

2025 ANNUAL GROUNDWATER QUALITY REPORT

**FOR THE
FREMONT COUNTY SANITARY LANDFILL
36-SDP-01-74P
SIDNEY, IOWA**

**by:
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January, 2026



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Table of Contents

Certification

Section 1.0 Background Information

Monitoring Well Maintenance Performance Reevaluation

Section 2.0 Reporting Period Activities

Section 3.0 Data Evaluation and Summary

Quality Assurance/Quality Control

Background data Validation

Site Specific GWPS

Statistically Significant Increases/Exceedances of Prediction Limits

Assessment Monitoring

Statistically Significant Levels

Assessment of Corrective Measures

Corrective Action Evaluations & Monitoring

Section 4.0 Leachate Collection System Performance Reevaluation

Section 5.0 Gas Monitoring Evaluation

Section 6.0 Recommendations

Figures

Figure 1 – Site Plan & Gas Monitoring Locations

Figure 2 – Water Table Contour Map

Tables in IDNR Format

Table 1 – Monitoring Program Summary

Table 2 – Monitoring Program Implementation Schedule

Table 2A – Historic Monitoring Summary

Table 3 – Monitoring Well Maintenance Performance Reevaluation Schedule

Table 4 – Monitoring Well Maintenance Performance Reevaluation Summary

Table 4A – Historic Water Elevation Summary

Table 5 – Background and GWPS Summary – Interwell for MW

Table 5A – Background and GWPS Summary – Intrawell for GWD

Table 6 – Summary of Detections

Table 7 – Summary of Ongoing and Newly Identified SSI

Table 8 - Summary of Ongoing and Newly Identified SSL – **Not Required**

Table 9 – Analytical Data Summary

Table 10 – Historic SSI and SSL (Confidence Interval Evaluation) – **Not Required**

Table 11 – Corrective Action Trend Analysis – **Not Required**

Table 12 – Leachate Level Summary

Table 13 – Gas Monitoring Summary

Appendices

Appendix A - Field Sampling Forms

Appendix B - Statistical Reports

Appendix C - Laboratory Reports for Report Period

Appendix D – Turbidity

Appendix E – Prediction Limit Exceedances

Appendix F - Assessment Monitoring Results

Appendix G –Leachate Collection System Performance Evaluation Information

Certification

Prepared by:  _____

Date: 1-16 -2026

Typed: Todd Whipple, CPG

Section 1.0 Background Information

1.1 Report Format

Table 1 through Table 13 are attached to this report and satisfy the IDNR requirement to provide tables to meet the IDNR format requirements included in Special Provision 4.i. of the Revised Permit, dated October 31, 2024 (Doc #111237).

1.2 Report Priority

No requests are made herein for priority review of this document.

1.3 Period of Report Coverage

Water quality data evaluation is based on a running compilation of data beginning on September 18, 2014. Statistical evaluations herein are based on the most recent water quality data collected September 8, 2025.

1.4 Current Site Map

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

1.5 Site Status and Applicable Rules

Site Location

The Fremont County Sanitary Landfill is located in the SE¼ of Section 22, T68N, R24W, Fremont County, Iowa. The site encompasses approximately 90 acres. The facility is situated at 2879 250th Street, Sidney, Iowa 51652. The facility operates under the Iowa Department of Natural Resources (IDNR) Permit Number 36-SDP-01-74P.

The landfill was originally developed by excavating trenches (expanding ravines) in the Pleistocene loess that mantles the site. The loess, which generally is 60 or more feet thick (Terracon Environmental, 1991), is windblown silt that was derived from the Missouri River valley in late Pleistocene time. Most of the loess is Wisconsinan in age (Peorian loess), but somewhat older Illinoian age loess (Loveland loess) was penetrated by drilling at the site. The Loveland loess in turn is underlain by glacial till and intratill glacial sands.

The uppermost bedrock unit consists of cyclic shale and limestone sequences which is typically over 1,000 feet thick.

Landfill Layout

The site is situated in the uplands south of a small stream that arcs around the east, west, and north sides of the landfill.

