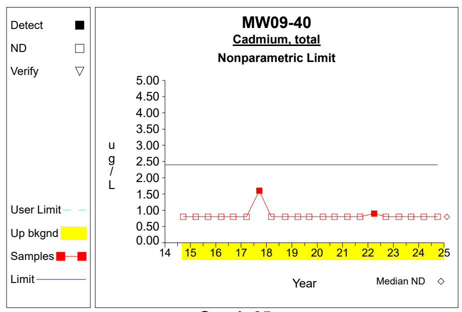
Graph 62



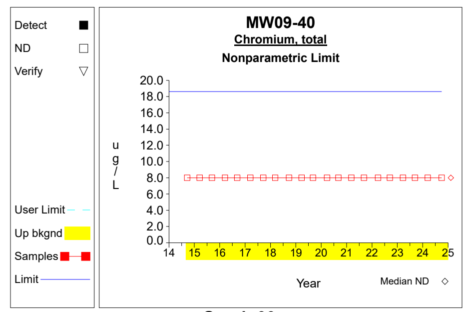
Graph 63



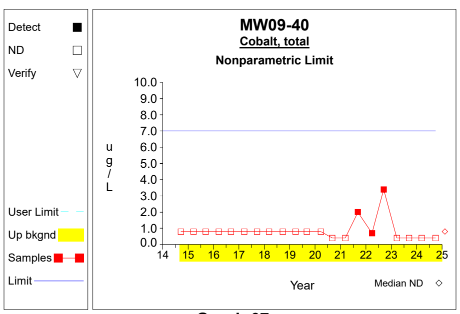
Graph 64



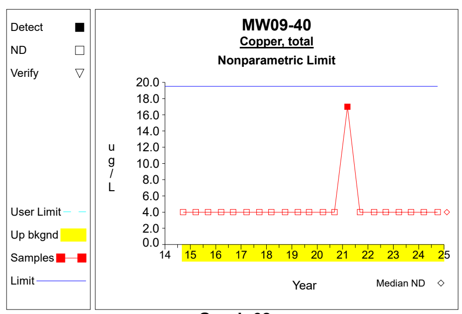
Graph 65



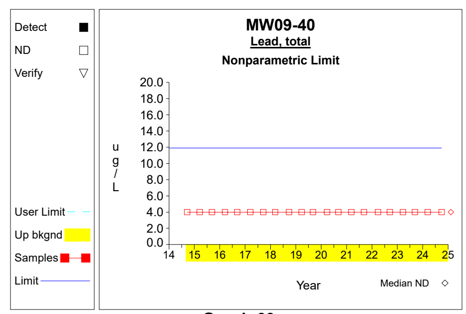
Graph 66



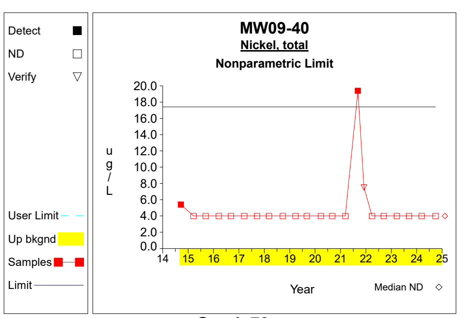
Graph 67



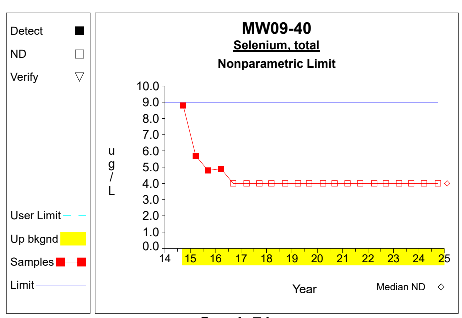
Graph 68



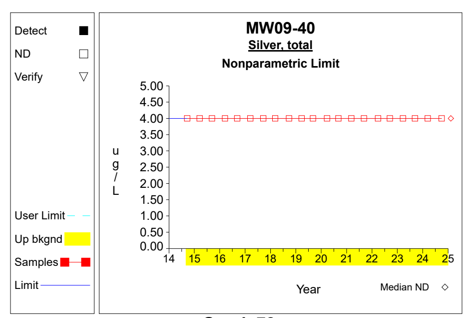
Graph 69



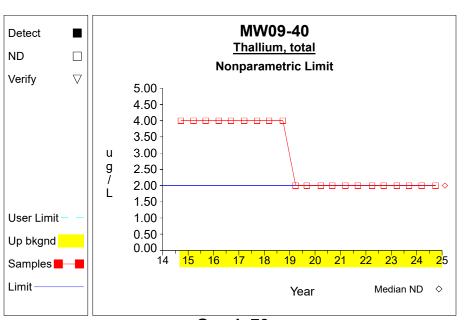
Graph 70



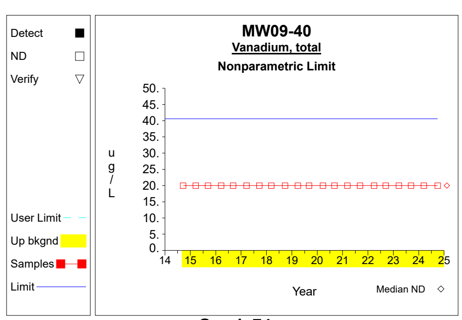
Graph 71



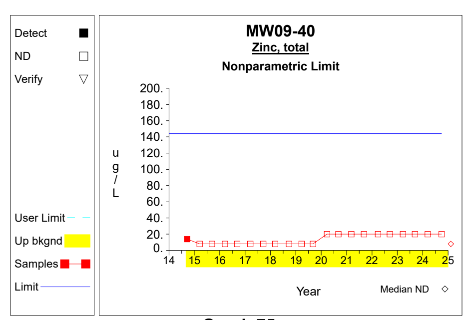
Graph 72



Graph 73



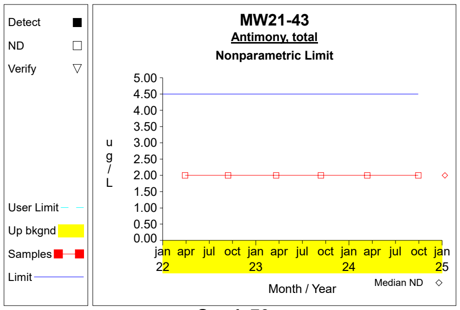
Graph 74



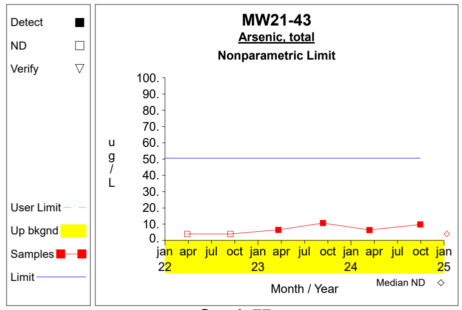
Graph 75

Prepared by: Otter Creek Environmental

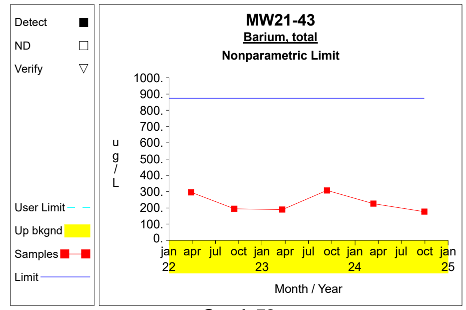
Up vs. Down Prediction Limits



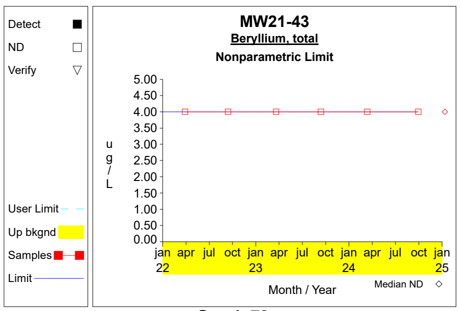
Graph 76



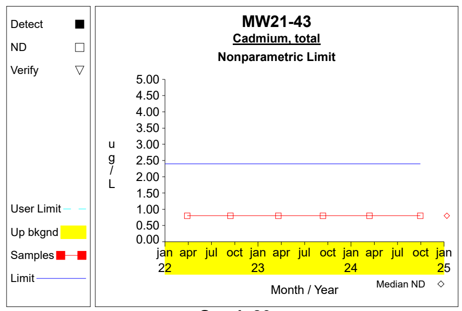
Graph 77



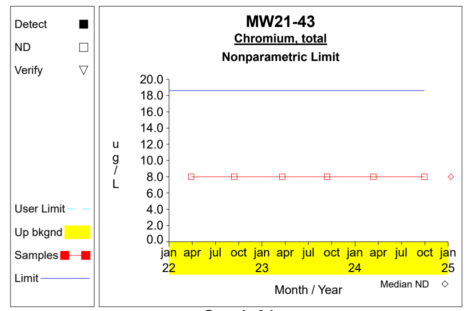
Graph 78



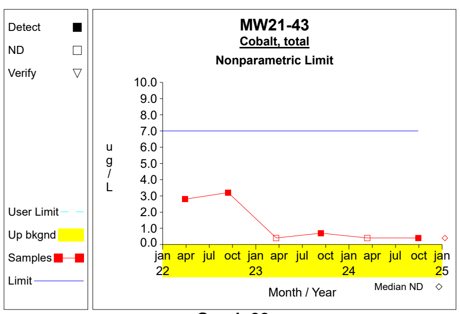
Graph 79



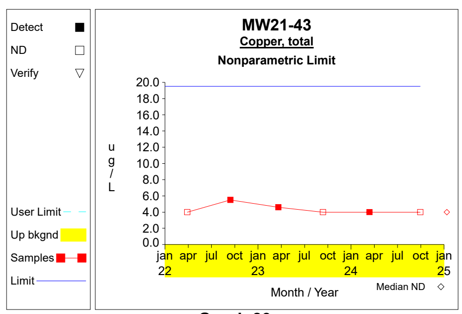
Graph 80



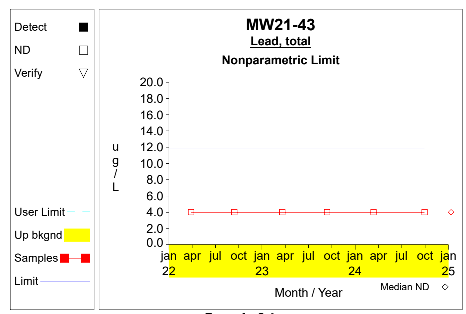
Graph 81



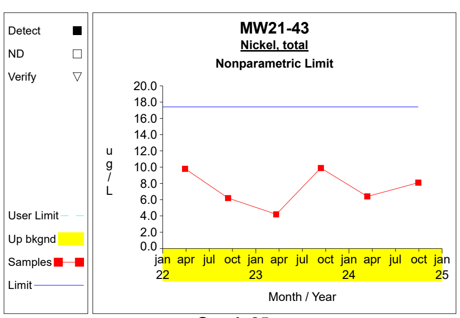
Graph 82



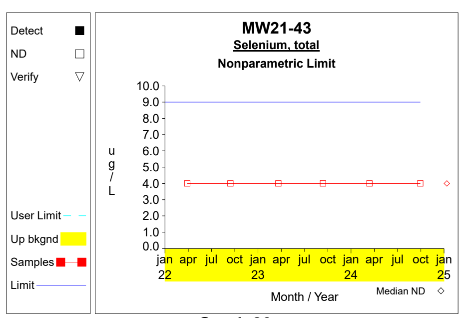
Graph 83



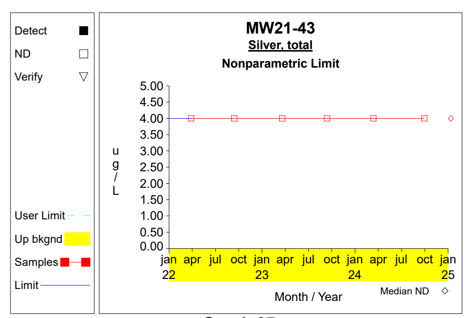
Graph 84



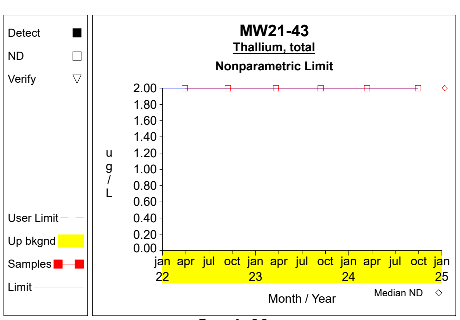
Graph 85



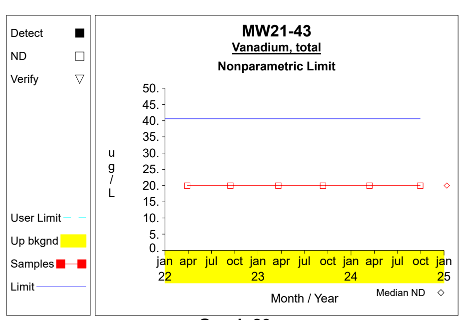
Graph 86



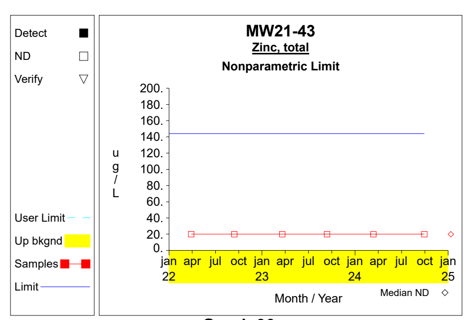
Graph 87



Graph 88

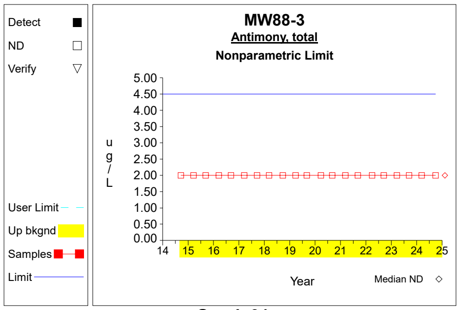


Graph 89

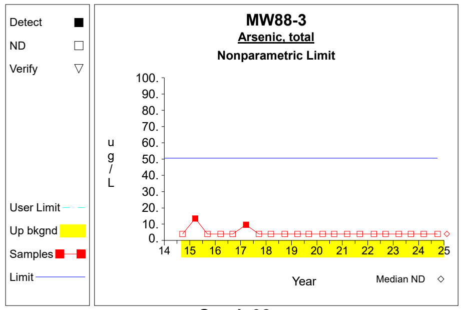


Graph 90

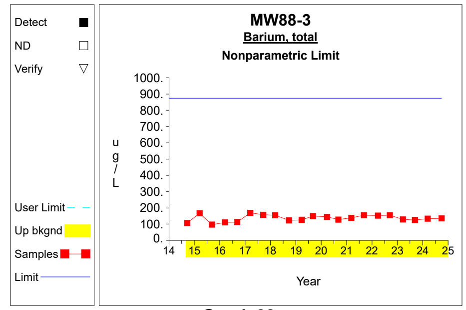
Up vs. Down Prediction Limits



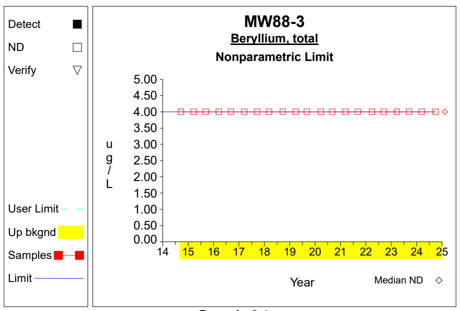
Graph 91



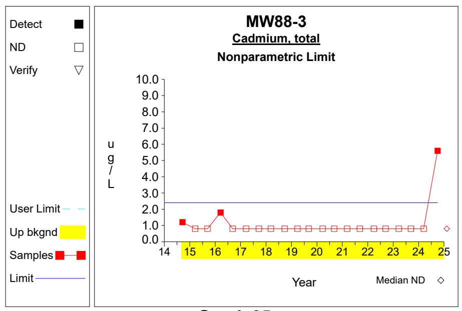
Graph 92



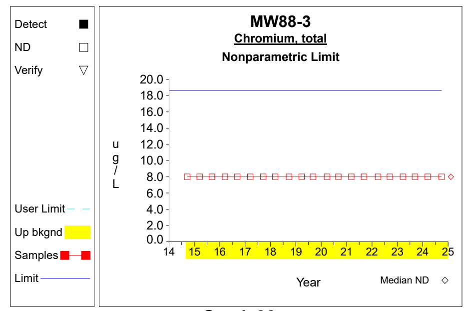
Graph 93



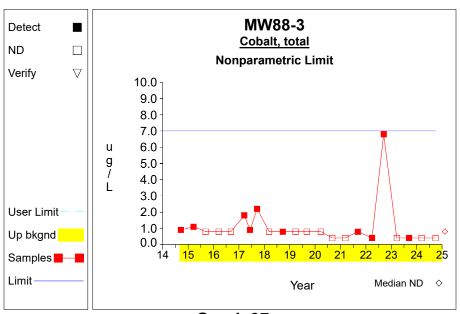
Graph 94



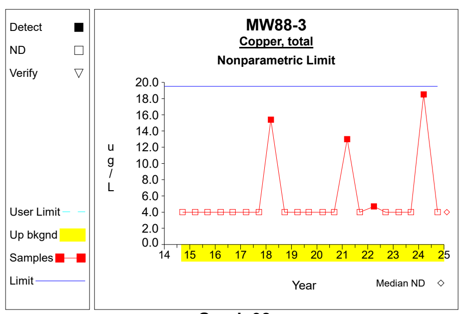
Graph 95



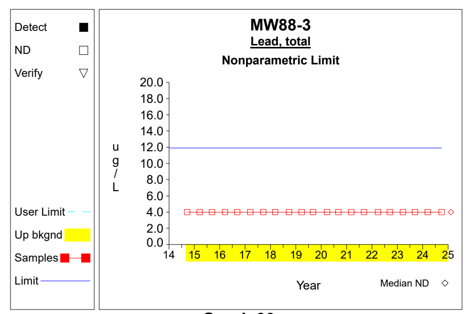
Graph 96



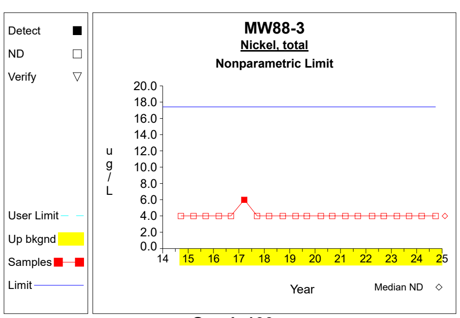
Graph 97



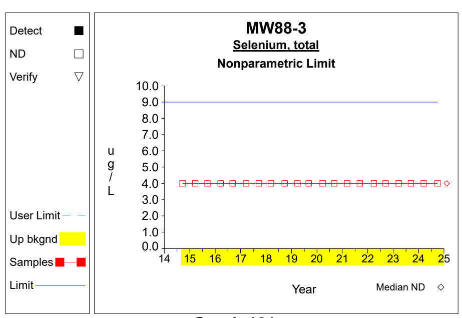
Graph 98



Graph 99



Graph 100



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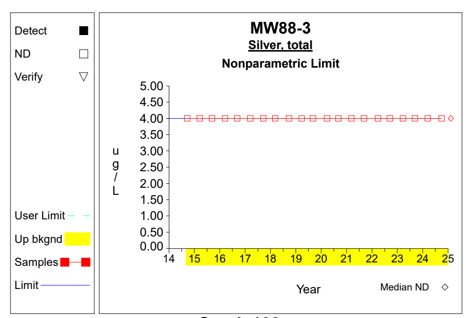

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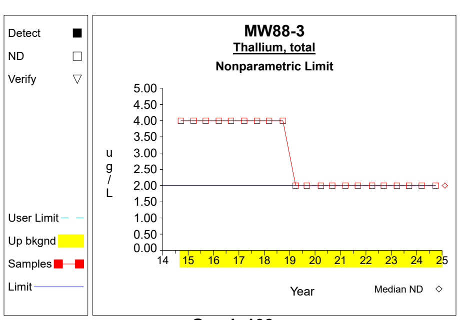
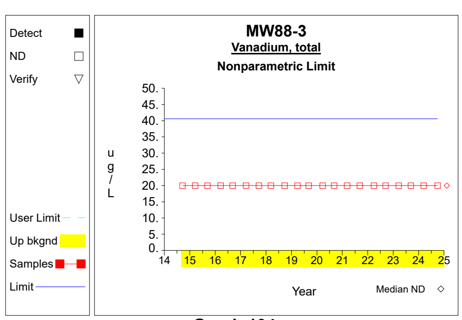
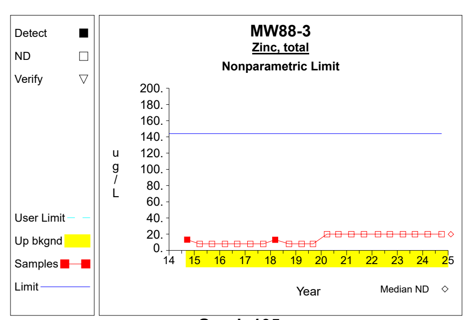


Graph 103

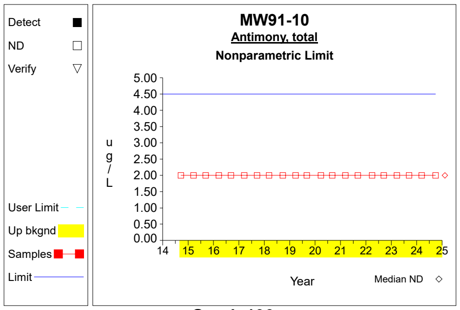


Graph 104

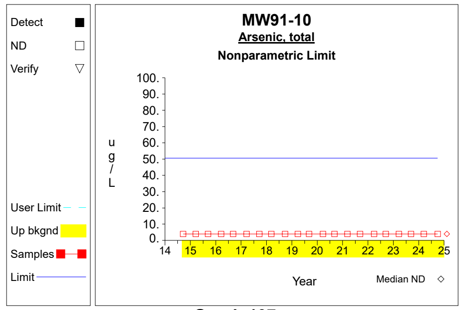


Graph 105

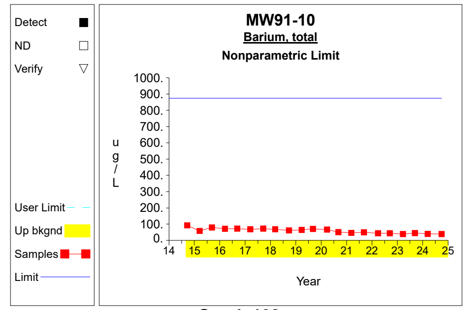
Up vs. Down Prediction Limits



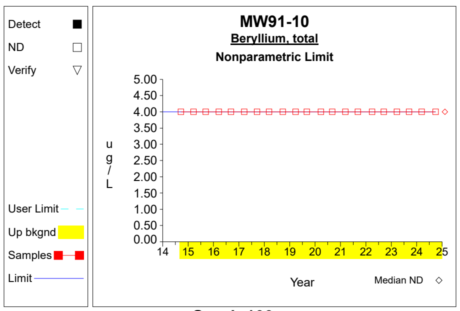
Graph 106



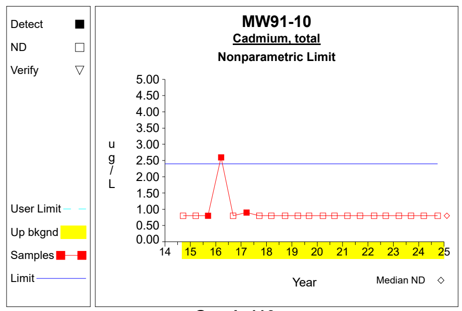
Graph 107



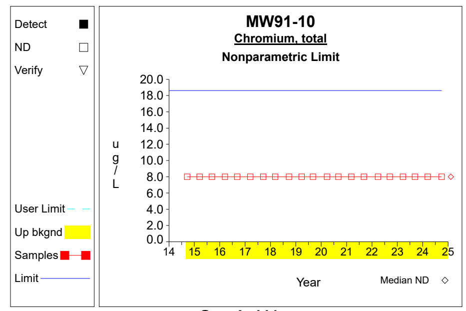
Graph 108



Graph 109



Graph 110



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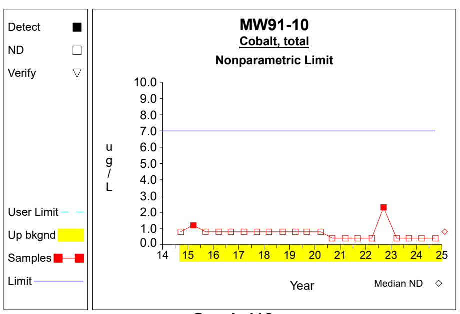
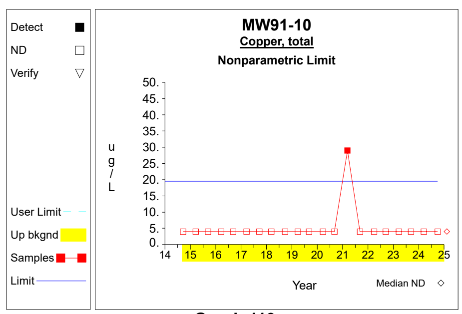
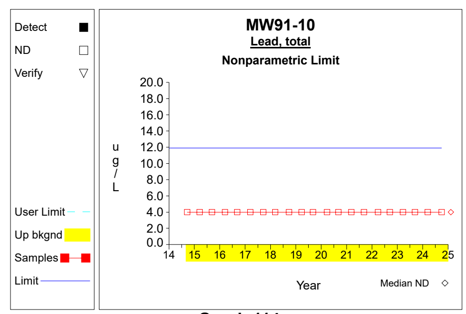


Graph 112



Graph 113



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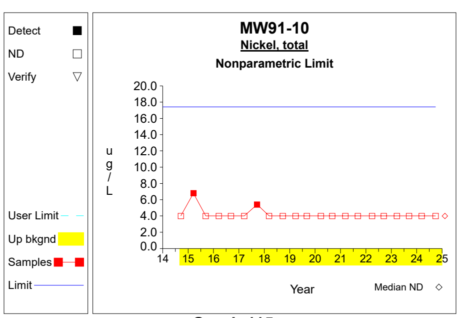

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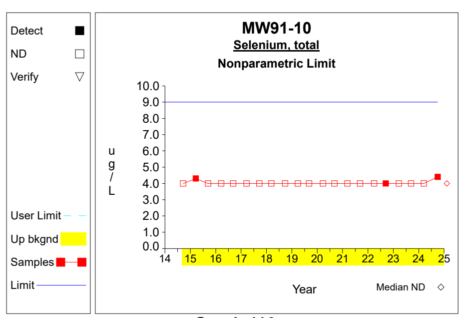
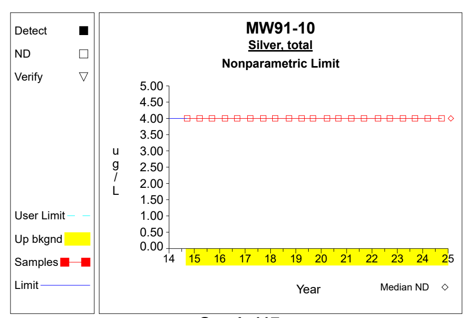
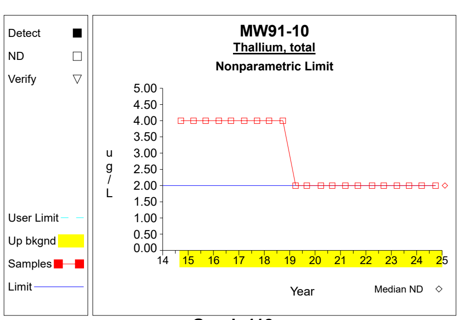


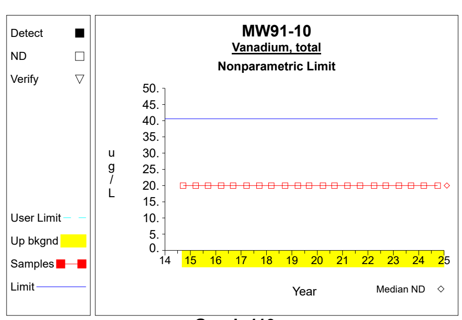
Graph 116



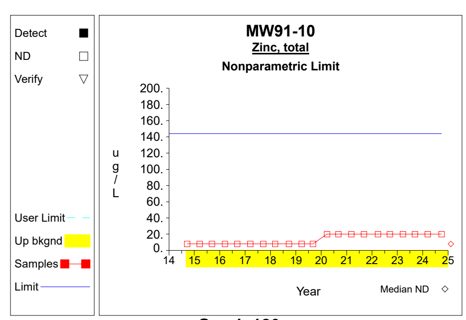
Graph 117



Graph 118

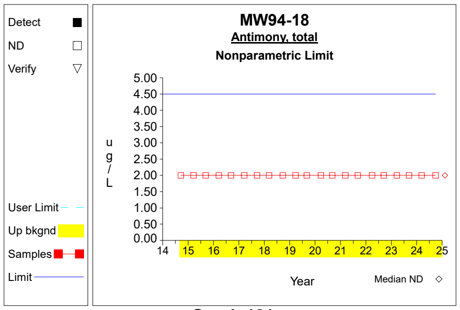


Graph 119

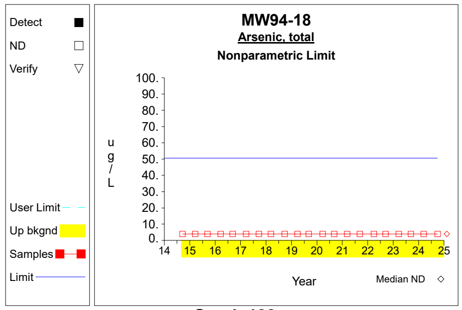


Graph 120

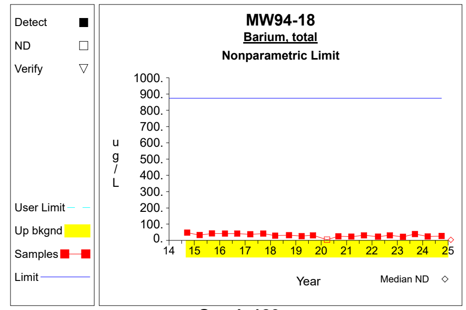
Up vs. Down Prediction Limits



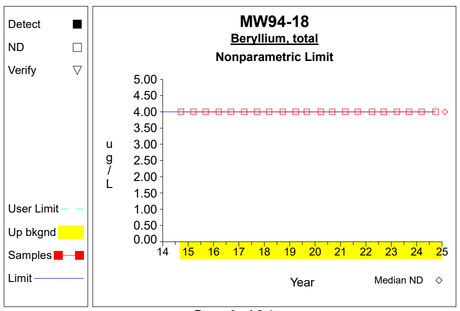
Graph 121



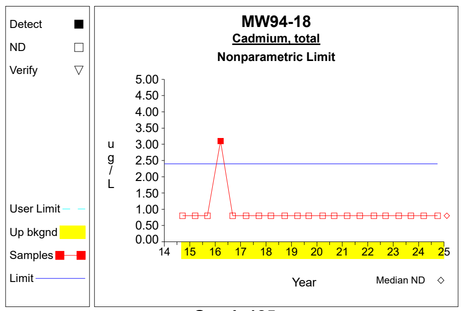
Graph 122



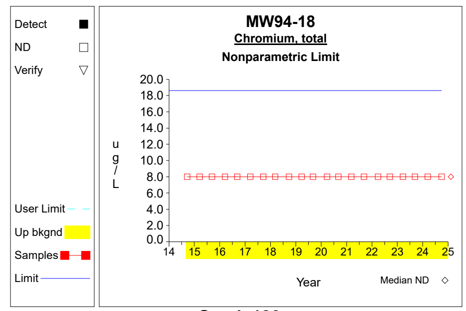
Graph 123



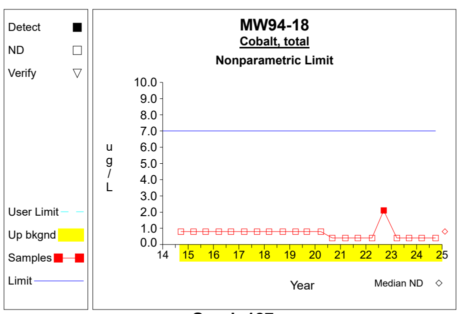
Graph 124



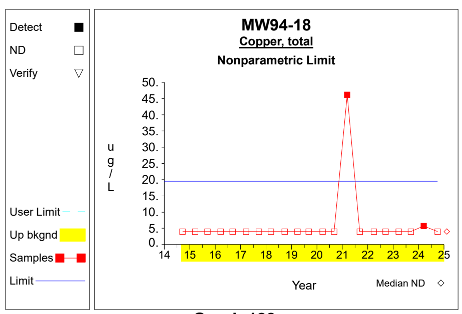
Graph 125



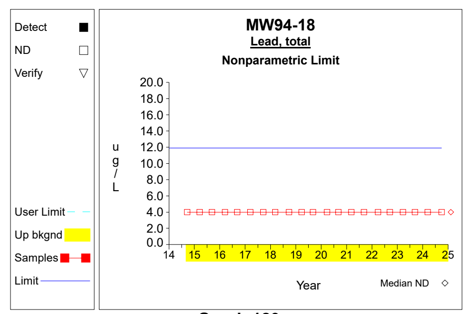
Graph 126



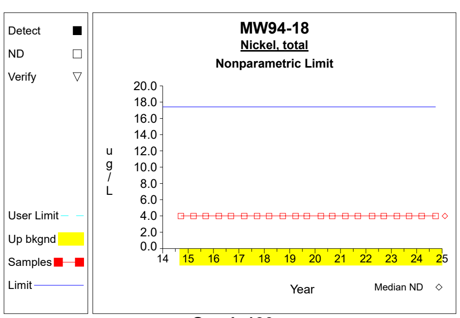
Graph 127



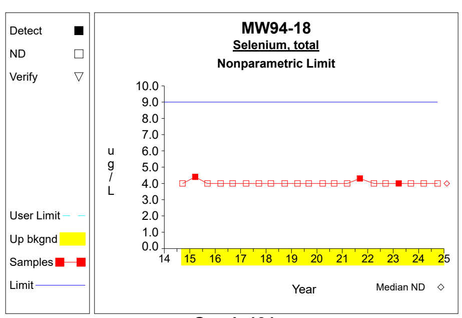
Graph 128



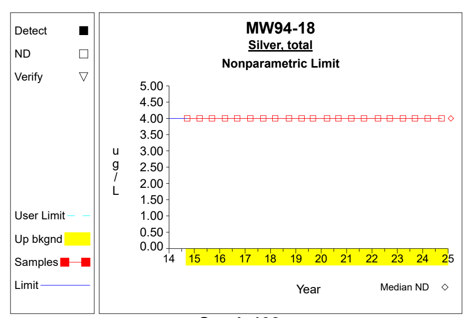
Graph 129



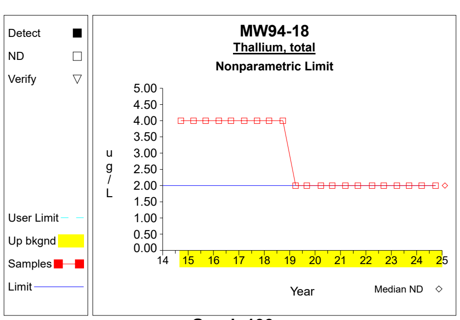
Graph 130



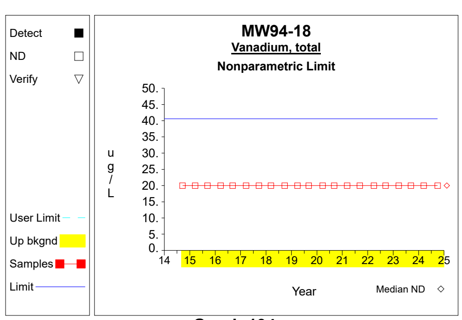
Graph 131



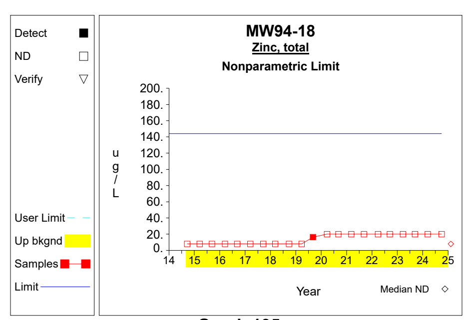
Graph 132



Graph 133

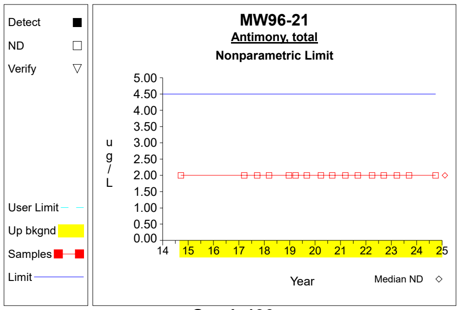


Graph 134

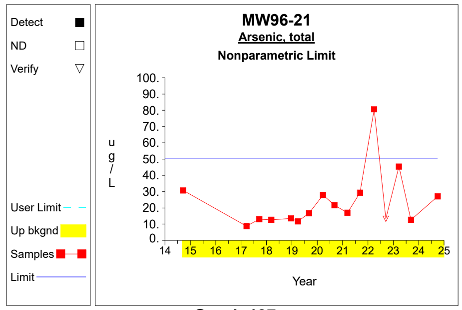


Graph 135

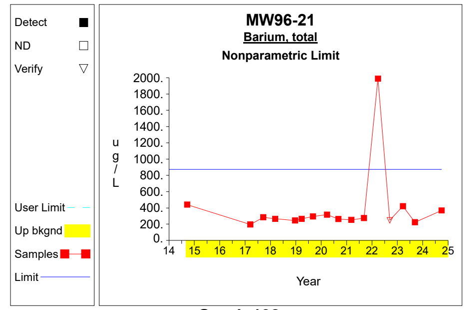
Up vs. Down Prediction Limits



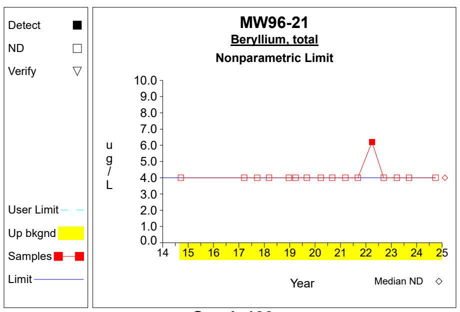
Graph 136



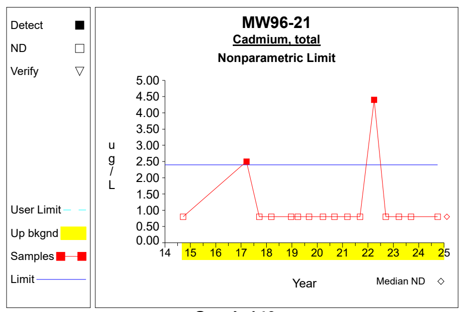
Graph 137



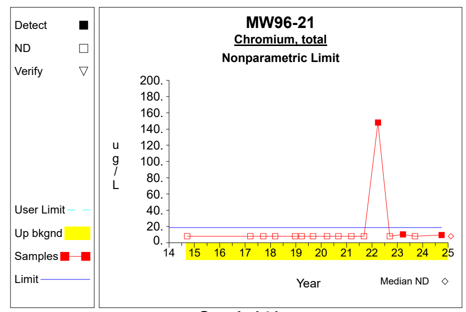
Graph 138



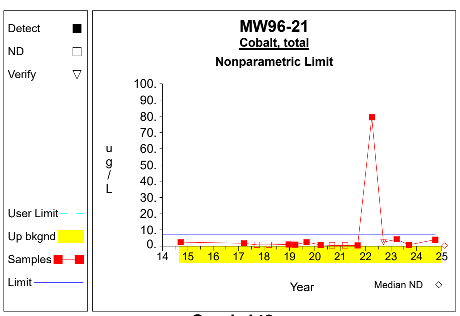
Graph 139



Graph 140



Graph 141



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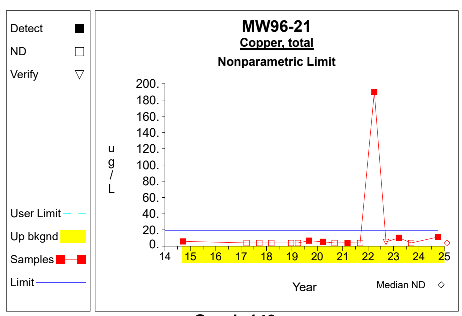
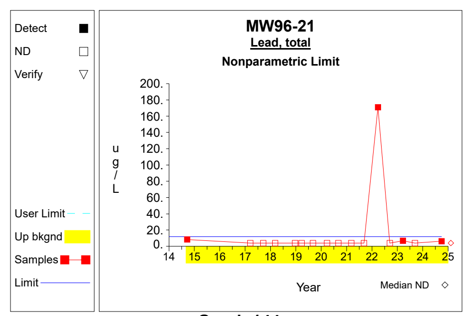
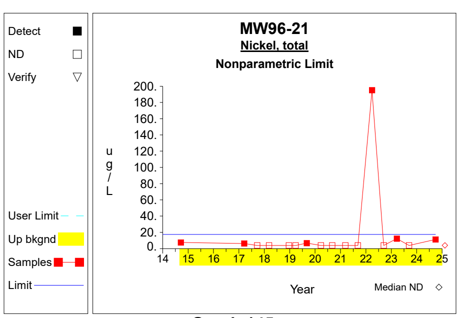


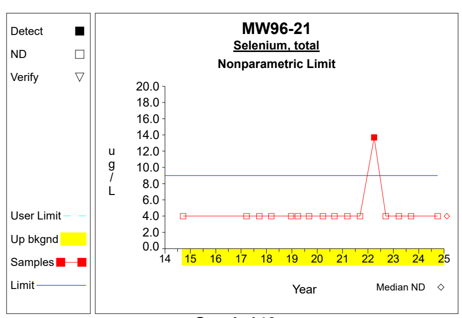
Graph 143



Graph 144



Graph 145



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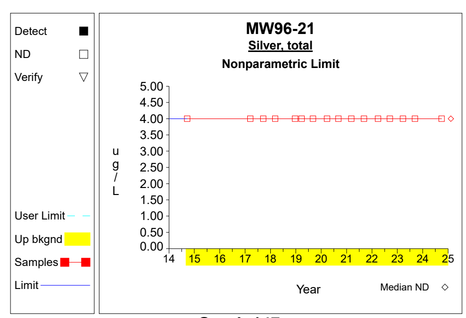
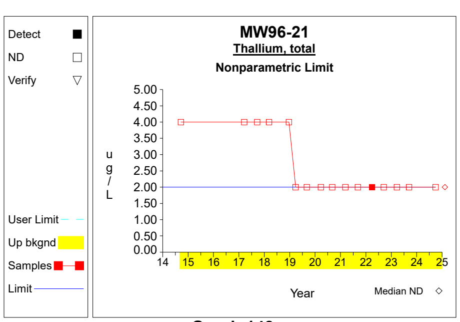
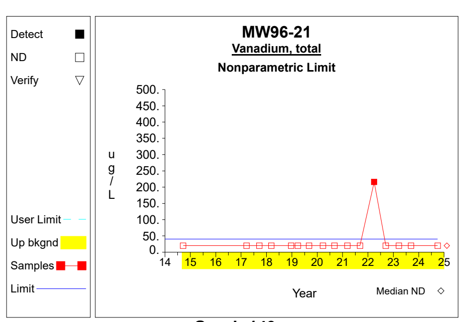


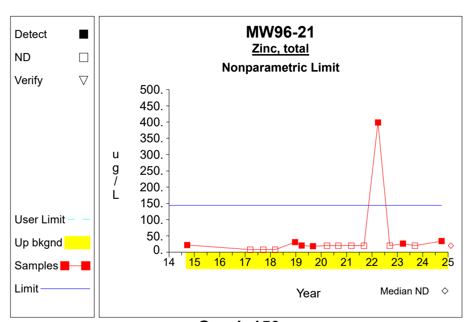
Graph 147



Graph 148

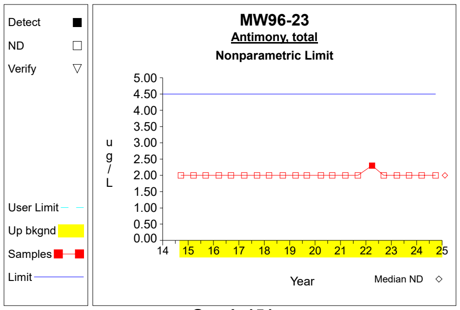


Graph 149

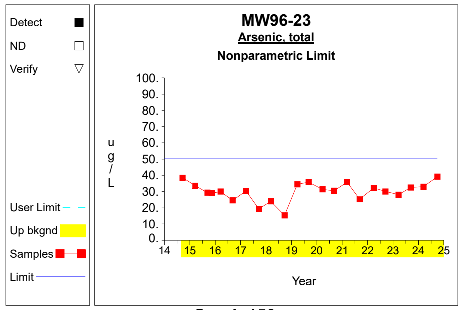


Graph 150

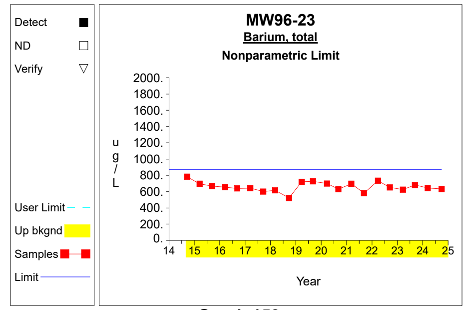
Up vs. Down Prediction Limits



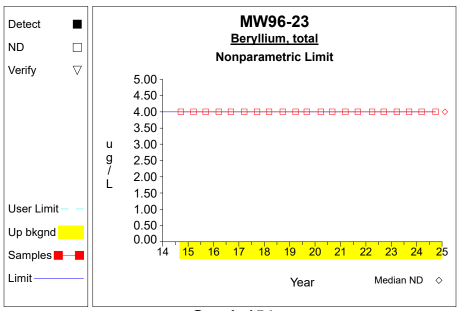
Graph 151



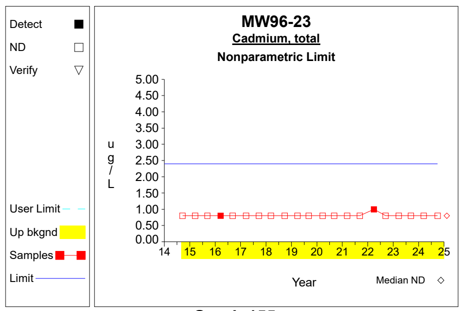
Graph 152



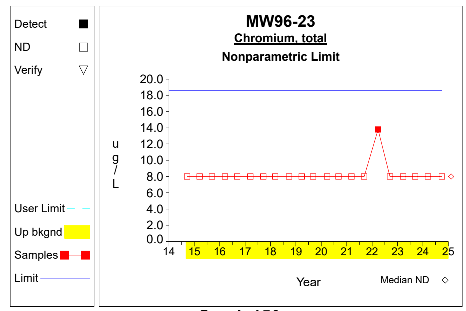
Graph 153



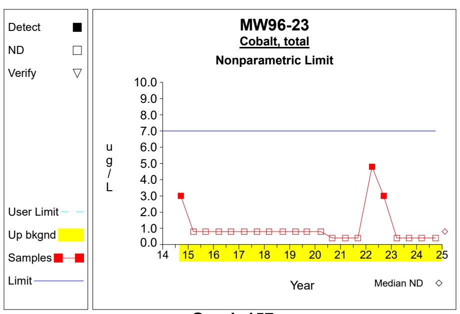
Graph 154



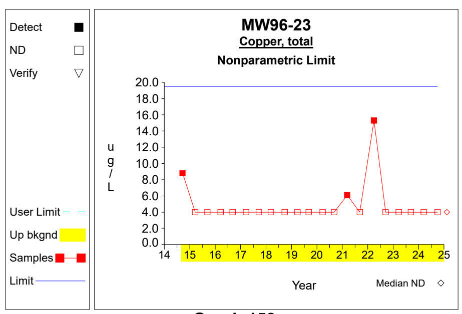
Graph 155



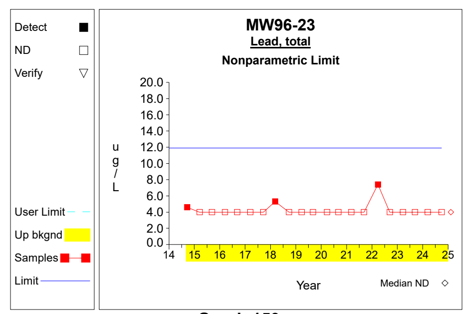
Graph 156



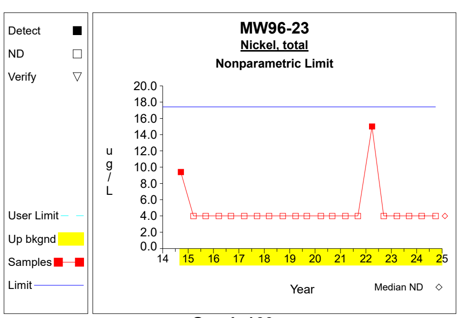
Graph 157



Graph 158



Graph 159



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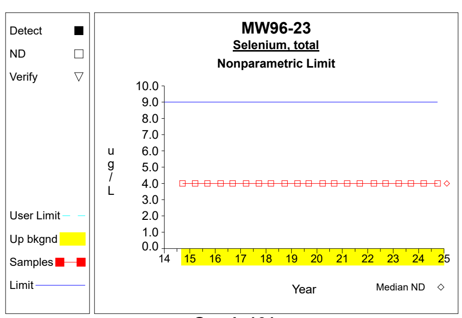
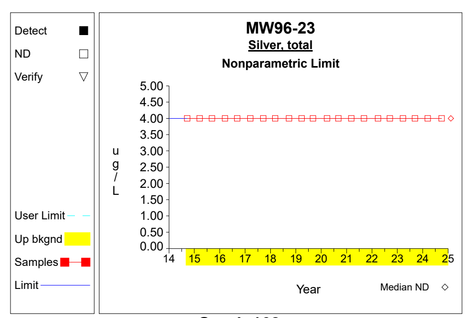


Graph 161



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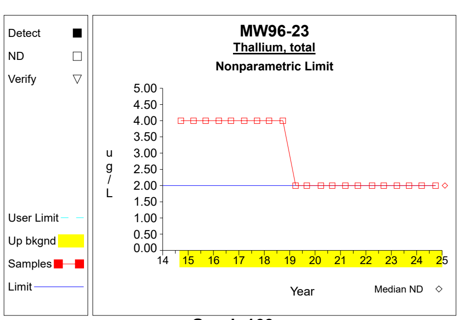
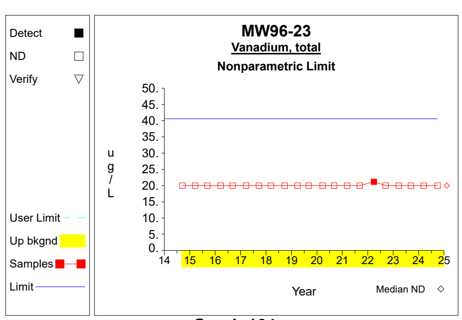
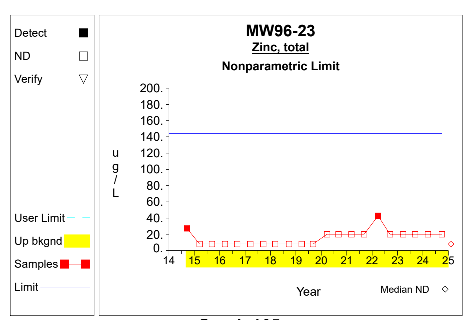


Graph 163

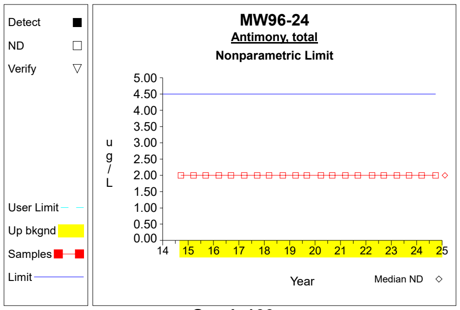


Graph 164

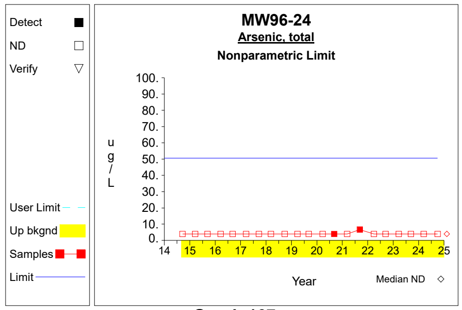


Graph 165

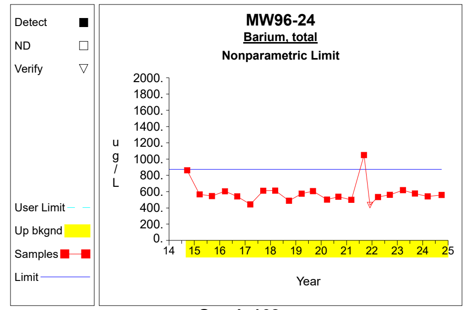
Up vs. Down Prediction Limits



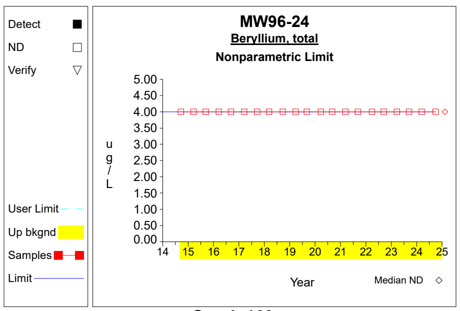
Graph 166



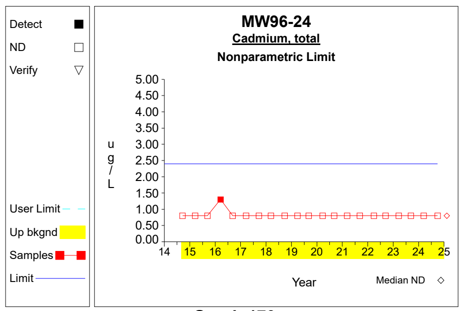
Graph 167



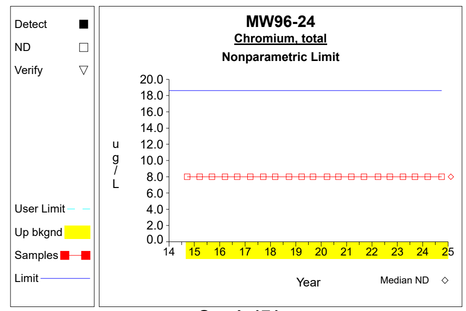
Graph 168



Graph 169



Graph 170



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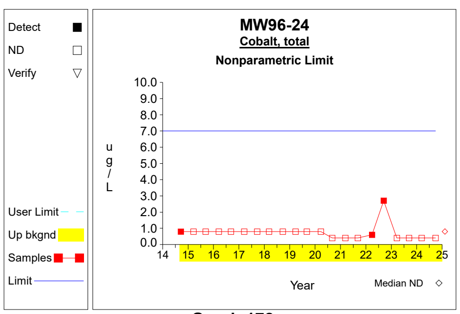
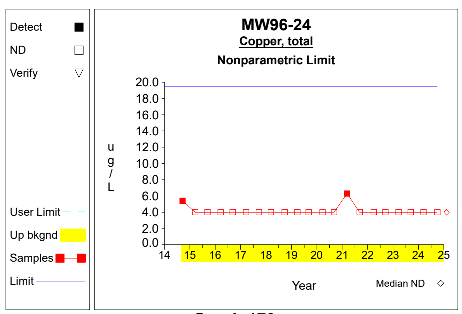
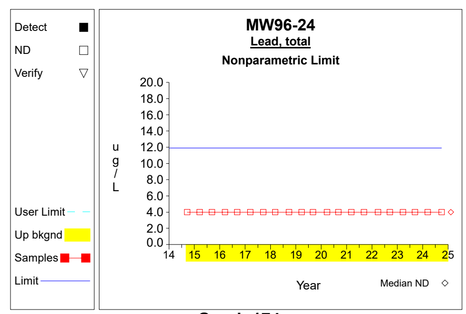


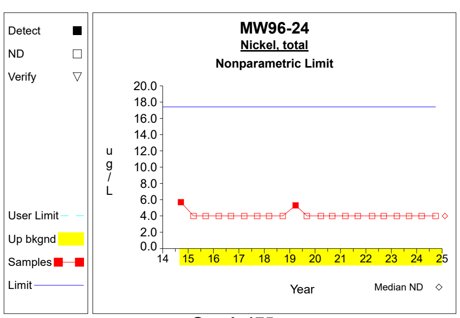
Graph 172



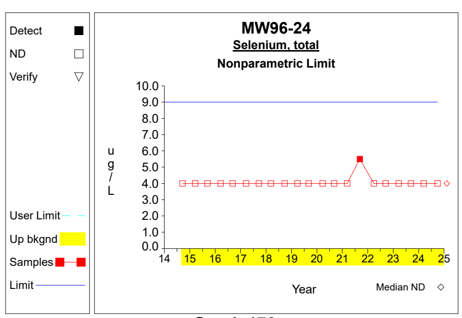
Graph 173



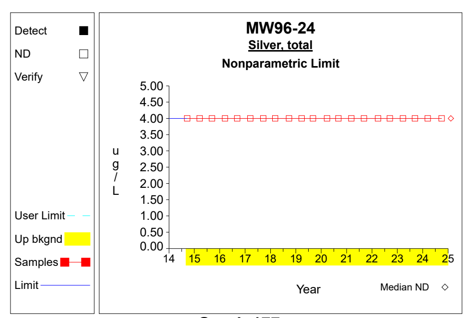
Graph 174



Graph 175



Graph 176



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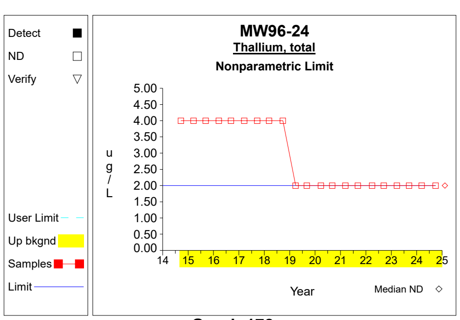
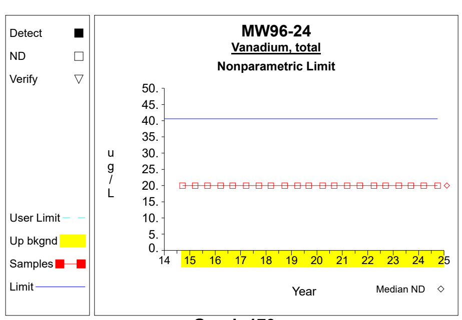
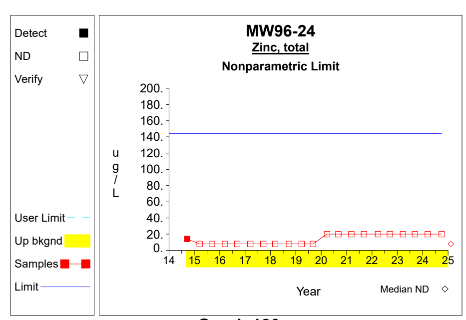


Graph 178

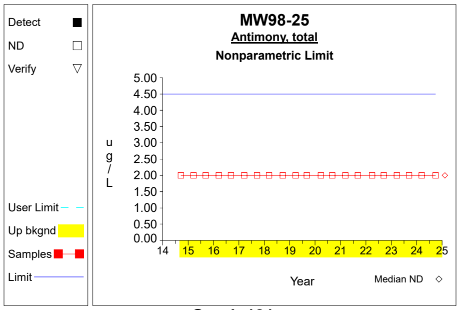


Graph 179

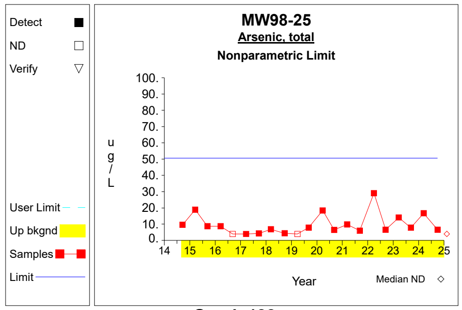


Graph 180

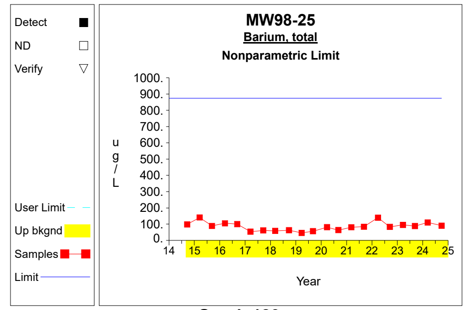
Up vs. Down Prediction Limits



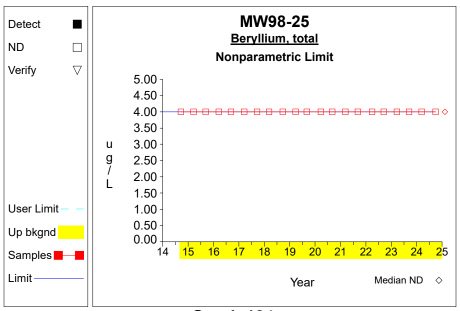
Graph 181



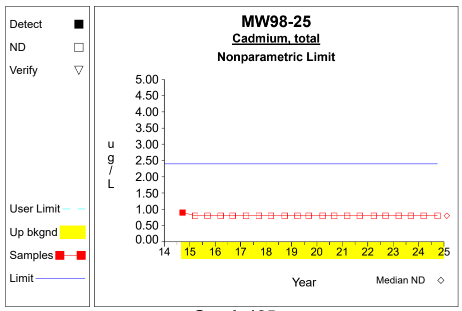
Graph 182



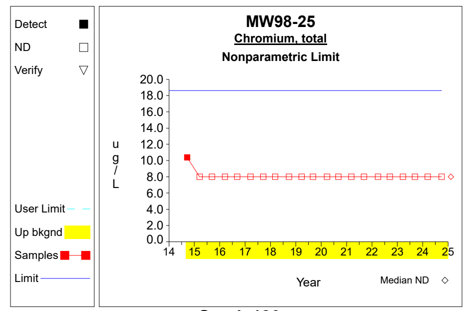
Graph 183



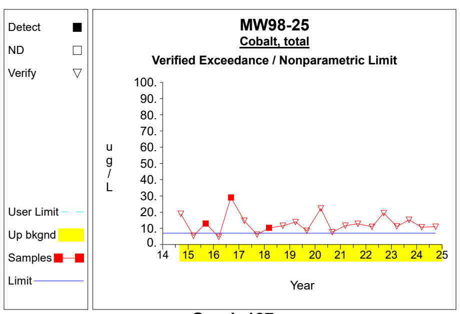
Graph 184



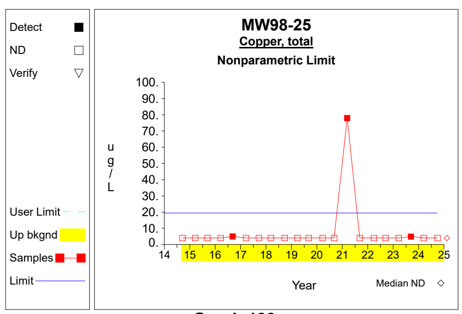
Graph 185



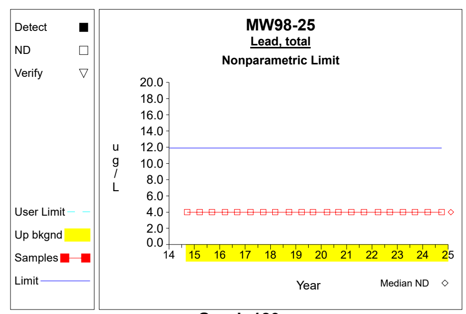
Graph 186



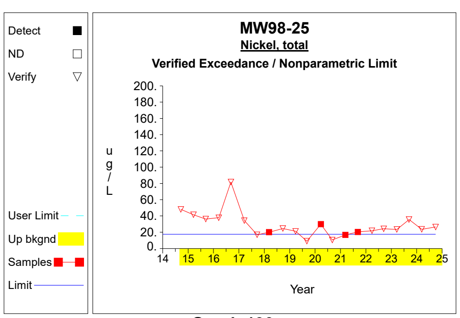
Graph 187



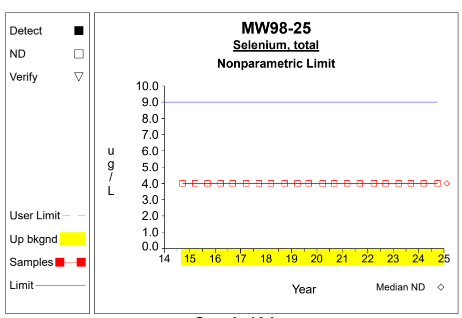
Graph 188



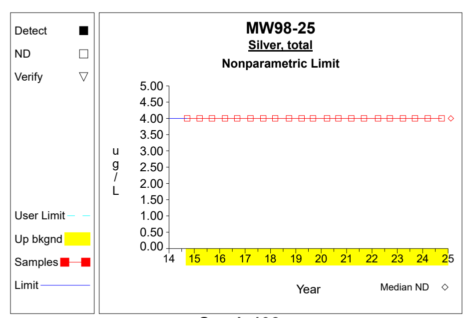
Graph 189



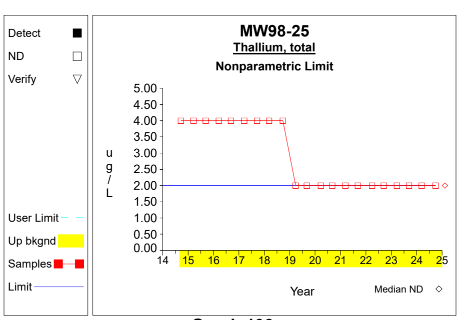
Graph 190



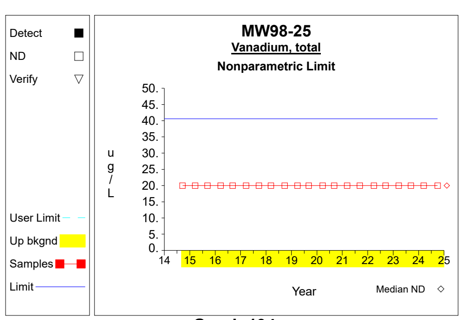
Graph 191



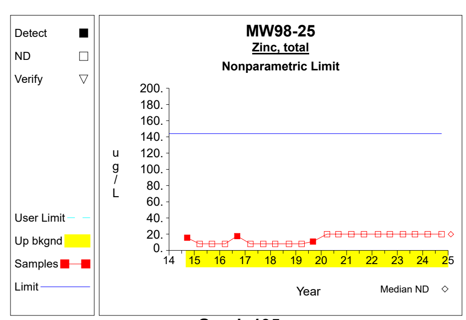
Graph 192



Graph 193

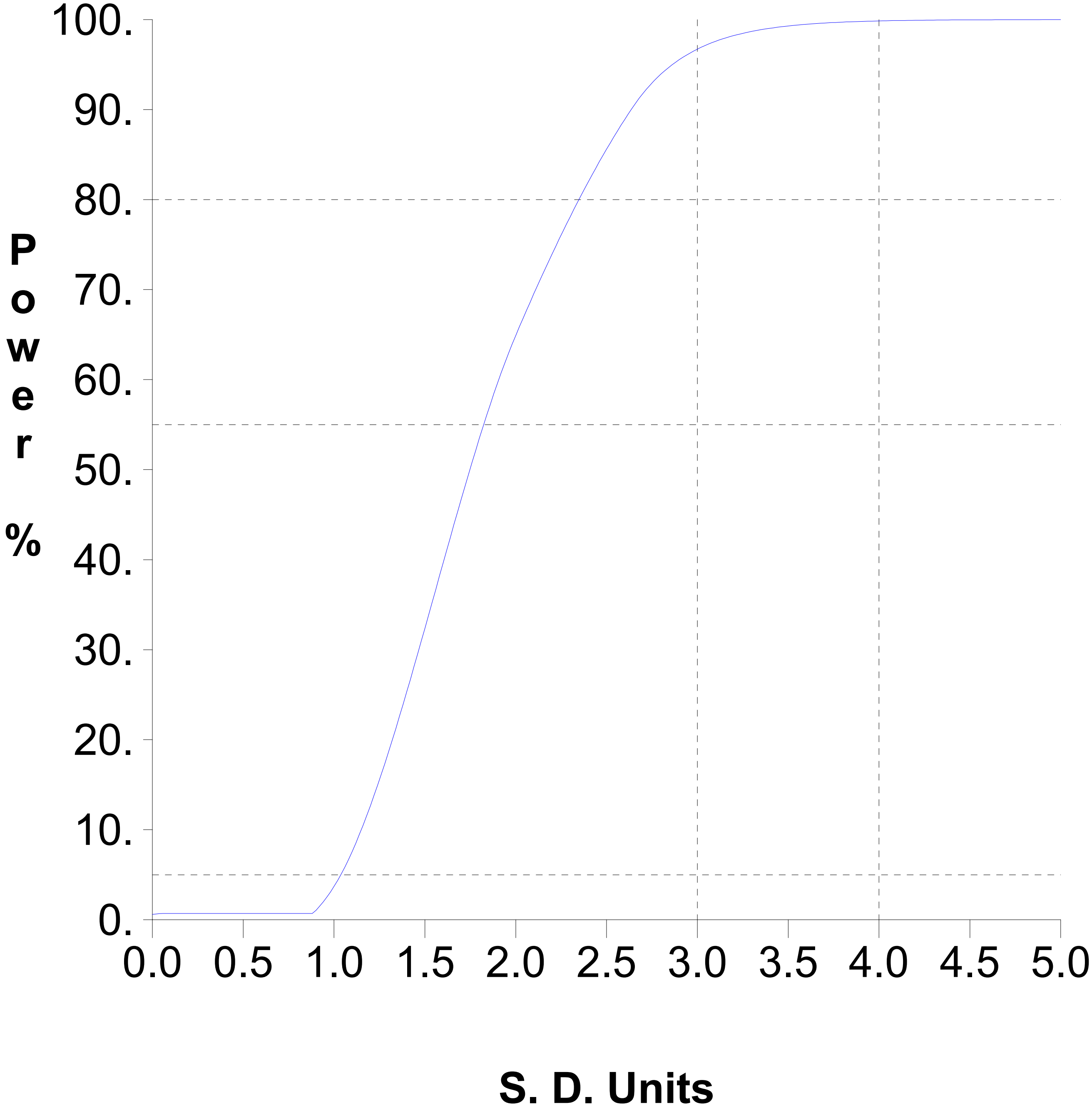


Graph 194



Graph 195

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



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

Step	Equation	Description
1	PL = max(X) = **4.5**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

Step	Equation	Description
1	PL = max(X) = **50.6**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

Step	Equation	Description
1	PL = max(X) = **874.0**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

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

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

Step	Equation	Description
1	PL = max(X) = **2.4**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

Step	Equation	Description
1	PL = max(X) = **18.6**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

Step	Equation	Description
1	PL = max(X) = **7.0**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

Step	Equation	Description
1	PL = max(X) = **19.5**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

Step	Equation	Description
1	PL = max(X) = **11.9**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

Step	Equation	Description
1	PL = max(X) = **17.4**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

Step	Equation	Description
1	PL = max(X) = **9.0**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

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

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

Step	Equation	Description
1	PL = median(X) = **2.0**	Compute nonparametric prediction limit as median reporting limit in background.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

Step	Equation	Description
1	PL = max(X) = **40.6**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

Step	Equation	Description
1	PL = max(X) = **144.0**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

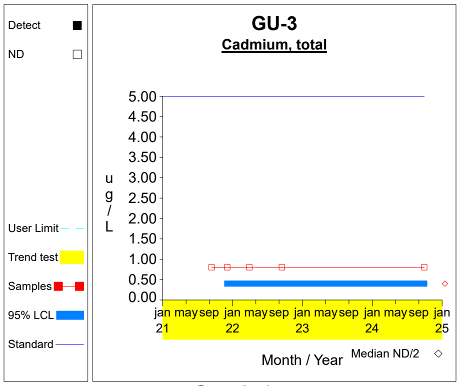
Table 1

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

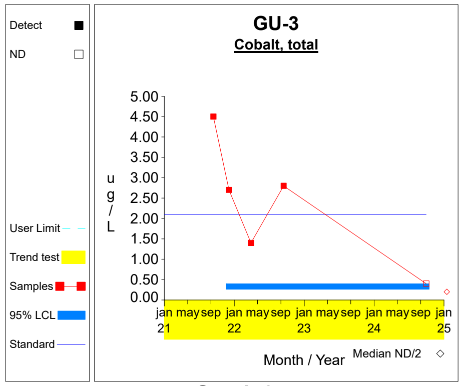
Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend	
Cadmium, total	ug/L	GU-3	4	0.400	0.000	1.176	0.400	0.400	5.000		
Cobalt, total	ug/L	GU-3	4	1.775	1.228	1.176	0.330	3.220	2.100		
Nickel, total	ug/L	GU-3	4	20.750	11.435	1.176	7.300	34.200	100.000		
Cadmium, total	ug/L	MW88-3	4	1.700	2.600	1.176	0.000	4.758	5.000		
Cobalt, total	ug/L	MW88-3	4	1.600	0.800	1.176	0.659	2.541	2.100		
Nickel, total	ug/L	MW88-3	4	2.000	0.000	1.176	2.000	2.000	100.000		
Cadmium, total	ug/L	MW98-25	4	0.400	0.000	1.176	0.400	0.400	5.000		
Cobalt, total	ug/L	MW98-25	4	12.025	2.127	1.176	9.523	14.527	2.100	dec	**
Nickel, total	ug/L	MW98-25	4	27.300	5.776	1.176	20.505	34.095	100.000	dec	

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

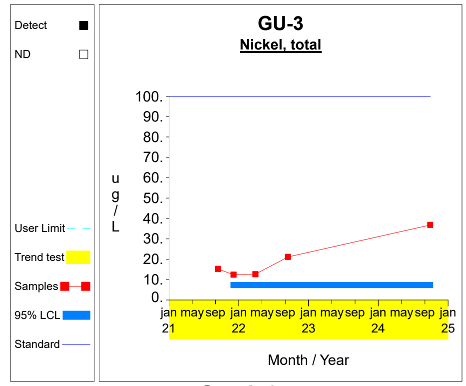
Confidence Limits (Assessment)



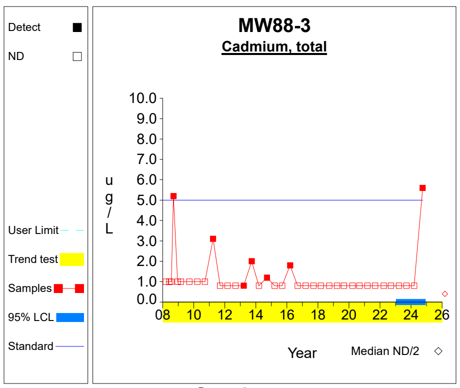
Graph 1



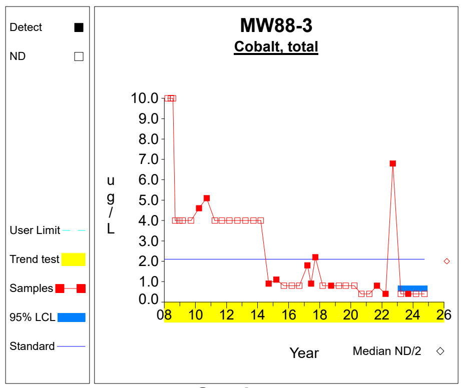
Graph 2



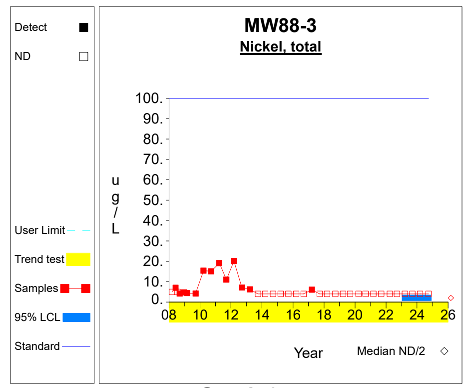
Graph 3



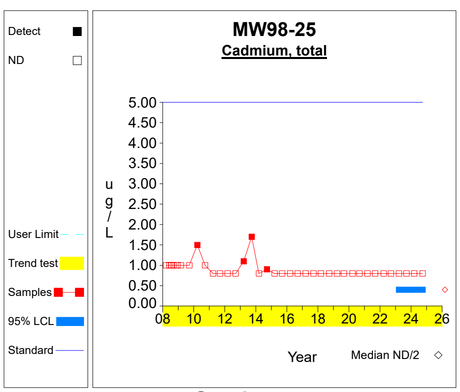
Graph 4



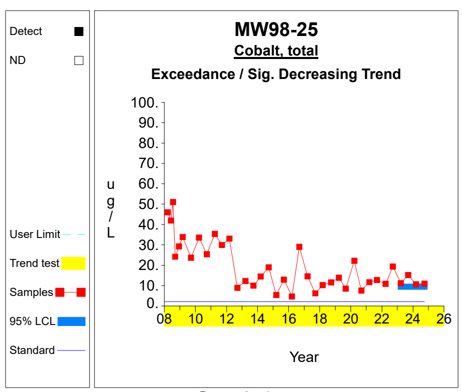
Graph 5



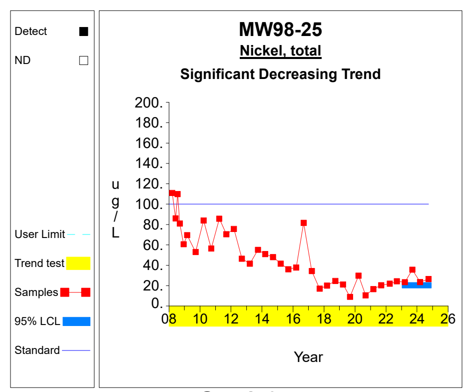
Graph 6



Graph 7



Graph 8



Graph 9

Worksheet 6 - Assessment Monitoring
Cadmium, total (ug/L) at GU-3

Step	Equation	Description
1	$\bar{X} = \mathbf{sum[X]} / \mathbf{N}$ $= \mathbf{1.6} / \mathbf{4}$ $= \mathbf{0.4}$	Compute the mean of the last 4 measurements.
2	$S = ((\mathbf{sum[X^2]} - \mathbf{sum[X]}^2/\mathbf{N}) / (\mathbf{N}-1))^{½}$ $= ((\mathbf{0.64} - \mathbf{2.56/4}) / (\mathbf{4}-1))^{½}$ $= \mathbf{4.21 \times 10^{-9}}$	Compute sd of the last 4 measurements.
3	$LCL = \bar{\mathbf{X}} - \mathbf{tS}/\mathbf{N}^{½}$ $= \mathbf{0.4} - \mathbf{2.353} * \mathbf{4.21 \times 10^{-9}}/\mathbf{4}^{½}$ $= \mathbf{0.4}$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$UCL = \bar{\mathbf{X}} + \mathbf{tS}/\mathbf{N}^{½}$ $= \mathbf{0.4} + \mathbf{2.353} * \mathbf{4.21 \times 10^{-9}}/\mathbf{4}^{½}$ $= \mathbf{0.4}$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = \mathbf{N} * (\mathbf{N}-1) / 2$ $= \mathbf{5} * (\mathbf{5}-1) / 2$ $= \mathbf{10}$	Number of sample pairs during trend detection period.
6	$S = \mathbf{0.0}$	Sen's estimator of trend.
7	$var(S) = \mathbf{0.0}$	Variance estimate for slope.
8	$M(S) = (\mathbf{N'} \pm \mathbf{Z}_{.995} * \mathbf{var(S)}^{½}) / 2$ $= (\mathbf{10} \pm \mathbf{2.576} * \mathbf{0.0}^{½}) / 2$ $= [\ \mathbf{5.0}, \mathbf{5.0}\ ]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M^{th} largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$CL(S) = [\ \mathbf{0.0}, \mathbf{0.0}\ ]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

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

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **7.1** / **4** = **1.775**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]^2**/**N**) / (**N**-1))^{½} = ((**17.13** - **50.41**/**4**) / (**4**-1))^{½} = **1.228**	Compute sd of the last 4 measurements.
3	LCL = **$\overline{X}$** - **tS**/**N**^{½} = **1.775** - **2.353** * **1.228**/**4**^{½} = **0.33**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = **$\overline{X}$** + **tS**/**N**^{½} = **1.775** + **2.353** * **1.228**/**4**^{½} = **3.22**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **5** * (**5**-1) / 2 = **10**	Number of sample pairs during trend detection period.
6	S = **-1.342**	Sen's estimator of trend.
7	var(S) = **16.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**10** ± **2.576** * **16.667**^{½}) / 2 = [**-0.258**, **10.258**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-8.111**, **2.988**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

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

Step	Equation	Description
1	$\bar{X} = \mathbf{sum[X]} / \mathbf{N}$ $= \mathbf{83.0} / \mathbf{4}$ $= \mathbf{20.75}$	Compute the mean of the last 4 measurements.
2	$S = ((\mathbf{sum[X^2]} - \mathbf{sum[X]}^2/\mathbf{N}) / (\mathbf{N}-1))^{1/2}$ $= ((\mathbf{2114.5} - \mathbf{6889.0/4}) / (\mathbf{4}-1))^{1/2}$ $= \mathbf{11.435}$	Compute sd of the last 4 measurements.
3	$LCL = \bar{\mathbf{X}} - \mathbf{tS/N}^{1/2}$ $= \mathbf{20.75 - 2.353 * 11.435/4}^{1/2}$ $= \mathbf{7.3}$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$UCL = \bar{\mathbf{X}} + \mathbf{tS/N}^{1/2}$ $= \mathbf{20.75 + 2.353 * 11.435/4}^{1/2}$ $= \mathbf{34.2}$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = \mathbf{N} * (\mathbf{N}-1) / 2$ $= \mathbf{5} * (\mathbf{5}-1) / 2$ $= \mathbf{10}$	Number of sample pairs during trend detection period.
6	$S = \mathbf{7.389}$	Sen's estimator of trend.
7	$var(S) = \mathbf{16.667}$	Variance estimate for slope.
8	$M(S) = (\mathbf{N'} \pm \mathbf{Z}_{.995} * \mathbf{var(S)}^{1/2}) / 2$ $= (\mathbf{10} \pm \mathbf{2.576} * \mathbf{16.667}^{1/2}) / 2$ $= [\ \mathbf{-0.258}, \mathbf{10.258}\ ]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M^{th} largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$CL(S) = [\ \mathbf{-12.617}, \mathbf{17.93}\ ]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cadmium, total (ug/L) at MW88-3

Step	Equation	Description
1	$\bar{X}$ = **sum[X]** / **N** = **6.8** / **4** = **1.7**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))$^{1/2}$ = ((**31.84** - **46.24**/**4**) / (**4**-1))$^{1/2}$ = **2.6**	Compute sd of the last 4 measurements.
3	LCL = **$\bar{X}$** - **tS**/**N**$^{1/2}$ = **1.7** - **2.353** * **2.6**/**4**$^{1/2}$ = **0.0**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = **$\bar{X}$** + **tS**/**N**$^{1/2}$ = **1.7** + **2.353** * **2.6**/**4**$^{1/2}$ = **4.758**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **37** * (**37**-1) / 2 = **666**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **2704.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**$^{1/2}$) / 2 = (**666** ± **2.576** * **2704.333**$^{1/2}$) / 2 = [**266.02**, **399.98**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cobalt, total (ug/L) at MW88-3

Step	Equation	Description
1	$\bar{X}$ = **sum[X]** / **N** = **6.4** / **4** = **1.6**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))$^{1/2}$ = ((**12.16** - **40.96**/**4**) / (**4**-1))$^{1/2}$ = **0.8**	Compute sd of the last 4 measurements.
3	LCL = **$\bar{X}$** - **tS**/**N**$^{1/2}$ = **1.6** - **2.353** * **0.8**/**4**$^{1/2}$ = **0.659**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = **$\bar{X}$** + **tS**/**N**$^{1/2}$ = **1.6** + **2.353** * **0.8**/**4**$^{1/2}$ = **2.541**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **38** * (**38**-1) / 2 = **703**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **4265.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**$^{1/2}$) / 2 = (**703** ± **2.576** * **4265.667**$^{1/2}$) / 2 = [**267.378**, **435.622**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Nickel, total (ug/L) at MW88-3

Step	Equation	Description
1	$\bar{X} = \textbf{sum[X]} / \textbf{N}$ $= \textbf{8.0} / \textbf{4}$ $= \textbf{2.0}$	Compute the mean of the last 4 measurements.
2	$S = ((\textbf{sum[X}^{\textbf{2}}\textbf{]} - \textbf{sum[X]}^2/\textbf{N}) / (\textbf{N}-1))^{½}$ $= ((\textbf{16.0} - \textbf{64.0/4}) / (\textbf{4}-1))^{½}$ $= \textbf{0.0}$	Compute sd of the last 4 measurements.
3	$LCL = \bar{\textbf{X}} - \textbf{tS/N}^{½}$ $= \textbf{2.0} - \textbf{2.353} * \textbf{0.0/4}^{½}$ $= \textbf{2.0}$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$UCL = \bar{\textbf{X}} + \textbf{tS/N}^{½}$ $= \textbf{2.0} + \textbf{2.353} * \textbf{0.0/4}^{½}$ $= \textbf{2.0}$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = \textbf{N} * (\textbf{N}-1) / 2$ $= \textbf{37} * (\textbf{37}-1) / 2$ $= \textbf{666}$	Number of sample pairs during trend detection period.
6	$S = \textbf{0.0}$	Sen's estimator of trend.
7	$var(S) = \textbf{4219.667}$	Variance estimate for slope.
8	$M(S) = (\textbf{N'} \pm \textbf{Z}_{.995} * \textbf{var(S)}^{½}) / 2$ $= (\textbf{666} \pm \textbf{2.576} * \textbf{4219.667}^{½}) / 2$ $= [\ \textbf{249.333}, \textbf{416.667}\ ]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M^{th} largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$CL(S) = [\ \textbf{-0.279}, \textbf{0.0}\ ]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cadmium, total (ug/L) at MW98-25

Step	Equation	Description
1	$\bar{X} = \textbf{sum[X]} / \textbf{N}$ $= \textbf{1.6} / \textbf{4}$ $= \textbf{0.4}$	Compute the mean of the last 4 measurements.
2	$S = ((\textbf{sum[X}^{\textbf{2}}\textbf{]} - \textbf{sum[X]}^2/\textbf{N}) / (\textbf{N}-1))^{1/2}$ $= ((\textbf{0.64} - \textbf{2.56}/\textbf{4}) / (\textbf{4}-1))^{1/2}$ $= \textbf{4.21}\times\textbf{10}^{\textbf{-9}}$	Compute sd of the last 4 measurements.
3	$LCL = \bar{\textbf{X}} - \textbf{tS}/\textbf{N}^{1/2}$ $= \textbf{0.4} - \textbf{2.353} * \textbf{4.21}\times\textbf{10}^{\textbf{-9}}/\textbf{4}^{1/2}$ $= \textbf{0.4}$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$UCL = \bar{\textbf{X}} + \textbf{tS}/\textbf{N}^{1/2}$ $= \textbf{0.4} + \textbf{2.353} * \textbf{4.21}\times\textbf{10}^{\textbf{-9}}/\textbf{4}^{1/2}$ $= \textbf{0.4}$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = \textbf{N} * (\textbf{N}-1) / 2$ $= \textbf{37} * (\textbf{37}-1) / 2$ $= \textbf{666}$	Number of sample pairs during trend detection period.
6	$S = \textbf{0.0}$	Sen's estimator of trend.
7	$var(S) = \textbf{1680.667}$	Variance estimate for slope.
8	$M(S) = (\textbf{N'} \pm \textbf{Z}_{.995} * \textbf{var(S)}^{1/2}) / 2$ $= (\textbf{666} \pm \textbf{2.576} * \textbf{1680.667}^{1/2}) / 2$ $= [\ \textbf{280.197}, \textbf{385.803}\ ]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M^{th} largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$CL(S) = [\ \textbf{0.0}, \textbf{0.0}\ ]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cobalt, total (ug/L) at MW98-25

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **48.1** / **4** = **12.025**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2] - sum[X]^2/N**) / (**N**-1))$^{1/2}$ = ((**591.97** - **2313.61**/**4**) / (**4**-1))$^{1/2}$ = **2.127**	Compute sd of the last 4 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**$^{1/2}$ = **12.025** - **2.353** * **2.127**/**4**$^{1/2}$ = **9.523**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**$^{1/2}$ = **12.025** + **2.353** * **2.127**/**4**$^{1/2}$ = **14.527**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **37** * (**37**-1) / 2 = **666**	Number of sample pairs during trend detection period.
6	S = **-1.385**	Sen's estimator of trend.
7	var(S) = **5846.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**$^{1/2}$) / 2 = (**666** ± **2.576** * **5846.0**$^{1/2}$) / 2 = [**234.521**, **431.479**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-2.367**, **-0.448**]	Two-sided confidence interval for slope.
10	UCL(S) < 0	**Significant decreasing trend.**

Worksheet 6 - Assessment Monitoring
Nickel, total (ug/L) at MW98-25

Step	Equation	Description
1	$\bar{X} = \textbf{sum[X]} / \textbf{N}$ $= \textbf{109.2} / \textbf{4}$ $= \textbf{27.3}$	Compute the mean of the last 4 measurements.
2	$S = ((\textbf{sum[X}^2\textbf{]} - \textbf{sum[X]}^2/\textbf{N}) / (\textbf{N}-1))^{1/2}$ $= ((\textbf{3081.26} - \textbf{11924.64/4}) / (\textbf{4}-1))^{1/2}$ $= \textbf{5.776}$	Compute sd of the last 4 measurements.
3	$LCL = \bar{X} - tS/N^{1/2}$ $= \textbf{27.3} - \textbf{2.353} * \textbf{5.776/4}^{1/2}$ $= \textbf{20.505}$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$UCL = \bar{X} + tS/N^{1/2}$ $= \textbf{27.3} + \textbf{2.353} * \textbf{5.776/4}^{1/2}$ $= \textbf{34.095}$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = \textbf{N} * (\textbf{N}-1) / 2$ $= \textbf{37} * (\textbf{37}-1) / 2$ $= \textbf{666}$	Number of sample pairs during trend detection period.
6	$S = \textbf{-4.25}$	Sen's estimator of trend.
7	$var(S) = \textbf{5846.0}$	Variance estimate for slope.
8	$M(S) = (\textbf{N'} \pm \textbf{Z}_{.995} * \textbf{var(S)}^{1/2}) / 2$ $= (\textbf{666} \pm \textbf{2.576} * \textbf{5846.0}^{1/2}) / 2$ $= [\ \textbf{234.521}, \textbf{431.479}\ ]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M^{th} largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$CL(S) = [\ \textbf{-5.97}, \textbf{-2.785}\ ]$	Two-sided confidence interval for slope.
10	$UCL(S) < 0$	**Significant decreasing trend.**