As illustrated in Figure 1, the site is described as the original landfill with abutment landfill cells north of the original.

During 2007, a Subtitle D composite-lined cell was constructed. The landfill began depositing waste in the new Subtitle D cell late in September 2007 and formally ceased using the unlined areas for waste on October 1, 2007. Permit amendment #3 approved the placement of flood debris on a portion of the non-lined site in 2012. The unlined area was again reopened for flood debris during the spring of 2019 (#94763). During the summer of 2013, Phase 4S was constructed and approved for waste in October 2013. At the direction of IDNR staff, a separate groundwater discharge sampling location, GWD-2, was installed. Phase 5 was constructed in 2019 and approved for waste August 30, 2019. With the construction of Phase 5, MW-22 was abandoned and a new well, MW-23, constructed May 13, 2019.

Figure 1 shows the general area of landfiling, and locations of monitoring wells. Figure 2 shows the groundwater contours using fall 2025 static water and leachate piezometer measurements. Landfiling, conducted under Iowa Department of Natural Resources (IDNR) Permit No. 36-SDP-1-74P, began in 1975.

Applicable Rules

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

1.6 Summary of Hydrologic Monitoring System Plan (HMSP)

The HMSP includes background monitoring points MW-2, MW-14, MW-18, and MW-19. There are eight(8) downgradient monitoring points designated MW-3, MW-9, MW-12, MW-15, MW-21, MW-23, GWD-1, and GWD-2.

The current HMSP is summarized in Table 1. The HMSP Implementation Schedule for 2026 is itemized in Table 2.

MONITORING WELL MAINTENANCE PERFORMANCE REEVALUATION

Table 3 outlines the status of well performance and maintenance activities performed as required by IAC 567-113.10(2) f.

High & Low Water Levels

Current year water elevation data is included on Table 4. Historic water elevation data (2010-present) is included in Table 4A. A Water Table Contour Map (Figure 2) dated September, 2025 is included with this report and illustrates the water table surface and the effects of the topography.

Review of the 2025 water elevation data does not indicate any remarkable water elevation conditions.

Well Depth & Sedimentation

Well depth measurements were made September 8, 2025. Review of the well depth data included on Table 4 indicate that well sedimentation is estimated to be one (1) foot, or less, at all site monitoring wells.

Well Recharge Rates & Chemistry

The most recent measured horizontal hydraulic conductivity testing results (2004) for site monitoring wells are included on Table 4. Horizontal hydraulic conductivities ranged between 10^{-3} cm/sec and 10^{-6} cm/sec.

Field recovery data recorded on March 20, 2024 (also on Table 4) indicates that the monitoring wells recover to at least 90% recovery within 0 to 24 hours after purging. Well recovery information indicates that recharge to the individual wells remained sufficient to promote collection of representative water quality samples and the wells were functioning as intended. Monitoring well recharge reevaluation is due biennially according to 113.10(2)"f", and should be evaluated again in 2026.

Based on the apparent static condition of the water surfaces across the site, it appears that the semi-annual water elevation data is sufficient to adequately monitor the hydrologic condition of the site. Further, the wells are interpreted to be appropriately located to detect any impact, should it occur.

Groundwater Underdrains

The discharge end of the pipe at GWD-1 was buried/submerged below sediment and/or water in the sediment-filled drainage creek during both March 11, 2025, and September 8, 2025 sample collection events. Sediment in the drainage creek below GWD-1 should be removed in order to allow the discharge pipe GWD-1 to flow freely and to be sampled readily.

Section 2.0 Reporting Period Monitoring Activities

A summary of the planned 2026 sample collection events at each well is included in Table 2. A comprehensive summary of sampling episodes from 2016 to present is included in Table 2A.

Field sampling information for March 11, 2025 and September 8, 2025 sampling episodes is included on the field forms (IDNR Form 542-1322) in Appendix A.

A comprehensive summary of Analytical Data for the episodes between September 18, 2014 and September 8, 2025 is included on Table 9.