Attachment C

Summary Table of Historical VOC Detections

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Benzene	GU-3	9/13/2021		1.3	1.0	ug/L
Benzene	GU-3	12/03/2021		6.0	1.0	ug/L
Benzene	GU-3	3/28/2022		6.2	1.0	ug/L
Benzene	GU-3	9/15/2022		6.1	1.0	ug/L
Benzene	GU-3	9/30/2024		6.0	1.0	ug/L
Chlorobenzene	GU-3	3/28/2022		1.8	1.0	ug/L
Chlorobenzene	GU-3	9/15/2022		1.7	1.0	ug/L
Chlorobenzene	GU-3	9/30/2024		1.3	1.0	ug/L
Chloroethane	GU-3	9/13/2021		1.4	1.0	ug/L
Chloroethane	GU-3	12/03/2021		2.0	1.0	ug/L
Chloroethane	GU-3	9/15/2022		1.6	1.0	ug/L
Chloroethane	GU-3	9/30/2024		1.1	1.0	ug/L
Cis-1,2-dichloroethylene	GU-3	9/13/2021		1.0	1.0	ug/L
Cis-1,2-dichloroethylene	GU-3	12/03/2021		10.5	1.0	ug/L
Cis-1,2-dichloroethylene	GU-3	9/15/2022		11.9	1.0	ug/L
Cis-1,2-dichloroethylene	GU-3	9/30/2024		4.3	1.0	ug/L
Ethylbenzene	GU-3	9/15/2022		1.8	1.0	ug/L
Vinyl chloride	GU-3	12/03/2021		3.6	1.0	ug/L
Vinyl chloride	GU-3	3/28/2022		3.0	1.0	ug/L
Vinyl chloride	GU-3	9/15/2022		1.9	1.0	ug/L
Vinyl chloride	GU-3	9/30/2024		1.2	1.0	ug/L
Benzene	GU-4	3/28/2022		1.4	1.0	ug/L
Toluene	GU-4	9/14/2022		1.9	1.0	ug/L
Acetone	GWD-2	3/14/2008		35.5	10.0	ug/L
Benzene	GWD-2	3/14/2008		1.3	1.0	ug/L
Benzene	GWD-2	7/22/2008		1.1	1.0	ug/L
Benzene	GWD-2	9/12/2008		1.2	1.0	ug/L
Benzene	GWD-2	12/18/2008		1.1	1.0	ug/L
Benzene	GWD-2	3/04/2009		1.3	1.0	ug/L
Benzene	GWD-2	9/21/2010		1.6	1.0	ug/L
Bis(2-ethylhexyl) phthalate	GWD-2	10/01/2010		9	8	ug/L
Chloroethane	GWD-2	3/14/2008		1.2	1.0	ug/L
Chloroethane	GWD-2	7/22/2008		1.2	1.0	ug/L
Chloroethane	GWD-2	9/12/2008		1.3	1.0	ug/L
Chloroethane	GWD-2	12/18/2008		1.1	1.0	ug/L
Chloroethane	GWD-2	3/04/2009		1.1	1.0	ug/L
Chloroethane	GWD-2	7/01/2009		1.0	1.0	ug/L
Chloroethane	GWD-2	9/27/2009		2.2	1.0	ug/L
Chloroethane	GWD-2	3/24/2010		4.2	1.0	ug/L
Chloroethane	GWD-2	6/02/2010		7.5	1.0	ug/L
Chloroethane	GWD-2	7/15/2010		5.9	1.0	ug/L
Chloroethane	GWD-2	9/21/2010		24.8	1.0	ug/L
Vinyl chloride	GWD-2	3/14/2008		1.6	1.0	ug/L
Vinyl chloride	GWD-2	6/03/2008		1.0	1.0	ug/L
Vinyl chloride	GWD-2	7/22/2008		1.4	1.0	ug/L
Vinyl chloride	GWD-2	9/12/2008		1.5	1.0	ug/L
Vinyl chloride	GWD-2	12/18/2008		2.2	1.0	ug/L
Vinyl chloride	GWD-2	3/04/2009		2.1	1.0	ug/L
Vinyl chloride	GWD-2	5/05/2009		1.2	1.0	ug/L
Vinyl chloride	GWD-2	7/01/2009		1.1	1.0	ug/L
Vinyl chloride	GWD-2	9/27/2009		1.9	1.0	ug/L
Carbon disulfide	MW02-30A	6/07/2016		1.7	1.0	ug/L
2,4,6-tribromophenol	MW06-37	7/23/2008		96.8	8.0	ug/L
2,4,6-tribromophenol	MW06-37	9/12/2008		93.1	8.0	ug/L
2,4,6-tribromophenol	MW06-37	12/11/2008		83.5	8.0	ug/L
2,4,6-tribromophenol	MW06-38	7/23/2008		83.2	8.0	ug/L
2,4,6-tribromophenol	MW06-38	9/12/2008		93.7	8.0	ug/L
2,4,6-tribromophenol	MW06-38	12/11/2008		85.8	8.0	ug/L
2,4,6-tribromophenol	MW06-39	7/23/2008		78.9	8.0	ug/L
2,4,6-tribromophenol	MW06-39	9/12/2008		100.0	8.0	ug/L
2,4,6-tribromophenol	MW06-39	12/11/2008		92.0	8.0	ug/L
Bis(2-ethylhexyl) phthalate	MW09-42	9/24/2018		7	6	ug/L
Acetone	MW91-8	9/19/2017		12.4	10.0	ug/L
Trans-1,4-dichloro-2-butene	MW91-8	3/16/2016		33	5	ug/L
1,1,1-trichloroethane	MW94-18	12/23/1994		2	1	ug/L
1,1,1-trichloroethane	MW94-18	3/17/1995		2	1	ug/L
1,1-dichloroethane	MW96-23	9/27/2013		1.3	1.0	ug/L
Bis(2-ethylhexyl) phthalate	MW96-23	3/07/2012		10	8	ug/L
1,1-dichloroethane	MW98-25	9/04/2020		1.1	1.0	ug/L
1,1-dichloroethane	MW98-25	3/09/2021		1.8	1.0	ug/L
1,1-dichloroethane	MW98-25	9/07/2021		2.3	1.0	ug/L
1,1-dichloroethane	MW98-25	3/28/2022		1.5	1.0	ug/L
1,1-dichloroethane	MW98-25	3/20/2023		1.7	1.0	ug/L
1,1-dichloroethane	MW98-25	9/12/2023		1.6	1.0	ug/L
1,1-dichloroethane	MW98-25	3/12/2024		1.1	1.0	ug/L
1,1-dichloroethane	MW98-25	9/30/2024		1.2	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
1,4-dichlorobenzene	MW98-25	9/20/2007		1.4	1.0	ug/L
1,4-dichlorobenzene	MW98-25	6/04/2008		1.4	1.0	ug/L
1,4-dichlorobenzene	MW98-25	7/23/2008		1.3	1.0	ug/L
1,4-dichlorobenzene	MW98-25	9/12/2008		1.3	1.0	ug/L
1,4-dichlorobenzene	MW98-25	12/11/2008		1.4	1.0	ug/L
1,4-dichlorobenzene	MW98-25	3/04/2009		1.1	1.0	ug/L
1,4-dichlorobenzene	MW98-25	3/04/2009		1.4	1.0	ug/L
1,4-dichlorobenzene	MW98-25	9/20/2009		1.7	1.0	ug/L
1,4-dichlorobenzene	MW98-25	3/26/2010		2.1	1.0	ug/L
1,4-dichlorobenzene	MW98-25	9/24/2010		2.6	1.0	ug/L
1,4-dichlorobenzene	MW98-25	9/14/2011		1.3	1.0	ug/L
1,4-dichlorobenzene	MW98-25	3/07/2012		1.8	1.0	ug/L
1,4-dichlorobenzene	MW98-25	9/08/2016		2.1	1.0	ug/L
1,4-dichlorobenzene	MW98-25	3/18/2017		2.0	1.0	ug/L
1,4-dichlorobenzene	MW98-25	9/19/2017		1.7	1.0	ug/L
1,4-dichlorobenzene	MW98-25	9/24/2018		2.9	1.0	ug/L
1,4-dichlorobenzene	MW98-25	9/04/2020		1.3	1.0	ug/L
1,4-dichlorobenzene	MW98-25	3/09/2021		1.1	1.0	ug/L
1,4-dichlorobenzene	MW98-25	9/07/2021		2.0	1.0	ug/L
1,4-dichlorobenzene	MW98-25	3/28/2022		1.2	1.0	ug/L
1,4-dichlorobenzene	MW98-25	3/20/2023		1.2	1.0	ug/L
1,4-dichlorobenzene	MW98-25	9/12/2023		2.4	1.0	ug/L
1,4-dichlorobenzene	MW98-25	3/12/2024		1.6	1.0	ug/L
1,4-dichlorobenzene	MW98-25	9/30/2024		1.8	1.0	ug/L
2,4,6-tribromophenol	MW98-25	7/23/2008		105.0	8.0	ug/L
2,4,6-tribromophenol	MW98-25	9/12/2008		120.0	8.0	ug/L
2,4,6-tribromophenol	MW98-25	12/11/2008		97.1	8.0	ug/L
Acetone	MW98-25	6/04/2008		12.1	10.0	ug/L
Acetone	MW98-25	3/30/2011		54.0	10.0	ug/L
Acetone	MW98-25	3/07/2012		14.8	10.0	ug/L
Acetone	MW98-25	3/08/2018		46.5	10.0	ug/L
Benzene	MW98-25	3/09/2004		4.2	1.0	ug/L
Benzene	MW98-25	9/14/2004		3.3	1.0	ug/L
Benzene	MW98-25	3/30/2006		2.5	1.0	ug/L
Benzene	MW98-25	9/15/2006		2.0	1.0	ug/L
Benzene	MW98-25	9/20/2007		2.4	1.0	ug/L
Benzene	MW98-25	3/17/2008		6.0	1.0	ug/L
Benzene	MW98-25	6/04/2008		8.9	1.0	ug/L
Benzene	MW98-25	7/23/2008		5.5	1.0	ug/L
Benzene	MW98-25	9/12/2008		5.0	1.0	ug/L
Benzene	MW98-25	12/11/2008		7.6	1.0	ug/L
Benzene	MW98-25	3/04/2009		6.4	1.0	ug/L
Benzene	MW98-25	3/04/2009		6.5	1.0	ug/L
Benzene	MW98-25	9/20/2009		6.1	1.0	ug/L
Benzene	MW98-25	3/26/2010		6.4	1.0	ug/L
Benzene	MW98-25	9/24/2010		5.6	1.0	ug/L
Benzene	MW98-25	3/30/2011		4.7	1.0	ug/L
Benzene	MW98-25	9/14/2011		4.0	1.0	ug/L
Benzene	MW98-25	3/07/2012		5.8	1.0	ug/L
Benzene	MW98-25	9/27/2013		1.6	1.0	ug/L
Benzene	MW98-25	3/13/2014		1.0	1.0	ug/L
Benzene	MW98-25	9/18/2014		5.6	1.0	ug/L
Benzene	MW98-25	9/11/2015		1.3	1.0	ug/L
Benzene	MW98-25	9/08/2016		1.4	1.0	ug/L
Benzene	MW98-25	3/08/2018		1.9	1.0	ug/L
Benzene	MW98-25	3/09/2021		1.6	1.0	ug/L
Benzene	MW98-25	9/07/2021		2.7	1.0	ug/L
Benzene	MW98-25	3/28/2022		1.3	1.0	ug/L
Benzene	MW98-25	9/12/2023		1.4	1.0	ug/L
Beta-bhc	MW98-25	9/12/2008		.14	.05	ug/L
Beta-bhc	MW98-25	3/13/2014		.07	.05	ug/L
Bis(2-ethylhexyl) phthalate	MW98-25	12/11/2008		13	8	ug/L
Bis(2-ethylhexyl) phthalate	MW98-25	9/27/2013		10	10	ug/L
Bis(2-ethylhexyl) phthalate	MW98-25	9/19/2017		6	6	ug/L
Chlorobenzene	MW98-25	3/17/2008		1.1	1.0	ug/L
Chlorobenzene	MW98-25	6/04/2008		2.8	1.0	ug/L
Chlorobenzene	MW98-25	7/23/2008		2.2	1.0	ug/L
Chlorobenzene	MW98-25	9/12/2008		2.4	1.0	ug/L
Chlorobenzene	MW98-25	12/11/2008		2.3	1.0	ug/L
Chlorobenzene	MW98-25	3/04/2009		1.9	1.0	ug/L
Chlorobenzene	MW98-25	3/04/2009		1.8	1.0	ug/L
Chlorobenzene	MW98-25	3/26/2010		1.4	1.0	ug/L
Chlorobenzene	MW98-25	9/24/2010		2.1	1.0	ug/L
Chlorobenzene	MW98-25	9/14/2011		1.2	1.0	ug/L
Chlorobenzene	MW98-25	3/07/2012		1.3	1.0	ug/L
Chlorobenzene	MW98-25	9/18/2014		1.3	1.0	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Chlorobenzene	MW98-25	9/07/2021		1.0	1.0	ug/L
Chlorobenzene	MW98-25	9/12/2023		1.3	1.0	ug/L
Chlorobenzene	MW98-25	9/30/2024		1.0	1.0	ug/L
Chloroethane	MW98-25	3/17/2008		4.2	1.0	ug/L
Chloroethane	MW98-25	6/04/2008		2.5	1.0	ug/L
Chloroethane	MW98-25	7/23/2008		2.1	1.0	ug/L
Chloroethane	MW98-25	9/12/2008		2.3	1.0	ug/L
Chloroethane	MW98-25	12/11/2008		2.2	1.0	ug/L
Chloroethane	MW98-25	3/04/2009		2.4	1.0	ug/L
Chloroethane	MW98-25	3/04/2009		2.5	1.0	ug/L
Chloroethane	MW98-25	9/20/2009		1.8	1.0	ug/L
Chloroethane	MW98-25	3/26/2010		2.0	1.0	ug/L
Chloroethane	MW98-25	9/24/2010		2.2	1.0	ug/L
Chloroethane	MW98-25	3/30/2011		1.2	1.0	ug/L
Chloroethane	MW98-25	9/14/2011		1.9	1.0	ug/L
Chloroethane	MW98-25	3/07/2012		2.2	1.0	ug/L
Chloroethane	MW98-25	9/12/2012		1.8	1.0	ug/L
Chloroethane	MW98-25	9/27/2013		1.9	1.0	ug/L
Chloroethane	MW98-25	3/13/2014		2.0	1.0	ug/L
Chloroethane	MW98-25	3/16/2016		1.9	1.0	ug/L
Chloroethane	MW98-25	9/08/2016		1.0	1.0	ug/L
Chloroethane	MW98-25	3/08/2018		1.1	1.0	ug/L
Chloroethane	MW98-25	9/07/2021		1.5	1.0	ug/L
Chloroethane	MW98-25	3/20/2023		1.7	1.0	ug/L
Chloroethane	MW98-25	9/12/2023		1.5	1.0	ug/L
Chloroethane	MW98-25	3/12/2024		1.4	1.0	ug/L
Chloroethane	MW98-25	9/30/2024		1.0	1.0	ug/L
Chloromethane	MW98-25	9/30/2024		1.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	3/17/2008		8.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	6/04/2008		6.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	7/23/2008		6.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	9/12/2008		6.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	12/11/2008		5.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	3/04/2009		5.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	3/04/2009		5.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	9/20/2009		5.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	3/26/2010		4.6	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	9/24/2010		7.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	3/30/2011		6.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	9/14/2011		6.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	3/07/2012		6.7	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	9/12/2012		3.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	3/20/2013		2.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	9/27/2013		4.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	3/13/2014		4.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	9/18/2014		4.5	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	3/17/2015		5.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	9/11/2015		1.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	3/16/2016		5.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	9/08/2016		2.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	3/18/2017		2.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	9/19/2017		1.3	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	3/08/2018		2.5	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	9/24/2018		2.3	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	3/25/2019		1.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	9/04/2020		2.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	3/09/2021		2.5	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	9/07/2021		3.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	3/28/2022		2.5	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	3/20/2023		2.3	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	9/12/2023		2.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	3/12/2024		1.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	9/30/2024		2.0	1.0	ug/L
Dichlorodifluoromethane	MW98-25	7/23/2008		6.2	1.0	ug/L
Dichlorodifluoromethane	MW98-25	9/12/2008		2.6	1.0	ug/L
Dichlorodifluoromethane	MW98-25	3/04/2009		21.6	1.0	ug/L
Dichlorodifluoromethane	MW98-25	9/27/2009		16.6	1.0	ug/L
Dichlorodifluoromethane	MW98-25	3/26/2010		34.6	1.0	ug/L
Dichlorodifluoromethane	MW98-25	9/24/2010		28.2	1.0	ug/L
Dichlorodifluoromethane	MW98-25	3/30/2011		32.0	1.0	ug/L
Dichlorodifluoromethane	MW98-25	9/14/2011		12.6	1.0	ug/L
Dichlorodifluoromethane	MW98-25	3/07/2012		34.5	1.0	ug/L
Dichlorodifluoromethane	MW98-25	9/12/2012		4.2	1.0	ug/L
Dichlorodifluoromethane	MW98-25	3/20/2013		13.0	1.0	ug/L
Dichlorodifluoromethane	MW98-25	9/27/2013		1.3	1.0	ug/L
Dichlorodifluoromethane	MW98-25	3/13/2014		1.5	1.0	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Dichlorodifluoromethane	MW98-25	9/18/2014		24.3	1.0	ug/L
Dichlorodifluoromethane	MW98-25	9/11/2015		14.7	1.0	ug/L
Dichlorodifluoromethane	MW98-25	9/08/2016		6.6	1.0	ug/L
Dichlorodifluoromethane	MW98-25	3/18/2017		18.8	1.0	ug/L
Dichlorodifluoromethane	MW98-25	9/19/2017		6.9	1.0	ug/L
Dichlorodifluoromethane	MW98-25	3/08/2018		38.4	1.0	ug/L
Dichlorodifluoromethane	MW98-25	9/24/2018		1.6	1.0	ug/L
Dichlorodifluoromethane	MW98-25	3/25/2019		3.8	1.0	ug/L
Dichlorodifluoromethane	MW98-25	3/23/2020		19.4	1.0	ug/L
Dichlorodifluoromethane	MW98-25	9/04/2020		1.2	1.0	ug/L
Dichlorodifluoromethane	MW98-25	3/09/2021		8.6	1.0	ug/L
Dichlorodifluoromethane	MW98-25	9/07/2021		4.8	1.0	ug/L
Dichlorodifluoromethane	MW98-25	3/28/2022		1.7	1.0	ug/L
Dichlorodifluoromethane	MW98-25	3/20/2023		3.3	1.0	ug/L
Dichlorodifluoromethane	MW98-25	9/12/2023		2.1	1.0	ug/L
Ethylbenzene	MW98-25	6/04/2008		2.2	1.0	ug/L
Ethylbenzene	MW98-25	12/11/2008		1.8	1.0	ug/L
Ethylbenzene	MW98-25	9/20/2009		1.2	1.0	ug/L
Ethylbenzene	MW98-25	3/26/2010		2.6	1.0	ug/L
Toluene	MW98-25	6/04/2008		1.2	1.0	ug/L
Toluene	MW98-25	3/26/2010		1.2	1.0	ug/L
Toluene	MW98-25	9/24/2010		1.3	1.0	ug/L
Trichloroethylene	MW98-25	6/04/2008		1.2	1.0	ug/L
Trichlorofluoromethane	MW98-25	6/04/2008		28.7	1.0	ug/L
Trichlorofluoromethane	MW98-25	9/12/2008		2.4	1.0	ug/L
Trichlorofluoromethane	MW98-25	3/04/2009		16.0	1.0	ug/L
Trichlorofluoromethane	MW98-25	3/04/2009		16.4	1.0	ug/L
Trichlorofluoromethane	MW98-25	3/26/2010		27.0	1.0	ug/L
Trichlorofluoromethane	MW98-25	9/24/2010		12.1	1.0	ug/L
Trichlorofluoromethane	MW98-25	3/30/2011		19.3	1.0	ug/L
Trichlorofluoromethane	MW98-25	9/14/2011		5.0	1.0	ug/L
Trichlorofluoromethane	MW98-25	3/07/2012		16.4	1.0	ug/L
Trichlorofluoromethane	MW98-25	9/12/2012		1.0	1.0	ug/L
Trichlorofluoromethane	MW98-25	3/20/2013		6.2	1.0	ug/L
Trichlorofluoromethane	MW98-25	9/27/2013		1.9	1.0	ug/L
Trichlorofluoromethane	MW98-25	9/18/2014		3.2	1.0	ug/L
Trichlorofluoromethane	MW98-25	9/08/2016		4.4	1.0	ug/L
Trichlorofluoromethane	MW98-25	3/18/2017		4.3	1.0	ug/L
Trichlorofluoromethane	MW98-25	9/19/2017		1.6	1.0	ug/L
Trichlorofluoromethane	MW98-25	3/08/2018		2.5	1.0	ug/L
Trichlorofluoromethane	MW98-25	3/23/2020		6.0	1.0	ug/L
Trichlorofluoromethane	MW98-25	9/04/2020		1.0	1.0	ug/L
Trichlorofluoromethane	MW98-25	3/09/2021		2.6	1.0	ug/L
Trichlorofluoromethane	MW98-25	3/28/2022		1.0	1.0	ug/L
Trichlorofluoromethane	MW98-25	3/20/2023		1.2	1.0	ug/L
Trichlorofluoromethane	MW98-25	9/12/2023		1.1	1.0	ug/L
Trichlorofluoromethane	MW98-25	3/12/2024		1.0	1.0	ug/L
Vinyl chloride	MW98-25	3/17/2008		2.8	1.0	ug/L
Vinyl chloride	MW98-25	6/04/2008		2.8	1.0	ug/L
Vinyl chloride	MW98-25	7/23/2008		1.9	1.0	ug/L
Vinyl chloride	MW98-25	12/11/2008		2.4	1.0	ug/L
Vinyl chloride	MW98-25	3/04/2009		2.5	1.0	ug/L
Vinyl chloride	MW98-25	3/04/2009		2.3	1.0	ug/L
Vinyl chloride	MW98-25	3/26/2010		1.6	1.0	ug/L
Vinyl chloride	MW98-25	9/24/2010		1.7	1.0	ug/L
Vinyl chloride	MW98-25	3/30/2011		1.5	1.0	ug/L
Vinyl chloride	MW98-25	9/14/2011		1.0	1.0	ug/L
Vinyl chloride	MW98-25	3/07/2012		1.4	1.0	ug/L
Xylenes, total	MW98-25	6/04/2008		5.5	2.0	ug/L
Xylenes, total	MW98-25	7/23/2008		2.5	2.0	ug/L
Benzene	PEC-3	3/28/2022		1.5	1.0	ug/L
Cis-1,2-dichloroethylene	PEC-3	3/28/2022		3.2	1.0	ug/L
1,1-dichloroethane	Sramp 1	9/21/2009		1.1	1.0	ug/L
1,1-dichloroethane	Sramp 1	3/30/2011		1.0	1.0	ug/L
1,1-dichloroethane	Sramp 1	3/09/2021		2.6	1.0	ug/L
1,1-dichloroethane	Sramp 1	3/28/2022		1.4	1.0	ug/L
1,1-dichloroethane	Sramp 1	3/20/2023		1.4	1.0	ug/L
1,1-dichloroethylene	Sramp 1	12/12/2008		1	1	ug/L
1,2,4-trichlorobenzene	Sramp 1	9/21/2009		5.2	1.0	ug/L
1,4-dichlorobenzene	Sramp 1	7/21/2008		1.8	1.0	ug/L
1,4-dichlorobenzene	Sramp 1	9/12/2008		1.8	1.0	ug/L
1,4-dichlorobenzene	Sramp 1	12/12/2008		1.6	1.0	ug/L
1,4-dichlorobenzene	Sramp 1	3/04/2009		1.4	1.0	ug/L
1,4-dichlorobenzene	Sramp 1	9/21/2009		2.8	1.0	ug/L
1,4-dichlorobenzene	Sramp 1	9/24/2010		3.4	1.0	ug/L
1,4-dichlorobenzene	Sramp 1	3/30/2011		3.5	1.0	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
1,4-dichlorobenzene	Sramp 1	9/14/2011		2.7	1.0	ug/L
1,4-dichlorobenzene	Sramp 1	3/07/2012		1.3	1.0	ug/L
1,4-dichlorobenzene	Sramp 1	3/20/2013		4.0	1.0	ug/L
1,4-dichlorobenzene	Sramp 1	9/26/2013		3.3	1.0	ug/L
1,4-dichlorobenzene	Sramp 1	3/17/2015		2.2	1.0	ug/L
1,4-dichlorobenzene	Sramp 1	9/11/2015		6.4	1.0	ug/L
1,4-dichlorobenzene	Sramp 1	3/16/2016		3.9	1.0	ug/L
1,4-dichlorobenzene	Sramp 1	9/08/2016		4.6	1.0	ug/L
1,4-dichlorobenzene	Sramp 1	3/18/2017		2.7	1.0	ug/L
1,4-dichlorobenzene	Sramp 1	3/09/2021		5.8	1.0	ug/L
1,4-dichlorobenzene	Sramp 1	3/28/2022		5.0	1.0	ug/L
1,4-dichlorobenzene	Sramp 1	3/20/2023		6.5	1.0	ug/L
Acetone	Sramp 1	3/30/2011		40.1	10.0	ug/L
Acetone	Sramp 1	3/16/2016		82.1	10.0	ug/L
Acetone	Sramp 1	3/25/2019		19.3	10.0	ug/L
Acetone	Sramp 1	3/28/2022		23.5	10.0	ug/L
Benzene	Sramp 1	7/21/2008		4.7	1.0	ug/L
Benzene	Sramp 1	9/12/2008		3.6	1.0	ug/L
Benzene	Sramp 1	3/04/2009		1.3	1.0	ug/L
Benzene	Sramp 1	9/21/2009		7.6	1.0	ug/L
Benzene	Sramp 1	9/24/2010		4.2	1.0	ug/L
Benzene	Sramp 1	3/30/2011		5.8	1.0	ug/L
Benzene	Sramp 1	3/20/2013		3.5	1.0	ug/L
Benzene	Sramp 1	9/26/2013		6.0	1.0	ug/L
Benzene	Sramp 1	3/17/2015		2.6	1.0	ug/L
Benzene	Sramp 1	9/11/2015		6.2	1.0	ug/L
Benzene	Sramp 1	3/16/2016		5.0	1.0	ug/L
Benzene	Sramp 1	9/08/2016		2.2	1.0	ug/L
Benzene	Sramp 1	3/18/2017		2.0	1.0	ug/L
Benzene	Sramp 1	3/25/2019		1.2	1.0	ug/L
Benzene	Sramp 1	9/03/2019		1.2	1.0	ug/L
Benzene	Sramp 1	3/09/2021		5.7	1.0	ug/L
Benzene	Sramp 1	3/28/2022		4.8	1.0	ug/L
Benzene	Sramp 1	3/20/2023		5.7	1.0	ug/L
Chlorobenzene	Sramp 1	7/21/2008		1.6	1.0	ug/L
Chlorobenzene	Sramp 1	9/12/2008		1.8	1.0	ug/L
Chlorobenzene	Sramp 1	9/21/2009		2.8	1.0	ug/L
Chlorobenzene	Sramp 1	9/24/2010		1.5	1.0	ug/L
Chlorobenzene	Sramp 1	3/30/2011		1.5	1.0	ug/L
Chlorobenzene	Sramp 1	3/20/2013		1.1	1.0	ug/L
Chlorobenzene	Sramp 1	9/26/2013		2.1	1.0	ug/L
Chlorobenzene	Sramp 1	9/11/2015		2.4	1.0	ug/L
Chlorobenzene	Sramp 1	3/16/2016		1.9	1.0	ug/L
Chlorobenzene	Sramp 1	9/08/2016		1.4	1.0	ug/L
Chlorobenzene	Sramp 1	3/18/2017		1.1	1.0	ug/L
Chlorobenzene	Sramp 1	3/25/2019		1.5	1.0	ug/L
Chlorobenzene	Sramp 1	3/09/2021		1.7	1.0	ug/L
Chlorobenzene	Sramp 1	3/28/2022		1.4	1.0	ug/L
Chlorobenzene	Sramp 1	3/20/2023		1.7	1.0	ug/L
Chloroethane	Sramp 1	7/21/2008		1.5	1.0	ug/L
Chloroethane	Sramp 1	9/12/2008		1.0	1.0	ug/L
Chloroethane	Sramp 1	3/04/2009		1.4	1.0	ug/L
Chloroethane	Sramp 1	9/21/2009		1.4	1.0	ug/L
Chloroethane	Sramp 1	3/30/2011		1.3	1.0	ug/L
Chloroethane	Sramp 1	9/14/2011		1.2	1.0	ug/L
Chloroethane	Sramp 1	9/26/2013		2.2	1.0	ug/L
Chloroethane	Sramp 1	9/11/2015		1.4	1.0	ug/L
Chloroethane	Sramp 1	3/16/2016		1.9	1.0	ug/L
Chloroethane	Sramp 1	9/08/2016		2.0	1.0	ug/L
Chloroethane	Sramp 1	3/18/2017		1.6	1.0	ug/L
Chloroethane	Sramp 1	3/25/2019		2.6	1.0	ug/L
Chloroethane	Sramp 1	9/03/2019		2.5	1.0	ug/L
Chloroethane	Sramp 1	3/09/2021		2.6	1.0	ug/L
Chloroethane	Sramp 1	3/28/2022		1.6	1.0	ug/L
Chloroethane	Sramp 1	3/20/2023		2.0	1.0	ug/L
Cis-1,2-dichloroethylene	Sramp 1	7/21/2008		3.1	1.0	ug/L
Cis-1,2-dichloroethylene	Sramp 1	9/12/2008		2.5	1.0	ug/L
Cis-1,2-dichloroethylene	Sramp 1	12/12/2008		1.7	1.0	ug/L
Cis-1,2-dichloroethylene	Sramp 1	3/04/2009		1.8	1.0	ug/L
Cis-1,2-dichloroethylene	Sramp 1	9/21/2009		2.9	1.0	ug/L
Cis-1,2-dichloroethylene	Sramp 1	9/24/2010		2.3	1.0	ug/L
Cis-1,2-dichloroethylene	Sramp 1	3/30/2011		3.6	1.0	ug/L
Cis-1,2-dichloroethylene	Sramp 1	9/14/2011		2.4	1.0	ug/L
Cis-1,2-dichloroethylene	Sramp 1	3/20/2013		2.3	1.0	ug/L
Cis-1,2-dichloroethylene	Sramp 1	9/26/2013		3.3	1.0	ug/L
Cis-1,2-dichloroethylene	Sramp 1	3/17/2015		1.4	1.0	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Cis-1,2-dichloroethylene	Sramp 1	9/11/2015		2.7	1.0	ug/L
Cis-1,2-dichloroethylene	Sramp 1	3/16/2016		2.5	1.0	ug/L
Cis-1,2-dichloroethylene	Sramp 1	9/08/2016		2.8	1.0	ug/L
Cis-1,2-dichloroethylene	Sramp 1	3/18/2017		2.1	1.0	ug/L
Cis-1,2-dichloroethylene	Sramp 1	3/25/2019		4.0	1.0	ug/L
Cis-1,2-dichloroethylene	Sramp 1	9/03/2019		2.4	1.0	ug/L
Cis-1,2-dichloroethylene	Sramp 1	3/09/2021		4.4	1.0	ug/L
Cis-1,2-dichloroethylene	Sramp 1	3/28/2022		3.0	1.0	ug/L
Cis-1,2-dichloroethylene	Sramp 1	3/20/2023		3.0	1.0	ug/L
Dichlorodifluoromethane	Sramp 1	9/21/2009		20.4	1.0	ug/L
Dichlorodifluoromethane	Sramp 1	9/24/2010		7.6	1.0	ug/L
Dichlorodifluoromethane	Sramp 1	3/07/2012		1.1	1.0	ug/L
Dichlorodifluoromethane	Sramp 1	9/12/2012		2.2	1.0	ug/L
Dichlorodifluoromethane	Sramp 1	3/20/2013		9.5	1.0	ug/L
Dichlorodifluoromethane	Sramp 1	9/26/2013		20.3	1.0	ug/L
Dichlorodifluoromethane	Sramp 1	3/17/2015		16.7	1.0	ug/L
Dichlorodifluoromethane	Sramp 1	9/11/2015		40.6	1.0	ug/L
Dichlorodifluoromethane	Sramp 1	3/16/2016		16.5	1.0	ug/L
Dichlorodifluoromethane	Sramp 1	9/08/2016		40.7	1.0	ug/L
Dichlorodifluoromethane	Sramp 1	3/18/2017		34.8	1.0	ug/L
Dichlorodifluoromethane	Sramp 1	9/19/2017		3.1	1.0	ug/L
Dichlorodifluoromethane	Sramp 1	3/25/2019		38.4	1.0	ug/L
Dichlorodifluoromethane	Sramp 1	3/09/2021		50.7	1.0	ug/L
Dichlorodifluoromethane	Sramp 1	3/28/2022		12.2	1.0	ug/L
Dichlorodifluoromethane	Sramp 1	3/20/2023		18.4	1.0	ug/L
Ethylbenzene	Sramp 1	7/21/2008		2.6	1.0	ug/L
Ethylbenzene	Sramp 1	9/12/2008		2.0	1.0	ug/L
Ethylbenzene	Sramp 1	9/21/2009		7.7	1.0	ug/L
Ethylbenzene	Sramp 1	9/24/2010		2.7	1.0	ug/L
Ethylbenzene	Sramp 1	3/30/2011		2.3	1.0	ug/L
Ethylbenzene	Sramp 1	9/14/2011		1.8	1.0	ug/L
Ethylbenzene	Sramp 1	9/26/2013		3.5	1.0	ug/L
Ethylbenzene	Sramp 1	3/16/2016		2.1	1.0	ug/L
Ethylbenzene	Sramp 1	3/09/2021		1.9	1.0	ug/L
Trichlorofluoromethane	Sramp 1	7/21/2008		26.0	1.0	ug/L
Trichlorofluoromethane	Sramp 1	9/12/2008		12.7	1.0	ug/L
Trichlorofluoromethane	Sramp 1	12/12/2008		17.7	1.0	ug/L
Trichlorofluoromethane	Sramp 1	3/04/2009		26.8	1.0	ug/L
Trichlorofluoromethane	Sramp 1	9/21/2009		14.1	1.0	ug/L
Trichlorofluoromethane	Sramp 1	9/24/2010		3.0	1.0	ug/L
Trichlorofluoromethane	Sramp 1	3/30/2011		7.3	1.0	ug/L
Trichlorofluoromethane	Sramp 1	9/14/2011		2.8	1.0	ug/L
Trichlorofluoromethane	Sramp 1	3/20/2013		4.0	1.0	ug/L
Trichlorofluoromethane	Sramp 1	9/26/2013		3.0	1.0	ug/L
Trichlorofluoromethane	Sramp 1	9/11/2015		7.3	1.0	ug/L
Trichlorofluoromethane	Sramp 1	3/16/2016		39.1	1.0	ug/L
Trichlorofluoromethane	Sramp 1	9/08/2016		24.2	1.0	ug/L
Trichlorofluoromethane	Sramp 1	3/18/2017		17.9	1.0	ug/L
Trichlorofluoromethane	Sramp 1	9/19/2017		2.1	1.0	ug/L
Trichlorofluoromethane	Sramp 1	3/25/2019		22.5	1.0	ug/L
Trichlorofluoromethane	Sramp 1	3/09/2021		28.0	1.0	ug/L
Trichlorofluoromethane	Sramp 1	3/28/2022		8.1	1.0	ug/L
Trichlorofluoromethane	Sramp 1	3/20/2023		9.1	1.0	ug/L
Vinyl chloride	Sramp 1	7/21/2008		1.1	1.0	ug/L
Vinyl chloride	Sramp 1	9/12/2008		1.0	1.0	ug/L
Vinyl chloride	Sramp 1	12/12/2008		1.0	1.0	ug/L
Vinyl chloride	Sramp 1	3/04/2009		1.0	1.0	ug/L
Xylenes, total	Sramp 1	7/21/2008		3.4	2.0	ug/L
Xylenes, total	Sramp 1	9/12/2008		2.8	2.0	ug/L
Xylenes, total	Sramp 1	12/12/2008		2.3	2.0	ug/L
Xylenes, total	Sramp 1	9/21/2009		5.9	2.0	ug/L
Xylenes, total	Sramp 1	9/24/2010		5.7	2.0	ug/L
Xylenes, total	Sramp 1	9/14/2011		3.2	2.0	ug/L
Xylenes, total	Sramp 1	9/26/2013		3.4	2.0	ug/L
Xylenes, total	Sramp 1	3/16/2016		2.4	2.0	ug/L
Acetone	SRAMP 2	3/13/2014		82.2	10.0	ug/L
Ethylbenzene	SRAMP 2	9/24/2018		1.5	1.0	ug/L
Xylenes, total	SRAMP 2	9/24/2018		8.1	2.0	ug/L

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

Attachment D

Assessment Statistics for Detected VOCs

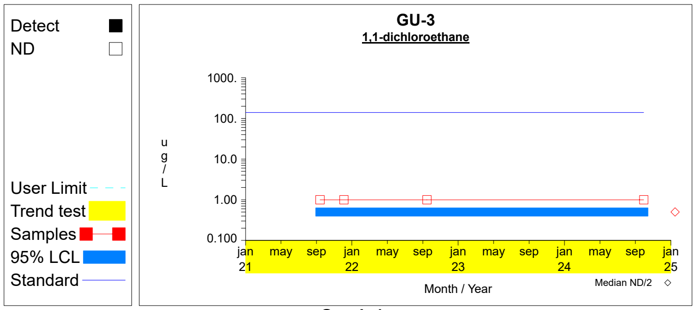
Table 1

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

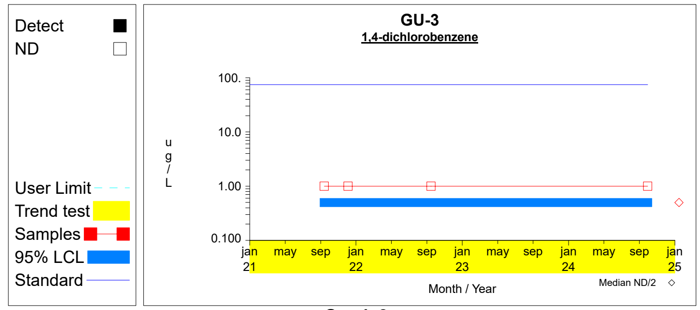
Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend	
1,1-dichloroethane	ug/L	GU-3	4	0.500	0.000	1.176	0.500	0.500	140.000		
1,4-dichlorobenzene	ug/L	GU-3	4	0.500	0.000	1.176	0.500	0.500	75.000		
Benzene	ug/L	GU-3	4	6.075	0.096	1.176	5.962	6.188	5.000		**
Chlorobenzene	ug/L	GU-3	4	1.325	0.591	1.176	0.630	2.020	100.000		
Chloroethane	ug/L	GU-3	4	1.525	0.377	1.176	1.081	1.969	2800.000		
Chloromethane	ug/L	GU-3	4	0.500	0.000	1.176	0.500	0.500			
Cis-1,2-dichloroethylene	ug/L	GU-3	4	6.925	5.149	1.176	0.869	12.981	70.000		
Dichlorodifluoromethane	ug/L	GU-3	0								*
Trichlorofluoromethane	ug/L	GU-3	4	0.500	0.000	1.176	0.500	0.500	2000.000		
Vinyl chloride	ug/L	GU-3	4	2.425	1.078	1.176	1.157	3.693	2.000		
1,1-dichloroethane	ug/L	MW98-25	4	1.400	0.294	1.176	1.054	1.746	140.000		
1,4-dichlorobenzene	ug/L	MW98-25	4	1.750	0.500	1.176	1.162	2.338	75.000		
Benzene	ug/L	MW98-25	4	0.725	0.450	1.176	0.196	1.254	5.000		
Chlorobenzene	ug/L	MW98-25	4	0.825	0.395	1.176	0.361	1.289	100.000		
Chloroethane	ug/L	MW98-25	4	1.400	0.294	1.176	1.054	1.746	2800.000	dec	
Chloromethane	ug/L	MW98-25	4	0.825	0.650	1.176	0.060	1.590			
Cis-1,2-dichloroethylene	ug/L	MW98-25	4	2.125	0.585	1.176	1.437	2.813	70.000	dec	
Dichlorodifluoromethane	ug/L	MW98-25	4	1.600	1.361	1.176	0.000	3.201	1000.000		
Trichlorofluoromethane	ug/L	MW98-25	4	0.950	0.311	1.176	0.584	1.316	2000.000		
Vinyl chloride	ug/L	MW98-25	4	0.500	0.000	1.176	0.500	0.500	2.000		

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

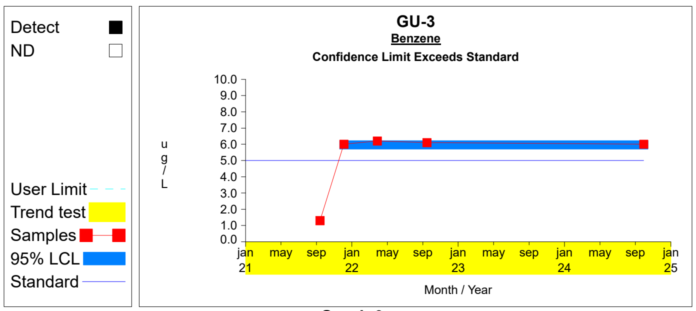
Confidence Limits (Assessment)



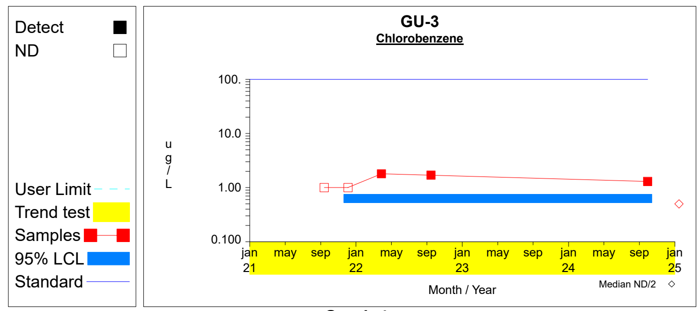
Graph 1



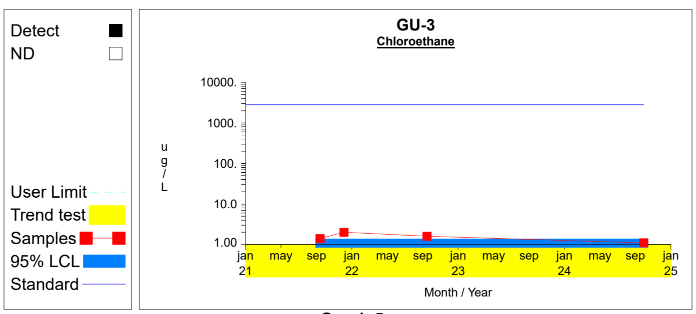
Graph 2



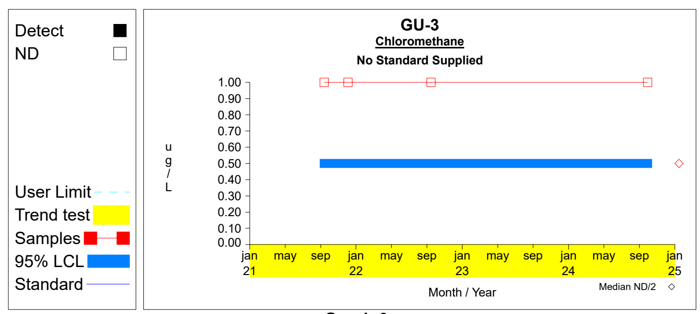
Graph 3



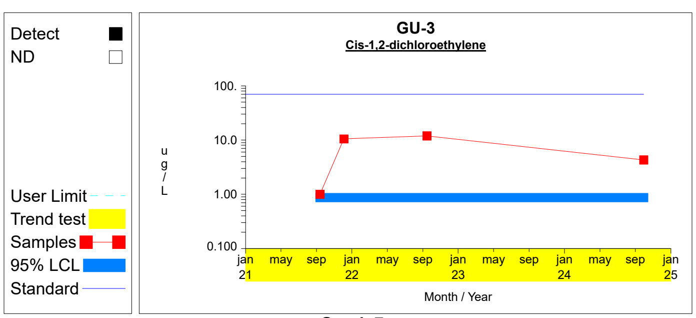
Graph 4



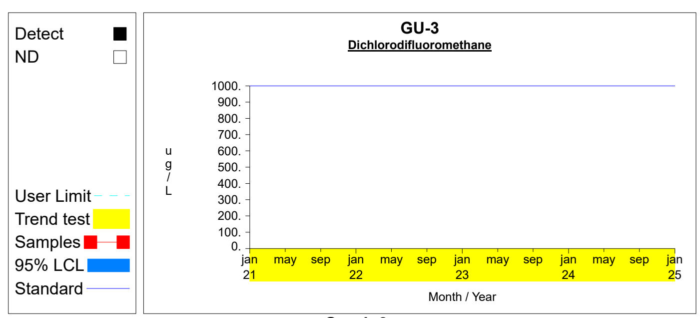
Graph 5



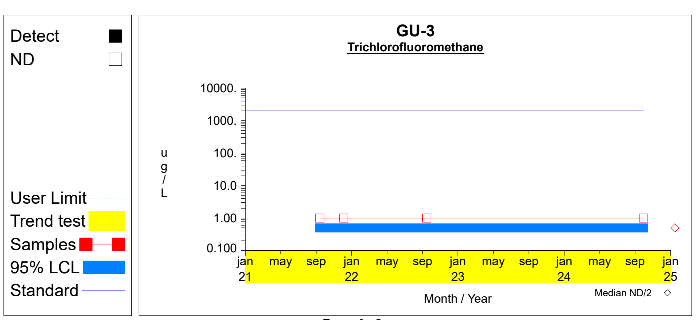
Graph 6



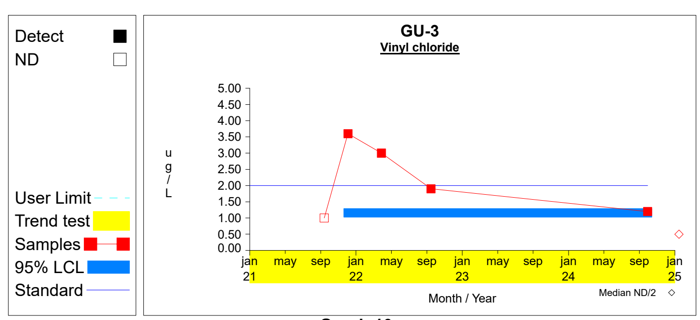
Graph 7



Graph 8

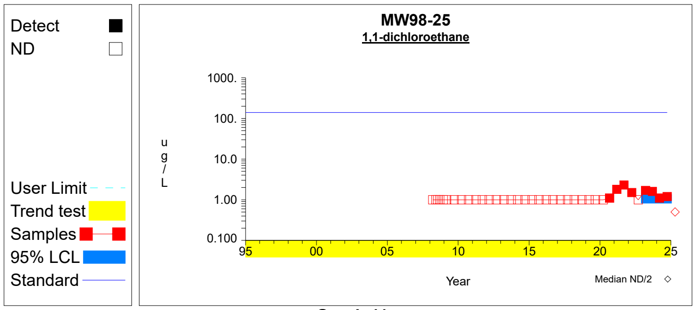


Graph 9

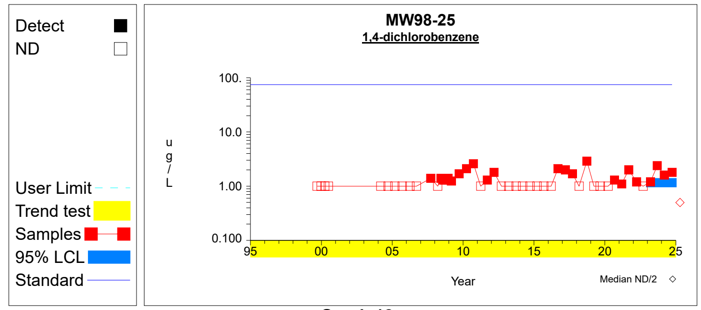


Graph 10

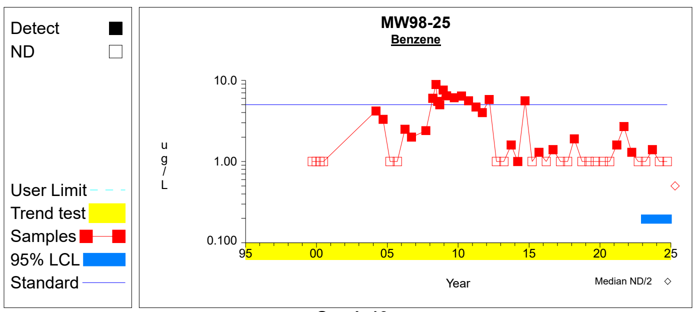
Confidence Limits (Assessment)



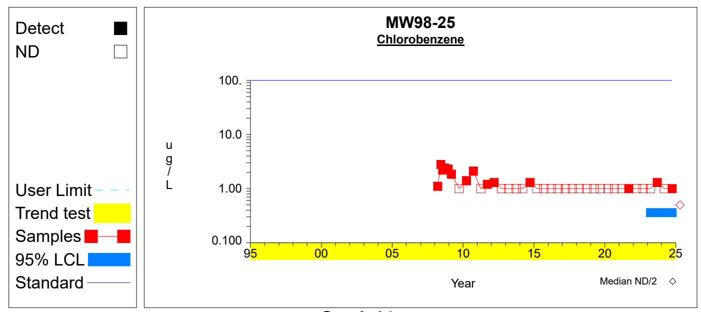
Graph 11



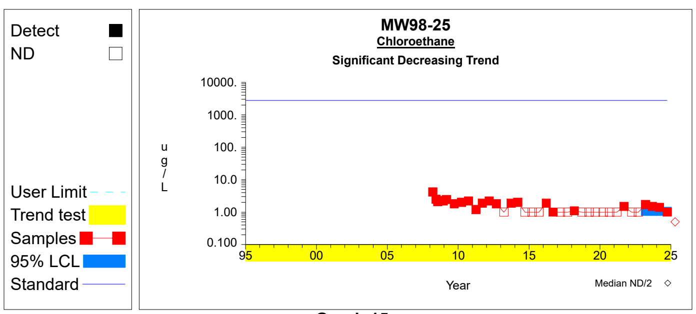
Graph 12



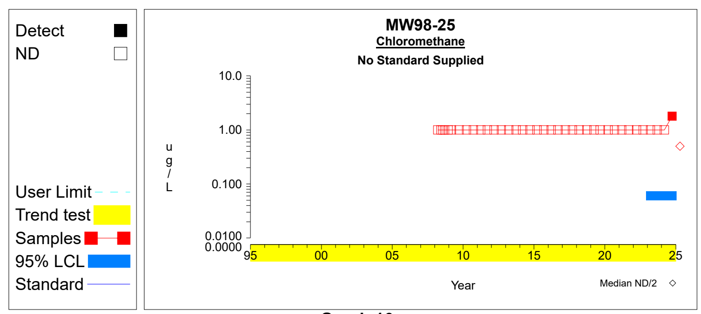
Graph 13



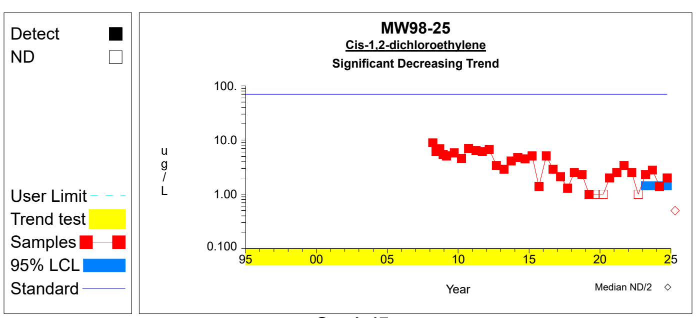
Graph 14



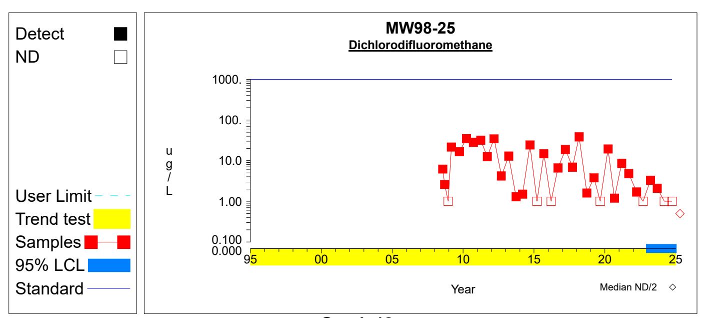
Graph 15



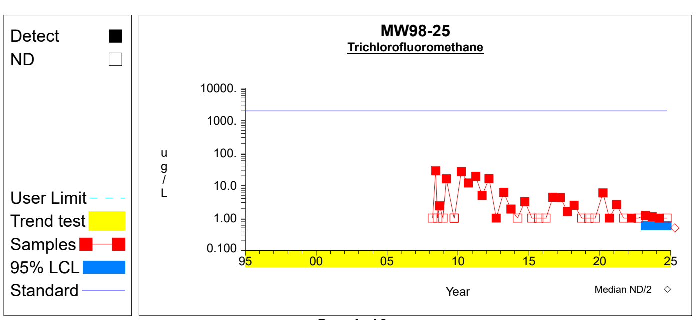
Graph 16



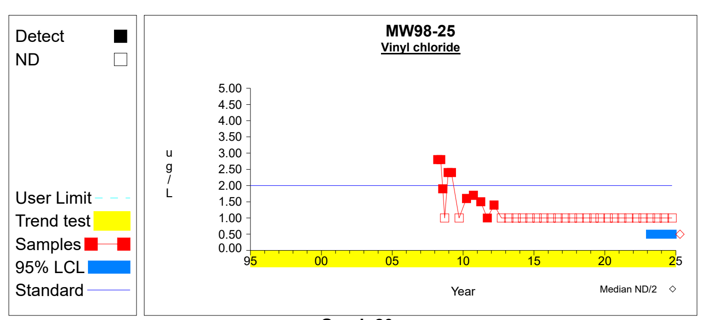
Graph 17



Graph 18



Graph 19



Graph 20

Worksheet 6 - Assessment Monitoring
1,1-dichloroethane (ug/L) at GU-3

Step	Equation	Description
1	$\overline{X} = \mathbf{sum[X]} / \mathbf{N}$ $= \mathbf{2.0} / \mathbf{4}$ $= \mathbf{0.5}$	Compute the mean of the last 4 measurements.
2	$S = ((\mathbf{sum[X^2]} - \mathbf{sum[X]}^2/\mathbf{N}) / (\mathbf{N}-1))^{1/2}$ $= ((\mathbf{1.0} - \mathbf{4.0/4}) / (\mathbf{4}-1))^{1/2}$ $= \mathbf{0.0}$	Compute sd of the last 4 measurements.
3	$LCL = \overline{\mathbf{X}} - \mathbf{tS/N}^{1/2}$ $= \mathbf{0.5} - \mathbf{2.353} * \mathbf{0.0/4}^{1/2}$ $= \mathbf{0.5}$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$UCL = \overline{\mathbf{X}} + \mathbf{tS/N}^{1/2}$ $= \mathbf{0.5} + \mathbf{2.353} * \mathbf{0.0/4}^{1/2}$ $= \mathbf{0.5}$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = \mathbf{N} * (\mathbf{N}-1) / 2$ $= \mathbf{4} * (\mathbf{4}-1) / 2$ $= \mathbf{6}$	Number of sample pairs during trend detection period.
6	$S = \mathbf{0.0}$	Sen's estimator of trend.
7	$var(S) = \mathbf{0.0}$	Variance estimate for slope.
8	$M(S) = (\mathbf{N'} \pm \mathbf{Z}_{.995} * \mathbf{var(S)}^{1/2}) / 2$ $= (\mathbf{6} \pm \mathbf{2.576} * \mathbf{0.0}^{1/2}) / 2$ $= [\ \mathbf{3.0}, \mathbf{3.0}\ ]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$CL(S) = [\ \mathbf{0.0}, \mathbf{0.0}\ ]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
1,4-dichlorobenzene (ug/L) at GU-3

Step	Equation	Description
1	$\bar{X} = \textbf{sum[X]} / \textbf{N}$ $= \textbf{2.0} / \textbf{4}$ $= \textbf{0.5}$	Compute the mean of the last 4 measurements.
2	$S = ((\textbf{sum[X}^{\textbf{2}}\textbf{]} - \textbf{sum[X]}^2/\textbf{N}) / (\textbf{N}-1))^{1/2}$ $= ((\textbf{1.0} - \textbf{4.0}/\textbf{4}) / (\textbf{4}-1))^{1/2}$ $= \textbf{0.0}$	Compute sd of the last 4 measurements.
3	$LCL = \bar{\textbf{X}} - \textbf{tS}/\textbf{N}^{1/2}$ $= \textbf{0.5} - \textbf{2.353} * \textbf{0.0}/\textbf{4}^{1/2}$ $= \textbf{0.5}$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$UCL = \bar{\textbf{X}} + \textbf{tS}/\textbf{N}^{1/2}$ $= \textbf{0.5} + \textbf{2.353} * \textbf{0.0}/\textbf{4}^{1/2}$ $= \textbf{0.5}$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = \textbf{N} * (\textbf{N}-1) / 2$ $= \textbf{4} * (\textbf{4}-1) / 2$ $= \textbf{6}$	Number of sample pairs during trend detection period.
6	$S = \textbf{0.0}$	Sen's estimator of trend.
7	$var(S) = \textbf{0.0}$	Variance estimate for slope.
8	$M(S) = (\textbf{N'} \pm \textbf{Z}_{.995} * \textbf{var(S)}^{1/2}) / 2$ $= (\textbf{6} \pm \textbf{2.576} * \textbf{0.0}^{1/2}) / 2$ $= [\ \textbf{3.0}, \textbf{3.0}\ ]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M^{th} largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$CL(S) = [\ \textbf{0.0}, \textbf{0.0}\ ]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Benzene (ug/L) at GU-3

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **24.3** / **4** = **6.075**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2] - sum[X]^2/N**) / (**N**-1))^{½} = ((**147.65** - **590.49/4**) / (**4**-1))^{½} = **0.096**	Compute sd of the last 4 measurements.
3	LCL = **$\overline{X}$ - tS/N**^{½} = **6.075** - **2.353** * **0.096/4**^{½} = **5.962**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = **$\overline{X}$ + tS/N**^{½} = **6.075** + **2.353** * **0.096/4**^{½} = **6.188**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **5** * (**5**-1) / 2 = **10**	Number of sample pairs during trend detection period.
6	S = **0.381**	Sen's estimator of trend.
7	var(S) = **15.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **$Z_{.995}$** * **var(S)**^{½}) / 2 = (**10** ± **2.576** * **15.667**^{½}) / 2 = [**-0.098**, **10.098**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M^{th} largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.213**, **21.179**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Chlorobenzene (ug/L) at GU-3

Step	Equation	Description
1	$\bar{X}$ = **sum[X]** / **N** = **5.3** / **4** = **1.325**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))$^{1/2}$ = ((**8.07** - **28.09**/**4**) / (**4**-1))$^{1/2}$ = **0.591**	Compute sd of the last 4 measurements.
3	LCL = $\bar{X}$ - **tS**/**N**$^{1/2}$ = **1.325** - **2.353** * **0.591**/**4**$^{1/2}$ = **0.63**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\bar{X}$ + **tS**/**N**$^{1/2}$ = **1.325** + **2.353** * **0.591**/**4**$^{1/2}$ = **2.02**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **5** * (**5**-1) / 2 = **10**	Number of sample pairs during trend detection period.
6	S = **0.273**	Sen's estimator of trend.
7	var(S) = **15.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**$^{1/2}$) / 2 = (**10** ± **2.576** * **15.667**$^{1/2}$) / 2 = [**-0.098**, **10.098**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.213**, **4.126**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Chloroethane (ug/L) at GU-3

Step	Equation	Description
1	$\overline{X} = \mathbf{sum[X]} / \mathbf{N}$ $= \mathbf{6.1} / \mathbf{4}$ $= \mathbf{1.525}$	Compute the mean of the last 4 measurements.
2	$S = ((\mathbf{sum[X^2]} - \mathbf{sum[X]}^2/\mathbf{N}) / (\mathbf{N}-1))^{1/2}$ $= ((\mathbf{9.73} - \mathbf{37.21/4}) / (\mathbf{4}-1))^{1/2}$ $= \mathbf{0.377}$	Compute sd of the last 4 measurements.
3	$LCL = \overline{\mathbf{X}} - \mathbf{tS/N}^{1/2}$ $= \mathbf{1.525} - \mathbf{2.353} * \mathbf{0.377/4}^{1/2}$ $= \mathbf{1.081}$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$UCL = \overline{\mathbf{X}} + \mathbf{tS/N}^{1/2}$ $= \mathbf{1.525} + \mathbf{2.353} * \mathbf{0.377/4}^{1/2}$ $= \mathbf{1.969}$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = \mathbf{N} * (\mathbf{N}-1) / 2$ $= \mathbf{4} * (\mathbf{4}-1) / 2$ $= \mathbf{6}$	Number of sample pairs during trend detection period.
6	$S = \mathbf{-0.172}$	Sen's estimator of trend.
7	$var(S) = \mathbf{8.667}$	Variance estimate for slope.
8	$M(S) = (\mathbf{N'} \pm \mathbf{Z}_{.995} * \mathbf{var(S)}^{1/2}) / 2$ $= (\mathbf{6} \pm \mathbf{2.576} * \mathbf{8.667}^{1/2}) / 2$ $= [\ \mathbf{-0.792}, \mathbf{6.792}\ ]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M^{th} largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$CL(S) = [\ \mathbf{-0.51}, \mathbf{2.704}\ ]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Chloromethane (ug/L) at GU-3

Step	Equation	Description
1	$\overline{X} = \textbf{sum[X]} / \textbf{N}$ $= \textbf{2.0} / \textbf{4}$ $= \textbf{0.5}$	Compute the mean of the last 4 measurements.
2	$S = ((\textbf{sum[X}^2\textbf{]} - \textbf{sum[X]}^2/\textbf{N}) / (\textbf{N}-1))^{1/2}$ $= ((\textbf{1.0} - \textbf{4.0}/\textbf{4}) / (\textbf{4}-1))^{1/2}$ $= \textbf{0.0}$	Compute sd of the last 4 measurements.
3	$LCL = \overline{\textbf{X}} - \textbf{tS}/\textbf{N}^{1/2}$ $= \textbf{0.5} - \textbf{2.353} * \textbf{0.0}/\textbf{4}^{1/2}$ $= \textbf{0.5}$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$UCL = \overline{\textbf{X}} + \textbf{tS}/\textbf{N}^{1/2}$ $= \textbf{0.5} + \textbf{2.353} * \textbf{0.0}/\textbf{4}^{1/2}$ $= \textbf{0.5}$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = \textbf{N} * (\textbf{N}-1) / 2$ $= \textbf{4} * (\textbf{4}-1) / 2$ $= \textbf{6}$	Number of sample pairs during trend detection period.
6	$S = \textbf{0.0}$	Sen's estimator of trend.
7	$var(S) = \textbf{0.0}$	Variance estimate for slope.
8	$M(S) = (\textbf{N'} \pm \textbf{Z}_{.995} * \textbf{var(S)}^{1/2}) / 2$ $= (\textbf{6} \pm \textbf{2.576} * \textbf{0.0}^{1/2}) / 2$ $= [\ \textbf{3.0}, \textbf{3.0}\ ]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$CL(S) = [\ \textbf{0.0}, \textbf{0.0}\ ]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cis-1,2-dichloroethylene (ug/L) at GU-3

Step	Equation	Description
1	$\bar{X}$ = **sum[X]** / **N** = **27.7** / **4** = **6.925**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2] - sum[X]^2/N**) / (**N**-1))^{½} = ((**271.35** - **767.29/4**) / (**4**-1))^{½} = **5.149**	Compute sd of the last 4 measurements.
3	LCL = $\bar{X}$ - **tS/N**^{½} = **6.925** - **2.353** * **5.149/4**^{½} = **0.869**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\bar{X}$ + **tS/N**^{½} = **6.925** + **2.353** * **5.149/4**^{½} = **12.981**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **4** * (**4**-1) / 2 = **6**	Number of sample pairs during trend detection period.
6	S = **1.435**	Sen's estimator of trend.
7	var(S) = **8.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **$Z_{.995}$** * **var(S)**^{½}) / 2 = (**6** ± **2.576** * **8.667**^{½}) / 2 = [**-0.792**, **6.792**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M^{th} largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-3.722**, **42.809**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Dichlorodifluoromethane (ug/L) at GU-3

Insufficient data to perform analysis

Worksheet 6 - Assessment Monitoring
Trichlorofluoromethane (ug/L) at GU-3

Step	Equation	Description
1	$\bar{X} = \textbf{sum[X]} / \textbf{N}$ $= \textbf{2.0} / \textbf{4}$ $= \textbf{0.5}$	Compute the mean of the last 4 measurements.
2	$S = ((\textbf{sum[X}^2\textbf{]} - \textbf{sum[X]}^2/\textbf{N}) / (\textbf{N}-1))^{1/2}$ $= ((\textbf{1.0} - \textbf{4.0}/\textbf{4}) / (\textbf{4}-1))^{1/2}$ $= \textbf{0.0}$	Compute sd of the last 4 measurements.
3	$LCL = \bar{X} - tS/N^{1/2}$ $= \textbf{0.5} - \textbf{2.353} * \textbf{0.0}/\textbf{4}^{1/2}$ $= \textbf{0.5}$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$UCL = \bar{X} + tS/N^{1/2}$ $= \textbf{0.5} + \textbf{2.353} * \textbf{0.0}/\textbf{4}^{1/2}$ $= \textbf{0.5}$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = \textbf{N} * (\textbf{N}-1) / 2$ $= \textbf{4} * (\textbf{4}-1) / 2$ $= \textbf{6}$	Number of sample pairs during trend detection period.
6	$S = \textbf{0.0}$	Sen's estimator of trend.
7	$var(S) = \textbf{0.0}$	Variance estimate for slope.
8	$M(S) = (\textbf{N'} \pm \textbf{Z}_{.995} * \textbf{var(S)}^{1/2}) / 2$ $= (\textbf{6} \pm \textbf{2.576} * \textbf{0.0}^{1/2}) / 2$ $= [\ \textbf{3.0}, \textbf{3.0}\ ]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M^{th} largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$CL(S) = [\ \textbf{0.0}, \textbf{0.0}\ ]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Vinyl chloride (ug/L) at GU-3

Step	Equation	Description
1	$\bar{X}$ = **sum[X]** / **N** = **9.7** / **4** = **2.425**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))$^{1/2}$ = ((**27.01** - **94.09**/**4**) / (**4**-1))$^{1/2}$ = **1.078**	Compute sd of the last 4 measurements.
3	LCL = $\bar{X}$ - **tS**/**N**$^{1/2}$ = **2.425** - **2.353** * **1.078**/**4**$^{1/2}$ = **1.157**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\bar{X}$ + **tS**/**N**$^{1/2}$ = **2.425** + **2.353** * **1.078**/**4**$^{1/2}$ = **3.693**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **5** * (**5**-1) / 2 = **10**	Number of sample pairs during trend detection period.
6	S = **-0.53**	Sen's estimator of trend.
7	var(S) = **16.667**	Variance estimate for slope.
8	M(S) = (**N'** ± $Z_{.995}$ * **var(S)**$^{1/2}$) / 2 = (**10** ± **2.576** * **16.667**$^{1/2}$) / 2 = [**-0.258**, **10.258**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-2.348**, **13.969**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
1,1-dichloroethane (ug/L) at MW98-25

Step	Equation	Description
1	$\bar{X}$ = **sum[X]** / **N** = **5.6** / **4** = **1.4**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**8.1** - **31.36**/**4**) / (**4**-1))^{½} = **0.294**	Compute sd of the last 4 measurements.
3	LCL = $\bar{X}$ - **tS**/**N**^{½} = **1.4** - **2.353** * **0.294**/**4**^{½} = **1.054**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\bar{X}$ + **tS**/**N**^{½} = **1.4** + **2.353** * **0.294**/**4**^{½} = **1.746**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **37** * (**37**-1) / 2 = **666**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **3003.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**666** ± **2.576** * **3003.0**^{½}) / 2 = [**262.418**, **403.582**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
1,4-dichlorobenzene (ug/L) at MW98-25

Step	Equation	Description
1	$\overline{X} = \mathbf{sum[X]} / \mathbf{N}$ $= \mathbf{7.0} / \mathbf{4}$ $= \mathbf{1.75}$	Compute the mean of the last 4 measurements.
2	$S = ((\mathbf{sum[X^2]} - \mathbf{sum[X]}^2/\mathbf{N}) / (\mathbf{N}-1))^{1/2}$ $= ((\mathbf{13.0} - \mathbf{49.0/4}) / (\mathbf{4}-1))^{1/2}$ $= \mathbf{0.5}$	Compute sd of the last 4 measurements.
3	$LCL = \overline{\mathbf{X}} - \mathbf{tS/N}^{1/2}$ $= \mathbf{1.75} - \mathbf{2.353} * \mathbf{0.5/4}^{1/2}$ $= \mathbf{1.162}$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$UCL = \overline{\mathbf{X}} + \mathbf{tS/N}^{1/2}$ $= \mathbf{1.75} + \mathbf{2.353} * \mathbf{0.5/4}^{1/2}$ $= \mathbf{2.338}$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = \mathbf{N} * (\mathbf{N}-1) / 2$ $= \mathbf{48} * (\mathbf{48}-1) / 2$ $= \mathbf{1128}$	Number of sample pairs during trend detection period.
6	$S = \mathbf{0.0}$	Sen's estimator of trend.
7	$var(S) = \mathbf{10808.0}$	Variance estimate for slope.
8	$M(S) = (\mathbf{N'} \pm \mathbf{Z}_{.995} * \mathbf{var(S)}^{1/2}) / 2$ $= (\mathbf{1128} \pm \mathbf{2.576} * \mathbf{10808.0}^{1/2}) / 2$ $= [\ \mathbf{430.098}, \mathbf{697.902}\ ]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M^{th} largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$CL(S) = [\ \mathbf{0.0}, \mathbf{0.06}\ ]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Benzene (ug/L) at MW98-25

Step	Equation	Description
1	$\overline{X} = \mathbf{sum[X]} / \mathbf{N}$ $= \mathbf{2.9} / \mathbf{4}$ $= \mathbf{0.725}$	Compute the mean of the last 4 measurements.
2	$S = ((\mathbf{sum[X^2]} - \mathbf{sum[X]}^2/\mathbf{N}) / (\mathbf{N}-1))^{1/2}$ $= ((\mathbf{2.71} - \mathbf{8.41/4}) / (\mathbf{4}-1))^{1/2}$ $= \mathbf{0.45}$	Compute sd of the last 4 measurements.
3	$LCL = \overline{\mathbf{X}} - \mathbf{tS/N}^{1/2}$ $= \mathbf{0.725} - \mathbf{2.353} * \mathbf{0.45/4}^{1/2}$ $= \mathbf{0.196}$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$UCL = \overline{\mathbf{X}} + \mathbf{tS/N}^{1/2}$ $= \mathbf{0.725} + \mathbf{2.353} * \mathbf{0.45/4}^{1/2}$ $= \mathbf{1.254}$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = \mathbf{N} * (\mathbf{N}-1) / 2$ $= \mathbf{48} * (\mathbf{48}-1) / 2$ $= \mathbf{1128}$	Number of sample pairs during trend detection period.
6	$S = \mathbf{-0.049}$	Sen's estimator of trend.
7	$var(S) = \mathbf{11558.0}$	Variance estimate for slope.
8	$M(S) = (\mathbf{N'} \pm \mathbf{Z}_{.995} * \mathbf{var(S)}^{1/2}) / 2$ $= (\mathbf{1128} \pm \mathbf{2.576} * \mathbf{11558.0}^{1/2}) / 2$ $= [\ \mathbf{425.53}, \mathbf{702.47}\ ]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$CL(S) = [\ \mathbf{-0.225}, \mathbf{0.0}\ ]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Chlorobenzene (ug/L) at MW98-25

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N**	Compute the mean of the last 4 measurements.
	= **3.3** / **4**	
	= **0.825**	
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½}	Compute sd of the last 4 measurements.
	= ((**3.19** - **10.89**/**4**) / (**4**-1))^{½}	
	= **0.395**	
3	LCL = **$\overline{X}$** - **tS**/**N**^{½}	Compute lower confidence limit for the mean of the last 4 measurements.
	= **0.825** - **2.353** * **0.395**/**4**^{½}	
	= **0.361**	
4	UCL = **$\overline{X}$** + **tS**/**N**^{½}	Compute upper confidence limit for the mean of the last 4 measurements.
	= **0.825** + **2.353** * **0.395**/**4**^{½}	
	= **1.289**	
5	N' = **N** * (**N**-1) / 2	Number of sample pairs during trend detection period.
	= **37** * (**37**-1) / 2	
	= **666**	
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **4407.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
	= (**666** ± **2.576** * **4407.667**^{½}) / 2	
	= [**247.489**, **418.511**]	
9	CL(S) = [**-0.094**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Chloroethane (ug/L) at MW98-25

Step	Equation	Description
1	$\bar{X} = \mathbf{sum[X]} / \mathbf{N}$ $= \mathbf{5.6} / \mathbf{4}$ $= \mathbf{1.4}$	Compute the mean of the last 4 measurements.
2	$S = ((\mathbf{sum[X^2]} - \mathbf{sum[X]}^2/\mathbf{N}) / (\mathbf{N}-1))^{1/2}$ $= ((\mathbf{8.1} - \mathbf{31.36/4}) / (\mathbf{4}-1))^{1/2}$ $= \mathbf{0.294}$	Compute sd of the last 4 measurements.
3	$LCL = \bar{\mathbf{X}} - \mathbf{tS/N}^{1/2}$ $= \mathbf{1.4} - \mathbf{2.353} * \mathbf{0.294/4}^{1/2}$ $= \mathbf{1.054}$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$UCL = \bar{\mathbf{X}} + \mathbf{tS/N}^{1/2}$ $= \mathbf{1.4} + \mathbf{2.353} * \mathbf{0.294/4}^{1/2}$ $= \mathbf{1.746}$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = \mathbf{N} * (\mathbf{N}-1) / 2$ $= \mathbf{37} * (\mathbf{37}-1) / 2$ $= \mathbf{666}$	Number of sample pairs during trend detection period.
6	$S = \mathbf{-0.087}$	Sen's estimator of trend.
7	$var(S) = \mathbf{5501.0}$	Variance estimate for slope.
8	$M(S) = (\mathbf{N'} \pm \mathbf{Z}_{.995} * \mathbf{var(S)}^{1/2}) / 2$ $= (\mathbf{666} \pm \mathbf{2.576} * \mathbf{5501.0}^{1/2}) / 2$ $= [\ \mathbf{237.471}, \mathbf{428.529}\ ]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M^{th} largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$CL(S) = [\ \mathbf{-0.163}, \mathbf{-0.024}\ ]$	Two-sided confidence interval for slope.
10	$UCL(S) < 0$	**Significant decreasing trend.**

Worksheet 6 - Assessment Monitoring
Chloromethane (ug/L) at MW98-25

Step	Equation	Description
1	$\bar{X} = \textbf{sum[X]} / \textbf{N}$ $= \textbf{3.3} / \textbf{4}$ $= \textbf{0.825}$	Compute the mean of the last 4 measurements.
2	$S = ((\textbf{sum[X}^2\textbf{]} - \textbf{sum[X]}^2/\textbf{N}) / (\textbf{N}-1))^{1/2}$ $= ((\textbf{3.99} - \textbf{10.89/4}) / (\textbf{4}-1))^{1/2}$ $= \textbf{0.65}$	Compute sd of the last 4 measurements.
3	$LCL = \bar{\textbf{X}} - \textbf{tS/N}^{1/2}$ $= \textbf{0.825} - \textbf{2.353} * \textbf{0.65/4}^{1/2}$ $= \textbf{0.06}$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$UCL = \bar{\textbf{X}} + \textbf{tS/N}^{1/2}$ $= \textbf{0.825} + \textbf{2.353} * \textbf{0.65/4}^{1/2}$ $= \textbf{1.59}$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = \textbf{N} * (\textbf{N}-1) / 2$ $= \textbf{37} * (\textbf{37}-1) / 2$ $= \textbf{666}$	Number of sample pairs during trend detection period.
6	$S = \textbf{0.0}$	Sen's estimator of trend.
7	$var(S) = \textbf{456.0}$	Variance estimate for slope.
8	$M(S) = (\textbf{N'} \pm \textbf{Z}_{.995} * \textbf{var(S)}^{1/2}) / 2$ $= (\textbf{666} \pm \textbf{2.576} * \textbf{456.0}^{1/2}) / 2$ $= [\ \textbf{305.496}, \textbf{360.504}\ ]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M^{th} largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$CL(S) = [\ \textbf{0.0}, \textbf{0.0}\ ]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cis-1,2-dichloroethylene (ug/L) at MW98-25

Step	Equation	Description
1	$\bar{X}$ = **sum[X]** / **N** = **8.5** / **4** = **2.125**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2] - sum[X]^2/N**) / (**N**-1))^{½} = ((**19.09 - 72.25/4**) / (**4**-1))^{½} = **0.585**	Compute sd of the last 4 measurements.
3	LCL = **$\bar{X}$ - tS/N**^{½} = **2.125 - 2.353 * 0.585/4**^{½} = **1.437**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = **$\bar{X}$ + tS/N**^{½} = **2.125 + 2.353 * 0.585/4**^{½} = **2.813**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **37** * (**37**-1) / 2 = **666**	Number of sample pairs during trend detection period.
6	S = **-0.34**	Sen's estimator of trend.
7	var(S) = **5829.0**	Variance estimate for slope.
8	M(S) = (**N' ± $Z_{.995}$ * var(S)**^{½}) / 2 = (**666** ± **2.576** * **5829.0**^{½}) / 2 = [**234.664**, **431.336**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.467**, **-0.215**]	Two-sided confidence interval for slope.
10	UCL(S) < 0	**Significant decreasing trend.**

Worksheet 6 - Assessment Monitoring
Dichlorodifluoromethane (ug/L) at MW98-25

Step	Equation	Description
1	$\bar{X}$ = **sum[X]** / **N** = **6.4** / **4** = **1.6**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]^2**/**N**) / (**N**-1))^{½} = ((**15.8** - **40.96**/**4**) / (**4**-1))^{½} = **1.361**	Compute sd of the last 4 measurements.
3	LCL = **$\bar{X}$** - **tS**/**N**^{½} = **1.6** - **2.353** * **1.361**/**4**^{½} = **0.0**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = **$\bar{X}$** + **tS**/**N**^{½} = **1.6** + **2.353** * **1.361**/**4**^{½} = **3.201**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **35** * (**35**-1) / 2 = **595**	Number of sample pairs during trend detection period.
6	S = **-0.781**	Sen's estimator of trend.
7	var(S) = **4914.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**595** ± **2.576** * **4914.0**^{½}) / 2 = [**207.211**, **387.789**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-1.934**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Trichlorofluoromethane (ug/L) at MW98-25

Step	Equation	Description
1	$\bar{X} = \textbf{sum[X]} / \textbf{N}$ $= \textbf{3.8} / \textbf{4}$ $= \textbf{0.95}$	Compute the mean of the last 4 measurements.
2	$S = ((\textbf{sum[X}^2\textbf{]} - \textbf{sum[X]}^2/\textbf{N}) / (\textbf{N}-1))^{1/2}$ $= ((\textbf{3.9} - \textbf{14.44/4}) / (\textbf{4}-1))^{1/2}$ $= \textbf{0.311}$	Compute sd of the last 4 measurements.
3	$LCL = \bar{\textbf{X}} - \textbf{tS/N}^{1/2}$ $= \textbf{0.95} - \textbf{2.353} * \textbf{0.311/4}^{1/2}$ $= \textbf{0.584}$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$UCL = \bar{\textbf{X}} + \textbf{tS/N}^{1/2}$ $= \textbf{0.95} + \textbf{2.353} * \textbf{0.311/4}^{1/2}$ $= \textbf{1.316}$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = \textbf{N} * (\textbf{N}-1) / 2$ $= \textbf{38} * (\textbf{38}-1) / 2$ $= \textbf{703}$	Number of sample pairs during trend detection period.
6	$S = \textbf{-0.077}$	Sen's estimator of trend.
7	$var(S) = \textbf{5910.0}$	Variance estimate for slope.
8	$M(S) = (\textbf{N'} \pm \textbf{Z}_{.995} * \textbf{var(S)}^{1/2}) / 2$ $= (\textbf{703} \pm \textbf{2.576} * \textbf{5910.0}^{1/2}) / 2$ $= [\ \textbf{252.483}, \textbf{450.517}\ ]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$CL(S) = [\ \textbf{-0.565}, \textbf{0.0}\ ]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Vinyl chloride (ug/L) at MW98-25

Step	Equation	Description
1	$\overline{X} = \mathbf{sum[X]} / \mathbf{N}$ $= \mathbf{2.0} / \mathbf{4}$ $= \mathbf{0.5}$	Compute the mean of the last 4 measurements.
2	$S = ((\mathbf{sum[X^2]} - \mathbf{sum[X]}^2/\mathbf{N}) / (\mathbf{N}-1))^{1/2}$ $= ((\mathbf{1.0} - \mathbf{4.0}/\mathbf{4}) / (\mathbf{4}-1))^{1/2}$ $= \mathbf{0.0}$	Compute sd of the last 4 measurements.
3	$LCL = \overline{\mathbf{X}} - \mathbf{tS/N}^{1/2}$ $= \mathbf{0.5} - \mathbf{2.353} * \mathbf{0.0/4}^{1/2}$ $= \mathbf{0.5}$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$UCL = \overline{\mathbf{X}} + \mathbf{tS/N}^{1/2}$ $= \mathbf{0.5} + \mathbf{2.353} * \mathbf{0.0/4}^{1/2}$ $= \mathbf{0.5}$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = \mathbf{N} * (\mathbf{N}-1) / 2$ $= \mathbf{37} * (\mathbf{37}-1) / 2$ $= \mathbf{666}$	Number of sample pairs during trend detection period.
6	$S = \mathbf{0.0}$	Sen's estimator of trend.
7	$var(S) = \mathbf{3543.0}$	Variance estimate for slope.
8	$M(S) = (\mathbf{N'} \pm \mathbf{Z}_{.995} * \mathbf{var(S)}^{1/2}) / 2$ $= (\mathbf{666} \pm \mathbf{2.576} * \mathbf{3543.0}^{1/2}) / 2$ $= [\ \mathbf{256.334},\ \mathbf{409.666}\ ]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M^{th} largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$CL(S) = [\ \mathbf{-0.094},\ \mathbf{0.0}\ ]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

APPENDIX D.3 – Field Turbidity Summary Table

Boone County Sanitary Landfill

Field Turbidity Over Time

No-Purge Sampling

	9/19/14	11/13/14	3/17/15	6/29/15	9/11/15	11/9/15	3/16/16	6/7/16	9/8/16
Well	**NTU**	**NTU**	**NTU**	**NTU**	**NTU**	**NTU**	**NTU**	**NTU**	**NTU**
2	177.6	19.70	9.53	13.89	0.82		1.72		13.05
3	90.07		53.10		10.90		3.77		24.71
8	9.11	1.19	2.20	2.08	1.45		0.94		2.64
10	2.73		3.65		9.47		0.72		0.76
15A	6.82	0.76	2.95	5.15	2.46		0.77		11.85
18	2.57		0.56		1.88		2.08		0.61
21	308.5								11.30
23	250.2		2.46		1.79	1.90	1.45		0.66
24	396.5		4.86		0.82		3.67		0.55
25	24.95		82.60		3.87		157.00		2.27
28	853.8	20.50	11.70	975.00	11.70		5.78		19.87
30A							0.91	9.79	11.48
37	7.35		1.31		0.89		1.75		1.64
38	20.65		1.04		2.30		2.09		1.48
39	6.09		0.51		4.18		1.09		1.19
40	2.88		1.91		0.63		2.41		1.91
GU-3									
SRAMP1	2.51		38.80		4.15		1.85		10.90
SRAMP2	5.56	5.09	3.02		7.34		3.94		11.82
GU-4									
Max	**853.80**	**20.50**	**82.60**	**975.00**	**11.70**	**1.90**	**157.00**	**29.70**	**24.71**
Min	**1.00**	**0.76**	**0.51**	**2.08**	**0.63**	**1.90**	**0.72**	**9.79**	**0.49**
Median	**8.23**	**5.09**	**2.95**	**9.52**	**2.46**	**1.90**	**2.08**	**19.75**	**2.09**
Average	**120.49**	**9.45**	**13.07**	**249.03**	**3.96**	**1.90**	**11.19**	**19.75**	**6.49**

Boone C

Field Turbic

No-Purg

	3/17/17	6/8/17	9/19/17	3/8/18	5/16/18	8/9/18	9/24/18	12/20/18	3/25/19
Well	**NTU**	**NTU**	**NTU**	**NTU**	**NTU**	**NTU**	**NTU**	**NTU**	**NTU**
2	3.33		3.95	100.30			94.49		73.74
3	149.00	5.06	3.79	20.86			0.71		3.52
8	1.83		1.37	0.75			0.73		0.77
10	0.87		0.86	0.44			0.74		0.58
15A	2.22		2.93	4.29			0.85		1.83
18	2.14		2.58	0.35			0.84		0.77
21	1.50		10.40	5.54				16.20	32.97
23	3.27		3.44	1.59			1.28		0.97
24	1.43		4.26	1.51			1.24		1.04
25	30.50		2.59	3.01			1.40		1.69
28	47.30		38.20	14.85			85.43		29.02
30A	2.50		11.30	4.80			79.17		169.90
37	1.04		1.78	0.57			0.44		0.52
38	3.07		2.87	0.34			0.53		1.27
39	0.71		6.44	3.22			0.47		2.50
40	1.22		1.93	0.29			0.69		0.70
GU-3									
SRAMP1	3.31		4.30						0.85
SRAMP2	2.89			1.96			4.61		1.19
GU-4									
Max	**149.00**	**80.70**	**38.20**	**100.30**	**648.00**	**43.95**	**94.49**	**16.20**	**170.10**
Min	**0.71**	**5.06**	**0.86**	**0.29**	**648.00**	**43.95**	**0.44**	**16.20**	**0.52**
Median	**2.50**	**42.88**	**3.13**	**1.87**	**648.00**	**43.95**	**0.85**	**16.20**	**1.27**
Average	**14.68**	**42.88**	**5.70**	**9.25**	**648.00**	**43.95**	**15.42**	**16.20**	**22.19**

Boone C

Field Turbic

No-Purg

	9/3/19	12/3/19	3/23/20	9/4/20	3/9/21	6/7/21	9/7/21	12/3/21	3/28/22	6/24/22	9/14/22
Well	**NTU**	**NTU**	**NTU**	**NTU**	**NTU**	**NTU**	**NTU**	**NTU**	**NTU**	**NTU**	**NTU**
2	88.24		8.04	21.25	145.00				32.2		0.63
3	8.76		6.85	7.31	45.22		11.90		13.80		1.43
8	1.81		15.44	1.05	1.23		0.71		0.70		1.48
10	0.98		0.70	1.28	1.78	1.80	0.51		1.09		0.76
15A	0.89		3.62	11.19	3.45		3.99		3.51		4.43
18	1.35		1.04	0.90	1.38	1.41	1.44		1.39		1.12
21	113.80		32.08	8.20	2.52		1.64		1000.00		0.92
23	6.19		3.74	4.82	1.91		1.26		453.00		4.37
24	0.81		1.07	1.68	2.04		0.83	5.13	5.20		1.89
25	0.74		70.61	3.03	63.55		0.83		388.00		3.40
28	13.99		22.36	16.09	178.50		8.57		75.60		21.03
30A	15.25		65.97	1.85	110.40		3.39		3.08		257.20
37	0.86	2.16	1.24	1.25	1.82		1.58	1.76	0.56		1.20
38	0.86		2.08	0.91	2.11		0.97		1.00		2.34
39	0.72		1.47	1.62	1.93		0.82		1.90		0.99
40	0.49		3.53	1.01	3.86		1.00	2.84	2.97		1.31
GU-3							103.00	6.88			6.42
SRAMP1	1.30				2.08				3.30		
SRAMP2			1.99		2.94				3.82		
GU-4										5.50	1.75
Max	**113.80**	**2.16**	**182.10**	**66.45**	**178.50**	**1.80**	**103.00**	**6.88**	**1000.00**	**5.50**	**257.20**
Min	**0.49**	**2.16**	**0.70**	**0.90**	**1.23**	**1.41**	**0.51**	**1.76**	**0.56**	**5.50**	**0.63**
Median	**1.33**	**2.16**	**3.68**	**1.85**	**2.32**	**1.61**	**1.35**	**3.99**	**3.41**	**5.50**	**1.62**
Average	**14.62**	**2.16**	**23.55**	**8.82**	**31.76**	**1.61**	**8.90**	**4.15**	**110.62**	**5.50**	**17.37**

Boone C

Field Turbic

No-Purg

	3/20/23	9/12/23	3/12/24	9/30/24	11/25/24	12/9/24	Max	Min	Ave	Std Dev
Well	**NTU**	**NTU**	**NTU**	**NTU**	**NTU**	**NTU**				
2	2.96	4.41	16.30	7.51			**177.60**	**0.63**	**38.12**	**51.45**
3	3.05	2.66	5.04	2.57	2.14		**149.00**	**0.71**	**20.71**	**35.11**
8	1.94	0.87	2.82	1.98			**15.44**	**0.70**	**2.40**	**3.32**
10	0.94	0.80	2.85	2.35			**9.47**	**0.44**	**1.67**	**1.95**
15A	2.46	3.50	3.53	4.98			**11.85**	**0.76**	**3.84**	**2.86**
18	1.50	3.23	7.16	1.80			**7.16**	**0.35**	**1.73**	**1.41**
21	59.71	12.40	608.30	115.50			**1000.00**	**0.92**	**130.08**	**264.95**
23	1.62	1.48	4.31	8.21			**453.00**	**0.66**	**34.54**	**107.30**
24	1.76	1.37	4.19	3.13			**396.50**	**0.55**	**20.23**	**84.06**
25	161.90	11.00	259.10	8.20			**388.00**	**0.74**	**60.96**	**102.01**
28	11.37	25.80	11.17	49.16			**975.00**	**5.78**	**110.73**	**257.01**
30A	250.90	4.72	2.93	3.05			**257.20**	**0.91**	**53.08**	**84.30**
37	1.55	1.04	2.01	2.78			**7.35**	**0.44**	**1.61**	**1.38**
38	1.21	1.28	3.70	2.56			**20.65**	**0.34**	**2.60**	**4.23**
39	1.16	1.24	2.52	2.92			**6.44**	**0.47**	**2.08**	**1.69**
40	0.93	1.22	2.98	2.79			**3.86**	**0.29**	**1.80**	**1.08**
GU-3				1.87		26.20	**103.00**	**1.87**	**28.87**	**42.48**
SRAMP1	1.51						**38.80**	**0.85**	**6.24**	**10.59**
SRAMP2	2.60		2.63				**11.82**	**1.19**	**4.09**	**2.67**
GU-4	54.30	247.00	2.31		5.29		**247.00**	**1.75**	**52.69**	**97.33**
Max	**250.90**	**247.00**	**608.30**	**115.50**	**5.29**	**26.20**				
Min	**0.93**	**0.80**	**2.01**	**1.80**	**2.14**	**26.20**				
Median	**1.94**	**2.66**	**3.62**	**2.92**	**3.72**	**26.20**				
Average	**29.65**	**19.06**	**52.44**	**13.02**	**3.72**	**26.20**				

APPENDIX D.4 –Running Summary of Prediction Limit Exceedances

Spring, 2013*		**Fall, 2013***	
MW00-36	1,1-dichloroethane	MW00-36	1,1-dichloroethane
MW98-25	cis-1,2-dichloroethene	MW98-25	benzene
	dichlorodifluoromethane		bis(2ethylhexyl)phthalate
	trichlorodifluoromethane		chloroethane
			cis-1,2-dichloroethene
			dichlorodifluoromethane
			trichlorodifluoromethane
SRAMP #1	1,4-dichlorobenzene	SRAMP #1	1,4-dichlorobenzene
	benzene		benzene
	chlorobenzene		chlorobenzene
	cis-1,2-dichloroethene		chloroethane
	dichlorodifluoromethane		cis-1,2-dichloroethene
	trichlorodifluoromethane		dichlorodifluoromethane
			ethyl benzene
			trichlorodifluoromethane
			xylenes
			arsenic

Spring, 2014*		**Fall, 2014***	
MW00-36	1,1-dichloroethane	MW00-36	1,1-dichloroethane
MW96-23	None	MW96-23	arsenic
MW98-25	benzene	MW98-25	benzene
	beta-BHC		chlorobenzene
	chloroethane		cis-1,2-dichloroethene
	cis-1,2-dichloroethene		dichlorodifluoromethane
	dichlorodifluoromethane		trichlorodifluoromethane
SRAMP #1	zinc	SRAMP #1	zinc

Spring, 2015*		**Fall, 2015***	
MW00-36	None	MW00-36	**abandoned**
MW96-23	None	MW96-23	arsenic
MW98-25	cis-1,2-dichloroethene	MW98-25	benzene
			cis-1,2-dichloroethene
			dichlorodifluoromethane
SRAMP #1	1,4-dichlorobenzene	SRAMP #1	1,4-dichlorobenzene
	Benzene		Benzene
	cis-1,2-dichloroethene		Chlorobenzene
	dichlorodifluoromethane		Chloroethane
			cis-1,2-dichloroethene
			dichlorodifluoromethane
			trichlorodifluoromethane

Spring, 2016*		**Fall, 2016**	
MW96-23*	Arsenic	MW96-23	None
MW98-25*	Chloroethane	MW98-25	Cobalt
	cis-1,2-dichloroethene		Nickel
			1,4-dichlorobenzene
			Benzene
			Chloroethane
			cis-1,2-dichloroethene
			dichlorodifluoromethane
			trichlorodifluoromethane
SRAMP #1*	1,4-dichlorobenzene	SRAMP #1	Cobalt
	Acetone		Nickel
	Benzene		1,4-dichlorobenzene
	Chlorobenzene		Benzene
	Chloroethane		Chlorobenzene
	cis-1,2-dichloroethene		Chloroethane
	dichlorodifluoromethane		cis-1,2-dichloroethene
	Ethylbenzene		dichlorodifluoromethane
	trichlorodifluoromethane		trichlorodifluoromethane
	Xylenes, total		

** Predates validated background data pool.*

Spring, 2017		**Fall, 2017**	
MW96-21	cobalt	MW96-21	none
MW98-25	cobalt	MW98-25	cobalt
	nickel		nickel
	1,4-dichlorobenzene		1,4-dichlorobenzene
	cis-1,2-dichloroethene		bis(2-ethylhexyl)phthalate
	dichlorodifluoromethane		cis-1,2-dichloroethene
	trichlorodifluoromethane		dichlorodifluoromethane
			trichlorodifluoromethane
SRAMP #1*	cobalt	SRAMP #1*	dichlorodifluoromethane
	nickel		trichlorodifluoromethane
	1,4-dichlorobenzene		
	benzene		
	chlorobenzene		
	chloroethane		
	cis-1,2-dichloroethene		
	dichlorodifluoromethane		
	trichlorodifluoromethane		
MW09-42	barium	MW09-42	none

Spring, 2018		**Fall, 2018**	
MW96-21	none	MW96-21	none
MW98-25	cobalt	MW98-25	cobalt
	nickel		nickel
	acetone		1,4-dichlorobenzene
	chloroethane		cis-1,2-dichloroethene
	cis-1,2-dichloroethene		dichlorodifluoromethane
	dichlorodifluoromethane		
	trichlorodifluoromethane		

Spring, 2019		**Fall, 2019**	
MW96-21	none	MW96-21	none
MW-09-42	barium	MW-09-42	barium
MW98-25	cobalt	MW98-25	cobalt
	nickel		
	cis-1,2-dichloroethene		
	dichlorodifluoromethane		
SRAMP 1	acetone	SRAMP 1	benzene
	benzene		chloroethane
	chlorobenzene		cis-1,2-dichloroethene
	chloroethane		
	cis-1,2-dichloroethene		
	dichlorodifluoromethane		
	trichlorodifluoromethane		

Spring, 2020		**Fall, 2020**	
MW-09-42	barium	MW-09-42	barium
MW98-25	cobalt	MW98-25	cobalt
	nickel		1,1-dichloroethane
	dichlorodifluoromethane		1,4-dichlorobenzene
	trichlorofluoromethane		cis-1,2-dichloroethene
			dichlorodifluoromethane
			trichlorofluoromethane
SRAMP 1	dry	SRAMP 1	dry

Spring, 2021		**Fall, 2021**	
MW98-25	cobalt	MW98-25	cobalt
	copper		nickel
	nickel		1,1-dichloroethane
	1,1-dichloroethane		1,4-dichlorobenzene
	1,4-dichlorobenzene		benzene
	benzene		chlorobenzene
	cis-1,2-dichloroethene		chloroethane
	dichlorodifluoromethane		cis-1,2-dichloroethene
	trichlorofluoromethane		dichlorodifluoromethane
SRAMP 1	1,1-dichloroethane	SRAMP 1	dry
	1,4-dichlorobenzene		
	benzene	GU-3	benzene
	chlorobenzene		chloroethane
	chloroethane		cis-1,2-dichloroethene
	cis-1,2-dichloroethene		vinyl chloride
	dichlorodifluoromethane		
	ethylbenzene		
	trichlorofluoromethane		

Spring, 2022		**Fall, 2022**	
MW-96-21*	*Elevated metals are due to elevated turbidity. Data is disregarded*	MW-96-21	None
MW98-25	cobalt	MW98-25	cobalt
	1,1-dichloroethane		
	1,4-dichlorobenzene		
	benzene		
	cis-1,2-dichloroethene		
	dichlorodifluoromethane		
	trichlorofluoromethane		
SRAMP 1	1,1-dichloroethane	SRAMP 1	dry
	1,4-dichlorobenzene		
	acetone	GU-3	benzene
	benzene		chlorobenzene
	chlorobenzene		chloroethane
	chloroethane		cis-1,2-dichloroethene
	cis-1,2-dichloroethene		ethylbenzene
	dichlorodifluoromethane		vinyl chloride
	trichlorofluoromethane		
GU-3	benzene		
	chlorobenzene		
	vinyl chloride		

Spring, 2023		**Fall, 2023**	
MW98-25	cobalt	MW98-25	cobalt
	1,1-dichloroethane		nickel
	1,4-dichlorobenzene		1,1-dichloroethane
	chloroethane		1,4-dichlorobenzene
	cis-1,2-dichloroethene		benzene
	dichlorodifluoromethane		chlorobenzene
	trichlorofluoromethane		chloroethane
			cis-1,2-dichloroethene
			dichlorodifluoromethane
			trichlorofluoromethane
SRAMP 1	1,1-dichloroethane	SRAMP 1	dry
	1,4-dichlorobenzene		
	benzene		
	chlorobenzene		
	chloroethane		
	cis-1,2-dichloroethene		
	dichlorodifluoromethane		
	trichlorofluoromethane		

Spring, 2024		**Fall, 2024**	
MW98-25	cobalt	MW98-25	cobalt
	nickel		nickel
	1,1-dichloroethane		1,1-dichloroethane
	1,4-dichlorobenzene		1,4-dichlorobenzene
	chloroethane		chlorobenzene
	cis-1,2-dichloroethene		chloroethane
	trichlorofluoromethane		chloromethane
			cis-1,2-dichloroethene
GU-3	submerged	GU-3	Nickel
			benzene
			chlorobenzene
			chloroethane
			cis-1,2-dichloroethene
			vinyl chloride
SRAMP 1	dry	SRAMP 1	dry

APPENDIX D.5 –SSL Evaluation Tables

Monitoring Well	Compound	Date	Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	95% UCL (ug/L)	GWPS (ug/L)
MW96-21	cobalt	3/16/16	---	1.5	---	---	**3.2**
MW96-21	cobalt	9/8/16	---	1.5	---	---	**3.2**
MW96-21	cobalt	3/17/17	1.8	1.5	1.724	2.426	**3.2**
MW96-21	cobalt	9/19/17	<0.8	4.4	1.724	2.426	**3.2**
MW96-21	cobalt	3/8/18	<0.8	4.8	1.724	2.426	**3.2**
MW96-21	cobalt	9/24/18	---	4.8	1.724	2.426	**3.2**
MW96-21	cobalt	12/20/18	1.1	4.8	1.724	2.426	**3.2**
MW96-21	cobalt	3/25/19	1.0	4.8	0.878	2.172	**3.2**
MW96-21	cobalt	9/3/19	2.5	4.8	0.799	2.501	**3.2**
MW96-21	cobalt	3/23/20	2.5	3.2	0.436	2.264	**3.2**
MW96-21	cobalt	9/4/20	2.5	3.2	0.622	2.528	**3.2**
MW96-21	cobalt	3/9/21	<0.4	3.2	0.975	2.675	**3.2**
MW96-21	cobalt	9/7/21	<0.4	3.2	0.330	2.270	**3.2**
MW96-21	cobalt	3/28/22	79.4*	5.8	0.000	66.795	**5.8**
MW96-21	cobalt	9/14/22	2.5	7.0	0.000	66.825	**7.0**
MW96-21	cobalt	3/20/23	4.3	7.0	0.000	66.976	**7.0**
MW96-21	cobalt	9/12/23	0.8	7.0	0.000	66.990	**7.0**
MW96-21	cobalt	3/12/24	---	7.0	0.000	66.990	**7.0**
MW96-21	cobalt	9/30/24	4.0	7.0	1.509	4.291	**7.0**

** sample collection error on 3/28/22. Turbidity was high and outside of measurable range. This data is dismissed.*

Monitoring Well	Compound	Date	Result (ug/L)	*Prediction Limit (ug/L)*	95% LCL (ug/L)	95% UCL (ug/L)	GWPS (ug/L)
MW98-25	Cobalt	3/16/16	4.7	*1.5*	0.000	26.390	**3.2**
MW98-25	Cobalt	9/8/16	29.1	*1.5*	0.000	26.390	**3.2**
MW98-25	Cobalt	3/17/17	14.6	*1.5*	3.420	27.280	**3.2**
MW98-25	Cobalt	9/19/17	6.2	*4.4*	0.495	26.805	**3.2**
MW98-25	Cobalt	3/8/18	10.3	*4.8*	3.317	26.783	**3.2**
MW98-25	Cobalt	9/24/18	11.6	*4.8*	6.576	14.774	**3.2**
MW98-25	Cobalt	3/25/19	13.9	*4.8*	6.701	14.299	**3.2**
MW98-25	Cobalt	9/3/19	8.5	*4.8*	8.402	13.748	**3.2**
MW98-25	Cobalt	3/23/20	22.2	*3.2*	7.149	20.951	**3.2**
MW98-25	Cobalt	9/4/20	7.6	*3.2*	5.164	20.936	**3.2**
MW98-25	Cobalt	3/9/21	11.7	*3.2*	4.617	20.383	**3.2**
MW98-25	Cobalt	9/7/21	12.8	*3.2*	6.317	20.833	**3.2**
MW98-25	Cobalt	3/28/22	10.9	*5.8*	8.115	13.385	**5.8**
MW98-25	Cobalt	9/14/22	19.4	*7.0*	9.137	18.263	**7.0**
MW98-25	Cobalt	3/20/23	11.2	*7.0*	8.903	18.247	**7.0**
MW98-25	Cobalt	9/12/23	15.2	*7.0*	9.473	18.877	**7.0**
MW98-25	Cobalt	3/12/24	10.7	*7.0*	9.358	18.892	**7.0**
MW98-25	Cobalt	9/30/24	11.0	*7.0*	9.523	14.527	**7.0**
MW98-25	Nickel	3/16/16	37.9	*14.0*	23.843	74.857	100.0
MW98-25	Nickel	9/8/16	81.7	*14.0*	23.843	74.857	100.0
MW98-25	Nickel	3/17/17	34.3	*14.0*	20.669	74.381	100.0
MW98-25	Nickel	9/19/17	17.0	*14.0*	10.332	75.118	100.0
MW98-25	Nickel	3/8/18	20.1	*14.0*	3.088	73.462	100.0
MW98-25	Nickel	9/24/18	24.6	*14.0*	15.128	32.872	100.0
MW98-25	Nickel	3/25/19	21.2	*14.0*	17.036	24.414	100.0
MW98-25	Nickel	9/3/19	9.0	*14.0*	10.773	26.677	100.0
MW98-25	Nickel	3/23/20	29.9	*14.0*	10.740	31.610	100.0
MW98-25	Nickel	9/4/20	10.5	*14.0*	6.113	29.187	100.0
MW98-25	Nickel	3/9/21	16.7	*17.3*	5.328	27.722	100.0
MW98-25	Nickel	9/7/21	20.4	*17.3*	9.825	28.925	100.0
MW98-25	Nickel	3/28/22	10.9	*33.6*	11.402	23.348	100.0
MW98-25	Nickel	9/14/22	24.3	*33.6*	17.079	24.571	100.0
MW98-25	Nickel	3/20/23	23.4	*33.6*	20.483	24.517	100.0
MW98-25	Nickel	9/12/23	35.7	*17.4*	18.882	33.768	100.0
MW98-25	Nickel	3/12/24	23.6	*17.4*	19.717	33.783	100.0
MW98-25	Nickel	9/30/24	26.5	*17.4*	20.505	34.095	100.0
MW98-25	1,1-DCA	3/16/16	<1.0	*1.0*	0.5	0.5	140.0
MW98-25	1,1-DCA	9/8/16	<1.0	*1.0*	0.5	0.5	140.0
MW98-25	1,1-DCA	3/17/17	<1.0	*1.0*	0.5	0.5	140.0
MW98-25	1,1-DCA	9/19/17	<1.0	*1.0*	0.5	0.5	140.0
MW98-25	1,1-DCA	3/8/18	<1.0	*1.0*	0.5	0.5	140.0
MW98-25	1,1-DCA	9/24/18	<1.0	*1.0*	0.5	0.5	140.0
MW98-25	1,1-DCA	3/25/19	<1.0	*1.0*	0.5	0.5	140.0
MW98-25	1,1-DCA	9/3/19	<1.0	*1.0*	0.5	0.5	140.0
MW98-25	1,1-DCA	3/23/20	<1.0	*1.0*	0.5	0.5	140.0
MW98-25	1,1-DCA	9/4/20	1.1	*1.0*	0.297	1.003	140.0
MW98-25	1,1-DCA	3/9/21	1.8	*1.0*	0.248	1.702	140.0
MW98-25	1,1-DCA	9/7/21	2.3	*1.0*	0.497	2.353	140.0
MW98-25	1,1-DCA	3/28/22	1.5	*1.0*	1.080	2.270	140.0
MW98-25	1,1-DCA	9/14/22	<1.0	*1.0*	0.632	2.418	140.0

MW98-25	1,1-DCA	3/20/23	<1.0	*1.0*	0.620	2.380	140.0
MW98-25	1,1-DCA	9/12/23	1.6	*1.0*	0.671	1.979	140.0
MW98-25	1,1-DCA	3/12/24	1.1	*1.0*	0.578	1.872	140.0
MW98-25	1,1-DCA	9/30/24	1.2	*1.0*	1.054	1.746	140.0
MW98-25	1,4-DCB	3/16/16	<1.0	*1.0*	0.500	0.500	75.0
MW98-25	1,4-DCB	9/8/16	2.1	*1.0*	0.000	1.841	75.0
MW98-25	1,4-DCB	3/17/17	2.0	*1.0*	0.221	2.329	75.0
MW98-25	1,4-DCB	9/19/17	1.7	*1.0*	0.709	2.441	75.0
MW98-25	1,4-DCB	3/8/18	<1.0	*1.0*	0.709	2.441	75.0
MW98-25	1,4-DCB	9/24/18	2.9	*1.0*	0.609	2.941	75.0
MW98-25	1,4-DCB	3/25/19	<1.0	*1.0*	0.049	2.751	75.0
MW98-25	1,4-DCB	9/3/19	<1.0	*1.0*	0.000	2.512	75.0
MW98-25	1,4-DCB	3/23/20	<1.0	*1.0*	0.000	2.512	75.0
MW98-25	1,4-DCB	9/4/20	1.3	*1.0*	0.229	1.171	75.0
MW98-25	1,4-DCB	3/9/21	1.1	*1.0*	0.365	1.335	75.0
MW98-25	1,4-DCB	9/7/21	2.0	*1.0*	0.498	1.952	75.0
MW98-25	1,4-DCB	3/28/22	1.2	*1.0*	0.920	1.880	75.0
MW98-25	1,4-DCB	9/14/22	<1.0	*1.0*	0.475	1.925	75.0
MW98-25	1,4-DCB	3/20/23	1.2	*1.0*	0.504	1.946	75.0
MW98-25	1,4-DCB	9/12/23	2.4	*1.0*	0.397	2.253	75.0
MW98-25	1,4-DCB	3/12/24	1.6	*1.0*	0.492	2.358	75.0
MW98-25	1,4-DCB	9/30/24	1.8	*1.0*	1.162	2.338	75.0
MW98-25	Acetone	3/16/16	<10	*10.0*	5.0	5.0	6,300
MW98-25	Acetone	9/8/16	<10	*10.0*	5.0	5.0	6,300
MW98-25	Acetone	3/17/17	<10	*10.0*	5.0	5.0	6,300
MW98-25	Acetone	9/19/17	<10	*10.0*	5.0	5.0	6,300
MW98-25	Acetone	3/8/18	46.5	*10.0*	0.000	39.783	6,300
MW98-25	Acetone	9/24/18	<10	*10.0*	0.000	39.783	6,300
MW98-25	Acetone	3/25/19	<10	*10.0*	0.000	39.783	6,300
MW98-25	Acetone	9/3/19	<10	*10.0*	0.000	39.783	6,300
MW98-25	Acetone	3/23/20	<10	*10.0*	5.0	5.0	6,300
MW98-25	Acetone	9/4/20	<10	*10.0*	5.0	5.0	6,300
MW98-25	Acetone	3/9/21	<10	*10.0*	5.0	5.0	6,300
MW98-25	Acetone	9/7/21	<10	*10.0*	5.0	5.0	6,300
MW98-25	Acetone	3/28/22	<10	*10.0*	5.0	5.0	6,300
MW98-25	Acetone	9/14/22	<10	*10.0*	5.0	5.0	6,300
MW98-25	Acetone	3/20/23	<10	*10.0*	5.0	5.0	6,300
MW98-25	Acetone	9/12/23	<10	*10.0*	5.0	5.0	6,300
MW98-25	Acetone	3/12/24	<10	*10.0*	5.0	5.0	6,300
MW98-25	Acetone	9/30/24	<10	*10.0*	5.0	5.0	6,300
MW98-25	Benzene	3/16/16	<1	*1.0*	0.500	0.500	5.0
MW98-25	Benzene	9/8/16	1.4	*1.0*	0.128	1.422	5.0
MW98-25	Benzene	3/17/17	<1	*1.0*	0.128	1.422	5.0
MW98-25	Benzene	9/19/17	<1	*1.0*	0.128	1.422	5.0
MW98-25	Benzene	3/8/18	1.9	*1.0*	0.086	2.564	5.0
MW98-25	Benzene	9/24/18	<1	*1.0*	0.112	1.717	5.0
MW98-25	Benzene	3/25/19	<1	*1.0*	0.112	1.717	5.0
MW98-25	Benzene	9/3/19	<1	*1.0*	0.112	1.717	5.0
MW98-25	Benzene	3/23/20	<1	*1.0*	0.500	0.500	5.0
MW98-25	Benzene	9/4/20	<1	*1.0*	0.500	0.500	5.0
MW98-25	Benzene	3/9/21	1.6	*1.0*	0.128	1.422	5.0
MW98-25	Benzene	9/7/21	2.7	*1.0*	0.086	2.564	5.0
MW98-25	Benzene	3/28/22	1.3	*1.0*	0.454	2.596	5.0

MW98-25	Benzene	9/14/22	<1	*1.0*	0.454	2.596	5.0
MW98-25	Benzene	3/20/23	<1	*1.0*	0.029	2.471	5.0
MW98-25	Benzene	9/12/23	1.4	*1.0*	0.346	1.504	5.0
MW98-25	Benzene	3/12/24	<1	*1.0*	0.196	1.254	5.0
MW98-25	Benzene	9/30/24	<1	*1.0*	0.196	1.254	5.0
MW98-25	Bis(2-EH)P	3/16/16	<6	*6.0*	5.0	5.0	6.0
MW98-25	Bis(2-EH)P	9/8/16	<6	*6.0*	5.0	5.0	6.0
MW98-25	Bis(2-EH)P	3/17/17	<6	*6.0*	5.0	5.0	6.0
MW98-25	Bis(2-EH)P	9/19/17	6.0	*6.0*	4.662	5.838	6.0
MW98-25	Bis(2-EH)P	3/8/18	---	*6.0*	4.662	5.838	6.0
MW98-25	Bis(2-EH)P	9/24/18	---	*6.0*	4.662	5.838	6.0
MW98-25	Bis(2-EH)P	3/25/19	---	*6.0*	4.662	5.838	6.0
MW98-25	Bis(2-EH)P	9/3/19	---	*6.0*	4.662	5.838	6.0
MW98-25	Bis(2-EH)P	3/23/20	---	*6.0*	4.662	5.838	6.0
MW98-25	Bis(2-EH)P	9/4/20	---	*6.0*	4.662	5.838	6.0
MW98-25	Bis(2-EH)P	3/9/21	---	*6.0*	4.662	5.838	6.0
MW98-25	Bis(2-EH)P	9/7/21	---	*6.0*	4.662	5.838	6.0
MW98-25	Bis(2-EH)P	3/28/22	---	*6.0*	4.662	5.838	6.0
MW98-25	Bis(2-EH)P	9/14/22	<6	*6.0*	4.662	5.838	6.0
MW98-25	Bis(2-EH)P	3/20/23	---	*6.0*	4.662	5.838	6.0
MW98-25	Bis(2-EH)P	9/12/23	---	*6.0*	4.662	5.838	6.0
MW98-25	Bis(2-EH)P	3/12/24	---	*6.0*	4.662	5.838	6.0
MW98-25	Bis(2-EH)P	9/30/24	---	*6.0*	4.662	5.838	6.0
MW98-25	chlorobenzene	3/16/16	<1	*1.0*	0.500	0.500	100.0
MW98-25	chlorobenzene	9/8/16	<1	*1.0*	0.500	0.500	100.0
MW98-25	chlorobenzene	3/17/17	<1	*1.0*	0.500	0.500	100.0
MW98-25	chlorobenzene	9/19/17	<1	*1.0*	0.500	0.500	100.0
MW98-25	chlorobenzene	3/8/18	<1	*1.0*	0.500	0.500	100.0
MW98-25	chlorobenzene	9/24/18	<1	*1.0*	0.500	0.500	100.0
MW98-25	chlorobenzene	3/25/19	<1	*1.0*	0.500	0.500	100.0
MW98-25	chlorobenzene	9/3/19	<1	*1.0*	0.500	0.500	100.0
MW98-25	chlorobenzene	3/23/20	<1	*1.0*	0.500	0.500	100.0
MW98-25	chlorobenzene	9/4/20	<1	*1.0*	0.500	0.500	100.0
MW98-25	chlorobenzene	3/9/21	<1	*1.0*	0.500	0.500	100.0
MW98-25	chlorobenzene	9/7/21	1.0	*1.0*	0.331	0.919	100.0
MW98-25	chlorobenzene	3/28/22	<1	*1.0*	0.331	0.919	100.0
MW98-25	chlorobenzene	9/14/22	<1	*1.0*	0.331	0.919	100.0
MW98-25	chlorobenzene	3/20/23	<1	*1.0*	0.331	0.919	100.0
MW98-25	chlorobenzene	9/12/23	<1	*1.0*	0.229	1.171	100.0
MW98-25	chlorobenzene	3/12/24	<1	*1.0*	0.229	1.171	100.0
MW98-25	chlorobenzene	9/30/24	1.0	*1.0*	0.361	1.289	100.0
MW98-25	chloroethane	3/16/16	1.9	*1.0*	0.027	1.673	2,800
MW98-25	chloroethane	9/8/16	1.0	*1.0*	0.198	1.752	2,800
MW98-25	chloroethane	3/17/17	<1.0	*1.0*	0.198	1.752	2,800
MW98-25	chloroethane	9/19/17	<1.0	*1.0*	0.198	1.752	2,800
MW98-25	chloroethane	3/8/18	1.1	*1.0*	0.398	1.152	2,800
MW98-25	chloroethane	9/24/18	<1.0	*1.0*	0.297	1.003	2,800
MW98-25	chloroethane	3/25/19	<1.0	*1.0*	0.297	1.003	2,800
MW98-25	chloroethane	9/3/19	<1.0	*1.0*	0.297	1.003	2,800
MW98-25	chloroethane	3/23/20	<1.0	*1.0*	0.500	0.500	2,800
MW98-25	chloroethane	9/4/20	<1.0	*1.0*	0.500	0.500	2,800
MW98-25	chloroethane	3/9/21	<1.0	*1.0*	0.500	0.500	2,800
MW98-25	chloroethane	9/7/21	1.5	*1.0*	0.162	1.338	2,800

MW98-25	chloroethane	3/28/22	<1.0	*1.0*	0.162	1.338	2,800
MW98-25	chloroethane	9/14/22	<1.0	*1.0*	0.162	1.338	2,800
MW98-25	chloroethane	3/20/23	1.7	*1.0*	0.297	1.803	2,800
MW98-25	chloroethane	9/12/23	1.5	*1.0*	0.297	1.803	2,800
MW98-25	chloroethane	3/12/24	1.4	*1.0*	0.650	1.900	2,800
MW98-25	chloroethane	9/30/24	1.0	*1.0*	1.054	1.746	2,800
MW98-25	Cis-1,2-DCE	3/16/16	5.1	*1.0*	1.940	6.110	70.0
MW98-25	Cis-1,2-DCE	9/8/16	2.9	*1.0*	1.496	5.754	70.0
MW98-25	Cis-1,2-DCE	3/17/17	2.1	*1.0*	0.987	4.763	70.0
MW98-25	Cis-1,2-DCE	9/19/17	1.3	*1.0*	0.926	4.774	70.0
MW98-25	Cis-1,2-DCE	3/8/18	2.5	*1.0*	1.396	3.004	70.0
MW98-25	Cis-1,2-DCE	9/24/18	2.3	*1.0*	1.431	2.669	70.0
MW98-25	Cis-1,2-DCE	3/25/19	1.0	*1.0*	0.909	2.641	70.0
MW98-25	Cis-1,2-DCE	9/3/19	<1.0	*1.0*	0.425	2.725	70.0
MW98-25	Cis-1,2-DCE	3/23/20	<1.0	*1.0*	0.075	2.075	70.0
MW98-25	Cis-1,2-DCE	9/4/20	2.0	*1.0*	0.168	1.832	70.0
MW98-25	Cis-1,2-DCE	3/9/21	2.5	*1.0*	0.163	2.587	70.0
MW98-25	Cis-1,2-DCE	9/7/21	3.4	*1.0*	0.672	3.528	70.0
MW98-25	Cis-1,2-DCE	3/28/22	2.5	*1.0*	1.914	3.286	70.0
MW98-25	Cis-1,2-DCE	9/14/22	<1.0	*1.0*	0.783	3.667	70.0
MW98-25	Cis-1,2-DCE	3/20/23	2.3	*1.0*	0.746	3.604	70.0
MW98-25	Cis-1,2-DCE	9/12/23	2.8	*1.0*	0.805	3.245	70.0
MW98-25	Cis-1,2-DCE	3/12/24	1.4	*1.0*	0.556	2.944	70.0
MW98-25	Cis-1,2-DCE	9/30/24	2.0	*1.0*	1.437	2.813	70.0
MW98-25	DCDFM	3/16/16	<1.0	*1.0*	0.000	23.702	1000.0
MW98-25	DCDFM	9/8/16	6.6	*1.0*	0.000	13.490	1000.0
MW98-25	DCDFM	3/17/17	18.8	*1.0*	0.516	19.784	1000.0
MW98-25	DCDFM	9/19/17	6.9	*1.0*	0.000	17.207	1000.0
MW98-25	DCDFM	3/8/18	38.4	*1.0*	0.102	35.248	1000.0
MW98-25	DCDFM	9/24/18	1.6	*1.0*	0.000	35.622	1000.0
MW98-25	DCDFM	3/25/19	3.8	*1.0*	0.000	33.010	1000.0
MW98-25	DCDFM	9/3/19	<1.0	*1.0*	0.000	32.564	1000.0
MW98-25	DCDFM	3/23/20	19.4	*1.0*	0.000	16.705	1000.0
MW98-25	DCDFM	9/4/20	1.2	*1.0*	0.000	16.691	1000.0
MW98-25	DCDFM	3/9/21	8.6	*1.0*	0.000	17.758	1000.0
MW98-25	DCDFM	9/7/21	4.8	*1.0*	0.000	17.757	1000.0
MW98-25	DCDFM	3/28/22	1.7	*1.0*	0.063	8.087	1000.0
MW98-25	DCDFM	9/14/22	<1.0	*1.0*	0.000	8.157	1000.0
MW98-25	DCDFM	3/20/23	3.3	*1.0*	0.369	4.781	1000.0
MW98-25	DCDFM	9/12/23	2.1	*1.0*	0.542	3.258	1000.0
MW98-25	DCDFM	3/12/24	<1.0	*1.0*	0.000	3.201	1000.0
MW98-25	DCDFM	9/30/24	<1.0	*1.0*	0.000	3.201	1000.0
MW98-25	TCFM	3/16/16	<1.0	*1.0*	0.000	2.763	2000.0
MW98-25	TCFM	9/8/16	4.4	*1.0*	0.000	3.769	2000.0
MW98-25	TCFM	3/17/17	4.3	*1.0*	0.000	5.040	2000.0
MW98-25	TCFM	9/19/17	1.6	*1.0*	0.397	5.003	2000.0
MW98-25	TCFM	3/8/18	2.5	*1.0*	1.579	4.821	2000.0
MW98-25	TCFM	9/24/18	<1.0	*1.0*	0.335	4.115	2000.0
MW98-25	TCFM	3/25/19	<1.0	*1.0*	0.137	2.413	2000.0
MW98-25	TCFM	9/3/19	<1.0	*1.0*	0.000	2.176	2000.0
MW98-25	TCFM	3/23/20	6.0	*1.0*	0.000	5.110	2000.0
MW98-25	TCFM	9/4/20	1.0	*1.0*	0.000	5.149	2000.0
MW98-25	TCFM	3/9/21	2.6	*1.0*	0.000	5.447	2000.0

MW98-25	TCFM	9/7/21	<1.0	*1.0*	0.000	5.447	2000.0
MW98-25	TCFM	3/28/22	1.0	*1.0*	0.200	2.350	2000.0
MW98-25	TCFM	9/14/22	<1.0	*1.0*	0.000	2.320	2000.0
MW98-25	TCFM	3/20/23	1.2	*1.0*	0.381	1.219	2000.0
MW98-25	TCFM	9/12/23	1.1	*1.0*	0.584	1.316	2000.0
MW98-25	TCFM	3/12/24	1.0	*1.0*	0.584	1.316	2000.0
MW98-25	TCFM	9/30/24	<1.0	*1.0*	0.584	1.316	2000.0

Monitoring Well	Compound	Date	*Result (ug/L)*	*Prediction Limit (ug/L)*	*95% LCL (ug/L)*	95% UCL (ug/L)	GWPS (ug/L)
SRAMP-1	Cobalt	3/16/16	*20.1*	*1.5*	*1.671*	17.979	**3.2**
SRAMP-1	Cobalt	9/8/16	*7.1*	*1.5*	*1.671*	17.979	**3.2**
SRAMP-1	Cobalt	3/17/17	*8.1*	*1.5*	*0.000*	17.929	**3.2**
SRAMP-1	Cobalt	9/19/17	*1.5*	*4.4*	*0.000*	18.405	**3.2**
SRAMP-1	Cobalt	3/8/18	*Dry*	*4.8*	*0.000*	18.405	**3.2**
SRAMP-1	Cobalt	9/24/18	*Dry*	*4.8*	*0.000*	18.405	**3.2**
SRAMP-1	Cobalt	3/25/19	*7.7*	*4.8*	*2.460*	9.740	**3.2**
SRAMP-1	Cobalt	9/3/19	*8.9*	*4.8*	*2.547*	10.553	**3.2**
SRAMP-1	Cobalt	3/23/20	*Dry*	*3.2*	*2.547*	10.553	**3.2**
SRAMP-1	Cobalt	9/4/20	*Dry*	*3.2*	*2.547*	10.553	**3.2**
SRAMP-1	Cobalt	3/9/21	*2.7*	*3.2*	*2.042*	8.358	**3.2**
SRAMP-1	Cobalt	9/7/21	*Dry*	*3.2*	*2.042*	8.358	**3.2**
SRAMP-1	Cobalt	3/28/22	*2.1*	*5.8*	*2.042*	8.358	**5.8**
SRAMP-1	Cobalt	9/14/22	*Dry*	*7.0*	*2.042*	8.358	**7.0**
SRAMP-1	Cobalt	3/20/23	*1.8*	*7.0*	*0.956*	6.794	**7.0**
SRAMP-1	Cobalt	9/12/23	*Dry*	*7.0*	*0.956*	6.794	**7.0**
SRAMP-1	Cobalt	3/12/24	*Dry*	*7.0*	*0.956*	6.794	**7.0**
SRAMP-1	Cobalt	9/30/24	*Dry*	*7.0*	*0.956*	6.794	**7.0**
SRAMP-1	Nickel	3/16/16	*27.9*	*14.0*	*14.139*	30.011	100.0
SRAMP-1	Nickel	9/8/16	*24.9*	*14.0*	*14.139*	30.011	100.0
SRAMP-1	Nickel	3/17/17	*23.9*	*14.0*	*4.434*	30.316	100.0
SRAMP-1	Nickel	9/19/17	*6.7*	*14.0*	*9.575*	32.125	100.0
SRAMP-1	Nickel	3/8/18	*Dry*	*14.0*	*9.575*	32.125	100.0
SRAMP-1	Nickel	9/24/18	*Dry*	*14.0*	*9.575*	32.125	100.0
SRAMP-1	Nickel	3/25/19	*18.2*	*14.0*	*8.597*	28.253	100.0
SRAMP-1	Nickel	9/3/19	*26.0*	*14.0*	*8.523*	28.877	100.0
SRAMP-1	Nickel	3/23/20	*Dry*	*14.0*	*8.523*	28.877	100.0
SRAMP-1	Nickel	9/4/20	*Dry*	*14.0*	*8.523*	28.877	100.0
SRAMP-1	Nickel	3/9/21	*6.4*	*14.0*	*6.075*	22.575	100.0
SRAMP-1	Nickel	9/7/21	*Dry*	*14.0*	*6.075*	22.575	100.0
SRAMP-1	Nickel	3/28/22	*7.6*	*33.6*	*6.075*	22.575	100.0
SRAMP-1	Nickel	9/14/22	*Dry*	*33.6*	*6.075*	22.575	100.0
SRAMP-1	Nickel	3/20/23	*7.5*	*33.6*	*3.706*	20.044	100.0
SRAMP-1	Nickel	9/12/23	*Dry*	*17.4*	*3.706*	20.044	100.0
SRAMP-1	Nickel	3/12/24	*Dry*	*17.4*	*3.706*	20.044	100.0
SRAMP-1	Nickel	9/30/24	*Dry*	*17.4*	*3.706*	20.044	100.0
SRAMP-1	1,1-DCA	3/16/16	*<1.0*	*1.0*	0.500	0.500	140.0
SRAMP-1	1,1-DCA	9/8/16	*<1.0*	*1.0*	0.500	0.500	140.0
SRAMP-1	1,1-DCA	3/17/17	*<1.0*	*1.0*	0.500	0.500	140.0
SRAMP-1	1,1-DCA	9/19/17	*<1.0*	*1.0*	0.500	0.500	140.0
SRAMP-1	1,1-DCA	3/8/18	*Dry*	*1.0*	0.500	0.500	140.0
SRAMP-1	1,1-DCA	9/24/18	*Dry*	*1.0*	0.500	0.500	140.0
SRAMP-1	1,1-DCA	3/25/19	*<1.0*	*1.0*	0.500	0.500	140.0
SRAMP-1	1,1-DCA	9/3/19	*<1.0*	*1.0*	0.500	0.500	140.0
SRAMP-1	1,1-DCA	3/23/20	*Dry*	*1.0*	0.500	0.500	140.0
SRAMP-1	1,1-DCA	9/4/20	*Dry*	*1.0*	0.500	0.500	140.0
SRAMP-1	1,1-DCA	3/9/21	*2.6*	*1.0*	0.000	2.260	140.0
SRAMP-1	1,1-DCA	9/7/21	*Dry*	*1.0*	0.000	2.260	140.0
SRAMP-1	1,1-DCA	3/28/22	*1.4*	*1.0*	0.080	2.420	140.0
SRAMP-1	1,1-DCA	9/14/22	*Dry*	*1.0*	0.080	2.420	140.0
SRAMP-1	1,1-DCA	3/20/23	*1.4*	*1.0*	0.461	2.489	140.0
SRAMP-1	1,1-DCA	9/12/23	*Dry*	*1.0*	0.461	2.489	140.0

SRAMP-1	1,1-DCA	3/12/24	*Dry*	*1.0*	0.461	2.489	140.0
SRAMP-1	1,1-DCA	9/30/24	*Dry*	*1.0*	0.461	2.489	140.0
SRAMP-1	1,4-DCB	3/16/16	*3.9*	*1.0*	*0.289*	6.211	75.0
SRAMP-1	1,4-DCB	9/8/16	*4.6*	*1.0*	*2.230*	6.320	75.0
SRAMP-1	1,4-DCB	3/17/17	*2.7*	*1.0*	*0.000*	2.344	75.0
SRAMP-1	1,4-DCB	9/19/17	*<1.0*	*1.0*	*0.811*	5.039	75.0
SRAMP-1	1,4-DCB	3/8/18	*Dry*	*1.0*	*0.811*	5.039	75.0
SRAMP-1	1,4-DCB	9/24/18	*Dry*	*1.0*	*0.811*	5.039	75.0
SRAMP-1	1,4-DCB	3/25/19	*<1.0*	*1.0*	*0.000*	4.401	75.0
SRAMP-1	1,4-DCB	9/3/19	*<1.0*	*1.0*	*0.000*	2.344	75.0
SRAMP-1	1,4-DCB	3/23/20	*Dry*	*1.0*	*0.000*	2.344	75.0
SRAMP-1	1,4-DCB	9/4/20	*Dry*	*1.0*	*0.000*	2.344	75.0
SRAMP-1	1,4-DCB	3/9/21	*5.8*	*1.0*	*0.000*	4.942	75.0
SRAMP-1	1,4-DCB	9/7/21	*Dry*	*1.0*	*0.000*	4.942	75.0
SRAMP-1	1,4-DCB	3/28/22	*5.0*	*1.0*	*0.000*	6.300	75.0
SRAMP-1	1,4-DCB	9/14/22	*Dry*	*1.0*	*0.000*	6.300	75.0
SRAMP-1	1,4-DCB	3/20/23	*6.5*	*1.0*	1.270	7.630	75.0
SRAMP-1	1,4-DCB	9/12/23	*Dry*	*1.0*	1.270	7.630	75.0
SRAMP-1	1,4-DCB	3/12/24	*Dry*	*1.0*	1.270	7.630	75.0
SRAMP-1	1,4-DCB	9/30/24	*Dry*	*1.0*	1.270	7.630	75.0
SRAMP-1	Benzene	3/16/16	*5.0*	*1.0*	*0.589*	6.561	5.0
SRAMP-1	Benzene	9/8/16	*2.2*	*1.0*	*1.743*	6.257	5.0
SRAMP-1	Benzene	3/17/17	*2.0*	*1.0*	*0.000*	1.757	5.0
SRAMP-1	Benzene	9/19/17	*<1.0*	*1.0*	*0.217*	4.633	5.0
SRAMP-1	Benzene	3/8/18	*Dry*	*1.0*	*0.217*	4.633	5.0
SRAMP-1	Benzene	9/24/18	*Dry*	*1.0*	*0.217*	4.633	5.0
SRAMP-1	Benzene	3/25/19	*1.2*	*1.0*	*0.557*	2.393	5.0
SRAMP-1	Benzene	9/3/19	*1.2*	*1.0*	*0.504*	1.946	5.0
SRAMP-1	Benzene	3/23/20	*Dry*	*1.0*	*0.504*	1.946	5.0
SRAMP-1	Benzene	9/4/20	*Dry*	*1.0*	*0.504*	1.946	5.0
SRAMP-1	Benzene	3/9/21	*5.7*	*1.0*	*0.000*	4.961	5.0
SRAMP-1	Benzene	9/7/21	*Dry*	*1.0*	*0.000*	4.961	5.0
SRAMP-1	Benzene	3/28/22	*4.8*	*1.0*	*0.441*	6.009	5.0
SRAMP-1	Benzene	9/14/22	*Dry*	*1.0*	*0.441*	6.009	5.0
SRAMP-1	Benzene	3/20/23	*5.7*	*1.0*	1.830	6.870	5.0
SRAMP-1	Benzene	9/12/23	*Dry*	*1.0*	1.830	6.870	5.0
SRAMP-1	Benzene	3/12/24	*Dry*	*1.0*	1.830	6.870	5.0
SRAMP-1	Benzene	9/30/24	*Dry*	*1.0*	1.830	6.870	5.0
SRAMP-1	Chlorobenzene	3/16/16	*1.9*	*1.0*	*0.179*	2.471	100.0
SRAMP-1	Chlorobenzene	9/8/16	*1.4*	*1.0*	*0.597*	2.503	100.0
SRAMP-1	Chlorobenzene	3/17/17	*1.1*	*1.0*	*0.297*	1.003	100.0
SRAMP-1	Chlorobenzene	9/19/17	*<1.0*	*1.0*	*0.537*	1.913	100.0
SRAMP-1	Chlorobenzene	3/8/18	*Dry*	*1.0*	*0.537*	1.913	100.0
SRAMP-1	Chlorobenzene	9/24/18	*Dry*	*1.0*	*0.537*	1.913	100.0
SRAMP-1	Chlorobenzene	3/25/19	*1.5*	*1.0*	*0.596*	1.654	100.0
SRAMP-1	Chlorobenzene	9/3/19	*<1.0*	*1.0*	*0.324*	1.476	100.0
SRAMP-1	Chlorobenzene	3/23/20	*Dry*	*1.0*	*0.324*	1.476	100.0
SRAMP-1	Chlorobenzene	9/4/20	*Dry*	*1.0*	*0.324*	1.476	100.0
SRAMP-1	Chlorobenzene	3/9/21	*1.7*	*1.0*	*0.297*	1.803	100.0
SRAMP-1	Chlorobenzene	9/7/21	*Dry*	*1.0*	*0.297*	1.803	100.0
SRAMP-1	Chlorobenzene	3/28/22	*1.4*	*1.0*	*0.650*	1.900	100.0
SRAMP-1	Chlorobenzene	9/14/22	*Dry*	*1.0*	*0.650*	1.900	100.0
SRAMP-1	Chlorobenzene	3/20/23	*1.7*	*1.0*	0.657	1.993	100.0

SRAMP-1	Chlorobenzene	9/12/23	*Dry*	*1.0*	0.657	1.993	100.0
SRAMP-1	Chlorobenzene	3/12/24	*Dry*	*1.0*	0.657	1.993	100.0
SRAMP-1	Chlorobenzene	9/30/24	*Dry*	*1.0*	0.657	1.993	100.0
SRAMP-1	Chloroethane	3/16/16	*1.9*	*1.0*	*0.258*	1.892	2,800.0
SRAMP-1	Chloroethane	9/8/16	*2.0*	*1.0*	*0.644*	2.256	2,800.0
SRAMP-1	Chloroethane	3/17/17	*1.6*	*1.0*	*0.128*	1.422	2,800.0
SRAMP-1	Chloroethane	9/19/17	*<1.0*	*1.0*	*0.691*	2.309	2,800.0
SRAMP-1	Chloroethane	3/8/18	*Dry*	*1.0*	*0.691*	2.309	2,800.0
SRAMP-1	Chloroethane	9/24/18	*Dry*	*1.0*	*0.691*	2.309	2,800.0
SRAMP-1	Chloroethane	3/25/19	*2.6*	*1.0*	*0.634*	2.716	2,800.0
SRAMP-1	Chloroethane	9/3/19	*2.5*	*1.0*	*0.651*	2.949	2,800.0
SRAMP-1	Chloroethane	3/23/20	*Dry*	*1.0*	*0.651*	2.949	2,800.0
SRAMP-1	Chloroethane	9/4/20	*Dry*	*1.0*	*0.651*	2.949	2,800.0
SRAMP-1	Chloroethane	3/9/21	*2.6*	*1.0*	*0.833*	3.267	2,800.0
SRAMP-1	Chloroethane	9/7/21	*Dry*	*1.0*	*0.833*	3.267	2,800.0
SRAMP-1	Chloroethane	3/28/22	*1.6*	*1.0*	*1.754*	2.896	2,800.0
SRAMP-1	Chloroethane	9/14/22	*Dry*	*1.0*	*1.754*	2.896	2,800.0
SRAMP-1	Chloroethane	3/20/23	*2.0*	*1.0*	1.629	2.721	2,800.0
SRAMP-1	Chloroethane	9/12/23	*Dry*	*1.0*	1.629	2.721	2,800.0
SRAMP-1	Chloroethane	3/12/24	*Dry*	*1.0*	1.629	2.721	2,800.0
SRAMP-1	Chloroethane	9/30/24	*Dry*	*1.0*	1.629	2.721	2,800.0
SRAMP-1	Cis-1,2-DCE	3/16/16	*2.5*	*1.0*	*0.570*	2.980	70.0
SRAMP-1	Cis-1,2-DCE	9/8/16	*2.8*	*1.0*	*1.591*	3.109	70.0
SRAMP-1	Cis-1,2-DCE	3/17/17	*2.1*	*1.0*	*0.000*	1.841	70.0
SRAMP-1	Cis-1,2-DCE	9/19/17	*<1.0*	*1.0*	*0.770*	3.180	70.0
SRAMP-1	Cis-1,2-DCE	3/8/18	*Dry*	*1.0*	*0.770*	3.180	70.0
SRAMP-1	Cis-1,2-DCE	9/24/18	*Dry*	*1.0*	*0.770*	3.180	70.0
SRAMP-1	Cis-1,2-DCE	3/25/19	*4.0*	*1.0*	*0.631*	4.069	70.0
SRAMP-1	Cis-1,2-DCE	9/3/19	*2.4*	*1.0*	*0.563*	3.937	70.0
SRAMP-1	Cis-1,2-DCE	3/23/20	*Dry*	*1.0*	*0.563*	3.937	70.0
SRAMP-1	Cis-1,2-DCE	9/4/20	*Dry*	*1.0*	*0.563*	3.937	70.0
SRAMP-1	Cis-1,2-DCE	3/9/21	*4.4*	*1.0*	*0.738*	4.912	70.0
SRAMP-1	Cis-1,2-DCE	9/7/21	*Dry*	*1.0*	*0.738*	4.912	70.0
SRAMP-1	Cis-1,2-DCE	3/28/22	*3.0*	*1.0*	*2.374*	4.526	70.0
SRAMP-1	Cis-1,2-DCE	9/14/22	*Dry*	*1.0*	*2.374*	4.526	70.0
SRAMP-1	Cis-1,2-DCE	3/20/23	*3.0*	*1.0*	2.202	4.198	70.0
SRAMP-1	Cis-1,2-DCE	9/12/23	*Dry*	*1.0*	2.202	4.198	70.0
SRAMP-1	Cis-1,2-DCE	3/12/24	*Dry*	*1.0*	2.202	4.198	70.0
SRAMP-1	Cis-1,2-DCE	9/30/24	*Dry*	*1.0*	2.202	4.198	70.0
SRAMP-1	DCDFM	3/16/16	*16.5*	*1.0*	*0.000*	38.018	1000.0
SRAMP-1	DCDFM	9/8/16	*40.7*	*1.0*	*12.292*	44.958	1000.0
SRAMP-1	DCDFM	3/17/17	*34.8*	*1.0*	*0.000*	29.248	1000.0
SRAMP-1	DCDFM	9/19/17	*3.1*	*1.0*	*3.533*	44.017	1000.0
SRAMP-1	DCDFM	3/8/18	*Dry*	*1.0*	*3.533*	44.017	1000.0
SRAMP-1	DCDFM	9/24/18	*Dry*	*1.0*	*3.533*	44.017	1000.0
SRAMP-1	DCDFM	3/25/19	*38.4*	*1.0*	*8.545*	49.955	1000.0
SRAMP-1	DCDFM	9/3/19	*<1.0*	*1.0*	*0.000*	42.930	1000.0
SRAMP-1	DCDFM	3/23/20	*Dry*	*1.0*	*0.000*	42.930	1000.0
SRAMP-1	DCDFM	9/4/20	*Dry*	*1.0*	*0.000*	42.930	1000.0
SRAMP-1	DCDFM	3/9/21	*50.7*	*1.0*	*0.000*	52.829	1000.0
SRAMP-1	DCDFM	9/7/21	*Dry*	*1.0*	*0.000*	52.829	1000.0
SRAMP-1	DCDFM	3/28/22	*12.2*	*1.0*	*0.000*	52.643	1000.0
SRAMP-1	DCDFM	9/14/22	*Dry*	*1.0*	*0.000*	52.643	1000.0

SRAMP-1	DCDFM	3/20/23	*18.4*	*1.0*	0.000	45.727	1000.0
SRAMP-1	DCDFM	9/12/23	*Dry*	*1.0*	0.000	45.727	1000.0
SRAMP-1	DCDFM	3/12/24	*Dry*	*1.0*	0.000	45.727	1000.0
SRAMP-1	DCDFM	9/30/24	*Dry*	*1.0*	0.000	45.727	1000.0
SRAMP-1	TCFM	3/16/16	*39.1*	*1.0*	*0.000*	33.549	2000.0
SRAMP-1	TCFM	9/8/16	*24.2*	*1.0*	*0.000*	38.196	2000.0
SRAMP-1	TCFM	3/17/17	*17.9*	*1.0*	*0.000*	15.084	2000.0
SRAMP-1	TCFM	9/19/17	*2.1*	*1.0*	*2.779*	38.851	2000.0
SRAMP-1	TCFM	3/8/18	*Dry*	*1.0*	*2.779*	38.851	2000.0
SRAMP-1	TCFM	9/24/18	*Dry*	*1.0*	*2.779*	38.851	2000.0
SRAMP-1	TCFM	3/25/19	*22.5*	*1.0*	*4.824*	28.526	2000.0
SRAMP-1	TCFM	9/3/19	*<1.0*	*1.0*	*0.000*	23.797	2000.0
SRAMP-1	TCFM	3/23/20	*Dry*	*1.0*	*0.000*	23.797	2000.0
SRAMP-1	TCFM	9/4/20	*Dry*	*1.0*	*0.000*	23.797	2000.0
SRAMP-1	TCFM	3/9/21	*28.0*	*1.0*	*0.000*	29.771	2000.0
SRAMP-1	TCFM	9/7/21	*Dry*	*1.0*	*0.000*	29.771	2000.0
SRAMP-1	TCFM	3/28/22	*8.1*	*1.0*	*0.000*	29.699	2000.0
SRAMP-1	TCFM	9/14/22	*Dry*	*1.0*	*0.000*	29.699	2000.0
SRAMP-1	TCFM	3/20/23	*9.1*	*1.0*	0.000	25.186	2000.0
SRAMP-1	TCFM	9/12/23	*Dry*	*1.0*	0.000	25.186	2000.0
SRAMP-1	TCFM	3/12/24	*Dry*	*1.0*	0.000	25.186	2000.0
SRAMP-1	TCFM	9/30/24	*Dry*	*1.0*	0.000	25.186	2000.0

Monitoring Well	Compound	Date	Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	95% UCL (ug/L)	GWPS (ug/L)
GU-3	Nickel	9/13/21	15.2	17.4	---	---	100.0
GU-3	Nickel	12/3/21	12.4	17.4	---	---	100.0
GU-3	Nickel	3/28/22	12.7	17.4	---	---	100.0
GU-3	Nickel	9/15/22	21.1	17.4	11.857	18.843	100.0
GU-3	Nickel	3/20/23	submerged	17.4	11.857	18.843	100.0
GU-3	Nickel	9/12/23	submerged	17.4	11.857	18.843	100.0
GU-3	Nickel	3/12/24	submerged	17.4	11.857	18.843	100.0
GU-3	Nickel	9/30/24	36.8	17.4	7.300	34.200	100.0
GU-3	Nickel	12/9/24	23.5	17.4	7.300	34.200	100.0
GU-3	Benzene	9/13/21	1.3	1.0	---	---	5.0
GU-3	Benzene	12/3/21	6.0	1.0	---	---	5.0
GU-3	Benzene	3/28/22	6.2	1.0	---	---	5.0
GU-3	Benzene	9/15/22	6.1	1.0	2.075	7.725	5.0
GU-3	Benzene	3/20/23	submerged	1.0	2.075	7.725	5.0
GU-3	Benzene	9/12/23	submerged	1.0	2.075	7.725	5.0
GU-3	Benzene	3/12/24	submerged	1.0	2.075	7.725	5.0
GU-3	Benzene	9/30/24	6.0	1.0	5.962	6.188	5.0
GU-3	Chlorobenzene	9/13/21	<1.0	1.0	---	---	100.0
GU-3	Chlorobenzene	12/3/21	<1.0	1.0	---	---	100.0
GU-3	Chlorobenzene	3/28/22	1.8	1.0	---	---	100.0
GU-3	Chlorobenzene	9/15/22	1.7	1.0	0.275	1.975	100.0
GU-3	Chlorobenzene	3/20/23	submerged	1.0	0.275	1.975	100.0
GU-3	Chlorobenzene	9/12/23	submerged	1.0	0.275	1.975	100.0
GU-3	Chlorobenzene	3/12/24	submerged	1.0	0.275	1.975	100.0
GU-3	Chlorobenzene	9/30/24	1.3	1.0	0.630	2.020	100.0
GU-3	Chloroethane	9/13/21	1.4	1.0	---	---	2,800.0
GU-3	Chloroethane	12/3/21	2.0	1.0	---	---	2,800.0
GU-3	Chloroethane	3/28/22	<1.0	1.0	---	---	2,800.0
GU-3	Chloroethane	9/15/22	1.6	1.0	0.826	1.924	2,800.0
GU-3	Chloroethane	3/20/23	submerged	1.0	0.826	1.924	2,800.0
GU-3	Chloroethane	9/12/23	submerged	1.0	0.826	1.924	2,800.0
GU-3	Chloroethane	3/12/24	submerged	1.0	0.826	1.924	2,800.0
GU-3	Chloroethane	9/30/24	1.3	1.0	1.081	1.969	2,800.0
GU-3	Cis-1,2-DCE	9/13/21	1.0	1.0	---	---	70.0
GU-3	Cis-1,2-DCE	12/3/21	10.5	1.0	---	---	70.0
GU-3	Cis-1,2-DCE	3/28/22	<1.0	1.0	---	---	70.0
GU-3	Cis-1,2-DCE	9/15/22	11.9	1.0	0.724	11.226	70.0
GU-3	Cis-1,2-DCE	3/20/23	submerged	1.0	0.724	11.226	70.0
GU-3	Cis-1,2-DCE	9/12/23	submerged	1.0	0.724	11.226	70.0
GU-3	Cis-1,2-DCE	3/12/24	submerged	1.0	0.724	11.226	70.0
GU-3	Cis-1,2-DCE	9/30/24	4.3	1.0	0.896	12.981	70.0
GU-3	Ethylbenzene	9/13/21	<1.0	1.0	---	---	2.0
GU-3	Ethylbenzene	12/3/21	<1.0	1.0	---	---	2.0
GU-3	Ethylbenzene	3/28/22	<1.0	1.0	---	---	2.0
GU-3	Ethylbenzene	9/15/22	1.8	1.0	0.060	1.590	2.0
GU-3	Ethylbenzene	3/20/23	submerged	1.0	0.060	1.590	2.0
GU-3	Ethylbenzene	9/12/23	submerged	1.0	0.060	1.590	2.0
GU-3	Ethylbenzene	3/12/24	submerged	1.0	0.060	1.590	2.0
GU-3	Ethylbenzene	9/30/24	<1.0	1.0	0.060	1.590	2.0
GU-3	Vinyl Chloride	9/13/21	<1.0	1.0	---	---	2.0
GU-3	Vinyl Chloride	12/3/21	3.6	1.0	---	---	2.0

GU-3	Vinyl Chloride	3/28/22	3.0	1.0	---	---	2.0
GU-3	Vinyl Chloride	9/15/22	1.9	1.0	0.647	3.853	2.0
GU-3	Vinyl Chloride	3/20/23	submerged	1.0	0.647	3.853	2.0
GU-3	Vinyl Chloride	9/12/23	submerged	1.0	0.647	3.853	2.0
GU-3	Vinyl Chloride	3/12/24	submerged	1.0	0.647	3.853	2.0
GU-3	Vinyl Chloride	9/30/24	1.2	1.0	1.157	3.693	2.0

Appendix E

Laboratory Reports for Reporting Period

With Chain of Custody

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HC1004

Project Description

6007

For:

Todd Whipple

HLW Engineering

PO Box 314

Story City, IA 50248

Heather Murphy

Customer Relationship Specialist

Thursday, April 4, 2024

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

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

MICROBAC®

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HC1004

HLW Engineering

Todd Whipple
PO Box 314
Story City, IA 50248

Project Name: 6007

Project / PO Number: Boone Landfill-New Regs
Received: 03/13/2024
Reported: 04/04/2024

Sample Summary Report

Sample Name	Laboratory ID	Client Matrix	Sample Type	Sample Begin	Sample Taken	Lab Received
MW91-8	1HC1004-01	Water	GRAB		03/12/24 13:54	03/13/24 10:29
MW02-15A	1HC1004-02	Water	GRAB		03/12/24 12:28	03/13/24 10:29
MW98-28	1HC1004-03	Water	GRAB		03/12/24 13:30	03/13/24 10:29
MW02-30A	1HC1004-04	Water	GRAB		03/12/24 12:05	03/13/24 10:29
MW88-2	1HC1004-05	Water	GRAB		03/12/24 11:10	03/13/24 10:29
MW94-18	1HC1004-06	Water	GRAB		03/12/24 08:15	03/13/24 10:29
MW09-40	1HC1004-07	Water	GRAB		03/12/24 08:34	03/13/24 10:29
MW91-10	1HC1004-08	Water	GRAB		03/12/24 08:50	03/13/24 10:29
MW96-21	1HC1004-09	Water	GRAB		03/12/24 07:40	03/13/24 10:29
MW96-24	1HC1004-10	Water	GRAB		03/12/24 09:25	03/13/24 10:29
MW88-3	1HC1004-11	Water	GRAB		03/12/24 10:29	03/13/24 10:29
MW96-23	1HC1004-12	Water	GRAB		03/12/24 09:49	03/13/24 10:29
MW21-43	1HC1004-13	Water	GRAB		03/12/24 11:40	03/13/24 10:29
GU-4	1HC1004-14	Water	GRAB		03/12/24 10:55	03/13/24 10:29
SRAMP #2	1HC1004-15	Water	GRAB		03/12/24 10:15	03/13/24 10:29
MW98-25	1HC1004-16	Water	GRAB		03/12/24 13:05	03/13/24 10:29
MW06-37	1HC1004-17	Water	GRAB		03/12/24 14:15	03/13/24 10:29
MW06-38	1HC1004-18	Water	GRAB		03/12/24 14:28	03/13/24 10:29
MW06-39	1HC1004-19	Water	GRAB		03/12/24 14:42	03/13/24 10:29
Field Duplicate	1HC1004-20	Water	GRAB		03/12/24 00:00	03/13/24 10:29

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HC1004

Analytical Testing Parameters

Client Sample ID:	MW91-8			
Sample Matrix:	Water		**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC1004-01		**Collection Date:**	03/12/2024 13:54

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1907	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1907	CSM
Bromomethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1907	CSM
Chloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1907	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1907	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1907	CSM
Acetone	<10.0	10.0	ug/L	1		03/15/24 0000	03/15/24 1907	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1907	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1907	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1907	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1907	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1907	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1907	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1907	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1907	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/15/24 0000	03/15/24 1907	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1907	CSM
Chloroform	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1907	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1907	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1907	CSM
Benzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1907	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1907	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1907	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1907	CSM
Dibromomethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1907	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1907	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1907	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1907	CSM
Toluene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1907	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1907	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1907	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1907	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1907	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1907	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1907	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1907	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1907	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1907	CSM
Xylenes, total	<2.0	2.0	ug/L	1		03/15/24 0000	03/15/24 1907	CSM
Styrene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1907	CSM

Client Sample ID:	MW91-8			
Sample Matrix:	Water		**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC1004-01		**Collection Date:**	03/12/2024 13:54

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Bromoform	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1907	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1907	CSM
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1907	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1907	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1907	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1907	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1907	CSM
Surrogate: Dibromofluoromethane	75.7	Limit: 75-136	% Rec	1		03/15/24 0000	03/15/24 1907	CSM
Surrogate: Dibromofluoromethane	75.7	Limit: 80-126	% Rec	1	**S-GC**	03/15/24 0000	03/15/24 1907	CSM
Surrogate: 1,2-Dichloroethane-d4	72.4	Limit: 61-142	% Rec	1		03/15/24 0000	03/15/24 1907	CSM
Surrogate: 1,2-Dichloroethane-d4	72.4	Limit: 63-138	% Rec	1		03/15/24 0000	03/15/24 1907	CSM
Surrogate: Toluene-d8	104	Limit: 87-116	% Rec	1		03/15/24 0000	03/15/24 1907	CSM
Surrogate: Toluene-d8	104	Limit: 82-121	% Rec	1		03/15/24 0000	03/15/24 1907	CSM
Surrogate: 4-Bromofluorobenzene	85.3	Limit: 80-116	% Rec	1		03/15/24 0000	03/15/24 1907	CSM
Surrogate: 4-Bromofluorobenzene	85.3	Limit: 85-111	% Rec	1		03/15/24 0000	03/15/24 1907	CSM

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		03/20/24 0948	03/21/24 2049	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/21/24 2049	RVV
Barium, total	**0.107**	0.0040	mg/L	4		03/20/24 0948	03/21/24 2049	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/21/24 2049	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		03/20/24 0948	03/21/24 2049	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/20/24 0948	03/21/24 2049	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		03/20/24 0948	03/21/24 2049	RVV
Copper, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/21/24 2049	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/21/24 2049	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/21/24 2049	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/21/24 2049	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/21/24 2049	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/20/24 0948	03/21/24 2049	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/20/24 0948	03/21/24 2049	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		03/20/24 0948	03/21/24 2049	RVV

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HC1004

Client Sample ID:	MW02-15A		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC1004-02	**Collection Date:**	03/12/2024 12:28

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1933	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1933	CSM
Bromomethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1933	CSM
Chloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1933	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1933	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1933	CSM
Acetone	<10.0	10.0	ug/L	1		03/15/24 0000	03/15/24 1933	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1933	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1933	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1933	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1933	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1933	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1933	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1933	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1933	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/15/24 0000	03/15/24 1933	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1933	CSM
Chloroform	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1933	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1933	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1933	CSM
Benzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1933	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1933	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1933	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1933	CSM
Dibromomethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1933	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1933	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1933	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1933	CSM
Toluene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1933	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1933	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1933	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1933	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1933	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1933	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1933	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1933	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1933	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1933	CSM
Xylenes, total	<2.0	2.0	ug/L	1		03/15/24 0000	03/15/24 1933	CSM
Styrene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1933	CSM
Bromoform	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1933	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1933	CSM

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HC1004

Client Sample ID:	MW02-15A		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC1004-02	**Collection Date:**	03/12/2024 12:28

Determination of Volatile Organic Compounds	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1933	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1933	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1933	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1933	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1933	CSM
Surrogate: Dibromofluoromethane	70.4	Limit: 75-136	% Rec	1	**S-GC**	03/15/24 0000	03/15/24 1933	CSM
Surrogate: Dibromofluoromethane	70.4	Limit: 80-126	% Rec	1	**S-GC**	03/15/24 0000	03/15/24 1933	CSM
Surrogate: 1,2-Dichloroethane-d4	66.9	Limit: 61-142	% Rec	1		03/15/24 0000	03/15/24 1933	CSM
Surrogate: 1,2-Dichloroethane-d4	66.9	Limit: 63-138	% Rec	1		03/15/24 0000	03/15/24 1933	CSM
Surrogate: Toluene-d8	105	Limit: 82-121	% Rec	1		03/15/24 0000	03/15/24 1933	CSM
Surrogate: Toluene-d8	105	Limit: 87-116	% Rec	1		03/15/24 0000	03/15/24 1933	CSM
Surrogate: 4-Bromofluorobenzene	85.1	Limit: 85-111	% Rec	1		03/15/24 0000	03/15/24 1933	CSM
Surrogate: 4-Bromofluorobenzene	85.1	Limit: 80-116	% Rec	1		03/15/24 0000	03/15/24 1933	CSM

Determination of Total Metals	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		03/20/24 0948	03/21/24 2126	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/21/24 2126	RVV
Barium, total	**0.0389**	0.0040	mg/L	4		03/20/24 0948	03/21/24 2126	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/21/24 2126	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		03/20/24 0948	03/21/24 2126	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/20/24 0948	03/21/24 2126	RVV
Cobalt, total	**0.0012**	0.0004	mg/L	4		03/20/24 0948	03/21/24 2126	RVV
Copper, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/21/24 2126	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/21/24 2126	RVV
Nickel, total	**0.0066**	0.0040	mg/L	4		03/20/24 0948	03/21/24 2126	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/21/24 2126	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/21/24 2126	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/20/24 0948	03/21/24 2126	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/20/24 0948	03/21/24 2126	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		03/20/24 0948	03/21/24 2126	RVV

Client Sample ID:	MW98-28			
Sample Matrix:	Water		**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC1004-03		**Collection Date:**	03/12/2024 13:30

Determination of Volatile Organic Compounds	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1959	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1959	CSM
Bromomethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1959	CSM
Chloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1959	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1959	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1959	CSM
Acetone	<10.0	10.0	ug/L	1		03/15/24 0000	03/15/24 1959	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1959	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1959	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1959	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1959	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1959	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1959	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1959	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1959	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/15/24 0000	03/15/24 1959	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1959	CSM
Chloroform	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1959	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1959	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1959	CSM
Benzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1959	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1959	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1959	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1959	CSM
Dibromomethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1959	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1959	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1959	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1959	CSM
Toluene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1959	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1959	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1959	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1959	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1959	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1959	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1959	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1959	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1959	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1959	CSM
Xylenes, total	<2.0	2.0	ug/L	1		03/15/24 0000	03/15/24 1959	CSM
Styrene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1959	CSM
Bromoform	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1959	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1959	CSM

Client Sample ID:	MW98-28		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC1004-03	**Collection Date:**	03/12/2024 13:30

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1959	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1959	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1959	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 1959	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 1959	CSM
Surrogate: Dibromofluoromethane	72.4	Limit: 75-136	% Rec	1	**S-GC**	03/15/24 0000	03/15/24 1959	CSM
Surrogate: Dibromofluoromethane	72.4	Limit: 80-126	% Rec	1	**S-GC**	03/15/24 0000	03/15/24 1959	CSM
Surrogate: 1,2-Dichloroethane-d4	71.0	Limit: 61-142	% Rec	1		03/15/24 0000	03/15/24 1959	CSM
Surrogate: 1,2-Dichloroethane-d4	71.0	Limit: 63-138	% Rec	1		03/15/24 0000	03/15/24 1959	CSM
Surrogate: Toluene-d8	105	Limit: 87-116	% Rec	1		03/15/24 0000	03/15/24 1959	CSM
Surrogate: Toluene-d8	105	Limit: 82-121	% Rec	1		03/15/24 0000	03/15/24 1959	CSM
Surrogate: 4-Bromofluorobenzene	85.2	Limit: 80-116	% Rec	1		03/15/24 0000	03/15/24 1959	CSM
Surrogate: 4-Bromofluorobenzene	85.2	Limit: 85-111	% Rec	1		03/15/24 0000	03/15/24 1959	CSM

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		03/20/24 0948	03/21/24 2132	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/21/24 2132	RVV
Barium, total	**0.246**	0.0040	mg/L	4		03/20/24 0948	03/21/24 2132	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/21/24 2132	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		03/20/24 0948	03/21/24 2132	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/20/24 0948	03/21/24 2132	RVV
Cobalt, total	**0.0008**	0.0004	mg/L	4		03/20/24 0948	03/21/24 2132	RVV
Copper, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/21/24 2132	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/21/24 2132	RVV
Nickel, total	**0.0058**	0.0040	mg/L	4		03/20/24 0948	03/21/24 2132	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/21/24 2132	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/21/24 2132	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/20/24 0948	03/21/24 2132	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/20/24 0948	03/21/24 2132	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		03/20/24 0948	03/21/24 2132	RVV

Client Sample ID:	MW02-30A			
Sample Matrix:	Water		**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC1004-04		**Collection Date:**	03/12/2024 12:05

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2026	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2026	CSM
Bromomethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2026	CSM
Chloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2026	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2026	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2026	CSM
Acetone	<10.0	10.0	ug/L	1		03/15/24 0000	03/15/24 2026	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2026	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2026	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 2026	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 2026	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2026	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2026	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 2026	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2026	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/15/24 0000	03/15/24 2026	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2026	CSM
Chloroform	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2026	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2026	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2026	CSM
Benzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2026	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2026	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2026	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2026	CSM
Dibromomethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2026	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2026	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2026	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 2026	CSM
Toluene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2026	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2026	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2026	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2026	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 2026	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2026	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2026	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2026	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2026	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2026	CSM
Xylenes, total	<2.0	2.0	ug/L	1		03/15/24 0000	03/15/24 2026	CSM
Styrene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2026	CSM
Bromoform	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2026	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2026	CSM

Client Sample ID:	MW02-30A		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC1004-04	**Collection Date:**	03/12/2024 12:05

Determination of Volatile Organic Compounds	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 2026	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2026	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2026	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2026	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 2026	CSM
Surrogate: Dibromofluoromethane	75.1	Limit: 80-126	% Rec	1	**S-GC**	03/15/24 0000	03/15/24 2026	CSM
Surrogate: Dibromofluoromethane	75.1	Limit: 75-136	% Rec	1		03/15/24 0000	03/15/24 2026	CSM
Surrogate: 1,2-Dichloroethane-d4	72.6	Limit: 63-138	% Rec	1		03/15/24 0000	03/15/24 2026	CSM
Surrogate: 1,2-Dichloroethane-d4	72.6	Limit: 61-142	% Rec	1		03/15/24 0000	03/15/24 2026	CSM
Surrogate: Toluene-d8	104	Limit: 87-116	% Rec	1		03/15/24 0000	03/15/24 2026	CSM
Surrogate: Toluene-d8	104	Limit: 82-121	% Rec	1		03/15/24 0000	03/15/24 2026	CSM
Surrogate: 4-Bromofluorobenzene	83.5	Limit: 85-111	% Rec	1	**S-GC**	03/15/24 0000	03/15/24 2026	CSM
Surrogate: 4-Bromofluorobenzene	83.5	Limit: 80-116	% Rec	1		03/15/24 0000	03/15/24 2026	CSM

Determination of Total Metals	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		03/20/24 0948	03/21/24 2138	RVV
Arsenic, total	**0.0443**	0.0040	mg/L	4		03/20/24 0948	03/21/24 2138	RVV
Barium, total	**0.120**	0.0040	mg/L	4		03/20/24 0948	03/21/24 2138	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/21/24 2138	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		03/20/24 0948	03/21/24 2138	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/20/24 0948	03/21/24 2138	RVV
Cobalt, total	**0.0006**	0.0004	mg/L	4		03/20/24 0948	03/21/24 2138	RVV
Copper, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/21/24 2138	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/21/24 2138	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/21/24 2138	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/21/24 2138	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/21/24 2138	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/20/24 0948	03/21/24 2138	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/20/24 0948	03/21/24 2138	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		03/20/24 0948	03/21/24 2138	RVV

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HC1004

Client Sample ID:	MW88-2		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC1004-05	**Collection Date:**	03/12/2024 11:10

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2052	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2052	CSM
Bromomethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2052	CSM
Chloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2052	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2052	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2052	CSM
Acetone	<10.0	10.0	ug/L	1		03/15/24 0000	03/15/24 2052	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2052	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2052	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 2052	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 2052	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2052	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2052	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 2052	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2052	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/15/24 0000	03/15/24 2052	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2052	CSM
Chloroform	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2052	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2052	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2052	CSM
Benzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2052	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2052	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2052	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2052	CSM
Dibromomethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2052	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2052	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2052	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 2052	CSM
Toluene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2052	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2052	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2052	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2052	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 2052	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2052	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2052	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2052	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2052	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2052	CSM
Xylenes, total	<2.0	2.0	ug/L	1		03/15/24 0000	03/15/24 2052	CSM
Styrene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2052	CSM
Bromoform	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2052	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2052	CSM

Client Sample ID:	MW88-2			
Sample Matrix:	Water		**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC1004-05		**Collection Date:**	03/12/2024 11:10

Determination of Volatile Organic Compounds	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 2052	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2052	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2052	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2052	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 2052	CSM
Surrogate: Dibromofluoromethane	70.1	Limit: 80-126	% Rec	1	**S-GC**	03/15/24 0000	03/15/24 2052	CSM
Surrogate: Dibromofluoromethane	70.1	Limit: 75-136	% Rec	1	**S-GC**	03/15/24 0000	03/15/24 2052	CSM
Surrogate: 1,2-Dichloroethane-d4	66.8	Limit: 63-138	% Rec	1		03/15/24 0000	03/15/24 2052	CSM
Surrogate: 1,2-Dichloroethane-d4	66.8	Limit: 61-142	% Rec	1		03/15/24 0000	03/15/24 2052	CSM
Surrogate: Toluene-d8	105	Limit: 82-121	% Rec	1		03/15/24 0000	03/15/24 2052	CSM
Surrogate: Toluene-d8	105	Limit: 87-116	% Rec	1		03/15/24 0000	03/15/24 2052	CSM
Surrogate: 4-Bromofluorobenzene	84.2	Limit: 80-116	% Rec	1		03/15/24 0000	03/15/24 2052	CSM
Surrogate: 4-Bromofluorobenzene	84.2	Limit: 85-111	% Rec	1	**S-GC**	03/15/24 0000	03/15/24 2052	CSM

Determination of Total Metals	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		03/20/24 0948	03/22/24 0817	RVV
Arsenic, total	**0.0127**	0.0040	mg/L	4		03/20/24 0948	03/22/24 0817	RVV
Barium, total	**0.270**	0.0040	mg/L	4		03/20/24 0948	03/22/24 0817	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0817	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		03/20/24 0948	03/22/24 0817	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/20/24 0948	03/22/24 0817	RVV
Cobalt, total	**0.0008**	0.0004	mg/L	4		03/20/24 0948	03/22/24 0817	RVV
Copper, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0817	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0817	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0817	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0817	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0817	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/20/24 0948	03/22/24 0817	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/20/24 0948	03/22/24 0817	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		03/20/24 0948	03/22/24 0817	RVV

Client Sample ID:	MW94-18		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC1004-06	**Collection Date:**	03/12/2024 8:15

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2118	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2118	CSM
Bromomethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2118	CSM
Chloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2118	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2118	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2118	CSM
Acetone	<10.0	10.0	ug/L	1		03/15/24 0000	03/15/24 2118	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2118	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2118	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 2118	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 2118	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2118	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2118	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 2118	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2118	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/15/24 0000	03/15/24 2118	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2118	CSM
Chloroform	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2118	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2118	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2118	CSM
Benzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2118	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2118	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2118	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2118	CSM
Dibromomethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2118	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2118	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2118	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 2118	CSM
Toluene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2118	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2118	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2118	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2118	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 2118	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2118	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2118	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2118	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2118	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2118	CSM
Xylenes, total	<2.0	2.0	ug/L	1		03/15/24 0000	03/15/24 2118	CSM
Styrene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2118	CSM
Bromoform	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2118	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2118	CSM

Client Sample ID:	MW94-18		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC1004-06	**Collection Date:**	03/12/2024 8:15

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 2118	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2118	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2118	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/15/24 0000	03/15/24 2118	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/15/24 0000	03/15/24 2118	CSM
Surrogate: Dibromofluoromethane	72.0	Limit: 75-136	% Rec	1	**S-GC**	03/15/24 0000	03/15/24 2118	CSM
Surrogate: Dibromofluoromethane	72.0	Limit: 80-126	% Rec	1	**S-GC**	03/15/24 0000	03/15/24 2118	CSM
Surrogate: 1,2-Dichloroethane-d4	69.2	Limit: 61-142	% Rec	1		03/15/24 0000	03/15/24 2118	CSM
Surrogate: 1,2-Dichloroethane-d4	69.2	Limit: 63-138	% Rec	1		03/15/24 0000	03/15/24 2118	CSM
Surrogate: Toluene-d8	105	Limit: 82-121	% Rec	1		03/15/24 0000	03/15/24 2118	CSM
Surrogate: Toluene-d8	105	Limit: 87-116	% Rec	1		03/15/24 0000	03/15/24 2118	CSM
Surrogate: 4-Bromofluorobenzene	84.2	Limit: 80-116	% Rec	1		03/15/24 0000	03/15/24 2118	CSM
Surrogate: 4-Bromofluorobenzene	84.2	Limit: 85-111	% Rec	1	**S-GC**	03/15/24 0000	03/15/24 2118	CSM

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		03/20/24 0948	03/22/24 0824	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0824	RVV
Barium, total	**0.0244**	0.0040	mg/L	4		03/20/24 0948	03/22/24 0824	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0824	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		03/20/24 0948	03/22/24 0824	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/20/24 0948	03/22/24 0824	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		03/20/24 0948	03/22/24 0824	RVV
Copper, total	**0.0057**	0.0040	mg/L	4		03/20/24 0948	03/22/24 0824	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0824	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0824	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0824	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0824	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/20/24 0948	03/22/24 0824	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/20/24 0948	03/22/24 0824	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		03/20/24 0948	03/22/24 0824	RVV

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HC1004

Client Sample ID:	MW09-40		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC1004-07	**Collection Date:**	03/12/2024 8:34

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1450	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1450	CSM
Bromomethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1450	CSM
Chloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1450	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1450	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1450	CSM
Acetone	<10.0	10.0	ug/L	1		03/18/24 0000	03/18/24 1450	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1450	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1450	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1450	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1450	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1450	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1450	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1450	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1450	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/18/24 0000	03/18/24 1450	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1450	CSM
Chloroform	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1450	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1450	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1450	CSM
Benzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1450	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1450	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1450	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1450	CSM
Dibromomethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1450	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1450	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1450	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1450	CSM
Toluene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1450	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1450	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1450	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1450	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1450	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1450	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1450	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1450	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1450	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1450	CSM
Xylenes, total	<2.0	2.0	ug/L	1		03/18/24 0000	03/18/24 1450	CSM
Styrene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1450	CSM
Bromoform	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1450	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1450	CSM

Client Sample ID:	MW09-40			
Sample Matrix:	Water		**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC1004-07		**Collection Date:**	03/12/2024 8:34

Determination of Volatile Organic Compounds	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1450	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1450	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1450	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1450	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1450	CSM
Surrogate: Dibromofluoromethane	50.3	Limit: 75-136	% Rec	1	**S-GC**	03/18/24 0000	03/18/24 1450	CSM
Surrogate: Dibromofluoromethane	50.3	Limit: 80-126	% Rec	1	**S-GC**	03/18/24 0000	03/18/24 1450	CSM
Surrogate: 1,2-Dichloroethane-d4	48.3	Limit: 63-138	% Rec	1	**S-GC**	03/18/24 0000	03/18/24 1450	CSM
Surrogate: 1,2-Dichloroethane-d4	48.3	Limit: 61-142	% Rec	1	**S-GC**	03/18/24 0000	03/18/24 1450	CSM
Surrogate: Toluene-d8	104	Limit: 87-116	% Rec	1		03/18/24 0000	03/18/24 1450	CSM
Surrogate: Toluene-d8	104	Limit: 82-121	% Rec	1		03/18/24 0000	03/18/24 1450	CSM
Surrogate: 4-Bromofluorobenzene	84.1	Limit: 80-116	% Rec	1		03/18/24 0000	03/18/24 1450	CSM
Surrogate: 4-Bromofluorobenzene	84.1	Limit: 85-111	% Rec	1	**S-GC**	03/18/24 0000	03/18/24 1450	CSM

Determination of Total Metals	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		03/20/24 0948	03/22/24 0830	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0830	RVV
Barium, total	**0.0213**	0.0040	mg/L	4		03/20/24 0948	03/22/24 0830	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0830	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		03/20/24 0948	03/22/24 0830	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/20/24 0948	03/22/24 0830	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		03/20/24 0948	03/22/24 0830	RVV
Copper, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0830	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0830	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0830	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0830	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0830	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/20/24 0948	03/22/24 0830	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/20/24 0948	03/22/24 0830	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		03/20/24 0948	03/22/24 0830	RVV

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CERTIFICATE OF ANALYSIS

1HC1004

Client Sample ID:	MW91-10			
Sample Matrix:	Water		**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC1004-08		**Collection Date:**	03/12/2024 8:50

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1516	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1516	CSM
Bromomethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1516	CSM
Chloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1516	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1516	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1516	CSM
Acetone	<10.0	10.0	ug/L	1		03/18/24 0000	03/18/24 1516	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1516	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1516	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1516	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1516	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1516	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1516	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1516	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1516	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/18/24 0000	03/18/24 1516	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1516	CSM
Chloroform	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1516	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1516	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1516	CSM
Benzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1516	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1516	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1516	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1516	CSM
Dibromomethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1516	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1516	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1516	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1516	CSM
Toluene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1516	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1516	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1516	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1516	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1516	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1516	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1516	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1516	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1516	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1516	CSM
Xylenes, total	<2.0	2.0	ug/L	1		03/18/24 0000	03/18/24 1516	CSM
Styrene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1516	CSM
Bromoform	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1516	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1516	CSM

Client Sample ID:	MW91-10			
Sample Matrix:	Water		**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC1004-08		**Collection Date:**	03/12/2024 8:50

Determination of Volatile Organic Compounds	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1516	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1516	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1516	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1516	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1516	CSM
Surrogate: Dibromofluoromethane	64.2	Limit: 80-126	% Rec	1	**S-GC**	03/18/24 0000	03/18/24 1516	CSM
Surrogate: Dibromofluoromethane	64.2	Limit: 75-136	% Rec	1	**S-GC**	03/18/24 0000	03/18/24 1516	CSM
Surrogate: 1,2-Dichloroethane-d4	60.5	Limit: 63-138	% Rec	1	**S-GC**	03/18/24 0000	03/18/24 1516	CSM
Surrogate: 1,2-Dichloroethane-d4	60.5	Limit: 61-142	% Rec	1	**S-GC**	03/18/24 0000	03/18/24 1516	CSM
Surrogate: Toluene-d8	103	Limit: 82-121	% Rec	1		03/18/24 0000	03/18/24 1516	CSM
Surrogate: Toluene-d8	103	Limit: 87-116	% Rec	1		03/18/24 0000	03/18/24 1516	CSM
Surrogate: 4-Bromofluorobenzene	88.2	Limit: 80-116	% Rec	1		03/18/24 0000	03/18/24 1516	CSM
Surrogate: 4-Bromofluorobenzene	88.2	Limit: 85-111	% Rec	1		03/18/24 0000	03/18/24 1516	CSM

Determination of Total Metals	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		03/20/24 0948	03/22/24 0836	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0836	RVV
Barium, total	**0.0407**	0.0040	mg/L	4		03/20/24 0948	03/22/24 0836	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0836	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		03/20/24 0948	03/22/24 0836	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/20/24 0948	03/22/24 0836	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		03/20/24 0948	03/22/24 0836	RVV
Copper, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0836	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0836	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0836	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0836	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0836	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/20/24 0948	03/22/24 0836	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/20/24 0948	03/22/24 0836	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		03/20/24 0948	03/22/24 0836	RVV

Client Sample ID:	MW96-21		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC1004-09	**Collection Date:**	03/12/2024 7:40

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		03/18/24 0000	03/18/24 1542	CSM
Chloromethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1542	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1542	CSM
Bromomethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1542	CSM
Chloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1542	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1542	CSM
Acrolein	<10.0	10.0	ug/L	1		03/18/24 0000	03/18/24 1542	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1542	CSM
Acetone	<10.0	10.0	ug/L	1		03/18/24 0000	03/18/24 1542	CSM
Methyl Iodide	<2.0	2.0	ug/L	1		03/18/24 0000	03/18/24 1542	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1542	CSM
Acetonitrile	<10.0	10.0	ug/L	1		03/18/24 0000	03/18/24 1542	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1542	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1542	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1542	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1542	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1542	CSM
2,2-Dichloropropane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1542	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1542	CSM
2-Butanone (MEK)	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1542	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1542	CSM
Chloroform	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1542	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1542	CSM
1,1-Dichloropropene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1542	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1542	CSM
Benzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1542	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1542	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1542	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1542	CSM
Dibromomethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1542	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1542	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1542	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1542	CSM
Toluene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1542	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1542	CSM
Ethyl Methacrylate	<10.0	10.0	ug/L	1		03/18/24 0000	03/18/24 1542	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1542	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1542	CSM
1,3-Dichloropropane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1542	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1542	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1542	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1542	CSM

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CERTIFICATE OF ANALYSIS

1HC1004

Client Sample ID:	MW96-21			
Sample Matrix:	Water		**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC1004-09		**Collection Date:**	03/12/2024 7:40

Determination of Volatile Organic Compounds	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
Chlorobenzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1542	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1542	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1542	CSM
Xylenes, total	<2.0	2.0	ug/L	1		03/18/24 0000	03/18/24 1542	CSM
Styrene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1542	CSM
Bromoform	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1542	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1542	CSM
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1542	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1542	CSM
1,3-Dichlorobenzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1542	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1542	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1542	CSM
1,2-Dibromo-3-chloropropane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1542	CSM
1,2,4-Trichlorobenzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1542	CSM
Allyl chloride	<1.0	1.0	ug/L	1		03/22/24 0000	03/22/24 1226	CSM
Chloroprene	<1.0	1.0	ug/L	1		03/22/24 0000	03/22/24 1226	CSM
Methacrylonitrile	<1.0	1.0	ug/L	1		03/22/24 0000	03/22/24 1226	CSM
Methyl Methacrylate	<1.0	1.0	ug/L	1		03/22/24 0000	03/22/24 1226	CSM
Propionitrile	<10.0	10.0	ug/L	1		03/22/24 0000	03/22/24 1226	CSM
Surrogate: Dibromofluoromethane	67.4	Limit: 80-126	% Rec	1	**S-GC**	03/18/24 0000	03/18/24 1542	CSM
Surrogate: Dibromofluoromethane	91.4	Limit: 80-126	% Rec	1		03/22/24 0000	03/22/24 1226	CSM
Surrogate: 1,2-Dichloroethane-d4	64.7	Limit: 63-138	% Rec	1		03/18/24 0000	03/18/24 1542	CSM
Surrogate: 1,2-Dichloroethane-d4	94.6	Limit: 63-138	% Rec	1		03/22/24 0000	03/22/24 1226	CSM
Surrogate: 1,2-Dichloroethane-d4	64.7	Limit: 63-138	% Rec	1		03/18/24 0000	03/18/24 1542	CSM
Surrogate: Toluene-d8	104	Limit: 87-116	% Rec	1		03/18/24 0000	03/18/24 1542	CSM
Surrogate: Toluene-d8	104	Limit: 87-116	% Rec	1		03/18/24 0000	03/18/24 1542	CSM
Surrogate: Toluene-d8	97.0	Limit: 87-116	% Rec	1		03/22/24 0000	03/22/24 1226	CSM
Surrogate: 4-Bromofluorobenzene	85.8	Limit: 85-111	% Rec	1		03/18/24 0000	03/18/24 1542	CSM
Surrogate: 4-Bromofluorobenzene	96.9	Limit: 85-111	% Rec	1		03/22/24 0000	03/22/24 1226	CSM
Surrogate: 4-Bromofluorobenzene	85.8	Limit: 85-111	% Rec	1		03/18/24 0000	03/18/24 1542	CSM

Determination of General Solvents	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
EPA 8015C								
Isobutanol	<1.0	1.0	mg/L	1		03/26/24 1211	03/26/24 1532	PDS

Determination of Base/Neutral/Acid Extractable Compounds	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
EPA 3520C/EPA 8270C								
N-Nitrosodimethylamine	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
Methyl Methanesulfonate	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
N-Nitrosodiethylamine	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
N-Nitrosomethylethylamine	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
Ethyl Methanesulfonate	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
Phenol	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP

Client Sample ID:	MW96-21			
Sample Matrix:	Water		**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC1004-09		**Collection Date:**	03/12/2024 7:40

Determination of Base/Neutral/Acid Extractable Compounds	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
Bis(2-Chloroethyl) Ether	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
2-Chlorophenol	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
Benzyl Alcohol	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
2-Methylphenol (o-Cresol)	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
Bis[2-Chloroisopropyl]ether	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
n-Nitroso-di-n-propylamine	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
N-Nitrosopyrrolidine	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
Acetophenone	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
o-Toluidine	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
(3 & 4)-Methylphenol	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
Hexachloroethane	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
Nitrobenzene	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
N-Nitrosopiperidine	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
Isophorone	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
2-Nitrophenol	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
2,4-Dimethylphenol	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
Bis (2-Chloroethoxy) Methane	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
2,4-Dichlorophenol	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
Naphthalene	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
4-Chloroaniline	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
2,6-Dichlorophenol	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
Hexachloropropene	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
Hexachlorobutadiene	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
N-Nitrosodi-n-butylamine	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
1,4-Phenylenediamine	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
4-Chloro-3-methylphenol	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
2-Methylnaphthalene	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
Isosafrole	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
1,2,4,5-Tetrachlorobenzene	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
Hexachlorocyclopentadiene	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
2,4,6-Trichlorophenol	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
2,4,5-Trichlorophenol	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
Safrole	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
2-Chloronaphthalene	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
2-Nitroaniline	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
1,4-Naphthoquinone	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
Dimethylphthalate	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
1,3-Dinitrobenzene	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
1,2-Dinitrobenzene	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
2,6-Dinitrotoluene	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
Acenaphthylene	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
3-Nitroaniline	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
Acenaphthene	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP

Client Sample ID:	MW96-21			
Sample Matrix:	Water		**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC1004-09		**Collection Date:**	03/12/2024 7:40

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
2,4-Dinitrophenol	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
4-Nitrophenol	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
Dibenzofuran	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
2,4-Dinitrotoluene	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
2,3,4,6-Tetrachlorophenol	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
Pentachlorobenzene	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
1-Naphthylamine	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
2-Naphthylamine	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
Diethyl Phthalate	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
Fluorene	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
4-Chlorophenyl Phenyl Ether	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
4-Nitroaniline	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
5-Nitro-o-toluidine	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
4,6-Dinitro-2-methylphenol	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
N-Nitrosodiphenylamine	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
Diphenylamine	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
Azobenzene	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
Diallate	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
1,3,5-Trinitrobenzene	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
Phenacetin	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
4-Bromophenyl Phenyl Ether	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
4-Aminobiphenyl	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
Pentachlorophenol	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
Pronamide	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
Pentachloronitrobenzene (PCNB)	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
Phenanthrene	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
Anthracene	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
Di-n-butyl Phthalate	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
Methapyrilene	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
Fluoranthene	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
Isodrin	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
Chlorobenzilate	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
Pyrene	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
p-(Dimethylamino)azobenzene	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
3,3-Dimethylbenzidine	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
Butyl Benzyl Phthalate	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
Benzo(a)anthracene	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
Chrysene	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
Bis(2-Ethylhexyl) Phthalate	<6	6	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
Kepone	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
3,3´-Dichlorobenzidine	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
2-Acetylaminofluorene	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
Di-n-octyl Phthalate	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP

Client Sample ID:	MW96-21		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC1004-09	**Collection Date:**	03/12/2024 7:40

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Benzo(b)Fluoranthene	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
7,12-Dimethylbenz [a] anthracene	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
Benzo(k)Fluoranthene	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
Benzo(a)Pyrene	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
3-Methylcholanthrene	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
Dibenzo(a,h)anthracene	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
Indeno(1,2,3-cd)Pyrene	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
Benzo(g,h,i)perylene	<8	8	ug/L	1		03/19/24 1409	03/27/24 1308	EPP
Surrogate: 2-Fluorophenol	53.5	Limit: 24-136	% Rec	1		03/19/24 1409	03/27/24 1308	EPP
Surrogate: Phenol-d6	52.4	Limit: 15-140	% Rec	1		03/19/24 1409	03/27/24 1308	EPP
Surrogate: Nitrobenzene-d5	51.8	Limit: 29-130	% Rec	1		03/19/24 1409	03/27/24 1308	EPP
Surrogate: 2-Fluorobiphenyl	48.5	Limit: 23-113	% Rec	1		03/19/24 1409	03/27/24 1308	EPP
Surrogate: 2,4,6-Tribromophenol	61.6	Limit: 15-139	% Rec	1		03/19/24 1409	03/27/24 1308	EPP
Surrogate: Terphenyl-dl4	58.0	Limit: 27-141	% Rec	1		03/19/24 1409	03/27/24 1308	EPP

Determination of Organophosphorus Insecticides	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3510C/EPA 8141								
O,O,O-Triethyl phosphorothioate	<0.4	0.4	ug/L	1		03/19/24 1245	04/01/24 1320	EPP
Thionazin	<0.4	0.4	ug/L	1		03/19/24 1245	04/01/24 1320	EPP
Phorate	<0.4	0.4	ug/L	1		03/19/24 1245	04/01/24 1320	EPP
Dimethoate	<0.4	0.4	ug/L	1		03/19/24 1245	04/01/24 1320	EPP
Disulfoton	<0.4	0.4	ug/L	1		03/19/24 1245	04/01/24 1320	EPP
Methyl Parathion	<0.4	0.4	ug/L	1		03/19/24 1245	04/01/24 1320	EPP
Parathion	<0.4	0.4	ug/L	1		03/19/24 1245	04/01/24 1320	EPP
Famphur	<0.4	0.4	ug/L	1		03/19/24 1245	04/01/24 1320	EPP
Surrogate: 2-Nitro-m-xylene	83.0	Limit: 38-122	% Rec	1		03/19/24 1245	04/01/24 1320	EPP

Determination of Chlorinated Phenoxy Herbicides	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 8151A								
2,4-D	<2.0	2.0	ug/L	1		03/19/24 1110	03/26/24 0020	EPP
2,4,5-TP (Silvex)	<0.5	0.5	ug/L	1		03/19/24 1110	03/26/24 0020	EPP
2,4,5-T	<0.5	0.5	ug/L	1		03/19/24 1110	03/26/24 0020	EPP
Dinoseb	<0.5	0.5	ug/L	1		03/19/24 1110	03/26/24 0020	EPP
Surrogate: 2,5-Dichlorobenzoic Acid	89.6	Limit: 31-116	% Rec	1		03/19/24 1110	03/26/24 0020	EPP

Determination of Organochlorine Insecticides & Metabolites	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3510C/EPA 8081								
Alpha-BHC	<0.05	0.05	ug/L	1		03/19/24 1240	03/29/24 1542	EPP
Gamma-BHC [Lindane]	<0.05	0.05	ug/L	1		03/19/24 1240	03/29/24 1542	EPP
Beta-BHC	<0.05	0.05	ug/L	1		03/19/24 1240	03/29/24 1542	EPP
Heptachlor	<0.05	0.05	ug/L	1		03/19/24 1240	03/29/24 1542	EPP

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HC1004

Client Sample ID:	MW96-21		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC1004-09	**Collection Date:**	03/12/2024 7:40

Determination of Organochlorine Insecticides & Metabolites	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
Delta-BHC	<0.05	0.05	ug/L	1		03/19/24 1240	03/29/24 1542	EPP
Aldrin	<0.05	0.05	ug/L	1		03/19/24 1240	03/29/24 1542	EPP
Heptachlor Epoxide	<0.05	0.05	ug/L	1		03/19/24 1240	03/29/24 1542	EPP
Endosulfan I	<0.05	0.05	ug/L	1		03/19/24 1240	03/29/24 1542	EPP
4,4`-DDE	<0.05	0.05	ug/L	1		03/19/24 1240	03/29/24 1542	EPP
Dieldrin	<0.05	0.05	ug/L	1		03/19/24 1240	03/29/24 1542	EPP
Endrin	<0.05	0.05	ug/L	1		03/19/24 1240	03/29/24 1542	EPP
4,4`-DDD	<0.05	0.05	ug/L	1		03/19/24 1240	03/29/24 1542	EPP
Endosulfan II	<0.05	0.05	ug/L	1		03/19/24 1240	03/29/24 1542	EPP
4,4`-DDT	<0.05	0.05	ug/L	1		03/19/24 1240	03/29/24 1542	EPP
Endrin Aldehyde	<0.05	0.05	ug/L	1		03/19/24 1240	03/29/24 1542	EPP
Endosulfan Sulfate	<0.05	0.05	ug/L	1		03/19/24 1240	03/29/24 1542	EPP
Methoxychlor	<0.05	0.05	ug/L	1		03/19/24 1240	03/29/24 1542	EPP
Chlordane	<0.10	0.10	ug/L	1		03/19/24 1240	03/29/24 1542	EPP
Toxaphene	<0.20	0.20	ug/L	1		03/19/24 1240	03/29/24 1542	EPP
Hexachlorobenzene	<0.05	0.05	ug/L	1		03/19/24 1240	03/29/24 1542	EPP
Surrogate: Tetrachloro-m-xylene	83.9	Limit: 10-121	% Rec	1		03/19/24 1240	03/29/24 1542	EPP

Determination of Polychlorinated Biphenyls (PCB)	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
EPA 3510C/EPA 8082								
Arochlor 1016	<0.20	0.20	ug/L	1		03/19/24 1242	03/29/24 1542	EPP
Arochlor 1221	<0.20	0.20	ug/L	1		03/19/24 1242	03/29/24 1542	EPP
Arochlor 1232	<0.20	0.20	ug/L	1		03/19/24 1242	03/29/24 1542	EPP
Arochlor 1242	<0.20	0.20	ug/L	1		03/19/24 1242	03/29/24 1542	EPP
Arochlor 1248	<0.20	0.20	ug/L	1		03/19/24 1242	03/29/24 1542	EPP
Arochlor 1254	<0.20	0.20	ug/L	1		03/19/24 1242	03/29/24 1542	EPP
Arochlor 1260	<0.20	0.20	ug/L	1		03/19/24 1242	03/29/24 1542	EPP
Surrogate: Tetrachloro-m-xylene	91.1	Limit: 38-121	% Rec	1		03/19/24 1242	03/29/24 1542	EPP
Surrogate: Decachlorobiphenyl	31.8	Limit: 25-119	% Rec	1		03/19/24 1242	03/29/24 1542	EPP

Determination of Conventional Chemistry Parameters	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
EPA 376.2								
Sulfide, total	<0.15	0.15	mg/L	1		03/15/24 1329	03/15/24 1457	CHP
EPA 9010B								
Cyanide, total	<0.005	0.005	mg/L	1		03/25/24 1659	03/26/24 1600	CHP

CERTIFICATE OF ANALYSIS

1HC1004

Client Sample ID:	MW96-24		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC1004-10	**Collection Date:**	03/12/2024 9:25

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1609	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1609	CSM
Bromomethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1609	CSM
Chloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1609	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1609	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1609	CSM
Acetone	<10.0	10.0	ug/L	1		03/18/24 0000	03/18/24 1609	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1609	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1609	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1609	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1609	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1609	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1609	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1609	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1609	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/18/24 0000	03/18/24 1609	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1609	CSM
Chloroform	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1609	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1609	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1609	CSM
Benzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1609	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1609	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1609	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1609	CSM
Dibromomethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1609	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1609	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1609	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1609	CSM
Toluene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1609	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1609	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1609	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1609	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1609	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1609	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1609	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1609	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1609	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1609	CSM
Xylenes, total	<2.0	2.0	ug/L	1		03/18/24 0000	03/18/24 1609	CSM
Styrene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1609	CSM
Bromoform	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1609	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1609	CSM

CERTIFICATE OF ANALYSIS

1HC1004

Client Sample ID:	MW96-24		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC1004-10	**Collection Date:**	03/12/2024 9:25

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1609	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1609	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1609	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1609	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1609	CSM
Surrogate: Dibromofluoromethane	67.1	Limit: 80-126	% Rec	1	**S-GC**	03/18/24 0000	03/18/24 1609	CSM
Surrogate: Dibromofluoromethane	67.1	Limit: 75-136	% Rec	1	**S-GC**	03/18/24 0000	03/18/24 1609	CSM
Surrogate: 1,2-Dichloroethane-d4	64.1	Limit: 63-138	% Rec	1		03/18/24 0000	03/18/24 1609	CSM
Surrogate: 1,2-Dichloroethane-d4	64.1	Limit: 61-142	% Rec	1		03/18/24 0000	03/18/24 1609	CSM
Surrogate: Toluene-d8	104	Limit: 82-121	% Rec	1		03/18/24 0000	03/18/24 1609	CSM
Surrogate: Toluene-d8	104	Limit: 87-116	% Rec	1		03/18/24 0000	03/18/24 1609	CSM
Surrogate: 4-Bromofluorobenzene	86.3	Limit: 85-111	% Rec	1		03/18/24 0000	03/18/24 1609	CSM
Surrogate: 4-Bromofluorobenzene	86.3	Limit: 80-116	% Rec	1		03/18/24 0000	03/18/24 1609	CSM

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		03/20/24 0948	03/22/24 0842	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0842	RVV
Barium, total	**0.541**	0.0040	mg/L	4		03/20/24 0948	03/22/24 0842	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0842	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		03/20/24 0948	03/22/24 0842	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/20/24 0948	03/22/24 0842	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		03/20/24 0948	03/22/24 0842	RVV
Copper, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0842	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0842	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0842	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0842	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0842	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/20/24 0948	03/22/24 0842	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/20/24 0948	03/22/24 0842	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		03/20/24 0948	03/22/24 0842	RVV

Client Sample ID:	MW88-3		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC1004-11	**Collection Date:**	03/12/2024 10:29

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1635	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1635	CSM
Bromomethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1635	CSM
Chloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1635	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1635	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1635	CSM
Acetone	<10.0	10.0	ug/L	1		03/18/24 0000	03/18/24 1635	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1635	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1635	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1635	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1635	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1635	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1635	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1635	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1635	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/18/24 0000	03/18/24 1635	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1635	CSM
Chloroform	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1635	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1635	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1635	CSM
Benzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1635	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1635	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1635	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1635	CSM
Dibromomethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1635	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1635	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1635	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1635	CSM
Toluene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1635	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1635	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1635	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1635	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1635	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1635	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1635	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1635	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1635	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1635	CSM
Xylenes, total	<2.0	2.0	ug/L	1		03/18/24 0000	03/18/24 1635	CSM
Styrene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1635	CSM
Bromoform	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1635	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1635	CSM

Client Sample ID:	MW88-3		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC1004-11	**Collection Date:**	03/12/2024 10:29

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1635	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1635	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1635	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1635	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1635	CSM
Surrogate: Dibromofluoromethane	70.4	Limit: 80-126	% Rec	1	**S-GC**	03/18/24 0000	03/18/24 1635	CSM
Surrogate: Dibromofluoromethane	70.4	Limit: 75-136	% Rec	1	**S-GC**	03/18/24 0000	03/18/24 1635	CSM
Surrogate: 1,2-Dichloroethane-d4	67.3	Limit: 61-142	% Rec	1		03/18/24 0000	03/18/24 1635	CSM
Surrogate: 1,2-Dichloroethane-d4	67.3	Limit: 63-138	% Rec	1		03/18/24 0000	03/18/24 1635	CSM
Surrogate: Toluene-d8	104	Limit: 87-116	% Rec	1		03/18/24 0000	03/18/24 1635	CSM
Surrogate: Toluene-d8	104	Limit: 82-121	% Rec	1		03/18/24 0000	03/18/24 1635	CSM
Surrogate: 4-Bromofluorobenzene	85.4	Limit: 80-116	% Rec	1		03/18/24 0000	03/18/24 1635	CSM
Surrogate: 4-Bromofluorobenzene	85.4	Limit: 85-111	% Rec	1		03/18/24 0000	03/18/24 1635	CSM

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		03/20/24 0948	03/22/24 0900	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0900	RVV
Barium, total	**0.134**	0.0040	mg/L	4		03/20/24 0948	03/22/24 0900	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0900	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		03/20/24 0948	03/22/24 0900	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/20/24 0948	03/22/24 0900	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		03/20/24 0948	03/22/24 0900	RVV
Copper, total	**0.0185**	0.0040	mg/L	4		03/20/24 0948	03/22/24 0900	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0900	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0900	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0900	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0900	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/20/24 0948	03/22/24 0900	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/20/24 0948	03/22/24 0900	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		03/20/24 0948	03/22/24 0900	RVV

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Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HC1004

Client Sample ID:	MW96-23			
Sample Matrix:	Water		**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC1004-12		**Collection Date:**	03/12/2024 9:49

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1701	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1701	CSM
Bromomethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1701	CSM
Chloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1701	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1701	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1701	CSM
Acetone	<10.0	10.0	ug/L	1		03/18/24 0000	03/18/24 1701	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1701	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1701	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1701	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1701	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1701	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1701	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1701	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1701	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/18/24 0000	03/18/24 1701	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1701	CSM
Chloroform	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1701	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1701	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1701	CSM
Benzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1701	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1701	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1701	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1701	CSM
Dibromomethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1701	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1701	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1701	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1701	CSM
Toluene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1701	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1701	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1701	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1701	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1701	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1701	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1701	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1701	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1701	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1701	CSM
Xylenes, total	<2.0	2.0	ug/L	1		03/18/24 0000	03/18/24 1701	CSM
Styrene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1701	CSM
Bromoform	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1701	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1701	CSM

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HC1004

Client Sample ID:	MW96-23		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC1004-12	**Collection Date:**	03/12/2024 9:49

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1701	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1701	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1701	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1701	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1701	CSM
Surrogate: Dibromofluoromethane	73.1	Limit: 75-136	% Rec	1	**S-GC**	03/18/24 0000	03/18/24 1701	CSM
Surrogate: Dibromofluoromethane	73.1	Limit: 80-126	% Rec	1	**S-GC**	03/18/24 0000	03/18/24 1701	CSM
Surrogate: 1,2-Dichloroethane-d4	68.6	Limit: 63-138	% Rec	1		03/18/24 0000	03/18/24 1701	CSM
Surrogate: 1,2-Dichloroethane-d4	68.6	Limit: 61-142	% Rec	1		03/18/24 0000	03/18/24 1701	CSM
Surrogate: Toluene-d8	103	Limit: 82-121	% Rec	1		03/18/24 0000	03/18/24 1701	CSM
Surrogate: Toluene-d8	103	Limit: 87-116	% Rec	1		03/18/24 0000	03/18/24 1701	CSM
Surrogate: 4-Bromofluorobenzene	84.9	Limit: 80-116	% Rec	1		03/18/24 0000	03/18/24 1701	CSM
Surrogate: 4-Bromofluorobenzene	84.9	Limit: 85-111	% Rec	1	**S-GC**	03/18/24 0000	03/18/24 1701	CSM

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		03/20/24 0948	03/22/24 0906	RVV
Arsenic, total	**0.0330**	0.0040	mg/L	4		03/20/24 0948	03/22/24 0906	RVV
Barium, total	**0.644**	0.0040	mg/L	4		03/20/24 0948	03/22/24 0906	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0906	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		03/20/24 0948	03/22/24 0906	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/20/24 0948	03/22/24 0906	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		03/20/24 0948	03/22/24 0906	RVV
Copper, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0906	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0906	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0906	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0906	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0906	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/20/24 0948	03/22/24 0906	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/20/24 0948	03/22/24 0906	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		03/20/24 0948	03/22/24 0906	RVV

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HC1004

Client Sample ID:	MW21-43		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC1004-13	**Collection Date:**	03/12/2024 11:40

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1727	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1727	CSM
Bromomethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1727	CSM
Chloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1727	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1727	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1727	CSM
Acetone	<10.0	10.0	ug/L	1		03/18/24 0000	03/18/24 1727	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1727	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1727	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1727	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1727	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1727	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1727	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1727	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1727	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/18/24 0000	03/18/24 1727	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1727	CSM
Chloroform	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1727	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1727	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1727	CSM
Benzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1727	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1727	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1727	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1727	CSM
Dibromomethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1727	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1727	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1727	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1727	CSM
Toluene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1727	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1727	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1727	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1727	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1727	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1727	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1727	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1727	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1727	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1727	CSM
Xylenes, total	<2.0	2.0	ug/L	1		03/18/24 0000	03/18/24 1727	CSM
Styrene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1727	CSM
Bromoform	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1727	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1727	CSM

Client Sample ID:	MW21-43		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC1004-13	**Collection Date:**	03/12/2024 11:40

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1727	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1727	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1727	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1727	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1727	CSM
Surrogate: Dibromofluoromethane	68.2	Limit: 80-126	% Rec	1	**S-GC**	03/18/24 0000	03/18/24 1727	CSM
Surrogate: Dibromofluoromethane	68.2	Limit: 75-136	% Rec	1	**S-GC**	03/18/24 0000	03/18/24 1727	CSM
Surrogate: 1,2-Dichloroethane-d4	64.7	Limit: 61-142	% Rec	1		03/18/24 0000	03/18/24 1727	CSM
Surrogate: 1,2-Dichloroethane-d4	64.7	Limit: 63-138	% Rec	1		03/18/24 0000	03/18/24 1727	CSM
Surrogate: Toluene-d8	105	Limit: 87-116	% Rec	1		03/18/24 0000	03/18/24 1727	CSM
Surrogate: Toluene-d8	105	Limit: 82-121	% Rec	1		03/18/24 0000	03/18/24 1727	CSM
Surrogate: 4-Bromofluorobenzene	84.7	Limit: 85-111	% Rec	1	**S-GC**	03/18/24 0000	03/18/24 1727	CSM
Surrogate: 4-Bromofluorobenzene	84.7	Limit: 80-116	% Rec	1		03/18/24 0000	03/18/24 1727	CSM

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		03/20/24 0948	03/22/24 0913	RVV
Arsenic, total	**0.0064**	0.0040	mg/L	4		03/20/24 0948	03/22/24 0913	RVV
Barium, total	**0.226**	0.0040	mg/L	4		03/20/24 0948	03/22/24 0913	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0913	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		03/20/24 0948	03/22/24 0913	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/20/24 0948	03/22/24 0913	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		03/20/24 0948	03/22/24 0913	RVV
Copper, total	**0.0040**	0.0040	mg/L	4		03/20/24 0948	03/22/24 0913	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0913	RVV
Nickel, total	**0.0064**	0.0040	mg/L	4		03/20/24 0948	03/22/24 0913	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0913	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0913	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/20/24 0948	03/22/24 0913	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/20/24 0948	03/22/24 0913	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		03/20/24 0948	03/22/24 0913	RVV

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HC1004

Client Sample ID:	GU-4		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC1004-14	**Collection Date:**	03/12/2024 10:55

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1754	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1754	CSM
Bromomethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1754	CSM
Chloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1754	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1754	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1754	CSM
Acetone	<10.0	10.0	ug/L	1		03/18/24 0000	03/18/24 1754	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1754	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1754	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1754	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1754	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1754	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1754	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1754	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1754	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/18/24 0000	03/18/24 1754	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1754	CSM
Chloroform	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1754	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1754	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1754	CSM
Benzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1754	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1754	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1754	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1754	CSM
Dibromomethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1754	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1754	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1754	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1754	CSM
Toluene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1754	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1754	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1754	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1754	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1754	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1754	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1754	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1754	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1754	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1754	CSM
Xylenes, total	<2.0	2.0	ug/L	1		03/18/24 0000	03/18/24 1754	CSM
Styrene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1754	CSM
Bromoform	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1754	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1754	CSM

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CERTIFICATE OF ANALYSIS

1HC1004

Client Sample ID:	GU-4		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC1004-14	**Collection Date:**	03/12/2024 10:55

Determination of Volatile Organic Compounds	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1754	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1754	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1754	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1754	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1754	CSM
Surrogate: Dibromofluoromethane	69.3	Limit: 80-126	% Rec	1	**S-GC**	03/18/24 0000	03/18/24 1754	CSM
Surrogate: Dibromofluoromethane	69.3	Limit: 75-136	% Rec	1	**S-GC**	03/18/24 0000	03/18/24 1754	CSM
Surrogate: 1,2-Dichloroethane-d4	66.7	Limit: 61-142	% Rec	1		03/18/24 0000	03/18/24 1754	CSM
Surrogate: 1,2-Dichloroethane-d4	66.7	Limit: 63-138	% Rec	1		03/18/24 0000	03/18/24 1754	CSM
Surrogate: Toluene-d8	104	Limit: 87-116	% Rec	1		03/18/24 0000	03/18/24 1754	CSM
Surrogate: Toluene-d8	104	Limit: 82-121	% Rec	1		03/18/24 0000	03/18/24 1754	CSM
Surrogate: 4-Bromofluorobenzene	85.5	Limit: 85-111	% Rec	1		03/18/24 0000	03/18/24 1754	CSM
Surrogate: 4-Bromofluorobenzene	85.5	Limit: 80-116	% Rec	1		03/18/24 0000	03/18/24 1754	CSM

Determination of Total Metals	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		03/20/24 0948	03/22/24 0919	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0919	RVV
Barium, total	**0.368**	0.0040	mg/L	4		03/20/24 0948	03/22/24 0919	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0919	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		03/20/24 0948	03/22/24 0919	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/20/24 0948	03/22/24 0919	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		03/20/24 0948	03/22/24 0919	RVV
Copper, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0919	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0919	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0919	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0919	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0919	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/20/24 0948	03/22/24 0919	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/20/24 0948	03/22/24 0919	RVV
Zinc, total	**0.0707**	0.0200	mg/L	4		03/20/24 0948	03/22/24 0919	RVV

Client Sample ID:	SRAMP #2		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC1004-15	**Collection Date:**	03/12/2024 10:15

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		03/18/24 0000	03/18/24 1820	CSM
Chloromethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1820	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1820	CSM
Bromomethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1820	CSM
Chloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1820	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1820	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1820	CSM
Acetone	<10.0	10.0	ug/L	1		03/18/24 0000	03/18/24 1820	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1820	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1820	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1820	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1820	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1820	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1820	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1820	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1820	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/18/24 0000	03/18/24 1820	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1820	CSM
Chloroform	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1820	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1820	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1820	CSM
Benzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1820	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1820	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1820	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1820	CSM
Dibromomethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1820	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1820	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1820	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1820	CSM
Toluene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1820	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1820	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1820	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1820	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1820	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1820	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1820	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1820	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1820	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1820	CSM
Xylenes, total	<2.0	2.0	ug/L	1		03/18/24 0000	03/18/24 1820	CSM
Styrene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1820	CSM
Bromoform	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1820	CSM

Client Sample ID:	SRAMP #2		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC1004-15	**Collection Date:**	03/12/2024 10:15

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1820	CSM
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1820	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1820	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1820	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1820	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1820	CSM
Surrogate: Dibromofluoromethane	69.6	Limit: 75-136	% Rec	1	**S-GC**	03/18/24 0000	03/18/24 1820	CSM
Surrogate: Dibromofluoromethane	69.6	Limit: 80-126	% Rec	1	**S-GC**	03/18/24 0000	03/18/24 1820	CSM
Surrogate: 1,2-Dichloroethane-d4	67.1	Limit: 61-142	% Rec	1		03/18/24 0000	03/18/24 1820	CSM
Surrogate: 1,2-Dichloroethane-d4	67.1	Limit: 63-138	% Rec	1		03/18/24 0000	03/18/24 1820	CSM
Surrogate: Toluene-d8	105	Limit: 87-116	% Rec	1		03/18/24 0000	03/18/24 1820	CSM
Surrogate: Toluene-d8	105	Limit: 82-121	% Rec	1		03/18/24 0000	03/18/24 1820	CSM
Surrogate: 4-Bromofluorobenzene	85.1	Limit: 80-116	% Rec	1		03/18/24 0000	03/18/24 1820	CSM
Surrogate: 4-Bromofluorobenzene	85.1	Limit: 85-111	% Rec	1		03/18/24 0000	03/18/24 1820	CSM

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HC1004

Client Sample ID:	MW98-25		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC1004-16	**Collection Date:**	03/12/2024 13:05

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		03/18/24 0000	03/18/24 1846	CSM
Chloromethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1846	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1846	CSM
Bromomethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1846	CSM
Chloroethane	**1.4**	1.0	ug/L	1		03/18/24 0000	03/18/24 1846	CSM
Trichlorofluoromethane	**1.0**	1.0	ug/L	1		03/18/24 0000	03/18/24 1846	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1846	CSM
Acetone	<10.0	10.0	ug/L	1		03/18/24 0000	03/18/24 1846	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1846	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1846	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1846	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1846	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1846	CSM
1,1-Dichloroethane	**1.1**	1.0	ug/L	1		03/18/24 0000	03/18/24 1846	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1846	CSM
cis-1,2-Dichloroethylene	**1.4**	1.0	ug/L	1		03/18/24 0000	03/18/24 1846	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/18/24 0000	03/18/24 1846	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1846	CSM
Chloroform	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1846	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1846	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1846	CSM
Benzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1846	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1846	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1846	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1846	CSM
Dibromomethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1846	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1846	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1846	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1846	CSM
Toluene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1846	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1846	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1846	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1846	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1846	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1846	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1846	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1846	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1846	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1846	CSM
Xylenes, total	<2.0	2.0	ug/L	1		03/18/24 0000	03/18/24 1846	CSM
Styrene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1846	CSM
Bromoform	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1846	CSM

Client Sample ID:	MW98-25		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC1004-16	**Collection Date:**	03/12/2024 13:05

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1846	CSM
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1846	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1846	CSM
1,4-Dichlorobenzene	**1.6**	1.0	ug/L	1		03/18/24 0000	03/18/24 1846	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1846	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1846	CSM
Surrogate: Dibromofluoromethane	73.6	Limit: 75-136	% Rec	1	**S-GC**	03/18/24 0000	03/18/24 1846	CSM
Surrogate: Dibromofluoromethane	73.6	Limit: 80-126	% Rec	1	**S-GC**	03/18/24 0000	03/18/24 1846	CSM
Surrogate: 1,2-Dichloroethane-d4	69.6	Limit: 61-142	% Rec	1		03/18/24 0000	03/18/24 1846	CSM
Surrogate: 1,2-Dichloroethane-d4	69.6	Limit: 63-138	% Rec	1		03/18/24 0000	03/18/24 1846	CSM
Surrogate: Toluene-d8	105	Limit: 87-116	% Rec	1		03/18/24 0000	03/18/24 1846	CSM
Surrogate: Toluene-d8	105	Limit: 82-121	% Rec	1		03/18/24 0000	03/18/24 1846	CSM
Surrogate: 4-Bromofluorobenzene	84.3	Limit: 80-116	% Rec	1		03/18/24 0000	03/18/24 1846	CSM
Surrogate: 4-Bromofluorobenzene	84.3	Limit: 85-111	% Rec	1	**S-GC**	03/18/24 0000	03/18/24 1846	CSM

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		03/20/24 0948	03/22/24 0925	RVV
Arsenic, total	**0.0167**	0.0040	mg/L	4		03/20/24 0948	03/22/24 0925	RVV
Barium, total	**0.110**	0.0040	mg/L	4		03/20/24 0948	03/22/24 0925	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0925	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		03/20/24 0948	03/22/24 0925	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/20/24 0948	03/22/24 0925	RVV
Cobalt, total	**0.0107**	0.0004	mg/L	4		03/20/24 0948	03/22/24 0925	RVV
Copper, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0925	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0925	RVV
Nickel, total	**0.0236**	0.0040	mg/L	4		03/20/24 0948	03/22/24 0925	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0925	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0925	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/20/24 0948	03/22/24 0925	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/20/24 0948	03/22/24 0925	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		03/20/24 0948	03/22/24 0925	RVV

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HC1004

Client Sample ID:	MW06-37		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC1004-17	**Collection Date:**	03/12/2024 14:15

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1913	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1913	CSM
Bromomethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1913	CSM
Chloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1913	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1913	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1913	CSM
Acetone	<10.0	10.0	ug/L	1		03/18/24 0000	03/18/24 1913	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1913	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1913	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1913	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1913	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1913	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1913	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1913	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1913	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/18/24 0000	03/18/24 1913	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1913	CSM
Chloroform	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1913	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1913	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1913	CSM
Benzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1913	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1913	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1913	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1913	CSM
Dibromomethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1913	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1913	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1913	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1913	CSM
Toluene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1913	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1913	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1913	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1913	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1913	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1913	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1913	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1913	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1913	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1913	CSM
Xylenes, total	<2.0	2.0	ug/L	1		03/18/24 0000	03/18/24 1913	CSM
Styrene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1913	CSM
Bromoform	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1913	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1913	CSM

Client Sample ID:	MW06-37		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC1004-17	**Collection Date:**	03/12/2024 14:15

Determination of Volatile Organic Compounds	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1913	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1913	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1913	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1913	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1913	CSM
Surrogate: Dibromofluoromethane	74.7	Limit: 80-126	% Rec	1	**S-GC**	03/18/24 0000	03/18/24 1913	CSM
Surrogate: Dibromofluoromethane	74.7	Limit: 75-136	% Rec	1	**S-GC**	03/18/24 0000	03/18/24 1913	CSM
Surrogate: 1,2-Dichloroethane-d4	71.1	Limit: 63-138	% Rec	1		03/18/24 0000	03/18/24 1913	CSM
Surrogate: 1,2-Dichloroethane-d4	71.1	Limit: 61-142	% Rec	1		03/18/24 0000	03/18/24 1913	CSM
Surrogate: Toluene-d8	104	Limit: 87-116	% Rec	1		03/18/24 0000	03/18/24 1913	CSM
Surrogate: Toluene-d8	104	Limit: 82-121	% Rec	1		03/18/24 0000	03/18/24 1913	CSM
Surrogate: 4-Bromofluorobenzene	84.2	Limit: 85-111	% Rec	1	**S-GC**	03/18/24 0000	03/18/24 1913	CSM
Surrogate: 4-Bromofluorobenzene	84.2	Limit: 80-116	% Rec	1		03/18/24 0000	03/18/24 1913	CSM

Determination of Total Metals	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		03/20/24 0948	03/22/24 0931	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0931	RVV
Barium, total	**0.128**	0.0040	mg/L	4		03/20/24 0948	03/22/24 0931	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0931	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		03/20/24 0948	03/22/24 0931	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/20/24 0948	03/22/24 0931	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		03/20/24 0948	03/22/24 0931	RVV
Copper, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0931	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0931	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0931	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0931	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0931	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/20/24 0948	03/22/24 0931	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/20/24 0948	03/22/24 0931	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		03/20/24 0948	03/22/24 0931	RVV

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HC1004

Client Sample ID:	MW06-38		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC1004-18	**Collection Date:**	03/12/2024 14:28

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1939	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1939	CSM
Bromomethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1939	CSM
Chloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1939	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1939	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1939	CSM
Acetone	<10.0	10.0	ug/L	1		03/18/24 0000	03/18/24 1939	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1939	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1939	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1939	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1939	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1939	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1939	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1939	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1939	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/18/24 0000	03/18/24 1939	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1939	CSM
Chloroform	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1939	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1939	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1939	CSM
Benzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1939	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1939	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1939	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1939	CSM
Dibromomethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1939	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1939	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1939	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1939	CSM
Toluene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1939	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1939	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1939	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1939	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1939	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1939	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1939	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1939	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1939	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1939	CSM
Xylenes, total	<2.0	2.0	ug/L	1		03/18/24 0000	03/18/24 1939	CSM
Styrene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1939	CSM
Bromoform	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1939	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1939	CSM

Client Sample ID:	MW06-38		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC1004-18	**Collection Date:**	03/12/2024 14:28

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1939	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1939	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1939	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 1939	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 1939	CSM
Surrogate: Dibromofluoromethane	78.7	Limit: 75-136	% Rec	1		03/18/24 0000	03/18/24 1939	CSM
Surrogate: Dibromofluoromethane	78.7	Limit: 80-126	% Rec	1	**S-GC**	03/18/24 0000	03/18/24 1939	CSM
Surrogate: 1,2-Dichloroethane-d4	73.0	Limit: 63-138	% Rec	1		03/18/24 0000	03/18/24 1939	CSM
Surrogate: 1,2-Dichloroethane-d4	73.0	Limit: 61-142	% Rec	1		03/18/24 0000	03/18/24 1939	CSM
Surrogate: Toluene-d8	106	Limit: 82-121	% Rec	1		03/18/24 0000	03/18/24 1939	CSM
Surrogate: Toluene-d8	106	Limit: 87-116	% Rec	1		03/18/24 0000	03/18/24 1939	CSM
Surrogate: 4-Bromofluorobenzene	85.3	Limit: 80-116	% Rec	1		03/18/24 0000	03/18/24 1939	CSM
Surrogate: 4-Bromofluorobenzene	85.3	Limit: 85-111	% Rec	1		03/18/24 0000	03/18/24 1939	CSM

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		03/20/24 0948	03/22/24 0937	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0937	RVV
Barium, total	**0.196**	0.0040	mg/L	4		03/20/24 0948	03/22/24 0937	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0937	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		03/20/24 0948	03/22/24 0937	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/20/24 0948	03/22/24 0937	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		03/20/24 0948	03/22/24 0937	RVV
Copper, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0937	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0937	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0937	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0937	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0937	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/20/24 0948	03/22/24 0937	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/20/24 0948	03/22/24 0937	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		03/20/24 0948	03/22/24 0937	RVV

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CERTIFICATE OF ANALYSIS

1HC1004

Client Sample ID:	MW06-39			
Sample Matrix:	Water		**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC1004-19		**Collection Date:**	03/12/2024 14:42

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 2005	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 2005	CSM
Bromomethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 2005	CSM
Chloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 2005	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 2005	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 2005	CSM
Acetone	<10.0	10.0	ug/L	1		03/18/24 0000	03/18/24 2005	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 2005	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 2005	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 2005	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 2005	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 2005	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 2005	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 2005	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 2005	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/18/24 0000	03/18/24 2005	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 2005	CSM
Chloroform	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 2005	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 2005	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 2005	CSM
Benzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 2005	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 2005	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 2005	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 2005	CSM
Dibromomethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 2005	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 2005	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 2005	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 2005	CSM
Toluene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 2005	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 2005	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 2005	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 2005	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 2005	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 2005	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 2005	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 2005	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 2005	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 2005	CSM
Xylenes, total	<2.0	2.0	ug/L	1		03/18/24 0000	03/18/24 2005	CSM
Styrene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 2005	CSM
Bromoform	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 2005	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 2005	CSM

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Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HC1004

Client Sample ID:	MW06-39		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC1004-19	**Collection Date:**	03/12/2024 14:42

Determination of Volatile Organic Compounds	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 2005	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 2005	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 2005	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/18/24 0000	03/18/24 2005	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/18/24 0000	03/18/24 2005	CSM
Surrogate: Dibromofluoromethane	77.2	Limit: 80-126	% Rec	1	**S-GC**	03/18/24 0000	03/18/24 2005	CSM
Surrogate: Dibromofluoromethane	77.2	Limit: 75-136	% Rec	1		03/18/24 0000	03/18/24 2005	CSM
Surrogate: 1,2-Dichloroethane-d4	72.6	Limit: 61-142	% Rec	1		03/18/24 0000	03/18/24 2005	CSM
Surrogate: 1,2-Dichloroethane-d4	72.6	Limit: 63-138	% Rec	1		03/18/24 0000	03/18/24 2005	CSM
Surrogate: Toluene-d8	106	Limit: 87-116	% Rec	1		03/18/24 0000	03/18/24 2005	CSM
Surrogate: Toluene-d8	106	Limit: 82-121	% Rec	1		03/18/24 0000	03/18/24 2005	CSM
Surrogate: 4-Bromofluorobenzene	86.4	Limit: 85-111	% Rec	1		03/18/24 0000	03/18/24 2005	CSM
Surrogate: 4-Bromofluorobenzene	86.4	Limit: 80-116	% Rec	1		03/18/24 0000	03/18/24 2005	CSM

Determination of Total Metals	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		03/20/24 0948	03/22/24 0943	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0943	RVV
Barium, total	**0.174**	0.0040	mg/L	4		03/20/24 0948	03/22/24 0943	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0943	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		03/20/24 0948	03/22/24 0943	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/20/24 0948	03/22/24 0943	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		03/20/24 0948	03/22/24 0943	RVV
Copper, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0943	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0943	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0943	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0943	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0943	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/20/24 0948	03/22/24 0943	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/20/24 0948	03/22/24 0943	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		03/20/24 0948	03/22/24 0943	RVV

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HC1004

Client Sample ID:	Field Duplicate		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HC1004-20	**Collection Date:**	03/12/2024

Determination of Total Metals	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		03/20/24 0948	03/22/24 0949	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0949	RVV
Barium, total	**0.110**	0.0040	mg/L	4		03/20/24 0948	03/22/24 0949	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0949	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		03/20/24 0948	03/22/24 0949	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/20/24 0948	03/22/24 0949	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		03/20/24 0948	03/22/24 0949	RVV
Copper, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0949	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0949	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0949	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0949	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/20/24 0948	03/22/24 0949	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/20/24 0948	03/22/24 0949	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/20/24 0948	03/22/24 0949	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		03/20/24 0948	03/22/24 0949	RVV

Batch Log Summary

Method	Batch	Laboratory ID	Client / Source ID
EPA 376.2	1HC0886	1HC0886-MSD1	1HC0966-03
		1HC0886-BLK1	
		1HC1004-09	MW96-21
		1HC0886-MS1	1HC0966-03
		1HC0886-BS1	

Method	Batch	Laboratory ID	Client / Source ID
EPA 8260B	1HC0910	1HC0910-BS1	
		1HC0910-BSD1	
		1HC0910-BLK1	
		1HC1004-01	MW91-8
		1HC1004-02	MW02-15A
		1HC1004-03	MW98-28
		1HC1004-04	MW02-30A
		1HC1004-05	MW88-2
		1HC1004-06	MW94-18
		1HC0910-MS1	1HC1002-01
		1HC0910-MSD1	1HC1002-01

Method	Batch	Laboratory ID	Client / Source ID
EPA 8260B	1HC0977	1HC0977-BS1	
		1HC0977-BSD1	
		1HC0977-BLK1	
		1HC1004-07	MW09-40
		1HC1004-08	MW91-10
		1HC1004-09	MW96-21
		1HC1004-10	MW96-24
		1HC1004-11	MW88-3
		1HC1004-12	MW96-23
		1HC1004-13	MW21-43
		1HC1004-14	GU-4
		1HC1004-15	SRAMP #2
		1HC1004-16	MW98-25
		1HC1004-17	MW06-37
		1HC1004-18	MW06-38
		1HC1004-19	MW06-39
		1HC0977-MS1	1HC1004-08
		1HC0977-MSD1	1HC1004-08

Method	Batch	Laboratory ID	Client / Source ID

Method	Batch	Laboratory ID	Client / Source ID
EPA 8151A	1HC1011	1HC1011-BLK1	
		1HC1004-09	MW96-21
		1HC1011-BS1	
		1HC1011-BSD1	

Method	Batch	Laboratory ID	Client / Source ID
EPA 8081	1HC1017	1HC1017-BLK1	
		1HC1017-BS1	
		1HC1017-BSD1	
		1HC1004-09	MW96-21

Method	Batch	Laboratory ID	Client / Source ID
EPA 8082	1HC1018	1HC1018-BLK1	
		1HC1018-BS1	
		1HC1018-BSD1	
		1HC1004-09	MW96-21

Method	Batch	Laboratory ID	Client / Source ID
EPA 8141	1HC1019	1HC1019-BLK1	
		1HC1004-09	MW96-21
		1HC1019-BS1	
		1HC1019-BSD1	

Method	Batch	Laboratory ID	Client / Source ID
EPA 8270C	1HC1026	1HC1026-BLK1	
		1HC1004-09	MW96-21
		1HC1026-BS1	
		1HC1026-BSD1	

Method	Batch	Laboratory ID	Client / Source ID
EPA 6020A	1HC1095	1HC1095-BLK1	
		1HC1095-BS1	
		1HC1004-01	MW91-8
		1HC1095-MS1	1HC1004-01
		1HC1095-MSD1	1HC1004-01
		1HC1095-PS1	1HC1004-01
		1HC1004-02	MW02-15A
		1HC1004-03	MW98-28
		1HC1004-04	MW02-30A
		1HC1004-05	MW88-2
		1HC1004-06	MW94-18
		1HC1004-07	MW09-40
		1HC1004-08	MW91-10
		1HC1004-10	MW96-24

Method	Batch	Laboratory ID	Client / Source ID
EPA 6020A	1HC1095	1HC1004-11	MW88-3
		1HC1004-12	MW96-23
		1HC1004-13	MW21-43
		1HC1004-14	GU-4
		1HC1004-16	MW98-25
		1HC1004-17	MW06-37
		1HC1004-18	MW06-38
		1HC1004-19	MW06-39
		1HC1004-20	Field Duplicate

Method	Batch	Laboratory ID	Client / Source ID
EPA 8260B	1HC1308	1HC1308-BS1	
		1HC1308-BSD1	
		1HC1308-BLK1	
		1HC1004-09	MW96-21
		1HC1308-MS1	1HC1004-09
		1HC1308-MSD1	1HC1004-09

Method	Batch	Laboratory ID	Client / Source ID
EPA 9010B	1HC1377	1HC1377-MSD1	1HC1004-09
		1HC1377-BLK1	
		1HC1377-MS1	1HC1004-09
		1HC1004-09	MW96-21
		1HC1377-BS1	

Method	Batch	Laboratory ID	Client / Source ID
EPA 8015C	1HC1422	1HC1422-BS1	
		1HC1422-BLK1	
		1HC1004-09	MW96-21
		1HC1422-MS1	1HC1004-09
		1HC1422-MSD1	1HC1004-09

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

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0910 - EPA 5030B - EPA 8260B										
Blank (1HC0910-BLK1)			Prepared: 03/15/24 00:00 Analyzed: 03/15/24 10:54							
Chloromethane	<1.0	1.0	ug/L							
Vinyl Chloride	<1.0	1.0	ug/L							
Bromomethane	<1.0	1.0	ug/L							
Chloroethane	<1.0	1.0	ug/L							
Trichlorofluoromethane	<1.0	1.0	ug/L							
1,1-Dichloroethylene	<1.0	1.0	ug/L							
Acetone	<10.0	10.0	ug/L							

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0910 - EPA 5030B - EPA 8260B										
Blank (1HC0910-BLK1)			Prepared: 03/15/24 00:00 Analyzed: 03/15/24 10:54							
Methyl Iodide	<1.0	1.0	ug/L							
Carbon Disulfide	<1.0	1.0	ug/L							
Methylene Chloride	<5.0	5.0	ug/L							
Acrylonitrile	<5.0	5.0	ug/L							
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L							
1,1-Dichloroethane	<1.0	1.0	ug/L							
Vinyl Acetate	<5.0	5.0	ug/L							
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L							
2-Butanone (MEK)	<10.0	10.0	ug/L							
Bromochloromethane	<1.0	1.0	ug/L							
Chloroform	<1.0	1.0	ug/L							
1,1,1-Trichloroethane	<1.0	1.0	ug/L							
Carbon Tetrachloride	<1.0	1.0	ug/L							
Benzene	<1.0	1.0	ug/L							
1,2-Dichloroethane	<1.0	1.0	ug/L							
Trichloroethylene	<1.0	1.0	ug/L							
1,2-Dichloropropane	<1.0	1.0	ug/L							
Dibromomethane	<1.0	1.0	ug/L							
Bromodichloromethane	<1.0	1.0	ug/L							
cis-1,3-Dichloropropene	<1.0	1.0	ug/L							
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L							
Toluene	<1.0	1.0	ug/L							
trans-1,3-Dichloropropene	<1.0	1.0	ug/L							
1,1,2-Trichloroethane	<1.0	1.0	ug/L							
Tetrachloroethylene	<1.0	1.0	ug/L							
2-Hexanone (MBK)	<5.0	5.0	ug/L							
Dibromochloromethane	<1.0	1.0	ug/L							
1,2-Dibromoethane	<1.0	1.0	ug/L							
Chlorobenzene	<1.0	1.0	ug/L							
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L							
Ethylbenzene	<1.0	1.0	ug/L							
Xylenes, total	<2.0	2.0	ug/L							
Styrene	<1.0	1.0	ug/L							
Bromoform	<1.0	1.0	ug/L							
1,2,3-Trichloropropane	<1.0	1.0	ug/L							
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L							
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L							
1,4-Dichlorobenzene	<1.0	1.0	ug/L							
1,2-Dichlorobenzene	<1.0	1.0	ug/L							
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L							
Surrogate: Dibromofluoromethane	*36.3*		ug/L	*50.2*		*72.3*	*80-126*			*S-GC*
Surrogate: Dibromofluoromethane	*36.3*		ug/L	*50.2*		*72.3*	*75-136*			*S-GC*

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0910 - EPA 5030B - EPA 8260B										
Blank (1HC0910-BLK1)			Prepared: 03/15/24 00:00 Analyzed: 03/15/24 10:54							
Surrogate: 1,2-Dichloroethane-d4	*34.1*		ug/L	*50.1*		*68.1*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*34.1*		ug/L	*50.1*		*68.1*	*61-142*			
Surrogate: Toluene-d8	*52.9*		ug/L	*50.4*		*105*	*87-116*			
Surrogate: Toluene-d8	*52.9*		ug/L	*50.4*		*105*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*46.2*		ug/L	*50.1*		*92.1*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*46.2*		ug/L	*50.1*		*92.1*	*80-116*			
LCS (1HC0910-BS1)			Prepared: 03/15/24 00:00 Analyzed: 03/15/24 09:35							
Chloromethane	32.01	1.0	ug/L	30.6		104	63-155			
Vinyl Chloride	28.39	1.0	ug/L	30.2		93.9	70-154			
Bromomethane	28.10	1.0	ug/L	28.8		97.6	52-176			
Chloroethane	32.15	1.0	ug/L	31.6		102	72-148			
Trichlorofluoromethane	28.03	1.0	ug/L	32.6		86.0	70-152			
1,1-Dichloroethylene	48.44	1.0	ug/L	50.0		96.9	70-148			
Acetone	94.40	10.0	ug/L	102		92.5	43-172			
Methyl Iodide	105.2	1.0	ug/L	99.7		105	69-170			
Carbon Disulfide	93.92	1.0	ug/L	101		93.0	72-162			
Methylene Chloride	46.14	5.0	ug/L	50.0		92.3	68-142			
Acrylonitrile	78.93	5.0	ug/L	100		78.7	67-144			
trans-1,2-Dichloroethylene	48.22	1.0	ug/L	50.0		96.4	66-148			
1,1-Dichloroethane	47.35	1.0	ug/L	50.0		94.7	66-143			
Vinyl Acetate	70.70	5.0	ug/L	102		69.4	43-153			
cis-1,2-Dichloroethylene	47.81	1.0	ug/L	49.5		96.6	71-149			
2-Butanone (MEK)	90.57	10.0	ug/L	103		87.7	52-159			
Bromochloromethane	49.59	1.0	ug/L	50.0		99.2	69-143			
Chloroform	47.50	1.0	ug/L	50.0		95.0	69-144			
1,1,1-Trichloroethane	42.71	1.0	ug/L	50.0		85.5	62-129			
Carbon Tetrachloride	45.27	1.0	ug/L	50.0		90.5	63-141			
Benzene	52.00	1.0	ug/L	50.0		104	71-134			
1,2-Dichloroethane	48.94	1.0	ug/L	50.0		97.9	72-132			
Trichloroethylene	48.68	1.0	ug/L	50.0		97.4	71-135			
1,2-Dichloropropane	50.09	1.0	ug/L	50.0		100	69-136			
Dibromomethane	51.57	1.0	ug/L	50.0		103	73-147			
Bromodichloromethane	47.84	1.0	ug/L	50.0		95.7	68-129			
cis-1,3-Dichloropropene	47.05	1.0	ug/L	50.3		93.5	65-134			
4-Methyl-2-pentanone (MIBK)	97.95	5.0	ug/L	101		96.6	58-147			
Toluene	50.74	1.0	ug/L	50.0		101	72-133			
trans-1,3-Dichloropropene	46.33	1.0	ug/L	50.4		91.9	67-130			
1,1,2-Trichloroethane	49.48	1.0	ug/L	50.0		99.0	69-135			
Tetrachloroethylene	49.12	1.0	ug/L	50.0		98.2	69-130			
2-Hexanone (MBK)	100.3	5.0	ug/L	103		97.1	55-144			
Dibromochloromethane	50.12	1.0	ug/L	49.5		101	73-127			
1,2-Dibromoethane	49.50	1.0	ug/L	50.0		99.0	67-132			
Chlorobenzene	51.56	1.0	ug/L	50.0		103	72-123			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0910 - EPA 5030B - EPA 8260B										
LCS (1HC0910-BS1)	Prepared: 03/15/24 00:00 Analyzed: 03/15/24 09:35									
1,1,1,2-Tetrachloroethane	51.90	1.0	ug/L	50.0		104	73-127			
Ethylbenzene	48.39	1.0	ug/L	50.0		96.8	71-127			
Xylenes, total	148.5	2.0	ug/L	150		99.0	74-127			
Styrene	49.66	1.0	ug/L	50.0		99.3	66-126			
Bromoform	55.68	1.0	ug/L	50.0		111	68-130			
1,2,3-Trichloropropane	51.26	1.0	ug/L	50.0		103	63-136			
trans-1,4-Dichloro-2-butene	93.01	5.0	ug/L	104		89.5	54-134			
1,1,2,2-Tetrachloroethane	49.35	1.0	ug/L	49.8		99.0	61-131			
1,4-Dichlorobenzene	48.48	1.0	ug/L	50.0		97.0	70-129			
1,2-Dichlorobenzene	49.14	1.0	ug/L	50.0		98.3	69-126			
1,2-Dibromo-3-chloropropane	50.39	5.0	ug/L	50.0		101	50-143			
Surrogate: Dibromofluoromethane	*50.3*		ug/L	*50.2*		*100*	*80-126*			
Surrogate: Dibromofluoromethane	*50.3*		ug/L	*50.2*		*100*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*51.2*		ug/L	*50.1*		*102*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*51.2*		ug/L	*50.1*		*102*	*61-142*			
Surrogate: Toluene-d8	*50.5*		ug/L	*50.4*		*100*	*87-116*			
Surrogate: Toluene-d8	*50.5*		ug/L	*50.4*		*100*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*52.5*		ug/L	*50.1*		*105*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*52.5*		ug/L	*50.1*		*105*	*80-116*			
LCS Dup (1HC0910-BSD1)	Prepared: 03/15/24 00:00 Analyzed: 03/15/24 10:02									
Chloromethane	27.87	1.0	ug/L	30.6		90.9	63-155	13.8	24	
Vinyl Chloride	24.63	1.0	ug/L	30.2		81.5	70-154	14.2	25	
Bromomethane	25.26	1.0	ug/L	28.8		87.7	52-176	10.6	27	
Chloroethane	28.21	1.0	ug/L	31.6		89.2	72-148	13.1	25	
Trichlorofluoromethane	24.49	1.0	ug/L	32.6		75.1	70-152	13.5	26	
1,1-Dichloroethylene	43.14	1.0	ug/L	50.0		86.3	70-148	11.6	24	
Acetone	86.67	10.0	ug/L	102		85.0	43-172	8.54	30	
Methyl Iodide	92.63	1.0	ug/L	99.7		92.9	69-170	12.7	30	
Carbon Disulfide	81.88	1.0	ug/L	101		81.1	72-162	13.7	24	
Methylene Chloride	41.25	5.0	ug/L	50.0		82.5	68-142	11.2	21	
Acrylonitrile	73.54	5.0	ug/L	100		73.3	67-144	7.07	24	
trans-1,2-Dichloroethylene	42.98	1.0	ug/L	50.0		86.0	66-148	11.5	27	
1,1-Dichloroethane	42.63	1.0	ug/L	50.0		85.3	66-143	10.5	24	
Vinyl Acetate	86.86	5.0	ug/L	102		85.2	43-153	20.5	30	
cis-1,2-Dichloroethylene	43.46	1.0	ug/L	49.5		87.8	71-149	9.53	26	
2-Butanone (MEK)	81.63	10.0	ug/L	103		79.0	52-159	10.4	27	
Bromochloromethane	45.04	1.0	ug/L	50.0		90.1	69-143	9.62	23	
Chloroform	43.08	1.0	ug/L	50.0		86.2	69-144	9.76	23	
1,1,1-Trichloroethane	37.68	1.0	ug/L	50.0		75.4	62-129	12.5	24	
Carbon Tetrachloride	39.84	1.0	ug/L	50.0		79.7	63-141	12.8	25	
Benzene	46.26	1.0	ug/L	50.0		92.5	71-134	11.7	24	
1,2-Dichloroethane	45.46	1.0	ug/L	50.0		90.9	72-132	7.37	24	
Trichloroethylene	43.27	1.0	ug/L	50.0		86.5	71-135	11.8	24	

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0910 - EPA 5030B - EPA 8260B										
LCS Dup (1HC0910-BSD1)			Prepared: 03/15/24 00:00 Analyzed: 03/15/24 10:02							
1,2-Dichloropropane	45.56	1.0	ug/L	50.0		91.1	69-136	9.47	24	
Dibromomethane	47.28	1.0	ug/L	50.0		94.6	73-147	8.68	25	
Bromodichloromethane	43.18	1.0	ug/L	50.0		86.4	68-129	10.2	22	
cis-1,3-Dichloropropene	43.10	1.0	ug/L	50.3		85.6	65-134	8.76	23	
4-Methyl-2-pentanone (MIBK)	87.91	5.0	ug/L	101		86.7	58-147	10.8	27	
Toluene	44.42	1.0	ug/L	50.0		88.8	72-133	13.3	24	
trans-1,3-Dichloropropene	42.20	1.0	ug/L	50.4		83.7	67-130	9.33	24	
1,1,2-Trichloroethane	45.08	1.0	ug/L	50.0		90.2	69-135	9.31	23	
Tetrachloroethylene	43.11	1.0	ug/L	50.0		86.2	69-130	13.0	25	
2-Hexanone (MBK)	90.38	5.0	ug/L	103		87.5	55-144	10.4	25	
Dibromochloromethane	45.64	1.0	ug/L	49.5		92.2	73-127	9.36	22	
1,2-Dibromoethane	44.73	1.0	ug/L	50.0		89.5	67-132	10.1	24	
Chlorobenzene	46.06	1.0	ug/L	50.0		92.1	72-123	11.3	23	
1,1,1,2-Tetrachloroethane	46.47	1.0	ug/L	50.0		92.9	73-127	11.0	24	
Ethylbenzene	42.66	1.0	ug/L	50.0		85.3	71-127	12.6	26	
Xylenes, total	131.0	2.0	ug/L	150		87.3	74-127	12.6	25	
Styrene	43.98	1.0	ug/L	50.0		88.0	66-126	12.1	23	
Bromoform	48.95	1.0	ug/L	50.0		97.9	68-130	12.9	23	
1,2,3-Trichloropropane	46.24	1.0	ug/L	50.0		92.5	63-136	10.3	24	
trans-1,4-Dichloro-2-butene	83.02	5.0	ug/L	104		79.9	54-134	11.4	27	
1,1,2,2-Tetrachloroethane	44.34	1.0	ug/L	49.8		88.9	61-131	10.7	29	
1,4-Dichlorobenzene	43.95	1.0	ug/L	50.0		87.9	70-129	9.80	24	
1,2-Dichlorobenzene	44.48	1.0	ug/L	50.0		89.0	69-126	9.96	26	
1,2-Dibromo-3-chloropropane	44.13	5.0	ug/L	50.0		88.3	50-143	13.2	30	
Surrogate: Dibromofluoromethane	*50.3*		ug/L	*50.2*		*100*	*80-126*			
Surrogate: Dibromofluoromethane	*50.3*		ug/L	*50.2*		*100*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*51.3*		ug/L	*50.1*		*103*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*51.3*		ug/L	*50.1*		*103*	*61-142*			
Surrogate: Toluene-d8	*50.2*		ug/L	*50.4*		*99.6*	*87-116*			
Surrogate: Toluene-d8	*50.2*		ug/L	*50.4*		*99.6*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*51.8*		ug/L	*50.1*		*103*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*51.8*		ug/L	*50.1*		*103*	*80-116*			
Matrix Spike (1HC0910-MS1)	**Source: 1HC1002-01**		Prepared: 03/15/24 00:00 Analyzed: 03/15/24 21:45							
Chloromethane	304.7	10.0	ug/L	306	ND	99.4	61-152			
Vinyl Chloride	282.6	10.0	ug/L	302	ND	93.5	66-149			
Bromomethane	248.8	10.0	ug/L	288	ND	86.4	43-171			
Chloroethane	311.2	10.0	ug/L	316	ND	98.4	69-148			
Trichlorofluoromethane	283.0	10.0	ug/L	326	ND	86.8	62-163			
1,1-Dichloroethylene	466.9	10.0	ug/L	500	ND	93.4	70-148			
Acetone	905.6	100	ug/L	1020	ND	88.8	45-173			
Methyl Iodide	1009	10.0	ug/L	997	ND	101	62-167			
Carbon Disulfide	919.1	10.0	ug/L	1010	ND	91.0	71-163			
Methylene Chloride	419.8	50.0	ug/L	500	ND	84.0	69-140			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch 1HC0910 - EPA 5030B - EPA 8260B

Matrix Spike (1HC0910-MS1) **Source: 1HC1002-01** Prepared: 03/15/24 00:00 Analyzed: 03/15/24 21:45

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Acrylonitrile	715.4	50.0	ug/L	1000	ND	71.3	58-151			
trans-1,2-Dichloroethylene	464.2	10.0	ug/L	500	ND	92.8	69-144			
1,1-Dichloroethane	451.1	10.0	ug/L	500	ND	90.2	70-138			
Vinyl Acetate	745.2	50.0	ug/L	1020	ND	73.1	58-142			
cis-1,2-Dichloroethylene	437.7	10.0	ug/L	495	ND	88.5	68-151			
2-Butanone (MEK)	922.8	100	ug/L	1030	ND	89.3	50-160			
Bromochloromethane	441.9	10.0	ug/L	500	ND	88.4	65-143			
Chloroform	452.1	10.0	ug/L	500	ND	90.4	71-143			
1,1,1-Trichloroethane	422.7	10.0	ug/L	500	ND	84.6	63-133			
Carbon Tetrachloride	459.9	10.0	ug/L	500	ND	92.0	63-142			
Benzene	500.9	10.0	ug/L	500	ND	100	69-133			
1,2-Dichloroethane	461.0	10.0	ug/L	500	ND	92.2	63-138			
Trichloroethylene	475.3	10.0	ug/L	500	ND	95.1	71-133			
1,2-Dichloropropane	469.5	10.0	ug/L	500	ND	93.9	69-132			
Dibromomethane	476.3	10.0	ug/L	500	ND	95.3	70-147			
Bromodichloromethane	447.0	10.0	ug/L	500	ND	89.4	67-130			
cis-1,3-Dichloropropene	415.6	10.0	ug/L	503	ND	82.6	61-126			
4-Methyl-2-pentanone (MIBK)	834.8	50.0	ug/L	1010	ND	82.3	55-147			
Toluene	480.2	10.0	ug/L	500	ND	96.0	71-133			
trans-1,3-Dichloropropene	395.8	10.0	ug/L	504	ND	78.5	63-124			
1,1,2-Trichloroethane	463.5	10.0	ug/L	500	ND	92.7	69-133			
Tetrachloroethylene	500.7	10.0	ug/L	500	ND	100	70-124			
2-Hexanone (MBK)	861.7	50.0	ug/L	1030	ND	83.4	53-141			
Dibromochloromethane	466.9	10.0	ug/L	495	ND	94.3	74-122			
1,2-Dibromoethane	453.3	10.0	ug/L	500	ND	90.7	66-127			
Chlorobenzene	486.5	10.0	ug/L	500	ND	97.3	76-116			
1,1,1,2-Tetrachloroethane	499.0	10.0	ug/L	500	ND	99.8	77-121			
Ethylbenzene	467.9	10.0	ug/L	500	ND	93.6	73-124			
Xylenes, total	1410	20.0	ug/L	1500	ND	94.0	75-123			
Styrene	461.1	10.0	ug/L	500	ND	92.2	70-120			
Bromoform	495.8	10.0	ug/L	500	ND	99.2	70-124			
1,2,3-Trichloropropane	466.3	10.0	ug/L	500	ND	93.3	62-135			
trans-1,4-Dichloro-2-butene	764.7	50.0	ug/L	1040	ND	73.6	50-120			
1,1,2,2-Tetrachloroethane	443.4	10.0	ug/L	498	ND	88.9	63-126			
1,4-Dichlorobenzene	445.7	10.0	ug/L	500	ND	89.1	72-119			
1,2-Dichlorobenzene	444.1	10.0	ug/L	500	ND	88.8	71-117			
1,2-Dibromo-3-chloropropane	397.2	50.0	ug/L	500	ND	79.4	49-134			
Surrogate: Dibromofluoromethane	*502*		ug/L	*502*		*100*	*80-126*			
Surrogate: Dibromofluoromethane	*502*		ug/L	*502*		*100*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*514*		ug/L	*501*		*103*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*514*		ug/L	*501*		*103*	*61-142*			
Surrogate: Toluene-d8	*506*		ug/L	*504*		*100*	*87-116*			
Surrogate: Toluene-d8	*506*		ug/L	*504*		*100*	*82-121*			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0910 - EPA 5030B - EPA 8260B										
Matrix Spike (1HC0910-MS1)	**Source: 1HC1002-01**	Prepared: 03/15/24 00:00 Analyzed: 03/15/24 21:45								
Surrogate: 4-Bromofluorobenzene	*509*		ug/L	*501*		*101*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*509*		ug/L	*501*		*101*	*80-116*			
Matrix Spike Dup (1HC0910-MSD1)	**Source: 1HC1002-01**	Prepared: 03/15/24 00:00 Analyzed: 03/15/24 22:11								
Chloromethane	288.9	10.0	ug/L	306	ND	94.3	61-152	5.32	26	
Vinyl Chloride	264.2	10.0	ug/L	302	ND	87.4	66-149	6.73	23	
Bromomethane	253.1	10.0	ug/L	288	ND	87.9	43-171	1.71	29	
Chloroethane	293.4	10.0	ug/L	316	ND	92.7	69-148	5.89	25	
Trichlorofluoromethane	271.8	10.0	ug/L	326	ND	83.3	62-163	4.04	25	
1,1-Dichloroethylene	462.1	10.0	ug/L	500	ND	92.4	70-148	1.03	22	
Acetone	923.5	100	ug/L	1020	ND	90.5	45-173	1.96	30	
Methyl Iodide	962.6	10.0	ug/L	997	ND	96.6	62-167	4.75	24	
Carbon Disulfide	875.8	10.0	ug/L	1010	ND	86.7	71-163	4.82	22	
Methylene Chloride	407.5	50.0	ug/L	500	ND	81.5	69-140	2.97	19	
Acrylonitrile	730.2	50.0	ug/L	1000	ND	72.8	58-151	2.05	15	
trans-1,2-Dichloroethylene	459.0	10.0	ug/L	500	ND	91.8	69-144	1.13	22	
1,1-Dichloroethane	443.1	10.0	ug/L	500	ND	88.6	70-138	1.79	20	
Vinyl Acetate	819.5	50.0	ug/L	1020	ND	80.4	58-142	9.50	24	
cis-1,2-Dichloroethylene	437.8	10.0	ug/L	495	ND	88.5	68-151	0.0228	22	
2-Butanone (MEK)	860.5	100	ug/L	1030	ND	83.3	50-160	6.99	23	
Bromochloromethane	440.8	10.0	ug/L	500	ND	88.2	65-143	0.249	22	
Chloroform	447.0	10.0	ug/L	500	ND	89.4	71-143	1.13	21	
1,1,1-Trichloroethane	412.8	10.0	ug/L	500	ND	82.6	63-133	2.37	23	
Carbon Tetrachloride	449.6	10.0	ug/L	500	ND	89.9	63-142	2.26	22	
Benzene	488.5	10.0	ug/L	500	ND	97.7	69-133	2.51	18	
1,2-Dichloroethane	453.6	10.0	ug/L	500	ND	90.7	63-138	1.62	20	
Trichloroethylene	466.1	10.0	ug/L	500	ND	93.2	71-133	1.95	23	
1,2-Dichloropropane	463.9	10.0	ug/L	500	ND	92.8	69-132	1.20	20	
Dibromomethane	473.3	10.0	ug/L	500	ND	94.7	70-147	0.632	22	
Bromodichloromethane	440.9	10.0	ug/L	500	ND	88.2	67-130	1.37	21	
cis-1,3-Dichloropropene	419.8	10.0	ug/L	503	ND	83.4	61-126	1.01	21	
4-Methyl-2-pentanone (MIBK)	864.9	50.0	ug/L	1010	ND	85.3	55-147	3.54	23	
Toluene	461.1	10.0	ug/L	500	ND	92.2	71-133	4.06	19	
trans-1,3-Dichloropropene	403.4	10.0	ug/L	504	ND	80.0	63-124	1.90	21	
1,1,2-Trichloroethane	451.5	10.0	ug/L	500	ND	90.3	69-133	2.62	19	
Tetrachloroethylene	487.8	10.0	ug/L	500	ND	97.6	70-124	2.61	24	
2-Hexanone (MBK)	899.4	50.0	ug/L	1030	ND	87.1	53-141	4.28	24	
Dibromochloromethane	465.7	10.0	ug/L	495	ND	94.1	74-122	0.257	21	
1,2-Dibromoethane	455.9	10.0	ug/L	500	ND	91.2	66-127	0.572	23	
Chlorobenzene	479.2	10.0	ug/L	500	ND	95.8	76-116	1.51	21	
1,1,1,2-Tetrachloroethane	492.8	10.0	ug/L	500	ND	98.6	77-121	1.25	25	
Ethylbenzene	457.9	10.0	ug/L	500	ND	91.6	73-124	2.16	20	
Xylenes, total	1380	20.0	ug/L	1500	ND	92.0	75-123	2.14	20	

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0910 - EPA 5030B - EPA 8260B										
Matrix Spike Dup (1HC0910-MSD1)	**Source: 1HC1002-01**		Prepared: 03/15/24 00:00 Analyzed: 03/15/24 22:11							
Styrene	450.8	10.0	ug/L	500	ND	90.2	70-120	2.26	23	
Bromoform	485.2	10.0	ug/L	500	ND	97.0	70-124	2.16	22	
1,2,3-Trichloropropane	458.7	10.0	ug/L	500	ND	91.7	62-135	1.64	28	
trans-1,4-Dichloro-2-butene	765.1	50.0	ug/L	1040	ND	73.6	50-120	0.0523	26	
1,1,2,2-Tetrachloroethane	450.1	10.0	ug/L	498	ND	90.3	63-126	1.50	24	
1,4-Dichlorobenzene	441.5	10.0	ug/L	500	ND	88.3	72-119	0.947	24	
1,2-Dichlorobenzene	444.0	10.0	ug/L	500	ND	88.8	71-117	0.0225	24	
1,2-Dibromo-3-chloropropane	406.6	50.0	ug/L	500	ND	81.3	49-134	2.34	28	
Surrogate: Dibromofluoromethane	*502*		ug/L	*502*		*100*	*80-126*			
Surrogate: Dibromofluoromethane	*502*		ug/L	*502*		*100*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*524*		ug/L	*501*		*105*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*524*		ug/L	*501*		*105*	*61-142*			
Surrogate: Toluene-d8	*496*		ug/L	*504*		*98.4*	*87-116*			
Surrogate: Toluene-d8	*496*		ug/L	*504*		*98.4*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*506*		ug/L	*501*		*101*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*506*		ug/L	*501*		*101*	*80-116*			
Batch 1HC0977 - EPA 5030B - EPA 8260B										
Blank (1HC0977-BLK1)			Prepared: 03/18/24 00:00 Analyzed: 03/18/24 11:08							
Dichlorodifluoromethane	<1.0	1.0	ug/L							
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							

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0977 - EPA 5030B - EPA 8260B										
Blank (1HC0977-BLK1)			Prepared: 03/18/24 00:00 Analyzed: 03/18/24 11:08							
Acrylonitrile	<5.0	5.0	ug/L							
Acrylonitrile	<5.0	5.0	ug/L							
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L							
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L							
1,1-Dichloroethane	<1.0	1.0	ug/L							
1,1-Dichloroethane	<1.0	1.0	ug/L							
Vinyl Acetate	<5.0	5.0	ug/L							
Vinyl Acetate	<5.0	5.0	ug/L							
2,2-Dichloropropane	<1.0	1.0	ug/L							
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L							
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L							
2-Butanone (MEK)	<5.0	5.0	ug/L							
2-Butanone (MEK)	<10.0	10.0	ug/L							
Bromochloromethane	<1.0	1.0	ug/L							
Bromochloromethane	<1.0	1.0	ug/L							
Chloroform	<1.0	1.0	ug/L							
Chloroform	<1.0	1.0	ug/L							
1,1,1-Trichloroethane	<1.0	1.0	ug/L							
1,1,1-Trichloroethane	<1.0	1.0	ug/L							
1,1-Dichloropropene	<1.0	1.0	ug/L							
Carbon Tetrachloride	<1.0	1.0	ug/L							
Carbon Tetrachloride	<1.0	1.0	ug/L							
Benzene	<1.0	1.0	ug/L							
Benzene	<1.0	1.0	ug/L							
1,2-Dichloroethane	<1.0	1.0	ug/L							
1,2-Dichloroethane	<1.0	1.0	ug/L							
Trichloroethylene	<1.0	1.0	ug/L							
Trichloroethylene	<1.0	1.0	ug/L							
1,2-Dichloropropane	<1.0	1.0	ug/L							
1,2-Dichloropropane	<1.0	1.0	ug/L							
Dibromomethane	<1.0	1.0	ug/L							
Dibromomethane	<1.0	1.0	ug/L							
Bromodichloromethane	<1.0	1.0	ug/L							
Bromodichloromethane	<1.0	1.0	ug/L							
cis-1,3-Dichloropropene	<1.0	1.0	ug/L							
cis-1,3-Dichloropropene	<1.0	1.0	ug/L							
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L							
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L							
Toluene	<1.0	1.0	ug/L							
Toluene	<1.0	1.0	ug/L							
trans-1,3-Dichloropropene	<1.0	1.0	ug/L							
trans-1,3-Dichloropropene	<1.0	1.0	ug/L							
Ethyl Methacrylate	<10.0	10.0	ug/L							

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0977 - EPA 5030B - EPA 8260B										
Blank (1HC0977-BLK1)				Prepared: 03/18/24 00:00 Analyzed: 03/18/24 11:08						
1,1,2-Trichloroethane	<1.0	1.0	ug/L							
1,1,2-Trichloroethane	<1.0	1.0	ug/L							
Tetrachloroethylene	<1.0	1.0	ug/L							
Tetrachloroethylene	<1.0	1.0	ug/L							
1,3-Dichloropropane	<1.0	1.0	ug/L							
2-Hexanone (MBK)	<5.0	5.0	ug/L							
2-Hexanone (MBK)	<5.0	5.0	ug/L							
Dibromochloromethane	<1.0	1.0	ug/L							
Dibromochloromethane	<1.0	1.0	ug/L							
1,2-Dibromoethane	<1.0	1.0	ug/L							
1,2-Dibromoethane	<1.0	1.0	ug/L							
Chlorobenzene	<1.0	1.0	ug/L							
Chlorobenzene	<1.0	1.0	ug/L							
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L							
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L							
Ethylbenzene	<1.0	1.0	ug/L							
Ethylbenzene	<1.0	1.0	ug/L							
Xylenes, total	<2.0	2.0	ug/L							
Xylenes, total	<2.0	2.0	ug/L							
Styrene	<1.0	1.0	ug/L							
Styrene	<1.0	1.0	ug/L							
Bromoform	<1.0	1.0	ug/L							
Bromoform	<1.0	1.0	ug/L							
1,2,3-Trichloropropane	<1.0	1.0	ug/L							
1,2,3-Trichloropropane	<1.0	1.0	ug/L							
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L							
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L							
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L							
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L							
1,3-Dichlorobenzene	<1.0	1.0	ug/L							
1,4-Dichlorobenzene	<1.0	1.0	ug/L							
1,4-Dichlorobenzene	<1.0	1.0	ug/L							
1,2-Dichlorobenzene	<1.0	1.0	ug/L							
1,2-Dichlorobenzene	<1.0	1.0	ug/L							
1,2-Dibromo-3-chloropropane	<1.0	1.0	ug/L							
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L							
1,2,4-Trichlorobenzene	<1.0	1.0	ug/L							
Surrogate: Dibromofluoromethane	*33.4*		ug/L	*50.2*		*66.6*	*80-126*			*S-GC*
Surrogate: Dibromofluoromethane	*33.4*		ug/L	*50.2*		*66.6*	*80-126*			*S-GC*
Surrogate: Dibromofluoromethane	*33.4*		ug/L	*50.2*		*66.6*	*75-136*			*S-GC*
Surrogate: 1,2-Dichloroethane-d4	*32.2*		ug/L	*50.1*		*64.3*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*32.2*		ug/L	*50.1*		*64.3*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*32.2*		ug/L	*50.1*		*64.3*	*63-138*			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0977 - EPA 5030B - EPA 8260B										
Blank (1HC0977-BLK1)			Prepared: 03/18/24 00:00 Analyzed: 03/18/24 11:08							
Surrogate: 1,2-Dichloroethane-d4	*32.2*		ug/L	*50.1*		*64.3*	*61-142*			
Surrogate: Toluene-d8	*51.6*		ug/L	*50.4*		*102*	*87-116*			
Surrogate: Toluene-d8	*51.6*		ug/L	*50.4*		*102*	*87-116*			
Surrogate: Toluene-d8	*51.6*		ug/L	*50.4*		*102*	*87-116*			
Surrogate: Toluene-d8	*51.6*		ug/L	*50.4*		*102*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*44.7*		ug/L	*50.1*		*89.1*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*44.7*		ug/L	*50.1*		*89.1*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*44.7*		ug/L	*50.1*		*89.1*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*44.7*		ug/L	*50.1*		*89.1*	*80-116*			
LCS (1HC0977-BS1)			Prepared: 03/18/24 00:00 Analyzed: 03/18/24 09:49							
Dichlorodifluoromethane	21.60	1.0	ug/L	30.0		71.9	44-139			
Dichlorodifluoromethane	21.60	1.0	ug/L	30.0		71.9	44-139			
Chloromethane	25.59	1.0	ug/L	30.0		85.2	56-152			
Chloromethane	25.59	1.0	ug/L	30.0		85.2	63-155			
Vinyl Chloride	25.71	1.0	ug/L	30.0		85.6	62-151			
Vinyl Chloride	25.71	1.0	ug/L	30.0		85.6	70-154			
Bromomethane	23.44	1.0	ug/L	30.1		77.9	61-162			
Bromomethane	23.44	1.0	ug/L	30.1		77.9	52-176			
Chloroethane	26.67	1.0	ug/L	30.0		88.9	69-138			
Chloroethane	26.67	1.0	ug/L	30.0		88.9	72-148			
Trichlorofluoromethane	24.89	1.0	ug/L	30.0		83.0	70-143			
Trichlorofluoromethane	24.89	1.0	ug/L	30.0		83.0	70-152			
Acrolein	42.95	10.0	ug/L	50.5		85.0	27-144			
1,1-Dichloroethylene	45.04	1.0	ug/L	50.1		89.8	76-140			
1,1-Dichloroethylene	45.04	1.0	ug/L	50.1		89.8	70-148			
Acetone	85.66	10.0	ug/L	100		85.6	51-156			
Acetone	85.66	10.0	ug/L	100		85.6	43-172			
Methyl Iodide	95.51	2.0	ug/L	100		95.3	81-166			
Methyl Iodide	95.51	1.0	ug/L	100		95.3	69-170			
Carbon Disulfide	96.87	1.0	ug/L	100		96.8	76-147			
Carbon Disulfide	96.87	1.0	ug/L	100		96.8	72-162			
Acetonitrile	85.72	10.0	ug/L	100		85.6	46-156			
Methylene Chloride	44.08	5.0	ug/L	50.2		87.8	67-139			
Methylene Chloride	44.08	5.0	ug/L	50.2		87.8	68-142			
Acrylonitrile	43.04	5.0	ug/L	50.0		86.1	67-144			
Acrylonitrile	43.04	5.0	ug/L	50.0		86.1	67-144			
trans-1,2-Dichloroethylene	47.97	1.0	ug/L	50.3		95.4	72-135			
trans-1,2-Dichloroethylene	47.97	1.0	ug/L	50.3		95.4	66-148			
1,1-Dichloroethane	47.24	1.0	ug/L	50.2		94.0	72-129			
1,1-Dichloroethane	47.24	1.0	ug/L	50.2		94.0	66-143			
Vinyl Acetate	134.1	5.0	ug/L	162		83.0	24-144			
Vinyl Acetate	134.1	5.0	ug/L	162		83.0	43-153			
2,2-Dichloropropane	48.32	1.0	ug/L	50.2		96.2	64-131			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch 1HC0977 - EPA 5030B - EPA 8260B

LCS (1HC0977-BS1) Prepared: 03/18/24 00:00 Analyzed: 03/18/24 09:49

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
cis-1,2-Dichloroethylene	46.40	1.0	ug/L	50.2		92.3	81-137			
cis-1,2-Dichloroethylene	46.40	1.0	ug/L	50.2		92.3	71-149			
2-Butanone (MEK)	89.33	5.0	ug/L	100		89.2	47-149			
2-Butanone (MEK)	89.33	10.0	ug/L	100		89.2	52-159			
Bromochloromethane	44.28	1.0	ug/L	50.3		88.1	75-138			
Bromochloromethane	44.28	1.0	ug/L	50.3		88.1	69-143			
Chloroform	46.55	1.0	ug/L	50.2		92.8	78-131			
Chloroform	46.55	1.0	ug/L	50.2		92.8	69-144			
1,1,1-Trichloroethane	48.45	1.0	ug/L	50.3		96.3	67-121			
1,1,1-Trichloroethane	48.45	1.0	ug/L	50.3		96.3	62-129			
1,1-Dichloropropene	48.87	1.0	ug/L	50.3		97.2	80-131			
Carbon Tetrachloride	48.56	1.0	ug/L	50.2		96.7	71-131			
Carbon Tetrachloride	48.56	1.0	ug/L	50.2		96.7	63-141			
Benzene	53.40	1.0	ug/L	50.2		106	77-130			
Benzene	53.40	1.0	ug/L	50.2		106	71-134			
1,2-Dichloroethane	48.27	1.0	ug/L	50.2		96.2	76-126			
1,2-Dichloroethane	48.27	1.0	ug/L	50.2		96.2	72-132			
Trichloroethylene	52.28	1.0	ug/L	50.3		104	80-124			
Trichloroethylene	52.28	1.0	ug/L	50.3		104	71-135			
1,2-Dichloropropane	50.62	1.0	ug/L	50.2		101	81-125			
1,2-Dichloropropane	50.62	1.0	ug/L	50.2		101	69-136			
Dibromomethane	46.80	1.0	ug/L	50.3		93.1	84-134			
Dibromomethane	46.80	1.0	ug/L	50.3		93.1	73-147			
Bromodichloromethane	49.77	1.0	ug/L	50.3		99.0	78-121			
Bromodichloromethane	49.77	1.0	ug/L	50.3		99.0	68-129			
cis-1,3-Dichloropropene	48.37	1.0	ug/L	50.2		96.3	78-120			
cis-1,3-Dichloropropene	48.37	1.0	ug/L	50.2		96.3	65-134			
4-Methyl-2-pentanone (MIBK)	89.96	5.0	ug/L	100		89.8	67-143			
4-Methyl-2-pentanone (MIBK)	89.96	5.0	ug/L	100		89.8	58-147			
Toluene	52.43	1.0	ug/L	50.4		104	77-130			
Toluene	52.43	1.0	ug/L	50.4		104	72-133			
trans-1,3-Dichloropropene	46.98	1.0	ug/L	50.3		93.5	77-123			
trans-1,3-Dichloropropene	46.98	1.0	ug/L	50.3		93.5	67-130			
Ethyl Methacrylate	90.85	10.0	ug/L	100		90.8	52-148			
1,1,2-Trichloroethane	47.99	1.0	ug/L	50.2		95.6	78-124			
1,1,2-Trichloroethane	47.99	1.0	ug/L	50.2		95.6	69-135			
Tetrachloroethylene	55.71	1.0	ug/L	50.2		111	73-124			
Tetrachloroethylene	55.71	1.0	ug/L	50.2		111	69-130			
1,3-Dichloropropane	50.12	1.0	ug/L	50.2		99.9	78-131			
2-Hexanone (MBK)	93.27	5.0	ug/L	100		93.2	57-145			
2-Hexanone (MBK)	93.27	5.0	ug/L	100		93.2	55-144			
Dibromochloromethane	49.86	1.0	ug/L	50.3		99.1	78-126			
Dibromochloromethane	49.86	1.0	ug/L	50.3		99.1	73-127			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0977 - EPA 5030B - EPA 8260B										
LCS (1HC0977-BS1)				Prepared: 03/18/24 00:00 Analyzed: 03/18/24 09:49						
1,2-Dibromoethane	48.59	1.0	ug/L	50.4		96.4	69-126			
1,2-Dibromoethane	48.59	1.0	ug/L	50.4		96.4	67-132			
Chlorobenzene	54.76	1.0	ug/L	50.2		109	76-120			
Chlorobenzene	54.76	1.0	ug/L	50.2		109	72-123			
1,1,1,2-Tetrachloroethane	53.02	1.0	ug/L	50.2		106	81-122			
1,1,1,2-Tetrachloroethane	53.02	1.0	ug/L	50.2		106	73-127			
Ethylbenzene	53.25	1.0	ug/L	50.3		106	74-121			
Ethylbenzene	53.25	1.0	ug/L	50.3		106	71-127			
Xylenes, total	159.4	2.0	ug/L	151		106	75-122			
Xylenes, total	159.4	2.0	ug/L	151		106	74-127			
Styrene	52.34	1.0	ug/L	50.3		104	76-119			
Styrene	52.34	1.0	ug/L	50.3		104	66-126			
Bromoform	53.08	1.0	ug/L	50.2		106	74-127			
Bromoform	53.08	1.0	ug/L	50.2		106	68-130			
1,2,3-Trichloropropane	49.92	1.0	ug/L	50.2		99.4	73-125			
1,2,3-Trichloropropane	49.92	1.0	ug/L	50.2		99.4	63-136			
trans-1,4-Dichloro-2-butene	93.78	5.0	ug/L	100		93.5	55-135			
trans-1,4-Dichloro-2-butene	93.78	5.0	ug/L	100		93.5	54-134			
1,1,2,2-Tetrachloroethane	49.64	1.0	ug/L	50.2		98.9	58-133			
1,1,2,2-Tetrachloroethane	49.64	1.0	ug/L	50.2		98.9	61-131			
1,3-Dichlorobenzene	52.05	1.0	ug/L	50.3		103	70-125			
1,4-Dichlorobenzene	49.90	1.0	ug/L	50.2		99.5	69-128			
1,4-Dichlorobenzene	49.90	1.0	ug/L	50.2		99.5	70-129			
1,2-Dichlorobenzene	51.38	1.0	ug/L	50.2		102	70-125			
1,2-Dichlorobenzene	51.38	1.0	ug/L	50.2		102	69-126			
1,2-Dibromo-3-chloropropane	46.44	1.0	ug/L	50.4		92.1	54-147			
1,2-Dibromo-3-chloropropane	46.44	5.0	ug/L	50.4		92.1	50-143			
1,2,4-Trichlorobenzene	52.70	1.0	ug/L	50.2		105	55-149			
Surrogate: Dibromofluoromethane	*47.8*		ug/L	*50.2*		*95.3*	*80-126*			
Surrogate: Dibromofluoromethane	*47.8*		ug/L	*50.2*		*95.3*	*80-126*			
Surrogate: Dibromofluoromethane	*47.8*		ug/L	*50.2*		*95.3*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*48.2*		ug/L	*50.1*		*96.2*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*48.2*		ug/L	*50.1*		*96.2*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*48.2*		ug/L	*50.1*		*96.2*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*48.2*		ug/L	*50.1*		*96.2*	*61-142*			
Surrogate: Toluene-d8	*49.9*		ug/L	*50.4*		*99.0*	*87-116*			
Surrogate: Toluene-d8	*49.9*		ug/L	*50.4*		*99.0*	*87-116*			
Surrogate: Toluene-d8	*49.9*		ug/L	*50.4*		*99.0*	*87-116*			
Surrogate: Toluene-d8	*49.9*		ug/L	*50.4*		*99.0*	*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 Dup (1HC0977-BSD1)				Prepared: 03/18/24 00:00 Analyzed: 03/18/24 10:15						

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0977 - EPA 5030B - EPA 8260B										
LCS Dup (1HC0977-BSD1)			Prepared: 03/18/24 00:00 Analyzed: 03/18/24 10:15							
Dichlorodifluoromethane	20.71	1.0	ug/L	30.0		69.0	44-139	4.21	30	
Dichlorodifluoromethane	20.71	1.0	ug/L	30.0		69.0	44-139	4.21	30	
Chloromethane	24.16	1.0	ug/L	30.0		80.5	56-152	5.75	30	
Chloromethane	24.16	1.0	ug/L	30.0		80.5	63-155	5.75	24	
Vinyl Chloride	24.17	1.0	ug/L	30.0		80.5	62-151	6.17	28	
Vinyl Chloride	24.17	1.0	ug/L	30.0		80.5	70-154	6.17	25	
Bromomethane	22.59	1.0	ug/L	30.1		75.1	61-162	3.69	28	
Bromomethane	22.59	1.0	ug/L	30.1		75.1	52-176	3.69	27	
Chloroethane	25.51	1.0	ug/L	30.0		85.0	69-138	4.45	29	
Chloroethane	25.51	1.0	ug/L	30.0		85.0	72-148	4.45	25	
Trichlorofluoromethane	24.00	1.0	ug/L	30.0		80.0	70-143	3.64	27	
Trichlorofluoromethane	24.00	1.0	ug/L	30.0		80.0	70-152	3.64	26	
Acrolein	44.60	10.0	ug/L	50.5		88.3	27-144	3.77	30	
1,1-Dichloroethylene	43.42	1.0	ug/L	50.1		86.6	76-140	3.66	30	
1,1-Dichloroethylene	43.42	1.0	ug/L	50.1		86.6	70-148	3.66	24	
Acetone	87.51	10.0	ug/L	100		87.4	51-156	2.14	30	
Acetone	87.51	10.0	ug/L	100		87.4	43-172	2.14	30	
Methyl Iodide	90.94	2.0	ug/L	100		90.8	81-166	4.90	29	
Methyl Iodide	90.94	1.0	ug/L	100		90.8	69-170	4.90	30	
Carbon Disulfide	91.00	1.0	ug/L	100		90.9	76-147	6.25	27	
Carbon Disulfide	91.00	1.0	ug/L	100		90.9	72-162	6.25	24	
Acetonitrile	82.43	10.0	ug/L	100		82.3	46-156	3.91	30	
Methylene Chloride	42.70	5.0	ug/L	50.2		85.1	67-139	3.18	26	
Methylene Chloride	42.70	5.0	ug/L	50.2		85.1	68-142	3.18	21	
Acrylonitrile	43.04	5.0	ug/L	50.0		86.1	67-144	0.00	24	
Acrylonitrile	43.04	5.0	ug/L	50.0		86.1	67-144	0.00	24	
trans-1,2-Dichloroethylene	46.53	1.0	ug/L	50.3		92.5	72-135	3.05	28	
trans-1,2-Dichloroethylene	46.53	1.0	ug/L	50.3		92.5	66-148	3.05	27	
1,1-Dichloroethane	45.90	1.0	ug/L	50.2		91.3	72-129	2.88	26	
1,1-Dichloroethane	45.90	1.0	ug/L	50.2		91.3	66-143	2.88	24	
Vinyl Acetate	131.7	5.0	ug/L	162		81.5	24-144	1.83	30	
Vinyl Acetate	131.7	5.0	ug/L	162		81.5	43-153	1.83	30	
2,2-Dichloropropane	46.15	1.0	ug/L	50.2		91.8	64-131	4.59	26	
cis-1,2-Dichloroethylene	45.38	1.0	ug/L	50.2		90.3	81-137	2.22	27	
cis-1,2-Dichloroethylene	45.38	1.0	ug/L	50.2		90.3	71-149	2.22	26	
2-Butanone (MEK)	94.25	5.0	ug/L	100		94.1	47-149	5.36	30	
2-Butanone (MEK)	94.25	10.0	ug/L	100		94.1	52-159	5.36	27	
Bromochloromethane	43.87	1.0	ug/L	50.3		87.3	75-138	0.930	24	
Bromochloromethane	43.87	1.0	ug/L	50.3		87.3	69-143	0.930	23	
Chloroform	45.32	1.0	ug/L	50.2		90.3	78-131	2.68	27	
Chloroform	45.32	1.0	ug/L	50.2		90.3	69-144	2.68	23	
1,1,1-Trichloroethane	46.19	1.0	ug/L	50.3		91.8	67-121	4.78	28	
1,1,1-Trichloroethane	46.19	1.0	ug/L	50.3		91.8	62-129	4.78	24	

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch 1HC0977 - EPA 5030B - EPA 8260B

LCS Dup (1HC0977-BSD1) Prepared: 03/18/24 00:00 Analyzed: 03/18/24 10:15

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloropropene	46.77	1.0	ug/L	50.3		93.0	80-131	4.39	30	
Carbon Tetrachloride	46.66	1.0	ug/L	50.2		92.9	71-131	3.99	28	
Carbon Tetrachloride	46.66	1.0	ug/L	50.2		92.9	63-141	3.99	25	
Benzene	51.56	1.0	ug/L	50.2		103	77-130	3.51	25	
Benzene	51.56	1.0	ug/L	50.2		103	71-134	3.51	24	
1,2-Dichloroethane	48.24	1.0	ug/L	50.2		96.1	76-126	0.0622	24	
1,2-Dichloroethane	48.24	1.0	ug/L	50.2		96.1	72-132	0.0622	24	
Trichloroethylene	50.49	1.0	ug/L	50.3		100	80-124	3.48	27	
Trichloroethylene	50.49	1.0	ug/L	50.3		100	71-135	3.48	24	
1,2-Dichloropropane	49.54	1.0	ug/L	50.2		98.6	81-125	2.16	25	
1,2-Dichloropropane	49.54	1.0	ug/L	50.2		98.6	69-136	2.16	24	
Dibromomethane	47.38	1.0	ug/L	50.3		94.3	84-134	1.23	23	
Dibromomethane	47.38	1.0	ug/L	50.3		94.3	73-147	1.23	25	
Bromodichloromethane	48.90	1.0	ug/L	50.3		97.3	78-121	1.76	25	
Bromodichloromethane	48.90	1.0	ug/L	50.3		97.3	68-129	1.76	22	
cis-1,3-Dichloropropene	48.00	1.0	ug/L	50.2		95.6	78-120	0.768	26	
cis-1,3-Dichloropropene	48.00	1.0	ug/L	50.2		95.6	65-134	0.768	23	
4-Methyl-2-pentanone (MIBK)	90.63	5.0	ug/L	100		90.4	67-143	0.742	26	
4-Methyl-2-pentanone (MIBK)	90.63	5.0	ug/L	100		90.4	58-147	0.742	27	
Toluene	50.03	1.0	ug/L	50.4		99.2	77-130	4.68	27	
Toluene	50.03	1.0	ug/L	50.4		99.2	72-133	4.68	24	
trans-1,3-Dichloropropene	46.81	1.0	ug/L	50.3		93.1	77-123	0.363	28	
trans-1,3-Dichloropropene	46.81	1.0	ug/L	50.3		93.1	67-130	0.363	24	
Ethyl Methacrylate	90.26	10.0	ug/L	100		90.2	52-148	0.652	30	
1,1,2-Trichloroethane	47.97	1.0	ug/L	50.2		95.5	78-124	0.0417	24	
1,1,2-Trichloroethane	47.97	1.0	ug/L	50.2		95.5	69-135	0.0417	23	
Tetrachloroethylene	52.42	1.0	ug/L	50.2		104	73-124	6.09	26	
Tetrachloroethylene	52.42	1.0	ug/L	50.2		104	69-130	6.09	25	
1,3-Dichloropropane	49.36	1.0	ug/L	50.2		98.4	78-131	1.53	24	
2-Hexanone (MBK)	93.86	5.0	ug/L	100		93.8	57-145	0.631	30	
2-Hexanone (MBK)	93.86	5.0	ug/L	100		93.8	55-144	0.631	25	
Dibromochloromethane	49.63	1.0	ug/L	50.3		98.6	78-126	0.462	23	
Dibromochloromethane	49.63	1.0	ug/L	50.3		98.6	73-127	0.462	22	
1,2-Dibromoethane	48.30	1.0	ug/L	50.4		95.8	69-126	0.599	22	
1,2-Dibromoethane	48.30	1.0	ug/L	50.4		95.8	67-132	0.599	24	
Chlorobenzene	52.77	1.0	ug/L	50.2		105	76-120	3.70	25	
Chlorobenzene	52.77	1.0	ug/L	50.2		105	72-123	3.70	23	
1,1,1,2-Tetrachloroethane	51.73	1.0	ug/L	50.2		103	81-122	2.46	23	
1,1,1,2-Tetrachloroethane	51.73	1.0	ug/L	50.2		103	73-127	2.46	24	
Ethylbenzene	51.15	1.0	ug/L	50.3		102	74-121	4.02	27	
Ethylbenzene	51.15	1.0	ug/L	50.3		102	71-127	4.02	26	
Xylenes, total	153.0	2.0	ug/L	151		101	75-122	4.08	26	
Xylenes, total	153.0	2.0	ug/L	151		101	74-127	4.08	25	

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0977 - EPA 5030B - EPA 8260B										
LCS Dup (1HC0977-BSD1)				Prepared: 03/18/24 00:00 Analyzed: 03/18/24 10:15						
Styrene	50.58	1.0	ug/L	50.3		100	76-119	3.42	26	
Styrene	50.58	1.0	ug/L	50.3		100	66-126	3.42	23	
Bromoform	52.29	1.0	ug/L	50.2		104	74-127	1.50	22	
Bromoform	52.29	1.0	ug/L	50.2		104	68-130	1.50	23	
1,2,3-Trichloropropane	48.07	1.0	ug/L	50.2		95.8	73-125	3.78	20	
1,2,3-Trichloropropane	48.07	1.0	ug/L	50.2		95.8	63-136	3.78	24	
trans-1,4-Dichloro-2-butene	91.74	5.0	ug/L	100		91.5	55-135	2.20	26	
trans-1,4-Dichloro-2-butene	91.74	5.0	ug/L	100		91.5	54-134	2.20	27	
1,1,2,2-Tetrachloroethane	49.42	1.0	ug/L	50.2		98.4	58-133	0.444	28	
1,1,2,2-Tetrachloroethane	49.42	1.0	ug/L	50.2		98.4	61-131	0.444	29	
1,3-Dichlorobenzene	50.61	1.0	ug/L	50.3		101	70-125	2.81	27	
1,4-Dichlorobenzene	49.50	1.0	ug/L	50.2		98.7	69-128	0.805	29	
1,4-Dichlorobenzene	49.50	1.0	ug/L	50.2		98.7	70-129	0.805	24	
1,2-Dichlorobenzene	50.73	1.0	ug/L	50.2		101	70-125	1.27	25	
1,2-Dichlorobenzene	50.73	1.0	ug/L	50.2		101	69-126	1.27	26	
1,2-Dibromo-3-chloropropane	45.26	1.0	ug/L	50.4		89.8	54-147	2.57	29	
1,2-Dibromo-3-chloropropane	45.26	5.0	ug/L	50.4		89.8	50-143	2.57	30	
1,2,4-Trichlorobenzene	52.43	1.0	ug/L	50.2		104	55-149	0.514	30	
Surrogate: Dibromofluoromethane	*47.7*		ug/L	*50.2*		*95.0*	*80-126*			
Surrogate: Dibromofluoromethane	*47.7*		ug/L	*50.2*		*95.0*	*80-126*			
Surrogate: Dibromofluoromethane	*47.7*		ug/L	*50.2*		*95.0*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*48.8*		ug/L	*50.1*		*97.5*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*48.8*		ug/L	*50.1*		*97.5*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*48.8*		ug/L	*50.1*		*97.5*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*48.8*		ug/L	*50.1*		*97.5*	*61-142*			
Surrogate: Toluene-d8	*49.4*		ug/L	*50.4*		*98.0*	*87-116*			
Surrogate: Toluene-d8	*49.4*		ug/L	*50.4*		*98.0*	*87-116*			
Surrogate: Toluene-d8	*49.4*		ug/L	*50.4*		*98.0*	*87-116*			
Surrogate: Toluene-d8	*49.4*		ug/L	*50.4*		*98.0*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*50.9*		ug/L	*50.1*		*102*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*50.9*		ug/L	*50.1*		*102*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*50.9*		ug/L	*50.1*		*102*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*50.9*		ug/L	*50.1*		*102*	*80-116*			
Matrix Spike (1HC0977-MS1)		**Source: 1HC1004-08**		Prepared: 03/18/24 00:00 Analyzed: 03/18/24 23:36						
Dichlorodifluoromethane	305.4	10.0	ug/L	316	ND	96.7	47-137			
Dichlorodifluoromethane	305.4	10.0	ug/L	316	ND	96.7	47-137			
Chloromethane	332.8	10.0	ug/L	306	ND	109	49-154			
Chloromethane	332.8	10.0	ug/L	306	ND	109	61-152			
Vinyl Chloride	305.6	10.0	ug/L	302	ND	101	61-152			
Vinyl Chloride	305.6	10.0	ug/L	302	ND	101	66-149			
Bromomethane	283.6	10.0	ug/L	288	ND	98.5	47-168			
Bromomethane	283.6	10.0	ug/L	288	ND	98.5	43-171			
Chloroethane	331.8	10.0	ug/L	316	ND	105	61-148			
Chloroethane	331.8	10.0	ug/L	316	ND	105	69-148			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0977 - EPA 5030B - EPA 8260B										
Matrix Spike (1HC0977-MS1)		**Source: 1HC1004-08**	Prepared: 03/18/24 00:00 Analyzed: 03/18/24 23:36							
Trichlorofluoromethane	308.6	10.0	ug/L	326	ND	94.6	73-147			
Trichlorofluoromethane	308.6	10.0	ug/L	326	ND	94.6	62-163			
Acrolein	873.5	100	ug/L	1000	ND	87.1	20-164			
1,1-Dichloroethylene	510.2	10.0	ug/L	500	ND	102	68-153			
1,1-Dichloroethylene	510.2	10.0	ug/L	500	ND	102	70-148			
Acetone	1006	100	ug/L	1020	ND	98.7	45-175			
Acetone	1006	100	ug/L	1020	ND	98.7	45-173			
Methyl Iodide	1062	20.0	ug/L	997	ND	107	79-167			
Methyl Iodide	1062	10.0	ug/L	997	ND	107	62-167			
Carbon Disulfide	981.2	10.0	ug/L	1010	ND	97.1	72-156			
Carbon Disulfide	981.2	10.0	ug/L	1010	ND	97.1	71-163			
Acetonitrile	918.0	100	ug/L	1010	ND	91.3	38-166			
Methylene Chloride	459.8	50.0	ug/L	500	ND	92.0	64-143			
Methylene Chloride	459.8	50.0	ug/L	500	ND	92.0	69-140			
Acrylonitrile	809.4	50.0	ug/L	1000	ND	80.7	58-151			
Acrylonitrile	809.4	50.0	ug/L	1000	ND	80.7	58-151			
trans-1,2-Dichloroethylene	505.6	10.0	ug/L	500	ND	101	65-145			
trans-1,2-Dichloroethylene	505.6	10.0	ug/L	500	ND	101	69-144			
1,1-Dichloroethane	492.0	10.0	ug/L	500	ND	98.4	68-136			
1,1-Dichloroethane	492.0	10.0	ug/L	500	ND	98.4	70-138			
Vinyl Acetate	844.7	50.0	ug/L	1020	ND	82.9	58-143			
Vinyl Acetate	844.7	50.0	ug/L	1020	ND	82.9	58-142			
2,2-Dichloropropane	410.7	10.0	ug/L	500	ND	82.1	50-118			
cis-1,2-Dichloroethylene	480.4	10.0	ug/L	495	ND	97.1	67-153			
cis-1,2-Dichloroethylene	480.4	10.0	ug/L	495	ND	97.1	68-151			
2-Butanone (MEK)	953.2	50.0	ug/L	1030	ND	92.3	52-159			
2-Butanone (MEK)	953.2	100	ug/L	1030	ND	92.3	50-160			
Bromochloromethane	494.4	10.0	ug/L	500	ND	98.9	61-151			
Bromochloromethane	494.4	10.0	ug/L	500	ND	98.9	65-143			
Chloroform	494.0	10.0	ug/L	500	ND	98.8	77-132			
Chloroform	494.0	10.0	ug/L	500	ND	98.8	71-143			
1,1,1-Trichloroethane	456.0	10.0	ug/L	500	ND	91.2	71-118			
1,1,1-Trichloroethane	456.0	10.0	ug/L	500	ND	91.2	63-133			
1,1-Dichloropropene	488.9	10.0	ug/L	500	ND	97.8	82-128			
Carbon Tetrachloride	491.9	10.0	ug/L	500	ND	98.4	71-133			
Carbon Tetrachloride	491.9	10.0	ug/L	500	ND	98.4	63-142			
Benzene	514.3	10.0	ug/L	500	ND	103	81-125			
Benzene	514.3	10.0	ug/L	500	ND	103	69-133			
1,2-Dichloroethane	486.8	10.0	ug/L	500	ND	97.4	75-125			
1,2-Dichloroethane	486.8	10.0	ug/L	500	ND	97.4	63-138			
Trichloroethylene	489.3	10.0	ug/L	500	ND	97.9	83-120			
Trichloroethylene	489.3	10.0	ug/L	500	ND	97.9	71-133			
1,2-Dichloropropane	489.2	10.0	ug/L	500	ND	97.8	80-124			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0977 - EPA 5030B - EPA 8260B										
Matrix Spike (1HC0977-MS1)	**Source: 1HC1004-08**		Prepared: 03/18/24 00:00 Analyzed: 03/18/24 23:36							
1,2-Dichloropropane	489.2	10.0	ug/L	500	ND	97.8	69-132			
Dibromomethane	512.5	10.0	ug/L	500	ND	102	84-131			
Dibromomethane	512.5	10.0	ug/L	500	ND	102	70-147			
Bromodichloromethane	467.7	10.0	ug/L	500	ND	93.5	79-118			
Bromodichloromethane	467.7	10.0	ug/L	500	ND	93.5	67-130			
cis-1,3-Dichloropropene	439.1	10.0	ug/L	503	ND	87.3	75-116			
cis-1,3-Dichloropropene	439.1	10.0	ug/L	503	ND	87.3	61-126			
4-Methyl-2-pentanone (MIBK)	892.4	50.0	ug/L	1010	ND	88.0	65-149			
4-Methyl-2-pentanone (MIBK)	892.4	50.0	ug/L	1010	ND	88.0	55-147			
Toluene	490.6	10.0	ug/L	500	ND	98.1	82-123			
Toluene	490.6	10.0	ug/L	500	ND	98.1	71-133			
trans-1,3-Dichloropropene	423.0	10.0	ug/L	504	ND	83.9	75-117			
trans-1,3-Dichloropropene	423.0	10.0	ug/L	504	ND	83.9	63-124			
Ethyl Methacrylate	850.3	100	ug/L	1010	ND	84.5	73-135			
1,1,2-Trichloroethane	485.5	10.0	ug/L	500	ND	97.1	77-122			
1,1,2-Trichloroethane	485.5	10.0	ug/L	500	ND	97.1	69-133			
Tetrachloroethylene	495.4	10.0	ug/L	500	ND	99.1	74-120			
Tetrachloroethylene	495.4	10.0	ug/L	500	ND	99.1	70-124			
1,3-Dichloropropane	519.5	10.0	ug/L	500	ND	104	80-127			
2-Hexanone (MBK)	930.5	50.0	ug/L	1030	ND	90.1	57-150			
2-Hexanone (MBK)	930.5	50.0	ug/L	1030	ND	90.1	53-141			
Dibromochloromethane	484.0	10.0	ug/L	495	ND	97.8	80-120			
Dibromochloromethane	484.0	10.0	ug/L	495	ND	97.8	74-122			
1,2-Dibromoethane	468.3	10.0	ug/L	500	ND	93.7	67-125			
1,2-Dibromoethane	468.3	10.0	ug/L	500	ND	93.7	66-127			
Chlorobenzene	493.5	10.0	ug/L	500	ND	98.7	81-113			
Chlorobenzene	493.5	10.0	ug/L	500	ND	98.7	76-116			
1,1,1,2-Tetrachloroethane	508.6	10.0	ug/L	500	ND	102	80-119			
1,1,1,2-Tetrachloroethane	508.6	10.0	ug/L	500	ND	102	77-121			
Ethylbenzene	467.1	10.0	ug/L	500	ND	93.4	78-114			
Ethylbenzene	467.1	10.0	ug/L	500	ND	93.4	73-124			
Xylenes, total	1412	20.0	ug/L	1500	ND	94.1	77-116			
Xylenes, total	1412	20.0	ug/L	1500	ND	94.1	75-123			
Styrene	471.4	10.0	ug/L	500	ND	94.3	78-114			
Styrene	471.4	10.0	ug/L	500	ND	94.3	70-120			
Bromoform	519.3	10.0	ug/L	500	ND	104	69-125			
Bromoform	519.3	10.0	ug/L	500	ND	104	70-124			
1,2,3-Trichloropropane	495.4	10.0	ug/L	500	ND	99.1	72-125			
1,2,3-Trichloropropane	495.4	10.0	ug/L	500	ND	99.1	62-135			
trans-1,4-Dichloro-2-butene	787.5	50.0	ug/L	1040	ND	75.8	48-131			
trans-1,4-Dichloro-2-butene	787.5	50.0	ug/L	1040	ND	75.8	50-120			
1,1,2,2-Tetrachloroethane	457.2	10.0	ug/L	498	ND	91.7	51-138			
1,1,2,2-Tetrachloroethane	457.2	10.0	ug/L	498	ND	91.7	63-126			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0977 - EPA 5030B - EPA 8260B										
Matrix Spike (1HC0977-MS1)	**Source: 1HC1004-08**	Prepared: 03/18/24 00:00 Analyzed: 03/18/24 23:36								
1,3-Dichlorobenzene	438.8	10.0	ug/L	500	ND	87.8	70-122			
1,4-Dichlorobenzene	445.5	10.0	ug/L	500	ND	89.1	70-124			
1,4-Dichlorobenzene	445.5	10.0	ug/L	500	ND	89.1	72-119			
1,2-Dichlorobenzene	450.5	10.0	ug/L	500	ND	90.1	68-123			
1,2-Dichlorobenzene	450.5	10.0	ug/L	500	ND	90.1	71-117			
1,2-Dibromo-3-chloropropane	415.7	10.0	ug/L	500	ND	83.1	46-149			
1,2-Dibromo-3-chloropropane	415.7	50.0	ug/L	500	ND	83.1	49-134			
1,2,4-Trichlorobenzene	435.2	10.0	ug/L	500	ND	87.0	60-137			
Surrogate: Dibromofluoromethane	*559*		ug/L	*502*		*111*	*80-126*			
Surrogate: Dibromofluoromethane	*559*		ug/L	*502*		*111*	*80-126*			
Surrogate: Dibromofluoromethane	*559*		ug/L	*502*		*111*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*569*		ug/L	*501*		*114*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*569*		ug/L	*501*		*114*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*569*		ug/L	*501*		*114*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*569*		ug/L	*501*		*114*	*61-142*			
Surrogate: Toluene-d8	*513*		ug/L	*504*		*102*	*87-116*			
Surrogate: Toluene-d8	*513*		ug/L	*504*		*102*	*87-116*			
Surrogate: Toluene-d8	*513*		ug/L	*504*		*102*	*87-116*			
Surrogate: Toluene-d8	*513*		ug/L	*504*		*102*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*516*		ug/L	*501*		*103*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*516*		ug/L	*501*		*103*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*516*		ug/L	*501*		*103*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*516*		ug/L	*501*		*103*	*80-116*			
Matrix Spike Dup (1HC0977-MSD1)	**Source: 1HC1004-08**	Prepared: 03/18/24 00:00 Analyzed: 03/19/24 00:02								
Dichlorodifluoromethane	291.9	10.0	ug/L	316	ND	92.4	47-137	4.52	20	
Dichlorodifluoromethane	291.9	10.0	ug/L	316	ND	92.4	47-137	4.52	20	
Chloromethane	316.9	10.0	ug/L	306	ND	103	49-154	4.89	25	
Chloromethane	316.9	10.0	ug/L	306	ND	103	61-152	4.89	26	
Vinyl Chloride	291.5	10.0	ug/L	302	ND	96.4	61-152	4.72	24	
Vinyl Chloride	291.5	10.0	ug/L	302	ND	96.4	66-149	4.72	23	
Bromomethane	286.4	10.0	ug/L	288	ND	99.4	47-168	0.982	30	
Bromomethane	286.4	10.0	ug/L	288	ND	99.4	43-171	0.982	29	
Chloroethane	318.1	10.0	ug/L	316	ND	101	61-148	4.22	29	
Chloroethane	318.1	10.0	ug/L	316	ND	101	69-148	4.22	25	
Trichlorofluoromethane	289.7	10.0	ug/L	326	ND	88.8	73-147	6.32	24	
Trichlorofluoromethane	289.7	10.0	ug/L	326	ND	88.8	62-163	6.32	25	
Acrolein	843.8	100	ug/L	1000	ND	84.2	20-164	3.46	24	
1,1-Dichloroethylene	490.1	10.0	ug/L	500	ND	98.0	68-153	4.02	21	
1,1-Dichloroethylene	490.1	10.0	ug/L	500	ND	98.0	70-148	4.02	22	
Acetone	970.0	100	ug/L	1020	ND	95.1	45-175	3.67	23	
Acetone	970.0	100	ug/L	1020	ND	95.1	45-173	3.67	30	
Methyl Iodide	1017	20.0	ug/L	997	ND	102	79-167	4.35	14	
Methyl Iodide	1017	10.0	ug/L	997	ND	102	62-167	4.35	24	
Carbon Disulfide	927.7	10.0	ug/L	1010	ND	91.9	72-156	5.61	19	

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0977 - EPA 5030B - EPA 8260B										
Matrix Spike Dup (1HC0977-MSD1)	**Source: 1HC1004-08**	Prepared: 03/18/24 00:00 Analyzed: 03/19/24 00:02								
Carbon Disulfide	927.7	10.0	ug/L	1010	ND	91.9	71-163	5.61	22	
Acetonitrile	909.7	100	ug/L	1010	ND	90.4	38-166	0.908	20	
Methylene Chloride	445.6	50.0	ug/L	500	ND	89.1	64-143	3.14	19	
Methylene Chloride	445.6	50.0	ug/L	500	ND	89.1	69-140	3.14	19	
Acrylonitrile	796.9	50.0	ug/L	1000	ND	79.4	58-151	1.56	15	
Acrylonitrile	796.9	50.0	ug/L	1000	ND	79.4	58-151	1.56	15	
trans-1,2-Dichloroethylene	486.9	10.0	ug/L	500	ND	97.4	65-145	3.77	18	
trans-1,2-Dichloroethylene	486.9	10.0	ug/L	500	ND	97.4	69-144	3.77	22	
1,1-Dichloroethane	473.0	10.0	ug/L	500	ND	94.6	68-136	3.94	17	
1,1-Dichloroethane	473.0	10.0	ug/L	500	ND	94.6	70-138	3.94	20	
Vinyl Acetate	788.9	50.0	ug/L	1020	ND	77.4	58-143	6.83	14	
Vinyl Acetate	788.9	50.0	ug/L	1020	ND	77.4	58-142	6.83	24	
2,2-Dichloropropane	391.4	10.0	ug/L	500	ND	78.3	50-118	4.81	17	
cis-1,2-Dichloroethylene	463.6	10.0	ug/L	495	ND	93.7	67-153	3.56	22	
cis-1,2-Dichloroethylene	463.6	10.0	ug/L	495	ND	93.7	68-151	3.56	22	
2-Butanone (MEK)	994.1	50.0	ug/L	1030	ND	96.2	52-159	4.20	28	
2-Butanone (MEK)	994.1	100	ug/L	1030	ND	96.2	50-160	4.20	23	
Bromochloromethane	485.9	10.0	ug/L	500	ND	97.2	61-151	1.73	27	
Bromochloromethane	485.9	10.0	ug/L	500	ND	97.2	65-143	1.73	22	
Chloroform	474.5	10.0	ug/L	500	ND	94.9	77-132	4.03	17	
Chloroform	474.5	10.0	ug/L	500	ND	94.9	71-143	4.03	21	
1,1,1-Trichloroethane	436.4	10.0	ug/L	500	ND	87.3	71-118	4.39	15	
1,1,1-Trichloroethane	436.4	10.0	ug/L	500	ND	87.3	63-133	4.39	23	
1,1-Dichloropropene	472.7	10.0	ug/L	500	ND	94.5	82-128	3.37	16	
Carbon Tetrachloride	471.8	10.0	ug/L	500	ND	94.4	71-133	4.17	14	
Carbon Tetrachloride	471.8	10.0	ug/L	500	ND	94.4	63-142	4.17	22	
Benzene	496.9	10.0	ug/L	500	ND	99.4	81-125	3.44	12	
Benzene	496.9	10.0	ug/L	500	ND	99.4	69-133	3.44	18	
1,2-Dichloroethane	474.8	10.0	ug/L	500	ND	95.0	75-125	2.50	13	
1,2-Dichloroethane	474.8	10.0	ug/L	500	ND	95.0	63-138	2.50	20	
Trichloroethylene	473.8	10.0	ug/L	500	ND	94.8	83-120	3.22	11	
Trichloroethylene	473.8	10.0	ug/L	500	ND	94.8	71-133	3.22	23	
1,2-Dichloropropane	476.0	10.0	ug/L	500	ND	95.2	80-124	2.74	11	
1,2-Dichloropropane	476.0	10.0	ug/L	500	ND	95.2	69-132	2.74	20	
Dibromomethane	488.3	10.0	ug/L	500	ND	97.7	84-131	4.84	13	
Dibromomethane	488.3	10.0	ug/L	500	ND	97.7	70-147	4.84	22	
Bromodichloromethane	454.3	10.0	ug/L	500	ND	90.9	79-118	2.91	11	
Bromodichloromethane	454.3	10.0	ug/L	500	ND	90.9	67-130	2.91	21	
cis-1,3-Dichloropropene	428.3	10.0	ug/L	503	ND	85.1	75-116	2.49	11	
cis-1,3-Dichloropropene	428.3	10.0	ug/L	503	ND	85.1	61-126	2.49	21	
4-Methyl-2-pentanone (MIBK)	899.9	50.0	ug/L	1010	ND	88.7	65-149	0.837	14	
4-Methyl-2-pentanone (MIBK)	899.9	50.0	ug/L	1010	ND	88.7	55-147	0.837	23	
Toluene	474.7	10.0	ug/L	500	ND	94.9	82-123	3.29	12	

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0977 - EPA 5030B - EPA 8260B										
Matrix Spike Dup (1HC0977-MSD1)	**Source: 1HC1004-08**	Prepared: 03/18/24 00:00 Analyzed: 03/19/24 00:02								
Toluene	474.7	10.0	ug/L	500	ND	94.9	71-133	3.29	19	
trans-1,3-Dichloropropene	415.7	10.0	ug/L	504	ND	82.4	75-117	1.74	11	
trans-1,3-Dichloropropene	415.7	10.0	ug/L	504	ND	82.4	63-124	1.74	21	
Ethyl Methacrylate	861.8	100	ug/L	1010	ND	85.7	73-135	1.34	10	
1,1,2-Trichloroethane	475.0	10.0	ug/L	500	ND	95.0	77-122	2.19	11	
1,1,2-Trichloroethane	475.0	10.0	ug/L	500	ND	95.0	69-133	2.19	19	
Tetrachloroethylene	479.8	10.0	ug/L	500	ND	96.0	74-120	3.20	17	
Tetrachloroethylene	479.8	10.0	ug/L	500	ND	96.0	70-124	3.20	24	
1,3-Dichloropropane	511.5	10.0	ug/L	500	ND	102	80-127	1.55	13	
2-Hexanone (MBK)	917.7	50.0	ug/L	1030	ND	88.8	57-150	1.39	17	
2-Hexanone (MBK)	917.7	50.0	ug/L	1030	ND	88.8	53-141	1.39	24	
Dibromochloromethane	474.5	10.0	ug/L	495	ND	95.9	80-120	1.98	12	
Dibromochloromethane	474.5	10.0	ug/L	495	ND	95.9	74-122	1.98	21	
1,2-Dibromoethane	465.9	10.0	ug/L	500	ND	93.2	67-125	0.514	12	
1,2-Dibromoethane	465.9	10.0	ug/L	500	ND	93.2	66-127	0.514	23	
Chlorobenzene	482.8	10.0	ug/L	500	ND	96.6	81-113	2.19	14	
Chlorobenzene	482.8	10.0	ug/L	500	ND	96.6	76-116	2.19	21	
1,1,1,2-Tetrachloroethane	496.4	10.0	ug/L	500	ND	99.3	80-119	2.43	15	
1,1,1,2-Tetrachloroethane	496.4	10.0	ug/L	500	ND	99.3	77-121	2.43	25	
Ethylbenzene	458.7	10.0	ug/L	500	ND	91.7	78-114	1.81	14	
Ethylbenzene	458.7	10.0	ug/L	500	ND	91.7	73-124	1.81	20	
Xylenes, total	1387	20.0	ug/L	1500	ND	92.4	77-116	1.83	13	
Xylenes, total	1387	20.0	ug/L	1500	ND	92.4	75-123	1.83	20	
Styrene	457.0	10.0	ug/L	500	ND	91.4	78-114	3.10	12	
Styrene	457.0	10.0	ug/L	500	ND	91.4	70-120	3.10	23	
Bromoform	515.8	10.0	ug/L	500	ND	103	69-125	0.676	14	
Bromoform	515.8	10.0	ug/L	500	ND	103	70-124	0.676	22	
1,2,3-Trichloropropane	479.3	10.0	ug/L	500	ND	95.9	72-125	3.30	18	
1,2,3-Trichloropropane	479.3	10.0	ug/L	500	ND	95.9	62-135	3.30	28	
trans-1,4-Dichloro-2-butene	792.2	50.0	ug/L	1040	ND	76.2	48-131	0.595	17	
trans-1,4-Dichloro-2-butene	792.2	50.0	ug/L	1040	ND	76.2	50-120	0.595	26	
1,1,2,2-Tetrachloroethane	462.7	10.0	ug/L	498	ND	92.8	51-138	1.20	30	
1,1,2,2-Tetrachloroethane	462.7	10.0	ug/L	498	ND	92.8	63-126	1.20	24	
1,3-Dichlorobenzene	436.6	10.0	ug/L	500	ND	87.3	70-122	0.503	30	
1,4-Dichlorobenzene	444.4	10.0	ug/L	500	ND	88.9	70-124	0.247	28	
1,4-Dichlorobenzene	444.4	10.0	ug/L	500	ND	88.9	72-119	0.247	24	
1,2-Dichlorobenzene	447.3	10.0	ug/L	500	ND	89.5	68-123	0.713	29	
1,2-Dichlorobenzene	447.3	10.0	ug/L	500	ND	89.5	71-117	0.713	24	
1,2-Dibromo-3-chloropropane	446.0	10.0	ug/L	500	ND	89.2	46-149	7.03	30	
1,2-Dibromo-3-chloropropane	446.0	50.0	ug/L	500	ND	89.2	49-134	7.03	28	
1,2,4-Trichlorobenzene	458.1	10.0	ug/L	500	ND	91.6	60-137	5.13	30	
Surrogate: Dibromofluoromethane	*537*		ug/L	*502*		*107*	*80-126*			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0977 - EPA 5030B - EPA 8260B										
Matrix Spike Dup (1HC0977-MSD1)	**Source: 1HC1004-08**		Prepared: 03/18/24 00:00 Analyzed: 03/19/24 00:02							
Surrogate: Dibromofluoromethane	*537*		ug/L	*502*		*107*	*80-126*			
Surrogate: Dibromofluoromethane	*537*		ug/L	*502*		*107*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*548*		ug/L	*501*		*110*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*548*		ug/L	*501*		*110*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*548*		ug/L	*501*		*110*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*548*		ug/L	*501*		*110*	*61-142*			
Surrogate: Toluene-d8	*504*		ug/L	*504*		*100*	*87-116*			
Surrogate: Toluene-d8	*504*		ug/L	*504*		*100*	*87-116*			
Surrogate: Toluene-d8	*504*		ug/L	*504*		*100*	*87-116*			
Surrogate: Toluene-d8	*504*		ug/L	*504*		*100*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*518*		ug/L	*501*		*103*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*518*		ug/L	*501*		*103*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*518*		ug/L	*501*		*103*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*518*		ug/L	*501*		*103*	*80-116*			
Batch 1HC1308 - EPA 5030B - EPA 8260B										
Blank (1HC1308-BLK1)			Prepared: 03/22/24 00:00 Analyzed: 03/22/24 10:58							
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	*44.9*		ug/L	*50.2*		*89.5*	*80-126*			
Surrogate: 1,2-Dichloroethane-d4	*47.1*		ug/L	*50.1*		*94.1*	*63-138*			
Surrogate: Toluene-d8	*48.8*		ug/L	*50.4*		*96.8*	*87-116*			
Surrogate: 4-Bromofluorobenzene	*49.6*		ug/L	*50.1*		*98.9*	*85-111*			
LCS (1HC1308-BS1)			Prepared: 03/22/24 00:00 Analyzed: 03/22/24 09:50							
Allyl chloride	41.42	1.0	ug/L	35.7		116	76-134			
Chloroprene	45.89	1.0	ug/L	50.0		91.8	74-141			
Methacrylonitrile	57.91	1.0	ug/L	64.3		90.1	73-143			
Methyl Methacrylate	56.05	1.0	ug/L	57.3		97.8	72-123			
Propionitrile	69.14	10.0	ug/L	50.0		138	50-151			
Surrogate: Dibromofluoromethane	*46.6*		ug/L	*50.2*		*93.0*	*80-126*			
Surrogate: 1,2-Dichloroethane-d4	*47.1*		ug/L	*50.1*		*94.0*	*63-138*			
Surrogate: Toluene-d8	*49.3*		ug/L	*50.4*		*97.9*	*87-116*			
Surrogate: 4-Bromofluorobenzene	*50.0*		ug/L	*50.1*		*99.6*	*85-111*			
LCS Dup (1HC1308-BSD1)			Prepared: 03/22/24 00:00 Analyzed: 03/22/24 10:12							
Allyl chloride	38.34	1.0	ug/L	35.7		107	76-134	7.72	30	
Chloroprene	41.57	1.0	ug/L	50.0		83.1	74-141	9.88	30	
Methacrylonitrile	54.32	1.0	ug/L	64.3		84.5	73-143	6.40	30	
Methyl Methacrylate	52.91	1.0	ug/L	57.3		92.3	72-123	5.76	30	
Propionitrile	65.81	10.0	ug/L	50.0		132	50-151	4.94	30	

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC1308 - EPA 5030B - EPA 8260B										
LCS Dup (1HC1308-BSD1)			Prepared: 03/22/24 00:00 Analyzed: 03/22/24 10:12							
Surrogate: Dibromofluoromethane	*46.3*		ug/L	*50.2*		*92.3*	*80-126*			
Surrogate: 1,2-Dichloroethane-d4	*46.8*		ug/L	*50.1*		*93.5*	*63-138*			
Surrogate: Toluene-d8	*49.7*		ug/L	*50.4*		*98.7*	*87-116*			
Surrogate: 4-Bromofluorobenzene	*50.1*		ug/L	*50.1*		*100*	*85-111*			
Matrix Spike (1HC1308-MS1)	**Source: 1HC1004-09**		Prepared: 03/22/24 00:00 Analyzed: 03/22/24 13:12							
Allyl chloride	435.7	10.0	ug/L	357	ND	122	60-140			
Chloroprene	483.9	10.0	ug/L	500	ND	96.8	60-140			
Methacrylonitrile	584.7	10.0	ug/L	643	ND	91.0	60-140			
Methyl Methacrylate	562.2	10.0	ug/L	573	ND	98.1	60-140			
Propionitrile	733.1	100	ug/L	500	ND	147	60-140			QM-14
Surrogate: Dibromofluoromethane	*465*		ug/L	*502*		*92.7*	*80-126*			
Surrogate: 1,2-Dichloroethane-d4	*473*		ug/L	*501*		*94.4*	*63-138*			
Surrogate: Toluene-d8	*497*		ug/L	*504*		*98.7*	*87-116*			
Surrogate: 4-Bromofluorobenzene	*504*		ug/L	*501*		*101*	*85-111*			
Matrix Spike Dup (1HC1308-MSD1)	**Source: 1HC1004-09**		Prepared: 03/22/24 00:00 Analyzed: 03/22/24 13:35							
Allyl chloride	429.6	10.0	ug/L	357	ND	120	60-140	1.41	30	
Chloroprene	454.5	10.0	ug/L	500	ND	90.9	60-140	6.27	30	
Methacrylonitrile	579.1	10.0	ug/L	643	ND	90.1	60-140	0.962	30	
Methyl Methacrylate	564.4	10.0	ug/L	573	ND	98.5	60-140	0.391	30	
Propionitrile	715.4	100	ug/L	500	ND	143	60-140	2.44	30	QM-14
Surrogate: Dibromofluoromethane	*462*		ug/L	*502*		*92.2*	*80-126*			
Surrogate: 1,2-Dichloroethane-d4	*470*		ug/L	*501*		*93.9*	*63-138*			
Surrogate: Toluene-d8	*494*		ug/L	*504*		*98.1*	*87-116*			
Surrogate: 4-Bromofluorobenzene	*500*		ug/L	*501*		*99.8*	*85-111*			

Determination of General Solvents	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC1422 - Semi-Vol GC - EPA 8015C										
Blank (1HC1422-BLK1)			Prepared: 03/26/24 12:11 Analyzed: 03/26/24 14:54							
Isobutanol	<1.0	1.0	mg/L							
LCS (1HC1422-BS1)			Prepared: 03/26/24 12:11 Analyzed: 03/26/24 13:00							
Isobutanol	26.71	1.0	mg/L	26.0		103	40-135			
Matrix Spike (1HC1422-MS1)	**Source: 1HC1004-09**		Prepared: 03/26/24 12:11 Analyzed: 03/26/24 16:09							
Isobutanol	26.86	1.0	mg/L	26.0	ND	103	63-135			
Matrix Spike Dup (1HC1422-MSD1)	**Source: 1HC1004-09**		Prepared: 03/26/24 12:11 Analyzed: 03/26/24 16:47							
Isobutanol	22.81	1.0	mg/L	26.0	ND	87.7	63-135	16.3	30	

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC1026 - 3520C BNA Cont Liq - EPA 8270C										
Blank (1HC1026-BLK1)			Prepared: 03/19/24 14:09 Analyzed: 03/27/24 12:43							
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							
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							

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC1026 - 3520C BNA Cont Liq - EPA 8270C										
Blank (1HC1026-BLK1)			Prepared: 03/19/24 14:09 Analyzed: 03/27/24 12:43							
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							
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							

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC1026 - 3520C BNA Cont Liq - EPA 8270C										
Blank (1HC1026-BLK1)			Prepared: 03/19/24 14:09 Analyzed: 03/27/24 12:43							
Butyl Benzyl Phthalate	<8	8	ug/L							
Benzo(a)anthracene	<8	8	ug/L							
Chrysene	<8	8	ug/L							
Bis(2-Ethylhexyl) Phthalate	<6	6	ug/L							
Kepone	<8	8	ug/L							
3,3´-Dichlorobenzidine	<8	8	ug/L							
2-Acetylaminofluorene	<8	8	ug/L							
Di-n-octyl Phthalate	<8	8	ug/L							
Benzo(b)Fluoranthene	<8	8	ug/L							
7,12-Dimethylbenz [a] anthracene	<8	8	ug/L							
Benzo(k)Fluoranthene	<8	8	ug/L							
Benzo(a)Pyrene	<8	8	ug/L							
3-Methylcholanthrene	<8	8	ug/L							
Dibenzo(a,h)anthracene	<8	8	ug/L							
Indeno(1,2,3-cd)Pyrene	<8	8	ug/L							
Benzo(g,h,i)perylene	<8	8	ug/L							
Surrogate: 2-Fluorophenol	*35.6*		ug/L	*61.6*		*57.7*	*24-136*			
Surrogate: Phenol-d6	*35.7*		ug/L	*63.5*		*56.2*	*15-140*			
Surrogate: Nitrobenzene-d5	*36.9*		ug/L	*62.6*		*58.9*	*29-130*			
Surrogate: 2-Fluorobiphenyl	*37.2*		ug/L	*60.0*		*62.0*	*23-113*			
Surrogate: 2,4,6-Tribromophenol	*44.4*		ug/L	*62.0*		*71.7*	*15-139*			
Surrogate: Terphenyl-dl4	*44.7*		ug/L	*60.0*		*74.5*	*27-141*			
LCS (1HC1026-BS1)			Prepared: 03/19/24 14:09 Analyzed: 03/27/24 13:33							
N-Nitrosodimethylamine	15.3	8	ug/L	21.4		71.5	36-138			
Methyl Methanesulfonate	31.2	8	ug/L	50.0		62.5	22-114			
N-Nitrosodiethylamine	33.9	8	ug/L	50.0		67.9	52-114			
N-Nitrosomethylethylamine	34.1	8	ug/L	50.0		68.2	36-120			
Ethyl Methanesulfonate	30.2	8	ug/L	50.0		60.3	46-110			
Phenol	18.3	8	ug/L	21.4		85.6	50-112			
Bis(2-Chloroethyl) Ether	16.8	8	ug/L	21.4		78.8	39-151			
2-Chlorophenol	18.4	8	ug/L	21.4		85.8	56-116			
Benzyl Alcohol	17.0	8	ug/L	21.4		79.2	13-158			
2-Methylphenol (o-Cresol)	17.7	8	ug/L	21.4		82.8	53-131			
Bis[2-Chloroisopropyl]ether	17.5	8	ug/L	21.4		81.9	50-121			
n-Nitroso-di-n-propylamine	16.5	8	ug/L	21.4		77.0	50-138			
N-Nitrosopyrrolidine	32.0	8	ug/L	50.0		64.1	31-118			
Acetophenone	35.4	8	ug/L	50.0		70.8	45-104			
o-Toluidine	<8	8	ug/L	50.0		12.8	10-163			
(3 & 4)-Methylphenol	18.5	8	ug/L	21.4		86.4	30-164			
Hexachloroethane	12.3	8	ug/L	21.4		57.5	10-110			
Nitrobenzene	18.3	8	ug/L	21.4		85.3	47-134			
N-Nitrosopiperidine	36.0	8	ug/L	50.0		72.0	51-122			

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC1026 - 3520C BNA Cont Liq - EPA 8270C										
LCS (1HC1026-BS1)			Prepared: 03/19/24 14:09 Analyzed: 03/27/24 13:33							
Isophorone	18.2	8	ug/L	21.4		85.2	54-128			
2-Nitrophenol	21.2	8	ug/L	21.4		99.1	54-117			
2,4-Dimethylphenol	19.9	8	ug/L	21.4		93.1	52-118			
Bis (2-Chloroethoxy) Methane	15.9	8	ug/L	21.4		74.2	13-132			
2,4-Dichlorophenol	20.6	8	ug/L	21.4		96.5	58-114			
Naphthalene	16.4	8	ug/L	21.4		76.7	37-116			
2,6-Dichlorophenol	41.8	8	ug/L	50.0		83.5	52-129			
Hexachloropropene	28.6	8	ug/L	50.0		57.2	14-110			
Hexachlorobutadiene	15.4	8	ug/L	21.4		72.2	14-110			
N-Nitrosodi-n-butylamine	32.2	8	ug/L	50.0		64.3	40-135			
4-Chloro-3-methylphenol	21.6	8	ug/L	21.4		101	57-136			
2-Methylnaphthalene	18.1	8	ug/L	21.4		84.5	44-111			
Isosafrole	37.7	8	ug/L	50.0		75.3	49-107			
1,2,4,5-Tetrachlorobenzene	30.1	8	ug/L	50.0		60.1	42-110			
Hexachlorocyclopentadiene	16.5	8	ug/L	21.4		77.2	11-110			
2,4,6-Trichlorophenol	22.9	8	ug/L	21.4		107	55-120			
2,4,5-Trichlorophenol	23.2	8	ug/L	21.4		108	55-121			
Safrole	37.6	8	ug/L	50.0		75.1	40-118			
2-Chloronaphthalene	24.4	8	ug/L	21.4		114	47-127			
2-Nitroaniline	21.5	8	ug/L	21.4		100	36-143			
1,4-Naphthoquinone	50.3	8	ug/L	50.0		101	43-152			
Dimethylphthalate	21.9	8	ug/L	21.4		102	59-128			
1,3-Dinitrobenzene	21.5	8	ug/L	21.4		101	63-125			
1,2-Dinitrobenzene	22.7	8	ug/L	21.4		106	63-123			
2,6-Dinitrotoluene	21.7	8	ug/L	21.4		101	60-127			
Acenaphthylene	19.4	8	ug/L	21.4		90.9	49-113			
Acenaphthene	19.8	8	ug/L	21.4		92.5	50-119			
2,4-Dinitrophenol	16.2	8	ug/L	21.4		76.0	27-157			
4-Nitrophenol	22.6	8	ug/L	21.4		106	49-154			
Dibenzofuran	20.2	8	ug/L	21.4		94.6	56-121			
2,4-Dinitrotoluene	21.2	8	ug/L	21.4		98.9	53-138			
2,3,4,6-Tetrachlorophenol	20.8	8	ug/L	21.4		97.4	47-132			
Pentachlorobenzene	44.6	8	ug/L	50.0		89.2	41-125			
Diethyl Phthalate	22.3	8	ug/L	21.4		104	53-138			
Fluorene	20.8	8	ug/L	21.4		97.3	54-125			
4-Chlorophenyl Phenyl Ether	20.8	8	ug/L	21.4		97.5	51-122			
4-Nitroaniline	10.0	8	ug/L	21.4		46.6	10-136			
5-Nitro-o-toluidine	8.5	8	ug/L	50.0		16.9	10-145			
4,6-Dinitro-2-methylphenol	19.0	8	ug/L	21.4		88.9	49-137			
N-Nitrosodiphenylamine	20.3	8	ug/L	21.4		94.7	25-138			
Diphenylamine	20.3	8	ug/L	21.4		94.7	35-151			
Azobenzene	22.0	8	ug/L	21.4		103	16-156			

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC1026 - 3520C BNA Cont Liq - EPA 8270C										
LCS (1HC1026-BS1)			Prepared: 03/19/24 14:09 Analyzed: 03/27/24 13:33							
Diallate	46.7	8	ug/L	50.0		93.4	54-132			
1,3,5-Trinitrobenzene	34.8	8	ug/L	50.0		69.7	57-173			
Phenacetin	46.9	8	ug/L	50.0		93.7	55-121			
4-Bromophenyl Phenyl Ether	23.0	8	ug/L	21.4		108	53-122			
Pentachlorophenol	13.6	8	ug/L	21.4		63.6	18-152			
Pronamide	42.9	8	ug/L	50.0		85.9	42-122			
Pentachloronitrobenzene (PCNB)	51.5	8	ug/L	50.0		103	50-128			
Phenanthrene	22.3	8	ug/L	21.4		104	59-131			
Anthracene	22.1	8	ug/L	21.4		103	59-127			
Di-n-butyl Phthalate	23.4	8	ug/L	21.4		109	64-148			
Fluoranthene	22.7	8	ug/L	21.4		106	62-132			
Isodrin	51.4	8	ug/L	50.0		103	46-130			
Chlorobenzilate	50.2	8	ug/L	50.0		100	48-150			
Pyrene	25.9	8	ug/L	21.4		121	58-135			
p-(Dimethylamino)azobenzene	34.1	8	ug/L	50.0		68.2	28-146			
Butyl Benzyl Phthalate	23.4	8	ug/L	21.4		109	52-150			
Benzo(a)anthracene	22.4	8	ug/L	21.4		105	58-131			
Chrysene	23.0	8	ug/L	21.4		107	59-131			
Bis(2-Ethylhexyl) Phthalate	28.3	6	ug/L	21.4		132	33-184			
Kepone	56.9	8	ug/L	50.0		114	10-134			
2-Acetylaminofluorene	53.8	8	ug/L	50.0		108	47-166			
Di-n-octyl Phthalate	26.1	8	ug/L	21.4		122	48-162			
Benzo(b)Fluoranthene	24.7	8	ug/L	21.4		115	50-146			
7,12-Dimethylbenz [a] anthracene	45.5	8	ug/L	50.0		91.0	22-155			
Benzo(k)Fluoranthene	24.1	8	ug/L	21.4		113	54-144			
Benzo(a)Pyrene	22.7	8	ug/L	21.4		106	39-148			
3-Methylcholanthrene	40.6	8	ug/L	50.0		81.3	34-118			
Dibenzo(a,h)anthracene	18.8	8	ug/L	21.4		87.7	46-153			
Indeno(1,2,3-cd)Pyrene	18.9	8	ug/L	21.4		88.4	48-152			
Benzo(g,h,i)perylene	17.8	8	ug/L	21.4		83.3	47-161			
Surrogate: 2-Fluorophenol	*38.4*		ug/L	*61.6*		*62.3*	*24-136*			
Surrogate: Phenol-d6	*39.8*		ug/L	*63.5*		*62.7*	*15-140*			
Surrogate: Nitrobenzene-d5	*42.0*		ug/L	*62.6*		*67.0*	*38-115*			
Surrogate: 2-Fluorobiphenyl	*42.6*		ug/L	*60.0*		*71.0*	*33-110*			
Surrogate: 2,4,6-Tribromophenol	*52.5*		ug/L	*62.0*		*84.7*	*15-139*			
Surrogate: Terphenyl-dl4	*59.9*		ug/L	*60.0*		*99.7*	*30-142*			
LCS Dup (1HC1026-BSD1)			Prepared: 03/19/24 14:09 Analyzed: 03/27/24 13:57							
N-Nitrosodimethylamine	15.4	8	ug/L	21.4		71.8	36-138	0.522	30	
Methyl Methanesulfonate	31.7	8	ug/L	50.0		63.4	22-114	1.43	23	
N-Nitrosodiethylamine	33.8	8	ug/L	50.0		67.6	52-114	0.413	18	
N-Nitrosomethylethylamine	34.7	8	ug/L	50.0		69.4	36-120	1.69	22	
Ethyl Methanesulfonate	30.6	8	ug/L	50.0		61.1	46-110	1.32	24	

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC1026 - 3520C BNA Cont Liq - EPA 8270C										
LCS Dup (1HC1026-BSD1)			Prepared: 03/19/24 14:09 Analyzed: 03/27/24 13:57							
Phenol	17.1	8	ug/L	21.4		79.8	50-112	6.95	28	
Bis(2-Chloroethyl) Ether	16.3	8	ug/L	21.4		76.0	39-151	3.56	30	
2-Chlorophenol	18.3	8	ug/L	21.4		85.3	56-116	0.546	22	
Benzyl Alcohol	17.6	8	ug/L	21.4		82.2	13-158	3.71	30	
2-Methylphenol (o-Cresol)	17.5	8	ug/L	21.4		81.9	53-131	1.02	25	
Bis[2-Chloroisopropyl]ether	17.2	8	ug/L	21.4		80.3	50-121	2.07	25	
n-Nitroso-di-n-propylamine	16.7	8	ug/L	21.4		78.2	50-138	1.57	30	
N-Nitrosopyrrolidine	32.5	8	ug/L	50.0		65.0	31-118	1.36	30	
Acetophenone	36.0	8	ug/L	50.0		72.0	45-104	1.62	30	
o-Toluidine	<8	8	ug/L	50.0		13.1	10-163	2.17	30	
(3 & 4)-Methylphenol	18.8	8	ug/L	21.4		88.0	30-164	1.82	30	
Hexachloroethane	11.1	8	ug/L	21.4		52.0	10-110	10.1	37	
Nitrobenzene	18.7	8	ug/L	21.4		87.3	47-134	2.27	28	
N-Nitrosopiperidine	36.9	8	ug/L	50.0		73.8	51-122	2.50	30	
Isophorone	18.3	8	ug/L	21.4		85.6	54-128	0.547	22	
2-Nitrophenol	21.1	8	ug/L	21.4		98.8	54-117	0.283	21	
2,4-Dimethylphenol	20.1	8	ug/L	21.4		93.9	52-118	0.850	23	
Bis (2-Chloroethoxy) Methane	12.9	8	ug/L	21.4		60.5	13-132	20.4	30	
2,4-Dichlorophenol	21.5	8	ug/L	21.4		100	58-114	3.94	20	
Naphthalene	16.0	8	ug/L	21.4		75.0	37-116	2.16	17	
2,6-Dichlorophenol	43.5	8	ug/L	50.0		86.9	52-129	3.99	16	
Hexachloropropene	22.4	8	ug/L	50.0		44.7	14-110	24.6	29	
Hexachlorobutadiene	13.3	8	ug/L	21.4		62.2	14-110	14.8	29	
N-Nitrosodi-n-butylamine	33.5	8	ug/L	50.0		66.9	40-135	4.02	23	
4-Chloro-3-methylphenol	22.7	8	ug/L	21.4		106	57-136	4.97	18	
2-Methylnaphthalene	17.9	8	ug/L	21.4		83.8	44-111	0.834	20	
Isosafrole	35.5	8	ug/L	50.0		71.0	49-107	5.93	12	
1,2,4,5-Tetrachlorobenzene	27.4	8	ug/L	50.0		54.9	42-110	9.08	30	
Hexachlorocyclopentadiene	14.9	8	ug/L	21.4		69.7	11-110	10.1	29	
2,4,6-Trichlorophenol	22.1	8	ug/L	21.4		103	55-120	3.42	15	
2,4,5-Trichlorophenol	23.2	8	ug/L	21.4		108	55-121	0.0432	16	
Safrole	33.4	8	ug/L	50.0		66.8	40-118	11.7	30	
2-Chloronaphthalene	23.9	8	ug/L	21.4		112	47-127	2.19	17	
2-Nitroaniline	21.1	8	ug/L	21.4		98.4	36-143	1.97	30	
1,4-Naphthoquinone	44.2	8	ug/L	50.0		88.5	43-152	12.8	30	
Dimethylphthalate	21.1	8	ug/L	21.4		98.7	59-128	3.49	15	
1,3-Dinitrobenzene	20.5	8	ug/L	21.4		96.0	63-125	4.71	14	
1,2-Dinitrobenzene	22.0	8	ug/L	21.4		103	63-123	3.45	18	
2,6-Dinitrotoluene	21.3	8	ug/L	21.4		99.4	60-127	1.91	13	
Acenaphthylene	18.0	8	ug/L	21.4		83.9	49-113	8.02	23	
Acenaphthene	19.1	8	ug/L	21.4		89.4	50-119	3.44	16	
2,4-Dinitrophenol	12.4	8	ug/L	21.4		58.0	27-157	26.9	23	QR-02

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC1026 - 3520C BNA Cont Liq - EPA 8270C										
LCS Dup (1HC1026-BSD1)			Prepared: 03/19/24 14:09 Analyzed: 03/27/24 13:57							
4-Nitrophenol	23.7	8	ug/L	21.4		111	49-154	4.71	28	
Dibenzofuran	19.3	8	ug/L	21.4		90.2	56-121	4.71	18	
2,4-Dinitrotoluene	21.0	8	ug/L	21.4		98.1	53-138	0.807	18	
2,3,4,6-Tetrachlorophenol	22.0	8	ug/L	21.4		103	47-132	5.24	29	
Pentachlorobenzene	43.1	8	ug/L	50.0		86.1	41-125	3.54	22	
Diethyl Phthalate	21.6	8	ug/L	21.4		101	53-138	2.91	18	
Fluorene	20.0	8	ug/L	21.4		93.5	54-125	3.97	14	
4-Chlorophenyl Phenyl Ether	20.4	8	ug/L	21.4		95.2	51-122	2.33	15	
4-Nitroaniline	8.4	8	ug/L	21.4		39.3	10-136	17.0	30	
5-Nitro-o-toluidine	<8	8	ug/L	50.0		13.9	10-145	20.0	30	
4,6-Dinitro-2-methylphenol	18.8	8	ug/L	21.4		87.9	49-137	1.16	16	
N-Nitrosodiphenylamine	17.8	8	ug/L	21.4		83.2	25-138	13.0	30	
Diphenylamine	17.8	8	ug/L	21.4		83.2	35-151	13.0	30	
Azobenzene	20.6	8	ug/L	21.4		96.0	16-156	6.59	30	
Diallate	46.4	8	ug/L	50.0		92.8	54-132	0.666	25	
1,3,5-Trinitrobenzene	37.4	8	ug/L	50.0		74.8	57-173	7.14	30	
Phenacetin	46.7	8	ug/L	50.0		93.3	55-121	0.428	30	
4-Bromophenyl Phenyl Ether	22.2	8	ug/L	21.4		104	53-122	3.89	16	
Pentachlorophenol	14.2	8	ug/L	21.4		66.3	18-152	4.10	30	
Pronamide	41.5	8	ug/L	50.0		83.0	42-122	3.41	30	
Pentachloronitrobenzene (PCNB)	50.9	8	ug/L	50.0		102	50-128	1.17	18	
Phenanthrene	21.5	8	ug/L	21.4		101	59-131	3.74	16	
Anthracene	20.9	8	ug/L	21.4		97.7	59-127	5.67	16	
Di-n-butyl Phthalate	23.0	8	ug/L	21.4		107	64-148	1.90	30	
Fluoranthene	22.5	8	ug/L	21.4		105	62-132	0.841	16	
Isodrin	48.6	8	ug/L	50.0		97.1	46-130	5.74	29	
Chlorobenzilate	49.6	8	ug/L	50.0		99.1	48-150	1.34	30	
Pyrene	23.7	8	ug/L	21.4		111	58-135	9.11	18	
p-(Dimethylamino)azobenzene	26.6	8	ug/L	50.0		53.3	28-146	24.6	30	
Butyl Benzyl Phthalate	22.4	8	ug/L	21.4		105	52-150	4.37	30	
Benzo(a)anthracene	21.7	8	ug/L	21.4		101	58-131	3.04	30	
Chrysene	22.0	8	ug/L	21.4		103	59-131	4.44	30	
Bis(2-Ethylhexyl) Phthalate	26.7	6	ug/L	21.4		125	33-184	5.93	30	
Kepone	71.6	8	ug/L	50.0		143	10-134	22.8	30	QS-02
2-Acetylaminofluorene	53.5	8	ug/L	50.0		107	47-166	0.597	30	
Di-n-octyl Phthalate	25.8	8	ug/L	21.4		120	48-162	1.20	30	
Benzo(b)Fluoranthene	24.0	8	ug/L	21.4		112	50-146	2.71	30	
7,12-Dimethylbenz [a] anthracene	43.0	8	ug/L	50.0		85.9	22-155	5.77	30	
Benzo(k)Fluoranthene	23.9	8	ug/L	21.4		112	54-144	0.833	30	
Benzo(a)Pyrene	22.2	8	ug/L	21.4		104	39-148	2.05	30	
3-Methylcholanthrene	38.9	8	ug/L	50.0		77.8	34-118	4.35	30	
Dibenzo(a,h)anthracene	18.8	8	ug/L	21.4		87.8	46-153	0.106	30	

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC1026 - 3520C BNA Cont Liq - EPA 8270C										
LCS Dup (1HC1026-BSD1)			Prepared: 03/19/24 14:09 Analyzed: 03/27/24 13:57							
Indeno(1,2,3-cd)Pyrene	19.0	8	ug/L	21.4		88.9	48-152	0.475	30	
Benzo(g,h,i)perylene	18.2	8	ug/L	21.4		84.8	47-161	1.78	30	
Surrogate: 2-Fluorophenol	*37.8*		ug/L	*61.6*		*61.3*	*24-136*			
Surrogate: Phenol-d6	*39.5*		ug/L	*63.5*		*62.2*	*15-140*			
Surrogate: Nitrobenzene-d5	*42.7*		ug/L	*62.6*		*68.2*	*38-115*			
Surrogate: 2-Fluorobiphenyl	*39.7*		ug/L	*60.0*		*66.2*	*33-110*			
Surrogate: 2,4,6-Tribromophenol	*51.4*		ug/L	*62.0*		*82.9*	*15-139*			
Surrogate: Terphenyl-dl4	*54.6*		ug/L	*60.0*		*90.9*	*30-142*			

Determination of Organophosphorus Insecticides	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC1019 - 3510C NP/OC Sep Fnl - EPA 8141										
Blank (1HC1019-BLK1)			Prepared: 03/19/24 12:45 Analyzed: 04/01/24 12:22							
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	*7.80*		ug/L	*8.34*		*93.5*	*38-122*			
LCS (1HC1019-BS1)			Prepared: 03/19/24 12:45 Analyzed: 04/01/24 14:18							
O,O,O-Triethyl phosphorothioate	3.18	0.4	ug/L	4.02		78.9	42-115			
Thionazin	3.37	0.4	ug/L	4.03		83.5	28-118			
Phorate	3.82	0.4	ug/L	4.03		94.7	18-159			
Dimethoate	5.19	0.4	ug/L	4.03		129	43-155			
Disulfoton	3.06	0.4	ug/L	4.03		75.8	37-126			
Methyl Parathion	3.86	0.4	ug/L	4.04		95.7	28-145			
Parathion	3.57	0.4	ug/L	4.00		89.2	52-121			
Famphur	3.80	0.4	ug/L	4.02		94.5	44-144			
Surrogate: 2-Nitro-m-xylene	*9.52*		ug/L	*8.34*		*114*	*38-122*			
LCS Dup (1HC1019-BSD1)			Prepared: 03/19/24 12:45 Analyzed: 04/01/24 15:16							
O,O,O-Triethyl phosphorothioate	3.69	0.4	ug/L	4.02		91.7	42-115	15.0	30	
Thionazin	4.00	0.4	ug/L	4.03		99.2	28-118	17.1	30	
Phorate	4.26	0.4	ug/L	4.03		106	18-159	10.9	30	
Dimethoate	5.52	0.4	ug/L	4.03		137	43-155	6.16	22	

Determination of Organophosphorus Insecticides	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC1019 - 3510C NP/OC Sep Fnl - EPA 8141										
LCS Dup (1HC1019-BSD1)			Prepared: 03/19/24 12:45 Analyzed: 04/01/24 15:16							
Disulfoton	4.36	0.4	ug/L	4.03		108	37-126	35.2	30	QR-02
Methyl Parathion	4.24	0.4	ug/L	4.04		105	28-145	9.25	28	
Parathion	4.37	0.4	ug/L	4.00		109	52-121	20.2	26	
Famphur	4.20	0.4	ug/L	4.02		105	44-144	10.1	28	
Surrogate: 2-Nitro-m-xylene	*10.1*		ug/L	*8.34*		*122*	*38-122*			

Determination of Chlorinated Phenoxy Herbicides	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC1011 - EPA 8151A - EPA 8151A										
Blank (1HC1011-BLK1)			Prepared: 03/19/24 11:10 Analyzed: 03/25/24 23:47							
2,4-D	<2.0	2.0	ug/L							
2,4,5-TP (Silvex)	<0.5	0.5	ug/L							
2,4,5-T	<0.5	0.5	ug/L							
Dinoseb	<0.5	0.5	ug/L							
Surrogate: 2,5-Dichlorobenzoic Acid	*1.63*		ug/L	*2.02*		*80.7*	*31-116*			
LCS (1HC1011-BS1)			Prepared: 03/19/24 11:10 Analyzed: 03/26/24 00:52							
2,4-D	<2.0	2.0	ug/L	1.15		107	16-161			
2,4,5-TP (Silvex)	0.62	0.5	ug/L	0.575		109	35-141			
2,4,5-T	0.65	0.5	ug/L	0.575		113	54-149			
Dinoseb	0.60	0.5	ug/L	1.15		52.2	10-133			
Surrogate: 2,5-Dichlorobenzoic Acid	*1.86*		ug/L	*2.02*		*92.1*	*31-116*			
LCS Dup (1HC1011-BSD1)			Prepared: 03/19/24 11:10 Analyzed: 03/26/24 01:25							
2,4-D	<2.0	2.0	ug/L	1.15		103	16-161	3.73	30	
2,4,5-TP (Silvex)	0.58	0.5	ug/L	0.575		102	35-141	6.61	30	
2,4,5-T	0.60	0.5	ug/L	0.575		104	54-149	8.00	30	
Dinoseb	0.75	0.5	ug/L	1.15		65.2	10-133	22.2	30	
Surrogate: 2,5-Dichlorobenzoic Acid	*1.81*		ug/L	*2.02*		*89.6*	*31-116*			

Determination of Organochlorine Insecticides & Metabolites	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC1017 - 3510C NP/OC Sep Fnl - EPA 8081										
Blank (1HC1017-BLK1)			Prepared: 03/19/24 12:40 Analyzed: 03/29/24 13:30							
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							

Determination of Organochlorine Insecticides & Metabolites	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC1017 - 3510C NP/OC Sep Fnl - EPA 8081										
Blank (1HC1017-BLK1)			Prepared: 03/19/24 12:40 Analyzed: 03/29/24 13:30							
Heptachlor	<0.05	0.05	ug/L							
Delta-BHC	<0.05	0.05	ug/L							
Aldrin	<0.05	0.05	ug/L							
Heptachlor Epoxide	<0.05	0.05	ug/L							
Endosulfan I	<0.05	0.05	ug/L							
4,4`-DDE	<0.05	0.05	ug/L							
Dieldrin	<0.05	0.05	ug/L							
Endrin	<0.05	0.05	ug/L							
4,4`-DDD	<0.05	0.05	ug/L							
Endosulfan II	<0.05	0.05	ug/L							
4,4`-DDT	<0.05	0.05	ug/L							
Endrin Aldehyde	<0.05	0.05	ug/L							
Endosulfan Sulfate	<0.05	0.05	ug/L							
Methoxychlor	<0.05	0.05	ug/L							
Chlordane	<0.10	0.10	ug/L							
Toxaphene	<0.20	0.20	ug/L							
Hexachlorobenzene	<0.05	0.05	ug/L							
Surrogate: Tetrachloro-m-xylene	*0.564*		ug/L	*0.600*		*94.0*	*10-121*			
LCS (1HC1017-BS1)			Prepared: 03/19/24 12:40 Analyzed: 03/29/24 13:45							
Alpha-BHC	0.222	0.05	ug/L	0.250		88.7	33-123			
Gamma-BHC [Lindane]	0.215	0.05	ug/L	0.250		86.1	34-120			
Beta-BHC	0.217	0.05	ug/L	0.250		86.8	33-125			
Heptachlor	0.236	0.05	ug/L	0.250		94.3	32-117			
Delta-BHC	0.246	0.05	ug/L	0.250		98.6	24-140			
Aldrin	0.208	0.05	ug/L	0.250		83.3	29-122			
Heptachlor Epoxide	0.217	0.05	ug/L	0.250		86.9	37-137			
Endosulfan I	0.227	0.05	ug/L	0.250		91.0	27-141			
4,4`-DDE	0.221	0.05	ug/L	0.250		88.4	38-147			
Dieldrin	0.207	0.05	ug/L	0.250		82.7	32-137			
Endrin	0.275	0.05	ug/L	0.250		110	25-142			
4,4`-DDD	0.215	0.05	ug/L	0.250		86.1	43-146			
Endosulfan II	0.229	0.05	ug/L	0.250		91.7	36-140			
4,4`-DDT	0.264	0.05	ug/L	0.250		105	39-140			
Endrin Aldehyde	0.221	0.05	ug/L	0.250		88.2	17-150			
Endosulfan Sulfate	0.227	0.05	ug/L	0.250		91.0	41-135			
Methoxychlor	0.293	0.05	ug/L	0.250		117	40-148			
Surrogate: Tetrachloro-m-xylene	*0.522*		ug/L	*0.600*		*87.0*	*10-121*			
LCS Dup (1HC1017-BSD1)			Prepared: 03/19/24 12:40 Analyzed: 03/29/24 14:00							
Alpha-BHC	0.257	0.05	ug/L	0.250		103	33-123	14.5	30	
Gamma-BHC [Lindane]	0.247	0.05	ug/L	0.250		98.7	34-120	13.5	30	

Determination of Organochlorine Insecticides & Metabolites	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC1017 - 3510C NP/OC Sep Fnl - EPA 8081										
LCS Dup (1HC1017-BSD1)			Prepared: 03/19/24 12:40 Analyzed: 03/29/24 14:00							
Beta-BHC	0.248	0.05	ug/L	0.250		99.1	33-125	13.2	30	
Heptachlor	0.273	0.05	ug/L	0.250		109	32-117	14.7	30	
Delta-BHC	0.288	0.05	ug/L	0.250		115	24-140	15.5	30	
Aldrin	0.243	0.05	ug/L	0.250		97.2	29-122	15.5	30	
Heptachlor Epoxide	0.251	0.05	ug/L	0.250		101	37-137	14.6	30	
Endosulfan I	0.266	0.05	ug/L	0.250		107	27-141	15.8	30	
4,4`-DDE	0.260	0.05	ug/L	0.250		104	38-147	16.3	30	
Dieldrin	0.243	0.05	ug/L	0.250		97.2	32-137	16.1	30	
Endrin	0.327	0.05	ug/L	0.250		131	25-142	17.2	30	
4,4`-DDD	0.254	0.05	ug/L	0.250		102	43-146	16.6	30	
Endosulfan II	0.264	0.05	ug/L	0.250		106	36-140	14.0	30	
4,4`-DDT	0.311	0.05	ug/L	0.250		124	39-140	16.4	30	
Endrin Aldehyde	0.239	0.05	ug/L	0.250		95.6	17-150	8.03	30	
Endosulfan Sulfate	0.266	0.05	ug/L	0.250		106	41-135	15.5	30	
Methoxychlor	0.348	0.05	ug/L	0.250		139	40-148	17.1	30	
Surrogate: Tetrachloro-m-xylene	*0.562*		ug/L	*0.600*		*93.6*	*10-121*			

Determination of Polychlorinated Biphenyls (PCB)	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC1018 - 3510C NP/OC Sep Fnl - EPA 8082										
Blank (1HC1018-BLK1)			Prepared: 03/19/24 12:42 Analyzed: 03/29/24 13:30							
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	*0.607*		ug/L	*0.600*		*101*	*38-121*			
Surrogate: Decachlorobiphenyl	*0.589*		ug/L	*0.600*		*98.2*	*25-119*			
LCS (1HC1018-BS1)			Prepared: 03/19/24 12:42 Analyzed: 03/29/24 14:14							
Arochlor 1016	2.571	0.20	ug/L	2.60		98.9	25-126			
Arochlor 1260	2.748	0.20	ug/L	2.60		106	29-142			
Surrogate: Tetrachloro-m-xylene	*0.574*		ug/L	*0.600*		*95.6*	*38-121*			
Surrogate: Decachlorobiphenyl	*0.518*		ug/L	*0.600*		*86.3*	*25-119*			
LCS Dup (1HC1018-BSD1)			Prepared: 03/19/24 12:42 Analyzed: 03/29/24 14:29							
Arochlor 1016	2.638	0.20	ug/L	2.60		101	25-126	2.58	30	

Determination of Polychlorinated Biphenyls (PCB)	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC1018 - 3510C NP/OC Sep Fnl - EPA 8082										
LCS Dup (1HC1018-BSD1)			Prepared: 03/19/24 12:42 Analyzed: 03/29/24 14:29							
Arochlor 1260	3.015	0.20	ug/L	2.60		116	29-142	9.28	30	
Surrogate: Tetrachloro-m-xylene	*0.590*		ug/L	*0.600*		*98.3*	*38-121*			
Surrogate: Decachlorobiphenyl	*0.353*		ug/L	*0.600*		*58.8*	*25-119*			

Determination of Conventional Chemistry Parameters	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC0886 - Wet Chem Preparation - EPA 376.2										
Blank (1HC0886-BLK1)			Prepared: 03/15/24 13:29 Analyzed: 03/15/24 14:57							
Sulfide, total	<0.10	0.10	mg/L							
LCS (1HC0886-BS1)			Prepared: 03/15/24 13:29 Analyzed: 03/15/24 14:57							
Sulfide, total	0.164	0.10	mg/L	0.19		85.0	59-110			
Matrix Spike (1HC0886-MS1)		**Source: 1HC0966-03**	Prepared: 03/15/24 13:29 Analyzed: 03/15/24 14:57							
Sulfide, total	0.157	0.10	mg/L	0.19	0.0326	64.4	50-150			
Matrix Spike Dup (1HC0886-MSD1)		**Source: 1HC0966-03**	Prepared: 03/15/24 13:29 Analyzed: 03/15/24 14:57							
Sulfide, total	0.173	0.10	mg/L	0.19	0.0326	72.7	50-150	9.67	30	
Batch 1HC1377 - Wet Chem Preparation - EPA 9010B										
Blank (1HC1377-BLK1)			Prepared: 03/25/24 16:59 Analyzed: 03/26/24 16:00							
Cyanide, total	<0.005	0.005	mg/L							
LCS (1HC1377-BS1)			Prepared: 03/25/24 16:59 Analyzed: 03/26/24 16:00							
Cyanide, total	0.0301	0.005	mg/L	0.0300		100	66-136			
Matrix Spike (1HC1377-MS1)		**Source: 1HC1004-09**	Prepared: 03/25/24 16:59 Analyzed: 03/26/24 16:00							
Cyanide, total	0.0328	0.005	mg/L	0.0300	ND	109	59-153			
Matrix Spike Dup (1HC1377-MSD1)		**Source: 1HC1004-09**	Prepared: 03/25/24 16:59 Analyzed: 03/26/24 16:00							
Cyanide, total	0.0345	0.005	mg/L	0.0300	ND	115	59-153	5.01	30	

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC1095 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Blank (1HC1095-BLK1)			Prepared: 03/20/24 09:48 Analyzed: 03/21/24 20:37							
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							

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC1095 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Blank (1HC1095-BLK1)			Prepared: 03/20/24 09:48 Analyzed: 03/21/24 20:37							
Cobalt, total	<0.0004	0.0004	mg/L							
Copper, total	<0.0040	0.0040	mg/L							
Lead, total	<0.0040	0.0040	mg/L							
Nickel, total	<0.0040	0.0040	mg/L							
Selenium, total	<0.0040	0.0040	mg/L							
Silver, total	<0.0040	0.0040	mg/L							
Thallium, total	<0.0020	0.0020	mg/L							
Vanadium, total	<0.0200	0.0200	mg/L							QB-12
Zinc, total	<0.0200	0.0200	mg/L							
LCS (1HC1095-BS1)			Prepared: 03/20/24 09:48 Analyzed: 03/21/24 20:43							
Antimony, total	0.0928	0.0020	mg/L	0.100		92.8	80-120			
Arsenic, total	0.0955	0.0040	mg/L	0.100		95.5	80-120			
Barium, total	0.100	0.0040	mg/L	0.100		100	80-120			
Beryllium, total	0.0867	0.0040	mg/L	0.100		86.7	80-120			
Cadmium, total	0.0919	0.0008	mg/L	0.100		91.9	80-120			
Chromium, total	0.0953	0.0080	mg/L	0.100		95.3	80-120			
Cobalt, total	0.0934	0.0004	mg/L	0.100		93.4	80-120			
Copper, total	0.0945	0.0040	mg/L	0.100		94.5	80-120			
Lead, total	0.0993	0.0040	mg/L	0.100		99.3	80-120			
Nickel, total	0.0893	0.0040	mg/L	0.100		89.3	80-120			
Selenium, total	0.0946	0.0040	mg/L	0.100		94.6	80-120			
Silver, total	0.0960	0.0040	mg/L	0.100		96.0	80-120			
Thallium, total	0.0996	0.0020	mg/L	0.100		99.6	80-120			
Vanadium, total	0.110	0.0200	mg/L	0.100		110	80-120			
Zinc, total	0.0919	0.0200	mg/L	0.100		91.9	80-120			
Matrix Spike (1HC1095-MS1)	**Source: 1HC1004-01**		Prepared: 03/20/24 09:48 Analyzed: 03/21/24 20:55							
Antimony, total	0.0919	0.0020	mg/L	0.100	ND	91.9	75-125			
Arsenic, total	0.0958	0.0040	mg/L	0.100	0.0018	94.0	75-125			
Barium, total	0.209	0.0040	mg/L	0.100	0.107	102	75-125			
Beryllium, total	0.0893	0.0040	mg/L	0.100	ND	89.3	75-125			
Cadmium, total	0.0869	0.0008	mg/L	0.100	ND	86.9	75-125			
Chromium, total	0.0907	0.0080	mg/L	0.100	0.0006	90.7	75-125			
Cobalt, total	0.0914	0.0004	mg/L	0.100	ND	91.4	75-125			
Copper, total	0.0867	0.0040	mg/L	0.100	ND	86.7	75-125			
Lead, total	0.0934	0.0040	mg/L	0.100	ND	93.4	75-125			
Nickel, total	0.0863	0.0040	mg/L	0.100	ND	86.3	75-125			
Selenium, total	0.0938	0.0040	mg/L	0.100	ND	93.8	75-125			
Silver, total	0.0925	0.0040	mg/L	0.100	ND	92.5	75-125			
Thallium, total	0.0951	0.0020	mg/L	0.100	0.0002	94.9	75-125			
Vanadium, total	0.101	0.0200	mg/L	0.100	ND	101	75-125			
Zinc, total	0.0870	0.0200	mg/L	0.100	ND	87.0	75-125			
Matrix Spike Dup (1HC1095-MSD1)	**Source: 1HC1004-01**		Prepared: 03/20/24 09:48 Analyzed: 03/21/24 21:14							
Antimony, total	0.0923	0.0020	mg/L	0.100	ND	92.3	75-125	0.516	20	

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HC1004

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HC1095 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Matrix Spike Dup (1HC1095-MSD1)	**Source: 1HC1004-01**	Prepared: 03/20/24 09:48 Analyzed: 03/21/24 21:14								
Arsenic, total	0.0944	0.0040	mg/L	0.100	0.0018	92.6	75-125	1.45	20	
Barium, total	0.209	0.0040	mg/L	0.100	0.107	102	75-125	0.308	20	
Beryllium, total	0.0832	0.0040	mg/L	0.100	ND	83.2	75-125	7.04	20	
Cadmium, total	0.0890	0.0008	mg/L	0.100	ND	89.0	75-125	2.30	20	
Chromium, total	0.0902	0.0080	mg/L	0.100	0.0006	90.2	75-125	0.569	20	
Cobalt, total	0.0901	0.0004	mg/L	0.100	ND	90.1	75-125	1.41	20	
Copper, total	0.0852	0.0040	mg/L	0.100	ND	85.2	75-125	1.67	20	
Lead, total	0.0945	0.0040	mg/L	0.100	ND	94.5	75-125	1.19	20	
Nickel, total	0.0849	0.0040	mg/L	0.100	ND	84.9	75-125	1.66	20	
Selenium, total	0.0909	0.0040	mg/L	0.100	ND	90.9	75-125	3.24	20	
Silver, total	0.0926	0.0040	mg/L	0.100	ND	92.6	75-125	0.0640	20	
Thallium, total	0.0957	0.0020	mg/L	0.100	0.0002	95.5	75-125	0.646	20	
Vanadium, total	0.100	0.0200	mg/L	0.100	ND	100	75-125	0.404	20	
Zinc, total	0.0863	0.0200	mg/L	0.100	ND	86.3	75-125	0.847	20	
Post Spike (1HC1095-PS1)	**Source: 1HC1004-01**	Prepared: 03/20/24 09:48 Analyzed: 03/21/24 21:20								
Antimony, total	0.0757		mg/L	0.0800	0.0001	94.5	80-120			
Arsenic, total	0.0777		mg/L	0.0800	0.0018	94.9	80-120			
Barium, total	0.186		mg/L	0.0800	0.105	102	80-120			
Beryllium, total	0.0686		mg/L	0.0800	-0.00001	85.7	80-120			
Cadmium, total	0.0727		mg/L	0.0800	0.00004	90.8	80-120			
Chromium, total	0.0756		mg/L	0.0800	0.0006	93.7	80-120			
Cobalt, total	0.0739		mg/L	0.0800	0.00007	92.3	80-120			
Copper, total	0.0711		mg/L	0.0800	0.0007	88.1	80-120			
Lead, total	0.0773		mg/L	0.0800	0.00009	96.6	80-120			
Nickel, total	0.0693		mg/L	0.0800	0.0007	85.8	80-120			
Selenium, total	0.0725		mg/L	0.0800	0.0012	89.2	80-120			
Silver, total	0.0777		mg/L	0.0800	0.0003	96.7	80-120			
Thallium, total	0.0781		mg/L	0.0800	0.0002	97.4	80-120			
Vanadium, total	0.0868		mg/L	0.0800	0.0097	96.3	80-120			
Zinc, total	0.0703		mg/L	0.0800	0.0023	85.0	80-120			

Definitions

QB-12: The analyte was found in the blank at a concentration greater than one-half the reporting limit. However, the concentration of the analyte in the blank was less than the reporting limit so the data was accepted.

QM-14: The spike recovery was outside acceptance limits for the MS and/or MSD. However, all other QC was acceptable.

QR-02: The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.

QS-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-GC: Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate.

Cooler Receipt Log

Cooler ID: Default Cooler Temp: 0.0ºC

Cooler Inspection Checklist

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

Report Comments

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

Reviewed and Approved By:

Heather Murphy
Customer Relationship Specialist
heather.murphy@microbac.com
04/04/24 16:50

CHAIN OF CUSTODY RECORD

Keystone LABORATORIES
A Microbac Company

600 East 17th Street South
Newton, IA 50208
641-792-8451

www.keystonelabs.com

Printed: 2/21/2024 2:02:50P

SITE INFORMATION

Sampler: TODD WHIPPLE

Project: Boone Landfill-New Regs

6007

REPORT TO

Todd Whipple
HLW Engineering
PO Box 314
Story City, IA 50248

INVOICE TO

John Roosa
Boone County Sanitary Landfill
1268 224th Lane
Boone, IA 50036

SPECIAL INSTRUCTIONS

None

Turn Around Time

☐ Standard ☐ RUSH, need by ___/___/___

LAB USE ONLY

Work Order: 1HC1004

Temperature: 0.0

Turn-Cooler: No

☐ Custody Seal
☒ Containers Intact
☒ COC/Labels Agree
☐ Preservation Confirmed
☒ Received on Ice

Number	Sample Identification / Client ID	Matrix	Sample Type	Date	Time	Number of Containers	Analyses		Lab Sample Number
-001	MW91-8	Water	GRAB	3/12/24	13:54	7	lndfill-app1-voc-group	lndfll-app1-metals-6020	01
-001	MW02-15A	Water	GRAB	3/12/24	12:28	7	lndfill-app1-voc-group	lndfll-app1-metals-6020	02
-001	MW98-28	Water	GRAB	3/12/24	13:30	7	lndfill-app1-voc-group	lndfll-app1-metals-6020	03
-001	MW02-30A	Water	GRAB	3/12/24	12:05	7	lndfill-app1-voc-group	lndfll-app1-metals-6020	04
-001	MW88-2	Water	GRAB	3/12/24	11:10	7	lndfill-app1-voc-group	lndfll-app1-metals-6020	05
-001	MW94-18	Water	GRAB	3/12/24	8:15	7	lndfill-app1-voc-group	lndfll-app1-metals-6020	06
-001	MW09-40	Water	GRAB	3/12/24	8:34	7	lndfill-app1-voc-group	lndfll-app1-metals-6020	07

Relinquished By: Todd Whipple Date/Time: 3/13/24

Relinquished By Date/Time

Received By Date/Time

Received for Lab By: Mahy Date/Time: 3/13/24 10:29

Remarks

1HC1004
HLW Engineering
PM: Heather Murphy

Original - Lab Copy Yellow - Sampler Copy

CHAIN OF CUSTODY RECORD

Keystone LABORATORIES
A Microbac Company

600 East 17th Street South
Newton, IA 50208
641-792-8451

www.keystonelabs.com

Page 2 of

Printed: 2/21/2024 2:02:50P

SITE INFORMATION

Sampler: TODD WHIPPLE

Project: Boone Landfill-New Regs
6007

REPORT TO

Todd Whipple
HLW Engineering
PO Box 314
Story City, IA 50248

INVOICE TO

John Roosa
Boone County Sanitary Landfill
1268 224th Lane
Boone, IA 50036

SPECIAL INSTRUCTIONS

None

Turn Around Time
☐ Standard ☐ RUSH, need by __/__/__

LAB USE ONLY

Work Order 1HC1004
Temperature 0.0
Turn-Cooler: No

☐ Custody Seal
☒ Containers Intact
☒ COC/Labels Agree
☐ Preservation Confirmed
☒ Received on Ice

Number	Sample Identification / Client ID	Matrix	Sample Type	Date	Time	Number of Containers	Analyses		Lab Sample Number
-001	MW91-10	Water	GRAB	3/12/24	8:50	7	lndfill-app1-voc-group	lndfll-app1-metals-6020	08
-001	MW96-21	Water	GRAB	3/12/24	7:40	16	No metals lndfll-app2-inorg-6020	lndfll-app2-org	09
-001	MW96-24	Water	GRAB	3/12/24	9:25	7	lndfill-app1-voc-group	lndfll-app1-metals-6020	10
-001	MW88-3	Water	GRAB	3/12/24	10:29	7	lndfill-app1-voc-group	lndfll-app1-metals-6020	11
-001	MW96-23	Water	GRAB	3/12/24	9:49	7	lndfill-app1-voc-group	lndfll-app1-metals-6020	12
-001	MW21-43	Water	GRAB	3/12/24	11:40	7	lndfill-app1-voc-group	lndfll-app1-metals-6020	13
-001	GWD-1 DRY	Water	GRAB	—/—/—	—	0	lndfill-app1-voc-group	lndfll-app1-metals-6020	

Relinquished By: Todd Whipple Date/Time: 3/13/24

Received By: Date/Time:

Relinquished By: Date/Time:

Received for Lab By: Maher Date/Time: 3/13/24 10:29

Remarks:

1HC1004
HLW Engineering
PM: Heather Murphy

Original - Lab Copy Yellow - Sampler Copy

CHAIN OF CUSTODY RECORD

Keystone LABORATORIES
A Microbac Company

600 East 17th Street South
Newton, IA 50208
641-792-8451

Printed: 2/21/2024 2:02:50P

www.keystonelabs.com

SITE INFORMATION

Sampler: TODD WHIPPLE

Project: Boone Landfill-New Regs 6007

REPORT TO

Todd Whipple
HLW Engineering
PO Box 314
Story City, IA 50248

INVOICE TO

John Roosa
Boone County Sanitary Landfill
1268 224th Lane
Boone, IA 50036

SPECIAL INSTRUCTIONS

None

Turn Around Time
☐ Standard ☐ RUSH, need by __/__/__

LAB USE ONLY

Work Order 1HC1004

Temperature 0.0

Turn-Cooler: No

☐ Custody Seal
☒ Containers Intact
☒ COC/Labels Agree
☐ Preservation Confirmed
☒ Received on Ice

Number	Sample Identification / Client ID	Matrix	Sample Type	Date	Time	Number of Containers	Analyses	Lab Sample Number
-001	GU-3	Water	GRAB	~~/ /~~	—	0	lndfill-app1-voc-group lndfill-app1-metals-6020	
-001	PEC-3	Water	GRAB	~~/ /~~	—	0	lndfill-app1-voc-group	
-001	GU-4	Water	GRAB	3/12/24	10:55	7	lndfill-app1-voc-group lndfill-app1-metals-6020	14
-001	SRAMP #1	Water	GRAB	~~/ /~~	—	0	8260@dichlorodifluoromethane lndfill-app1-voc-group lndfill-app1-metals-6020	
-001	SRAMP #2	Water	GRAB	3/12/24	10:15	7	8260@dichlorodifluoromethane lndfill-app1-voc-group	15
-001	MW98-25	Water	GRAB	3/12/24	13:05	7	8260@dichlorodifluoromethane lndfill-app1-voc-group lndfill-app1-metals-6020	16

Relinquished By: [signature] Date/Time: 3/13/24

Relinquished By ___ Date/Time ___

Received By ___ Date/Time ___

Received for Lab By: [signature] Date/Time: 3/13/24 10:29

Remarks:

1HC1004
HLW Engineering
PM: Heather Murphy

Original - Lab Copy Yellow - Sampler Copy

CHAIN OF CUSTODY RECORD

Keystone LABORATORIES
A Microbac Company

600 East 17th Street South
Newton, IA 50208
641-792-8451

www.keystonelabs.com

SITE INFORMATION

Sampler: Todd Whipple

Project: Boone Landfill-New Regs
6007

REPORT TO

Todd Whipple
HLW Engineering
PO Box 314
Story City, IA 50248

INVOICE TO

John Roosa
Boone County Sanitary Landfill
1268 224th Lane
Boone, IA 50036

SPECIAL INSTRUCTIONS

None

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

LAB USE ONLY

Work Order 1HC1004
Temperature 0.0
Turn-Cooler: No

☐ Custody Seal
☒ Containers Intact
☒ COC/Labels Agree
☐ Preservation Confirmed
☒ Received on Ice

Number	Sample Identification / Client ID	Matrix	Sample Type	Date	Time	Number of Containers	Analyses		Lab Sample Number
-001	MW06-37	Water	GRAB	3/12/24	14:15	7	lndfill-app1-voc-group	lndfll-app1-metals-6020	17
-001	MW06-38	Water	GRAB	3/12/24	14:28	7	lndfill-app1-voc-group	lndfll-app1-metals-6020	18
-001	MW06-39	Water	GRAB	3/12/24	14:42	7	lndfill-app1-voc-group	lndfll-app1-metals-6020	19
-001	Field Duplicate	Water	GRAB	3/12/24	✓	1	~~lndfill-app1-voc-group~~	lndfll-app1-metals-6020	20

Relinquished By [signature] Date/Time 3/13/24

Relinquished By Date/Time

Received By Date/Time

Received for Lab By Maher Date/Time 3/13/24 10:29

Remarks

1HC1004
HLW Engineering
PM: Heather Murphy

Original - Lab Copy Yellow - Sampler Copy

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HJ0247

Project Description

6007

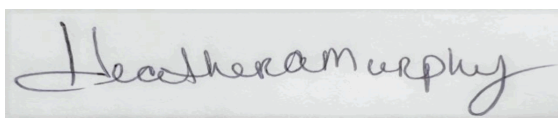
For:

Todd Whipple

HLW Engineering

204 West Broad St

Story City, IA 50248



Heather Murphy

Customer Relationship Specialist

Friday, November 1, 2024

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

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

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HJ0247

HLW Engineering

Todd Whipple
204 West Broad St
Story City, IA 50248

Project Name: 6007

Project / PO Number: N/A
Received: 10/01/2024
Reported: 11/01/2024

Sample Summary Report

Sample Name	Laboratory ID	Client Matrix	Sample Type	Sample Begin	Sample Taken	Lab Received
MW91-8	1HJ0247-01	Aqueous	GRAB		09/30/24 13:21	10/01/24 10:30
MW02-15A	1HJ0247-02	Aqueous	GRAB		09/30/24 12:48	10/01/24 10:30
MW98-28	1HJ0247-03	Aqueous	GRAB		09/30/24 07:31	10/01/24 10:30
MW02-30A	1HJ0247-04	Aqueous	GRAB		09/30/24 12:33	10/01/24 10:30
MW88-2	1HJ0247-05	Aqueous	GRAB		09/30/24 11:34	10/01/24 10:30
MW94-18	1HJ0247-06	Aqueous	GRAB		09/30/24 08:54	10/01/24 10:30
MW09-40	1HJ0247-07	Aqueous	GRAB		09/30/24 09:10	10/01/24 10:30
MW91-10	1HJ0247-08	Aqueous	GRAB		09/30/24 09:24	10/01/24 10:30
MW96-21	1HJ0247-09	Aqueous	GRAB		09/30/24 09:53	10/01/24 10:30
MW96-24	1HJ0247-10	Aqueous	GRAB		09/30/24 10:10	10/01/24 10:30
MW88-3	1HJ0247-11	Aqueous	GRAB		09/30/24 11:23	10/01/24 10:30
MW96-23	1HJ0247-12	Aqueous	GRAB		09/30/24 10:36	10/01/24 10:30
MW21-43	1HJ0247-13	Aqueous	GRAB		09/30/24 12:09	10/01/24 10:30
GU-3	1HJ0247-14	Aqueous	GRAB		09/30/24 10:51	10/01/24 10:30
PEC-3	1HJ0247-15	Aqueous	GRAB		09/30/24 00:00	10/01/24 10:30
MW98-25	1HJ0247-16	Aqueous	GRAB		09/30/24 08:21	10/01/24 10:30
MW06-37	1HJ0247-17	Aqueous	GRAB		09/30/24 14:14	10/01/24 10:30
MW06-38	1HJ0247-18	Aqueous	GRAB		09/30/24 14:02	10/01/24 10:30
MW06-39	1HJ0247-19	Aqueous	GRAB		09/30/24 13:51	10/01/24 10:30
Field Duplicate	1HJ0247-20	Aqueous	GRAB		09/30/24 00:00	10/01/24 10:30

MICROBAC®

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HJ0247

Analytical Testing Parameters

Client Sample ID:	MW91-8		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0247-01	**Collection Date:**	09/30/2024 13:21

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/03/24 2353	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		10/03/24 0000	10/03/24 2353	BDF
Bromomethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/03/24 2353	BDF
Chloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/03/24 2353	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/03/24 2353	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/03/24 2353	BDF
Acetone	<10.0	10.0	ug/L	1		10/03/24 0000	10/03/24 2353	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		10/03/24 0000	10/03/24 2353	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1		10/03/24 0000	10/03/24 2353	BDF
Methylene Chloride	<5.0	5.0	ug/L	1		10/03/24 0000	10/03/24 2353	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		10/03/24 0000	10/03/24 2353	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/03/24 2353	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/03/24 2353	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		10/03/24 0000	10/03/24 2353	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/03/24 2353	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/03/24 0000	10/03/24 2353	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/03/24 2353	BDF
Chloroform	<1.0	1.0	ug/L	1		10/03/24 0000	10/03/24 2353	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/03/24 2353	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/03/24 0000	10/03/24 2353	BDF
Benzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/03/24 2353	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/03/24 2353	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/03/24 2353	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/03/24 0000	10/03/24 2353	BDF
Dibromomethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/03/24 2353	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/03/24 2353	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/24 0000	10/03/24 2353	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/03/24 0000	10/03/24 2353	BDF
Toluene	<1.0	1.0	ug/L	1		10/03/24 0000	10/03/24 2353	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/24 0000	10/03/24 2353	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/03/24 2353	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/03/24 2353	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/03/24 0000	10/03/24 2353	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/03/24 2353	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/03/24 2353	BDF
Chlorobenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/03/24 2353	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/03/24 2353	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/03/24 2353	BDF
Xylenes, total	<2.0	2.0	ug/L	1		10/03/24 0000	10/03/24 2353	BDF
Styrene	<1.0	1.0	ug/L	1		10/03/24 0000	10/03/24 2353	BDF

Client Sample ID:	MW91-8			
Sample Matrix:	Aqueous		**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0247-01		**Collection Date:**	09/30/2024 13:21

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Bromoform	<1.0	1.0	ug/L	1		10/03/24 0000	10/03/24 2353	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/03/24 0000	10/03/24 2353	BDF
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/03/24 0000	10/03/24 2353	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/03/24 2353	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/03/24 2353	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/03/24 2353	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/03/24 0000	10/03/24 2353	BDF
Surrogate: Dibromofluoromethane	92.8	Limit: 75-136	% Rec	1		10/03/24 0000	10/03/24 2353	BDF
Surrogate: Dibromofluoromethane	92.8	Limit: 57-134	% Rec	1		10/03/24 0000	10/03/24 2353	BDF
Surrogate: 1,2-Dichloroethane-d4	95.0	Limit: 53-140	% Rec	1		10/03/24 0000	10/03/24 2353	BDF
Surrogate: 1,2-Dichloroethane-d4	95.0	Limit: 61-142	% Rec	1		10/03/24 0000	10/03/24 2353	BDF
Surrogate: Toluene-d8	98.6	Limit: 82-121	% Rec	1		10/03/24 0000	10/03/24 2353	BDF
Surrogate: Toluene-d8	98.6	Limit: 86-114	% Rec	1		10/03/24 0000	10/03/24 2353	BDF
Surrogate: 4-Bromofluorobenzene	106	Limit: 78-121	% Rec	1		10/03/24 0000	10/03/24 2353	BDF
Surrogate: 4-Bromofluorobenzene	106	Limit: 80-116	% Rec	1		10/03/24 0000	10/03/24 2353	BDF

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		10/07/24 0755	10/07/24 2048	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2048	RVV
Barium, total	**0.109**	0.0040	mg/L	4		10/07/24 0755	10/07/24 2048	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2048	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/07/24 0755	10/07/24 2048	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/07/24 0755	10/07/24 2048	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		10/07/24 0755	10/07/24 2048	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2048	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2048	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2048	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2048	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2048	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/07/24 0755	10/07/24 2048	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/07/24 0755	10/07/24 2048	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/07/24 0755	10/07/24 2048	RVV

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CERTIFICATE OF ANALYSIS

1HJ0247

Client Sample ID:	MW02-15A		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0247-02	**Collection Date:**	09/30/2024 12:48

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0016	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0016	BDF
Bromomethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0016	BDF
Chloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0016	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0016	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0016	BDF
Acetone	<10.0	10.0	ug/L	1		10/03/24 0000	10/04/24 0016	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0016	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0016	BDF
Methylene Chloride	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0016	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0016	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0016	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0016	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0016	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0016	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/03/24 0000	10/04/24 0016	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0016	BDF
Chloroform	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0016	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0016	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0016	BDF
Benzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0016	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0016	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0016	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0016	BDF
Dibromomethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0016	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0016	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0016	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0016	BDF
Toluene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0016	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0016	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0016	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0016	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0016	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0016	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0016	BDF
Chlorobenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0016	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0016	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0016	BDF
Xylenes, total	<2.0	2.0	ug/L	1		10/03/24 0000	10/04/24 0016	BDF
Styrene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0016	BDF
Bromoform	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0016	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0016	BDF

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HJ0247

Client Sample ID:	MW02-15A			
Sample Matrix:	Aqueous		**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0247-02		**Collection Date:**	09/30/2024 12:48

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0016	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0016	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0016	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0016	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0016	BDF
Surrogate: Dibromofluoromethane	92.5	Limit: 75-136	% Rec	1		10/03/24 0000	10/04/24 0016	BDF
Surrogate: Dibromofluoromethane	92.5	Limit: 57-134	% Rec	1		10/03/24 0000	10/04/24 0016	BDF
Surrogate: 1,2-Dichloroethane-d4	96.6	Limit: 53-140	% Rec	1		10/03/24 0000	10/04/24 0016	BDF
Surrogate: 1,2-Dichloroethane-d4	96.6	Limit: 61-142	% Rec	1		10/03/24 0000	10/04/24 0016	BDF
Surrogate: Toluene-d8	98.9	Limit: 82-121	% Rec	1		10/03/24 0000	10/04/24 0016	BDF
Surrogate: Toluene-d8	98.9	Limit: 86-114	% Rec	1		10/03/24 0000	10/04/24 0016	BDF
Surrogate: 4-Bromofluorobenzene	106	Limit: 78-121	% Rec	1		10/03/24 0000	10/04/24 0016	BDF
Surrogate: 4-Bromofluorobenzene	106	Limit: 80-116	% Rec	1		10/03/24 0000	10/04/24 0016	BDF

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		10/07/24 0755	10/07/24 2125	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2125	RVV
Barium, total	**0.0349**	0.0040	mg/L	4		10/07/24 0755	10/07/24 2125	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2125	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/07/24 0755	10/07/24 2125	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/07/24 0755	10/07/24 2125	RVV
Cobalt, total	**0.0009**	0.0004	mg/L	4		10/07/24 0755	10/07/24 2125	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2125	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2125	RVV
Nickel, total	**0.0063**	0.0040	mg/L	4		10/07/24 0755	10/07/24 2125	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2125	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2125	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/07/24 0755	10/07/24 2125	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/07/24 0755	10/07/24 2125	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/07/24 0755	10/07/24 2125	RVV

Client Sample ID:	MW98-28		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0247-03	**Collection Date:**	09/30/2024 7:31

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0038	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0038	BDF
Bromomethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0038	BDF
Chloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0038	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0038	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0038	BDF
Acetone	<10.0	10.0	ug/L	1		10/03/24 0000	10/04/24 0038	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0038	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0038	BDF
Methylene Chloride	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0038	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0038	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0038	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0038	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0038	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0038	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/03/24 0000	10/04/24 0038	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0038	BDF
Chloroform	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0038	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0038	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0038	BDF
Benzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0038	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0038	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0038	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0038	BDF
Dibromomethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0038	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0038	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0038	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0038	BDF
Toluene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0038	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0038	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0038	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0038	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0038	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0038	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0038	BDF
Chlorobenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0038	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0038	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0038	BDF
Xylenes, total	<2.0	2.0	ug/L	1		10/03/24 0000	10/04/24 0038	BDF
Styrene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0038	BDF
Bromoform	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0038	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0038	BDF

Client Sample ID:	MW98-28		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0247-03	**Collection Date:**	09/30/2024 7:31

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0038	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0038	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0038	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0038	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0038	BDF
Surrogate: Dibromofluoromethane	93.6	Limit: 57-134	% Rec	1		10/03/24 0000	10/04/24 0038	BDF
Surrogate: Dibromofluoromethane	93.6	Limit: 75-136	% Rec	1		10/03/24 0000	10/04/24 0038	BDF
Surrogate: 1,2-Dichloroethane-d4	96.8	Limit: 53-140	% Rec	1		10/03/24 0000	10/04/24 0038	BDF
Surrogate: 1,2-Dichloroethane-d4	96.8	Limit: 61-142	% Rec	1		10/03/24 0000	10/04/24 0038	BDF
Surrogate: Toluene-d8	98.7	Limit: 86-114	% Rec	1		10/03/24 0000	10/04/24 0038	BDF
Surrogate: Toluene-d8	98.7	Limit: 82-121	% Rec	1		10/03/24 0000	10/04/24 0038	BDF
Surrogate: 4-Bromofluorobenzene	107	Limit: 78-121	% Rec	1		10/03/24 0000	10/04/24 0038	BDF
Surrogate: 4-Bromofluorobenzene	107	Limit: 80-116	% Rec	1		10/03/24 0000	10/04/24 0038	BDF

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		10/07/24 0755	10/07/24 2131	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2131	RVV
Barium, total	**0.270**	0.0040	mg/L	4		10/07/24 0755	10/07/24 2131	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2131	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/07/24 0755	10/07/24 2131	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/07/24 0755	10/07/24 2131	RVV
Cobalt, total	**0.0039**	0.0004	mg/L	4		10/07/24 0755	10/07/24 2131	RVV
Copper, total	**0.0048**	0.0040	mg/L	4		10/07/24 0755	10/07/24 2131	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2131	RVV
Nickel, total	**0.0101**	0.0040	mg/L	4		10/07/24 0755	10/07/24 2131	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2131	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2131	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/07/24 0755	10/07/24 2131	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/07/24 0755	10/07/24 2131	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/07/24 0755	10/07/24 2131	RVV

Client Sample ID:	MW02-30A		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0247-04	**Collection Date:**	09/30/2024 12:33

Determination of Volatile Organic Compounds	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0101	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0101	BDF
Bromomethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0101	BDF
Chloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0101	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0101	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0101	BDF
Acetone	<10.0	10.0	ug/L	1		10/03/24 0000	10/04/24 0101	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0101	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0101	BDF
Methylene Chloride	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0101	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0101	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0101	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0101	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0101	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0101	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/03/24 0000	10/04/24 0101	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0101	BDF
Chloroform	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0101	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0101	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0101	BDF
Benzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0101	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0101	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0101	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0101	BDF
Dibromomethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0101	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0101	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0101	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0101	BDF
Toluene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0101	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0101	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0101	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0101	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0101	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0101	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0101	BDF
Chlorobenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0101	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0101	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0101	BDF
Xylenes, total	<2.0	2.0	ug/L	1		10/03/24 0000	10/04/24 0101	BDF
Styrene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0101	BDF
Bromoform	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0101	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0101	BDF

Client Sample ID:	MW02-30A		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0247-04	**Collection Date:**	09/30/2024 12:33

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0101	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0101	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0101	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0101	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0101	BDF
Surrogate: Dibromofluoromethane	94.2	Limit: 75-136	% Rec	1		10/03/24 0000	10/04/24 0101	BDF
Surrogate: Dibromofluoromethane	94.2	Limit: 57-134	% Rec	1		10/03/24 0000	10/04/24 0101	BDF
Surrogate: 1,2-Dichloroethane-d4	97.9	Limit: 53-140	% Rec	1		10/03/24 0000	10/04/24 0101	BDF
Surrogate: 1,2-Dichloroethane-d4	97.9	Limit: 61-142	% Rec	1		10/03/24 0000	10/04/24 0101	BDF
Surrogate: Toluene-d8	99.0	Limit: 82-121	% Rec	1		10/03/24 0000	10/04/24 0101	BDF
Surrogate: Toluene-d8	99.0	Limit: 86-114	% Rec	1		10/03/24 0000	10/04/24 0101	BDF
Surrogate: 4-Bromofluorobenzene	106	Limit: 80-116	% Rec	1		10/03/24 0000	10/04/24 0101	BDF
Surrogate: 4-Bromofluorobenzene	106	Limit: 78-121	% Rec	1		10/03/24 0000	10/04/24 0101	BDF

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		10/07/24 0755	10/07/24 2137	RVV
Arsenic, total	**0.0410**	0.0040	mg/L	4		10/07/24 0755	10/07/24 2137	RVV
Barium, total	**0.0868**	0.0040	mg/L	4		10/07/24 0755	10/07/24 2137	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2137	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/07/24 0755	10/07/24 2137	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/07/24 0755	10/07/24 2137	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		10/07/24 0755	10/07/24 2137	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2137	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2137	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2137	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2137	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2137	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/07/24 0755	10/07/24 2137	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/07/24 0755	10/07/24 2137	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/07/24 0755	10/07/24 2137	RVV

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CERTIFICATE OF ANALYSIS

1HJ0247

Client Sample ID:	MW88-2		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0247-05	**Collection Date:**	09/30/2024 11:34

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0123	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0123	BDF
Bromomethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0123	BDF
Chloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0123	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0123	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0123	BDF
Acetone	<10.0	10.0	ug/L	1		10/03/24 0000	10/04/24 0123	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0123	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0123	BDF
Methylene Chloride	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0123	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0123	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0123	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0123	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0123	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0123	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/03/24 0000	10/04/24 0123	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0123	BDF
Chloroform	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0123	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0123	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0123	BDF
Benzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0123	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0123	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0123	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0123	BDF
Dibromomethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0123	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0123	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0123	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0123	BDF
Toluene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0123	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0123	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0123	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0123	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0123	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0123	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0123	BDF
Chlorobenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0123	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0123	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0123	BDF
Xylenes, total	<2.0	2.0	ug/L	1		10/03/24 0000	10/04/24 0123	BDF
Styrene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0123	BDF
Bromoform	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0123	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0123	BDF

Client Sample ID:	MW88-2		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0247-05	**Collection Date:**	09/30/2024 11:34

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0123	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0123	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0123	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0123	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0123	BDF
Surrogate: Dibromofluoromethane	91.6	Limit: 75-136	% Rec	1		10/03/24 0000	10/04/24 0123	BDF
Surrogate: Dibromofluoromethane	91.6	Limit: 57-134	% Rec	1		10/03/24 0000	10/04/24 0123	BDF
Surrogate: 1,2-Dichloroethane-d4	95.8	Limit: 53-140	% Rec	1		10/03/24 0000	10/04/24 0123	BDF
Surrogate: 1,2-Dichloroethane-d4	95.8	Limit: 61-142	% Rec	1		10/03/24 0000	10/04/24 0123	BDF
Surrogate: Toluene-d8	99.5	Limit: 82-121	% Rec	1		10/03/24 0000	10/04/24 0123	BDF
Surrogate: Toluene-d8	99.5	Limit: 86-114	% Rec	1		10/03/24 0000	10/04/24 0123	BDF
Surrogate: 4-Bromofluorobenzene	105	Limit: 80-116	% Rec	1		10/03/24 0000	10/04/24 0123	BDF
Surrogate: 4-Bromofluorobenzene	105	Limit: 78-121	% Rec	1		10/03/24 0000	10/04/24 0123	BDF

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		10/07/24 0755	10/07/24 2144	RVV
Arsenic, total	**0.0193**	0.0040	mg/L	4		10/07/24 0755	10/07/24 2144	RVV
Barium, total	**0.357**	0.0040	mg/L	4		10/07/24 0755	10/07/24 2144	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2144	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/07/24 0755	10/07/24 2144	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/07/24 0755	10/07/24 2144	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		10/07/24 0755	10/07/24 2144	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2144	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2144	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2144	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2144	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2144	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/07/24 0755	10/07/24 2144	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/07/24 0755	10/07/24 2144	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/07/24 0755	10/07/24 2144	RVV

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CERTIFICATE OF ANALYSIS

1HJ0247

Client Sample ID:	MW94-18		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0247-06	**Collection Date:**	09/30/2024 8:54

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0146	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0146	BDF
Bromomethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0146	BDF
Chloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0146	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0146	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0146	BDF
Acetone	<10.0	10.0	ug/L	1		10/03/24 0000	10/04/24 0146	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0146	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0146	BDF
Methylene Chloride	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0146	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0146	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0146	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0146	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0146	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0146	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/03/24 0000	10/04/24 0146	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0146	BDF
Chloroform	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0146	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0146	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0146	BDF
Benzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0146	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0146	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0146	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0146	BDF
Dibromomethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0146	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0146	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0146	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0146	BDF
Toluene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0146	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0146	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0146	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0146	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0146	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0146	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0146	BDF
Chlorobenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0146	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0146	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0146	BDF
Xylenes, total	<2.0	2.0	ug/L	1		10/03/24 0000	10/04/24 0146	BDF
Styrene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0146	BDF
Bromoform	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0146	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0146	BDF

Client Sample ID:	MW94-18		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0247-06	**Collection Date:**	09/30/2024 8:54

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0146	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0146	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0146	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0146	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0146	BDF
Surrogate: Dibromofluoromethane	92.7	Limit: 75-136	% Rec	1		10/03/24 0000	10/04/24 0146	BDF
Surrogate: Dibromofluoromethane	92.7	Limit: 57-134	% Rec	1		10/03/24 0000	10/04/24 0146	BDF
Surrogate: 1,2-Dichloroethane-d4	96.9	Limit: 61-142	% Rec	1		10/03/24 0000	10/04/24 0146	BDF
Surrogate: 1,2-Dichloroethane-d4	96.9	Limit: 53-140	% Rec	1		10/03/24 0000	10/04/24 0146	BDF
Surrogate: Toluene-d8	100	Limit: 86-114	% Rec	1		10/03/24 0000	10/04/24 0146	BDF
Surrogate: Toluene-d8	100	Limit: 82-121	% Rec	1		10/03/24 0000	10/04/24 0146	BDF
Surrogate: 4-Bromofluorobenzene	105	Limit: 80-116	% Rec	1		10/03/24 0000	10/04/24 0146	BDF
Surrogate: 4-Bromofluorobenzene	105	Limit: 78-121	% Rec	1		10/03/24 0000	10/04/24 0146	BDF

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		10/07/24 0755	10/07/24 2150	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2150	RVV
Barium, total	**0.0276**	0.0040	mg/L	4		10/07/24 0755	10/07/24 2150	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2150	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/07/24 0755	10/07/24 2150	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/07/24 0755	10/07/24 2150	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		10/07/24 0755	10/07/24 2150	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2150	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2150	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2150	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2150	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2150	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/07/24 0755	10/07/24 2150	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/07/24 0755	10/07/24 2150	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/07/24 0755	10/07/24 2150	RVV

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CERTIFICATE OF ANALYSIS

1HJ0247

Client Sample ID:	MW09-40		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0247-07	**Collection Date:**	09/30/2024 9:10

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0208	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0208	BDF
Bromomethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0208	BDF
Chloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0208	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0208	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0208	BDF
Acetone	<10.0	10.0	ug/L	1		10/03/24 0000	10/04/24 0208	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0208	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0208	BDF
Methylene Chloride	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0208	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0208	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0208	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0208	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0208	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0208	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/03/24 0000	10/04/24 0208	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0208	BDF
Chloroform	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0208	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0208	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0208	BDF
Benzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0208	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0208	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0208	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0208	BDF
Dibromomethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0208	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0208	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0208	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0208	BDF
Toluene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0208	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0208	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0208	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0208	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0208	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0208	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0208	BDF
Chlorobenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0208	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0208	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0208	BDF
Xylenes, total	<2.0	2.0	ug/L	1		10/03/24 0000	10/04/24 0208	BDF
Styrene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0208	BDF
Bromoform	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0208	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0208	BDF

Client Sample ID:	MW09-40			
Sample Matrix:	Aqueous		**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0247-07		**Collection Date:**	09/30/2024 9:10

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0208	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0208	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0208	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0208	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0208	BDF
Surrogate: Dibromofluoromethane	93.5	Limit: 75-136	% Rec	1		10/03/24 0000	10/04/24 0208	BDF
Surrogate: Dibromofluoromethane	93.5	Limit: 57-134	% Rec	1		10/03/24 0000	10/04/24 0208	BDF
Surrogate: 1,2-Dichloroethane-d4	97.3	Limit: 61-142	% Rec	1		10/03/24 0000	10/04/24 0208	BDF
Surrogate: 1,2-Dichloroethane-d4	97.3	Limit: 53-140	% Rec	1		10/03/24 0000	10/04/24 0208	BDF
Surrogate: Toluene-d8	99.6	Limit: 86-114	% Rec	1		10/03/24 0000	10/04/24 0208	BDF
Surrogate: Toluene-d8	99.6	Limit: 82-121	% Rec	1		10/03/24 0000	10/04/24 0208	BDF
Surrogate: 4-Bromofluorobenzene	106	Limit: 80-116	% Rec	1		10/03/24 0000	10/04/24 0208	BDF
Surrogate: 4-Bromofluorobenzene	106	Limit: 78-121	% Rec	1		10/03/24 0000	10/04/24 0208	BDF

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		10/07/24 0755	10/07/24 2156	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2156	RVV
Barium, total	**0.0234**	0.0040	mg/L	4		10/07/24 0755	10/07/24 2156	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2156	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/07/24 0755	10/07/24 2156	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/07/24 0755	10/07/24 2156	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		10/07/24 0755	10/07/24 2156	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2156	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2156	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2156	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2156	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2156	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/07/24 0755	10/07/24 2156	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/07/24 0755	10/07/24 2156	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/07/24 0755	10/07/24 2156	RVV

Client Sample ID:	MW91-10		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0247-08	**Collection Date:**	09/30/2024 9:24

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0231	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0231	BDF
Bromomethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0231	BDF
Chloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0231	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0231	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0231	BDF
Acetone	<10.0	10.0	ug/L	1		10/03/24 0000	10/04/24 0231	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0231	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0231	BDF
Methylene Chloride	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0231	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0231	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0231	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0231	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0231	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0231	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/03/24 0000	10/04/24 0231	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0231	BDF
Chloroform	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0231	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0231	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0231	BDF
Benzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0231	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0231	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0231	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0231	BDF
Dibromomethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0231	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0231	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0231	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0231	BDF
Toluene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0231	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0231	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0231	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0231	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0231	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0231	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0231	BDF
Chlorobenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0231	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0231	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0231	BDF
Xylenes, total	<2.0	2.0	ug/L	1		10/03/24 0000	10/04/24 0231	BDF
Styrene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0231	BDF
Bromoform	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0231	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0231	BDF

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HJ0247

Client Sample ID:	MW91-10		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0247-08	**Collection Date:**	09/30/2024 9:24

Determination of Volatile Organic Compounds	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0231	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0231	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0231	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0231	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0231	BDF
Surrogate: Dibromofluoromethane	93.2	Limit: 57-134	% Rec	1		10/03/24 0000	10/04/24 0231	BDF
Surrogate: Dibromofluoromethane	93.2	Limit: 75-136	% Rec	1		10/03/24 0000	10/04/24 0231	BDF
Surrogate: 1,2-Dichloroethane-d4	97.5	Limit: 61-142	% Rec	1		10/03/24 0000	10/04/24 0231	BDF
Surrogate: 1,2-Dichloroethane-d4	97.5	Limit: 53-140	% Rec	1		10/03/24 0000	10/04/24 0231	BDF
Surrogate: Toluene-d8	99.5	Limit: 86-114	% Rec	1		10/03/24 0000	10/04/24 0231	BDF
Surrogate: Toluene-d8	99.5	Limit: 82-121	% Rec	1		10/03/24 0000	10/04/24 0231	BDF
Surrogate: 4-Bromofluorobenzene	105	Limit: 80-116	% Rec	1		10/03/24 0000	10/04/24 0231	BDF
Surrogate: 4-Bromofluorobenzene	105	Limit: 78-121	% Rec	1		10/03/24 0000	10/04/24 0231	BDF

Determination of Total Metals	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		10/07/24 0755	10/07/24 2202	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2202	RVV
Barium, total	**0.0398**	0.0040	mg/L	4		10/07/24 0755	10/07/24 2202	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2202	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/07/24 0755	10/07/24 2202	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/07/24 0755	10/07/24 2202	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		10/07/24 0755	10/07/24 2202	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2202	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2202	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2202	RVV
Selenium, total	**0.0044**	0.0040	mg/L	4		10/07/24 0755	10/07/24 2202	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2202	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/07/24 0755	10/07/24 2202	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/07/24 0755	10/07/24 2202	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/07/24 0755	10/07/24 2202	RVV

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HJ0247

Client Sample ID:	MW96-21		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0247-09	**Collection Date:**	09/30/2024 9:53

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0253	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0253	BDF
Bromomethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0253	BDF
Chloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0253	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0253	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0253	BDF
Acetone	<10.0	10.0	ug/L	1		10/03/24 0000	10/04/24 0253	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0253	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0253	BDF
Methylene Chloride	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0253	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0253	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0253	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0253	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0253	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0253	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/03/24 0000	10/04/24 0253	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0253	BDF
Chloroform	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0253	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0253	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0253	BDF
Benzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0253	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0253	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0253	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0253	BDF
Dibromomethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0253	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0253	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0253	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0253	BDF
Toluene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0253	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0253	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0253	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0253	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0253	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0253	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0253	BDF
Chlorobenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0253	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0253	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0253	BDF
Xylenes, total	<2.0	2.0	ug/L	1		10/03/24 0000	10/04/24 0253	BDF
Styrene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0253	BDF
Bromoform	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0253	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0253	BDF

CERTIFICATE OF ANALYSIS

1HJ0247

Client Sample ID:	MW96-21		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0247-09	**Collection Date:**	09/30/2024 9:53

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0253	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0253	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0253	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0253	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0253	BDF
Surrogate: Dibromofluoromethane	92.5	Limit: 75-136	% Rec	1		10/03/24 0000	10/04/24 0253	BDF
Surrogate: Dibromofluoromethane	92.5	Limit: 57-134	% Rec	1		10/03/24 0000	10/04/24 0253	BDF
Surrogate: 1,2-Dichloroethane-d4	97.0	Limit: 61-142	% Rec	1		10/03/24 0000	10/04/24 0253	BDF
Surrogate: 1,2-Dichloroethane-d4	97.0	Limit: 53-140	% Rec	1		10/03/24 0000	10/04/24 0253	BDF
Surrogate: Toluene-d8	99.2	Limit: 86-114	% Rec	1		10/03/24 0000	10/04/24 0253	BDF
Surrogate: Toluene-d8	99.2	Limit: 82-121	% Rec	1		10/03/24 0000	10/04/24 0253	BDF
Surrogate: 4-Bromofluorobenzene	105	Limit: 80-116	% Rec	1		10/03/24 0000	10/04/24 0253	BDF
Surrogate: 4-Bromofluorobenzene	105	Limit: 78-121	% Rec	1		10/03/24 0000	10/04/24 0253	BDF

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		10/07/24 0755	10/07/24 2208	RVV
Arsenic, total	**0.0270**	0.0040	mg/L	4		10/07/24 0755	10/07/24 2208	RVV
Barium, total	**0.369**	0.0040	mg/L	4		10/07/24 0755	10/07/24 2208	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2208	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/07/24 0755	10/07/24 2208	RVV
Chromium, total	**0.0095**	0.0080	mg/L	4		10/07/24 0755	10/07/24 2208	RVV
Cobalt, total	**0.0040**	0.0004	mg/L	4		10/07/24 0755	10/07/24 2208	RVV
Copper, total	**0.0114**	0.0040	mg/L	4		10/07/24 0755	10/07/24 2208	RVV
Lead, total	**0.0062**	0.0040	mg/L	4		10/07/24 0755	10/07/24 2208	RVV
Nickel, total	**0.0113**	0.0040	mg/L	4		10/07/24 0755	10/07/24 2208	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2208	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2208	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/07/24 0755	10/07/24 2208	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/07/24 0755	10/07/24 2208	RVV
Zinc, total	**0.0341**	0.0200	mg/L	4		10/07/24 0755	10/07/24 2208	RVV

Client Sample ID:	MW96-24		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0247-10	**Collection Date:**	09/30/2024 10:10

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0316	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0316	BDF
Bromomethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0316	BDF
Chloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0316	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0316	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0316	BDF
Acetone	<10.0	10.0	ug/L	1		10/03/24 0000	10/04/24 0316	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0316	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0316	BDF
Methylene Chloride	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0316	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0316	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0316	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0316	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0316	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0316	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/03/24 0000	10/04/24 0316	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0316	BDF
Chloroform	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0316	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0316	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0316	BDF
Benzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0316	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0316	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0316	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0316	BDF
Dibromomethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0316	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0316	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0316	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0316	BDF
Toluene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0316	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0316	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0316	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0316	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0316	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0316	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0316	BDF
Chlorobenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0316	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0316	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0316	BDF
Xylenes, total	<2.0	2.0	ug/L	1		10/03/24 0000	10/04/24 0316	BDF
Styrene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0316	BDF
Bromoform	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0316	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0316	BDF

Client Sample ID:	MW96-24		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0247-10	**Collection Date:**	09/30/2024 10:10

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0316	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0316	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0316	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0316	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0316	BDF
Surrogate: Dibromofluoromethane	93.8	Limit: 57-134	% Rec	1		10/03/24 0000	10/04/24 0316	BDF
Surrogate: Dibromofluoromethane	93.8	Limit: 75-136	% Rec	1		10/03/24 0000	10/04/24 0316	BDF
Surrogate: 1,2-Dichloroethane-d4	100	Limit: 61-142	% Rec	1		10/03/24 0000	10/04/24 0316	BDF
Surrogate: 1,2-Dichloroethane-d4	100	Limit: 53-140	% Rec	1		10/03/24 0000	10/04/24 0316	BDF
Surrogate: Toluene-d8	99.8	Limit: 86-114	% Rec	1		10/03/24 0000	10/04/24 0316	BDF
Surrogate: Toluene-d8	99.8	Limit: 82-121	% Rec	1		10/03/24 0000	10/04/24 0316	BDF
Surrogate: 4-Bromofluorobenzene	115	Limit: 78-121	% Rec	1		10/03/24 0000	10/04/24 0316	BDF
Surrogate: 4-Bromofluorobenzene	115	Limit: 80-116	% Rec	1		10/03/24 0000	10/04/24 0316	BDF

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		10/07/24 0755	10/07/24 2226	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2226	RVV
Barium, total	**0.559**	0.0040	mg/L	4		10/07/24 0755	10/07/24 2226	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2226	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/07/24 0755	10/07/24 2226	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/07/24 0755	10/07/24 2226	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		10/07/24 0755	10/07/24 2226	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2226	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2226	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2226	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2226	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2226	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/07/24 0755	10/07/24 2226	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/07/24 0755	10/07/24 2226	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/07/24 0755	10/07/24 2226	RVV

Client Sample ID:	MW88-3		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0247-11	**Collection Date:**	09/30/2024 11:23

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0338	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0338	BDF
Bromomethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0338	BDF
Chloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0338	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0338	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0338	BDF
Acetone	<10.0	10.0	ug/L	1		10/03/24 0000	10/04/24 0338	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0338	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0338	BDF
Methylene Chloride	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0338	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0338	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0338	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0338	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0338	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0338	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/03/24 0000	10/04/24 0338	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0338	BDF
Chloroform	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0338	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0338	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0338	BDF
Benzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0338	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0338	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0338	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0338	BDF
Dibromomethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0338	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0338	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0338	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0338	BDF
Toluene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0338	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0338	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0338	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0338	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0338	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0338	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0338	BDF
Chlorobenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0338	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0338	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0338	BDF
Xylenes, total	<2.0	2.0	ug/L	1		10/03/24 0000	10/04/24 0338	BDF
Styrene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0338	BDF
Bromoform	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0338	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0338	BDF

Client Sample ID:	MW88-3		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0247-11	**Collection Date:**	09/30/2024 11:23

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0338	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0338	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0338	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0338	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0338	BDF
Surrogate: Dibromofluoromethane	93.2	Limit: 75-136	% Rec	1		10/03/24 0000	10/04/24 0338	BDF
Surrogate: Dibromofluoromethane	93.2	Limit: 57-134	% Rec	1		10/03/24 0000	10/04/24 0338	BDF
Surrogate: 1,2-Dichloroethane-d4	109	Limit: 61-142	% Rec	1		10/03/24 0000	10/04/24 0338	BDF
Surrogate: 1,2-Dichloroethane-d4	109	Limit: 53-140	% Rec	1		10/03/24 0000	10/04/24 0338	BDF
Surrogate: Toluene-d8	88.4	Limit: 86-114	% Rec	1		10/03/24 0000	10/04/24 0338	BDF
Surrogate: Toluene-d8	88.4	Limit: 82-121	% Rec	1		10/03/24 0000	10/04/24 0338	BDF
Surrogate: 4-Bromofluorobenzene	90.3	Limit: 80-116	% Rec	1		10/03/24 0000	10/04/24 0338	BDF
Surrogate: 4-Bromofluorobenzene	90.3	Limit: 78-121	% Rec	1		10/03/24 0000	10/04/24 0338	BDF

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		10/07/24 0755	10/07/24 2232	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2232	RVV
Barium, total	**0.136**	0.0040	mg/L	4		10/07/24 0755	10/07/24 2232	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2232	RVV
Cadmium, total	**0.0056**	0.0008	mg/L	4		10/07/24 0755	10/07/24 2232	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/07/24 0755	10/07/24 2232	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		10/07/24 0755	10/07/24 2232	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2232	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2232	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2232	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2232	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2232	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/07/24 0755	10/07/24 2232	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/07/24 0755	10/07/24 2232	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/07/24 0755	10/07/24 2232	RVV

Client Sample ID:	MW96-23		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0247-12	**Collection Date:**	09/30/2024 10:36

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0401	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0401	BDF
Bromomethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0401	BDF
Chloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0401	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0401	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0401	BDF
Acetone	<10.0	10.0	ug/L	1		10/03/24 0000	10/04/24 0401	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0401	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0401	BDF
Methylene Chloride	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0401	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0401	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0401	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0401	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0401	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0401	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/03/24 0000	10/04/24 0401	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0401	BDF
Chloroform	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0401	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0401	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0401	BDF
Benzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0401	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0401	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0401	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0401	BDF
Dibromomethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0401	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0401	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0401	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0401	BDF
Toluene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0401	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0401	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0401	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0401	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0401	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0401	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0401	BDF
Chlorobenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0401	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0401	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0401	BDF
Xylenes, total	<2.0	2.0	ug/L	1		10/03/24 0000	10/04/24 0401	BDF
Styrene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0401	BDF
Bromoform	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0401	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0401	BDF

Client Sample ID:	MW96-23		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0247-12	**Collection Date:**	09/30/2024 10:36

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0401	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0401	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0401	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0401	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0401	BDF
Surrogate: Dibromofluoromethane	92.4	Limit: 57-134	% Rec	1		10/03/24 0000	10/04/24 0401	BDF
Surrogate: Dibromofluoromethane	92.4	Limit: 75-136	% Rec	1		10/03/24 0000	10/04/24 0401	BDF
Surrogate: 1,2-Dichloroethane-d4	98.7	Limit: 53-140	% Rec	1		10/03/24 0000	10/04/24 0401	BDF
Surrogate: 1,2-Dichloroethane-d4	98.7	Limit: 61-142	% Rec	1		10/03/24 0000	10/04/24 0401	BDF
Surrogate: Toluene-d8	89.0	Limit: 86-114	% Rec	1		10/03/24 0000	10/04/24 0401	BDF
Surrogate: Toluene-d8	89.0	Limit: 82-121	% Rec	1		10/03/24 0000	10/04/24 0401	BDF
Surrogate: 4-Bromofluorobenzene	101	Limit: 78-121	% Rec	1		10/03/24 0000	10/04/24 0401	BDF
Surrogate: 4-Bromofluorobenzene	101	Limit: 80-116	% Rec	1		10/03/24 0000	10/04/24 0401	BDF

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		10/07/24 0755	10/07/24 2239	RVV
Arsenic, total	**0.0392**	0.0040	mg/L	4		10/07/24 0755	10/07/24 2239	RVV
Barium, total	**0.632**	0.0040	mg/L	4		10/07/24 0755	10/07/24 2239	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2239	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/07/24 0755	10/07/24 2239	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/07/24 0755	10/07/24 2239	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		10/07/24 0755	10/07/24 2239	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2239	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2239	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2239	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2239	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2239	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/07/24 0755	10/07/24 2239	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/07/24 0755	10/07/24 2239	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/07/24 0755	10/07/24 2239	RVV

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HJ0247

Client Sample ID:	MW21-43		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0247-13	**Collection Date:**	09/30/2024 12:09

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0423	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0423	BDF
Bromomethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0423	BDF
Chloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0423	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0423	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0423	BDF
Acetone	<10.0	10.0	ug/L	1		10/03/24 0000	10/04/24 0423	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0423	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0423	BDF
Methylene Chloride	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0423	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0423	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0423	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0423	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0423	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0423	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/03/24 0000	10/04/24 0423	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0423	BDF
Chloroform	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0423	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0423	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0423	BDF
Benzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0423	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0423	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0423	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0423	BDF
Dibromomethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0423	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0423	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0423	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0423	BDF
Toluene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0423	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0423	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0423	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0423	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0423	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0423	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0423	BDF
Chlorobenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0423	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0423	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0423	BDF
Xylenes, total	<2.0	2.0	ug/L	1		10/03/24 0000	10/04/24 0423	BDF
Styrene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0423	BDF
Bromoform	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0423	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0423	BDF

Client Sample ID:	MW21-43		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0247-13	**Collection Date:**	09/30/2024 12:09

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0423	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0423	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0423	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0423	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0423	BDF
Surrogate: Dibromofluoromethane	92.4	Limit: 75-136	% Rec	1		10/03/24 0000	10/04/24 0423	BDF
Surrogate: Dibromofluoromethane	92.4	Limit: 57-134	% Rec	1		10/03/24 0000	10/04/24 0423	BDF
Surrogate: 1,2-Dichloroethane-d4	99.3	Limit: 61-142	% Rec	1		10/03/24 0000	10/04/24 0423	BDF
Surrogate: 1,2-Dichloroethane-d4	99.3	Limit: 53-140	% Rec	1		10/03/24 0000	10/04/24 0423	BDF
Surrogate: Toluene-d8	98.7	Limit: 82-121	% Rec	1		10/03/24 0000	10/04/24 0423	BDF
Surrogate: Toluene-d8	98.7	Limit: 86-114	% Rec	1		10/03/24 0000	10/04/24 0423	BDF
Surrogate: 4-Bromofluorobenzene	96.6	Limit: 80-116	% Rec	1		10/03/24 0000	10/04/24 0423	BDF
Surrogate: 4-Bromofluorobenzene	96.6	Limit: 78-121	% Rec	1		10/03/24 0000	10/04/24 0423	BDF

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		10/07/24 0755	10/07/24 2245	RVV
Arsenic, total	**0.0098**	0.0040	mg/L	4		10/07/24 0755	10/07/24 2245	RVV
Barium, total	**0.177**	0.0040	mg/L	4		10/07/24 0755	10/07/24 2245	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2245	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/07/24 0755	10/07/24 2245	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/07/24 0755	10/07/24 2245	RVV
Cobalt, total	**0.0004**	0.0004	mg/L	4		10/07/24 0755	10/07/24 2245	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2245	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2245	RVV
Nickel, total	**0.0081**	0.0040	mg/L	4		10/07/24 0755	10/07/24 2245	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2245	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2245	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/07/24 0755	10/07/24 2245	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/07/24 0755	10/07/24 2245	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/07/24 0755	10/07/24 2245	RVV

Client Sample ID:	GU-3		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0247-14	**Collection Date:**	09/30/2024 10:51

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0446	BDF
Vinyl Chloride	**1.2**	1.0	ug/L	1		10/03/24 0000	10/04/24 0446	BDF
Bromomethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0446	BDF
Chloroethane	**1.1**	1.0	ug/L	1		10/03/24 0000	10/04/24 0446	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0446	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0446	BDF
Acetone	<10.0	10.0	ug/L	1		10/03/24 0000	10/04/24 0446	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0446	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0446	BDF
Methylene Chloride	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0446	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0446	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0446	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0446	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0446	BDF
cis-1,2-Dichloroethylene	**4.3**	1.0	ug/L	1		10/03/24 0000	10/04/24 0446	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/03/24 0000	10/04/24 0446	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0446	BDF
Chloroform	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0446	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0446	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0446	BDF
Benzene	**6.0**	1.0	ug/L	1		10/03/24 0000	10/04/24 0446	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0446	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0446	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0446	BDF
Dibromomethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0446	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0446	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0446	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0446	BDF
Toluene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0446	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0446	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0446	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0446	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0446	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0446	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0446	BDF
Chlorobenzene	**1.3**	1.0	ug/L	1		10/03/24 0000	10/04/24 0446	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0446	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0446	BDF
Xylenes, total	<2.0	2.0	ug/L	1		10/03/24 0000	10/04/24 0446	BDF
Styrene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0446	BDF
Bromoform	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0446	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0446	BDF

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HJ0247

Client Sample ID:	GU-3		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0247-14	**Collection Date:**	09/30/2024 10:51

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0446	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0446	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0446	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0446	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0446	BDF
Surrogate: Dibromofluoromethane	93.8	Limit: 57-134	% Rec	1		10/03/24 0000	10/04/24 0446	BDF
Surrogate: Dibromofluoromethane	93.8	Limit: 75-136	% Rec	1		10/03/24 0000	10/04/24 0446	BDF
Surrogate: 1,2-Dichloroethane-d4	99.9	Limit: 53-140	% Rec	1		10/03/24 0000	10/04/24 0446	BDF
Surrogate: 1,2-Dichloroethane-d4	99.9	Limit: 61-142	% Rec	1		10/03/24 0000	10/04/24 0446	BDF
Surrogate: Toluene-d8	98.2	Limit: 86-114	% Rec	1		10/03/24 0000	10/04/24 0446	BDF
Surrogate: Toluene-d8	98.2	Limit: 82-121	% Rec	1		10/03/24 0000	10/04/24 0446	BDF
Surrogate: 4-Bromofluorobenzene	101	Limit: 78-121	% Rec	1		10/03/24 0000	10/04/24 0446	BDF
Surrogate: 4-Bromofluorobenzene	101	Limit: 80-116	% Rec	1		10/03/24 0000	10/04/24 0446	BDF

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		10/07/24 0755	10/07/24 2251	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2251	RVV
Barium, total	**0.488**	0.0040	mg/L	4		10/07/24 0755	10/07/24 2251	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2251	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/07/24 0755	10/07/24 2251	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/07/24 0755	10/07/24 2251	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		10/07/24 0755	10/07/24 2251	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2251	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2251	RVV
Nickel, total	**0.0368**	0.0040	mg/L	4		10/07/24 0755	10/07/24 2251	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2251	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2251	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/07/24 0755	10/07/24 2251	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/07/24 0755	10/07/24 2251	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/07/24 0755	10/07/24 2251	RVV

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HJ0247

Client Sample ID:	PEC-3		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0247-15	**Collection Date:**	09/30/2024

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0508	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0508	BDF
Bromomethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0508	BDF
Chloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0508	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0508	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0508	BDF
Acetone	<10.0	10.0	ug/L	1		10/03/24 0000	10/04/24 0508	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0508	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0508	BDF
Methylene Chloride	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0508	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0508	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0508	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0508	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0508	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0508	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/03/24 0000	10/04/24 0508	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0508	BDF
Chloroform	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0508	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0508	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0508	BDF
Benzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0508	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0508	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0508	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0508	BDF
Dibromomethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0508	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0508	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0508	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0508	BDF
Toluene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0508	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0508	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0508	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0508	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0508	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0508	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0508	BDF
Chlorobenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0508	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0508	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0508	BDF
Xylenes, total	<2.0	2.0	ug/L	1		10/03/24 0000	10/04/24 0508	BDF
Styrene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0508	BDF
Bromoform	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0508	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0508	BDF

Client Sample ID:	PEC-3		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0247-15	**Collection Date:**	09/30/2024

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0508	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0508	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0508	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0508	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0508	BDF
Surrogate: Dibromofluoromethane	93.3	Limit: 75-136	% Rec	1		10/03/24 0000	10/04/24 0508	BDF
Surrogate: Dibromofluoromethane	93.3	Limit: 57-134	% Rec	1		10/03/24 0000	10/04/24 0508	BDF
Surrogate: 1,2-Dichloroethane-d4	100	Limit: 61-142	% Rec	1		10/03/24 0000	10/04/24 0508	BDF
Surrogate: 1,2-Dichloroethane-d4	100	Limit: 53-140	% Rec	1		10/03/24 0000	10/04/24 0508	BDF
Surrogate: Toluene-d8	100	Limit: 82-121	% Rec	1		10/03/24 0000	10/04/24 0508	BDF
Surrogate: Toluene-d8	100	Limit: 86-114	% Rec	1		10/03/24 0000	10/04/24 0508	BDF
Surrogate: 4-Bromofluorobenzene	116	Limit: 80-116	% Rec	1		10/03/24 0000	10/04/24 0508	BDF
Surrogate: 4-Bromofluorobenzene	116	Limit: 78-121	% Rec	1		10/03/24 0000	10/04/24 0508	BDF

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CERTIFICATE OF ANALYSIS

1HJ0247

Client Sample ID:	MW98-25		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0247-16	**Collection Date:**	09/30/2024 8:21

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		10/03/24 0000	10/04/24 0531	BDF
Chloromethane	**1.8**	1.0	ug/L	1		10/03/24 0000	10/04/24 0531	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0531	BDF
Bromomethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0531	BDF
Chloroethane	**1.0**	1.0	ug/L	1		10/03/24 0000	10/04/24 0531	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0531	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0531	BDF
Acetone	<10.0	10.0	ug/L	1		10/03/24 0000	10/04/24 0531	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0531	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0531	BDF
Methylene Chloride	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0531	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0531	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0531	BDF
1,1-Dichloroethane	**1.2**	1.0	ug/L	1		10/03/24 0000	10/04/24 0531	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0531	BDF
cis-1,2-Dichloroethylene	**2.0**	1.0	ug/L	1		10/03/24 0000	10/04/24 0531	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/03/24 0000	10/04/24 0531	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0531	BDF
Chloroform	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0531	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0531	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0531	BDF
Benzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0531	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0531	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0531	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0531	BDF
Dibromomethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0531	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0531	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0531	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0531	BDF
Toluene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0531	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0531	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0531	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0531	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0531	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0531	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0531	BDF
Chlorobenzene	**1.0**	1.0	ug/L	1		10/03/24 0000	10/04/24 0531	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0531	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0531	BDF
Xylenes, total	<2.0	2.0	ug/L	1		10/03/24 0000	10/04/24 0531	BDF
Styrene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0531	BDF
Bromoform	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0531	BDF

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CERTIFICATE OF ANALYSIS

1HJ0247

Client Sample ID:	MW98-25		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0247-16	**Collection Date:**	09/30/2024 8:21

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0531	BDF
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0531	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0531	BDF
1,4-Dichlorobenzene	**1.8**	1.0	ug/L	1		10/03/24 0000	10/04/24 0531	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0531	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0531	BDF
Surrogate: Dibromofluoromethane	94.9	Limit: 57-134	% Rec	1		10/03/24 0000	10/04/24 0531	BDF
Surrogate: Dibromofluoromethane	94.9	Limit: 75-136	% Rec	1		10/03/24 0000	10/04/24 0531	BDF
Surrogate: 1,2-Dichloroethane-d4	102	Limit: 53-140	% Rec	1		10/03/24 0000	10/04/24 0531	BDF
Surrogate: 1,2-Dichloroethane-d4	102	Limit: 61-142	% Rec	1		10/03/24 0000	10/04/24 0531	BDF
Surrogate: Toluene-d8	97.8	Limit: 86-114	% Rec	1		10/03/24 0000	10/04/24 0531	BDF
Surrogate: Toluene-d8	97.8	Limit: 82-121	% Rec	1		10/03/24 0000	10/04/24 0531	BDF
Surrogate: 4-Bromofluorobenzene	103	Limit: 80-116	% Rec	1		10/03/24 0000	10/04/24 0531	BDF
Surrogate: 4-Bromofluorobenzene	103	Limit: 78-121	% Rec	1		10/03/24 0000	10/04/24 0531	BDF

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		10/07/24 0755	10/07/24 2257	RVV
Arsenic, total	**0.0066**	0.0040	mg/L	4		10/07/24 0755	10/07/24 2257	RVV
Barium, total	**0.0902**	0.0040	mg/L	4		10/07/24 0755	10/07/24 2257	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2257	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/07/24 0755	10/07/24 2257	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/07/24 0755	10/07/24 2257	RVV
Cobalt, total	**0.0110**	0.0004	mg/L	4		10/07/24 0755	10/07/24 2257	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2257	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2257	RVV
Nickel, total	**0.0265**	0.0040	mg/L	4		10/07/24 0755	10/07/24 2257	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2257	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2257	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/07/24 0755	10/07/24 2257	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/07/24 0755	10/07/24 2257	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/07/24 0755	10/07/24 2257	RVV

Client Sample ID:	MW06-37			
Sample Matrix:	Aqueous		**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0247-17		**Collection Date:**	09/30/2024 14:14

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0553	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0553	BDF
Bromomethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0553	BDF
Chloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0553	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0553	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0553	BDF
Acetone	<10.0	10.0	ug/L	1		10/03/24 0000	10/04/24 0553	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0553	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0553	BDF
Methylene Chloride	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0553	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0553	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0553	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0553	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0553	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0553	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/03/24 0000	10/04/24 0553	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0553	BDF
Chloroform	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0553	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0553	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0553	BDF
Benzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0553	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0553	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0553	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0553	BDF
Dibromomethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0553	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0553	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0553	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0553	BDF
Toluene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0553	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0553	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0553	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0553	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0553	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0553	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0553	BDF
Chlorobenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0553	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0553	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0553	BDF
Xylenes, total	<2.0	2.0	ug/L	1		10/03/24 0000	10/04/24 0553	BDF
Styrene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0553	BDF
Bromoform	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0553	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0553	BDF

Client Sample ID:	MW06-37		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0247-17	**Collection Date:**	09/30/2024 14:14

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0553	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0553	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0553	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0553	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0553	BDF
Surrogate: Dibromofluoromethane	93.1	Limit: 75-136	% Rec	1		10/03/24 0000	10/04/24 0553	BDF
Surrogate: Dibromofluoromethane	93.1	Limit: 57-134	% Rec	1		10/03/24 0000	10/04/24 0553	BDF
Surrogate: 1,2-Dichloroethane-d4	101	Limit: 53-140	% Rec	1		10/03/24 0000	10/04/24 0553	BDF
Surrogate: 1,2-Dichloroethane-d4	101	Limit: 61-142	% Rec	1		10/03/24 0000	10/04/24 0553	BDF
Surrogate: Toluene-d8	99.2	Limit: 82-121	% Rec	1		10/03/24 0000	10/04/24 0553	BDF
Surrogate: Toluene-d8	99.2	Limit: 86-114	% Rec	1		10/03/24 0000	10/04/24 0553	BDF
Surrogate: 4-Bromofluorobenzene	102	Limit: 78-121	% Rec	1		10/03/24 0000	10/04/24 0553	BDF
Surrogate: 4-Bromofluorobenzene	102	Limit: 80-116	% Rec	1		10/03/24 0000	10/04/24 0553	BDF

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		10/07/24 0755	10/07/24 2303	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2303	RVV
Barium, total	**0.116**	0.0040	mg/L	4		10/07/24 0755	10/07/24 2303	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2303	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/07/24 0755	10/07/24 2303	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/07/24 0755	10/07/24 2303	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		10/07/24 0755	10/07/24 2303	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2303	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2303	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2303	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2303	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2303	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/07/24 0755	10/07/24 2303	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/07/24 0755	10/07/24 2303	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/07/24 0755	10/07/24 2303	RVV

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CERTIFICATE OF ANALYSIS

1HJ0247

Client Sample ID:	MW06-38		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0247-18	**Collection Date:**	09/30/2024 14:02

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0616	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0616	BDF
Bromomethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0616	BDF
Chloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0616	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0616	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0616	BDF
Acetone	<10.0	10.0	ug/L	1		10/03/24 0000	10/04/24 0616	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0616	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0616	BDF
Methylene Chloride	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0616	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0616	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0616	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0616	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0616	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0616	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/03/24 0000	10/04/24 0616	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0616	BDF
Chloroform	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0616	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0616	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0616	BDF
Benzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0616	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0616	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0616	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0616	BDF
Dibromomethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0616	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0616	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0616	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0616	BDF
Toluene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0616	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0616	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0616	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0616	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0616	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0616	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0616	BDF
Chlorobenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0616	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0616	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0616	BDF
Xylenes, total	<2.0	2.0	ug/L	1		10/03/24 0000	10/04/24 0616	BDF
Styrene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0616	BDF
Bromoform	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0616	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0616	BDF

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CERTIFICATE OF ANALYSIS

1HJ0247

Client Sample ID:	MW06-38			
Sample Matrix:	Aqueous		**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0247-18		**Collection Date:**	09/30/2024 14:02

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0616	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0616	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0616	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0616	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0616	BDF
Surrogate: Dibromofluoromethane	93.6	Limit: 75-136	% Rec	1		10/03/24 0000	10/04/24 0616	BDF
Surrogate: Dibromofluoromethane	93.6	Limit: 57-134	% Rec	1		10/03/24 0000	10/04/24 0616	BDF
Surrogate: 1,2-Dichloroethane-d4	101	Limit: 53-140	% Rec	1		10/03/24 0000	10/04/24 0616	BDF
Surrogate: 1,2-Dichloroethane-d4	101	Limit: 61-142	% Rec	1		10/03/24 0000	10/04/24 0616	BDF
Surrogate: Toluene-d8	109	Limit: 86-114	% Rec	1		10/03/24 0000	10/04/24 0616	BDF
Surrogate: Toluene-d8	109	Limit: 82-121	% Rec	1		10/03/24 0000	10/04/24 0616	BDF
Surrogate: 4-Bromofluorobenzene	102	Limit: 80-116	% Rec	1		10/03/24 0000	10/04/24 0616	BDF
Surrogate: 4-Bromofluorobenzene	102	Limit: 78-121	% Rec	1		10/03/24 0000	10/04/24 0616	BDF

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		10/07/24 0755	10/07/24 2309	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2309	RVV
Barium, total	**0.188**	0.0040	mg/L	4		10/07/24 0755	10/07/24 2309	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2309	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/07/24 0755	10/07/24 2309	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/07/24 0755	10/07/24 2309	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		10/07/24 0755	10/07/24 2309	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2309	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2309	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2309	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2309	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2309	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/07/24 0755	10/07/24 2309	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/07/24 0755	10/07/24 2309	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/07/24 0755	10/07/24 2309	RVV

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HJ0247

Client Sample ID:	MW06-39		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0247-19	**Collection Date:**	09/30/2024 13:51

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0638	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0638	BDF
Bromomethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0638	BDF
Chloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0638	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0638	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0638	BDF
Acetone	<10.0	10.0	ug/L	1		10/03/24 0000	10/04/24 0638	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0638	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0638	BDF
Methylene Chloride	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0638	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0638	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0638	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0638	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0638	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0638	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/03/24 0000	10/04/24 0638	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0638	BDF
Chloroform	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0638	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0638	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0638	BDF
Benzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0638	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0638	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0638	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0638	BDF
Dibromomethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0638	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0638	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0638	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0638	BDF
Toluene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0638	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0638	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0638	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0638	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0638	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0638	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0638	BDF
Chlorobenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0638	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0638	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0638	BDF
Xylenes, total	<2.0	2.0	ug/L	1		10/03/24 0000	10/04/24 0638	BDF
Styrene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0638	BDF
Bromoform	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0638	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0638	BDF

Client Sample ID:	MW06-39		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0247-19	**Collection Date:**	09/30/2024 13:51

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0638	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0638	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0638	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/24 0000	10/04/24 0638	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/03/24 0000	10/04/24 0638	BDF
Surrogate: Dibromofluoromethane	93.8	Limit: 75-136	% Rec	1		10/03/24 0000	10/04/24 0638	BDF
Surrogate: Dibromofluoromethane	93.8	Limit: 57-134	% Rec	1		10/03/24 0000	10/04/24 0638	BDF
Surrogate: 1,2-Dichloroethane-d4	100	Limit: 61-142	% Rec	1		10/03/24 0000	10/04/24 0638	BDF
Surrogate: 1,2-Dichloroethane-d4	100	Limit: 53-140	% Rec	1		10/03/24 0000	10/04/24 0638	BDF
Surrogate: Toluene-d8	99.2	Limit: 82-121	% Rec	1		10/03/24 0000	10/04/24 0638	BDF
Surrogate: Toluene-d8	99.2	Limit: 86-114	% Rec	1		10/03/24 0000	10/04/24 0638	BDF
Surrogate: 4-Bromofluorobenzene	116	Limit: 80-116	% Rec	1		10/03/24 0000	10/04/24 0638	BDF
Surrogate: 4-Bromofluorobenzene	116	Limit: 78-121	% Rec	1		10/03/24 0000	10/04/24 0638	BDF

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		10/07/24 0755	10/07/24 2315	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2315	RVV
Barium, total	**0.160**	0.0040	mg/L	4		10/07/24 0755	10/07/24 2315	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2315	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/07/24 0755	10/07/24 2315	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/07/24 0755	10/07/24 2315	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		10/07/24 0755	10/07/24 2315	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2315	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2315	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2315	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2315	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2315	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/07/24 0755	10/07/24 2315	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/07/24 0755	10/07/24 2315	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/07/24 0755	10/07/24 2315	RVV

CERTIFICATE OF ANALYSIS

1HJ0247

Client Sample ID:	Field Duplicate		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ0247-20	**Collection Date:**	09/30/2024

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		10/07/24 0755	10/07/24 2322	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2322	RVV
Barium, total	**0.0271**	0.0040	mg/L	4		10/07/24 0755	10/07/24 2322	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2322	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/07/24 0755	10/07/24 2322	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/30/24 1122	10/31/24 1324	JAR
Cobalt, total	<0.0004	0.0004	mg/L	4		10/30/24 1122	10/31/24 1324	JAR
Copper, total	<0.0040	0.0040	mg/L	4		10/30/24 1122	10/31/24 1324	JAR
Lead, total	<0.0040	0.0040	mg/L	4		10/30/24 1122	10/31/24 1324	JAR
Nickel, total	<0.0040	0.0040	mg/L	4		10/30/24 1122	10/31/24 1324	JAR
Selenium, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2322	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/07/24 0755	10/07/24 2322	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/07/24 0755	10/07/24 2322	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/07/24 0755	10/07/24 2322	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/07/24 0755	10/07/24 2322	RVV

Batch Log Summary

Method	Batch	Laboratory ID	Client / Source ID
EPA 8260B	1HJ0299	1HJ0299-BS1	
		1HJ0299-BSD1	
		1HJ0299-MS1	1HJ0247-07
		1HJ0299-MSD1	1HJ0247-07
		1HJ0299-BLK1	
		1HJ0247-01	MW91-8
		1HJ0247-01	MW91-8
		1HJ0247-02	MW02-15A
		1HJ0247-02	MW02-15A
		1HJ0247-03	MW98-28
		1HJ0247-03	MW98-28
		1HJ0247-04	MW02-30A
		1HJ0247-04	MW02-30A
		1HJ0247-05	MW88-2
		1HJ0247-05	MW88-2
		1HJ0247-06	MW94-18
		1HJ0247-06	MW94-18
		1HJ0247-07	MW09-40
		1HJ0247-07	MW09-40
		1HJ0247-08	MW91-10
		1HJ0247-08	MW91-10
		1HJ0247-09	MW96-21
		1HJ0247-09	MW96-21
		1HJ0247-10	MW96-24
		1HJ0247-10	MW96-24
		1HJ0247-11	MW88-3
		1HJ0247-11	MW88-3
		1HJ0247-12	MW96-23
		1HJ0247-12	MW96-23
		1HJ0247-13	MW21-43
		1HJ0247-13	MW21-43
		1HJ0247-14	GU-3
		1HJ0247-14	GU-3
		1HJ0247-15	PEC-3
		1HJ0247-15	PEC-3
		1HJ0247-16	MW98-25
		1HJ0247-16	MW98-25
		1HJ0247-17	MW06-37
		1HJ0247-17	MW06-37

EPA 8260B	1HJ0299	1HJ0247-18	MW06-38
		1HJ0247-18	MW06-38
		1HJ0247-19	MW06-39
		1HJ0247-19	MW06-39

Method	Batch	Laboratory ID	Client / Source ID
EPA 6020A	1HJ0347	1HJ0347-BLK1	
		1HJ0347-BS1	
		1HJ0247-01	MW91-8
		1HJ0347-MS1	1HJ0247-01
		1HJ0347-MSD1	1HJ0247-01
		1HJ0347-PS1	1HJ0247-01
		1HJ0247-02	MW02-15A
		1HJ0247-03	MW98-28
		1HJ0247-04	MW02-30A
		1HJ0247-05	MW88-2
		1HJ0247-06	MW94-18
		1HJ0247-07	MW09-40
		1HJ0247-08	MW91-10
		1HJ0247-09	MW96-21
		1HJ0247-10	MW96-24
		1HJ0247-11	MW88-3
		1HJ0247-12	MW96-23
		1HJ0247-13	MW21-43
		1HJ0247-14	GU-3
		1HJ0247-16	MW98-25
		1HJ0247-17	MW06-37
		1HJ0247-18	MW06-38
		1HJ0247-19	MW06-39
		1HJ0247-20	Field Duplicate

Method	Batch	Laboratory ID	Client / Source ID
EPA 6020A	1HJ1786	1HJ1786-BLK1	
		1HJ1786-BS1	
		1HJ1786-MS1	1HJ2157-01
		1HJ1786-MSD1	1HJ2157-01
		1HJ1786-PS1	1HJ2157-01
		1HJ0247-20RE3	Field Duplicate

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

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch 1HJ0299 - EPA 5030B - EPA 8260B

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ0299 - EPA 5030B - EPA 8260B										
Blank (1HJ0299-BLK1)				Prepared: 10/03/24 00:00 Analyzed: 10/03/24 23:31						
Dichlorodifluoromethane	<1.0	1.0	ug/L							
Chloromethane	<1.0	1.0	ug/L							
Vinyl Chloride	<1.0	1.0	ug/L							
Bromomethane	<1.0	1.0	ug/L							
Chloroethane	<1.0	1.0	ug/L							
Trichlorofluoromethane	<1.0	1.0	ug/L							
1,1-Dichloroethylene	<1.0	1.0	ug/L							
Acetone	<10.0	10.0	ug/L							
Methyl Iodide	<1.0	1.0	ug/L							
Carbon Disulfide	<1.0	1.0	ug/L							
Methylene Chloride	<5.0	5.0	ug/L							
Acrylonitrile	<5.0	5.0	ug/L							
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L							
1,1-Dichloroethane	<1.0	1.0	ug/L							
Vinyl Acetate	<5.0	5.0	ug/L							
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L							
2-Butanone (MEK)	<10.0	10.0	ug/L							
Bromochloromethane	<1.0	1.0	ug/L							
Chloroform	<1.0	1.0	ug/L							
1,1,1-Trichloroethane	<1.0	1.0	ug/L							
Carbon Tetrachloride	<1.0	1.0	ug/L							
Benzene	<1.0	1.0	ug/L							
1,2-Dichloroethane	<1.0	1.0	ug/L							
Trichloroethylene	<1.0	1.0	ug/L							
1,2-Dichloropropane	<1.0	1.0	ug/L							
Dibromomethane	<1.0	1.0	ug/L							
Bromodichloromethane	<1.0	1.0	ug/L							
cis-1,3-Dichloropropene	<1.0	1.0	ug/L							
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L							
Toluene	<1.0	1.0	ug/L							
trans-1,3-Dichloropropene	<1.0	1.0	ug/L							
1,1,2-Trichloroethane	<1.0	1.0	ug/L							
Tetrachloroethylene	<1.0	1.0	ug/L							
2-Hexanone (MBK)	<5.0	5.0	ug/L							
Dibromochloromethane	<1.0	1.0	ug/L							
1,2-Dibromoethane	<1.0	1.0	ug/L							
Chlorobenzene	<1.0	1.0	ug/L							
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L							
Ethylbenzene	<1.0	1.0	ug/L							
Xylenes, total	<2.0	2.0	ug/L							
Styrene	<1.0	1.0	ug/L							
Bromoform	<1.0	1.0	ug/L							
1,2,3-Trichloropropane	<1.0	1.0	ug/L							

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ0299 - EPA 5030B - EPA 8260B										
Blank (1HJ0299-BLK1)			Prepared: 10/03/24 00:00 Analyzed: 10/03/24 23:31							
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L							
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L							
1,4-Dichlorobenzene	<1.0	1.0	ug/L							
1,2-Dichlorobenzene	<1.0	1.0	ug/L							
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L							
Surrogate: Dibromofluoromethane	*46.2*		ug/L	*50.2*		*92.1*	*57-134*			
Surrogate: Dibromofluoromethane	*46.2*		ug/L	*50.2*		*92.1*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*47.7*		ug/L	*50.4*		*94.8*	*53-140*			
Surrogate: 1,2-Dichloroethane-d4	*47.7*		ug/L	*50.4*		*94.8*	*61-142*			
Surrogate: Toluene-d8	*49.8*		ug/L	*50.5*		*98.8*	*86-114*			
Surrogate: Toluene-d8	*49.8*		ug/L	*50.5*		*98.8*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*53.3*		ug/L	*50.2*		*106*	*78-121*			
Surrogate: 4-Bromofluorobenzene	*53.3*		ug/L	*50.2*		*106*	*80-116*			
LCS (1HJ0299-BS1)			Prepared: 10/03/24 00:00 Analyzed: 10/03/24 21:38							
Dichlorodifluoromethane	28.29	1.0	ug/L	30.0		94.3	49-138			
Chloromethane	30.13	1.0	ug/L	30.0		100	63-155			
Vinyl Chloride	25.30	1.0	ug/L	30.0		84.3	70-154			
Bromomethane	19.67	1.0	ug/L	30.0		65.6	52-176			
Chloroethane	34.09	1.0	ug/L	30.0		114	72-148			
Trichlorofluoromethane	30.44	1.0	ug/L	30.0		101	70-152			
1,1-Dichloroethylene	99.96	1.0	ug/L	100		100	70-148			
Acetone	106.1	10.0	ug/L	101		105	43-172			
Methyl Iodide	102.0	1.0	ug/L	102		100	69-170			
Carbon Disulfide	103.6	1.0	ug/L	103		101	72-162			
Methylene Chloride	99.31	5.0	ug/L	100		99.3	68-142			
Acrylonitrile	106.0	5.0	ug/L	100		106	56-135			
trans-1,2-Dichloroethylene	100.2	1.0	ug/L	100		100	66-148			
1,1-Dichloroethane	102.2	1.0	ug/L	100		102	66-143			
Vinyl Acetate	102.1	5.0	ug/L	100		102	43-153			
cis-1,2-Dichloroethylene	92.38	1.0	ug/L	100		92.4	71-149			
2-Butanone (MEK)	105.0	10.0	ug/L	102		103	52-159			
Bromochloromethane	103.0	1.0	ug/L	100		103	69-143			
Chloroform	92.93	1.0	ug/L	100		92.9	69-144			
1,1,1-Trichloroethane	86.86	1.0	ug/L	100		86.9	62-129			
Carbon Tetrachloride	90.37	1.0	ug/L	100		90.4	63-141			
Benzene	107.9	1.0	ug/L	100		108	71-134			
1,2-Dichloroethane	103.1	1.0	ug/L	100		103	72-132			
Trichloroethylene	99.90	1.0	ug/L	100		99.9	71-135			
1,2-Dichloropropane	101.1	1.0	ug/L	100		101	69-136			
Dibromomethane	98.64	1.0	ug/L	100		98.6	73-147			
Bromodichloromethane	96.78	1.0	ug/L	100		96.8	68-129			
cis-1,3-Dichloropropene	100.8	1.0	ug/L	100		101	65-134			
4-Methyl-2-pentanone (MIBK)	119.6	5.0	ug/L	100		119	58-147			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ0299 - EPA 5030B - EPA 8260B										
LCS (1HJ0299-BS1)				Prepared: 10/03/24 00:00 Analyzed: 10/03/24 21:38						
Toluene	100.2	1.0	ug/L	100		100	72-133			
trans-1,3-Dichloropropene	100.0	1.0	ug/L	100		100	67-130			
1,1,2-Trichloroethane	101.4	1.0	ug/L	100		101	69-135			
Tetrachloroethylene	101.6	1.0	ug/L	100		102	69-130			
2-Hexanone (MBK)	119.8	5.0	ug/L	99.3		121	55-144			
Dibromochloromethane	99.35	1.0	ug/L	100		99.4	73-127			
1,2-Dibromoethane	100.3	1.0	ug/L	100		100	67-132			
Chlorobenzene	100.7	1.0	ug/L	100		101	72-123			
1,1,1,2-Tetrachloroethane	97.61	1.0	ug/L	100		97.6	73-127			
Ethylbenzene	100.3	1.0	ug/L	100		100	71-127			
Xylenes, total	307.8	2.0	ug/L	300		103	74-127			
Styrene	100.6	1.0	ug/L	100		101	66-126			
Bromoform	96.09	1.0	ug/L	100		96.1	68-130			
1,2,3-Trichloropropane	105.1	1.0	ug/L	100		105	63-136			
trans-1,4-Dichloro-2-butene	93.41	5.0	ug/L	103		90.9	54-134			
1,1,2,2-Tetrachloroethane	135.7	1.0	ug/L	100		136	61-131			Q2
1,4-Dichlorobenzene	100.8	1.0	ug/L	100		101	70-129			
1,2-Dichlorobenzene	99.15	1.0	ug/L	100		99.2	69-126			
1,2-Dibromo-3-chloropropane	102.7	5.0	ug/L	100		103	50-143			
Surrogate: Dibromofluoromethane	*46.2*		ug/L	*50.2*		*92.0*	*57-134*			
Surrogate: Dibromofluoromethane	*46.2*		ug/L	*50.2*		*92.0*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*46.9*		ug/L	*50.4*		*93.1*	*53-140*			
Surrogate: 1,2-Dichloroethane-d4	*46.9*		ug/L	*50.4*		*93.1*	*61-142*			
Surrogate: Toluene-d8	*52.2*		ug/L	*50.5*		*103*	*86-114*			
Surrogate: Toluene-d8	*52.2*		ug/L	*50.5*		*103*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*51.0*		ug/L	*50.2*		*102*	*78-121*			
Surrogate: 4-Bromofluorobenzene	*51.0*		ug/L	*50.2*		*102*	*80-116*			
LCS Dup (1HJ0299-BSD1)				Prepared: 10/03/24 00:00 Analyzed: 10/03/24 22:01						
Dichlorodifluoromethane	29.73	1.0	ug/L	30.0		99.1	49-138	4.96	22	
Chloromethane	29.72	1.0	ug/L	30.0		99.1	63-155	1.37	24	
Vinyl Chloride	25.19	1.0	ug/L	30.0		84.0	70-154	0.436	25	
Bromomethane	19.69	1.0	ug/L	30.0		65.6	52-176	0.102	27	
Chloroethane	33.36	1.0	ug/L	30.0		111	72-148	2.16	25	
Trichlorofluoromethane	30.82	1.0	ug/L	30.0		103	70-152	1.24	26	
1,1-Dichloroethylene	97.95	1.0	ug/L	100		98.0	70-148	2.03	24	
Acetone	107.0	10.0	ug/L	101		106	43-172	0.807	30	
Methyl Iodide	101.2	1.0	ug/L	102		99.4	69-170	0.767	30	
Carbon Disulfide	102.4	1.0	ug/L	103		99.8	72-162	1.14	24	
Methylene Chloride	99.63	5.0	ug/L	100		99.6	68-142	0.322	21	
Acrylonitrile	105.2	5.0	ug/L	100		105	56-135	0.805	16	
trans-1,2-Dichloroethylene	99.15	1.0	ug/L	100		99.2	66-148	1.06	27	
1,1-Dichloroethane	100.8	1.0	ug/L	100		101	66-143	1.34	24	
Vinyl Acetate	103.3	5.0	ug/L	100		103	43-153	1.16	30	

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ0299 - EPA 5030B - EPA 8260B										
LCS Dup (1HJ0299-BSD1)				Prepared: 10/03/24 00:00 Analyzed: 10/03/24 22:01						
cis-1,2-Dichloroethylene	90.55	1.0	ug/L	100		90.6	71-149	2.00	26	
2-Butanone (MEK)	107.9	10.0	ug/L	102		106	52-159	2.79	27	
Bromochloromethane	102.9	1.0	ug/L	100		103	69-143	0.0971	23	
Chloroform	91.54	1.0	ug/L	100		91.5	69-144	1.51	23	
1,1,1-Trichloroethane	85.62	1.0	ug/L	100		85.6	62-129	1.44	24	
Carbon Tetrachloride	89.83	1.0	ug/L	100		89.8	63-141	0.599	25	
Benzene	106.4	1.0	ug/L	100		106	71-134	1.36	24	
1,2-Dichloroethane	101.8	1.0	ug/L	100		102	72-132	1.30	24	
Trichloroethylene	97.49	1.0	ug/L	100		97.5	71-135	2.44	24	
1,2-Dichloropropane	99.37	1.0	ug/L	100		99.4	69-136	1.73	24	
Dibromomethane	99.35	1.0	ug/L	100		99.4	73-147	0.717	25	
Bromodichloromethane	96.19	1.0	ug/L	100		96.2	68-129	0.611	22	
cis-1,3-Dichloropropene	99.67	1.0	ug/L	100		99.7	65-134	1.13	23	
4-Methyl-2-pentanone (MIBK)	119.0	5.0	ug/L	100		119	58-147	0.528	27	
Toluene	99.16	1.0	ug/L	100		99.2	72-133	1.04	24	
trans-1,3-Dichloropropene	99.48	1.0	ug/L	100		99.5	67-130	0.571	24	
1,1,2-Trichloroethane	99.90	1.0	ug/L	100		99.9	69-135	1.47	23	
Tetrachloroethylene	99.47	1.0	ug/L	100		99.5	69-130	2.17	25	
2-Hexanone (MBK)	117.1	5.0	ug/L	99.3		118	55-144	2.27	25	
Dibromochloromethane	98.95	1.0	ug/L	100		99.0	73-127	0.403	22	
1,2-Dibromoethane	99.38	1.0	ug/L	100		99.4	67-132	0.941	24	
Chlorobenzene	99.42	1.0	ug/L	100		99.4	72-123	1.28	23	
1,1,1,2-Tetrachloroethane	95.99	1.0	ug/L	100		96.0	73-127	1.67	24	
Ethylbenzene	98.04	1.0	ug/L	100		98.0	71-127	2.29	26	
Xylenes, total	304.4	2.0	ug/L	300		101	74-127	1.11	25	
Styrene	99.51	1.0	ug/L	100		99.5	66-126	1.09	23	
Bromoform	95.01	1.0	ug/L	100		95.0	68-130	1.13	23	
1,2,3-Trichloropropane	104.3	1.0	ug/L	100		104	63-136	0.821	24	
trans-1,4-Dichloro-2-butene	92.21	5.0	ug/L	103		89.7	54-134	1.29	27	
1,1,2,2-Tetrachloroethane	140.2	1.0	ug/L	100		140	61-131	3.25	29	Q2
1,4-Dichlorobenzene	102.1	1.0	ug/L	100		102	70-129	1.29	24	
1,2-Dichlorobenzene	100.6	1.0	ug/L	100		101	69-126	1.48	26	
1,2-Dibromo-3-chloropropane	103.8	5.0	ug/L	100		104	50-143	1.11	30	
Surrogate: Dibromofluoromethane	*46.0*		ug/L	*50.2*		*91.5*	*57-134*			
Surrogate: Dibromofluoromethane	*46.0*		ug/L	*50.2*		*91.5*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*46.4*		ug/L	*50.4*		*92.1*	*53-140*			
Surrogate: 1,2-Dichloroethane-d4	*46.4*		ug/L	*50.4*		*92.1*	*61-142*			
Surrogate: Toluene-d8	*52.1*		ug/L	*50.5*		*103*	*86-114*			
Surrogate: Toluene-d8	*52.1*		ug/L	*50.5*		*103*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*50.5*		ug/L	*50.2*		*101*	*78-121*			
Surrogate: 4-Bromofluorobenzene	*50.5*		ug/L	*50.2*		*101*	*80-116*			
Matrix Spike (1HJ0299-MS1)	**Source: 1HJ0247-07**			Prepared: 10/03/24 00:00 Analyzed: 10/03/24 22:23						
Dichlorodifluoromethane	297.1	10.0	ug/L	300	ND	99.0	37-140			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ0299 - EPA 5030B - EPA 8260B										
Matrix Spike (1HJ0299-MS1)		**Source: 1HJ0247-07**	Prepared: 10/03/24 00:00 Analyzed: 10/03/24 22:23							
Chloromethane	291.4	10.0	ug/L	300	ND	97.1	61-152			
Vinyl Chloride	250.6	10.0	ug/L	300	ND	83.5	66-149			
Bromomethane	195.3	10.0	ug/L	300	ND	65.1	43-171			
Chloroethane	330.0	10.0	ug/L	300	ND	110	69-148			
Trichlorofluoromethane	310.5	10.0	ug/L	300	ND	104	62-163			
1,1-Dichloroethylene	977.4	10.0	ug/L	1000	ND	97.7	70-148			
Acetone	1088	100	ug/L	1010	ND	108	45-173			
Methyl Iodide	991.9	10.0	ug/L	1020	ND	97.4	62-167			
Carbon Disulfide	1025	10.0	ug/L	1030	ND	99.8	71-163			
Methylene Chloride	970.8	50.0	ug/L	1000	ND	97.1	69-140			
Acrylonitrile	1036	50.0	ug/L	1000	ND	103	38-147			
trans-1,2-Dichloroethylene	997.0	10.0	ug/L	1000	ND	99.7	69-144			
1,1-Dichloroethane	995.3	10.0	ug/L	1000	ND	99.5	70-138			
Vinyl Acetate	1009	50.0	ug/L	1000	ND	101	58-142			
cis-1,2-Dichloroethylene	902.6	10.0	ug/L	1000	ND	90.3	68-151			
2-Butanone (MEK)	1054	100	ug/L	1020	ND	104	50-160			
Bromochloromethane	1014	10.0	ug/L	1000	ND	101	65-143			
Chloroform	913.8	10.0	ug/L	1000	ND	91.4	71-143			
1,1,1-Trichloroethane	864.0	10.0	ug/L	1000	ND	86.4	63-133			
Carbon Tetrachloride	899.1	10.0	ug/L	1000	ND	89.9	63-142			
Benzene	1046	10.0	ug/L	1000	ND	105	69-133			
1,2-Dichloroethane	1004	10.0	ug/L	1000	ND	100	63-138			
Trichloroethylene	969.3	10.0	ug/L	1000	ND	96.9	71-133			
1,2-Dichloropropane	975.8	10.0	ug/L	1000	ND	97.6	69-132			
Dibromomethane	965.3	10.0	ug/L	1000	ND	96.5	70-147			
Bromodichloromethane	947.0	10.0	ug/L	1000	ND	94.7	67-130			
cis-1,3-Dichloropropene	976.4	10.0	ug/L	1000	ND	97.6	61-126			
4-Methyl-2-pentanone (MIBK)	1155	50.0	ug/L	1000	ND	115	55-147			
Toluene	978.4	10.0	ug/L	1000	ND	97.8	71-133			
trans-1,3-Dichloropropene	973.3	10.0	ug/L	1000	ND	97.3	63-124			
1,1,2-Trichloroethane	991.3	10.0	ug/L	1000	ND	99.1	69-133			
Tetrachloroethylene	996.6	10.0	ug/L	1000	ND	99.7	70-124			
2-Hexanone (MBK)	1140	50.0	ug/L	993	ND	115	53-141			
Dibromochloromethane	960.5	10.0	ug/L	1000	ND	96.0	74-122			
1,2-Dibromoethane	974.9	10.0	ug/L	1000	ND	97.5	66-127			
Chlorobenzene	991.4	10.0	ug/L	1000	ND	99.1	76-116			
1,1,1,2-Tetrachloroethane	945.2	10.0	ug/L	1000	ND	94.5	77-121			
Ethylbenzene	970.7	10.0	ug/L	1000	ND	97.1	73-124			
Xylenes, total	3025	20.0	ug/L	3000	ND	101	75-123			
Styrene	980.5	10.0	ug/L	1000	ND	98.0	70-120			
Bromoform	932.8	10.0	ug/L	1000	ND	93.3	70-124			
1,2,3-Trichloropropane	1017	10.0	ug/L	1000	ND	102	62-135			
trans-1,4-Dichloro-2-butene	898.6	50.0	ug/L	1030	ND	87.4	50-120			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ0299 - EPA 5030B - EPA 8260B										
Matrix Spike (1HJ0299-MS1)	**Source: 1HJ0247-07**	Prepared: 10/03/24 00:00 Analyzed: 10/03/24 22:23								
1,1,2,2-Tetrachloroethane	1307	10.0	ug/L	1000	ND	131	63-126			M1
1,4-Dichlorobenzene	977.6	10.0	ug/L	1000	ND	97.8	72-119			
1,2-Dichlorobenzene	974.3	10.0	ug/L	1000	ND	97.4	71-117			
1,2-Dibromo-3-chloropropane	1015	50.0	ug/L	1000	ND	101	49-134			
Surrogate: Dibromofluoromethane	*462*		ug/L	*502*		*92.0*	*57-134*			
Surrogate: Dibromofluoromethane	*462*		ug/L	*502*		*92.0*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*469*		ug/L	*504*		*93.1*	*53-140*			
Surrogate: 1,2-Dichloroethane-d4	*469*		ug/L	*504*		*93.1*	*61-142*			
Surrogate: Toluene-d8	*522*		ug/L	*505*		*104*	*86-114*			
Surrogate: Toluene-d8	*522*		ug/L	*505*		*104*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*508*		ug/L	*502*		*101*	*78-121*			
Surrogate: 4-Bromofluorobenzene	*508*		ug/L	*502*		*101*	*80-116*			
Matrix Spike Dup (1HJ0299-MSD1)	**Source: 1HJ0247-07**	Prepared: 10/03/24 00:00 Analyzed: 10/03/24 22:46								
Dichlorodifluoromethane	258.9	10.0	ug/L	300	ND	86.3	37-140	13.7	18	
Chloromethane	275.2	10.0	ug/L	300	ND	91.7	61-152	5.72	26	
Vinyl Chloride	236.0	10.0	ug/L	300	ND	78.7	66-149	6.00	23	
Bromomethane	184.2	10.0	ug/L	300	ND	61.4	43-171	5.85	29	
Chloroethane	315.9	10.0	ug/L	300	ND	105	69-148	4.37	25	
Trichlorofluoromethane	284.4	10.0	ug/L	300	ND	94.8	62-163	8.77	25	
1,1-Dichloroethylene	931.5	10.0	ug/L	1000	ND	93.2	70-148	4.81	22	
Acetone	1096	100	ug/L	1010	ND	108	45-173	0.714	30	
Methyl Iodide	943.2	10.0	ug/L	1020	ND	92.6	62-167	5.03	24	
Carbon Disulfide	967.0	10.0	ug/L	1030	ND	94.2	71-163	5.78	22	
Methylene Chloride	936.8	50.0	ug/L	1000	ND	93.7	69-140	3.56	19	
Acrylonitrile	1032	50.0	ug/L	1000	ND	103	38-147	0.377	30	
trans-1,2-Dichloroethylene	948.1	10.0	ug/L	1000	ND	94.8	69-144	5.03	22	
1,1-Dichloroethane	964.0	10.0	ug/L	1000	ND	96.4	70-138	3.20	20	
Vinyl Acetate	988.2	50.0	ug/L	1000	ND	98.8	58-142	2.10	24	
cis-1,2-Dichloroethylene	861.7	10.0	ug/L	1000	ND	86.2	68-151	4.64	22	
2-Butanone (MEK)	1050	100	ug/L	1020	ND	103	50-160	0.361	23	
Bromochloromethane	986.3	10.0	ug/L	1000	ND	98.6	65-143	2.79	22	
Chloroform	883.8	10.0	ug/L	1000	ND	88.4	71-143	3.34	21	
1,1,1-Trichloroethane	821.2	10.0	ug/L	1000	ND	82.1	63-133	5.08	23	
Carbon Tetrachloride	853.0	10.0	ug/L	1000	ND	85.3	63-142	5.26	22	
Benzene	1007	10.0	ug/L	1000	ND	101	69-133	3.81	18	
1,2-Dichloroethane	975.3	10.0	ug/L	1000	ND	97.5	63-138	2.88	20	
Trichloroethylene	939.1	10.0	ug/L	1000	ND	93.9	71-133	3.16	23	
1,2-Dichloropropane	950.4	10.0	ug/L	1000	ND	95.0	69-132	2.64	20	
Dibromomethane	954.9	10.0	ug/L	1000	ND	95.5	70-147	1.08	22	
Bromodichloromethane	912.0	10.0	ug/L	1000	ND	91.2	67-130	3.77	21	
cis-1,3-Dichloropropene	946.8	10.0	ug/L	1000	ND	94.7	61-126	3.08	21	
4-Methyl-2-pentanone (MIBK)	1160	50.0	ug/L	1000	ND	116	55-147	0.423	23	
Toluene	949.5	10.0	ug/L	1000	ND	95.0	71-133	3.00	19	

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ0299 - EPA 5030B - EPA 8260B										
Matrix Spike Dup (1HJ0299-MSD1)	**Source: 1HJ0247-07**	Prepared: 10/03/24 00:00 Analyzed: 10/03/24 22:46								
trans-1,3-Dichloropropene	953.3	10.0	ug/L	1000	ND	95.3	63-124	2.08	21	
1,1,2-Trichloroethane	971.0	10.0	ug/L	1000	ND	97.1	69-133	2.07	19	
Tetrachloroethylene	946.5	10.0	ug/L	1000	ND	94.6	70-124	5.16	24	
2-Hexanone (MBK)	1169	50.0	ug/L	993	ND	118	53-141	2.52	24	
Dibromochloromethane	950.6	10.0	ug/L	1000	ND	95.1	74-122	1.04	21	
1,2-Dibromoethane	954.6	10.0	ug/L	1000	ND	95.5	66-127	2.10	23	
Chlorobenzene	953.2	10.0	ug/L	1000	ND	95.3	76-116	3.93	21	
1,1,1,2-Tetrachloroethane	916.0	10.0	ug/L	1000	ND	91.6	77-121	3.14	25	
Ethylbenzene	934.5	10.0	ug/L	1000	ND	93.4	73-124	3.80	20	
Xylenes, total	2936	20.0	ug/L	3000	ND	97.9	75-123	2.99	20	
Styrene	961.5	10.0	ug/L	1000	ND	96.2	70-120	1.96	23	
Bromoform	923.6	10.0	ug/L	1000	ND	92.4	70-124	0.991	22	
1,2,3-Trichloropropane	1024	10.0	ug/L	1000	ND	102	62-135	0.686	28	
trans-1,4-Dichloro-2-butene	898.3	50.0	ug/L	1030	ND	87.4	50-120	0.0334	26	
1,1,2,2-Tetrachloroethane	1312	10.0	ug/L	1000	ND	131	63-126	0.328	24	M1
1,4-Dichlorobenzene	966.9	10.0	ug/L	1000	ND	96.7	72-119	1.10	24	
1,2-Dichlorobenzene	953.7	10.0	ug/L	1000	ND	95.4	71-117	2.14	24	
1,2-Dibromo-3-chloropropane	1026	50.0	ug/L	1000	ND	103	49-134	1.15	28	
Surrogate: Dibromofluoromethane	*458*		ug/L	*502*		*91.3*	*57-134*			
Surrogate: Dibromofluoromethane	*458*		ug/L	*502*		*91.3*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*462*		ug/L	*504*		*91.7*	*53-140*			
Surrogate: 1,2-Dichloroethane-d4	*462*		ug/L	*504*		*91.7*	*61-142*			
Surrogate: Toluene-d8	*522*		ug/L	*505*		*104*	*86-114*			
Surrogate: Toluene-d8	*522*		ug/L	*505*		*104*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*508*		ug/L	*502*		*101*	*78-121*			
Surrogate: 4-Bromofluorobenzene	*508*		ug/L	*502*		*101*	*80-116*			

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ0347 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Blank (1HJ0347-BLK1)		Prepared: 10/07/24 07:55 Analyzed: 10/07/24 20:36								
Antimony, total	<0.0020	0.0020	mg/L							
Arsenic, total	<0.0040	0.0040	mg/L							
Barium, total	<0.0040	0.0040	mg/L							
Beryllium, total	<0.0040	0.0040	mg/L							
Cadmium, total	<0.0008	0.0008	mg/L							
Chromium, total	<0.0080	0.0080	mg/L							
Cobalt, total	<0.0004	0.0004	mg/L							
Copper, total	<0.0040	0.0040	mg/L							
Lead, total	<0.0040	0.0040	mg/L							
Nickel, total	<0.0040	0.0040	mg/L							
Selenium, total	<0.0040	0.0040	mg/L							
Silver, total	<0.0040	0.0040	mg/L							

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ0347 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Blank (1HJ0347-BLK1)				Prepared: 10/07/24 07:55 Analyzed: 10/07/24 20:36						
Thallium, total	<0.0020	0.0020	mg/L							
Vanadium, total	<0.0200	0.0200	mg/L							
Zinc, total	<0.0200	0.0200	mg/L							
LCS (1HJ0347-BS1)				Prepared: 10/07/24 07:55 Analyzed: 10/07/24 20:42						
Antimony, total	0.0984	0.0020	mg/L	0.100		98.4	80-120			
Arsenic, total	0.101	0.0040	mg/L	0.100		101	80-120			
Barium, total	0.106	0.0040	mg/L	0.100		106	80-120			
Beryllium, total	0.105	0.0040	mg/L	0.100		105	80-120			
Cadmium, total	0.102	0.0008	mg/L	0.100		102	80-120			
Chromium, total	0.0965	0.0080	mg/L	0.100		96.5	80-120			
Cobalt, total	0.104	0.0004	mg/L	0.100		104	80-120			
Copper, total	0.105	0.0040	mg/L	0.100		105	80-120			
Lead, total	0.101	0.0040	mg/L	0.100		101	80-120			
Nickel, total	0.102	0.0040	mg/L	0.100		102	80-120			
Selenium, total	0.1027	0.0040	mg/L	0.100		103	80-120			
Silver, total	0.102	0.0040	mg/L	0.100		102	80-120			
Thallium, total	0.0907	0.0020	mg/L	0.100		90.7	80-120			
Vanadium, total	0.100	0.0200	mg/L	0.100		100	80-120			
Zinc, total	0.111	0.0200	mg/L	0.100		111	80-120			
Matrix Spike (1HJ0347-MS1)	**Source: 1HJ0247-01**			Prepared: 10/07/24 07:55 Analyzed: 10/07/24 20:55						
Antimony, total	0.100	0.0020	mg/L	0.100	ND	100	75-125			
Arsenic, total	0.101	0.0040	mg/L	0.100	0.0009	101	75-125			
Barium, total	0.216	0.0040	mg/L	0.100	0.109	107	75-125			
Beryllium, total	0.103	0.0040	mg/L	0.100	ND	103	75-125			
Cadmium, total	0.101	0.0008	mg/L	0.100	0.0002	101	75-125			
Chromium, total	0.0953	0.0080	mg/L	0.100	ND	95.3	75-125			
Cobalt, total	0.101	0.0004	mg/L	0.100	ND	101	75-125			
Copper, total	0.0976	0.0040	mg/L	0.100	ND	97.6	75-125			
Lead, total	0.0968	0.0040	mg/L	0.100	ND	96.8	75-125			
Nickel, total	0.0983	0.0040	mg/L	0.100	ND	98.3	75-125			
Selenium, total	0.1016	0.0040	mg/L	0.100	ND	102	75-125			
Silver, total	0.102	0.0040	mg/L	0.100	ND	102	75-125			
Thallium, total	0.0819	0.0020	mg/L	0.100	0.0002	81.7	75-125			
Vanadium, total	0.101	0.0200	mg/L	0.100	ND	101	75-125			
Zinc, total	0.104	0.0200	mg/L	0.100	ND	104	75-125			
Matrix Spike Dup (1HJ0347-MSD1)	**Source: 1HJ0247-01**			Prepared: 10/07/24 07:55 Analyzed: 10/07/24 21:13						
Antimony, total	0.103	0.0020	mg/L	0.100	ND	103	75-125	2.51	20	
Arsenic, total	0.103	0.0040	mg/L	0.100	0.0009	102	75-125	1.11	20	
Barium, total	0.223	0.0040	mg/L	0.100	0.109	114	75-125	3.19	20	
Beryllium, total	0.100	0.0040	mg/L	0.100	ND	100	75-125	2.51	20	
Cadmium, total	0.102	0.0008	mg/L	0.100	0.0002	102	75-125	0.670	20	
Chromium, total	0.0976	0.0080	mg/L	0.100	ND	97.6	75-125	2.42	20	
Cobalt, total	0.103	0.0004	mg/L	0.100	ND	103	75-125	1.94	20	

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ0347 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Matrix Spike Dup (1HJ0347-MSD1)	**Source: 1HJ0247-01**		Prepared: 10/07/24 07:55 Analyzed: 10/07/24 21:13							
Copper, total	0.100	0.0040	mg/L	0.100	ND	100	75-125	2.81	20	
Lead, total	0.0989	0.0040	mg/L	0.100	ND	98.9	75-125	2.09	20	
Nickel, total	0.101	0.0040	mg/L	0.100	ND	101	75-125	3.13	20	
Selenium, total	0.1007	0.0040	mg/L	0.100	ND	101	75-125	0.927	20	
Silver, total	0.103	0.0040	mg/L	0.100	ND	103	75-125	1.39	20	
Thallium, total	0.0824	0.0020	mg/L	0.100	0.0002	82.2	75-125	0.590	20	
Vanadium, total	0.104	0.0200	mg/L	0.100	ND	104	75-125	2.67	20	
Zinc, total	0.106	0.0200	mg/L	0.100	ND	106	75-125	2.05	20	
Post Spike (1HJ0347-PS1)	**Source: 1HJ0247-01**		Prepared: 10/07/24 07:55 Analyzed: 10/07/24 21:19							
Antimony, total	0.0786		mg/L	0.0800	0.0001	98.0	80-120			
Arsenic, total	0.0800		mg/L	0.0800	0.0009	98.9	80-120			
Barium, total	0.189		mg/L	0.0800	0.107	102	80-120			
Beryllium, total	0.0782		mg/L	0.0800	0.00	97.7	80-120			
Cadmium, total	0.0775		mg/L	0.0800	0.0002	96.7	80-120			
Chromium, total	0.0733		mg/L	0.0800	0.0005	91.0	80-120			
Cobalt, total	0.0811		mg/L	0.0800	0.00005	101	80-120			
Copper, total	0.0773		mg/L	0.0800	0.0009	95.5	80-120			
Lead, total	0.0767		mg/L	0.0800	0.00002	95.8	80-120			
Nickel, total	0.0792		mg/L	0.0800	0.0007	98.2	80-120			
Selenium, total	0.0813		mg/L	0.0800	0.0007	101	80-120			
Silver, total	0.0803		mg/L	0.0800	-0.00006	100	80-120			
Thallium, total	0.0642		mg/L	0.0800	0.0002	79.9	80-120			Q
Vanadium, total	0.0799		mg/L	0.0800	0.0034	95.6	80-120			
Zinc, total	0.0796		mg/L	0.0800	0.0022	96.7	80-120			
Batch 1HJ1786 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Blank (1HJ1786-BLK1)			Prepared: 10/30/24 11:22 Analyzed: 10/30/24 22:38							
Antimony, total	<0.0020	0.0020	mg/L							
Arsenic, total	<0.0040	0.0040	mg/L							
Barium, total	<0.0040	0.0040	mg/L							
Beryllium, total	<0.0040	0.0040	mg/L							
Cadmium, total	<0.0008	0.0008	mg/L							
Chromium, total	<0.0080	0.0080	mg/L							
Cobalt, total	<0.0004	0.0004	mg/L							
Copper, total	<0.0040	0.0040	mg/L							
Lead, total	<0.0040	0.0040	mg/L							
Nickel, total	<0.0040	0.0040	mg/L							
Selenium, total	<0.0040	0.0040	mg/L							
Silver, total	<0.0040	0.0040	mg/L							
Thallium, total	<0.0020	0.0020	mg/L							
Vanadium, total	<0.0200	0.0200	mg/L							
Zinc, total	<0.0200	0.0200	mg/L							
LCS (1HJ1786-BS1)			Prepared: 10/30/24 11:22 Analyzed: 10/30/24 22:44							

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1786 - EPA 3005A Total Recoverable Metals - EPA 6020A										
LCS (1HJ1786-BS1)				Prepared: 10/30/24 11:22 Analyzed: 10/30/24 22:44						
Antimony, total	0.0970	0.0020	mg/L	0.100		97.0	80-120			
Arsenic, total	0.0991	0.0040	mg/L	0.100		99.1	80-120			
Barium, total	0.105	0.0040	mg/L	0.100		105	80-120			
Beryllium, total	0.103	0.0040	mg/L	0.100		103	80-120			
Cadmium, total	0.0982	0.0008	mg/L	0.100		98.2	80-120			
Chromium, total	0.0985	0.0080	mg/L	0.100		98.5	80-120			
Cobalt, total	0.100	0.0004	mg/L	0.100		100	80-120			
Copper, total	0.0993	0.0040	mg/L	0.100		99.3	80-120			
Lead, total	0.0957	0.0040	mg/L	0.100		95.7	80-120			
Nickel, total	0.0977	0.0040	mg/L	0.100		97.7	80-120			
Selenium, total	0.0990	0.0040	mg/L	0.100		99.0	80-120			
Silver, total	0.102	0.0040	mg/L	0.100		102	80-120			
Thallium, total	0.0950	0.0020	mg/L	0.100		95.0	80-120			
Vanadium, total	0.0996	0.0200	mg/L	0.100		99.6	80-120			
Zinc, total	0.100	0.0200	mg/L	0.100		100	80-120			
Matrix Spike (1HJ1786-MS1)	**Source: 1HJ2157-01**			Prepared: 10/30/24 11:22 Analyzed: 10/30/24 23:09						
Antimony, total	0.209	0.0020	mg/L	0.100	0.104	106	75-125			
Arsenic, total	0.0615	0.0040	mg/L	0.100	0.0589	2.60	75-125			M
Barium, total	0.330	0.0040	mg/L	0.100	0.167	163	75-125			M
Beryllium, total	0.174	0.0040	mg/L	0.100	0.0850	88.6	75-125			
Cadmium, total	0.170	0.0008	mg/L	0.100	0.0875	82.3	75-125			
Chromium, total	5.59	0.0080	mg/L	0.100	2.91	NR	75-125			M
Cobalt, total	0.0898	0.0004	mg/L	0.100	0.0870	2.77	75-125			M
Copper, total	0.287	0.0040	mg/L	0.100	0.281	6.42	75-125			M
Lead, total	0.503	0.0040	mg/L	0.100	0.256	247	75-125			M
Nickel, total	1.63	0.0040	mg/L	0.100	1.57	57.7	75-125			M
Selenium, total	0.0049	0.0040	mg/L	0.100	0.0043	0.624	75-125			M
Silver, total	0.178	0.0040	mg/L	0.100	0.0899	87.6	75-125			
Thallium, total	0.181	0.0020	mg/L	0.100	0.0914	89.8	75-125			
Vanadium, total	1.21	0.0200	mg/L	0.100	0.622	585	75-125			M
Zinc, total	6.29	0.0200	mg/L	0.100	6.14	146	75-125			M
Matrix Spike Dup (1HJ1786-MSD1)	**Source: 1HJ2157-01**			Prepared: 10/30/24 11:22 Analyzed: 10/30/24 23:15						
Antimony, total	0.0863	0.0020	mg/L	0.100	0.104	NR	75-125	83.2	20	M
Arsenic, total	0.0574	0.0040	mg/L	0.100	0.0589	NR	75-125	6.87	20	M
Barium, total	0.135	0.0040	mg/L	0.100	0.167	NR	75-125	84.0	20	M
Beryllium, total	0.0688	0.0040	mg/L	0.100	0.0850	NR	75-125	86.4	20	M
Cadmium, total	0.0714	0.0008	mg/L	0.100	0.0875	NR	75-125	81.7	20	M
Chromium, total	2.90	0.0080	mg/L	0.100	2.91	NR	75-125	63.3	20	M
Cobalt, total	0.0858	0.0004	mg/L	0.100	0.0870	NR	75-125	4.57	20	M
Copper, total	0.276	0.0040	mg/L	0.100	0.281	NR	75-125	4.08	20	M
Lead, total	0.237	0.0040	mg/L	0.100	0.256	NR	75-125	71.8	20	M
Nickel, total	1.57	0.0040	mg/L	0.100	1.57	NR	75-125	3.60	20	M
Selenium, total	<0.0040	0.0040	mg/L	0.100	0.0043	NR	75-125	46.1	20	M

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1786 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Matrix Spike Dup (1HJ1786-MSD1)	**Source: 1HJ2157-01**	Prepared: 10/30/24 11:22 Analyzed: 10/30/24 23:15								
Silver, total	0.0727	0.0040	mg/L	0.100	0.0899	NR	75-125	83.8	20	M
Thallium, total	0.0770	0.0020	mg/L	0.100	0.0914	NR	75-125	80.7	20	M
Vanadium, total	0.605	0.0200	mg/L	0.100	0.622	NR	75-125	66.4	20	M
Zinc, total	6.09	0.0200	mg/L	0.100	6.14	NR	75-125	3.19	20	M
Post Spike (1HJ1786-PS1)	**Source: 1HJ2157-01**	Prepared: 10/30/24 11:22 Analyzed: 10/30/24 23:33								
Antimony, total	0.0002		mg/L	0.0800	0.102	NR	80-120			M
Arsenic, total	0.0010		mg/L	0.0800	0.0577	NR	80-120			M
Barium, total	0.0259		mg/L	0.0800	0.164	NR	80-120			M
Beryllium, total	0.000008		mg/L	0.0800	0.0833	NR	80-120			M
Cadmium, total	0.00009		mg/L	0.0800	0.0858	NR	80-120			M
Chromium, total	0.0006		mg/L	0.0800	2.85	NR	80-120			M
Cobalt, total	0.0001		mg/L	0.0800	0.0853	NR	80-120			M
Copper, total	0.0042		mg/L	0.0800	0.275	NR	80-120			M
Lead, total	-0.000004		mg/L	0.0800	0.250	NR	80-120			M
Nickel, total	0.0038		mg/L	0.0800	1.54	NR	80-120			M
Selenium, total	0.0008		mg/L	0.0800	0.0042	NR	80-120			M
Silver, total	0.0001		mg/L	0.0800	0.0881	NR	80-120			M
Thallium, total	0.0002		mg/L	0.0800	0.0895	NR	80-120			M
Vanadium, total	0.0014		mg/L	0.0800	0.610	NR	80-120			M
Zinc, total	0.0058		mg/L	0.0800	6.02	NR	80-120			M

Definitions

M:	Matrix interference is present.
M1:	Matrix spike recovery is above acceptance limits.
Q:	One or more quality control criteria failed.
Q2:	LCS recovery is above acceptance limits.
RL:	Reporting Limit
RPD:	Relative Percent Difference

Cooler Receipt Log

Cooler ID: Default Cooler Temp: 0.0°C

Cooler Inspection Checklist

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

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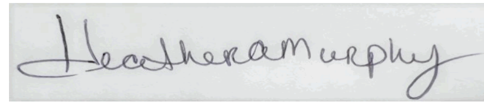
CERTIFICATE OF ANALYSIS

1HJ0247

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
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11/01/24 14:37

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1HJ0247
HLW Engineering
PM: Heather Murphy

Printed: 8/9/2024 3:00:30P
www.keystonelabs.com

SITE INFORMATION

Sampler: TODD WHIPPLE

Project: Boone Landfill-New Regs
6007

REPO

Todd Whipple
HLW Engineering
PO Box 314
Story City, IA 50248

E TO

John Roosa
Boone County Sanitary Landfill
1268 224th Lane
Boone, IA 50036

SPECIAL INSTRUCTIONS

None

Turn Around Time
☐ Standard ☐ RUSH, need by __/__/__

LAB USE ONLY

Work Order 1HJ0247
Temperature 0.0
Turn-Cooler: No

☐ Custody Seal
☑ Containers Intact
☑ COC/Labels Agree
☐ Preservation Confirmed
☒ Received on Ice

Number	Sample Identification / Client ID	Matrix	Sample Type	Date	Time	Number of Containers	Analyses		Lab Sample Number
-001	MW91-8	Aqueous	GRAB	9/30/24	13:21	7	lndfill-app1-voc-group	lndfil-app1-metals-6020	01
-001	MW02-15A	Aqueous	GRAB	9/30/24	12:48	7	lndfill-app1-voc-group	lndfil-app1-metals-6020	02
-001	MW98-28	Aqueous	GRAB	9/30/24	7:31	7	lndfill-app1-voc-group	lndfil-app1-metals-6020	03
-001	MW02-30A	Aqueous	GRAB	9/30/24	12:33	7	lndfill-app1-voc-group	lndfil-app1-metals-6020	04
-001	MW88-2	Aqueous	GRAB	9/30/24	11:34	7	lndfill-app1-voc-group	lndfil-app1-metals-6020	05
-001	MW94-18	Aqueous	GRAB	9/30/24	8:54	7	lndfill-app1-voc-group	lndfil-app1-metals-6020	06
-001	MW09-40	Aqueous	GRAB	9/30/24	9:10	7	lndfill-app1-voc-group	lndfil-app1-metals-6020	07

Relinquished By: Todd Whipple Date/Time: 10/1/24

Relinquished By Date/Time

Received By Date/Time

Received for Lab By: Larry Wood Date/Time: 10-2-24 1030

Remarks:

Original - Lab Copy Yellow - Sampler Copy

CHAIN OF CUSTODY RECORD

MICROBAC®
600 East 17th Street Sou
Newton, IA 50208
641-792-8451

1 H J 0 2 4 7
HLW Engineering
PM: Heather Murphy

www.keystonelabs.com

SITE INFORMATION
Sampler: TODD WHIPPLE
Project: Boone Landfill-New Regs
6007

REPORT TO
Todd Whipple
HLW Engineering
PO Box 314
Story City, IA 50248

John Roosa
Boone County Sanitary Landfill
1268 224th Lane
Boone, IA 50036

SPECIAL INSTRUCTIONS
None

Turn Around Time
☐ Standard ☐ RUSH, need by __/__/__

LAB USE ONLY
Work Order 1HJ0247
Temperature 0.0
Turn-Cooler: No

☐ Custody Seal
☒ Containers Intact
☒ COC/Labels Agree
☐ Preservation Confirmed
☒ Received on Ice

Number	Sample Identification / Client ID	Matrix	Sample Type	Date	Time	Number of Containers	Analyses		Lab Sample Number
-001	MW91-10	Aqueous	GRAB	9/30/24	9:24	7	lndfill-app1-voc-group	lndfll-app1-metals-6020	08
-001	MW96-21	Aqueous	GRAB	9/30/24	9:53	7	lndfll-app2-inorg-6020	lndfll-app2-org	09
-001	MW96-24	Aqueous	GRAB	9/30/24	10:10	7	lndfill-app1-voc-group	lndfll-app1-metals-6020	10
-001	MW88-3	Aqueous	GRAB	9/30/24	11:23	7	lndfill-app1-voc-group	lndfll-app1-metals-6020	11
-001	MW96-23	Aqueous	GRAB	9/30/24	10:36	7	lndfill-app1-voc-group	lndfll-app1-metals-6020	12
-001	MW21-43	Aqueous	GRAB	9/30/24	12:09	7	lndfill-app1-voc-group	lndfll-app1-metals-6020	13
-001	GWD-1 DRY	Aqueous	GRAB	9/30/24	—	0	lndfill-app1-voc-group	lndfll-app1-metals-6020	~~14~~ EE dup

Relinquished By: Todd Whipple Date/Time: 10/1/24
Relinquished By Date/Time
Received By Date/Time
Received for Lab By: Larry Word Date/Time: 10-1-24 1030

Remarks:

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CHAIN OF CUSTODY RECORD

MICROBAC®
600 East 17th Street Sout
Newton, IA 50208
641-792-8451

1HJ0247
HLW Engineering
PM: Heather Murphy

Printed: 8/9/2024 3:00:30P
www.keystonelabs.com

SITE INFORMATION

Sampler: TODD WHIPPLE

Project: Boone Landfill-New Regs
6007

REPORT TO

Todd Whipple
HLW Engineering
PO Box 314
Story City, IA 50248

INVOICE TO

John Roosa
Boone County Sanitary Landfill
1268 224th Lane
Boone, IA 50036

SPECIAL INSTRUCTIONS

None

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

LAB USE ONLY

Work Order 1HJ0247
Temperature 0.0
Turn-Cooler: No

☐ Custody Seal
☒ Containers Intact
☒ COC/Labels Agree
☐ Preservation Confirmed
☒ Received on Ice

Number	Sample Identification / Client ID	Matrix	Sample Type	Date	Time	Number of Containers	Analyses	Lab Sample Number
-001	GU-3	Aqueous	GRAB	9/30/24	10:51	7	lndfill-app1-voc-group lndfill-app1-metals-6020	14
-001	PEC-3	Aqueous	GRAB	9/30/24	10:57	6	lndfill-app1-voc-group	15
-001	GU-4 Buried	Aqueous	GRAB	9/30/24	—	0	lndfill-app1-voc-group lndfill-app1-metals-6020	—
-001	SRAMP #1 DRY	Aqueous	GRAB	—/—/—	—	0	8260@dichlorodifluoromethane lndfill-app1-voc-group lndfill-app1-metals-6020	—
-001	SRAMP #2 DRY	Aqueous	GRAB	—/—/—	—	0	8260@dichlorodifluoromethane lndfill-app1-voc-group	—
-001	MW98-25	Aqueous	GRAB	9/30/24	8:21	7	8260@dichlorodifluoromethane lndfill-app1-voc-group lndfill-app1-metals-6020	16

Relinquished By: Todd Whipple Date/Time: 10/1/24

Relinquished By ______ Date/Time ______

Received By ______ Date/Time ______

Received for Lab By: Larry Wood Date/Time: 10-2-24 1030

Remarks:

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CHAIN OF CUSTODY RECORD

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600 East 17th Street Sout[h]
Newton, IA 50208
641-792-8451

1HJ0247
HLW Engineering
PM: Heather Murphy

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SITE INFORMATION

Sampler: TODD WHIPPLE

Project: Boone Landfill-New Regs
6007

REPORT TO

Todd Whipple
HLW Engineering
PO Box 314
Story City, IA 50248

John Roosa
Boone County Sanitary Landfill
1268 224th Lane
Boone, IA 50036

SPECIAL INSTRUCTIONS

None

Turn Around Time
☐ Standard ☐ RUSH, need by __/__/__

LAB USE ONLY

Work Order 1HJ0247
Temperature 0.0
Turn-Cooler: No

☐ Custody Seal
☑ Containers Intact
☑ COC/Labels Agree
☐ Preservation Confirmed
☒ Received on Ice

Number	Sample Identification / Client ID	Matrix	Sample Type	Date	Time	Number of Containers	Analyses		Lab Sample Number
-001	MW06-37	Aqueous	GRAB	9/30/24	14:14	7	lndfill-app1-voc-group	lndfil-app1-metals-6020	17
-001	MW06-38	Aqueous	GRAB	9/30/24	14:02	7	lndfill-app1-voc-group	lndfil-app1-metals-6020	18
-001	MW06-39	Aqueous	GRAB	9/30/24	13:51	7	lndfill-app1-voc-group	lndfil-app1-metals-6020	19
-001	Field Duplicate	Aqueous	GRAB	9/30/24	✓	1	~~lndfill-app1-voc-group~~	lndfil-app1-metals-6020	20

Relinquished By: [signature] Date/Time: 10/1/24

Received By Date/Time

Relinquished By Date/Time

Received for Lab By: [signature] Date/Time: 10-1-24 1030

Remarks:

Original - Lab Copy Yellow - Sampler Copy

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HK2018

Project Description

6007

For:

Todd Whipple

HLW Engineering

204 West Broad St

Story City, IA 50248

Heather Murphy

Customer Relationship Specialist

Monday, December 9, 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., Newton

CERTIFICATE OF ANALYSIS

1HK2018

HLW Engineering

Todd Whipple
204 West Broad St
Story City, IA 50248

Project Name: 6007

Project / PO Number: N/A
Received: 11/27/2024
Reported: 12/09/2024

Sample Summary Report

Sample Name	Laboratory ID	Client Matrix	Sample Type	Sample Begin	Sample Taken	Lab Received
MW88-3	1HK2018-01	Aqueous	GRAB		11/25/24 14:00	11/27/24 09:48
GU-4	1HK2018-02	Aqueous	GRAB		11/25/24 14:31	11/27/24 09:48

Analytical Testing Parameters

Client Sample ID:	MW88-3		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HK2018-01	**Collection Date:**	11/25/2024 14:00

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 200.8, Rv. 5.4 (1994)								
Cadmium, total	<0.0002	0.0002	mg/L	4		12/02/24 0833	12/03/24 0721	RVV

Client Sample ID:	GU-4		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HK2018-02	**Collection Date:**	11/25/2024 14:31

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260D								
Chloromethane	<1.0	1.0	ug/L	1		12/02/24 0000	12/02/24 1923	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		12/02/24 0000	12/02/24 1923	CSM
Bromomethane	<1.0	1.0	ug/L	1		12/02/24 0000	12/02/24 1923	CSM
Chloroethane	<1.0	1.0	ug/L	1		12/02/24 0000	12/02/24 1923	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		12/02/24 0000	12/02/24 1923	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		12/02/24 0000	12/02/24 1923	CSM
Acetone	<10.0	10.0	ug/L	1		12/02/24 0000	12/02/24 1923	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		12/02/24 0000	12/02/24 1923	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		12/02/24 0000	12/02/24 1923	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		12/02/24 0000	12/02/24 1923	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		12/02/24 0000	12/02/24 1923	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		12/02/24 0000	12/02/24 1923	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		12/02/24 0000	12/02/24 1923	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		12/02/24 0000	12/02/24 1923	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		12/02/24 0000	12/02/24 1923	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		12/02/24 0000	12/02/24 1923	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		12/02/24 0000	12/02/24 1923	CSM
Chloroform	<1.0	1.0	ug/L	1		12/02/24 0000	12/02/24 1923	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		12/02/24 0000	12/02/24 1923	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		12/02/24 0000	12/02/24 1923	CSM
Benzene	<1.0	1.0	ug/L	1		12/02/24 0000	12/02/24 1923	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		12/02/24 0000	12/02/24 1923	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		12/02/24 0000	12/02/24 1923	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		12/02/24 0000	12/02/24 1923	CSM
Dibromomethane	<1.0	1.0	ug/L	1		12/02/24 0000	12/02/24 1923	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		12/02/24 0000	12/02/24 1923	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		12/02/24 0000	12/02/24 1923	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		12/02/24 0000	12/02/24 1923	CSM
Toluene	<1.0	1.0	ug/L	1		12/02/24 0000	12/02/24 1923	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		12/02/24 0000	12/02/24 1923	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		12/02/24 0000	12/02/24 1923	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		12/02/24 0000	12/02/24 1923	CSM

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Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HK2018

Client Sample ID:	GU-4		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HK2018-02	**Collection Date:**	11/25/2024 14:31

Determination of Volatile Organic Compounds	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		12/02/24 0000	12/02/24 1923	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		12/02/24 0000	12/02/24 1923	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		12/02/24 0000	12/02/24 1923	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		12/02/24 0000	12/02/24 1923	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		12/02/24 0000	12/02/24 1923	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		12/02/24 0000	12/02/24 1923	CSM
Xylenes, total	<2.0	2.0	ug/L	1		12/02/24 0000	12/02/24 1923	CSM
Styrene	<1.0	1.0	ug/L	1		12/02/24 0000	12/02/24 1923	CSM
Bromoform	<1.0	1.0	ug/L	1		12/02/24 0000	12/02/24 1923	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		12/02/24 0000	12/02/24 1923	CSM
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		12/02/24 0000	12/02/24 1923	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		12/02/24 0000	12/02/24 1923	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		12/02/24 0000	12/02/24 1923	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		12/02/24 0000	12/02/24 1923	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		12/02/24 0000	12/02/24 1923	CSM
Surrogate: Dibromofluoromethane	109	Limit: 57-134	% Rec	1		12/02/24 0000	12/02/24 1923	CSM
Surrogate: Dibromofluoromethane	109	Limit: 75-136	% Rec	1		12/02/24 0000	12/02/24 1923	CSM
Surrogate: 1,2-Dichloroethane-d4	114	Limit: 61-142	% Rec	1		12/02/24 0000	12/02/24 1923	CSM
Surrogate: 1,2-Dichloroethane-d4	114	Limit: 53-140	% Rec	1		12/02/24 0000	12/02/24 1923	CSM
Surrogate: Toluene-d8	92.9	Limit: 86-114	% Rec	1		12/02/24 0000	12/02/24 1923	CSM
Surrogate: Toluene-d8	92.9	Limit: 82-121	% Rec	1		12/02/24 0000	12/02/24 1923	CSM
Surrogate: 4-Bromofluorobenzene	95.3	Limit: 78-121	% Rec	1		12/02/24 0000	12/02/24 1923	CSM
Surrogate: 4-Bromofluorobenzene	95.3	Limit: 80-116	% Rec	1		12/02/24 0000	12/02/24 1923	CSM

Determination of Total Metals	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		12/02/24 1505	12/04/24 2201	RVV
Arsenic, total	**0.0051**	0.0040	mg/L	4		12/02/24 1505	12/04/24 2201	RVV
Barium, total	**0.415**	0.0040	mg/L	4		12/02/24 1505	12/04/24 2201	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		12/02/24 1505	12/04/24 2201	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		12/02/24 1505	12/04/24 2201	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		12/02/24 1505	12/04/24 2201	RVV
Cobalt, total	**0.0006**	0.0004	mg/L	4		12/02/24 1505	12/04/24 2201	RVV
Copper, total	<0.0040	0.0040	mg/L	4		12/02/24 1505	12/04/24 2201	RVV
Lead, total	<0.0040	0.0040	mg/L	4		12/02/24 1505	12/04/24 2201	RVV
Nickel, total	**0.0072**	0.0040	mg/L	4		12/02/24 1505	12/04/24 2201	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		12/02/24 1505	12/04/24 2201	RVV
Silver, total	<0.0040	0.0040	mg/L	4		12/02/24 1505	12/04/24 2201	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		12/02/24 1505	12/04/24 2201	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		12/02/24 1505	12/04/24 2201	RVV
Zinc, total	**0.262**	0.0200	mg/L	4		12/02/24 1505	12/04/24 2201	RVV

Batch Log Summary

Method	Batch	Laboratory ID	Client / Source ID
EPA 200.8, Rv. 5.4 (1994)	1HL0010	1HL0010-BLK1	
		1HL0010-BS1	
		1HL0010-MS1	1HK1973-02
		1HL0010-MSD1	1HK1973-02
		1HL0010-PS1	1HK1973-02
		1HK2018-01	MW88-3

Method	Batch	Laboratory ID	Client / Source ID
EPA 6020A	1HL0065	1HL0065-BLK1	
		1HL0065-BS1	
		1HK2018-02	GU-4
		1HL0065-MS1	1HK2018-02
		1HL0065-MSD1	1HK2018-02
		1HL0065-PS1	1HK2018-02

Method	Batch	Laboratory ID	Client / Source ID
EPA 8260D	1HL0133	1HL0133-BS1	
		1HL0133-BSD1	
		1HL0133-BLK1	
		1HK2018-02	GU-4
		1HL0133-MS1	1HL0001-01
		1HL0133-MS1	1HL0001-01
		1HL0133-MS1	1HL0001-01
		1HL0133-MSD1	1HL0001-01

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 1HL0133 - EPA 5030B - EPA 8260D										
Blank (1HL0133-BLK1)				Prepared: 12/02/24 00:00 Analyzed: 12/02/24 15:29						
Chloromethane	<1.0	1.0	ug/L							
Vinyl Chloride	<1.0	1.0	ug/L							
Bromomethane	<1.0	1.0	ug/L							
Chloroethane	<1.0	1.0	ug/L							
Trichlorofluoromethane	<1.0	1.0	ug/L							
1,1-Dichloroethylene	<1.0	1.0	ug/L							
Acetone	<10.0	10.0	ug/L							
Methyl Iodide	<1.0	1.0	ug/L							
Carbon Disulfide	<1.0	1.0	ug/L							
Methylene Chloride	<5.0	5.0	ug/L							
Acrylonitrile	<5.0	5.0	ug/L							

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HL0133 - EPA 5030B - EPA 8260D										
Blank (1HL0133-BLK1)				Prepared: 12/02/24 00:00 Analyzed: 12/02/24 15:29						
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L							
1,1-Dichloroethane	<1.0	1.0	ug/L							
Vinyl Acetate	<5.0	5.0	ug/L							
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L							
2-Butanone (MEK)	<10.0	10.0	ug/L							
Bromochloromethane	<1.0	1.0	ug/L							
Chloroform	<1.0	1.0	ug/L							
1,1,1-Trichloroethane	<1.0	1.0	ug/L							
Carbon Tetrachloride	<1.0	1.0	ug/L							
Benzene	<1.0	1.0	ug/L							
1,2-Dichloroethane	<1.0	1.0	ug/L							
Trichloroethylene	<1.0	1.0	ug/L							
1,2-Dichloropropane	<1.0	1.0	ug/L							
Dibromomethane	<1.0	1.0	ug/L							
Bromodichloromethane	<1.0	1.0	ug/L							
cis-1,3-Dichloropropene	<1.0	1.0	ug/L							
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L							
Toluene	<1.0	1.0	ug/L							
trans-1,3-Dichloropropene	<1.0	1.0	ug/L							
1,1,2-Trichloroethane	<1.0	1.0	ug/L							
Tetrachloroethylene	<1.0	1.0	ug/L							
2-Hexanone (MBK)	<5.0	5.0	ug/L							
Dibromochloromethane	<1.0	1.0	ug/L							
1,2-Dibromoethane	<1.0	1.0	ug/L							
Chlorobenzene	<1.0	1.0	ug/L							
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L							
Ethylbenzene	<1.0	1.0	ug/L							
Xylenes, total	<2.0	2.0	ug/L							
Styrene	<1.0	1.0	ug/L							
Bromoform	<1.0	1.0	ug/L							
1,2,3-Trichloropropane	<1.0	1.0	ug/L							
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L							
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L							
1,4-Dichlorobenzene	<1.0	1.0	ug/L							
1,2-Dichlorobenzene	<1.0	1.0	ug/L							
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L							
Surrogate: Dibromofluoromethane	*48.4*		ug/L	*50.2*		*96.4*	*57-134*			
Surrogate: Dibromofluoromethane	*48.4*		ug/L	*50.2*		*96.4*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*52.3*		ug/L	*50.4*		*104*	*53-140*			
Surrogate: 1,2-Dichloroethane-d4	*52.3*		ug/L	*50.4*		*104*	*61-142*			
Surrogate: Toluene-d8	*47.0*		ug/L	*50.5*		*93.1*	*86-114*			
Surrogate: Toluene-d8	*47.0*		ug/L	*50.5*		*93.1*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*48.4*		ug/L	*50.2*		*96.5*	*78-121*			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HL0133 - EPA 5030B - EPA 8260D										
Blank (1HL0133-BLK1)			Prepared: 12/02/24 00:00 Analyzed: 12/02/24 15:29							
Surrogate: 4-Bromofluorobenzene	*48.4*		ug/L	*50.2*		*96.5*	*80-116*			
LCS (1HL0133-BS1)			Prepared: 12/02/24 00:00 Analyzed: 12/02/24 14:45							
Chloromethane	57.31	1.0	ug/L	50.5		113	63-155			
Vinyl Chloride	57.97	1.0	ug/L	50.4		115	70-154			
Bromomethane	60.19	1.0	ug/L	50.2		120	52-176			
Chloroethane	49.44	1.0	ug/L	50.5		97.8	72-148			
Trichlorofluoromethane	45.23	1.0	ug/L	50.5		89.5	70-152			
1,1-Dichloroethylene	30.05	1.0	ug/L	30.1		99.9	70-148			
Acetone	89.90	10.0	ug/L	100		89.9	43-172			
Methyl Iodide	92.46	1.0	ug/L	100		92.5	69-170			
Carbon Disulfide	92.78	1.0	ug/L	100		92.8	72-162			
Methylene Chloride	30.28	5.0	ug/L	30.1		101	68-142			
Acrylonitrile	41.04	5.0	ug/L	50.2		81.8	56-135			
trans-1,2-Dichloroethylene	31.50	1.0	ug/L	30.1		105	66-148			
1,1-Dichloroethane	31.42	1.0	ug/L	30.1		105	66-143			
Vinyl Acetate	148.9	5.0	ug/L	156		95.6	43-153			
cis-1,2-Dichloroethylene	30.87	1.0	ug/L	30.2		102	71-149			
2-Butanone (MEK)	81.76	10.0	ug/L	100		81.8	52-159			
Bromochloromethane	30.55	1.0	ug/L	30.2		101	69-143			
Chloroform	30.31	1.0	ug/L	30.0		101	69-144			
1,1,1-Trichloroethane	30.06	1.0	ug/L	30.1		100	62-129			
Carbon Tetrachloride	30.06	1.0	ug/L	30.1		100	63-141			
Benzene	31.96	1.0	ug/L	30.3		106	71-134			
1,2-Dichloroethane	31.23	1.0	ug/L	30.1		104	72-132			
Trichloroethylene	30.10	1.0	ug/L	30.1		100	71-135			
1,2-Dichloropropane	30.70	1.0	ug/L	30.1		102	69-136			
Dibromomethane	28.62	1.0	ug/L	30.2		94.7	73-147			
Bromodichloromethane	29.72	1.0	ug/L	30.1		98.9	68-129			
cis-1,3-Dichloropropene	29.33	1.0	ug/L	30.1		97.6	65-134			
4-Methyl-2-pentanone (MIBK)	87.40	5.0	ug/L	100		87.4	58-147			
Toluene	30.36	1.0	ug/L	30.3		100	72-133			
trans-1,3-Dichloropropene	28.52	1.0	ug/L	30.0		94.9	67-130			
1,1,2-Trichloroethane	28.83	1.0	ug/L	30.1		95.9	69-135			
Tetrachloroethylene	33.65	1.0	ug/L	30.1		112	69-130			
2-Hexanone (MBK)	90.72	5.0	ug/L	100		90.7	55-144			
Dibromochloromethane	32.09	1.0	ug/L	30.0		107	73-127			
1,2-Dibromoethane	31.62	1.0	ug/L	30.1		105	67-132			
Chlorobenzene	33.04	1.0	ug/L	30.0		110	72-123			
1,1,1,2-Tetrachloroethane	33.67	1.0	ug/L	30.2		111	73-127			
Ethylbenzene	34.37	1.0	ug/L	30.1		114	71-127			
Xylenes, total	99.80	2.0	ug/L	90.6		110	74-127			
Styrene	34.09	1.0	ug/L	30.2		113	66-126			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HL0133 - EPA 5030B - EPA 8260D										
LCS (1HL0133-BS1)			Prepared: 12/02/24 00:00 Analyzed: 12/02/24 14:45							
Bromoform	30.59	1.0	ug/L	30.1		102	68-130			
1,2,3-Trichloropropane	29.91	1.0	ug/L	30.2		99.0	63-136			
trans-1,4-Dichloro-2-butene	93.41	5.0	ug/L	100		93.4	54-134			
1,1,2,2-Tetrachloroethane	32.27	1.0	ug/L	30.1		107	61-131			
1,4-Dichlorobenzene	33.66	1.0	ug/L	30.1		112	70-129			
1,2-Dichlorobenzene	33.17	1.0	ug/L	30.1		110	69-126			
1,2-Dibromo-3-chloropropane	25.30	5.0	ug/L	30.1		84.1	50-143			
Surrogate: Dibromofluoromethane	*48.7*		ug/L	*50.2*		*97.0*	*57-134*			
Surrogate: Dibromofluoromethane	*48.7*		ug/L	*50.2*		*97.0*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*50.2*		ug/L	*50.4*		*99.8*	*53-140*			
Surrogate: 1,2-Dichloroethane-d4	*50.2*		ug/L	*50.4*		*99.8*	*61-142*			
Surrogate: Toluene-d8	*48.5*		ug/L	*50.5*		*96.2*	*86-114*			
Surrogate: Toluene-d8	*48.5*		ug/L	*50.5*		*96.2*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*48.4*		ug/L	*50.2*		*96.4*	*78-121*			
Surrogate: 4-Bromofluorobenzene	*48.4*		ug/L	*50.2*		*96.4*	*80-116*			
LCS Dup (1HL0133-BSD1)			Prepared: 12/02/24 00:00 Analyzed: 12/02/24 15:07							
Chloromethane	51.45	1.0	ug/L	50.5		102	63-155	10.8	24	
Vinyl Chloride	51.96	1.0	ug/L	50.4		103	70-154	10.9	25	
Bromomethane	54.13	1.0	ug/L	50.2		108	52-176	10.6	27	
Chloroethane	45.56	1.0	ug/L	50.5		90.2	72-148	8.17	25	
Trichlorofluoromethane	41.60	1.0	ug/L	50.5		82.4	70-152	8.36	26	
1,1-Dichloroethylene	28.16	1.0	ug/L	30.1		93.6	70-148	6.49	24	
Acetone	101.8	10.0	ug/L	100		102	43-172	12.4	30	
Methyl Iodide	86.78	1.0	ug/L	100		86.8	69-170	6.34	30	
Carbon Disulfide	86.82	1.0	ug/L	100		86.8	72-162	6.64	24	
Methylene Chloride	29.13	5.0	ug/L	30.1		96.9	68-142	3.87	21	
Acrylonitrile	46.29	5.0	ug/L	50.2		92.2	56-135	12.0	16	
trans-1,2-Dichloroethylene	30.45	1.0	ug/L	30.1		101	66-148	3.39	27	
1,1-Dichloroethane	30.67	1.0	ug/L	30.1		102	66-143	2.42	24	
Vinyl Acetate	159.2	5.0	ug/L	156		102	43-153	6.70	30	
cis-1,2-Dichloroethylene	30.99	1.0	ug/L	30.2		103	71-149	0.388	26	
2-Butanone (MEK)	99.10	10.0	ug/L	100		99.1	52-159	19.2	27	
Bromochloromethane	31.26	1.0	ug/L	30.2		103	69-143	2.30	23	
Chloroform	30.64	1.0	ug/L	30.0		102	69-144	1.08	23	
1,1,1-Trichloroethane	29.99	1.0	ug/L	30.1		99.7	62-129	0.233	24	
Carbon Tetrachloride	30.07	1.0	ug/L	30.1		100	63-141	0.0333	25	
Benzene	31.72	1.0	ug/L	30.3		105	71-134	0.754	24	
1,2-Dichloroethane	32.28	1.0	ug/L	30.1		107	72-132	3.31	24	
Trichloroethylene	30.25	1.0	ug/L	30.1		101	71-135	0.497	24	
1,2-Dichloropropane	31.32	1.0	ug/L	30.1		104	69-136	2.00	24	
Dibromomethane	30.50	1.0	ug/L	30.2		101	73-147	6.36	25	
Bromodichloromethane	30.38	1.0	ug/L	30.1		101	68-129	2.20	22	
cis-1,3-Dichloropropene	30.13	1.0	ug/L	30.1		100	65-134	2.69	23	

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HL0133 - EPA 5030B - EPA 8260D										
LCS Dup (1HL0133-BSD1)			Prepared: 12/02/24 00:00 Analyzed: 12/02/24 15:07							
4-Methyl-2-pentanone (MIBK)	107.8	5.0	ug/L	100		108	58-147	20.9	27	
Toluene	30.71	1.0	ug/L	30.3		101	72-133	1.15	24	
trans-1,3-Dichloropropene	29.85	1.0	ug/L	30.0		99.4	67-130	4.56	24	
1,1,2-Trichloroethane	30.90	1.0	ug/L	30.1		103	69-135	6.93	23	
Tetrachloroethylene	33.64	1.0	ug/L	30.1		112	69-130	0.0297	25	
2-Hexanone (MBK)	116.5	5.0	ug/L	100		116	55-144	24.9	25	
Dibromochloromethane	33.35	1.0	ug/L	30.0		111	73-127	3.85	22	
1,2-Dibromoethane	34.13	1.0	ug/L	30.1		113	67-132	7.63	24	
Chlorobenzene	33.70	1.0	ug/L	30.0		112	72-123	1.98	23	
1,1,1,2-Tetrachloroethane	34.45	1.0	ug/L	30.2		114	73-127	2.29	24	
Ethylbenzene	34.91	1.0	ug/L	30.1		116	71-127	1.56	26	
Xylenes, total	102.0	2.0	ug/L	90.6		112	74-127	2.15	25	
Styrene	35.40	1.0	ug/L	30.2		117	66-126	3.77	23	
Bromoform	33.87	1.0	ug/L	30.1		113	68-130	10.2	23	
1,2,3-Trichloropropane	34.67	1.0	ug/L	30.2		115	63-136	14.7	24	
trans-1,4-Dichloro-2-butene	108.2	5.0	ug/L	100		108	54-134	14.7	27	
1,1,2,2-Tetrachloroethane	36.66	1.0	ug/L	30.1		122	61-131	12.7	29	
1,4-Dichlorobenzene	34.87	1.0	ug/L	30.1		116	70-129	3.53	24	
1,2-Dichlorobenzene	34.13	1.0	ug/L	30.1		114	69-126	2.85	26	
1,2-Dibromo-3-chloropropane	31.78	5.0	ug/L	30.1		106	50-143	22.7	30	
Surrogate: Dibromofluoromethane	*48.5*		ug/L	*50.2*		*96.6*	*57-134*			
Surrogate: Dibromofluoromethane	*48.5*		ug/L	*50.2*		*96.6*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*51.2*		ug/L	*50.4*		*102*	*53-140*			
Surrogate: 1,2-Dichloroethane-d4	*51.2*		ug/L	*50.4*		*102*	*61-142*			
Surrogate: Toluene-d8	*48.7*		ug/L	*50.5*		*96.5*	*86-114*			
Surrogate: Toluene-d8	*48.7*		ug/L	*50.5*		*96.5*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*48.6*		ug/L	*50.2*		*96.8*	*78-121*			
Surrogate: 4-Bromofluorobenzene	*48.6*		ug/L	*50.2*		*96.8*	*80-116*			
Matrix Spike (1HL0133-MS1)	**Source: 1HL0001-01**		Prepared: 12/02/24 00:00 Analyzed: 12/03/24 04:00							
Chloromethane	636.4	10.0	ug/L	505	ND	126	61-152			
Vinyl Chloride	647.5	10.0	ug/L	504	ND	128	66-149			
Bromomethane	633.5	10.0	ug/L	502	ND	126	43-171			
Chloroethane	571.2	10.0	ug/L	505	ND	113	69-148			
Trichlorofluoromethane	527.6	10.0	ug/L	505	ND	104	62-163			
1,1-Dichloroethylene	359.0	10.0	ug/L	301	ND	119	70-148			
Acetone	1305	100	ug/L	1000	ND	131	45-173			
Methyl Iodide	1025	10.0	ug/L	1000	ND	102	62-167			
Carbon Disulfide	1089	10.0	ug/L	1000	ND	109	71-163			
Methylene Chloride	355.8	50.0	ug/L	301	ND	118	69-140			
Acrylonitrile	219.1	20.0	ug/L	502	ND	43.6	38-147			
trans-1,2-Dichloroethylene	381.7	10.0	ug/L	301	ND	127	69-144			
1,1-Dichloroethane	387.0	10.0	ug/L	301	ND	129	70-138			
Vinyl Acetate	1758	50.0	ug/L	1560	ND	113	58-142			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HL0133 - EPA 5030B - EPA 8260D										
Matrix Spike (1HL0133-MS1)	**Source: 1HL0001-01**	Prepared: 12/02/24 00:00 Analyzed: 12/03/24 04:00								
cis-1,2-Dichloroethylene	373.9	10.0	ug/L	302	ND	124	68-151			
2-Butanone (MEK)	1265	100	ug/L	1000	ND	126	50-160			
Bromochloromethane	396.6	10.0	ug/L	302	ND	131	65-143			
Chloroform	378.2	10.0	ug/L	300	ND	126	71-143			
1,1,1-Trichloroethane	381.6	10.0	ug/L	301	ND	127	63-133			
Carbon Tetrachloride	378.9	10.0	ug/L	301	ND	126	63-142			
Benzene	353.5	10.0	ug/L	303	ND	117	69-133			
1,2-Dichloroethane	359.1	10.0	ug/L	301	ND	119	63-138			
Trichloroethylene	337.8	10.0	ug/L	301	ND	112	71-133			
1,2-Dichloropropane	346.6	10.0	ug/L	301	ND	115	69-132			
Dibromomethane	336.9	10.0	ug/L	302	ND	111	70-147			
Bromodichloromethane	334.3	10.0	ug/L	301	ND	111	67-130			
cis-1,3-Dichloropropene	318.5	10.0	ug/L	301	ND	106	61-126			
4-Methyl-2-pentanone (MIBK)	1179	50.0	ug/L	1000	ND	118	55-147			
Toluene	341.3	10.0	ug/L	303	ND	113	71-133			
trans-1,3-Dichloropropene	314.5	10.0	ug/L	300	ND	105	63-124			
1,1,2-Trichloroethane	337.1	10.0	ug/L	301	ND	112	69-133			
Tetrachloroethylene	354.7	10.0	ug/L	301	ND	118	70-124			
2-Hexanone (MBK)	1213	50.0	ug/L	1000	ND	121	53-141			
Dibromochloromethane	355.0	10.0	ug/L	300	ND	118	74-122			
1,2-Dibromoethane	358.8	10.0	ug/L	301	ND	119	66-127			
Chlorobenzene	356.7	10.0	ug/L	300	ND	119	76-116			M1
1,1,1,2-Tetrachloroethane	362.3	10.0	ug/L	302	ND	120	77-121			
Ethylbenzene	374.5	10.0	ug/L	301	ND	124	73-124			
Xylenes, total	1091	20.0	ug/L	906	ND	120	75-123			
Styrene	373.6	10.0	ug/L	302	ND	124	70-120			M1
Bromoform	353.5	10.0	ug/L	301	ND	118	70-124			
1,2,3-Trichloropropane	373.8	10.0	ug/L	302	ND	124	62-135			
trans-1,4-Dichloro-2-butene	1093	50.0	ug/L	1000	ND	109	50-120			
1,1,2,2-Tetrachloroethane	389.5	10.0	ug/L	301	ND	130	63-126			M1
1,4-Dichlorobenzene	363.8	10.0	ug/L	301	ND	121	72-119			M1
1,2-Dichlorobenzene	357.9	10.0	ug/L	301	ND	119	71-117			M1
1,2-Dibromo-3-chloropropane	328.8	50.0	ug/L	301	ND	109	49-134			
Surrogate: Dibromofluoromethane	*575*		ug/L	*502*		*115*	*57-134*			
Surrogate: Dibromofluoromethane	*575*		ug/L	*502*		*115*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*607*		ug/L	*504*		*120*	*53-140*			
Surrogate: 1,2-Dichloroethane-d4	*607*		ug/L	*504*		*120*	*61-142*			
Surrogate: Toluene-d8	*501*		ug/L	*505*		*99.3*	*86-114*			
Surrogate: Toluene-d8	*501*		ug/L	*505*		*99.3*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*495*		ug/L	*502*		*98.6*	*78-121*			
Surrogate: 4-Bromofluorobenzene	*495*		ug/L	*502*		*98.6*	*80-116*			
Matrix Spike Dup (1HL0133-MSD1)	**Source: 1HL0001-01**	Prepared: 12/02/24 00:00 Analyzed: 12/03/24 10:22								
Chloromethane	666.3	10.0	ug/L	505	ND	132	61-152	4.59	26	

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HL0133 - EPA 5030B - EPA 8260D										
Matrix Spike Dup (1HL0133-MSD1)	**Source: 1HL0001-01**	Prepared: 12/02/24 00:00 Analyzed: 12/03/24 10:22								
Vinyl Chloride	506.6	10.0	ug/L	504	ND	100	66-149	24.4	23	R1
Bromomethane	550.0	10.0	ug/L	502	ND	110	43-171	14.1	29	
Chloroethane	569.4	10.0	ug/L	505	ND	113	69-148	0.316	25	
Trichlorofluoromethane	526.6	10.0	ug/L	505	ND	104	62-163	0.190	25	
1,1-Dichloroethylene	355.6	10.0	ug/L	301	ND	118	70-148	0.952	22	
Acetone	1284	100	ug/L	1000	ND	128	45-173	1.61	30	
Methyl Iodide	682.4	10.0	ug/L	1000	ND	68.2	62-167	40.1	24	R1
Carbon Disulfide	1072	10.0	ug/L	1000	ND	107	71-163	1.58	22	
Methylene Chloride	358.3	50.0	ug/L	301	ND	119	69-140	0.700	19	
Acrylonitrile	551.4	50.0	ug/L	502	ND	110	38-147	86.2	30	R1
trans-1,2-Dichloroethylene	375.1	10.0	ug/L	301	ND	125	69-144	1.74	22	
1,1-Dichloroethane	380.2	10.0	ug/L	301	ND	126	70-138	1.77	20	
Vinyl Acetate	1688	50.0	ug/L	1560	ND	108	58-142	4.06	24	
cis-1,2-Dichloroethylene	357.0	10.0	ug/L	302	ND	118	68-151	4.62	22	
2-Butanone (MEK)	1190	100	ug/L	1000	ND	119	50-160	6.07	23	
Bromochloromethane	380.9	10.0	ug/L	302	ND	126	65-143	4.04	22	
Chloroform	363.5	10.0	ug/L	300	ND	121	71-143	3.96	21	
1,1,1-Trichloroethane	352.1	10.0	ug/L	301	ND	117	63-133	8.04	23	
Carbon Tetrachloride	352.7	10.0	ug/L	301	ND	117	63-142	7.16	22	
Benzene	346.5	10.0	ug/L	303	ND	115	69-133	2.00	18	
1,2-Dichloroethane	353.9	10.0	ug/L	301	ND	118	63-138	1.46	20	
Trichloroethylene	324.6	10.0	ug/L	301	ND	108	71-133	3.99	23	
1,2-Dichloropropane	335.0	10.0	ug/L	301	ND	111	69-132	3.40	20	
Dibromomethane	330.4	10.0	ug/L	302	ND	109	70-147	1.95	22	
Bromodichloromethane	328.0	10.0	ug/L	301	ND	109	67-130	1.90	21	
cis-1,3-Dichloropropene	309.4	10.0	ug/L	301	ND	103	61-126	2.90	21	
4-Methyl-2-pentanone (MIBK)	1238	50.0	ug/L	1000	ND	124	55-147	4.86	23	
Toluene	336.9	10.0	ug/L	303	ND	111	71-133	1.30	19	
trans-1,3-Dichloropropene	304.7	10.0	ug/L	300	ND	101	63-124	3.17	21	
1,1,2-Trichloroethane	328.0	10.0	ug/L	301	ND	109	69-133	2.74	19	
Tetrachloroethylene	334.0	10.0	ug/L	301	ND	111	70-124	6.01	24	
2-Hexanone (MBK)	1281	50.0	ug/L	1000	ND	128	53-141	5.43	24	
Dibromochloromethane	341.1	10.0	ug/L	300	ND	114	74-122	3.99	21	
1,2-Dibromoethane	346.5	10.0	ug/L	301	ND	115	66-127	3.49	23	
Chlorobenzene	344.6	10.0	ug/L	300	ND	115	76-116	3.45	21	
1,1,1,2-Tetrachloroethane	345.9	10.0	ug/L	302	ND	115	77-121	4.63	25	
Ethylbenzene	362.4	10.0	ug/L	301	ND	120	73-124	3.28	20	
Xylenes, total	1033	20.0	ug/L	906	ND	114	75-123	5.45	20	
Styrene	355.3	10.0	ug/L	302	ND	118	70-120	5.02	23	
Bromoform	342.7	10.0	ug/L	301	ND	114	70-124	3.10	22	
1,2,3-Trichloropropane	363.2	10.0	ug/L	302	ND	120	62-135	2.88	28	
trans-1,4-Dichloro-2-butene	1045	50.0	ug/L	1000	ND	104	50-120	4.49	26	
1,1,2,2-Tetrachloroethane	392.6	10.0	ug/L	301	ND	131	63-126	0.793	24	M1

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HL0133 - EPA 5030B - EPA 8260D										
Matrix Spike Dup (1HL0133-MSD1)	**Source: 1HL0001-01**		Prepared: 12/02/24 00:00 Analyzed: 12/03/24 10:22							
1,4-Dichlorobenzene	351.7	10.0	ug/L	301	ND	117	72-119	3.38	24	
1,2-Dichlorobenzene	351.1	10.0	ug/L	301	ND	117	71-117	1.92	24	
1,2-Dibromo-3-chloropropane	327.8	50.0	ug/L	301	ND	109	49-134	0.305	28	
Surrogate: Dibromofluoromethane	*557*		ug/L	*502*		*111*	*57-134*			
Surrogate: Dibromofluoromethane	*557*		ug/L	*502*		*111*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*575*		ug/L	*504*		*114*	*53-140*			
Surrogate: 1,2-Dichloroethane-d4	*575*		ug/L	*504*		*114*	*61-142*			
Surrogate: Toluene-d8	*511*		ug/L	*505*		*101*	*86-114*			
Surrogate: Toluene-d8	*511*		ug/L	*505*		*101*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*483*		ug/L	*502*		*96.2*	*78-121*			
Surrogate: 4-Bromofluorobenzene	*483*		ug/L	*502*		*96.2*	*80-116*			

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HL0010 - EPA 200.2 Total ICP-MS - EPA 200.8, Rv. 5.4 (1994)										
Blank (1HL0010-BLK1)			Prepared: 12/02/24 08:33 Analyzed: 12/03/24 04:17							
Cadmium, total	<0.0002	0.0002	mg/L							
LCS (1HL0010-BS1)			Prepared: 12/02/24 08:33 Analyzed: 12/03/24 04:35							
Cadmium, total	0.0954	0.0002	mg/L	0.100		95.4	85-115			
Matrix Spike (1HL0010-MS1)	**Source: 1HK1973-02**		Prepared: 12/02/24 08:33 Analyzed: 12/03/24 06:32							
Cadmium, total	0.0917	0.0002	mg/L	0.100	ND	91.7	70-130			
Matrix Spike Dup (1HL0010-MSD1)	**Source: 1HK1973-02**		Prepared: 12/02/24 08:33 Analyzed: 12/03/24 06:38							
Cadmium, total	0.0945	0.0002	mg/L	0.100	ND	94.5	70-130	3.01	20	
Post Spike (1HL0010-PS1)	**Source: 1HK1973-02**		Prepared: 12/02/24 08:33 Analyzed: 12/03/24 06:44							
Cadmium, total	0.0716		mg/L	0.0800	-0.00001	89.5	70-130			
Batch 1HL0065 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Blank (1HL0065-BLK1)			Prepared: 12/02/24 15:05 Analyzed: 12/04/24 21:42							
Antimony, total	<0.0020	0.0020	mg/L							
Arsenic, total	<0.0040	0.0040	mg/L							
Barium, total	<0.0040	0.0040	mg/L							
Beryllium, total	<0.0040	0.0040	mg/L							
Cadmium, total	<0.0008	0.0008	mg/L							
Chromium, total	<0.0080	0.0080	mg/L							
Cobalt, total	<0.0004	0.0004	mg/L							
Copper, total	<0.0040	0.0040	mg/L							
Lead, total	<0.0040	0.0040	mg/L							
Nickel, total	<0.0040	0.0040	mg/L							
Selenium, total	<0.0040	0.0040	mg/L							
Silver, total	<0.0040	0.0040	mg/L							
Thallium, total	<0.0020	0.0020	mg/L							

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HL0065 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Blank (1HL0065-BLK1)			Prepared: 12/02/24 15:05 Analyzed: 12/04/24 21:42							
Vanadium, total	<0.0200	0.0200	mg/L							
Zinc, total	<0.0200	0.0200	mg/L							
LCS (1HL0065-BS1)			Prepared: 12/02/24 15:05 Analyzed: 12/04/24 21:49							
Antimony, total	0.100	0.0020	mg/L	0.100		100	80-120			
Arsenic, total	0.0997	0.0040	mg/L	0.100		99.7	80-120			
Barium, total	0.112	0.0040	mg/L	0.100		112	80-120			
Beryllium, total	0.105	0.0040	mg/L	0.100		105	80-120			
Cadmium, total	0.0961	0.0008	mg/L	0.100		96.1	80-120			
Chromium, total	0.0936	0.0080	mg/L	0.100		93.6	80-120			
Cobalt, total	0.103	0.0004	mg/L	0.100		103	80-120			
Copper, total	0.0971	0.0040	mg/L	0.100		97.1	80-120			
Lead, total	0.0961	0.0040	mg/L	0.100		96.1	80-120			
Nickel, total	0.0985	0.0040	mg/L	0.100		98.5	80-120			
Selenium, total	0.1022	0.0040	mg/L	0.100		102	80-120			
Silver, total	0.101	0.0040	mg/L	0.100		101	80-120			
Thallium, total	0.0970	0.0020	mg/L	0.100		97.0	80-120			
Vanadium, total	0.100	0.0200	mg/L	0.100		100	80-120			
Zinc, total	0.101	0.0200	mg/L	0.100		101	80-120			
Matrix Spike (1HL0065-MS1)	**Source: 1HK2018-02**		Prepared: 12/02/24 15:05 Analyzed: 12/04/24 22:19							
Antimony, total	0.0999	0.0020	mg/L	0.100	ND	99.9	75-125			
Arsenic, total	0.101	0.0040	mg/L	0.100	0.0051	95.4	75-125			
Barium, total	0.517	0.0040	mg/L	0.100	0.415	102	75-125			
Beryllium, total	0.102	0.0040	mg/L	0.100	0.0001	102	75-125			
Cadmium, total	0.0934	0.0008	mg/L	0.100	ND	93.4	75-125			
Chromium, total	0.0907	0.0080	mg/L	0.100	0.0011	89.6	75-125			
Cobalt, total	0.0980	0.0004	mg/L	0.100	0.0006	97.4	75-125			
Copper, total	0.0874	0.0040	mg/L	0.100	0.0010	86.4	75-125			
Lead, total	0.0934	0.0040	mg/L	0.100	ND	93.4	75-125			
Nickel, total	0.100	0.0040	mg/L	0.100	0.0072	93.0	75-125			
Selenium, total	0.0981	0.0040	mg/L	0.100	ND	98.1	75-125			
Silver, total	0.0969	0.0040	mg/L	0.100	ND	96.9	75-125			
Thallium, total	0.0955	0.0020	mg/L	0.100	ND	95.5	75-125			
Vanadium, total	0.0953	0.0200	mg/L	0.100	ND	95.3	75-125			
Zinc, total	0.350	0.0200	mg/L	0.100	0.262	88.1	75-125			
Matrix Spike Dup (1HL0065-MSD1)	**Source: 1HK2018-02**		Prepared: 12/02/24 15:05 Analyzed: 12/04/24 22:25							
Antimony, total	0.100	0.0020	mg/L	0.100	ND	100	75-125	0.0980	20	
Arsenic, total	0.104	0.0040	mg/L	0.100	0.0051	98.5	75-125	3.00	20	
Barium, total	0.522	0.0040	mg/L	0.100	0.415	107	75-125	1.12	20	
Beryllium, total	0.100	0.0040	mg/L	0.100	0.0001	100	75-125	1.27	20	
Cadmium, total	0.0944	0.0008	mg/L	0.100	ND	94.4	75-125	1.05	20	
Chromium, total	0.0908	0.0080	mg/L	0.100	0.0011	89.6	75-125	0.0714	20	
Cobalt, total	0.0985	0.0004	mg/L	0.100	0.0006	97.9	75-125	0.510	20	
Copper, total	0.0893	0.0040	mg/L	0.100	0.0010	88.3	75-125	2.11	20	

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HL0065 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Matrix Spike Dup (1HL0065-MSD1)	**Source: 1HK2018-02**	Prepared: 12/02/24 15:05 Analyzed: 12/04/24 22:25								
Lead, total	0.0937	0.0040	mg/L	0.100	ND	93.7	75-125	0.307	20	
Nickel, total	0.103	0.0040	mg/L	0.100	0.0072	96.1	75-125	3.00	20	
Selenium, total	0.0993	0.0040	mg/L	0.100	ND	99.3	75-125	1.21	20	
Silver, total	0.0997	0.0040	mg/L	0.100	ND	99.7	75-125	2.85	20	
Thallium, total	0.0954	0.0020	mg/L	0.100	ND	95.4	75-125	0.100	20	
Vanadium, total	0.0968	0.0200	mg/L	0.100	ND	96.8	75-125	1.56	20	
Zinc, total	0.358	0.0200	mg/L	0.100	0.262	96.3	75-125	2.32	20	
Post Spike (1HL0065-PS1)	**Source: 1HK2018-02**	Prepared: 12/02/24 15:05 Analyzed: 12/04/24 22:31								
Antimony, total	0.0795		mg/L	0.0800	0.0002	99.1	80-120			
Arsenic, total	0.0825		mg/L	0.0800	0.0050	96.8	80-120			
Barium, total	0.500		mg/L	0.0800	0.407	117	80-120			
Beryllium, total	0.0809		mg/L	0.0800	0.0001	101	80-120			
Cadmium, total	0.0733		mg/L	0.0800	0.00007	91.5	80-120			
Chromium, total	0.0722		mg/L	0.0800	0.0011	88.8	80-120			
Cobalt, total	0.0797		mg/L	0.0800	0.0006	98.9	80-120			
Copper, total	0.0726		mg/L	0.0800	0.0010	89.5	80-120			
Lead, total	0.0750		mg/L	0.0800	0.0003	93.4	80-120			
Nickel, total	0.0820		mg/L	0.0800	0.0071	93.7	80-120			
Selenium, total	0.0792		mg/L	0.0800	0.0014	97.2	80-120			
Silver, total	0.0790		mg/L	0.0800	0.00009	98.6	80-120			
Thallium, total	0.0758		mg/L	0.0800	0.0001	94.6	80-120			
Vanadium, total	0.0798		mg/L	0.0800	0.0054	92.9	80-120			
Zinc, total	0.333		mg/L	0.0800	0.256	95.1	80-120			

Definitions

M1:	Matrix spike recovery is above acceptance limits.
R1:	Duplicate RPD is outside acceptance criteria.
RL:	Reporting Limit
RPD:	Relative Percent Difference

Cooler Receipt Log

Cooler ID: Default Cooler   Temp: 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

Heather Murphy
Customer Relationship Specialist
heather.murphy@microbac.com
12/09/24 16:55

CHAIN OF CUSTODY RECORD

Keystone LABORATORIES, INC.

☐ 600 E. Newton
Phone:
Fax:

☐ 35 S St Paul
Kansas City, KS 66105
Phone: 913-321-7856
Fax: 913-831-6778

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

1HK2018
HLW Engineering
PM: Heather Murphy

PAGE 1 OF 1

PRINT OR TYPE INFORMATION BELOW		REPORT TO:		BILL TO:	
SAMPLER:	TODD WHIPPLE	NAME:	TODD WHIPPLE	NAME:	John Roosa, Administ.
SITE NAME:	Boone SLF	COMPANY NAME:	HLW Engineering Group	COMPANY NAME:	Boone Co SLF
ADDRESS:		ADDRESS:	P.O. Box 314	ADDRESS:	1268 224th Lane
CITY/ST/ZIP:	Boone IA	CITY/ST/ZIP:	STORY City IA 50248	CITY/ST/ZIP:	Boone IA 50036
PHONE:		PHONE:	515 733 4144	PHONE:	
		FAX:	4146	Keystone Quote No: (If Applicable)	

LAB USE ONLY
LABORATORY WORK ORDER NO. 1HK2018
SAMPLE TEMPERATURE UPON RECEIPT: 0.6° °C

CLIENT SAMPLE NUMBER	DATE	TIME	SAMPLE LOCATION	NO. OF CONTAINERS	MATRIX	GRAB/COMPOSITE	Appendix I metals	Appendix I VOC	Cadmium, Total						SAMPLE CONDITION/COMMENTS	LABORATORY SAMPLE NUMBER
MW88-3	11/25/24	14:00	MW88-3	1	W	G			X							01
GU-4	11/25/24	14:31	GU-4	7	W	G	X	X								02

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Date / Time	Turn-Around:
Todd Whipple	Date 11-27-24 Time		Date Time	☐ Standard ☐ Rush ____ Contact Lab Prior to Submission
Relinquished by: (Signature)	Date Time	Received for Lab by: (Signature)	Date 11-27-24 Time 9:48	Remarks:

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HL0900

Project Description

6007

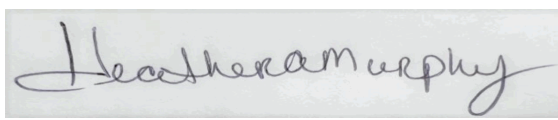
For:

Todd Whipple

HLW Engineering

204 West Broad St

Story City, IA 50248



Heather Murphy

Customer Relationship Specialist

Friday, December 20, 2024

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

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

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HL0900

HLW Engineering

Todd Whipple
204 West Broad St
Story City, IA 50248

Project Name: 6007

Project / PO Number: N/A
Received: 12/11/2024
Reported: 12/20/2024

Sample Summary Report

Sample Name	Laboratory ID	Client Matrix	Sample Type	Sample Begin	Sample Taken	Lab Received
GU-3	1HL0900-01	Aqueous	GRAB		12/08/24 14:05	12/11/24 09:50
PEC-3	1HL0900-02	Aqueous	GRAB		12/08/24 14:10	12/11/24 09:50

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HL0900

Analytical Testing Parameters

Client Sample ID:	GU-3			
Sample Matrix:	Aqueous		**Collected By:**	JGH
Lab Sample ID:	1HL0900-01		**Collection Date:**	12/08/2024 14:05

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260D								
Chloromethane	<1.0	1.0	ug/L	1		12/13/24 0000	12/13/24 1416	CSM
Vinyl Chloride	**1.8**	1.0	ug/L	1		12/13/24 0000	12/13/24 1416	CSM
Bromomethane	<1.0	1.0	ug/L	1		12/13/24 0000	12/13/24 1416	CSM
Chloroethane	**1.1**	1.0	ug/L	1		12/13/24 0000	12/13/24 1416	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		12/13/24 0000	12/13/24 1416	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		12/13/24 0000	12/13/24 1416	CSM
Acetone	<10.0	10.0	ug/L	1		12/13/24 0000	12/13/24 1416	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		12/13/24 0000	12/13/24 1416	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		12/13/24 0000	12/13/24 1416	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		12/13/24 0000	12/13/24 1416	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		12/13/24 0000	12/13/24 1416	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		12/13/24 0000	12/13/24 1416	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		12/13/24 0000	12/13/24 1416	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		12/13/24 0000	12/13/24 1416	CSM
cis-1,2-Dichloroethylene	**6.0**	1.0	ug/L	1		12/13/24 0000	12/13/24 1416	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		12/13/24 0000	12/13/24 1416	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		12/13/24 0000	12/13/24 1416	CSM
Chloroform	<1.0	1.0	ug/L	1		12/13/24 0000	12/13/24 1416	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		12/13/24 0000	12/13/24 1416	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		12/13/24 0000	12/13/24 1416	CSM
Benzene	**7.8**	1.0	ug/L	1		12/13/24 0000	12/13/24 1416	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		12/13/24 0000	12/13/24 1416	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		12/13/24 0000	12/13/24 1416	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		12/13/24 0000	12/13/24 1416	CSM
Dibromomethane	<1.0	1.0	ug/L	1		12/13/24 0000	12/13/24 1416	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		12/13/24 0000	12/13/24 1416	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		12/13/24 0000	12/13/24 1416	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		12/13/24 0000	12/13/24 1416	CSM
Toluene	<1.0	1.0	ug/L	1		12/13/24 0000	12/13/24 1416	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		12/13/24 0000	12/13/24 1416	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		12/13/24 0000	12/13/24 1416	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		12/13/24 0000	12/13/24 1416	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		12/13/24 0000	12/13/24 1416	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		12/13/24 0000	12/13/24 1416	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		12/13/24 0000	12/13/24 1416	CSM
Chlorobenzene	**1.8**	1.0	ug/L	1		12/13/24 0000	12/13/24 1416	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		12/13/24 0000	12/13/24 1416	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		12/13/24 0000	12/13/24 1416	CSM
Xylenes, total	<2.0	2.0	ug/L	1		12/13/24 0000	12/13/24 1416	CSM
Styrene	<1.0	1.0	ug/L	1		12/13/24 0000	12/13/24 1416	CSM

CERTIFICATE OF ANALYSIS

1HL0900

Client Sample ID:	GU-3		
Sample Matrix:	Aqueous	**Collected By:**	JGH
Lab Sample ID:	1HL0900-01	**Collection Date:**	12/08/2024 14:05

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Bromoform	<1.0	1.0	ug/L	1		12/13/24 0000	12/13/24 1416	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		12/13/24 0000	12/13/24 1416	CSM
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		12/13/24 0000	12/13/24 1416	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		12/13/24 0000	12/13/24 1416	CSM
1,4-Dichlorobenzene	**1.2**	1.0	ug/L	1		12/13/24 0000	12/13/24 1416	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		12/13/24 0000	12/13/24 1416	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		12/13/24 0000	12/13/24 1416	CSM
Surrogate: Dibromofluoromethane	102	Limit: 57-134	% Rec	1		12/13/24 0000	12/13/24 1416	CSM
Surrogate: Dibromofluoromethane	102	Limit: 75-136	% Rec	1		12/13/24 0000	12/13/24 1416	CSM
Surrogate: 1,2-Dichloroethane-d4	111	Limit: 61-142	% Rec	1		12/13/24 0000	12/13/24 1416	CSM
Surrogate: 1,2-Dichloroethane-d4	111	Limit: 53-140	% Rec	1		12/13/24 0000	12/13/24 1416	CSM
Surrogate: Toluene-d8	92.8	Limit: 86-114	% Rec	1		12/13/24 0000	12/13/24 1416	CSM
Surrogate: Toluene-d8	92.8	Limit: 82-121	% Rec	1		12/13/24 0000	12/13/24 1416	CSM
Surrogate: 4-Bromofluorobenzene	96.2	Limit: 78-121	% Rec	1		12/13/24 0000	12/13/24 1416	CSM
Surrogate: 4-Bromofluorobenzene	96.2	Limit: 80-116	% Rec	1		12/13/24 0000	12/13/24 1416	CSM

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		12/16/24 1534	12/18/24 1843	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		12/16/24 1534	12/18/24 1843	RVV
Barium, total	**0.683**	0.0040	mg/L	4		12/16/24 1534	12/18/24 1843	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		12/16/24 1534	12/18/24 1843	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		12/16/24 1534	12/18/24 1843	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		12/16/24 1534	12/18/24 1843	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		12/16/24 1534	12/18/24 1843	RVV
Copper, total	<0.0040	0.0040	mg/L	4		12/16/24 1534	12/18/24 1843	RVV
Lead, total	<0.0040	0.0040	mg/L	4		12/16/24 1534	12/18/24 1843	RVV
Nickel, total	**0.0235**	0.0040	mg/L	4		12/16/24 1534	12/18/24 1843	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		12/16/24 1534	12/18/24 1843	RVV
Silver, total	<0.0040	0.0040	mg/L	4		12/16/24 1534	12/18/24 1843	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		12/16/24 1534	12/18/24 1843	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		12/16/24 1534	12/18/24 1843	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		12/16/24 1534	12/18/24 1843	RVV

Client Sample ID:	PEC-3			
Sample Matrix:	Aqueous		**Collected By:**	JGH
Lab Sample ID:	1HL0900-02		**Collection Date:**	12/08/2024 14:10

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260D								
Chloromethane	<2.0	2.0	ug/L	2		12/13/24 0000	12/13/24 1502	CSM
Vinyl Chloride	<2.0	2.0	ug/L	2		12/13/24 0000	12/13/24 1502	CSM
Bromomethane	<2.0	2.0	ug/L	2		12/13/24 0000	12/13/24 1502	CSM
Chloroethane	<2.0	2.0	ug/L	2		12/13/24 0000	12/13/24 1502	CSM
Trichlorofluoromethane	<2.0	2.0	ug/L	2		12/13/24 0000	12/13/24 1502	CSM
1,1-Dichloroethylene	<2.0	2.0	ug/L	2		12/13/24 0000	12/13/24 1502	CSM
Acetone	**508**	20.0	ug/L	2		12/13/24 0000	12/13/24 1502	CSM
Methyl Iodide	<2.0	2.0	ug/L	2		12/13/24 0000	12/13/24 1502	CSM
Carbon Disulfide	<2.0	2.0	ug/L	2		12/13/24 0000	12/13/24 1502	CSM
Methylene Chloride	<10.0	10.0	ug/L	2		12/13/24 0000	12/13/24 1502	CSM
Acrylonitrile	<10.0	10.0	ug/L	2		12/13/24 0000	12/13/24 1502	CSM
trans-1,2-Dichloroethylene	<2.0	2.0	ug/L	2		12/13/24 0000	12/13/24 1502	CSM
1,1-Dichloroethane	<2.0	2.0	ug/L	2		12/13/24 0000	12/13/24 1502	CSM
Vinyl Acetate	<10.0	10.0	ug/L	2		12/13/24 0000	12/13/24 1502	CSM
cis-1,2-Dichloroethylene	<2.0	2.0	ug/L	2		12/13/24 0000	12/13/24 1502	CSM
2-Butanone (MEK)	**606**	20.0	ug/L	2		12/13/24 0000	12/13/24 1502	CSM
Bromochloromethane	<2.0	2.0	ug/L	2		12/13/24 0000	12/13/24 1502	CSM
Chloroform	<2.0	2.0	ug/L	2		12/13/24 0000	12/13/24 1502	CSM
1,1,1-Trichloroethane	<2.0	2.0	ug/L	2		12/13/24 0000	12/13/24 1502	CSM
Carbon Tetrachloride	<2.0	2.0	ug/L	2		12/13/24 0000	12/13/24 1502	CSM
Benzene	<2.0	2.0	ug/L	2		12/13/24 0000	12/13/24 1502	CSM
1,2-Dichloroethane	<2.0	2.0	ug/L	2		12/13/24 0000	12/13/24 1502	CSM
Trichloroethylene	<2.0	2.0	ug/L	2		12/13/24 0000	12/13/24 1502	CSM
1,2-Dichloropropane	<2.0	2.0	ug/L	2		12/13/24 0000	12/13/24 1502	CSM
Dibromomethane	<2.0	2.0	ug/L	2		12/13/24 0000	12/13/24 1502	CSM
Bromodichloromethane	<2.0	2.0	ug/L	2		12/13/24 0000	12/13/24 1502	CSM
cis-1,3-Dichloropropene	<2.0	2.0	ug/L	2		12/13/24 0000	12/13/24 1502	CSM
4-Methyl-2-pentanone (MIBK)	<10.0	10.0	ug/L	2		12/13/24 0000	12/13/24 1502	CSM
Toluene	**2.0**	2.0	ug/L	2		12/13/24 0000	12/13/24 1502	CSM
trans-1,3-Dichloropropene	<2.0	2.0	ug/L	2		12/13/24 0000	12/13/24 1502	CSM
1,1,2-Trichloroethane	<2.0	2.0	ug/L	2		12/13/24 0000	12/13/24 1502	CSM
Tetrachloroethylene	<2.0	2.0	ug/L	2		12/13/24 0000	12/13/24 1502	CSM
2-Hexanone (MBK)	<10.0	10.0	ug/L	2		12/13/24 0000	12/13/24 1502	CSM
Dibromochloromethane	<2.0	2.0	ug/L	2		12/13/24 0000	12/13/24 1502	CSM
1,2-Dibromoethane	<2.0	2.0	ug/L	2		12/13/24 0000	12/13/24 1502	CSM
Chlorobenzene	<2.0	2.0	ug/L	2		12/13/24 0000	12/13/24 1502	CSM
1,1,1,2-Tetrachloroethane	<2.0	2.0	ug/L	2		12/13/24 0000	12/13/24 1502	CSM
Ethylbenzene	<2.0	2.0	ug/L	2		12/13/24 0000	12/13/24 1502	CSM
Xylenes, total	<4.0	4.0	ug/L	2		12/13/24 0000	12/13/24 1502	CSM
Styrene	<2.0	2.0	ug/L	2		12/13/24 0000	12/13/24 1502	CSM
Bromoform	<2.0	2.0	ug/L	2		12/13/24 0000	12/13/24 1502	CSM
1,2,3-Trichloropropane	<2.0	2.0	ug/L	2		12/13/24 0000	12/13/24 1502	CSM

Client Sample ID:	PEC-3		
Sample Matrix:	Aqueous	**Collected By:**	JGH
Lab Sample ID:	1HL0900-02	**Collection Date:**	12/08/2024 14:10

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<10.0	10.0	ug/L	2		12/13/24 0000	12/13/24 1502	CSM
1,1,2,2-Tetrachloroethane	<2.0	2.0	ug/L	2		12/13/24 0000	12/13/24 1502	CSM
1,4-Dichlorobenzene	<2.0	2.0	ug/L	2		12/13/24 0000	12/13/24 1502	CSM
1,2-Dichlorobenzene	<2.0	2.0	ug/L	2		12/13/24 0000	12/13/24 1502	CSM
1,2-Dibromo-3-chloropropane	<10.0	10.0	ug/L	2		12/13/24 0000	12/13/24 1502	CSM
Surrogate: Dibromofluoromethane	101	Limit: 57-134	% Rec	2		12/13/24 0000	12/13/24 1502	CSM
Surrogate: Dibromofluoromethane	101	Limit: 75-136	% Rec	2		12/13/24 0000	12/13/24 1502	CSM
Surrogate: 1,2-Dichloroethane-d4	111	Limit: 53-140	% Rec	2		12/13/24 0000	12/13/24 1502	CSM
Surrogate: 1,2-Dichloroethane-d4	111	Limit: 61-142	% Rec	2		12/13/24 0000	12/13/24 1502	CSM
Surrogate: Toluene-d8	94.4	Limit: 86-114	% Rec	2		12/13/24 0000	12/13/24 1502	CSM
Surrogate: Toluene-d8	94.4	Limit: 82-121	% Rec	2		12/13/24 0000	12/13/24 1502	CSM
Surrogate: 4-Bromofluorobenzene	99.5	Limit: 78-121	% Rec	2		12/13/24 0000	12/13/24 1502	CSM
Surrogate: 4-Bromofluorobenzene	99.5	Limit: 80-116	% Rec	2		12/13/24 0000	12/13/24 1502	CSM

Batch Log Summary

Method	Batch	Laboratory ID	Client / Source ID
EPA 8260D	1HL0858	1HL0858-BSD1	
		1HL0858-BS1	
		1HL0858-BSD1	
		1HL0858-BLK1	
		1HL0900-01	GU-3
		1HL0900-02	PEC-3
		1HL0858-MS1	1HL0900-01
		1HL0858-MSD1	1HL0900-01

Method	Batch	Laboratory ID	Client / Source ID
EPA 6020A	1HL0900	1HL0900-BLK1	
		1HL0900-BS1	
		1HL0900-01	GU-3
		1HL0900-MS1	1HL0900-01
		1HL0900-MSD1	1HL0900-01
		1HL0900-PS1	1HL0900-01

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 1HL0858 - EPA 5030B - EPA 8260D										
Blank (1HL0858-BLK1)				Prepared: 12/13/24 00:00 Analyzed: 12/13/24 13:53						
Chloromethane	<1.0	1.0	ug/L							
Vinyl Chloride	<1.0	1.0	ug/L							
Bromomethane	<1.0	1.0	ug/L							
Chloroethane	<1.0	1.0	ug/L							
Trichlorofluoromethane	<1.0	1.0	ug/L							
1,1-Dichloroethylene	<1.0	1.0	ug/L							
Acetone	<10.0	10.0	ug/L							
Methyl Iodide	<1.0	1.0	ug/L							
Carbon Disulfide	<1.0	1.0	ug/L							
Methylene Chloride	<5.0	5.0	ug/L							
Acrylonitrile	<5.0	5.0	ug/L							
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L							
1,1-Dichloroethane	<1.0	1.0	ug/L							
Vinyl Acetate	<5.0	5.0	ug/L							
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L							
2-Butanone (MEK)	<10.0	10.0	ug/L							
Bromochloromethane	<1.0	1.0	ug/L							
Chloroform	<1.0	1.0	ug/L							
1,1,1-Trichloroethane	<1.0	1.0	ug/L							

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HL0858 - EPA 5030B - EPA 8260D										
Blank (1HL0858-BLK1)			Prepared: 12/13/24 00:00 Analyzed: 12/13/24 13:53							
Carbon Tetrachloride	<1.0	1.0	ug/L							
Benzene	<1.0	1.0	ug/L							
1,2-Dichloroethane	<1.0	1.0	ug/L							
Trichloroethylene	<1.0	1.0	ug/L							
1,2-Dichloropropane	<1.0	1.0	ug/L							
Dibromomethane	<1.0	1.0	ug/L							
Bromodichloromethane	<1.0	1.0	ug/L							
cis-1,3-Dichloropropene	<1.0	1.0	ug/L							
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L							
Toluene	<1.0	1.0	ug/L							
trans-1,3-Dichloropropene	<1.0	1.0	ug/L							
1,1,2-Trichloroethane	<1.0	1.0	ug/L							
Tetrachloroethylene	<1.0	1.0	ug/L							
2-Hexanone (MBK)	<5.0	5.0	ug/L							
Dibromochloromethane	<1.0	1.0	ug/L							
1,2-Dibromoethane	<1.0	1.0	ug/L							
Chlorobenzene	<1.0	1.0	ug/L							
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L							
Ethylbenzene	<1.0	1.0	ug/L							
Xylenes, total	<2.0	2.0	ug/L							
Styrene	<1.0	1.0	ug/L							
Bromoform	<1.0	1.0	ug/L							
1,2,3-Trichloropropane	<1.0	1.0	ug/L							
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L							
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L							
1,4-Dichlorobenzene	<1.0	1.0	ug/L							
1,2-Dichlorobenzene	<1.0	1.0	ug/L							
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L							
Surrogate: Dibromofluoromethane	*51.4*		ug/L	*50.2*		*102*	*57-134*			
Surrogate: Dibromofluoromethane	*51.4*		ug/L	*50.2*		*102*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*55.6*		ug/L	*50.4*		*110*	*53-140*			
Surrogate: 1,2-Dichloroethane-d4	*55.6*		ug/L	*50.4*		*110*	*61-142*			
Surrogate: Toluene-d8	*47.4*		ug/L	*50.5*		*94.0*	*86-114*			
Surrogate: Toluene-d8	*47.4*		ug/L	*50.5*		*94.0*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*48.8*		ug/L	*50.2*		*97.2*	*78-121*			
Surrogate: 4-Bromofluorobenzene	*48.8*		ug/L	*50.2*		*97.2*	*80-116*			
LCS (1HL0858-BS1)			Prepared: 12/13/24 00:00 Analyzed: 12/13/24 13:07							
Chloromethane	39.65	1.0	ug/L	30.3		131	63-155			
Vinyl Chloride	38.54	1.0	ug/L	30.2		127	70-154			
Bromomethane	38.47	1.0	ug/L	30.1		128	52-176			
Chloroethane	32.74	1.0	ug/L	30.3		108	72-148			
Trichlorofluoromethane	30.02	1.0	ug/L	30.3		99.1	70-152			
1,1-Dichloroethylene	51.30	1.0	ug/L	50.1		102	70-148			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HL0858 - EPA 5030B - EPA 8260D										
LCS (1HL0858-BS1)				Prepared: 12/13/24 00:00 Analyzed: 12/13/24 13:07						
Acetone	97.98	10.0	ug/L	100		98.0	43-172			
Methyl Iodide	99.22	1.0	ug/L	100		99.2	69-170			
Carbon Disulfide	96.27	1.0	ug/L	100		96.3	72-162			
Methylene Chloride	50.78	5.0	ug/L	50.1		101	68-142			
Acrylonitrile	42.21	5.0	ug/L	50.2		84.1	56-135			
trans-1,2-Dichloroethylene	53.41	1.0	ug/L	50.1		107	66-148			
1,1-Dichloroethane	53.92	1.0	ug/L	50.1		108	66-143			
Vinyl Acetate	156.4	5.0	ug/L	156		100	43-153			
cis-1,2-Dichloroethylene	53.48	1.0	ug/L	50.4		106	71-149			
2-Butanone (MEK)	87.66	10.0	ug/L	100		87.7	52-159			
Bromochloromethane	53.98	1.0	ug/L	50.4		107	69-143			
Chloroform	52.00	1.0	ug/L	50.1		104	69-144			
1,1,1-Trichloroethane	51.38	1.0	ug/L	50.1		103	62-129			
Carbon Tetrachloride	51.10	1.0	ug/L	50.1		102	63-141			
Benzene	52.55	1.0	ug/L	50.4		104	71-134			
1,2-Dichloroethane	51.87	1.0	ug/L	50.1		104	72-132			
Trichloroethylene	50.20	1.0	ug/L	50.1		100	71-135			
1,2-Dichloropropane	51.28	1.0	ug/L	50.1		102	69-136			
Dibromomethane	48.01	1.0	ug/L	50.4		95.3	73-147			
Bromodichloromethane	49.81	1.0	ug/L	50.1		99.4	68-129			
cis-1,3-Dichloropropene	49.10	1.0	ug/L	50.1		98.0	65-134			
4-Methyl-2-pentanone (MIBK)	93.21	5.0	ug/L	100		93.2	58-147			
Toluene	50.19	1.0	ug/L	50.5		99.4	72-133			
trans-1,3-Dichloropropene	47.92	1.0	ug/L	50.1		95.7	67-130			
1,1,2-Trichloroethane	48.22	1.0	ug/L	50.1		96.3	69-135			
Tetrachloroethylene	52.92	1.0	ug/L	50.1		106	69-130			
2-Hexanone (MBK)	95.89	5.0	ug/L	100		95.9	55-144			
Dibromochloromethane	51.89	1.0	ug/L	50.1		104	73-127			
1,2-Dibromoethane	51.24	1.0	ug/L	50.2		102	67-132			
Chlorobenzene	53.22	1.0	ug/L	50.1		106	72-123			
1,1,1,2-Tetrachloroethane	53.09	1.0	ug/L	50.3		105	73-127			
Ethylbenzene	55.21	1.0	ug/L	50.2		110	71-127			
Xylenes, total	160.7	2.0	ug/L	151		106	74-127			
Styrene	54.58	1.0	ug/L	50.4		108	66-126			
Bromoform	49.02	1.0	ug/L	50.1		97.8	68-130			
1,2,3-Trichloropropane	48.17	1.0	ug/L	50.3		95.7	63-136			
trans-1,4-Dichloro-2-butene	97.03	5.0	ug/L	100		97.0	54-134			
1,1,2,2-Tetrachloroethane	52.45	1.0	ug/L	50.1		105	61-131			
1,4-Dichlorobenzene	52.47	1.0	ug/L	50.1		105	70-129			
1,2-Dichlorobenzene	51.99	1.0	ug/L	50.1		104	69-126			
1,2-Dibromo-3-chloropropane	40.76	5.0	ug/L	50.1		81.3	50-143			
Surrogate: Dibromofluoromethane	*51.0*		ug/L	*50.2*		*102*	*57-134*			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HL0858 - EPA 5030B - EPA 8260D										
LCS (1HL0858-BS1)	Prepared: 12/13/24 00:00 Analyzed: 12/13/24 13:07									
Surrogate: Dibromofluoromethane	*51.0*		ug/L	*50.2*		*102*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*53.0*		ug/L	*50.4*		*105*	*53-140*			
Surrogate: 1,2-Dichloroethane-d4	*53.0*		ug/L	*50.4*		*105*	*61-142*			
Surrogate: Toluene-d8	*49.2*		ug/L	*50.5*		*97.5*	*86-114*			
Surrogate: Toluene-d8	*49.2*		ug/L	*50.5*		*97.5*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*47.8*		ug/L	*50.2*		*95.3*	*78-121*			
Surrogate: 4-Bromofluorobenzene	*47.8*		ug/L	*50.2*		*95.3*	*80-116*			
LCS Dup (1HL0858-BSD1)	Prepared: 12/13/24 00:00 Analyzed: 12/13/24 12:23									
Chloromethane	40.80	1.0	ug/L	30.3		135	63-155	2.86	24	
Vinyl Chloride	39.17	1.0	ug/L	30.2		129	70-154	1.62	25	
Bromomethane	38.10	1.0	ug/L	30.1		126	52-176	0.966	27	
Chloroethane	33.61	1.0	ug/L	30.3		111	72-148	2.62	25	
Trichlorofluoromethane	31.02	1.0	ug/L	30.3		102	70-152	3.28	26	
1,1-Dichloroethylene	52.71	1.0	ug/L	50.1		105	70-148	2.71	24	
Acetone	119.2	10.0	ug/L	100		119	43-172	19.5	30	
Methyl Iodide	93.52	1.0	ug/L	100		93.5	69-170	5.91	30	
Carbon Disulfide	98.46	1.0	ug/L	100		98.5	72-162	2.25	24	
Methylene Chloride	51.13	5.0	ug/L	50.1		102	68-142	0.687	21	
Acrylonitrile	46.86	5.0	ug/L	50.2		93.3	56-135	10.4	16	
trans-1,2-Dichloroethylene	54.44	1.0	ug/L	50.1		109	66-148	1.91	27	
1,1-Dichloroethane	53.52	1.0	ug/L	50.1		107	66-143	0.745	24	
Vinyl Acetate	169.5	5.0	ug/L	156		109	43-153	8.03	30	
cis-1,2-Dichloroethylene	53.98	1.0	ug/L	50.4		107	71-149	0.931	26	
2-Butanone (MEK)	107.6	10.0	ug/L	100		108	52-159	20.4	27	
Bromochloromethane	54.73	1.0	ug/L	50.4		109	69-143	1.38	23	
Chloroform	52.38	1.0	ug/L	50.1		105	69-144	0.728	23	
1,1,1-Trichloroethane	52.40	1.0	ug/L	50.1		105	62-129	1.97	24	
Carbon Tetrachloride	52.22	1.0	ug/L	50.1		104	63-141	2.17	25	
Benzene	52.89	1.0	ug/L	50.4		105	71-134	0.645	24	
1,2-Dichloroethane	53.18	1.0	ug/L	50.1		106	72-132	2.49	24	
Trichloroethylene	51.05	1.0	ug/L	50.1		102	71-135	1.68	24	
1,2-Dichloropropane	51.63	1.0	ug/L	50.1		103	69-136	0.680	24	
Dibromomethane	50.26	1.0	ug/L	50.4		99.8	73-147	4.58	25	
Bromodichloromethane	49.65	1.0	ug/L	50.1		99.1	68-129	0.322	22	
cis-1,3-Dichloropropene	49.87	1.0	ug/L	50.1		99.6	65-134	1.56	23	
4-Methyl-2-pentanone (MIBK)	112.8	5.0	ug/L	100		113	58-147	19.0	27	
Toluene	50.42	1.0	ug/L	50.5		99.9	72-133	0.457	24	
trans-1,3-Dichloropropene	49.49	1.0	ug/L	50.1		98.8	67-130	3.22	24	
1,1,2-Trichloroethane	50.11	1.0	ug/L	50.1		100	69-135	3.84	23	
Tetrachloroethylene	54.17	1.0	ug/L	50.1		108	69-130	2.33	25	
2-Hexanone (MBK)	119.5	5.0	ug/L	100		119	55-144	21.9	25	
Dibromochloromethane	53.29	1.0	ug/L	50.1		106	73-127	2.66	22	
1,2-Dibromoethane	54.68	1.0	ug/L	50.2		109	67-132	6.50	24	

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HL0858 - EPA 5030B - EPA 8260D										
LCS Dup (1HL0858-BSD1)			Prepared: 12/13/24 00:00 Analyzed: 12/13/24 12:23							
Chlorobenzene	53.43	1.0	ug/L	50.1		107	72-123	0.394	23	
1,1,1,2-Tetrachloroethane	53.73	1.0	ug/L	50.3		107	73-127	1.20	24	
Ethylbenzene	55.91	1.0	ug/L	50.2		111	71-127	1.26	26	
Xylenes, total	162.4	2.0	ug/L	151		107	74-127	1.02	25	
Styrene	54.74	1.0	ug/L	50.4		109	66-126	0.293	23	
Bromoform	52.75	1.0	ug/L	50.1		105	68-130	7.33	23	
1,2,3-Trichloropropane	54.85	1.0	ug/L	50.3		109	63-136	13.0	24	
trans-1,4-Dichloro-2-butene	114.1	5.0	ug/L	100		114	54-134	16.2	27	
1,1,2,2-Tetrachloroethane	58.71	1.0	ug/L	50.1		117	61-131	11.3	29	
1,4-Dichlorobenzene	52.95	1.0	ug/L	50.1		106	70-129	0.911	24	
1,2-Dichlorobenzene	53.07	1.0	ug/L	50.1		106	69-126	2.06	26	
1,2-Dibromo-3-chloropropane	50.73	5.0	ug/L	50.1		101	50-143	21.8	30	
Surrogate: Dibromofluoromethane	*50.6*		ug/L	*50.2*		*101*	*57-134*			
Surrogate: Dibromofluoromethane	*50.7*		ug/L	*50.2*		*101*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*53.4*		ug/L	*50.4*		*106*	*53-140*			
Surrogate: 1,2-Dichloroethane-d4	*53.3*		ug/L	*50.4*		*106*	*61-142*			
Surrogate: Toluene-d8	*49.1*		ug/L	*50.5*		*97.4*	*86-114*			
Surrogate: Toluene-d8	*49.3*		ug/L	*50.5*		*97.7*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*48.2*		ug/L	*50.2*		*96.2*	*78-121*			
Surrogate: 4-Bromofluorobenzene	*47.9*		ug/L	*50.2*		*95.4*	*80-116*			
Matrix Spike (1HL0858-MS1)	**Source: 1HL0900-01**		Prepared: 12/13/24 00:00 Analyzed: 12/13/24 15:47							
Chloromethane	404.3	10.0	ug/L	303	ND	133	61-152			
Vinyl Chloride	393.4	10.0	ug/L	302	ND	130	66-149			
Bromomethane	380.1	10.0	ug/L	301	ND	126	43-171			
Chloroethane	335.3	10.0	ug/L	303	ND	111	69-148			
Trichlorofluoromethane	309.5	10.0	ug/L	303	ND	102	62-163			
1,1-Dichloroethylene	534.0	10.0	ug/L	501	ND	107	70-148			
Acetone	1219	100	ug/L	1000	ND	122	45-173			
Methyl Iodide	944.1	10.0	ug/L	1000	ND	94.4	62-167			
Carbon Disulfide	997.4	10.0	ug/L	1000	ND	99.7	71-163			
Methylene Chloride	520.5	50.0	ug/L	501	ND	104	69-140			
Acrylonitrile	508.4	50.0	ug/L	502	ND	101	38-147			
trans-1,2-Dichloroethylene	548.4	10.0	ug/L	501	ND	109	69-144			
1,1-Dichloroethane	549.9	10.0	ug/L	501	ND	110	70-138			
Vinyl Acetate	1740	50.0	ug/L	1560	ND	112	58-142			
cis-1,2-Dichloroethylene	547.0	10.0	ug/L	504	ND	109	68-151			
2-Butanone (MEK)	1176	100	ug/L	1000	ND	118	50-160			
Bromochloromethane	560.1	10.0	ug/L	504	ND	111	65-143			
Chloroform	531.8	10.0	ug/L	501	ND	106	71-143			
1,1,1-Trichloroethane	529.9	10.0	ug/L	501	ND	106	63-133			
Carbon Tetrachloride	531.4	10.0	ug/L	501	ND	106	63-142			
Benzene	550.2	10.0	ug/L	504	7.78	108	69-133			
1,2-Dichloroethane	558.4	10.0	ug/L	501	ND	111	63-138			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HL0858 - EPA 5030B - EPA 8260D										
Matrix Spike (1HL0858-MS1)	**Source: 1HL0900-01**	Prepared: 12/13/24 00:00 Analyzed: 12/13/24 15:47								
Trichloroethylene	518.7	10.0	ug/L	501	ND	104	71-133			
1,2-Dichloropropane	529.9	10.0	ug/L	501	ND	106	69-132			
Dibromomethane	516.2	10.0	ug/L	504	ND	102	70-147			
Bromodichloromethane	512.0	10.0	ug/L	501	ND	102	67-130			
cis-1,3-Dichloropropene	505.7	10.0	ug/L	501	ND	101	61-126			
4-Methyl-2-pentanone (MIBK)	1190	50.0	ug/L	1000	ND	119	55-147			
Toluene	520.1	10.0	ug/L	505	ND	103	71-133			
trans-1,3-Dichloropropene	502.2	10.0	ug/L	501	ND	100	63-124			
1,1,2-Trichloroethane	515.1	10.0	ug/L	501	ND	103	69-133			
Tetrachloroethylene	541.0	10.0	ug/L	501	ND	108	70-124			
2-Hexanone (MBK)	1256	50.0	ug/L	1000	ND	126	53-141			
Dibromochloromethane	539.8	10.0	ug/L	501	ND	108	74-122			
1,2-Dibromoethane	554.9	10.0	ug/L	502	ND	110	66-127			
Chlorobenzene	544.6	10.0	ug/L	501	ND	109	76-116			
1,1,1,2-Tetrachloroethane	545.3	10.0	ug/L	503	ND	108	77-121			
Ethylbenzene	568.5	10.0	ug/L	502	ND	113	73-124			
Xylenes, total	1647	20.0	ug/L	1510	ND	109	75-123			
Styrene	559.2	10.0	ug/L	504	ND	111	70-120			
Bromoform	537.5	10.0	ug/L	501	ND	107	70-124			
1,2,3-Trichloropropane	568.9	10.0	ug/L	503	ND	113	62-135			
trans-1,4-Dichloro-2-butene	1125	50.0	ug/L	1000	ND	113	50-120			
1,1,2,2-Tetrachloroethane	594.7	10.0	ug/L	501	ND	119	63-126			
1,4-Dichlorobenzene	540.5	10.0	ug/L	501	ND	108	72-119			
1,2-Dichlorobenzene	543.4	10.0	ug/L	501	ND	108	71-117			
1,2-Dibromo-3-chloropropane	535.7	50.0	ug/L	501	ND	107	49-134			
Surrogate: Dibromofluoromethane	*504*		ug/L	*502*		*100*	*57-134*			
Surrogate: Dibromofluoromethane	*504*		ug/L	*502*		*100*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*534*		ug/L	*504*		*106*	*53-140*			
Surrogate: 1,2-Dichloroethane-d4	*534*		ug/L	*504*		*106*	*61-142*			
Surrogate: Toluene-d8	*499*		ug/L	*505*		*98.9*	*86-114*			
Surrogate: Toluene-d8	*499*		ug/L	*505*		*98.9*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*487*		ug/L	*502*		*97.0*	*78-121*			
Surrogate: 4-Bromofluorobenzene	*487*		ug/L	*502*		*97.0*	*80-116*			
Matrix Spike Dup (1HL0858-MSD1)	**Source: 1HL0900-01**	Prepared: 12/13/24 00:00 Analyzed: 12/13/24 16:10								
Chloromethane	365.3	10.0	ug/L	303	ND	120	61-152	10.1	26	
Vinyl Chloride	355.6	10.0	ug/L	302	ND	118	66-149	10.1	23	
Bromomethane	351.5	10.0	ug/L	301	ND	117	43-171	7.82	29	
Chloroethane	303.4	10.0	ug/L	303	ND	100	69-148	9.99	25	
Trichlorofluoromethane	277.9	10.0	ug/L	303	ND	91.7	62-163	10.8	25	
1,1-Dichloroethylene	485.1	10.0	ug/L	501	ND	96.8	70-148	9.60	22	
Acetone	1141	100	ug/L	1000	ND	114	45-173	6.64	30	
Methyl Iodide	931.3	10.0	ug/L	1000	ND	93.1	62-167	1.37	24	
Carbon Disulfide	913.7	10.0	ug/L	1000	ND	91.4	71-163	8.76	22	

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HL0858 - EPA 5030B - EPA 8260D										
Matrix Spike Dup (1HL0858-MSD1)	**Source: 1HL0900-01**	Prepared: 12/13/24 00:00 Analyzed: 12/13/24 16:10								
Methylene Chloride	491.5	50.0	ug/L	501	ND	98.1	69-140	5.73	19	
Acrylonitrile	482.5	50.0	ug/L	502	ND	96.1	38-147	5.23	30	
trans-1,2-Dichloroethylene	511.2	10.0	ug/L	501	ND	102	69-144	7.02	22	
1,1-Dichloroethane	517.4	10.0	ug/L	501	ND	103	70-138	6.09	20	
Vinyl Acetate	1695	50.0	ug/L	1560	ND	109	58-142	2.60	24	
cis-1,2-Dichloroethylene	526.0	10.0	ug/L	504	ND	104	68-151	3.91	22	
2-Butanone (MEK)	1126	100	ug/L	1000	ND	113	50-160	4.39	23	
Bromochloromethane	541.7	10.0	ug/L	504	ND	107	65-143	3.34	22	
Chloroform	510.3	10.0	ug/L	501	ND	102	71-143	4.13	21	
1,1,1-Trichloroethane	503.2	10.0	ug/L	501	ND	100	63-133	5.17	23	
Carbon Tetrachloride	505.0	10.0	ug/L	501	ND	101	63-142	5.09	22	
Benzene	518.2	10.0	ug/L	504	7.78	101	69-133	5.99	18	
1,2-Dichloroethane	525.8	10.0	ug/L	501	ND	105	63-138	6.01	20	
Trichloroethylene	488.0	10.0	ug/L	501	ND	97.4	71-133	6.10	23	
1,2-Dichloropropane	510.1	10.0	ug/L	501	ND	102	69-132	3.81	20	
Dibromomethane	497.7	10.0	ug/L	504	ND	98.8	70-147	3.65	22	
Bromodichloromethane	496.2	10.0	ug/L	501	ND	99.1	67-130	3.13	21	
cis-1,3-Dichloropropene	490.5	10.0	ug/L	501	ND	97.9	61-126	3.05	21	
4-Methyl-2-pentanone (MIBK)	1140	50.0	ug/L	1000	ND	114	55-147	4.24	23	
Toluene	496.1	10.0	ug/L	505	ND	98.3	71-133	4.72	19	
trans-1,3-Dichloropropene	490.0	10.0	ug/L	501	ND	97.9	63-124	2.46	21	
1,1,2-Trichloroethane	500.2	10.0	ug/L	501	ND	99.9	69-133	2.94	19	
Tetrachloroethylene	514.4	10.0	ug/L	501	ND	103	70-124	5.04	24	
2-Hexanone (MBK)	1195	50.0	ug/L	1000	ND	119	53-141	5.04	24	
Dibromochloromethane	524.3	10.0	ug/L	501	ND	105	74-122	2.91	21	
1,2-Dibromoethane	542.7	10.0	ug/L	502	ND	108	66-127	2.22	23	
Chlorobenzene	525.8	10.0	ug/L	501	ND	105	76-116	3.51	21	
1,1,1,2-Tetrachloroethane	533.3	10.0	ug/L	503	ND	106	77-121	2.23	25	
Ethylbenzene	544.9	10.0	ug/L	502	ND	109	73-124	4.24	20	
Xylenes, total	1573	20.0	ug/L	1510	ND	104	75-123	4.58	20	
Styrene	541.7	10.0	ug/L	504	ND	108	70-120	3.18	23	
Bromoform	526.1	10.0	ug/L	501	ND	105	70-124	2.14	22	
1,2,3-Trichloropropane	555.6	10.0	ug/L	503	ND	110	62-135	2.37	28	
trans-1,4-Dichloro-2-butene	1117	50.0	ug/L	1000	ND	112	50-120	0.758	26	
1,1,2,2-Tetrachloroethane	596.8	10.0	ug/L	501	ND	119	63-126	0.352	24	
1,4-Dichlorobenzene	528.9	10.0	ug/L	501	ND	106	72-119	2.17	24	
1,2-Dichlorobenzene	530.0	10.0	ug/L	501	ND	106	71-117	2.50	24	
1,2-Dibromo-3-chloropropane	522.9	50.0	ug/L	501	ND	104	49-134	2.42	28	
Surrogate: Dibromofluoromethane	*504*		ug/L	*502*		*100*	*57-134*			
Surrogate: Dibromofluoromethane	*504*		ug/L	*502*		*100*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*541*		ug/L	*504*		*107*	*53-140*			
Surrogate: 1,2-Dichloroethane-d4	*541*		ug/L	*504*		*107*	*61-142*			
Surrogate: Toluene-d8	*494*		ug/L	*505*		*97.9*	*86-114*			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HL0858 - EPA 5030B - EPA 8260D										
Matrix Spike Dup (1HL0858-MSD1)	**Source: 1HL0900-01**	Prepared: 12/13/24 00:00 Analyzed: 12/13/24 16:10								
Surrogate: Toluene-d8	*494*		ug/L	*505*		*97.9*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*484*		ug/L	*502*		*96.5*	*78-121*			
Surrogate: 4-Bromofluorobenzene	*484*		ug/L	*502*		*96.5*	*80-116*			

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HL0900 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Blank (1HL0900-BLK1)		Prepared: 12/16/24 15:34 Analyzed: 12/18/24 18:31								
Antimony, total	<0.0020	0.0020	mg/L							
Arsenic, total	<0.0040	0.0040	mg/L							
Barium, total	<0.0040	0.0040	mg/L							
Beryllium, total	<0.0040	0.0040	mg/L							
Cadmium, total	<0.0008	0.0008	mg/L							
Chromium, total	<0.0080	0.0080	mg/L							
Cobalt, total	<0.0004	0.0004	mg/L							
Copper, total	<0.0040	0.0040	mg/L							
Lead, total	<0.0040	0.0040	mg/L							
Nickel, total	<0.0040	0.0040	mg/L							
Selenium, total	<0.0040	0.0040	mg/L							
Silver, total	<0.0040	0.0040	mg/L							
Thallium, total	<0.0020	0.0020	mg/L							
Vanadium, total	<0.0200	0.0200	mg/L							
Zinc, total	<0.0200	0.0200	mg/L							
LCS (1HL0900-BS1)		Prepared: 12/16/24 15:34 Analyzed: 12/18/24 18:37								
Antimony, total	0.0982	0.0020	mg/L	0.100		98.2	80-120			
Arsenic, total	0.0974	0.0040	mg/L	0.100		97.4	80-120			
Barium, total	0.110	0.0040	mg/L	0.100		110	80-120			
Beryllium, total	0.0985	0.0040	mg/L	0.100		98.5	80-120			
Cadmium, total	0.0970	0.0008	mg/L	0.100		97.0	80-120			
Chromium, total	0.0954	0.0080	mg/L	0.100		95.4	80-120			
Cobalt, total	0.102	0.0004	mg/L	0.100		102	80-120			
Copper, total	0.0983	0.0040	mg/L	0.100		98.3	80-120			
Lead, total	0.0977	0.0040	mg/L	0.100		97.7	80-120			
Nickel, total	0.101	0.0040	mg/L	0.100		101	80-120			
Selenium, total	0.1015	0.0040	mg/L	0.100		102	80-120			
Silver, total	0.0992	0.0040	mg/L	0.100		99.2	80-120			
Thallium, total	0.0962	0.0020	mg/L	0.100		96.2	80-120			
Vanadium, total	0.0950	0.0200	mg/L	0.100		95.0	80-120			
Matrix Spike (1HL0900-MS1)	**Source: 1HL0900-01**	Prepared: 12/16/24 15:34 Analyzed: 12/18/24 18:49								
Antimony, total	0.101	0.0020	mg/L	0.100	ND	101	75-125			
Arsenic, total	0.105	0.0040	mg/L	0.100	0.0027	102	75-125			

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HL0900 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Matrix Spike (1HL0900-MS1)	**Source: 1HL0900-01**	Prepared: 12/16/24 15:34 Analyzed: 12/18/24 18:49								
Barium, total	0.784	0.0040	mg/L	0.100	0.683	101	75-125			
Beryllium, total	0.0974	0.0040	mg/L	0.100	ND	97.4	75-125			
Cadmium, total	0.0934	0.0008	mg/L	0.100	ND	93.4	75-125			
Chromium, total	0.0917	0.0080	mg/L	0.100	ND	91.7	75-125			
Cobalt, total	0.102	0.0004	mg/L	0.100	ND	102	75-125			
Copper, total	0.0920	0.0040	mg/L	0.100	ND	92.0	75-125			
Lead, total	0.0932	0.0040	mg/L	0.100	ND	93.2	75-125			
Nickel, total	0.125	0.0040	mg/L	0.100	0.0235	102	75-125			
Selenium, total	0.1036	0.0040	mg/L	0.100	ND	104	75-125			
Silver, total	0.0966	0.0040	mg/L	0.100	ND	96.6	75-125			
Thallium, total	0.0946	0.0020	mg/L	0.100	ND	94.6	75-125			
Vanadium, total	0.0960	0.0200	mg/L	0.100	ND	96.0	75-125			
Zinc, total	0.0913	0.0200	mg/L	0.100	ND	91.3	75-125			
Matrix Spike Dup (1HL0900-MSD1)	**Source: 1HL0900-01**	Prepared: 12/16/24 15:34 Analyzed: 12/18/24 18:55								
Antimony, total	0.101	0.0020	mg/L	0.100	ND	101	75-125	0.0734	20	
Arsenic, total	0.106	0.0040	mg/L	0.100	0.0027	103	75-125	1.06	20	
Barium, total	0.799	0.0040	mg/L	0.100	0.683	116	75-125	1.90	20	
Beryllium, total	0.101	0.0040	mg/L	0.100	ND	101	75-125	3.67	20	
Cadmium, total	0.0976	0.0008	mg/L	0.100	ND	97.6	75-125	4.33	20	
Chromium, total	0.0929	0.0080	mg/L	0.100	ND	92.9	75-125	1.29	20	
Cobalt, total	0.101	0.0004	mg/L	0.100	ND	101	75-125	1.08	20	
Copper, total	0.0915	0.0040	mg/L	0.100	ND	91.5	75-125	0.570	20	
Lead, total	0.0956	0.0040	mg/L	0.100	ND	95.6	75-125	2.55	20	
Nickel, total	0.124	0.0040	mg/L	0.100	0.0235	100	75-125	1.05	20	
Selenium, total	0.1028	0.0040	mg/L	0.100	ND	103	75-125	0.808	20	
Silver, total	0.0987	0.0040	mg/L	0.100	ND	98.7	75-125	2.22	20	
Thallium, total	0.0953	0.0020	mg/L	0.100	ND	95.3	75-125	0.767	20	
Vanadium, total	0.0988	0.0200	mg/L	0.100	ND	98.8	75-125	2.89	20	
Zinc, total	0.0938	0.0200	mg/L	0.100	ND	93.8	75-125	2.68	20	
Post Spike (1HL0900-PS1)	**Source: 1HL0900-01**	Prepared: 12/16/24 15:34 Analyzed: 12/18/24 19:01								
Antimony, total	0.0812		mg/L	0.0800	0.0002	101	80-120			
Arsenic, total	0.0851		mg/L	0.0800	0.0027	103	80-120			
Barium, total	0.797		mg/L	0.0800	0.669	159	80-120			M6
Beryllium, total	0.0796		mg/L	0.0800	0.00002	99.5	80-120			
Cadmium, total	0.0778		mg/L	0.0800	0.000004	97.2	80-120			
Chromium, total	0.0745		mg/L	0.0800	0.0004	92.7	80-120			
Cobalt, total	0.0831		mg/L	0.0800	0.00009	104	80-120			
Copper, total	0.0743		mg/L	0.0800	-0.0002	92.9	80-120			
Lead, total	0.0768		mg/L	0.0800	0.00002	96.0	80-120			
Nickel, total	0.107		mg/L	0.0800	0.0231	104	80-120			
Selenium, total	0.0793		mg/L	0.0800	-0.00009	99.2	80-120			
Silver, total	0.0798		mg/L	0.0800	0.0004	99.3	80-120			
Thallium, total	0.0766		mg/L	0.0800	0.0001	95.6	80-120			

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HL0900 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Post Spike (1HL0900-PS1)	**Source: 1HL0900-01**		Prepared: 12/16/24 15:34 Analyzed: 12/18/24 19:01							
Vanadium, total	0.0806		mg/L	0.0800	0.0022	98.0	80-120			
Zinc, total	0.0770		mg/L	0.0800	0.0023	93.4	80-120			

Definitions

M6: Matrix spike recovery is outside of acceptance limits. The analyte concentration is greater than 4X the spiking level.
RL: Reporting Limit
RPD: Relative Percent Difference

Cooler Receipt Log

Cooler ID: Default Cooler   Temp: 0.0ºC

Cooler Inspection Checklist

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

Report Comments

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

Reviewed and Approved By:

Heather Murphy

Heather Murphy
Customer Relationship Specialist
heather.murphy@microbac.com
12/20/24 15:47

CH[illegible]

1 H L 0 9 0 0

HLW Engineering

PM: Heather Murphy

Keystone LABORATORIES, INC.

☐ 600 E. 17th St. Newton, IA 502[illegible] Phone: 641-792[illegible] Fax: 641-792[illegible]

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

PAGE 1 OF 1

PRINT OR TYPE INFORMATION BELOW	REPORT TO:	BILL TO:
SAMPLER: JGH	NAME: TODD WHIPPLE	NAME: JOHN ROOSA
SITE NAME: BOONE CO SLF	COMPANY NAME: HLW ENGINEERING	COMPANY NAME: BOONE CO SLF
ADDRESS:	ADDRESS: PO BOX 314	ADDRESS: 1268 - 224TH LANE
CITY/ST/ZIP:	CITY/ST/ZIP: STORY CITY, IA 50248	CITY/ST/ZIP: BOONE, IA 50036
PHONE:	PHONE: 515-~~290~~ 733-4144	PHONE:
	FAX: 515-733-4146	Keystone Quote No: (If Applicable)

ANALYSES REQUIRED

LAB USE ONLY

LABORATORY WORK ORDER NO. 1HL0900

SAMPLE TEMPERATURE UPON RECEIPT: 0.0 icev °C

CLIENT SAMPLE NUMBER	DATE	TIME	SAMPLE LOCATION	NO. OF CONTAINERS	MATRIX	GRAB/COMPOSITE	LANDFILL APP I		APP I, VOC					SAMPLE CONDITION/COMMENTS	LABORATORY SAMPLE NUMBER
GW-3	12/9/24	14:05		7	WATER	G	X								01
REC-3	12/9/24	14:10		6	WATER	G			X						02

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Date / Time	Turn-Around:
J. C[illegible]	Date 12/11/24 Time		Date Time	☒ Standard ☐ Rush Contact Lab Prior to Submission
Relinquished by: (Signature)	Date Time	Received for Lab by: (Signature) [signature]	Date 12-11-24 Time 9:50	Remarks:

Original - Lab Copy • Yellow - Sampler Copy

FORM: CCR 7-97

Appendix F

Corrective Action System Data

APPENDIX F.1 VOC Detection Summary

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Benzene	GU-3	9/13/2021		1.3	1.0	ug/L
Benzene	GU-3	12/03/2021		6.0	1.0	ug/L
Benzene	GU-3	3/28/2022		6.2	1.0	ug/L
Benzene	GU-3	9/15/2022		6.1	1.0	ug/L
Benzene	GU-3	9/30/2024		6.0	1.0	ug/L
Chlorobenzene	GU-3	3/28/2022		1.8	1.0	ug/L
Chlorobenzene	GU-3	9/15/2022		1.7	1.0	ug/L
Chlorobenzene	GU-3	9/30/2024		1.3	1.0	ug/L
Chloroethane	GU-3	9/13/2021		1.4	1.0	ug/L
Chloroethane	GU-3	12/03/2021		2.0	1.0	ug/L
Chloroethane	GU-3	9/15/2022		1.6	1.0	ug/L
Chloroethane	GU-3	9/30/2024		1.1	1.0	ug/L
Cis-1,2-dichloroethylene	GU-3	9/13/2021		1.0	1.0	ug/L
Cis-1,2-dichloroethylene	GU-3	12/03/2021		10.5	1.0	ug/L
Cis-1,2-dichloroethylene	GU-3	9/15/2022		11.9	1.0	ug/L
Cis-1,2-dichloroethylene	GU-3	9/30/2024		4.3	1.0	ug/L
Ethylbenzene	GU-3	9/15/2022		1.8	1.0	ug/L
Vinyl chloride	GU-3	12/03/2021		3.6	1.0	ug/L
Vinyl chloride	GU-3	3/28/2022		3.0	1.0	ug/L
Vinyl chloride	GU-3	9/15/2022		1.9	1.0	ug/L
Vinyl chloride	GU-3	9/30/2024		1.2	1.0	ug/L
Benzene	GU-4	3/28/2022		1.4	1.0	ug/L
Toluene	GU-4	9/14/2022		1.9	1.0	ug/L
Acetone	GWD-2	3/14/2008		35.5	10.0	ug/L
Benzene	GWD-2	3/14/2008		1.3	1.0	ug/L
Benzene	GWD-2	7/22/2008		1.1	1.0	ug/L
Benzene	GWD-2	9/12/2008		1.2	1.0	ug/L
Benzene	GWD-2	12/18/2008		1.1	1.0	ug/L
Benzene	GWD-2	3/04/2009		1.3	1.0	ug/L
Benzene	GWD-2	9/21/2010		1.6	1.0	ug/L
Bis(2-ethylhexyl) phthalate	GWD-2	10/01/2010		9	8	ug/L
Chloroethane	GWD-2	3/14/2008		1.2	1.0	ug/L
Chloroethane	GWD-2	7/22/2008		1.2	1.0	ug/L
Chloroethane	GWD-2	9/12/2008		1.3	1.0	ug/L
Chloroethane	GWD-2	12/18/2008		1.1	1.0	ug/L
Chloroethane	GWD-2	3/04/2009		1.1	1.0	ug/L
Chloroethane	GWD-2	7/01/2009		1.0	1.0	ug/L
Chloroethane	GWD-2	9/27/2009		2.2	1.0	ug/L
Chloroethane	GWD-2	3/24/2010		4.2	1.0	ug/L
Chloroethane	GWD-2	6/02/2010		7.5	1.0	ug/L
Chloroethane	GWD-2	7/15/2010		5.9	1.0	ug/L
Chloroethane	GWD-2	9/21/2010		24.8	1.0	ug/L
Vinyl chloride	GWD-2	3/14/2008		1.6	1.0	ug/L
Vinyl chloride	GWD-2	6/03/2008		1.0	1.0	ug/L
Vinyl chloride	GWD-2	7/22/2008		1.4	1.0	ug/L
Vinyl chloride	GWD-2	9/12/2008		1.5	1.0	ug/L
Vinyl chloride	GWD-2	12/18/2008		2.2	1.0	ug/L
Vinyl chloride	GWD-2	3/04/2009		2.1	1.0	ug/L
Vinyl chloride	GWD-2	5/05/2009		1.2	1.0	ug/L
Vinyl chloride	GWD-2	7/01/2009		1.1	1.0	ug/L
Vinyl chloride	GWD-2	9/27/2009		1.9	1.0	ug/L
Carbon disulfide	MW02-30A	6/07/2016		1.7	1.0	ug/L
2,4,6-tribromophenol	MW06-37	7/23/2008		96.8	8.0	ug/L
2,4,6-tribromophenol	MW06-37	9/12/2008		93.1	8.0	ug/L
2,4,6-tribromophenol	MW06-37	12/11/2008		83.5	8.0	ug/L
2,4,6-tribromophenol	MW06-38	7/23/2008		83.2	8.0	ug/L
2,4,6-tribromophenol	MW06-38	9/12/2008		93.7	8.0	ug/L
2,4,6-tribromophenol	MW06-38	12/11/2008		85.8	8.0	ug/L
2,4,6-tribromophenol	MW06-39	7/23/2008		78.9	8.0	ug/L
2,4,6-tribromophenol	MW06-39	9/12/2008		100.0	8.0	ug/L
2,4,6-tribromophenol	MW06-39	12/11/2008		92.0	8.0	ug/L
Bis(2-ethylhexyl) phthalate	MW09-42	9/24/2018		7	6	ug/L
Acetone	MW91-8	9/19/2017		12.4	10.0	ug/L
Trans-1,4-dichloro-2-butene	MW91-8	3/16/2016		33	5	ug/L
1,1,1-trichloroethane	MW94-18	12/23/1994		2	1	ug/L
1,1,1-trichloroethane	MW94-18	3/17/1995		2	1	ug/L
1,1-dichloroethane	MW96-23	9/27/2013		1.3	1.0	ug/L
Bis(2-ethylhexyl) phthalate	MW96-23	3/07/2012		10	8	ug/L
1,1-dichloroethane	MW98-25	9/04/2020		1.1	1.0	ug/L
1,1-dichloroethane	MW98-25	3/09/2021		1.8	1.0	ug/L
1,1-dichloroethane	MW98-25	9/07/2021		2.3	1.0	ug/L
1,1-dichloroethane	MW98-25	3/28/2022		1.5	1.0	ug/L
1,1-dichloroethane	MW98-25	3/20/2023		1.7	1.0	ug/L
1,1-dichloroethane	MW98-25	9/12/2023		1.6	1.0	ug/L
1,1-dichloroethane	MW98-25	3/12/2024		1.1	1.0	ug/L
1,1-dichloroethane	MW98-25	9/30/2024		1.2	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
1,4-dichlorobenzene	MW98-25	9/20/2007		1.4	1.0	ug/L
1,4-dichlorobenzene	MW98-25	6/04/2008		1.4	1.0	ug/L
1,4-dichlorobenzene	MW98-25	7/23/2008		1.3	1.0	ug/L
1,4-dichlorobenzene	MW98-25	9/12/2008		1.3	1.0	ug/L
1,4-dichlorobenzene	MW98-25	12/11/2008		1.4	1.0	ug/L
1,4-dichlorobenzene	MW98-25	3/04/2009		1.1	1.0	ug/L
1,4-dichlorobenzene	MW98-25	3/04/2009		1.4	1.0	ug/L
1,4-dichlorobenzene	MW98-25	9/20/2009		1.7	1.0	ug/L
1,4-dichlorobenzene	MW98-25	3/26/2010		2.1	1.0	ug/L
1,4-dichlorobenzene	MW98-25	9/24/2010		2.6	1.0	ug/L
1,4-dichlorobenzene	MW98-25	9/14/2011		1.3	1.0	ug/L
1,4-dichlorobenzene	MW98-25	3/07/2012		1.8	1.0	ug/L
1,4-dichlorobenzene	MW98-25	9/08/2016		2.1	1.0	ug/L
1,4-dichlorobenzene	MW98-25	3/18/2017		2.0	1.0	ug/L
1,4-dichlorobenzene	MW98-25	9/19/2017		1.7	1.0	ug/L
1,4-dichlorobenzene	MW98-25	9/24/2018		2.9	1.0	ug/L
1,4-dichlorobenzene	MW98-25	9/04/2020		1.3	1.0	ug/L
1,4-dichlorobenzene	MW98-25	3/09/2021		1.1	1.0	ug/L
1,4-dichlorobenzene	MW98-25	9/07/2021		2.0	1.0	ug/L
1,4-dichlorobenzene	MW98-25	3/28/2022		1.2	1.0	ug/L
1,4-dichlorobenzene	MW98-25	3/20/2023		1.2	1.0	ug/L
1,4-dichlorobenzene	MW98-25	9/12/2023		2.4	1.0	ug/L
1,4-dichlorobenzene	MW98-25	3/12/2024		1.6	1.0	ug/L
1,4-dichlorobenzene	MW98-25	9/30/2024		1.8	1.0	ug/L
2,4,6-tribromophenol	MW98-25	7/23/2008		105.0	8.0	ug/L
2,4,6-tribromophenol	MW98-25	9/12/2008		120.0	8.0	ug/L
2,4,6-tribromophenol	MW98-25	12/11/2008		97.1	8.0	ug/L
Acetone	MW98-25	6/04/2008		12.1	10.0	ug/L
Acetone	MW98-25	3/30/2011		54.0	10.0	ug/L
Acetone	MW98-25	3/07/2012		14.8	10.0	ug/L
Acetone	MW98-25	3/08/2018		46.5	10.0	ug/L
Benzene	MW98-25	3/09/2004		4.2	1.0	ug/L
Benzene	MW98-25	9/14/2004		3.3	1.0	ug/L
Benzene	MW98-25	3/30/2006		2.5	1.0	ug/L
Benzene	MW98-25	9/15/2006		2.0	1.0	ug/L
Benzene	MW98-25	9/20/2007		2.4	1.0	ug/L
Benzene	MW98-25	3/17/2008		6.0	1.0	ug/L
Benzene	MW98-25	6/04/2008		8.9	1.0	ug/L
Benzene	MW98-25	7/23/2008		5.5	1.0	ug/L
Benzene	MW98-25	9/12/2008		5.0	1.0	ug/L
Benzene	MW98-25	12/11/2008		7.6	1.0	ug/L
Benzene	MW98-25	3/04/2009		6.4	1.0	ug/L
Benzene	MW98-25	3/04/2009		6.5	1.0	ug/L
Benzene	MW98-25	9/20/2009		6.1	1.0	ug/L
Benzene	MW98-25	3/26/2010		6.4	1.0	ug/L
Benzene	MW98-25	9/24/2010		5.6	1.0	ug/L
Benzene	MW98-25	3/30/2011		4.7	1.0	ug/L
Benzene	MW98-25	9/14/2011		4.0	1.0	ug/L
Benzene	MW98-25	3/07/2012		5.8	1.0	ug/L
Benzene	MW98-25	9/27/2013		1.6	1.0	ug/L
Benzene	MW98-25	3/13/2014		1.0	1.0	ug/L
Benzene	MW98-25	9/18/2014		5.6	1.0	ug/L
Benzene	MW98-25	9/11/2015		1.3	1.0	ug/L
Benzene	MW98-25	9/08/2016		1.4	1.0	ug/L
Benzene	MW98-25	3/08/2018		1.9	1.0	ug/L
Benzene	MW98-25	3/09/2021		1.6	1.0	ug/L
Benzene	MW98-25	9/07/2021		2.7	1.0	ug/L
Benzene	MW98-25	3/28/2022		1.3	1.0	ug/L
Benzene	MW98-25	9/12/2023		1.4	1.0	ug/L
Beta-bhc	MW98-25	9/12/2008		.14	.05	ug/L
Beta-bhc	MW98-25	3/13/2014		.07	.05	ug/L
Bis(2-ethylhexyl) phthalate	MW98-25	12/11/2008		13	8	ug/L
Bis(2-ethylhexyl) phthalate	MW98-25	9/27/2013		10	10	ug/L
Bis(2-ethylhexyl) phthalate	MW98-25	9/19/2017		6	6	ug/L
Chlorobenzene	MW98-25	3/17/2008		1.1	1.0	ug/L
Chlorobenzene	MW98-25	6/04/2008		2.8	1.0	ug/L
Chlorobenzene	MW98-25	7/23/2008		2.2	1.0	ug/L
Chlorobenzene	MW98-25	9/12/2008		2.4	1.0	ug/L
Chlorobenzene	MW98-25	12/11/2008		2.3	1.0	ug/L
Chlorobenzene	MW98-25	3/04/2009		1.9	1.0	ug/L
Chlorobenzene	MW98-25	3/04/2009		1.8	1.0	ug/L
Chlorobenzene	MW98-25	3/26/2010		1.4	1.0	ug/L
Chlorobenzene	MW98-25	9/24/2010		2.1	1.0	ug/L
Chlorobenzene	MW98-25	9/14/2011		1.2	1.0	ug/L
Chlorobenzene	MW98-25	3/07/2012		1.3	1.0	ug/L
Chlorobenzene	MW98-25	9/18/2014		1.3	1.0	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Chlorobenzene	MW98-25	9/07/2021		1.0	1.0	ug/L
Chlorobenzene	MW98-25	9/12/2023		1.3	1.0	ug/L
Chlorobenzene	MW98-25	9/30/2024		1.0	1.0	ug/L
Chloroethane	MW98-25	3/17/2008		4.2	1.0	ug/L
Chloroethane	MW98-25	6/04/2008		2.5	1.0	ug/L
Chloroethane	MW98-25	7/23/2008		2.1	1.0	ug/L
Chloroethane	MW98-25	9/12/2008		2.3	1.0	ug/L
Chloroethane	MW98-25	12/11/2008		2.2	1.0	ug/L
Chloroethane	MW98-25	3/04/2009		2.4	1.0	ug/L
Chloroethane	MW98-25	3/04/2009		2.5	1.0	ug/L
Chloroethane	MW98-25	9/20/2009		1.8	1.0	ug/L
Chloroethane	MW98-25	3/26/2010		2.0	1.0	ug/L
Chloroethane	MW98-25	9/24/2010		2.2	1.0	ug/L
Chloroethane	MW98-25	3/30/2011		1.2	1.0	ug/L
Chloroethane	MW98-25	9/14/2011		1.9	1.0	ug/L
Chloroethane	MW98-25	3/07/2012		2.2	1.0	ug/L
Chloroethane	MW98-25	9/12/2012		1.8	1.0	ug/L
Chloroethane	MW98-25	9/27/2013		1.9	1.0	ug/L
Chloroethane	MW98-25	3/13/2014		2.0	1.0	ug/L
Chloroethane	MW98-25	3/16/2016		1.9	1.0	ug/L
Chloroethane	MW98-25	9/08/2016		1.0	1.0	ug/L
Chloroethane	MW98-25	3/08/2018		1.1	1.0	ug/L
Chloroethane	MW98-25	9/07/2021		1.5	1.0	ug/L
Chloroethane	MW98-25	3/20/2023		1.7	1.0	ug/L
Chloroethane	MW98-25	9/12/2023		1.5	1.0	ug/L
Chloroethane	MW98-25	3/12/2024		1.4	1.0	ug/L
Chloroethane	MW98-25	9/30/2024		1.0	1.0	ug/L
Chloromethane	MW98-25	9/30/2024		1.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	3/17/2008		8.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	6/04/2008		6.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	7/23/2008		6.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	9/12/2008		6.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	12/11/2008		5.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	3/04/2009		5.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	3/04/2009		5.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	9/20/2009		5.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	3/26/2010		4.6	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	9/24/2010		7.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	3/30/2011		6.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	9/14/2011		6.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	3/07/2012		6.7	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	9/12/2012		3.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	3/20/2013		2.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	9/27/2013		4.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	3/13/2014		4.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	9/18/2014		4.5	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	3/17/2015		5.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	9/11/2015		1.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	3/16/2016		5.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	9/08/2016		2.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	3/18/2017		2.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	9/19/2017		1.3	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	3/08/2018		2.5	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	9/24/2018		2.3	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	3/25/2019		1.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	9/04/2020		2.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	3/09/2021		2.5	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	9/07/2021		3.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	3/28/2022		2.5	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	3/20/2023		2.3	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	9/12/2023		2.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	3/12/2024		1.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW98-25	9/30/2024		2.0	1.0	ug/L
Dichlorodifluoromethane	MW98-25	7/23/2008		6.2	1.0	ug/L
Dichlorodifluoromethane	MW98-25	9/12/2008		2.6	1.0	ug/L
Dichlorodifluoromethane	MW98-25	3/04/2009		21.6	1.0	ug/L
Dichlorodifluoromethane	MW98-25	9/27/2009		16.6	1.0	ug/L
Dichlorodifluoromethane	MW98-25	3/26/2010		34.6	1.0	ug/L
Dichlorodifluoromethane	MW98-25	9/24/2010		28.2	1.0	ug/L
Dichlorodifluoromethane	MW98-25	3/30/2011		32.0	1.0	ug/L
Dichlorodifluoromethane	MW98-25	9/14/2011		12.6	1.0	ug/L
Dichlorodifluoromethane	MW98-25	3/07/2012		34.5	1.0	ug/L
Dichlorodifluoromethane	MW98-25	9/12/2012		4.2	1.0	ug/L
Dichlorodifluoromethane	MW98-25	3/20/2013		13.0	1.0	ug/L
Dichlorodifluoromethane	MW98-25	9/27/2013		1.3	1.0	ug/L
Dichlorodifluoromethane	MW98-25	3/13/2014		1.5	1.0	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Dichlorodifluoromethane	MW98-25	9/18/2014		24.3	1.0	ug/L
Dichlorodifluoromethane	MW98-25	9/11/2015		14.7	1.0	ug/L
Dichlorodifluoromethane	MW98-25	9/08/2016		6.6	1.0	ug/L
Dichlorodifluoromethane	MW98-25	3/18/2017		18.8	1.0	ug/L
Dichlorodifluoromethane	MW98-25	9/19/2017		6.9	1.0	ug/L
Dichlorodifluoromethane	MW98-25	3/08/2018		38.4	1.0	ug/L
Dichlorodifluoromethane	MW98-25	9/24/2018		1.6	1.0	ug/L
Dichlorodifluoromethane	MW98-25	3/25/2019		3.8	1.0	ug/L
Dichlorodifluoromethane	MW98-25	3/23/2020		19.4	1.0	ug/L
Dichlorodifluoromethane	MW98-25	9/04/2020		1.2	1.0	ug/L
Dichlorodifluoromethane	MW98-25	3/09/2021		8.6	1.0	ug/L
Dichlorodifluoromethane	MW98-25	9/07/2021		4.8	1.0	ug/L
Dichlorodifluoromethane	MW98-25	3/28/2022		1.7	1.0	ug/L
Dichlorodifluoromethane	MW98-25	3/20/2023		3.3	1.0	ug/L
Dichlorodifluoromethane	MW98-25	9/12/2023		2.1	1.0	ug/L
Ethylbenzene	MW98-25	6/04/2008		2.2	1.0	ug/L
Ethylbenzene	MW98-25	12/11/2008		1.8	1.0	ug/L
Ethylbenzene	MW98-25	9/20/2009		1.2	1.0	ug/L
Ethylbenzene	MW98-25	3/26/2010		2.6	1.0	ug/L
Toluene	MW98-25	6/04/2008		1.2	1.0	ug/L
Toluene	MW98-25	3/26/2010		1.2	1.0	ug/L
Toluene	MW98-25	9/24/2010		1.3	1.0	ug/L
Trichloroethylene	MW98-25	6/04/2008		1.2	1.0	ug/L
Trichlorofluoromethane	MW98-25	6/04/2008		28.7	1.0	ug/L
Trichlorofluoromethane	MW98-25	9/12/2008		2.4	1.0	ug/L
Trichlorofluoromethane	MW98-25	3/04/2009		16.0	1.0	ug/L
Trichlorofluoromethane	MW98-25	3/04/2009		16.4	1.0	ug/L
Trichlorofluoromethane	MW98-25	3/26/2010		27.0	1.0	ug/L
Trichlorofluoromethane	MW98-25	9/24/2010		12.1	1.0	ug/L
Trichlorofluoromethane	MW98-25	3/30/2011		19.3	1.0	ug/L
Trichlorofluoromethane	MW98-25	9/14/2011		5.0	1.0	ug/L
Trichlorofluoromethane	MW98-25	3/07/2012		16.4	1.0	ug/L
Trichlorofluoromethane	MW98-25	9/12/2012		1.0	1.0	ug/L
Trichlorofluoromethane	MW98-25	3/20/2013		6.2	1.0	ug/L
Trichlorofluoromethane	MW98-25	9/27/2013		1.9	1.0	ug/L
Trichlorofluoromethane	MW98-25	9/18/2014		3.2	1.0	ug/L
Trichlorofluoromethane	MW98-25	9/08/2016		4.4	1.0	ug/L
Trichlorofluoromethane	MW98-25	3/18/2017		4.3	1.0	ug/L
Trichlorofluoromethane	MW98-25	9/19/2017		1.6	1.0	ug/L
Trichlorofluoromethane	MW98-25	3/08/2018		2.5	1.0	ug/L
Trichlorofluoromethane	MW98-25	3/23/2020		6.0	1.0	ug/L
Trichlorofluoromethane	MW98-25	9/04/2020		1.0	1.0	ug/L
Trichlorofluoromethane	MW98-25	3/09/2021		2.6	1.0	ug/L
Trichlorofluoromethane	MW98-25	3/28/2022		1.0	1.0	ug/L
Trichlorofluoromethane	MW98-25	3/20/2023		1.2	1.0	ug/L
Trichlorofluoromethane	MW98-25	9/12/2023		1.1	1.0	ug/L
Trichlorofluoromethane	MW98-25	3/12/2024		1.0	1.0	ug/L
Vinyl chloride	MW98-25	3/17/2008		2.8	1.0	ug/L
Vinyl chloride	MW98-25	6/04/2008		2.8	1.0	ug/L
Vinyl chloride	MW98-25	7/23/2008		1.9	1.0	ug/L
Vinyl chloride	MW98-25	12/11/2008		2.4	1.0	ug/L
Vinyl chloride	MW98-25	3/04/2009		2.5	1.0	ug/L
Vinyl chloride	MW98-25	3/04/2009		2.3	1.0	ug/L
Vinyl chloride	MW98-25	3/26/2010		1.6	1.0	ug/L
Vinyl chloride	MW98-25	9/24/2010		1.7	1.0	ug/L
Vinyl chloride	MW98-25	3/30/2011		1.5	1.0	ug/L
Vinyl chloride	MW98-25	9/14/2011		1.0	1.0	ug/L
Vinyl chloride	MW98-25	3/07/2012		1.4	1.0	ug/L
Xylenes, total	MW98-25	6/04/2008		5.5	2.0	ug/L
Xylenes, total	MW98-25	7/23/2008		2.5	2.0	ug/L
Benzene	PEC-3	3/28/2022		1.5	1.0	ug/L
Cis-1,2-dichloroethylene	PEC-3	3/28/2022		3.2	1.0	ug/L
1,1-dichloroethane	Sramp 1	9/21/2009		1.1	1.0	ug/L
1,1-dichloroethane	Sramp 1	3/30/2011		1.0	1.0	ug/L
1,1-dichloroethane	Sramp 1	3/09/2021		2.6	1.0	ug/L
1,1-dichloroethane	Sramp 1	3/28/2022		1.4	1.0	ug/L
1,1-dichloroethane	Sramp 1	3/20/2023		1.4	1.0	ug/L
1,1-dichloroethylene	Sramp 1	12/12/2008		1	1	ug/L
1,2,4-trichlorobenzene	Sramp 1	9/21/2009		5.2	1.0	ug/L
1,4-dichlorobenzene	Sramp 1	7/21/2008		1.8	1.0	ug/L
1,4-dichlorobenzene	Sramp 1	9/12/2008		1.8	1.0	ug/L
1,4-dichlorobenzene	Sramp 1	12/12/2008		1.6	1.0	ug/L
1,4-dichlorobenzene	Sramp 1	3/04/2009		1.4	1.0	ug/L
1,4-dichlorobenzene	Sramp 1	9/21/2009		2.8	1.0	ug/L
1,4-dichlorobenzene	Sramp 1	9/24/2010		3.4	1.0	ug/L
1,4-dichlorobenzene	Sramp 1	3/30/2011		3.5	1.0	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
1,4-dichlorobenzene	Sramp 1	9/14/2011		2.7	1.0	ug/L
1,4-dichlorobenzene	Sramp 1	3/07/2012		1.3	1.0	ug/L
1,4-dichlorobenzene	Sramp 1	3/20/2013		4.0	1.0	ug/L
1,4-dichlorobenzene	Sramp 1	9/26/2013		3.3	1.0	ug/L
1,4-dichlorobenzene	Sramp 1	3/17/2015		2.2	1.0	ug/L
1,4-dichlorobenzene	Sramp 1	9/11/2015		6.4	1.0	ug/L
1,4-dichlorobenzene	Sramp 1	3/16/2016		3.9	1.0	ug/L
1,4-dichlorobenzene	Sramp 1	9/08/2016		4.6	1.0	ug/L
1,4-dichlorobenzene	Sramp 1	3/18/2017		2.7	1.0	ug/L
1,4-dichlorobenzene	Sramp 1	3/09/2021		5.8	1.0	ug/L
1,4-dichlorobenzene	Sramp 1	3/28/2022		5.0	1.0	ug/L
1,4-dichlorobenzene	Sramp 1	3/20/2023		6.5	1.0	ug/L
Acetone	Sramp 1	3/30/2011		40.1	10.0	ug/L
Acetone	Sramp 1	3/16/2016		82.1	10.0	ug/L
Acetone	Sramp 1	3/25/2019		19.3	10.0	ug/L
Acetone	Sramp 1	3/28/2022		23.5	10.0	ug/L
Benzene	Sramp 1	7/21/2008		4.7	1.0	ug/L
Benzene	Sramp 1	9/12/2008		3.6	1.0	ug/L
Benzene	Sramp 1	3/04/2009		1.3	1.0	ug/L
Benzene	Sramp 1	9/21/2009		7.6	1.0	ug/L
Benzene	Sramp 1	9/24/2010		4.2	1.0	ug/L
Benzene	Sramp 1	3/30/2011		5.8	1.0	ug/L
Benzene	Sramp 1	3/20/2013		3.5	1.0	ug/L
Benzene	Sramp 1	9/26/2013		6.0	1.0	ug/L
Benzene	Sramp 1	3/17/2015		2.6	1.0	ug/L
Benzene	Sramp 1	9/11/2015		6.2	1.0	ug/L
Benzene	Sramp 1	3/16/2016		5.0	1.0	ug/L
Benzene	Sramp 1	9/08/2016		2.2	1.0	ug/L
Benzene	Sramp 1	3/18/2017		2.0	1.0	ug/L
Benzene	Sramp 1	3/25/2019		1.2	1.0	ug/L
Benzene	Sramp 1	9/03/2019		1.2	1.0	ug/L
Benzene	Sramp 1	3/09/2021		5.7	1.0	ug/L
Benzene	Sramp 1	3/28/2022		4.8	1.0	ug/L
Benzene	Sramp 1	3/20/2023		5.7	1.0	ug/L
Chlorobenzene	Sramp 1	7/21/2008		1.6	1.0	ug/L
Chlorobenzene	Sramp 1	9/12/2008		1.8	1.0	ug/L
Chlorobenzene	Sramp 1	9/21/2009		2.8	1.0	ug/L
Chlorobenzene	Sramp 1	9/24/2010		1.5	1.0	ug/L
Chlorobenzene	Sramp 1	3/30/2011		1.5	1.0	ug/L
Chlorobenzene	Sramp 1	3/20/2013		1.1	1.0	ug/L
Chlorobenzene	Sramp 1	9/26/2013		2.1	1.0	ug/L
Chlorobenzene	Sramp 1	9/11/2015		2.4	1.0	ug/L
Chlorobenzene	Sramp 1	3/16/2016		1.9	1.0	ug/L
Chlorobenzene	Sramp 1	9/08/2016		1.4	1.0	ug/L
Chlorobenzene	Sramp 1	3/18/2017		1.1	1.0	ug/L
Chlorobenzene	Sramp 1	3/25/2019		1.5	1.0	ug/L
Chlorobenzene	Sramp 1	3/09/2021		1.7	1.0	ug/L
Chlorobenzene	Sramp 1	3/28/2022		1.4	1.0	ug/L
Chlorobenzene	Sramp 1	3/20/2023		1.7	1.0	ug/L
Chloroethane	Sramp 1	7/21/2008		1.5	1.0	ug/L
Chloroethane	Sramp 1	9/12/2008		1.0	1.0	ug/L
Chloroethane	Sramp 1	3/04/2009		1.4	1.0	ug/L
Chloroethane	Sramp 1	9/21/2009		1.4	1.0	ug/L
Chloroethane	Sramp 1	3/30/2011		1.3	1.0	ug/L
Chloroethane	Sramp 1	9/14/2011		1.2	1.0	ug/L
Chloroethane	Sramp 1	9/26/2013		2.2	1.0	ug/L
Chloroethane	Sramp 1	9/11/2015		1.4	1.0	ug/L
Chloroethane	Sramp 1	3/16/2016		1.9	1.0	ug/L
Chloroethane	Sramp 1	9/08/2016		2.0	1.0	ug/L
Chloroethane	Sramp 1	3/18/2017		1.6	1.0	ug/L
Chloroethane	Sramp 1	3/25/2019		2.6	1.0	ug/L
Chloroethane	Sramp 1	9/03/2019		2.5	1.0	ug/L
Chloroethane	Sramp 1	3/09/2021		2.6	1.0	ug/L
Chloroethane	Sramp 1	3/28/2022		1.6	1.0	ug/L
Chloroethane	Sramp 1	3/20/2023		2.0	1.0	ug/L
Cis-1,2-dichloroethylene	Sramp 1	7/21/2008		3.1	1.0	ug/L
Cis-1,2-dichloroethylene	Sramp 1	9/12/2008		2.5	1.0	ug/L
Cis-1,2-dichloroethylene	Sramp 1	12/12/2008		1.7	1.0	ug/L
Cis-1,2-dichloroethylene	Sramp 1	3/04/2009		1.8	1.0	ug/L
Cis-1,2-dichloroethylene	Sramp 1	9/21/2009		2.9	1.0	ug/L
Cis-1,2-dichloroethylene	Sramp 1	9/24/2010		2.3	1.0	ug/L
Cis-1,2-dichloroethylene	Sramp 1	3/30/2011		3.6	1.0	ug/L
Cis-1,2-dichloroethylene	Sramp 1	9/14/2011		2.4	1.0	ug/L
Cis-1,2-dichloroethylene	Sramp 1	3/20/2013		2.3	1.0	ug/L
Cis-1,2-dichloroethylene	Sramp 1	9/26/2013		3.3	1.0	ug/L
Cis-1,2-dichloroethylene	Sramp 1	3/17/2015		1.4	1.0	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Cis-1,2-dichloroethylene	Sramp 1	9/11/2015		2.7	1.0	ug/L
Cis-1,2-dichloroethylene	Sramp 1	3/16/2016		2.5	1.0	ug/L
Cis-1,2-dichloroethylene	Sramp 1	9/08/2016		2.8	1.0	ug/L
Cis-1,2-dichloroethylene	Sramp 1	3/18/2017		2.1	1.0	ug/L
Cis-1,2-dichloroethylene	Sramp 1	3/25/2019		4.0	1.0	ug/L
Cis-1,2-dichloroethylene	Sramp 1	9/03/2019		2.4	1.0	ug/L
Cis-1,2-dichloroethylene	Sramp 1	3/09/2021		4.4	1.0	ug/L
Cis-1,2-dichloroethylene	Sramp 1	3/28/2022		3.0	1.0	ug/L
Cis-1,2-dichloroethylene	Sramp 1	3/20/2023		3.0	1.0	ug/L
Dichlorodifluoromethane	Sramp 1	9/21/2009		20.4	1.0	ug/L
Dichlorodifluoromethane	Sramp 1	9/24/2010		7.6	1.0	ug/L
Dichlorodifluoromethane	Sramp 1	3/07/2012		1.1	1.0	ug/L
Dichlorodifluoromethane	Sramp 1	9/12/2012		2.2	1.0	ug/L
Dichlorodifluoromethane	Sramp 1	3/20/2013		9.5	1.0	ug/L
Dichlorodifluoromethane	Sramp 1	9/26/2013		20.3	1.0	ug/L
Dichlorodifluoromethane	Sramp 1	3/17/2015		16.7	1.0	ug/L
Dichlorodifluoromethane	Sramp 1	9/11/2015		40.6	1.0	ug/L
Dichlorodifluoromethane	Sramp 1	3/16/2016		16.5	1.0	ug/L
Dichlorodifluoromethane	Sramp 1	9/08/2016		40.7	1.0	ug/L
Dichlorodifluoromethane	Sramp 1	3/18/2017		34.8	1.0	ug/L
Dichlorodifluoromethane	Sramp 1	9/19/2017		3.1	1.0	ug/L
Dichlorodifluoromethane	Sramp 1	3/25/2019		38.4	1.0	ug/L
Dichlorodifluoromethane	Sramp 1	3/09/2021		50.7	1.0	ug/L
Dichlorodifluoromethane	Sramp 1	3/28/2022		12.2	1.0	ug/L
Dichlorodifluoromethane	Sramp 1	3/20/2023		18.4	1.0	ug/L
Ethylbenzene	Sramp 1	7/21/2008		2.6	1.0	ug/L
Ethylbenzene	Sramp 1	9/12/2008		2.0	1.0	ug/L
Ethylbenzene	Sramp 1	9/21/2009		7.7	1.0	ug/L
Ethylbenzene	Sramp 1	9/24/2010		2.7	1.0	ug/L
Ethylbenzene	Sramp 1	3/30/2011		2.3	1.0	ug/L
Ethylbenzene	Sramp 1	9/14/2011		1.8	1.0	ug/L
Ethylbenzene	Sramp 1	9/26/2013		3.5	1.0	ug/L
Ethylbenzene	Sramp 1	3/16/2016		2.1	1.0	ug/L
Ethylbenzene	Sramp 1	3/09/2021		1.9	1.0	ug/L
Trichlorofluoromethane	Sramp 1	7/21/2008		26.0	1.0	ug/L
Trichlorofluoromethane	Sramp 1	9/12/2008		12.7	1.0	ug/L
Trichlorofluoromethane	Sramp 1	12/12/2008		17.7	1.0	ug/L
Trichlorofluoromethane	Sramp 1	3/04/2009		26.8	1.0	ug/L
Trichlorofluoromethane	Sramp 1	9/21/2009		14.1	1.0	ug/L
Trichlorofluoromethane	Sramp 1	9/24/2010		3.0	1.0	ug/L
Trichlorofluoromethane	Sramp 1	3/30/2011		7.3	1.0	ug/L
Trichlorofluoromethane	Sramp 1	9/14/2011		2.8	1.0	ug/L
Trichlorofluoromethane	Sramp 1	3/20/2013		4.0	1.0	ug/L
Trichlorofluoromethane	Sramp 1	9/26/2013		3.0	1.0	ug/L
Trichlorofluoromethane	Sramp 1	9/11/2015		7.3	1.0	ug/L
Trichlorofluoromethane	Sramp 1	3/16/2016		39.1	1.0	ug/L
Trichlorofluoromethane	Sramp 1	9/08/2016		24.2	1.0	ug/L
Trichlorofluoromethane	Sramp 1	3/18/2017		17.9	1.0	ug/L
Trichlorofluoromethane	Sramp 1	9/19/2017		2.1	1.0	ug/L
Trichlorofluoromethane	Sramp 1	3/25/2019		22.5	1.0	ug/L
Trichlorofluoromethane	Sramp 1	3/09/2021		28.0	1.0	ug/L
Trichlorofluoromethane	Sramp 1	3/28/2022		8.1	1.0	ug/L
Trichlorofluoromethane	Sramp 1	3/20/2023		9.1	1.0	ug/L
Vinyl chloride	Sramp 1	7/21/2008		1.1	1.0	ug/L
Vinyl chloride	Sramp 1	9/12/2008		1.0	1.0	ug/L
Vinyl chloride	Sramp 1	12/12/2008		1.0	1.0	ug/L
Vinyl chloride	Sramp 1	3/04/2009		1.0	1.0	ug/L
Xylenes, total	Sramp 1	7/21/2008		3.4	2.0	ug/L
Xylenes, total	Sramp 1	9/12/2008		2.8	2.0	ug/L
Xylenes, total	Sramp 1	12/12/2008		2.3	2.0	ug/L
Xylenes, total	Sramp 1	9/21/2009		5.9	2.0	ug/L
Xylenes, total	Sramp 1	9/24/2010		5.7	2.0	ug/L
Xylenes, total	Sramp 1	9/14/2011		3.2	2.0	ug/L
Xylenes, total	Sramp 1	9/26/2013		3.4	2.0	ug/L
Xylenes, total	Sramp 1	3/16/2016		2.4	2.0	ug/L
Acetone	SRAMP 2	3/13/2014		82.2	10.0	ug/L
Ethylbenzene	SRAMP 2	9/24/2018		1.5	1.0	ug/L
Xylenes, total	SRAMP 2	9/24/2018		8.1	2.0	ug/L

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

Appendix G

Leachate Collection System Performance Evaluation Report

Leachate Collection System Performance Evaluation

Leachate collected by the leachate collection system is hauled to the Boone Water Pollution Control Facility (WPCF) for treatment and disposal in accordance with the Industrial User Permit with the City of Boone (Appendix G.1). The Hauled Waste Discharge Permit with the Des Moines Metropolitan Wastewater Reclamation Authority (WRA) for treatment and disposal of leachate has expired and will not be renewed until desired. A copy of the expired Hauled Waste Discharge Permit with the WRA is included in Appendix G.1.

Leachate Disposal at City of Boone Water Pollution Control Facility

Between January 1, 2024 and December 31, 2024 approximately 1,253,822 gallons of leachate (Appendix G.2) were transported and discharged to the Boone WPCF for treatment and disposal. Chemical analysis of the leachate as required by the Boone WPCF for 2023 (Appendix G.3) indicates that all of the parameters were within the limits established in the treatment agreements. In addition, approximately 3,486 gallons of surface water impacted by leachate (Appendix G.2) were transported and discharged to the Boone WPCF for treatment and disposal.

Leachate Disposal at the Des Moines WRA Facility

No leachate was transported and discharged at the WRA in 2024.

Leachate Recirculation

A Leachate Recirculation Operation Plan was submitted to IDNR on November 4, 2019 (Doc #96294) and leachate recirculation over Subtitle D composite lined disposal areas was approved in the November 22, 2019 SDP Permit revision. Permission to recirculate leachate was rescinded in the SDP Permit revision dated October 9, 2020 as a result of the Notice of Violation (NOV) from IDNR FO #5 dated July 20, 2020 (Doc #98131) the facility received for "General Surface Water Criteria". It is anticipated that as operations continue in Phase 8-R a request will be submitted to IDNR to allow leachate recirculation over the Subtitle D composite lined disposal areas (Phases 7-R and 8-R) to resume.

Leachate Mixed with Posi-Shell

In 2024 staff reported that no leachate was mixed with Posi-Shell for use as Alternative Daily Cover.

Leachate Elevation Measurements

2024 Leachate elevation data is summarized in the tables presented in Appendix G.4. Due to a break or an obstruction in the casing, removal of LPZ-10 from the monitoring system was requested in the HLW letter dated July 8, 2024 (Doc #110390). IDNR approved the request in the July 17, 2024 letter (Doc #110500).

Special Provision X.4.i.2 of the SDP Permit requires the submittal of quarterly reports summarizing leachate well head levels and monthly flow rates from Extraction Wells EW-1 and EW-2. The quarterly reports for 2023 were submitted as follows:

1st quarter	April 1, 2024 (Doc #109704)
2nd quarter	July 8, 2024 (Doc #110388)
3rd quarter	October 2, 2024 (Doc #110993)
4th quarter	January 2, 2024 (Doc #111624)

Leachate elevation measurements in all site LPZ will continue to be monitored monthly in 2024 and will be assessed as part of the LCSPE for 2025.

Closed Landfill LCP

Available data suggests that the capped portion of the landfill (Area A, B, and C) does not demonstrate substantial surges in leachate head during periods of wet weather. Any variability in the measured leachate surface appears to be related to gas venting in the leachate piezometers rather than additional build-up of perched leachate. As reported in the 2024 Quarterly Leachate Reports, Extraction Well EW-1 and EW-2 were noted as operational during all measurement events in 2024. The 2024 leachate levels in Extraction Wells EW-1 and EW-2 are included in Appendix G.4.

RCRA Subtitle D LCP

The Leachate Collection System (LCS) in the Phase 1, 2, and 3 Expansion Areas actively conveys leachate out of the closed system that is upgradient from the Phase 1 Expansion. Based on available water/leachate elevation data, it is interpreted that the existing LCS lowers the leachate surface in the southern portion of the closed areas and maintains groundwater quality standards at compliance monitoring points.

The LCS was expanded into Phase 4-R in October, 1999; into Phase 5-R in September, 2001; into Phase 6-R in October, 2003; and into Phase 7-R in March, 2016. Tank #2 was abandoned and replaced with a double walled underground leachate storage tank with a capacity of 15,000 gallons (referred to as Tank 4) during the Phase 7-R Expansion project. Landfilling in Phase 7-R was approved in Permit Amendment #3 dated March 16, 2016 (Doc #85748).

The LCS was expanded into Phase 8-R in November, 2021. The Phase 8-R Expansion project included construction of a Subtitle D composite lined leachate storage lagoon with a capacity of approximately 915,870 gallons. Note that this volume does not include the top two feet of storage in the lagoon (freeboard storage). The leachate storage lagoon will be the primary storage location for leachate collected from Phases 4-R, 5-R, 6-R, 7-R, and 8-R. Tank #4 remains in place as backup storage for leachate collected from these areas. Landfilling in Phase 8-R was approved in the Permit Revision dated November 22, 2021 (Doc #101730).

LPZ-17 was installed in Phase 8-R near the low point in the Phase 8-R disposal area to measure leachate head on the Subtitle D composite liner. LPZ-17 was measured monthly in 2024 - measurements are included on the table in Appendix G.4. As reported in the 2024 Quarterly Leachate Reports, all measurements from LPZ-17 showed leachate thickness on the liner to be less than 12”. Based on the leachate head data, the leachate collection system appears to be operating as designed. No changes are recommended.

Separation of the base of solid waste and the groundwater table is evaluated through observation of groundwater elevation measurements collected from a groundwater piezometer located in the Subtitle D compliant lined disposal areas, GPZ-2.

Groundwater head measurements are required semiannually in accordance with the SDP Permit. Groundwater head measurements in 2024 are summarized in the table below:

Date	GPZ-2
1/11/24	0.28 ft
2/21/24	0.28 ft
3/12/24	0.60 ft
4/23/24	0.55 ft
5/7/24	1.65 ft
6/3/24	1.70 ft
7/24/24	1.75 ft
8/6/24	1.09 ft
9/30/24	0.30 ft
10/2/24	0.40 ft
11/25/24	0.55 ft
12/9/24	0.53 ft

Based on the groundwater head data, separation is maintained between the base of solid waste and the groundwater surface. No changes are recommended.

Leachate Line Cleaning

IAC 567-113.7(5)b(5) requires that the leachate system be cleaned every three (3) years. Leachate lines were cleaned during August/September, 2022. The leachate lines should be cleaned again in 2025 in accordance with regulations.

APPENDIX G.1- Industrial User Permit

City of Boone

Daniel Scott
City Engineer

April 20, 2021

Board of Supervisors
Boone County Courthouse
201 State Street
Boone, Iowa 50036

RE: Modification of Boone County Landfill Industrial User Permit No. 003.

Dear Board Members:

The City of Boone has modified the Boone County Landfill industrial sewer user permit for ease of understanding. The permit is now classified as a Monitoring permit. Monitoring permits have no limits associated with them and are used as verification of concentration of pollutants in the leachate wastewater. Enclosed with this letter is the Boone County Sanitary Landfill Industrial User Permit.

The enclosed Industrial User Permit No. 003 covers the landfill leachate wastewater discharged from the Boone County Landfill into the City of Boone sewer system. All discharges from this facility and actions and reports relating thereto shall be in accordance with the terms and conditions of this permit.

If you wish to appeal or challenge any conditions imposed in this permit, a petition shall be filed for modification or reissuance in accordance with the requirements of the City of Boone Code of Ordinances, Section 96.23 "WASTEWATER DISCHARGE PERMIT APPEALS" within 30 days of your receipt of this correspondence. Pursuant to Ordinance 96.23, failure to petition for reconsideration of this permit within allocated time is deemed a waiver by the permittee of this right to challenge the terms of this permit.

Signed by: Daniel Scott
City Engineer

Issued Date: 4/21/21

923 8th St, P.O. Box 550
Telephone: 515-432-4211

Boone, Iowa 50036-0550
Fax: 515-433-0630

Industrial User Monitoring Permit No. 003

In accordance with all terms and conditions of the City of Boone Code of Ordinances, Chapter 96 and also with any applicable provisions of Federal or State law or regulation, permission is hereby granted to:

Boone County Landfill
1268 224th Lane
Boone, Iowa 50036

For the Contribution of landfill leachate wastewater into the City of Boone sewer system located at 1721 McHose Drive, The City of Boone Water Environment Plant (WEP), wastewater dumping station. This permit granted in conformity with the plans, specifications and other data submitted to the Utilities Superintendent in support of the application filed on 7/1/20, and considered part of this permit.

Effective: January 1, 2021
Expire: December 31, 2025

If the permittee wishes to continue to discharge after the expiration date of this permit, an application must be filed for a renewal permit in accordance with the requirements of the City of Boone Code of Ordinances, Section 96.27 "WASTEWATER DISCHARGE PERMIT REISSUANCE". The application must be received a minimum of 90 days prior to the expiration date of this Permit.

Signed by: ______________________

City Engineer

Issued Date: 4/21/21

PART I, OUTFALLS

During the period of January 1, 2021 to December 31, 2025, the permittee has authorization to discharge Landfill Leachate wastewater into the City of Boone sewer system through the City of Boone WEP, wastewater, receiving station, located at 1721 McHose Drive, Boone, Iowa.

The discharger shall deliver the leachate to the wastewater dumping station in a tanker approved by the City Engineer. The tanker shall be equipped with a discharge device capable of controlling the rate of discharge to the sewer system. Delivery of the leachate shall be at the times the WEP normally staffed.

PART II, DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS

From the period beginning on January 1, 2021, and ending on December 31, 2025, of this permit, the permittee shall monitor the Landfill Leachate wastewater for the following parameters at the indicated frequencies. The permittee shall comply with the effluent monitoring requirements as specified in the following TABLE 1 of this permit.

TABLE 1

Parameters	Units	Monitoring Frequency	Sample Type
Flow - Batch	GPD	Each load	Tanker volume
BOD5	lbs./day	1/20,000 gal	Grab
NH3-N	lbs./day	1/20,000 gal	Grab
pH	STD Units	1/20,000 gal	Grab
TSS	lbs./day	1/20,000 gal	Grab
Arsenic	mg/l	1/6 months	Grab
Barium	mg/l	1/6/ months	Grab
Benzene	mg/l	1/year	Grab
Cadmium	mg/l	1/6 months	Grab
Carbon- tetrachloride	mg/l	1/year	Grab
Chlordane	mg/l	1/year	Grab
Chloride	mg/l	1/year	Grab
Chlorobenzene	mg/l	1/year	Grab
Chloroform	mg/l	1/year	Grab
Chromium, Total	mg/l	1/6 months	Grab
Copper	mg/l	1/6 months	Grab
Cyanide	mg/l	1/6 months	Grab
o-Cresol	mg/l	1/year	Grab
m-Cresol	mg/l	1/year	Grab
p-Cresol	mg/l	1/year	Grab
Cresol	mg/l	1/year	Grab
2,4-D	mg/l	1/year	Grab
1,4-Dichlorobenzene	mg/l	1/year	Grab

PARAMETERS	UNITS	MONITORING FREQUENCIES	SAMPLE TYPES
1,2-Dichloroethane	mg/l	1/year	Grab
1,1-Dichloroethylene	mg/l	1/year	Grab
2,4-Dinitrotoluene	mg/l	1/year	Grab
Endrin	mg/l	1/year	Grab
Heptachlor- epoxide	mg/l	1/year	Grab
Hexa-chlorobenzene	mg/l	1/year	Grab
Hexachlorobutadiene	mg/l	1/year	Grab
Hexachloroethane	mg/l	1/year	Grab
Lead	mg/l	1/6 months	Grab
Lindane	mg/l	1/year	Grab
Mercury	mg/l	1/6 months	Grab
Methoxychlor	mg/l	1/year	Grab
Methyl-ethyl ketone	mg/l	1/year	Grab
Molybdenum	mg/l	1/6 months	Grab
Nickel	mg/l	1/6 months	Grab
Nitrobenzene	mg/l	1/year	Grab
Pentachlorophenol	mg/l	1/year	Grab
Pyridine	mg/l	1/year	Grab
Selenium	mg/l	1/6 months	Grab
Silver	mg/l	1/6 months	Grab
Tetrachloroethylene	mg/l	1/year	Grab
Toxaphene	mg/l	1/year	Grab
Total Phenols	mg/l	1/year	Grab
Trichloroethylene	mg/l	1/year	Grab
2,4,5-Trichlorophenol	mg/l	1/year	Grab
2,4,6-Trichlorophenol	mg/l	1/year	Grab
2,4,5-TP (Silvex)	mg/l	1/year	Grab
Vinyl chloride	mg/l	1/year	Grab
Zinc	mg/l	1/6 months	Grab

BOD5 = 5 day Biological Oxygen Demand
mg/l = milligram per liter
NH3-N = Ammonia Nitrogen as Nitrogen
GPD = Gallons per day
Grab = grab sample
STD Unit = Standard pH Unit
TSS = Total Suspended Solids
NA = Does not apply

PART III, SPECIAL CONDITIONS

The Boone County Landfill will be required to have the Landfill Leachate wastewater, analyzed for all of the parameters at their respective monitoring frequencies and at each of the leachate containment tanks (with the exception of BOD, NH3-N, pH and TSS) as specified in Table 1 in PART II, DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS. Samples that are to be analyzed one sample per six month are to be collected between the months January 1 to June 30 for the first six months of the year, and July 1 to December 31 for the second six month of the same year. A signed report, in accordance with the City of Boone Code of Ordinances, Section 96.19 "APPLICATION SIGNITORIES AND CERTIFICATION", that include monitoring results is to be sent to the City of Boone Engineer's office no later than 15 days after analysis report has been received by the landfill administration.

The City of Boone WEP personnel will be responsible for overseeing the monitoring of the flows, and the sampling of the leachate wastewater discharged from the hauling truck. The samples will be analyzed for BOD, NH3-N, pH, and TSS. These sample containers will be labeled with a date, time, sample person and leachate tank the truck is discharging. These analyses are used for billing purposes.

The Superintendent may modify a wastewater permit for good cause as describe in City Boone Code of Ordinances, Section 96.24 "WATEWATER DISCHARGE PERMIT MODIFICATION".

Wastewater discharge permit is non-transferable without prior notification to the City of Boone in accordance with City of Boone Code of Ordinances, Section 96.25 "WASTEWATER DISCHARGE PERMIT TRANSFER".

A user who violates, or continues to violate the wastewater discharge permit, or any other pretreatment standard or requirement shall be liable to the City for a maximum civil penalty of $1,000 per violation, per day. In the case of a monthly or other long-term average discharge limit, penalties shall occur for each day during the period of the violation. Refer to City of Boone Code of Ordinances, Section 96.52.1A "VIOLATIONS. Civil Penalties".

A user who willfully violates any provision of this chapter, a wastewater permit, or order issued hereunder, or any other pretreatment standard or requirement, shall upon conviction, be guilty of a misdemeanor, and subject to a penalty as prescribed in City of Boone Code of Ordinance, Section 1.14 "STANDARD PENALTIES". The punishment can be a fine of not more than $500 per violation, per day, or imprisonment for no more than 30 days. Refer to City of Boone Code of Ordinances, Sections 96.52.2A "VIOLATIONS, Criminal Prosecution".

PART IV, STANDARD CONDITIONS

The standard conditions can be found in the City of Boone Code of Ordinances, Chapter 96.

DES MOINES METROPOLITAN
WASTEWATER RECLAMATION AUTHORITY

CITY OF DES MOINES, OPERATING CONTRACTOR

August 26, 2022

John Roosa
Boone County Sanitary Landfill
1260 224th Lane
Boone, IA 50036

RE: Hauled Waste Discharge Permit No. B10175

Dear Mr. Roosa:

Enclosed is your Hauled Waste Discharge Permit for the Boone County Landfill facility in Boone, IA. This permit is effective until the expiration date; however, an annual permit fee will be due.

Please keep us informed of future changes or developments that may affect your the volume or characteristics of waste hauled to the WRF. Questions should be directed to Paul Ebert, in Industrial Pretreatment, at 515/323-8133.

Sincerely,

Paul Ebert
WRF Regulatory Compliance Manager
WRA Wastewater Reclamation Facility

PE/ajf

Enc: Hauled Wastewater Discharge Permit

CC: T. Whipple, HLW Engineering (twhipple@hlwengineering.com)
File

DES MOINES METROPOLITAN WASTEWATER RECLAMATION AUTHORITY
HAULED WASTE DISCHARGE PERMIT
PERMIT NO. B10175

In accordance with the provisions of the Municipal Code of Des Moines, Chapter 118, Article III known as the Industrial Waste Ordinance,

Boone County Sanitary Landfill
1268 224th Lane
Boone, IA 50036

is hereby authorized to deliver wastewater from the RCRA Subtitle D non-hazardous landfill via a properly licensed and maintained tank truck to the Des Moines Metropolitan Wastewater Reclamation Facility in accordance with the conditions set forth in this permit. Compliance with this permit does not relieve the industrial user of its obligations to comply with all applicable pretreatment regulations, standards, requirements, or laws that are or may become effective during the term of this permit.

Noncompliance with any term or condition of this permit shall constitute a violation of the City of Des Moines Industrial Waste Ordinance.

EFFECTIVE DATE: September 1, 2022

EXPIRATION DATE: August 31, 2024

RENEWAL DATE: May 31, 2024

The industrial user must file an application for permit renewal 90 days prior to the expiration date.

Scott Hutchens

Scott Hutchens, P.E., WRA Director
City of Des Moines
WRA Wastewater Reclamation Facility

REVISED: June 23, 2022

PART 1 - REQUIREMENTS RELATING TO TRUCKED WASTES

The Des Moines Metropolitan Wastewater Reclamation Authority (WRA) will accept process wastewater from the Industrial User (IU) under the following terms:

A. Process Wastewater Characteristics and Volume

1. The pH of any load must not be less than 5.0 S.U. or greater than 12.0. S.U.

2. The COD of any load delivered to the headworks (Structure 07) must not exceed 100,000 mg/L.

3. The Arsenic Daily Maximum concentration of any load shall not exceed 0.38 mg/L, and the Total Daily Loading of Arsenic shall not exceed 0.014 lbs/day.

4. Total Toxic Organics (TTO) will be monitored routinely by the WRA. TTOs are sum of all volatile organic compounds detected using EPA Method 624.

5. The number of truck loads delivered to the Des Moines Metropolitan Wastewater Reclamation Facility (WRF) shall not exceed five (5) per day. The IU may request an increase in writing. The WRA reserves the right to further restrict the volume of leachate per day in order to meet pollutant loading limits for the WRA as identified in Chapter 118-343.

6. Hauled waste shall be delivered to the headworks (Structure 07) at the WRF, unless directed otherwise by WRA personnel.

7. Only landfill leachate wastewater is allowed by truck without advanced notice to and permission from the WRA Director.

B. Treatment Charges

1. Charges must cover 150% of the costs incurred by the WRA to handle and treat the wastewater as determined by the WRA Director, as well as 100% of the costs to analyze the wastewater.

2. Charges are billed monthly with NET 30 terms payable to CITY OF DES MOINES and mailed to

   City of Des Moines Treasurer's Office
   P.O. Box 1633
   Des Moines, IA 50306-1633

3. Treatment charges for waste loads disposed of at the headworks (Structure 07) shall be \$0.00929/lb. (subject to annual rate increases, given 30-days' notice).

4. Reevaluation of charges:
   (a) Charges will be reevaluated on February 1st and annually thereafter at a minimum.
   (b) Charges may be reevaluated at the request of the IU or by the WRA at any time due to waste characteristic changes in the process wastewater.
   (c) Changes in treatment charges are effective after 30-days' notice to the IU.

C. Sampling & Analysis

1. WRA Sampling & Analysis
   (a) The WRA may, at a minimum, perform daily sampling and measurement of pH, O&G, COD, TSS, TKN, %TS, %VS at the cost provided for in Chapter 118-352. The cost will be assessed to the IU and included in the charges in Part 1, B.1. above.
   (b) The WRA will perform other sampling and analysis at the expense of the IU as necessary to accurately assess charges and pollutant loadings.
   (c) Samples shall be taken from the tank truck at the WRF prior to discharge or mixing with any other waste.

2. IU Sampling & Analysis
   (a) The IU shall perform an annual scan of priority pollutants and report results to the WRA.
   (b) Such scan does not eliminate the need for the WRA to perform its normal sampling and analysis.
   (c) Samples shall be taken from the leachate collection vessel used to fill tank trucks for transport to the WRF.

D. Hours of Operation

1. The WRA will accept trucked waste 24/7 if drivers are familiar with the WRF manifesting, scaling, and unloading processes.

2. The WRA has the right to restrict hours as necessary and restrict truck driver access as necessary. Additional costs to provide service will be charged to the IU.

E. Termination of this Permit

1. This permit may be terminated by the IU by making a written request to the WRA providing 30 days' advanced notice.

2. This permit may be terminated by the WRA for any reason by providing 30 days' advanced written notice to the IU.

3. Delivery of wastes may be immediately suspended by the WRA if acceptance of this wastewater causes, or is anticipated to cause, interference, pass through of pollutants, or violation of any environmental permit held by the WRA.

F. Automatic Permit Extension

Expired permits shall remain effective and enforceable until the permit is reissued unless the IU is notified of permit termination by the WRA Director. (Chapter 118-372)

G. Damages

Anyone delivering or discharging wastes to the WRF whose waste causes upset, interference, or pass through is liable for the costs incurred by such incident and to penalties as allowed under city, state, and federal law.

H. Spill Control Plan

When required to do so by the WRA, the IU shall develop a Spill Control Plan to address potential spills or slugs.

PART 2 – REPORTING REQUIREMENTS

A. Monitoring Reports

The WRA will provide the IU with routine reports of the concentration of pollutants in the IU's effluent which are being monitored as described above.

1. Semi-Annual Reports

A certification statement, signed by an Authorized Representative, which uses the language required by federal law (40 CFR 403.12(l)), must be returned to the WRA every six (6) months. The industry is certifying that information it has submitted to the WRA is true and accurate. Those with TTO limits in wastewater discharge permits have an additional certifying statement regarding use and disposal of these substances. The IU shall submit a semi-annual report to the WRA as follows:

Semi-Annual	Periods Covered
1st Half	January – June
2nd Half	July - December

Semi-Annual Report Format

(a) Identifying information.
(b) Measurement of pollutants for any samples collected by the IU, per Chapter 118-377(5).
(c) Certification and signature by IU.
(d) Compliance schedule (as required).
(e) Additional monitoring (as required).

2. Reports - Additional Monitoring

If the IU monitors any permitted pollutant from the sample location identified in Part 1.C more frequently than required by this permit, using test procedures prescribed in 40 CFR Part 136, the results of such monitoring shall be submitted to the WRA. Such monitoring results shall be summarized and reported to the WRA as part of the semi-annual report.

B. Accidental Discharge Report

The IU shall notify the WRA immediately of all discharges that could cause problems to the POTW, including any slug loadings, as outlined in Chapter 118-349. Formal written notification discussing circumstances and remedies shall be submitted to the WRA within five (5) days of the occurrence. The following procedures shall be followed:

1. Accidental discharges that contain pollutants that exceed the permitted limit by 5x or that exceed a designated slug discharge concentration shall be reported immediately.

2. Accidental discharges that may cause permanent damage to treatment system shall be reported immediately. These discharges include, but are not limited to, pollutants that may cause a fire or explosion hazard, pH of less than 4.0 or greater than 13.0 for, any pollutant in a concentration that would increase the atmosphere in the POTW above the LC50 for human exposure, and any pollutant that may increase the concentration in the influent to the WRF enough to decrease treatment efficiency.

3. The IU shall notify the WRA immediately by telephone at 515/323-8000 or 8133. The notification shall include the name of the person making the call, telephone number where said person can be reached, location of discharge, date and time thereof, type of waste, including concentration and volume, and corrective action taken.

The party making the call shall be available by phone for a minimum of fifteen (15) minutes after the notification is made. This is so that a member of the WRA may contact the industry representative for more information, if necessary.

4. Within five (5) days following an accidental discharge, the IU shall submit to the WRA a detailed written report. The report shall specify:

   (a) Description of the upset, slug or accidental discharge, the cause thereof, and the impact on the IU's compliance status. The description should also include location of discharge, type, concentration and volume of waste.
   (b) Duration of noncompliance, including exact dates and times of noncompliance, and if the noncompliance continues, the time by which compliance is reasonably expected to occur.
   (c) All steps taken or to be taken to reduce, eliminate and prevent recurrence of such a slug discharge, accidental discharge, or other condition of noncompliance.

C. <u>Anticipated Noncompliance</u>

The IU shall give advance notice to the WRA of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

D. <u>Signatory Requirements</u>

1. All applications and reports submitted to the WRA must contain the following certification statement and be signed by an authorized representative of the IU as defined below:

   "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

   Authorized Representative means:
   (a) An executive officer of a corporation.
   (b) A general partner of a partnership.
   (c) The proprietor of a proprietorship.
   (d) The conservator, trustee, attorney in fact, receiver or other person or agent authorized in law and in fact to act on behalf of IUs which are not corporations, partnerships, or proprietorships or on behalf of other entities which must legally act through an agent.
   (e) Any other authorized representative of (a), (b), (c), or (d) above if the authorization specifies either an individual or a position having responsibility for the overall operation of the facility from which the discharge originates, such as the position of plant manager or a position of equivalent responsibility, or having overall responsibility for environmental matters for the company and the written authorization is submitted to the WRA Director.
   (f) Any other person authorized by law to act on behalf of any entity.

2. If an authorization under paragraph (d) of this subpart is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, or overall responsibility for the environmental matters for the company, a new authorization satisfying the requirements of paragraph (d) of this subpart must be submitted to the WRA prior to or together with any reports to be signed by an authorized representative.

E. Wastewater Reclamation Authority Address and Phone Number

All reports, applications and correspondence shall be submitted via fax (515/323-8063) or to the following address:

Des Moines Metropolitan Wastewater Reclamation Authority
Attention: Pretreatment Department
3000 Vandalia Road
Des Moines, IA 50317

Telephone notification shall be to WRA - 515/323-8000 or 8133.

PART 3 - GENERAL CONDITIONS

The EPA in 40 CFR 403 requires wastewater treatment plants with pretreatment authority to have the following authority over all dischargers:

A. Duty to Comply

You must comply with the terms, conditions, and limits of this permit and of city ordinance.
(Chapters 118-321 and 118-376)

B. Duty to Mitigate

The IU shall take all reasonable steps to minimize, correct, or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting the WRF, collection system, human health or environment. (Chapter 118-349)

C. Changes Resulting In New or Increase Pollutants

New or increased contributions of pollutants or changes in the nature of pollutant discharged to the WRF, whether due to changes in production, activity, flow or construction, shall require ninety (90) days prior approval by the WRA Director. (Chapter 118-370(11))

D. Permit Transfer

The IU shall not reassign or transfer this permit. New owners must apply for a new wastewater discharge permit sixty (60) days prior to a change of ownership. (Chapter 118-374)

E. Inspection of Premises, Records, Equipment, Methods and Discharges

You must permit authorized representatives of the WRA to inspect and sample in accordance with Chapter 118-405.

F. Confidential Information

No information shall be confidential except as specified in Chapters 118-381 and 118-382.

G. Dilution

The IU shall not increase the use of potable or process water or, in any way, attempt to dilute a discharge as a partial or complete substitute for adequate treatment to achieve compliance with limitations contained in this permit.

H. Annual Publication

A list of all permitted users which significantly violated pretreatment standards or requirements (including permit requirements) during the twelve (12) previous months shall be annually published in the largest daily newspaper within the service area. (Chapter 118-396)

I. Civil and Criminal Penalties

Violation of pretreatment standards and requirements, administrative orders, or compliance schedules may subject the IU to civil and criminal penalties contained in Chapter 118-400 and Iowa Code 364.22(1).

APPENDIX G.2 – Leachate Volume Hauled

Leachate Volumes Hauled to Boone POTW
Boone County SLF - 2024
TOTAL

TANK 1	30,786	Gallons
TANK 3	35,478	Gallons
LEACHATE STORAGE LAGOON	1,187,558	Gallons
IMPACTED SUFACE WATER	3,486	Gallons
TOTAL - 2024	1,257,308	Gallons

APPENDIX G.3 – Leachate Testing Results

Keystone Laboratories - Newton

CERTIFICATE OF ANALYSIS

1HA1076

Project Description

Boone Landfill-New Regs

For:

Todd Whipple

HLW Engineering

PO Box 314

Story City, IA 50248

Heather Murphy

Customer Relationship Specialist

Monday, February 5, 2024

Please find enclosed the analytical results for the samples you submitted to Microbac Laboratories. Review and compilation of your report was completed by Keystone Laboratories - 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.

Keystone Laboratories - Newton

CERTIFICATE OF ANALYSIS

1HA1076

HLW Engineering

Todd Whipple
PO Box 314
Story City, IA 50248

Project Name: Boone Landfill-New Regs

Project / PO Number: / 6007
Received: 01/17/2024
Reported: 02/05/2024

Sample Summary Report

Sample Name	Laboratory ID	Client Matrix	Sample Type	Sample Begin	Sample Taken	Lab Received
Load Out MH	1HA1076-01	Water	GRAB		01/11/24 12:28	01/17/24 10:30
TANK 1	1HA1076-02	Water	GRAB		01/11/24 12:41	01/17/24 10:30
TANK 3	1HA1076-03	Water	GRAB		01/11/24 13:39	01/17/24 10:30

Keystone Laboratories - Newton

CERTIFICATE OF ANALYSIS

1HA1076

Analytical Testing Parameters

Client Sample ID:	Load Out MH		
Sample Matrix:	Water	**Collected By:**	JGH
Lab Sample ID:	1HA1076-01	**Collection Date:**	01/11/2024 12:28

Determination of Conventional Chemistry Parameters	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 9010B								
Cyanide, total	<0.005	0.005	mg/L	1		01/23/24 1720	01/25/24 1541	CHP

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Arsenic, total	**0.0185**	0.0040	mg/L	4		01/22/24 0910	01/23/24 0014	RVV
Barium, total	**1.08**	0.0040	mg/L	4		01/22/24 0910	01/23/24 0014	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		01/22/24 0910	01/23/24 0014	RVV
Chromium, total	**0.0095**	0.0080	mg/L	4		01/22/24 0910	01/23/24 0014	RVV
Copper, total	<0.0040	0.0040	mg/L	4		01/22/24 0910	01/23/24 0014	RVV

Client Sample ID:	TANK 1		
Sample Matrix:	Water	**Collected By:**	JGH
Lab Sample ID:	1HA1076-02	**Collection Date:**	01/11/2024 12:41

Determination of Conventional Chemistry Parameters	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 9010B								
Cyanide, total	<0.005	0.005	mg/L	1		01/23/24 1720	01/25/24 1541	CHP

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Arsenic, total	<0.0040	0.0040	mg/L	4		01/22/24 0910	01/23/24 0020	RVV
Barium, total	**0.135**	0.0040	mg/L	4		01/22/24 0910	01/23/24 0020	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		01/22/24 0910	01/23/24 0020	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		01/22/24 0910	01/23/24 0020	RVV
Copper, total	<0.0040	0.0040	mg/L	4		01/22/24 0910	01/23/24 0020	RVV

Keystone Laboratories - Newton

CERTIFICATE OF ANALYSIS

1HA1076

Client Sample ID:	TANK 3		
Sample Matrix:	Water	**Collected By:**	JGH
Lab Sample ID:	1HA1076-03	**Collection Date:**	01/11/2024 13:39

Determination of Conventional Chemistry Parameters	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 9010B								
Cyanide, total	**0.006**	0.005	mg/L	1		01/23/24 1720	01/25/24 1541	CHP

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Arsenic, total	**0.0064**	0.0040	mg/L	4		01/22/24 0910	01/23/24 0026	RVV
Barium, total	**0.644**	0.0040	mg/L	4		01/22/24 0910	01/23/24 0026	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		01/22/24 0910	01/23/24 0026	RVV
Chromium, total	**0.0132**	0.0080	mg/L	4		01/22/24 0910	01/23/24 0026	RVV
Copper, total	<0.0040	0.0040	mg/L	4		01/22/24 0910	01/23/24 0026	RVV

Batch Log Summary

Method	Batch	Laboratory ID	Client / Source ID
EPA 6020A	1HA0951	1HA0951-BLK1	
		1HA0951-BS1	
		1HA0951-MS1	1HA0649-01
		1HA0951-MSD1	1HA0649-01
		1HA0951-PS1	1HA0649-01
		1HA1076-01	Load Out MH
		1HA1076-02	TANK 1
		1HA1076-03	TANK 3

Method	Batch	Laboratory ID	Client / Source ID
EPA 9010B	1HA1081	1HA1076-03	TANK 3
		1HA1076-02	TANK 1
		1HA1081-MSD1	1HA1076-01
		1HA1081-MS1	1HA1076-01
		1HA1076-01	Load Out MH
		1HA1081-BS1	
		1HA1081-BLK1	

Batch Quality Control Summary: Keystone Laboratories - Newton

Determination of Conventional Chemistry Parameters	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HA1081 - Wet Chem Preparation - EPA 9010B										
Blank (1HA1081-BLK1)			Prepared: 01/23/24 17:20 Analyzed: 01/25/24 15:41							
Cyanide, total	<0.005	0.005	mg/L							
LCS (1HA1081-BS1)			Prepared: 01/23/24 17:20 Analyzed: 01/25/24 15:41							
Cyanide, total	0.0317	0.005	mg/L	0.0300		106	66-136			
Matrix Spike (1HA1081-MS1)	**Source: 1HA1076-01**		Prepared: 01/23/24 17:20 Analyzed: 01/25/24 15:41							
Cyanide, total	0.0536	0.010	mg/L	0.0600	ND	89.3	59-153			
Matrix Spike Dup (1HA1081-MSD1)	**Source: 1HA1076-01**		Prepared: 01/23/24 17:20 Analyzed: 01/25/24 15:41							
Cyanide, total	0.0697	0.010	mg/L	0.0600	ND	116	59-153	26.3	30	

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HA0951 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Blank (1HA0951-BLK1)			Prepared: 01/22/24 09:10 Analyzed: 01/22/24 23:13							
Arsenic, total	<0.0040	0.0040	mg/L							
Barium, total	<0.0040	0.0040	mg/L							
Cadmium, total	<0.0008	0.0008	mg/L							
Chromium, total	<0.0080	0.0080	mg/L							

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HA0951 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Blank (1HA0951-BLK1)			Prepared: 01/22/24 09:10 Analyzed: 01/22/24 23:13							
Copper, total	<0.0040	0.0040	mg/L							
LCS (1HA0951-BS1)			Prepared: 01/22/24 09:10 Analyzed: 01/22/24 23:19							
Arsenic, total	0.0986	0.0040	mg/L	0.100		98.6	80-120			
Barium, total	0.102	0.0040	mg/L	0.100		102	80-120			
Cadmium, total	0.0970	0.0008	mg/L	0.100		97.0	80-120			
Chromium, total	0.0981	0.0080	mg/L	0.100		98.1	80-120			
Copper, total	0.102	0.0040	mg/L	0.100		102	80-120			
Matrix Spike (1HA0951-MS1)		**Source: 1HA0649-01**	Prepared: 01/22/24 09:10 Analyzed: 01/22/24 23:31							
Arsenic, total	0.101	0.0040	mg/L	0.100	0.0019	98.8	75-125			
Barium, total	0.136	0.0040	mg/L	0.100	0.0312	105	75-125			
Cadmium, total	0.0928	0.0008	mg/L	0.100	0.0005	92.3	75-125			
Chromium, total	0.0928	0.0080	mg/L	0.100	0.0007	92.0	75-125			
Copper, total	0.0925	0.0040	mg/L	0.100	0.0012	91.3	75-125			
Matrix Spike Dup (1HA0951-MSD1)		**Source: 1HA0649-01**	Prepared: 01/22/24 09:10 Analyzed: 01/22/24 23:37							
Arsenic, total	0.101	0.0040	mg/L	0.100	0.0019	98.7	75-125	0.178	20	
Barium, total	0.137	0.0040	mg/L	0.100	0.0312	106	75-125	0.853	20	
Cadmium, total	0.0929	0.0008	mg/L	0.100	0.0005	92.4	75-125	0.0814	20	
Chromium, total	0.0923	0.0080	mg/L	0.100	0.0007	91.6	75-125	0.489	20	
Copper, total	0.0909	0.0040	mg/L	0.100	0.0012	89.7	75-125	1.72	20	
Post Spike (1HA0951-PS1)		**Source: 1HA0649-01**	Prepared: 01/22/24 09:10 Analyzed: 01/22/24 23:56							
Arsenic, total	0.0807		mg/L	0.0800	0.0019	98.5	80-120			
Barium, total	0.112		mg/L	0.0800	0.0306	102	80-120			
Cadmium, total	0.0737		mg/L	0.0800	0.0005	91.5	80-120			
Chromium, total	0.0736		mg/L	0.0800	0.0007	91.1	80-120			
Copper, total	0.0737		mg/L	0.0800	0.0012	90.6	80-120			

Definitions

RL: Reporting Limit
RPD: Relative Percent Difference

Cooler Receipt Log

Cooler ID: Default Cooler   Temp: 4.9°C

Cooler Inspection Checklist

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

Keystone Laboratories - Newton

CERTIFICATE OF ANALYSIS

1HA1076

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 A Murphy

Heather Murphy
Customer Relationship Specialist
heather.murphy@microbac.com
02/05/24 15:24

CHAIN OF CUS[TODY]

Keystone LABORATORIES, INC.

❑ 600 E. 17th St. S.
Newton, IA 50208
Phone: 641-792-8451
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Centerville, IA 52544
Phone: 641-437-7023
Fax: 641-437-7040

1 H A 1 0 7 6
HLW Engineering
PM: Heather Murphy

PAGE 1 OF 1

PRINT OR TYPE INFORMATION BELOW	REPORT TO:	BILL TO:
SAMPLER: JGH	NAME: TODD WHIPPLE	NAME: JOHN ROOSA
SITE NAME: BOONE CO SLF	COMPANY NAME: HLW ENG.	COMPANY NAME: BOONE CO SLF
ADDRESS:	ADDRESS: PO BOX 314	ADDRESS: 1268 224TH LANE
CITY/ST/ZIP:	CITY/ST/ZIP: STORY CITY, IA 50248	CITY/ST/ZIP: BOONE, IA 50036
PHONE:	PHONE: 515-733-4144	PHONE:
	FAX: 515-733-4146	Keystone Quote No: (If Applicable)

LAB USE ONLY
LABORATORY WORK ORDER NO. 1HA1076
SAMPLE TEMPERATURE UPON RECEIPT: 4.9 ice✓ °C

CLIENT SAMPLE NUMBER	DATE	TIME	SAMPLE LOCATION	NO. OF CONTAINERS	MATRIX	GRAB/COMPOSITE	ARSENIC, TOT	BARIUM, TOT	CADMIUM, TOT	CHROMIUM, TOTAL	COPPER, TOT		CYANIDE		SAMPLE CONDITION/COMMENTS	LABORATORY SAMPLE NUMBER
LOAD OUT MH	1/11/24	12:28		2	WATER	G	X	X	X	X	X		X			01
TANK 1	1/11/24	12:41		2	WATER	G	X	X	X	X	X		X			02
TANK 3	1/11/24	13:39		2	WATER	G	X	X	X	X	X		X			03

Relinquished by: (Signature)	Date	Received by: (Signature)	Date	Turn-Around:
[signature]	1/11/24 Time		Time	❑ Standard ❑ Rush ___ Contact Lab Prior to Submission
Relinquished by: (Signature)	Date Time	Received for Lab by: (Signature) [signature]	Date 1-17-24 Time 10:30	Remarks:

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HG2038

Project Description

Boone CO SLF-Annual Leachate

For:

Todd Whipple

HLW Engineering

PO Box 314

Story City, IA 50248

Sue Thompson

Client Services Manager

Friday, August 9, 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

1HG2038

HLW Engineering

Todd Whipple
PO Box 314
Story City, IA 50248

Project Name: Boone CO SLF-Annual Leachate

Project / PO Number: N/A
Received: 07/25/2024
Reported: 08/09/2024

Sample Summary Report

Sample Name	Laboratory ID	Client Matrix	Sample Type	Sample Begin	Sample Taken	Lab Received
Leachate Tank #1	1HG2038-01	Aqueous	GRAB		07/24/24 13:32	07/25/24 10:45
Leachate Tank #3	1HG2038-02	Aqueous	GRAB		07/24/24 13:15	07/25/24 10:45
Lagoon	1HG2038-03	Aqueous	GRAB		07/24/24 12:45	07/25/24 10:45

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Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HG2038

Analytical Testing Parameters

Client Sample ID:	Leachate Tank #1			
Sample Matrix:	Aqueous		**Collected By:**	Whipple. Todd
Lab Sample ID:	1HG2038-01		**Collection Date:**	07/24/2024 13:32

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 624								
Vinyl Chloride	<1.0	1.0	ug/L	1		08/05/24 0000	08/05/24 1258	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		08/05/24 0000	08/05/24 1258	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		08/05/24 0000	08/05/24 1258	CSM
Chloroform	<1.0	1.0	ug/L	1		08/05/24 0000	08/05/24 1258	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		08/05/24 0000	08/05/24 1258	CSM
Benzene	**2.5**	1.0	ug/L	1		08/05/24 0000	08/05/24 1258	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		08/05/24 0000	08/05/24 1258	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		08/05/24 0000	08/05/24 1258	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		08/05/24 0000	08/05/24 1258	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		08/05/24 0000	08/05/24 1258	CSM
1,4-Dichlorobenzene	**1.9**	1.0	ug/L	1		08/05/24 0000	08/05/24 1258	CSM
Hexachlorobutadiene	<2.0	2.0	ug/L	1		08/05/24 0000	08/05/24 1258	CSM
Surrogate: Dibromofluoromethane	93.2	Limit: 59-123	% Rec	1		08/05/24 0000	08/05/24 1258	CSM
Surrogate: 1,2-Dichloroethane-d4	86.5	Limit: 56-130	% Rec	1		08/05/24 0000	08/05/24 1258	CSM
Surrogate: Toluene-d8	96.6	Limit: 85-113	% Rec	1		08/05/24 0000	08/05/24 1258	CSM
Surrogate: 4-Bromofluorobenzene	83.7	Limit: 82-112	% Rec	1		08/05/24 0000	08/05/24 1258	CSM

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 625								
Pyridine	<10	10	ug/L	1		07/29/24 1411	08/05/24 2235	EPP
2-Methylphenol (o-Cresol)	<10	10	ug/L	1		07/29/24 1411	08/05/24 2235	EPP
(3 & 4)-Methylphenol	**150**	10	ug/L	1		07/29/24 1411	08/05/24 2235	EPP
Hexachloroethane	<10	10	ug/L	1		07/29/24 1411	08/05/24 2235	EPP
Nitrobenzene	<10	10	ug/L	1		07/29/24 1411	08/05/24 2235	EPP
2,4,6-Trichlorophenol	<10	10	ug/L	1		07/29/24 1411	08/05/24 2235	EPP
2,4,5-Trichlorophenol	<50	50	ug/L	1		07/29/24 1411	08/05/24 2235	EPP
2,4-Dinitrotoluene	<10	10	ug/L	1		07/29/24 1411	08/05/24 2235	EPP
Hexachlorobenzene	<10	10	ug/L	1		07/29/24 1411	08/05/24 2235	EPP
Pentachlorophenol	<20	20	ug/L	1		07/29/24 1411	08/05/24 2235	EPP
Surrogate: 2-Fluorophenol	91.4	Limit: 16-140	% Rec	1		07/29/24 1411	08/05/24 2235	EPP
Surrogate: Phenol-d6	115	Limit: 13-147	% Rec	1		07/29/24 1411	08/05/24 2235	EPP
Surrogate: Nitrobenzene-d5	82.5	Limit: 17-150	% Rec	1		07/29/24 1411	08/05/24 2235	EPP
Surrogate: 2-Fluorobiphenyl	80.3	Limit: 15-134	% Rec	1		07/29/24 1411	08/05/24 2235	EPP
Surrogate: 2,4,6-Tribromophenol	73.7	Limit: 20-158	% Rec	1		07/29/24 1411	08/05/24 2235	EPP
Surrogate: Terphenyl-dl4	83.3	Limit: 12-157	% Rec	1		07/29/24 1411	08/05/24 2235	EPP

Determination of Chlorinated Phenoxy Herbicides	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 615								
2,4-D	<2.0	2.0	ug/L	1		07/29/24 0911	08/06/24 2303	EPP

Client Sample ID:	Leachate Tank #1		
Sample Matrix:	Aqueous	**Collected By:**	Whipple. Todd
Lab Sample ID:	1HG2038-01	**Collection Date:**	07/24/2024 13:32

Determination of Chlorinated Phenoxy Herbicides	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
2,4,5-TP (Silvex)	<0.5	0.5	ug/L	1		07/29/24 0911	08/06/24 2303	EPP
Surrogate: 2,5-Dichlorobenzoic Acid	161	Limit: 31-116	% Rec	1	**S4**	07/29/24 0911	08/06/24 2303	EPP

Determination of Organochlorine Insecticides & PCBs	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
EPA 3520C/EPA 608								
Gamma-BHC [Lindane]	<0.05	0.05	ug/L	1		07/29/24 1500	08/09/24 0925	EPP
Heptachlor Epoxide	<0.05	0.05	ug/L	1		07/29/24 1500	08/09/24 0925	EPP
Endrin	<0.05	0.05	ug/L	1		07/29/24 1500	08/09/24 0925	EPP
Methoxychlor	<0.05	0.05	ug/L	1		07/29/24 1500	08/09/24 0925	EPP
Chlordane	<0.10	0.10	ug/L	1		07/29/24 1500	08/09/24 0925	EPP
Toxaphene	<0.20	0.20	ug/L	1		07/29/24 1500	08/09/24 0925	EPP
Surrogate: Tetrachloro-m-xylene	81.2	Limit: 31-116	% Rec	1		07/29/24 1500	08/09/24 0925	EPP

Determination of Conventional Chemistry Parameters	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
4500CN-E								
Cyanide, total	<0.005	0.005	mg/L	1		07/26/24 1045	08/01/24 1328	BSS
EPA 420.1								
Phenols, total	<0.035	0.035	mg/L	1		08/01/24 0902	08/02/24 1042	BSS
SM 4500 H+ B								
pH	**7.1**	0.5	pH	1	**H4**	07/26/24 0821	07/26/24 1040	BSS
SM 5210 B								
BOD (5 day)	**18**	6	mg/L	3	**K2**	07/26/24 0820	07/26/24 1136	MND
TIMBERLINE								
Nitrogen, Ammonia	**49.2**	1.00	mg/L	10		08/05/24 1445	08/06/24 1145	LNH
USGS I-3765-85								
Total Suspended Solids (TSS)	**131**	1	mg/L	1		07/29/24 1202	07/29/24 1430	MEAH

Determination of Inorganic Anions	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
300.0								
Chloride	**312**	10.0	mg/L	10		08/02/24 0000	08/03/24 0544	MID

Determination of Total Metals	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
245.1								
Mercury, total	<0.00050	0.00050	mg/L	1		07/29/24 1517	07/31/24 1001	JAR
EPA 200.8								
Arsenic, total	**0.0043**	0.0020	mg/L	4		07/25/24 1627	07/29/24 2031	RVV
Barium, total	**0.474**	0.0020	mg/L	4		07/25/24 1627	07/29/24 2031	RVV
Cadmium, total	<0.0002	0.0002	mg/L	4		07/25/24 1627	07/29/24 2031	RVV
Chromium, total	**0.0057**	0.0020	mg/L	4		07/25/24 1627	07/29/24 2031	RVV
Copper, total	**0.0044**	0.0020	mg/L	4		07/25/24 1627	07/29/24 2031	RVV
Lead, total	**0.0022**	0.0008	mg/L	4		07/25/24 1627	07/29/24 2031	RVV

Client Sample ID:	Leachate Tank #1		
Sample Matrix:	Aqueous	**Collected By:**	Whipple. Todd
Lab Sample ID:	1HG2038-01	**Collection Date:**	07/24/2024 13:32

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Molybdenum, total	**0.0032**	0.0020	mg/L	4		07/25/24 1627	07/29/24 2031	RVV
Nickel, total	**0.0351**	0.0040	mg/L	4		07/25/24 1627	07/29/24 2031	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		07/25/24 1627	07/29/24 2031	RVV
Silver, total	<0.0020	0.0020	mg/L	4		07/25/24 1627	07/29/24 2031	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		07/25/24 1627	07/29/24 2031	RVV

Client Sample ID:	Leachate Tank #3		
Sample Matrix:	Aqueous	**Collected By:**	Whipple. Todd
Lab Sample ID:	1HG2038-02	**Collection Date:**	07/24/2024 13:15

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 624								
Vinyl Chloride	<1.0	1.0	ug/L	1		08/05/24 0000	08/05/24 1726	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		08/05/24 0000	08/05/24 1726	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		08/05/24 0000	08/05/24 1726	CSM
Chloroform	<1.0	1.0	ug/L	1		08/05/24 0000	08/05/24 1726	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		08/05/24 0000	08/05/24 1726	CSM
Benzene	**5.6**	1.0	ug/L	1		08/05/24 0000	08/05/24 1726	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		08/05/24 0000	08/05/24 1726	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		08/05/24 0000	08/05/24 1726	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		08/05/24 0000	08/05/24 1726	CSM
Chlorobenzene	**4.4**	1.0	ug/L	1		08/05/24 0000	08/05/24 1726	CSM
1,4-Dichlorobenzene	**5.1**	1.0	ug/L	1		08/05/24 0000	08/05/24 1726	CSM
Hexachlorobutadiene	<2.0	2.0	ug/L	1		08/05/24 0000	08/05/24 1726	CSM
Surrogate: Dibromofluoromethane	113	Limit: 59-123	% Rec	1		08/05/24 0000	08/05/24 1726	CSM
Surrogate: 1,2-Dichloroethane-d4	111	Limit: 56-130	% Rec	1		08/05/24 0000	08/05/24 1726	CSM
Surrogate: Toluene-d8	93.8	Limit: 85-113	% Rec	1		08/05/24 0000	08/05/24 1726	CSM
Surrogate: 4-Bromofluorobenzene	90.7	Limit: 82-112	% Rec	1		08/05/24 0000	08/05/24 1726	CSM

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 625								
Pyridine	<10	10	ug/L	1		07/29/24 1411	08/05/24 2300	EPP
2-Methylphenol (o-Cresol)	<10	10	ug/L	1		07/29/24 1411	08/05/24 2300	EPP
(3 & 4)-Methylphenol	<10	10	ug/L	1		07/29/24 1411	08/05/24 2300	EPP
Hexachloroethane	<10	10	ug/L	1		07/29/24 1411	08/05/24 2300	EPP
Nitrobenzene	<10	10	ug/L	1		07/29/24 1411	08/05/24 2300	EPP
2,4,6-Trichlorophenol	<10	10	ug/L	1		07/29/24 1411	08/05/24 2300	EPP
2,4,5-Trichlorophenol	<50	50	ug/L	1		07/29/24 1411	08/05/24 2300	EPP
2,4-Dinitrotoluene	<10	10	ug/L	1		07/29/24 1411	08/05/24 2300	EPP
Hexachlorobenzene	<10	10	ug/L	1		07/29/24 1411	08/05/24 2300	EPP
Pentachlorophenol	<20	20	ug/L	1		07/29/24 1411	08/05/24 2300	EPP
Surrogate: 2-Fluorophenol	70.0	Limit: 16-140	% Rec	1		07/29/24 1411	08/05/24 2300	EPP
Surrogate: Phenol-d6	56.3	Limit: 13-147	% Rec	1		07/29/24 1411	08/05/24 2300	EPP
Surrogate: Nitrobenzene-d5	103	Limit: 17-150	% Rec	1		07/29/24 1411	08/05/24 2300	EPP
Surrogate: 2-Fluorobiphenyl	89.9	Limit: 15-134	% Rec	1		07/29/24 1411	08/05/24 2300	EPP
Surrogate: 2,4,6-Tribromophenol	87.2	Limit: 20-158	% Rec	1		07/29/24 1411	08/05/24 2300	EPP
Surrogate: Terphenyl-dl4	111	Limit: 12-157	% Rec	1		07/29/24 1411	08/05/24 2300	EPP

Determination of Chlorinated Phenoxy Herbicides	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 615								
2,4-D	<2.0	2.0	ug/L	1		07/29/24 0911	08/06/24 2335	EPP
2,4,5-TP (Silvex)	<0.5	0.5	ug/L	1		07/29/24 0911	08/06/24 2335	EPP
Surrogate: 2,5-Dichlorobenzoic Acid	84.9	Limit: 31-116	% Rec	1		07/29/24 0911	08/06/24 2335	EPP

Client Sample ID:	Leachate Tank #3			
Sample Matrix:	Aqueous		**Collected By:**	Whipple. Todd
Lab Sample ID:	1HG2038-02		**Collection Date:**	07/24/2024 13:15

Determination of Organochlorine Insecticides & PCBs	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
EPA 3520C/EPA 608								
Gamma-BHC [Lindane]	<0.05	0.05	ug/L	1		07/29/24 1500	08/09/24 0940	EPP
Heptachlor Epoxide	<0.05	0.05	ug/L	1		07/29/24 1500	08/09/24 0940	EPP
Endrin	<0.05	0.05	ug/L	1		07/29/24 1500	08/09/24 0940	EPP
Methoxychlor	<0.05	0.05	ug/L	1		07/29/24 1500	08/09/24 0940	EPP
Chlordane	<0.10	0.10	ug/L	1		07/29/24 1500	08/09/24 0940	EPP
Toxaphene	<0.20	0.20	ug/L	1		07/29/24 1500	08/09/24 0940	EPP
Surrogate: Tetrachloro-m-xylene	86.3	Limit: 31-116	% Rec	1		07/29/24 1500	08/09/24 0940	EPP

Determination of Conventional Chemistry Parameters	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
4500CN-E								
Cyanide, total	<0.005	0.005	mg/L	1		07/26/24 1045	08/01/24 1328	BSS
EPA 420.1								
Phenols, total	<0.035	0.035	mg/L	1		08/01/24 0902	08/02/24 1042	BSS
SM 4500 H+ B								
pH	**7.3**	0.5	pH	1	**H4**	07/26/24 0821	07/26/24 1040	BSS
SM 5210 B								
BOD (5 day)	**34**	6	mg/L	3	**K2**	07/26/24 0820	07/26/24 1136	MND
TIMBERLINE								
Nitrogen, Ammonia	**362**	10.0	mg/L	100		08/05/24 1445	08/06/24 1202	LNH
USGS I-3765-85								
Total Suspended Solids (TSS)	**56**	1	mg/L	1		07/29/24 0853	07/29/24 1140	MEAH

Determination of Inorganic Anions	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
300.0								
Chloride	**3050**	100	mg/L	100		08/05/24 0000	08/05/24 1606	MID

Determination of Total Metals	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
245.1								
Mercury, total	<0.00050	0.00050	mg/L	1		07/29/24 1517	07/31/24 1003	JAR
EPA 200.8								
Arsenic, total	**0.0059**	0.0020	mg/L	4		07/25/24 1627	07/29/24 2037	RVV
Barium, total	**0.590**	0.0020	mg/L	4		07/25/24 1627	07/29/24 2037	RVV
Cadmium, total	<0.0002	0.0002	mg/L	4		07/25/24 1627	07/29/24 2037	RVV
Chromium, total	**0.0139**	0.0020	mg/L	4		07/25/24 1627	07/29/24 2037	RVV
Copper, total	**0.0027**	0.0020	mg/L	4		07/25/24 1627	07/29/24 2037	RVV
Lead, total	**0.0028**	0.0008	mg/L	4		07/25/24 1627	07/29/24 2037	RVV
Molybdenum, total	**0.0025**	0.0020	mg/L	4		07/25/24 1627	07/29/24 2037	RVV
Nickel, total	**0.0593**	0.0040	mg/L	4		07/25/24 1627	07/29/24 2037	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		07/25/24 1627	07/29/24 2037	RVV
Silver, total	<0.0020	0.0020	mg/L	4		07/25/24 1627	07/29/24 2037	RVV

Client Sample ID:	Leachate Tank #3		
Sample Matrix:	Aqueous	**Collected By:**	Whipple. Todd
Lab Sample ID:	1HG2038-02	**Collection Date:**	07/24/2024 13:15

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Zinc, total	<0.0200	0.0200	mg/L	4		07/25/24 1627	07/29/24 2037	RVV

Client Sample ID:	Lagoon		
Sample Matrix:	Aqueous	**Collected By:**	Whipple. Todd
Lab Sample ID:	1HG2038-03	**Collection Date:**	07/24/2024 12:45

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 624								
Vinyl Chloride	**1.2**	1.0	ug/L	1		08/05/24 0000	08/05/24 1748	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		08/05/24 0000	08/05/24 1748	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		08/05/24 0000	08/05/24 1748	CSM
Chloroform	<1.0	1.0	ug/L	1		08/05/24 0000	08/05/24 1748	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		08/05/24 0000	08/05/24 1748	CSM
Benzene	**5.0**	1.0	ug/L	1		08/05/24 0000	08/05/24 1748	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		08/05/24 0000	08/05/24 1748	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		08/05/24 0000	08/05/24 1748	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		08/05/24 0000	08/05/24 1748	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		08/05/24 0000	08/05/24 1748	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		08/05/24 0000	08/05/24 1748	CSM
Hexachlorobutadiene	<2.0	2.0	ug/L	1		08/05/24 0000	08/05/24 1748	CSM
Surrogate: Dibromofluoromethane	103	Limit: 59-123	% Rec	1		08/05/24 0000	08/05/24 1748	CSM
Surrogate: 1,2-Dichloroethane-d4	100	Limit: 56-130	% Rec	1		08/05/24 0000	08/05/24 1748	CSM
Surrogate: Toluene-d8	95.5	Limit: 85-113	% Rec	1		08/05/24 0000	08/05/24 1748	CSM
Surrogate: 4-Bromofluorobenzene	88.6	Limit: 82-112	% Rec	1		08/05/24 0000	08/05/24 1748	CSM

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 625								
Pyridine	<10	10	ug/L	1		07/29/24 1411	08/05/24 2324	EPP
2-Methylphenol (o-Cresol)	<10	10	ug/L	1		07/29/24 1411	08/05/24 2324	EPP
(3 & 4)-Methylphenol	<10	10	ug/L	1		07/29/24 1411	08/05/24 2324	EPP
Hexachloroethane	<10	10	ug/L	1		07/29/24 1411	08/05/24 2324	EPP
Nitrobenzene	<10	10	ug/L	1		07/29/24 1411	08/05/24 2324	EPP
2,4,6-Trichlorophenol	<10	10	ug/L	1		07/29/24 1411	08/05/24 2324	EPP
2,4,5-Trichlorophenol	<50	50	ug/L	1		07/29/24 1411	08/05/24 2324	EPP
2,4-Dinitrotoluene	<10	10	ug/L	1		07/29/24 1411	08/05/24 2324	EPP
Hexachlorobenzene	<10	10	ug/L	1		07/29/24 1411	08/05/24 2324	EPP
Pentachlorophenol	<20	20	ug/L	1		07/29/24 1411	08/05/24 2324	EPP
Surrogate: 2-Fluorophenol	73.0	Limit: 16-140	% Rec	1		07/29/24 1411	08/05/24 2324	EPP
Surrogate: Phenol-d6	88.6	Limit: 13-147	% Rec	1		07/29/24 1411	08/05/24 2324	EPP
Surrogate: Nitrobenzene-d5	86.6	Limit: 17-150	% Rec	1		07/29/24 1411	08/05/24 2324	EPP
Surrogate: 2-Fluorobiphenyl	67.8	Limit: 15-134	% Rec	1		07/29/24 1411	08/05/24 2324	EPP
Surrogate: 2,4,6-Tribromophenol	73.5	Limit: 20-158	% Rec	1		07/29/24 1411	08/05/24 2324	EPP
Surrogate: Terphenyl-dl4	92.5	Limit: 12-157	% Rec	1		07/29/24 1411	08/05/24 2324	EPP

Determination of Chlorinated Phenoxy Herbicides	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 615								
2,4-D	<2.0	2.0	ug/L	1		07/29/24 0911	08/07/24 0008	EPP
2,4,5-TP (Silvex)	<0.5	0.5	ug/L	1		07/29/24 0911	08/07/24 0008	EPP
Surrogate: 2,5-Dichlorobenzoic Acid	110	Limit: 31-116	% Rec	1		07/29/24 0911	08/07/24 0008	EPP

Client Sample ID:	Lagoon			
Sample Matrix:	Aqueous		**Collected By:**	Whipple. Todd
Lab Sample ID:	1HG2038-03		**Collection Date:**	07/24/2024 12:45

Determination of Organochlorine Insecticides & PCBs	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
EPA 3520C/EPA 608								
Gamma-BHC [Lindane]	<0.05	0.05	ug/L	1		07/29/24 1500	08/09/24 0954	EPP
Heptachlor Epoxide	<0.05	0.05	ug/L	1		07/29/24 1500	08/09/24 0954	EPP
Endrin	<0.05	0.05	ug/L	1		07/29/24 1500	08/09/24 0954	EPP
Methoxychlor	<0.05	0.05	ug/L	1		07/29/24 1500	08/09/24 0954	EPP
Chlordane	<0.10	0.10	ug/L	1		07/29/24 1500	08/09/24 0954	EPP
Toxaphene	<0.20	0.20	ug/L	1		07/29/24 1500	08/09/24 0954	EPP
Surrogate: Tetrachloro-m-xylene	112	Limit: 31-116	% Rec	1		07/29/24 1500	08/09/24 0954	EPP

Determination of Conventional Chemistry Parameters	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
4500CN-E								
Cyanide, total	<0.005	0.005	mg/L	1		07/26/24 1045	08/01/24 1328	BSS
EPA 420.1								
Phenols, total	<0.035	0.035	mg/L	1		08/01/24 0902	08/02/24 1042	BSS
SM 4500 H+ B								
pH	**6.9**	0.5	pH	1	**H4**	07/26/24 0821	07/26/24 1040	BSS
SM 5210 B								
BOD (5 day)	**26**	6	mg/L	3	**K2**	07/26/24 0820	07/26/24 1128	MND
TIMBERLINE								
Nitrogen, Ammonia	**174**	10.0	mg/L	100		08/05/24 1445	08/06/24 1042	LNH
USGS I-3765-85								
Total Suspended Solids (TSS)	**43**	1	mg/L	1		07/29/24 0853	07/29/24 1140	MEAH

Determination of Inorganic Anions	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
300.0								
Chloride	**526**	10.0	mg/L	10		08/02/24 0000	08/03/24 0629	MID

Determination of Total Metals	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
245.1								
Mercury, total	<0.00050	0.00050	mg/L	1		07/29/24 1517	07/31/24 1006	JAR
EPA 200.8								
Arsenic, total	**0.0178**	0.0020	mg/L	4		07/25/24 1627	07/29/24 2043	RVV
Barium, total	**1.18**	0.0020	mg/L	4		07/25/24 1627	07/29/24 2043	RVV
Cadmium, total	<0.0002	0.0002	mg/L	4		07/25/24 1627	07/29/24 2043	RVV
Chromium, total	**0.0087**	0.0020	mg/L	4		07/25/24 1627	07/29/24 2043	RVV
Copper, total	<0.0020	0.0020	mg/L	4		07/25/24 1627	07/29/24 2043	RVV
Lead, total	<0.0008	0.0008	mg/L	4		07/25/24 1627	07/29/24 2043	RVV
Molybdenum, total	**0.0048**	0.0020	mg/L	4		07/25/24 1627	07/29/24 2043	RVV
Nickel, total	**0.0741**	0.0040	mg/L	4		07/25/24 1627	07/29/24 2043	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		07/25/24 1627	07/29/24 2043	RVV
Silver, total	<0.0020	0.0020	mg/L	4		07/25/24 1627	07/29/24 2043	RVV

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CERTIFICATE OF ANALYSIS

1HG2038

Client Sample ID:	Lagoon			
Sample Matrix:	Aqueous		**Collected By:**	Whipple. Todd
Lab Sample ID:	1HG2038-03		**Collection Date:**	07/24/2024 12:45

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Zinc, total	**0.0551**	0.0200	mg/L	4		07/25/24 1627	07/29/24 2043	RVV

Batch Log Summary

Method	Batch	Laboratory ID	Client / Source ID
EPA 200.8	1HG1407	1HG1407-BLK1	
		1HG1407-BS1	
		1HG1407-MS1	1HG1956-01
		1HG1407-MSD1	1HG1956-01
		1HG1407-PS1	1HG1956-01
		1HG2038-01	Leachate Tank #1
		1HG2038-02	Leachate Tank #3
		1HG2038-03	Lagoon

Method	Batch	Laboratory ID	Client / Source ID
SM 5210 B	1HG1419	1HG1419-BLK1	
		1HG1419-SRM1	
		1HG2038-03	Lagoon
		1HG2038-01	Leachate Tank #1
		1HG2038-02	Leachate Tank #3
		1HG1419-DUP1	1HG1952-01

Method	Batch	Laboratory ID	Client / Source ID
SM 4500 H+ B	1HG1420	1HG2038-01	Leachate Tank #1
		1HG1420-DUP1	1HG1886-01
		1HG2038-03	Lagoon
		1HG1420-SRM2	
		1HG1420-SRM1	
		1HG2038-02	Leachate Tank #3

Method	Batch	Laboratory ID	Client / Source ID
4500CN-E	1HG1436	1HG1436-BLK1	
		1HG1436-BS1	
		1HG1436-MSD1	1HG1956-02
		1HG1436-MS1	1HG1956-02
		1HG2038-02	Leachate Tank #3
		1HG2038-01	Leachate Tank #1
		1HG2038-03	Lagoon

Method	Batch	Laboratory ID	Client / Source ID
USGS I-3765-85	1HG1493	1HG2038-03	Lagoon
		1HG1493-BS1	
		1HG1493-DUP1	1HG1982-01
		1HG1493-BLK1	
		1HG2038-02	Leachate Tank #3

Method	Batch	Laboratory ID	Client / Source ID
EPA 615	1HG1496	1HG1496-BLK1	
		1HG1496-BS1	
		1HG1496-BSD1	
		1HG2038-01	Leachate Tank #1
		1HG2038-02	Leachate Tank #3
		1HG2038-03	Lagoon

Method	Batch	Laboratory ID	Client / Source ID
USGS I-3765-85	1HG1516	1HG2038-01	Leachate Tank #1
		1HG1516-BLK1	
		1HG1516-BS1	
		1HG1516-DUP1	1HG2066-01

Method	Batch	Laboratory ID	Client / Source ID
EPA 625	1HG1524	1HG1524-BLK1	
		1HG1524-BS1	
		1HG1524-BSD1	
		1HG2038-01	Leachate Tank #1
		1HG2038-02	Leachate Tank #3
		1HG2038-03	Lagoon

Method	Batch	Laboratory ID	Client / Source ID
EPA 608	1HG1529	1HG1529-BLK1	
		1HG1529-BS1	
		1HG1529-BSD1	
		1HG2038-01	Leachate Tank #1
		1HG2038-02	Leachate Tank #3
		1HG2038-03	Lagoon

Method	Batch	Laboratory ID	Client / Source ID
245.1	1HG1535	1HG1535-BLK1	
		1HG1535-BS1	
		1HG1535-MS1	1HG1720-01
		1HG1535-MSD1	1HG1720-01
		1HG2038-01	Leachate Tank #1
		1HG2038-02	Leachate Tank #3
		1HG2038-03	Lagoon

Method	Batch	Laboratory ID	Client / Source ID
EPA 420.1	1HH0016	1HG2038-02	Leachate Tank #3
		1HH0016-MSD1	1HG1796-01
		1HG2038-03	Lagoon
		1HH0016-BS1	

Method	Batch	Laboratory ID	Client / Source ID
EPA 420.1	1HH0016	1HG2038-01	Leachate Tank #1
		1HH0016-MS1	1HG1796-01
		1HH0016-BLK1	

Method	Batch	Laboratory ID	Client / Source ID
300.0	1HH0164	1HH0164-BLK1	
		1HH0164-MRL1	
		1HH0164-BLK2	
		1HH0164-BS1	
		1HH0164-BSD1	
		1HH0164-MS1	1HG1855-01
		1HH0164-MSD1	1HG1855-01
		1HG2038-01	Leachate Tank #1
		1HG2038-03	Lagoon

Method	Batch	Laboratory ID	Client / Source ID
TIMBERLINE	1HH0186	1HH0186-BLK1	
		1HH0186-BS1	
		1HH0186-MS1	1HG2001-01
		1HH0186-MSD1	1HG2001-01
		1HG2038-03	Lagoon
		1HG2038-01	Leachate Tank #1
		1HG2038-02	Leachate Tank #3

Method	Batch	Laboratory ID	Client / Source ID
EPA 624	1HH0214	1HH0214-BS1	
		1HH0214-BSD1	
		1HH0214-BLK1	
		1HG2038-01	Leachate Tank #1
		1HG2038-02	Leachate Tank #3
		1HG2038-03	Lagoon
		1HH0214-MS1	1HG2007-02
		1HH0214-MSD1	1HG2007-02

Method	Batch	Laboratory ID	Client / Source ID
300.0	1HH0239	1HH0239-BLK1	
		1HH0239-MRL1	
		1HH0239-BS1	
		1HH0239-BSD1	
		1HH0239-MS1	1HH0216-02
		1HH0239-MSD1	1HH0216-02
		1HG2038-02	Leachate Tank #3
		1HH0239-BLK2	
		1HH0239-BLK3	

300.0	1HH0239	1HH0239-BS2	
		1HH0239-BSD2	
		1HH0239-MS2	1HG1882-02
		1HH0239-MSD2	1HG1882-02
		1HH0239-BLK4	

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 1HH0214 - EPA 5030B - EPA 624										
Blank (1HH0214-BLK1)			Prepared: 08/05/24 00:00 Analyzed: 08/05/24 12:11							
Vinyl Chloride	<1.0	1.0	ug/L							
1,1-Dichloroethylene	<1.0	1.0	ug/L							
2-Butanone (MEK)	<10.0	10.0	ug/L							
Chloroform	<1.0	1.0	ug/L							
Carbon Tetrachloride	<1.0	1.0	ug/L							
Benzene	<1.0	1.0	ug/L							
1,2-Dichloroethane	<1.0	1.0	ug/L							
Trichloroethylene	<1.0	1.0	ug/L							
Tetrachloroethylene	<1.0	1.0	ug/L							
Chlorobenzene	<1.0	1.0	ug/L							
1,4-Dichlorobenzene	<1.0	1.0	ug/L							
Hexachlorobutadiene	<2.0	2.0	ug/L							
Surrogate: Dibromofluoromethane	*48.3*		ug/L	*50.2*		*96.2*	*59-123*			
Surrogate: 1,2-Dichloroethane-d4	*47.7*		ug/L	*50.4*		*94.8*	*56-130*			
Surrogate: Toluene-d8	*48.2*		ug/L	*50.5*		*95.5*	*85-113*			
Surrogate: 4-Bromofluorobenzene	*42.8*		ug/L	*50.2*		*85.3*	*82-112*			
LCS (1HH0214-BS1)			Prepared: 08/05/24 00:00 Analyzed: 08/05/24 11:03							
Vinyl Chloride	26.07	1.0	ug/L	30.2		86.3	5-195			
1,1-Dichloroethylene	48.70	1.0	ug/L	50.0		97.4	50-150			
2-Butanone (MEK)	86.46	10.0	ug/L	102		84.9	44-134			
Chloroform	50.26	1.0	ug/L	50.0		101	70-135			
Carbon Tetrachloride	52.63	1.0	ug/L	50.0		105	70-130			
Benzene	51.67	1.0	ug/L	50.0		103	65-135			
1,2-Dichloroethane	55.21	1.0	ug/L	50.0		110	70-130			
Trichloroethylene	52.11	1.0	ug/L	50.0		104	65-135			
Tetrachloroethylene	55.99	1.0	ug/L	50.0		112	70-130			
Chlorobenzene	54.29	1.0	ug/L	50.0		109	65-135			
1,4-Dichlorobenzene	51.67	1.0	ug/L	50.0		103	65-135			
Hexachlorobutadiene	64.71	2.0	ug/L	50.0		129	79-155			
Surrogate: Dibromofluoromethane	*57.1*		ug/L	*50.2*		*114*	*59-123*			
Surrogate: 1,2-Dichloroethane-d4	*59.8*		ug/L	*50.4*		*119*	*56-130*			
Surrogate: Toluene-d8	*46.6*		ug/L	*50.5*		*92.4*	*85-113*			
Surrogate: 4-Bromofluorobenzene	*49.6*		ug/L	*50.2*		*98.9*	*82-112*			
LCS Dup (1HH0214-BSD1)			Prepared: 08/05/24 00:00 Analyzed: 08/05/24 11:26							

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HH0214 - EPA 5030B - EPA 624										
LCS Dup (1HH0214-BSD1)			Prepared: 08/05/24 00:00 Analyzed: 08/05/24 11:26							
Vinyl Chloride	25.13	1.0	ug/L	30.2		83.1	5-195	3.67	26	
1,1-Dichloroethylene	46.42	1.0	ug/L	50.0		92.8	50-150	4.79	19	
2-Butanone (MEK)	85.21	10.0	ug/L	102		83.7	44-134	1.46	30	
Chloroform	48.85	1.0	ug/L	50.0		97.7	70-135	2.85	17	
Carbon Tetrachloride	50.40	1.0	ug/L	50.0		101	70-130	4.33	19	
Benzene	49.56	1.0	ug/L	50.0		99.1	65-135	4.17	17	
1,2-Dichloroethane	54.58	1.0	ug/L	50.0		109	70-130	1.15	15	
Trichloroethylene	49.17	1.0	ug/L	50.0		98.3	65-135	5.81	18	
Tetrachloroethylene	54.53	1.0	ug/L	50.0		109	70-130	2.64	16	
Chlorobenzene	53.56	1.0	ug/L	50.0		107	65-135	1.35	18	
1,4-Dichlorobenzene	52.33	1.0	ug/L	50.0		105	65-135	1.27	15	
Hexachlorobutadiene	66.07	2.0	ug/L	50.0		132	79-155	2.08	30	
Surrogate: Dibromofluoromethane	*56.7*		ug/L	*50.2*		*113*	*59-123*			
Surrogate: 1,2-Dichloroethane-d4	*59.4*		ug/L	*50.4*		*118*	*56-130*			
Surrogate: Toluene-d8	*46.1*		ug/L	*50.5*		*91.3*	*85-113*			
Surrogate: 4-Bromofluorobenzene	*49.3*		ug/L	*50.2*		*98.3*	*82-112*			
Matrix Spike (1HH0214-MS1)	**Source: 1HG2007-02**		Prepared: 08/05/24 00:00 Analyzed: 08/05/24 18:56							
Vinyl Chloride	267.9	10.0	ug/L	302		88.6	5-251			
1,1-Dichloroethylene	515.1	10.0	ug/L	500		103	5-235			
2-Butanone (MEK)	927.6	100	ug/L	1020		91.1	57-133			
Chloroform	521.3	10.0	ug/L	500		104	51-138			
Carbon Tetrachloride	560.8	10.0	ug/L	500		112	70-140			
Benzene	507.7	10.0	ug/L	500		102	37-151			
1,2-Dichloroethane	544.6	10.0	ug/L	500		109	59-155			
Trichloroethylene	514.6	10.0	ug/L	500		103	70-157			
Tetrachloroethylene	562.3	10.0	ug/L	500		112	64-148			
Chlorobenzene	518.3	10.0	ug/L	500		104	37-160			
1,4-Dichlorobenzene	481.4	10.0	ug/L	500		96.3	18-190			
Hexachlorobutadiene	520.8	20.0	ug/L	500		104	70-130			
Surrogate: Dibromofluoromethane	*625*		ug/L	*502*		*125*	*59-123*			*M1*
Surrogate: 1,2-Dichloroethane-d4	*639*		ug/L	*504*		*127*	*56-130*			
Surrogate: Toluene-d8	*468*		ug/L	*505*		*92.7*	*85-113*			
Surrogate: 4-Bromofluorobenzene	*491*		ug/L	*502*		*97.8*	*82-112*			
Matrix Spike Dup (1HH0214-MSD1)	**Source: 1HG2007-02**		Prepared: 08/05/24 00:00 Analyzed: 08/05/24 19:19							
Vinyl Chloride	273.7	10.0	ug/L	302		90.6	5-251	2.14	66	
1,1-Dichloroethylene	513.4	10.0	ug/L	500		103	5-235	0.331	32	
2-Butanone (MEK)	966.0	100	ug/L	1020		94.9	57-133	4.06	30	
Chloroform	523.3	10.0	ug/L	500		105	51-138	0.383	54	
Carbon Tetrachloride	568.0	10.0	ug/L	500		114	70-140	1.28	41	
Benzene	513.0	10.0	ug/L	500		103	37-151	1.04	61	
1,2-Dichloroethane	544.9	10.0	ug/L	500		109	59-155	0.0551	49	
Trichloroethylene	510.0	10.0	ug/L	500		102	70-157	0.898	48	

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HH0214 - EPA 5030B - EPA 624										
Matrix Spike Dup (1HH0214-MSD1)	**Source: 1HG2007-02**		Prepared: 08/05/24 00:00 Analyzed: 08/05/24 19:19							
Tetrachloroethylene	570.7	10.0	ug/L	500		114	64-148	1.48	39	
Chlorobenzene	531.8	10.0	ug/L	500		106	37-160	2.57	53	
1,4-Dichlorobenzene	528.2	10.0	ug/L	500		106	18-190	9.27	57	
Hexachlorobutadiene	580.4	20.0	ug/L	500		116	70-130	10.8	20	
Surrogate: Dibromofluoromethane	*609*		ug/L	*502*		*121*	*59-123*			
Surrogate: 1,2-Dichloroethane-d4	*620*		ug/L	*504*		*123*	*56-130*			
Surrogate: Toluene-d8	*469*		ug/L	*505*		*93.0*	*85-113*			
Surrogate: 4-Bromofluorobenzene	*477*		ug/L	*502*		*95.1*	*82-112*			

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HG1524 - EPA 625 Acid - EPA 625										
Blank (1HG1524-BLK1)			Prepared: 07/29/24 14:11 Analyzed: 08/05/24 19:18							
Pyridine	<10	10	ug/L							
2-Methylphenol (o-Cresol)	<10	10	ug/L							
(3 & 4)-Methylphenol	<10	10	ug/L							
Hexachloroethane	<10	10	ug/L							
Nitrobenzene	<10	10	ug/L							
2,4,6-Trichlorophenol	<10	10	ug/L							
2,4,5-Trichlorophenol	<50	50	ug/L							
2,4-Dinitrotoluene	<10	10	ug/L							
Hexachlorobenzene	<10	10	ug/L							
Pentachlorophenol	<20	20	ug/L							
Surrogate: 2-Fluorophenol	*28.4*		ug/L	*30.9*		*91.6*	*16-140*			
Surrogate: Phenol-d6	*29.4*		ug/L	*29.4*		*99.9*	*13-147*			
Surrogate: Nitrobenzene-d5	*31.0*		ug/L	*30.8*		*101*	*17-150*			
Surrogate: 2-Fluorobiphenyl	*25.6*		ug/L	*29.3*		*87.3*	*15-134*			
Surrogate: 2,4,6-Tribromophenol	*30.0*		ug/L	*30.1*		*99.7*	*20-158*			
Surrogate: Terphenyl-dl4	*34.3*		ug/L	*30.9*		*111*	*12-157*			
LCS (1HG1524-BS1)			Prepared: 07/29/24 14:11 Analyzed: 08/05/24 19:42							
Pyridine	<10	10	ug/L	24.0		38.0	13-127			
2-Methylphenol (o-Cresol)	17.3	10	ug/L	24.0		71.9	35-117			
(3 & 4)-Methylphenol	17.6	10	ug/L	24.0		73.1	37-114			
Hexachloroethane	12.5	10	ug/L	24.0		51.9	13-95			
Nitrobenzene	18.3	10	ug/L	24.0		76.0	47-121			
2,4,6-Trichlorophenol	19.1	10	ug/L	24.0		79.4	45-125			
2,4,5-Trichlorophenol	<50	50	ug/L	24.0		84.8	50-121			
2,4-Dinitrotoluene	17.6	10	ug/L	24.0		73.1	59-125			
Hexachlorobenzene	17.0	10	ug/L	24.0		70.6	47-122			
Pentachlorophenol	21.5	20	ug/L	24.0		89.5	30-139			

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HG1524 - EPA 625 Acid - EPA 625										
LCS (1HG1524-BS1)			Prepared: 07/29/24 14:11 Analyzed: 08/05/24 19:42							
Surrogate: 2-Fluorophenol	*24.6*		ug/L	*30.9*		*79.6*	*16-140*			
Surrogate: Phenol-d6	*23.8*		ug/L	*29.4*		*80.8*	*13-147*			
Surrogate: Nitrobenzene-d5	*26.1*		ug/L	*30.8*		*84.6*	*17-150*			
Surrogate: 2-Fluorobiphenyl	*25.0*		ug/L	*29.3*		*85.5*	*15-134*			
Surrogate: 2,4,6-Tribromophenol	*27.5*		ug/L	*30.1*		*91.5*	*20-158*			
Surrogate: Terphenyl-dl4	*29.2*		ug/L	*30.9*		*94.4*	*12-157*			
LCS Dup (1HG1524-BSD1)			Prepared: 07/29/24 14:11 Analyzed: 08/05/24 20:07							
Pyridine	<10	10	ug/L	24.0		40.2	13-127	5.53	30	
2-Methylphenol (o-Cresol)	18.7	10	ug/L	24.0		77.9	35-117	8.00	30	
(3 & 4)-Methylphenol	19.6	10	ug/L	24.0		81.7	37-114	11.2	28	
Hexachloroethane	12.2	10	ug/L	24.0		50.6	13-95	2.44	30	
Nitrobenzene	18.8	10	ug/L	24.0		78.2	47-121	2.86	30	
2,4,6-Trichlorophenol	20.3	10	ug/L	24.0		84.3	45-125	6.00	30	
2,4,5-Trichlorophenol	<50	50	ug/L	24.0		88.3	50-121	4.09	25	
2,4-Dinitrotoluene	18.2	10	ug/L	24.0		75.7	59-125	3.41	30	
Hexachlorobenzene	17.2	10	ug/L	24.0		71.6	47-122	1.46	30	
Pentachlorophenol	22.6	20	ug/L	24.0		94.1	30-139	4.98	30	
Surrogate: 2-Fluorophenol	*26.8*		ug/L	*30.9*		*86.6*	*16-140*			
Surrogate: Phenol-d6	*25.0*		ug/L	*29.4*		*85.1*	*13-147*			
Surrogate: Nitrobenzene-d5	*27.2*		ug/L	*30.8*		*88.3*	*17-150*			
Surrogate: 2-Fluorobiphenyl	*25.4*		ug/L	*29.3*		*86.9*	*15-134*			
Surrogate: 2,4,6-Tribromophenol	*27.9*		ug/L	*30.1*		*92.7*	*20-158*			
Surrogate: Terphenyl-dl4	*30.8*		ug/L	*30.9*		*99.7*	*12-157*			

Determination of Chlorinated Phenoxy Herbicides	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HG1496 - EPA 615 Phenoxy - EPA 615										
Blank (1HG1496-BLK1)			Prepared: 07/29/24 09:11 Analyzed: 08/06/24 21:25							
2,4-D	<2.0	2.0	ug/L							
2,4,5-TP (Silvex)	<0.5	0.5	ug/L							
Surrogate: 2,5-Dichlorobenzoic Acid	*1.70*		ug/L	*2.02*		*83.9*	*31-116*			
LCS (1HG1496-BS1)			Prepared: 07/29/24 09:11 Analyzed: 08/06/24 21:57							
2,4-D	<2.0	2.0	ug/L	1.15		107	16-161			
2,4,5-TP (Silvex)	0.74	0.5	ug/L	0.575		128	35-141			
Surrogate: 2,5-Dichlorobenzoic Acid	*1.88*		ug/L	*2.02*		*93.1*	*31-116*			
LCS Dup (1HG1496-BSD1)			Prepared: 07/29/24 09:11 Analyzed: 08/06/24 22:30							
2,4-D	<2.0	2.0	ug/L	1.15		83.9	16-161	24.5	30	
2,4,5-TP (Silvex)	0.58	0.5	ug/L	0.575		100	35-141	24.4	30	

Determination of Chlorinated Phenoxy Herbicides	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HG1496 - EPA 615 Phenoxy - EPA 615										
LCS Dup (1HG1496-BSD1)			Prepared: 07/29/24 09:11 Analyzed: 08/06/24 22:30							
Surrogate: 2,5-Dichlorobenzoic Acid	*1.64*		ug/L	*2.02*		*81.4*	*31-116*			

Determination of Organochlorine Insecticides & PCBs	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HG1529 - 3520C NP/OC Cont Liq - EPA 608										
Blank (1HG1529-BLK1)			Prepared: 07/29/24 15:00 Analyzed: 08/09/24 08:41							
Gamma-BHC [Lindane]	<0.05	0.05	ug/L							
Heptachlor Epoxide	<0.05	0.05	ug/L							
Endrin	<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							
Surrogate: Tetrachloro-m-xylene	*0.473*		ug/L	*0.600*		*78.8*	*31-116*			
LCS (1HG1529-BS1)			Prepared: 07/29/24 15:00 Analyzed: 08/09/24 08:56							
Gamma-BHC [Lindane]	0.205	0.05	ug/L	0.250		81.8	44-124			
Heptachlor Epoxide	0.220	0.05	ug/L	0.250		88.1	61-128			
Endrin	0.225	0.05	ug/L	0.250		89.8	45-152			
Methoxychlor	0.245	0.05	ug/L	0.250		98.0	60-153			
Surrogate: Tetrachloro-m-xylene	*0.487*		ug/L	*0.600*		*81.2*	*31-116*			
LCS Dup (1HG1529-BSD1)			Prepared: 07/29/24 15:00 Analyzed: 08/09/24 09:10							
Gamma-BHC [Lindane]	0.219	0.05	ug/L	0.250		87.8	44-124	6.99	30	
Heptachlor Epoxide	0.236	0.05	ug/L	0.250		94.2	61-128	6.68	30	
Endrin	0.240	0.05	ug/L	0.250		95.9	45-152	6.54	30	
Methoxychlor	0.262	0.05	ug/L	0.250		105	60-153	6.92	30	
Surrogate: Tetrachloro-m-xylene	*0.474*		ug/L	*0.600*		*78.9*	*31-116*			

Determination of Conventional Chemistry Parameters	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HG1419 - General Prep Micro - SM 5210 B										
Blank (1HG1419-BLK1)			Prepared: 07/26/24 08:20 Analyzed: 07/26/24 10:14							
BOD (5 day)	<2	2	mg/L							K1
Duplicate (1HG1419-DUP1)	**Source: 1HG1952-01**		Prepared: 07/26/24 08:20 Analyzed: 07/26/24 11:45							
BOD (5 day)	<24	24	mg/L		ND				30	
Reference (1HG1419-SRM1)			Prepared: 07/26/24 08:20 Analyzed: 07/26/24 10:39							

Determination of Conventional Chemistry Parameters	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HG1419 - General Prep Micro - SM 5210 B										
Reference (1HG1419-SRM1)			Prepared: 07/26/24 08:20 Analyzed: 07/26/24 10:39							
BOD (5 day)	<100	100	mg/L	198			84.6-115.4			K2
Batch 1HG1420 - Wet Chem Preparation - SM 4500 H+ B										
Duplicate (1HG1420-DUP1)	**Source: 1HG1886-01**		Prepared: 07/26/24 08:21 Analyzed: 07/26/24 10:40							
pH	7.1	0.5	pH		7.1			0.183	10	
Reference (1HG1420-SRM1)			Prepared: 07/26/24 08:21 Analyzed: 07/26/24 10:40							
pH	7.1	0.5	pH	7.00		101	90-110			
Reference (1HG1420-SRM2)			Prepared: 07/26/24 08:21 Analyzed: 07/26/24 10:40							
pH	7.1	0.5	pH	7.00		101	90-110			
Batch 1HG1436 - Wet Chem Preparation - 4500CN-E										
Blank (1HG1436-BLK1)			Prepared: 07/26/24 10:45 Analyzed: 08/01/24 13:28							
Cyanide, total	<0.005	0.005	mg/L							
LCS (1HG1436-BS1)			Prepared: 07/26/24 10:45 Analyzed: 08/01/24 13:28							
Cyanide, total	0.053	0.005	mg/L	0.0600		88.7	64-123			
Matrix Spike (1HG1436-MS1)	**Source: 1HG1956-02**		Prepared: 07/26/24 10:45 Analyzed: 08/01/24 13:28							
Cyanide, total	0.041	0.005	mg/L	0.0600	ND	67.8	60-127			
Matrix Spike Dup (1HG1436-MSD1)	**Source: 1HG1956-02**		Prepared: 07/26/24 10:45 Analyzed: 08/01/24 13:28							
Cyanide, total	0.054	0.005	mg/L	0.0600	ND	90.1	60-127	28.3	30	
Batch 1HG1493 - Wet Chem Preparation - USGS I-3765-85										
Blank (1HG1493-BLK1)			Prepared: 07/29/24 08:53 Analyzed: 07/29/24 11:40							
Total Suspended Solids (TSS)	<1	1	mg/L							
LCS (1HG1493-BS1)			Prepared: 07/29/24 08:53 Analyzed: 07/29/24 11:40							
Total Suspended Solids (TSS)	13.3	1	mg/L	15.0		88.7	71-110			
Duplicate (1HG1493-DUP1)	**Source: 1HG1982-01**		Prepared: 07/29/24 08:53 Analyzed: 07/29/24 11:40							
Total Suspended Solids (TSS)	232	1	mg/L		220			5.31	30	
Batch 1HG1516 - Wet Chem Preparation - USGS I-3765-85										
Blank (1HG1516-BLK1)			Prepared: 07/29/24 12:02 Analyzed: 07/29/24 14:30							
Total Suspended Solids (TSS)	<1	1	mg/L							
LCS (1HG1516-BS1)			Prepared: 07/29/24 12:02 Analyzed: 07/29/24 14:30							
Total Suspended Solids (TSS)	13.0	1	mg/L	15.0		86.7	71-110			
Duplicate (1HG1516-DUP1)	**Source: 1HG2066-01**		Prepared: 07/29/24 12:02 Analyzed: 07/29/24 14:30							
Total Suspended Solids (TSS)	52.0	1	mg/L		54.0			3.77	30	
Batch 1HH0016 - Wet Chem Preparation - EPA 420.1										

Determination of Conventional Chemistry Parameters	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HH0016 - Wet Chem Preparation - EPA 420.1										
Blank (1HH0016-BLK1)			Prepared: 08/01/24 09:02 Analyzed: 08/02/24 10:42							
Phenols, total	<0.035	0.035	mg/L							
LCS (1HH0016-BS1)			Prepared: 08/01/24 09:02 Analyzed: 08/02/24 10:42							
Phenols, total	0.289	0.035	mg/L	0.400		72.2	60-125			
Matrix Spike (1HH0016-MS1)		**Source: 1HG1796-01**	Prepared: 08/01/24 09:02 Analyzed: 08/02/24 10:42							
Phenols, total	0.333	0.035	mg/L	0.400	ND	83.3	50-139			
Matrix Spike Dup (1HH0016-MSD1)		**Source: 1HG1796-01**	Prepared: 08/01/24 09:02 Analyzed: 08/02/24 10:42							
Phenols, total	0.354	0.035	mg/L	0.400	ND	88.5	50-139	5.96	21	
Batch 1HH0186 - General Prep HPLC/IC - TIMBERLINE										
Blank (1HH0186-BLK1)			Prepared: 08/05/24 14:45 Analyzed: 08/06/24 10:00							
Nitrogen, Ammonia	<0.10	0.10	mg/L							
LCS (1HH0186-BS1)			Prepared: 08/05/24 14:45 Analyzed: 08/06/24 10:01							
Nitrogen, Ammonia	5.17	0.10	mg/L	5.00		103	90-114			
Matrix Spike (1HH0186-MS1)		**Source: 1HG2001-01**	Prepared: 08/05/24 14:45 Analyzed: 08/06/24 10:03							
Nitrogen, Ammonia	5.44	0.10	mg/L	5.00	0.182	105	84-115			
Matrix Spike Dup (1HH0186-MSD1)		**Source: 1HG2001-01**	Prepared: 08/05/24 14:45 Analyzed: 08/06/24 10:04							
Nitrogen, Ammonia	5.37	0.10	mg/L	5.00	0.182	104	84-115	1.26	20	

Determination of Inorganic Anions	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HH0164 - General Prep HPLC/IC - 300.0										
Blank (1HH0164-BLK1)			Prepared: 08/02/24 00:00 Analyzed: 08/02/24 10:41							
Chloride	<1.0	1.0	mg/L							
Blank (1HH0164-BLK2)			Prepared: 08/02/24 00:00 Analyzed: 08/02/24 15:55							
Chloride	<1.0	1.0	mg/L							
LCS (1HH0164-BS1)			Prepared: 08/02/24 00:00 Analyzed: 08/02/24 22:38							
Chloride	14.48	1.0	mg/L	15.3		94.5	90-110			
LCS Dup (1HH0164-BSD1)			Prepared: 08/02/24 00:00 Analyzed: 08/02/24 23:01							
Chloride	14.48	1.0	mg/L	15.3		94.5	90-110	0.0276	10	
Matrix Spike (1HH0164-MS1)		**Source: 1HG1855-01**	Prepared: 08/02/24 00:00 Analyzed: 08/03/24 00:08							
Chloride	176.7	5.0	mg/L	76.6	98.58	102	80-120			
Matrix Spike Dup (1HH0164-MSD1)		**Source: 1HG1855-01**	Prepared: 08/02/24 00:00 Analyzed: 08/03/24 00:30							
Chloride	176.8	5.0	mg/L	76.6	98.58	102	80-120	0.0877	10	
Batch 1HH0239 - General Prep HPLC/IC - 300.0										
Blank (1HH0239-BLK1)			Prepared: 08/05/24 00:00 Analyzed: 08/05/24 10:15							
Chloride	<1.0	1.0	mg/L							

Determination of Inorganic Anions	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HH0239 - General Prep HPLC/IC - 300.0										
Blank (1HH0239-BLK2)			Prepared: 08/05/24 00:00 Analyzed: 08/05/24 17:01							
Chloride	<1.0	1.0	mg/L							
Blank (1HH0239-BLK3)			Prepared: 08/05/24 00:00 Analyzed: 08/05/24 21:33							
Chloride	<1.0	1.0	mg/L							
Blank (1HH0239-BLK4)			Prepared: 08/05/24 00:00 Analyzed: 08/06/24 02:42							
Chloride	<1.0	1.0	mg/L							
LCS (1HH0239-BS1)			Prepared: 08/05/24 00:00 Analyzed: 08/05/24 10:51							
Chloride	14.05	1.0	mg/L	15.3		91.7	90-110			
LCS (1HH0239-BS2)			Prepared: 08/05/24 00:00 Analyzed: 08/05/24 22:27							
Chloride	14.12	1.0	mg/L	15.3		92.1	90-110			
LCS Dup (1HH0239-BSD1)			Prepared: 08/05/24 00:00 Analyzed: 08/05/24 11:09							
Chloride	14.02	1.0	mg/L	15.3		91.5	90-110	0.249	10	
LCS Dup (1HH0239-BSD2)			Prepared: 08/05/24 00:00 Analyzed: 08/05/24 22:45							
Chloride	14.06	1.0	mg/L	15.3		91.8	90-110	0.419	10	
Matrix Spike (1HH0239-MS1)		**Source: 1HH0216-02**	Prepared: 08/05/24 00:00 Analyzed: 08/05/24 13:41							
Chloride	275.8	10.0	mg/L	153	126.2	97.6	80-120			
Matrix Spike (1HH0239-MS2)		**Source: 1HG1882-02**	Prepared: 08/05/24 00:00 Analyzed: 08/05/24 23:22							
Chloride	379.7	10.0	mg/L	153	228.8	98.5	80-120			
Matrix Spike Dup (1HH0239-MSD1)		**Source: 1HH0216-02**	Prepared: 08/05/24 00:00 Analyzed: 08/05/24 13:59							
Chloride	277.6	10.0	mg/L	153	126.2	98.8	80-120	0.647	10	
Matrix Spike Dup (1HH0239-MSD2)		**Source: 1HG1882-02**	Prepared: 08/05/24 00:00 Analyzed: 08/05/24 23:40							
Chloride	381.7	10.0	mg/L	153	228.8	99.8	80-120	0.536	10	

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HG1407 - EPA 200.2 Total ICP-MS - EPA 200.8										
Blank (1HG1407-BLK1)			Prepared: 07/25/24 16:27 Analyzed: 07/29/24 19:12							
Arsenic, total	<0.0020	0.0020	mg/L							
Barium, total	<0.0020	0.0020	mg/L							
Cadmium, total	<0.0002	0.0002	mg/L							
Chromium, total	<0.0020	0.0020	mg/L							
Copper, total	<0.0020	0.0020	mg/L							
Lead, total	<0.0008	0.0008	mg/L							
Molybdenum, total	<0.0020	0.0020	mg/L							
Nickel, total	<0.0040	0.0040	mg/L							
Selenium, total	<0.0040	0.0040	mg/L							
Silver, total	<0.0020	0.0020	mg/L							
Zinc, total	<0.0200	0.0200	mg/L							
LCS (1HG1407-BS1)			Prepared: 07/25/24 16:27 Analyzed: 07/29/24 19:18							
Arsenic, total	0.0951	0.0020	mg/L	0.100		95.1	85-115			

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HG1407 - EPA 200.2 Total ICP-MS - EPA 200.8										
LCS (1HG1407-BS1)			Prepared: 07/25/24 16:27 Analyzed: 07/29/24 19:18							
Barium, total	0.108	0.0020	mg/L	0.100		108	85-115			
Cadmium, total	0.0970	0.0002	mg/L	0.100		97.0	85-115			
Chromium, total	0.101	0.0020	mg/L	0.100		101	85-115			
Copper, total	0.102	0.0020	mg/L	0.100		102	85-115			
Lead, total	0.104	0.0008	mg/L	0.100		104	85-115			
Molybdenum, total	0.102	0.0020	mg/L	0.100		102	85-115			
Nickel, total	0.103	0.0040	mg/L	0.100		103	85-115			
Selenium, total	0.0918	0.0040	mg/L	0.100		91.8	85-115			
Silver, total	0.0991	0.0020	mg/L	0.100		99.1	85-115			
Zinc, total	0.0927	0.0200	mg/L	0.100		92.7	85-115			
Matrix Spike (1HG1407-MS1)	**Source: 1HG1956-01**		Prepared: 07/25/24 16:27 Analyzed: 07/29/24 19:30							
Arsenic, total	0.109	0.0020	mg/L	0.100	0.0009	108	70-130			
Barium, total	0.187	0.0020	mg/L	0.100	0.0565	130	70-130			
Cadmium, total	0.103	0.0002	mg/L	0.100	ND	103	70-130			
Chromium, total	0.111	0.0020	mg/L	0.100	ND	111	70-130			
Copper, total	0.124	0.0020	mg/L	0.100	0.0180	106	70-130			
Lead, total	0.106	0.0008	mg/L	0.100	ND	106	70-130			
Molybdenum, total	0.123	0.0020	mg/L	0.100	0.0023	121	70-130			
Nickel, total	0.110	0.0040	mg/L	0.100	0.0019	108	70-130			
Selenium, total	0.101	0.0040	mg/L	0.100	0.0015	99.7	70-130			
Silver, total	0.106	0.0020	mg/L	0.100	ND	106	70-130			
Zinc, total	0.124	0.0200	mg/L	0.100	0.0249	99.1	70-130			
Matrix Spike Dup (1HG1407-MSD1)	**Source: 1HG1956-01**		Prepared: 07/25/24 16:27 Analyzed: 07/29/24 19:36							
Arsenic, total	0.0986	0.0020	mg/L	0.100	0.0009	97.7	70-130	10.2	20	
Barium, total	0.160	0.0020	mg/L	0.100	0.0565	104	70-130	15.3	20	
Cadmium, total	0.0939	0.0002	mg/L	0.100	ND	93.9	70-130	9.57	20	
Chromium, total	0.0996	0.0020	mg/L	0.100	ND	99.6	70-130	10.9	20	
Copper, total	0.111	0.0020	mg/L	0.100	0.0180	93.5	70-130	10.9	20	
Lead, total	0.0967	0.0008	mg/L	0.100	ND	96.7	70-130	8.97	20	
Molybdenum, total	0.111	0.0020	mg/L	0.100	0.0023	109	70-130	10.4	20	
Nickel, total	0.100	0.0040	mg/L	0.100	0.0019	98.6	70-130	9.00	20	
Selenium, total	0.0926	0.0040	mg/L	0.100	0.0015	91.0	70-130	8.97	20	
Silver, total	0.0962	0.0020	mg/L	0.100	ND	96.2	70-130	9.71	20	
Zinc, total	0.109	0.0200	mg/L	0.100	0.0249	84.1	70-130	12.9	20	
Post Spike (1HG1407-PS1)	**Source: 1HG1956-01**		Prepared: 07/25/24 16:27 Analyzed: 07/29/24 19:42							
Arsenic, total	0.0782		mg/L	0.0800	0.0009	96.6	70-130			
Barium, total	0.139		mg/L	0.0800	0.0553	104	70-130			
Cadmium, total	0.0729		mg/L	0.0800	0.00003	91.1	70-130			
Chromium, total	0.0791		mg/L	0.0800	0.0003	98.5	70-130			
Copper, total	0.0931		mg/L	0.0800	0.0176	94.4	70-130			
Lead, total	0.0779		mg/L	0.0800	0.0002	97.0	70-130			
Molybdenum, total	0.0879		mg/L	0.0800	0.0023	107	70-130			
Nickel, total	0.0822		mg/L	0.0800	0.0018	100	70-130			

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HG1407 - EPA 200.2 Total ICP-MS - EPA 200.8										
Post Spike (1HG1407-PS1)	**Source: 1HG1956-01**		Prepared: 07/25/24 16:27 Analyzed: 07/29/24 19:42							
Selenium, total	0.0725		mg/L	0.0800	0.0015	88.8	70-130			
Silver, total	0.0765		mg/L	0.0800	0.0004	95.2	70-130			
Zinc, total	0.0930		mg/L	0.0800	0.0244	85.7	70-130			
Batch 1HG1535 - EPA 7470A Hg Water - 245.1										
Blank (1HG1535-BLK1)			Prepared: 07/29/24 15:17 Analyzed: 07/31/24 09:36							
Mercury, total	<0.00050	0.00050	mg/L							
LCS (1HG1535-BS1)			Prepared: 07/29/24 15:17 Analyzed: 07/31/24 09:38							
Mercury, total	0.00240	0.00050	mg/L	0.00250		96.0	85-115			
Matrix Spike (1HG1535-MS1)	**Source: 1HG1720-01**		Prepared: 07/29/24 15:17 Analyzed: 07/31/24 09:50							
Mercury, total	0.0268	0.00500	mg/L	0.0250	0.00423	90.4	70-130			
Matrix Spike Dup (1HG1535-MSD1)	**Source: 1HG1720-01**		Prepared: 07/29/24 15:17 Analyzed: 07/31/24 09:52							
Mercury, total	0.0261	0.00500	mg/L	0.0250	0.00423	87.7	70-130	2.60	10	

Definitions

H4:	The test was performed outside of the EPA recommended holding time of 15 minutes.
K1:	Unseeded dilution blank depletion exceeds 0.2 mg/L.
K2:	Glucose/glutamic acid recovery was below acceptance limits. The reported value is estimated.
M1:	Matrix spike recovery is above acceptance limits.
RL:	Reporting Limit
RPD:	Relative Percent Difference
S4:	Surrogate recovery can not be accurately measured due to matrix interference.

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

Reviewed and Approved By:

Sue Thompson

Sue Thompson
Client Services Manager
08/09/24 18:08

CHAIN OF CUSTODY RECORD

MICROBAC®
600 East 17th Street South
Newton, IA 50208
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1HG2038
HLW Engineering
PM: Heather Murphy

Printed: 7/1/2024 10:47:42A
www.keystonelabs.com

SITE INFORMATION

Sampler: TODD WHIPPLE
Project: Boone CO SLF Annual Leachate

REPORT TO

Todd Whipple
HLW Engineering
PO Box 314
Story City, IA 50248

INVOICE TO

John Roosa
Boone County Sanitary Landfill
1268 224th Lane
Boone, IA 50036

SPECIAL INSTRUCTIONS

None

Turn Around Time
☐ Standard ☐ RUSH, need by __/__/__

LAB USE ONLY

Work Order 1HG2038
Temperature 0.0
Turn-Cooler: No

☐ Custody Seal
☑ Containers Intact
☑ COC/Labels Agree
☐ Preservation Confirmed
☑ Received on Ice

Number	Sample Identification / Client ID	Matrix	Sample Type	Date	Time	Number of Containers	Analyses	Lab Sample Number
-001	Leachate Tank #1	Aqueous	GRAB	7/24/24	13:32	15	608-104, 615-101, 624-108, 625-107, ag-t-200.8, as-t-200.8, ba-t-200.8, bod-5210, cd-t-200.8, cl-300.0, cn-t-4500e, cr-t-200.8, cu-t-200.8, hg-t-245.1, mo-t-200.8, nh3-timberline, ni-t-200.8, pb-t-200.8, ph-4500, phenol-t-420.1, se-t-200.8, tss-i-3765-85, zn-t-200.8	—

Relinquished By: Todd Whipple Date/Time: 7/25/24
Received By: Date/Time:
Relinquished By: Date/Time:
Received for Lab By: [signature] Date/Time: 7-25-24 10:45

Remarks:
See COC #2 - is it duplicate?

Original - Lab Copy Yellow - Sampler Copy

MICROBAC®
600 East 17th Street So
Newton, IA 50208
641-792-8451

1 H G 2 0 3 8
HLW Engineering
PM: Heather Murphy

www.keystonelabs.com

SITE INFORMATION

Sampler: Todd Whipple

Project: Boone CO SLF-Annual Leachate

REPORT TO

Todd Whipple
HLW Engineering
PO Box 314
Story City, IA 50248

INVOICE TO

John Roosa
Boone County Sanitary Landfill
1268 224th Lane
Boone, IA 50036

SPECIAL INSTRUCTIONS

None

Turn Around Time
☐ Standard ☐ RUSH, need by __/__/__

LAB USE ONLY

Work Order: 1HG2038
Temperature: 0.0
Turn-Cooler: No

☐ Custody Seal
☑ Containers Intact
☑ COC/Labels Agree
☐ Preservation Confirmed
☑ Received on Ice

Number	Sample Identification / Client ID	Matrix	Sample Type	Date	Time	Number of Containers	Analyses	Lab Sample Number
-001	Leachate Tank #3	Aqueous	GRAB	7 24 24	13:15	15	608-104, 615-101, 624-108, 625-107, ag-t-200.8, as-t-200.8, ba-t-200.8, bod-5210, cd-t-200.8, cl-300.0, cn-t-4500e, cr-t-200.8, cu-t-200.8, hg-t-245.1, mo-t-200.8, nh3-timberline, ni-t-200.8, pb-t-200.8, ph-4500, phenol-t-420.1, se-t-200.8, tss-i-3765-85, zn-t-200.8	01

Relinquished By: [signature] Date/Time: 7/25/24

Received By: Date/Time:

Relinquished By: Date/Time:

Received for Lab By: [signature] Date/Time: 7-25-24 10:45

Remarks: see COC #2

Original - Lab Copy Yellow - Sampler Copy

CHAIN OF CUSTODY RECORD

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600 East 17th Street South
Newton, IA 50208
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1HG2038
HLW Engineering
PM: Heather Murphy

Printed: 7/1/2024 10:47:42A

www.keystonelabs.com

SITE INFORMATION

Sampler: Todd Whipple

Project: Boone CO SLF Annual Leachate

REPORT TO

Todd Whipple
HLW Engineering
PO Box 314
Story City, IA 50248

John Roosa
Boone County Sanitary Landfill
1268 224th Lane
Boone, IA 50036

SPECIAL INSTRUCTIONS

None

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

LAB USE ONLY

Work Order: 1HG2038
Temperature: 0.0
Turn-Cooler: No

- ☐ Custody Seal
- ☑ Containers Intact
- ☑ COC/Labels Agree
- ☐ Preservation Confirmed
- ☑ Received on Ice

Number	Sample Identification / Client ID	Matrix	Sample Type	Date	Time	Number of Containers	Analyses	Lab Sample Number
-001	Lagoon	Aqueous	GRAB	7/24/24	12:45	15	608-104, 615-101, 624-108, 625-107, ag-t-200.8, as-t-200.8, ba-t-200.8, bod-5210, cd-t-200.8, cl-300.0, cn-t-4500e, cr-t-200.8, cu-t-200.8, hg-t-245.1, mo-t-200.8, nh3-timberline, ni-t-200.8, pb-t-200.8, ph-4500, phenol-t-420.1, se-t-200.8, tss-i-3765-85, zn-t-200.8	—

Relinquished By: Todd Whipple Date/Time: 7/25/24

Received By: Date/Time:

Relinquished By: Date/Time:

Received for Lab By: [signature] Date/Time: 7-25-24 10:45

Remarks: See COC # 2

Original - Lab Copy Yellow - Sampler Copy

APPENDIX G.4 – Leachate Elevation Measurements

Well/TOC	LPZ-2R			Boone Co SLF
	Sept 14	1100.43		
Date	**Depth to Leachate (ft)**	**Leachate Elevation**	**Waste Base Elevation**	**Saturated Thickness (ft)**
1/11/2024	43.42	1057.01	1044.1	12.91
2/24/2024	40.03	1060.40	1044.1	16.30
3/12/2024	41.42	1059.01	1044.1	14.91
4/23/2024	38.70	1061.73	1044.1	17.63
5/7/2024	34.60	1065.83	1044.1	21.73
6/3/2024	41.76	1058.67	1044.1	14.57
7/24/2024	43.16	1057.27	1044.1	13.17
8/6/2024	43.22	1057.21	1044.1	13.11
9/30/2024	43.83	1056.60	1044.1	12.50
10/2/2024	44.08	1056.35	1044.1	12.25
11/25/2024	39.30	1061.13	1044.1	17.03
12/9/2024	41.85	1058.58	1044.1	14.48

Well/TOC	LPZ-3	1083.81		Boone Co SLF
	Jan 03	1112.37		
Date	**Depth to Leachate (ft)**	**Leachate Elevation**	**Waste Base Elevation**	**Saturated Thickness (ft)**
1/11/2024	34.90	1077.47	1024.8	52.67
2/24/2024	33.13	1079.24	1024.8	54.44
3/12/2024	31.78	1080.59	1024.8	55.79
4/23/2024	31.46	1080.91	1024.8	56.11
5/7/2024	31.25	1081.12	1024.8	56.32
6/3/2024	31.51	1080.86	1024.8	56.06
7/24/2024	30.92	1081.45	1024.8	56.65
8/6/2024	31.15	1081.22	1024.8	56.42
9/30/2024	33.40	1078.97	1024.8	54.17
10/2/2024	33.75	1078.62	1024.8	53.82
11/25/2024	28.60	1083.77	1024.8	58.97
12/9/2024	31.67	1080.70	1024.8	55.90

Well/TOC	LPZ-6R			Boone Co SLF
	Sept 14	1107.81		
Date	**Depth to Leachate (ft)**	**Leachate Elevation**	**Waste Base Elevation**	**Saturated Thickness (ft)**
1/11/2024	67.57	1040.24	1023.7	16.54
2/24/2024	67.60	1040.21	1023.7	16.51
3/12/2024	67.60	1040.21	1023.7	16.51
4/23/2024	67.68	1040.13	1023.7	16.43
5/7/2024	67.81	1040.00	1023.7	16.30
6/3/2024	67.89	1039.92	1023.7	16.22
7/24/2024	67.94	1039.87	1023.7	16.17
8/6/2024	67.95	1039.86	1023.7	16.16
9/30/2024	67.98	1039.83	1023.7	16.13
10/2/2024	68.00	1039.81	1023.7	16.11
11/25/2024	68.20	1039.61	1023.7	15.91
12/9/2024	68.13	1039.68	1023.7	15.98

Well/TOC	LPZ-8A	1077.19		Boone Co SLF
Date	**Depth to Leachate (ft)**	**Leachate Elevation**	**Waste Base Elevation**	**Saturated Thickness (ft)**
1/11/2024	42.85	1034.34	995.12	39.22
2/24/2024	43.50	1033.69	995.12	38.57
3/12/2024	43.75	1033.44	995.12	38.32
4/23/2024	43.68	1033.51	995.12	38.39
5/7/2024	43.40	1033.79	995.12	38.67
6/3/2024	43.42	1033.77	995.12	38.65
7/24/2024	44.90	1032.29	995.12	37.17
8/6/2024	44.60	1032.59	995.12	37.47
9/30/2024	44.90	1032.29	995.12	37.17
10/2/2024	44.90	1032.29	995.12	37.17
11/25/2024	43.90	1033.29	995.12	38.17
12/9/2024	44.90	1032.29	995.12	37.17

Well/TOC	LPZ-9	1089.5		Boone Co SLF
	Jan 03	1094.55		
Date	**Depth to Leachate (ft)**	**Leachate Elevation**	**Waste Base Elevation**	**Saturated Thickness (ft)**
1/11/2024	29.37	1065.18	1021.30	43.88
2/24/2024	29.25	1065.30	1021.30	44.00
3/12/2024	29.20	1065.35	1021.30	44.05
4/23/2024	29.14	1065.41	1021.30	44.11
5/7/2024	26.85	1067.70	1021.30	46.40
6/3/2024	29.10	1065.45	1021.30	44.15
7/24/2024	29.28	1065.27	1021.30	43.97
8/6/2024	29.14	1065.41	1021.30	44.11
9/30/2024	29.57	1064.98	1021.30	43.68
10/2/2024	29.57	1064.98	1021.30	43.68
11/25/2024	29.70	1064.85	1021.30	43.55
12/9/2024	29.30	1065.25	1021.30	43.95

Well/TOC	LPZ-10	1089.5		Boone Co SLF
	Jan 03	1104.5		
Date	**Depth to Leachate (ft)**	**Leachate Elevation**	**Waste Base Elevation**	**Saturated Thickness (ft)**
1/11/2024	NR(2)	NA	998.5	NA
2/24/2024	29.28	1075.22	998.5	76.72
3/12/2024	28.62	1075.88	998.5	77.38
4/23/2024	28.58	1075.92	998.5	77.42
5/7/2024	20.70	1083.80	998.5	85.30
6/3/2024	27.60	1076.90	998.5	78.40
7/24/2024	*			
8/6/2024	*			
9/30/2024	*			
10/2/2024	*			
11/25/2024	*			
12/9/2024	*			

(2) Obstruction encountered at 30'
Obstruction also noted during the 6/3/24 measurement
* Removed from monitoring system as per 7/17/24 IDNR letter

Well/TOC	LPZ-12	1076.88		Boone Co SLF	Well/TOC	LPZ-13C	1095		Boone Co SLF	Well/TOC	LPZ-14 Sept 14	 1091.63		Boone Co SLF
Date	**Depth to Leachate (ft)**	**Leachate Elevation**	**Waste Base Elevation**	**Saturated Thickness (ft)**	**Date**	**Depth to Leachate (ft)**	**Leachate Elevation**	**Waste Base Elevation**	**Saturated Thickness (ft)**	**Date**	**Depth to Leachate (ft)**	**Leachate Elevation**	**Waste Base Elevation**	**Saturated Thickness (ft)**
1/11/2024	24.05	1052.83	1047	5.83	1/11/2024	29.55	1065.45	1049.88	15.57	1/11/2024	37.08	1054.55	1046.4	8.15
2/24/2024	23.19	1053.69	1047	6.69	2/24/2024	29.28	1065.72	1049.88	15.84	2/24/2024	36.93	1054.70	1046.4	8.30
3/12/2024	23.30	1053.58	1047	6.58	3/12/2024	29.11	1065.89	1049.88	16.01	3/12/2024	37.01	1054.62	1046.4	8.22
4/23/2024	24.74	1052.14	1047	5.14	4/23/2024	29.15	1065.85	1049.88	15.97	4/23/2024	37.74	1053.89	1046.4	7.49
5/7/2024	21.97	1054.91	1047	7.91	5/7/2024	29.28	1065.72	1049.88	15.84	5/7/2024	32.80	1058.83	1046.4	12.43
6/3/2024	22.95	1053.93	1047	6.93	6/3/2024	29.50	1065.50	1049.88	15.62	6/3/2024	36.20	1055.43	1046.4	9.03
7/24/2024	23.37	1053.51	1047	6.51	7/24/2024	29.71	1065.29	1049.88	15.41	7/24/2024	36.90	1054.73	1046.4	8.33
8/6/2024	23.48	1053.40	1047	6.40	8/6/2024	29.62	1065.38	1049.88	15.50	8/6/2024	41.05	1050.58	1046.4	4.18
9/30/2024	24.55	1052.33	1047	5.33	9/30/2024	29.50	1065.50	1049.88	15.62	9/30/2024	36.98	1054.65	1046.4	8.25
10/2/2024	24.53	1052.35	1047	5.35	10/2/2024	29.76	1065.24	1049.88	15.36	10/2/2024	37.02	1054.61	1046.4	8.21
11/25/2024	23.50	1053.38	1047	6.38	11/25/2024	22.60	1072.40	1049.88	22.52	11/25/2024	37.18	1054.45	1046.4	8.05
12/9/2024	23.46	1053.42	1047	6.42	12/9/2024	25.30	1069.70	1049.88	19.82	12/9/2024	36.98	1054.65	1046.4	8.25

Well/TOC	LPZ-15			Boone Co SLF	Well/TOC	LPZ-17			Boone Co SLF
	Sept 14	1088.47				Oct 21	973.5		
						Aug 23[1]	973.8		
Date	**Depth to Leachate (ft)**	**Leachate Elevation**	**Waste Base Elevation**	**Saturated Thickness (ft)**	**Date**	**Depth to Leachate (ft)**	**Leachate Elevation**	**Waste Base Elevation**	**Saturated Thickness (ft)**
1/11/2024	34.30	1054.17	1045.3	8.87	1/11/2024	8.25	965.55	965.5	0.05
2/24/2024	34.02	1054.45	1045.3	9.15	2/24/2024	8.30	965.50	965.5	0.00
3/12/2024	33.91	1054.56	1045.3	9.26	3/12/2024	8.30	965.50	965.5	0.00
4/23/2024	33.72	1054.75	1045.3	9.45	4/23/2024	8.18	965.62	965.5	0.12
5/7/2024	33.52	1054.95	1045.3	9.65	5/7/2024	8.30	965.50	965.5	0.00
6/3/2024	33.88	1054.59	1045.3	9.29	6/3/2024	8.15	965.65	965.5	0.15
7/24/2024	34.00	1054.47	1045.3	9.17	7/24/2024	8.15	965.65	965.5	0.15
8/6/2024	34.09	1054.38	1045.3	9.08	8/6/2024	8.11	965.69	965.5	0.19
9/30/2024	34.35	1054.12	1045.3	8.82	9/30/2024	8.15	965.65	965.5	0.15
10/2/2024	34.36	1054.11	1045.3	8.81	10/2/2024	8.15	965.65	965.5	0.15
11/25/2024	34.55	1053.92	1045.3	8.62	11/25/2024	8.30	965.50	965.5	0.00
12/9/2024	34.19	1054.28	1045.3	8.98	12/9/2024	8.23	965.57	965.5	0.07

(1) LPZ-17 repaired on August 29, 2023

	EW-1	1107.82		Boone Co SLF	Well/TOC	EW-2	1110.92		Boone Co SLF	Leachate Tank #3	
Date	**Depth to Leachate (ft)**	**Leachate Elevation**	**Waste Base Elevation**	**Saturated Thickness (ft)**	**Date**	**Depth to Leachate (ft)**	**Leachate Elevation**	**Waste Base Elevation**	**Saturated Thickness (ft)**	**Monthly* Gallons Hauled**	**Cumulative* Gallons Hauled**
1/11/2024	77.55	1030.27	1026	4.27	1/11/2024	79.30	1031.62	1029	2.62	9,653	9,653
2/24/2024	76.57	1031.25	1026	5.25	2/24/2024	79.15	1031.77	1029	2.77	0	9,653
3/12/2024	77.40	1030.42	1026	4.42	3/12/2024	79.06	1031.86	1029	2.86	0	9,653
4/23/2024	77.42	1030.40	1026	4.40	4/23/2024	79.42	1031.50	1029	2.50	9,915	19,568
5/7/2024	77.28	1030.54	1026	4.54	5/7/2024	79.80	1031.12	1029	2.12	0	19,568
6/3/2024	77.08	1030.74	1026	4.74	6/3/2024	79.25	1031.67	1029	2.67	6,656	26,224
7/24/2024	77.38	1030.44	1026	4.44	7/24/2024	79.36	1031.56	1029	2.56	0	26,224
8/6/2024	77.70	1030.12	1026	4.12	8/6/2024	79.76	1031.16	1029	2.16	0	26,224
9/30/2024	76.85	1030.97	1026	4.97	9/30/2024	79.10	1031.82	1029	2.82	0	26,224
10/2/2024	77.42	1030.40	1026	4.40	10/2/2024	79.55	1031.37	1029	2.37	0	26,224
11/25/2024	77.80	1030.02	1026	4.02	11/25/2024	78.80	1032.12	1029	3.12	9,253	35,477
12/9/2024	77.30	1030.52	1026	4.52	12/9/2024	79.85	1031.07	1029	2.07	0	35,477

Display on EW-2 noted as off/fading during Jan. - Mar. readings, LCD display was repaired in late March.

* Actual volumes weighed and hauled to POTW from Leachate Tank #3

Appendix H

Gas Monitoring Report

Gas Monitoring Report

Explosive gas monitoring per 113.9(2) and the approved GMSP was conducted quarterly during the last reporting period (2023).

Explosive gas concentrations are recorded in Percent Lower Explosive Limits (% LEL) and were within regulatory guidelines during the monitoring episodes. Summary tables of gas monitoring are included in Appendix H.1.

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APPENDIX H.1 - Explosive Gas Monitoring Data

BOONE COUNTY SANITARY LANDFILL
IDNR PERMIT NO. 08-SDP-1-75P
EXPLOSIVE GAS MONITORING RESULTS

March 12, 2024

Reference* Location	Combustible % LEL
Subsurface	
GP-1	0
GP-2 - Manhole	0
GP-3 - Manhole	0
GP-4	**21.3**
GP-5	0
GP-6	0
GP-7	0
GP-8	0
GU-3	NT*
GU-4	0
Scale Pit	0
GWD-1 Manhole	**42.2**
Breathing Zone	
New Shop/Maintanence	0
Scale Pit	0
Scale House	0
Shop 1 - Attached	0
Shop 2 - cold storage	0

* Buried

June 3, 2024

Reference* Location	Combustible % LEL
Subsurface	
GP-1	0
GP-2 - Manhole	0
GP-3 - Manhole	0
GP-4	**4**
GP-5	0
GP-6	0
GP-7	0
GP-8	0
GU-3	0
GU-4	0
Scale Pit	0
GWD-1 Manhole	0
Breathing Zone	
New Shop/Maintanence	0
Scale Pit	0
Scale House	0
Shop 1 - Attached	0
Shop 2 - cold storage	0

September 30, 2024

Reference* Location	Combustible % LEL
Subsurface	
GP-1	0
GP-2 - Manhole	0
GP-3 - Manhole	0
GP-4	**7.0**
GP-5	0
GP-6	0
GP-7	0
GP-8	0
GU-3	0
GU-4	NT*
Scale Pit	0
GWD-1 Manhole	**4.6**
Breathing Zone	
New Shop/Maintanence	0
Scale Pit	0
Scale House	0
Shop 1 - Attached	0
Shop 2 - cold storage	0

* Buried

December 9, 2024

Reference* Location	Combustible % LEL
Subsurface	
GP-1	0
GP-2 - Manhole	0
GP-3 - Manhole	0
GP-4	**39.9**
GP-5	0
GP-6	0
GP-7	0
GP-8	0
GU-3	0
GU-4	0
Scale Pit	0
GWD-1 Manhole	0
Breathing Zone	
New Shop/Maintanence	0
Scale Pit	0
Scale House	0
Shop 1 - Attached	0
Shop 2 - cold storage	0