2.1 Current Detection Monitoring Activities

Background wells are currently MW-2, MW-14, MW-18, and MW-19.

Downgradient monitoring points include MW-3, MW-9, MW-12, MW-15, MW-21, MW-23, GWD-1, and GWD-2.

MW-9, MW-21, MW-23, GWD-1, and GWD-2 remain in the detection monitoring system.

2.2 Current Assessment Monitoring Activities

MW-3, MW-12, and MW-15 are in the assessment monitoring system. A five (5) year frequency for full Appendix II sampling was approved in Special Provision X.4.f of the Revised Permit, dated October 31, 2024 (Doc #111237).

A minimum of three (3) rounds of full Appendix II sampling are completed at MW-3, MW-12, and MW-15.

The groundwater underdrains (GWD-1 and GWD-2) are evaluated by intrawell statistical methods and remain in the detection monitoring system, as no control limits are exceeded at GWD-1 or GWD-2.

2.3 Current Corrective Action Activities

There are no wells in the corrective action monitoring system.

Assessment of Corrective Measures (ACM) is not required.

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 Fremont County Sanitary Landfill, First Semi-Annual Monitoring Event in 2025, dated March, 2025 is included in Appendix B.1. The Groundwater Statistics Report for the Fremont County Sanitary Landfill, Second Semi-Annual Monitoring Event in 2025, dated October, 2025 is included in Appendix B.2.

The Analytical Reports for the laboratory testing on samples collected March 11, 2025 and September 8, 2025 are included in Appendix C.

QUALITY ASSURANCE/QUALITY CONTROL

A blind duplicate sample was collected at MW-9 during the March 11, 2025 sampling episode. A blind duplicate sample was collected at MW-15 during the September 8 2025 sampling episode.

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

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

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

The results of the blind duplicate and the monitoring well results for March 11, 2025 and September 8, 2025 were within the limits established and indicate that the data quality is acceptable without restriction.

BACKGROUND DATA VALIDATION

On July 10, 2014 an unnumbered Permit Amendment and Memo was issued by the IDNR regarding turbidity (Doc # 80712). A TSS and Field Turbidity Evaluation Report was prepared and submitted on December 12, 2017 (Doc# 91109) and was approved by IDNR on December 27, 2017 (Doc #91170). A summary table of field measured turbidity is included in Appendix D.

The background data utilized herein has been restricted to include only sample results that have been collected by “No Purge” methods in order to avoid turbidity related issues that may have been associated with historic sample collection methods. No-purge sampling has been performed at the facility beginning with the September 17, 2014 sampling episode.

Monitoring Wells

Monitoring wells included in the HMSP are evaluated by interwell statistical methods. The prediction limits are based on the background water quality collected at background wells MW-2, MW-14, MW-18, and MW-19.

Upgradient Data, Table 1, Attachment B, to the October, 2025 Statistical Evaluation Report (Appendix B.2) includes a summary of the most current background data. Any water quality results tagged with an asterisk is a statistical outlier and is excluded from use in calculating the Prediction Limits. The calculated Prediction Limits are summarized on Table 5.

Groundwater Underdrains

Groundwater underdrains included in the HMSP are designated as GWD-1 and GWD-2 and are evaluated by intrawell statistical methods. The control limits are based on the initial 13 data points established as the background water quality. The water quality for each sample collection episode at GWD-1 and GWD-2 is compared to the background control limits.

The calculated Control Limits are summarized on Table 5A.

SITE SPECIFIC GWPS

Review of the information included on Table 5 indicates that the prediction limit for cobalt (14.4 ug/L) calculated from the background data exceeds the published IAC 567, Chapter 137 Statewide Standard (2.1 ug/L). The Site-Specific GWPS should not be set lower than the Site Prediction

Limit calculated from the site background data. For this report, the prediction limits for cobalt (14.4 ug/L) is utilized as the Site-Specific GWPS for the interwell evaluations of monitoring wells.

Review of the information included on Table 5A indicates that the Control limit for arsenic (12.49 ug/L) at GWD-1 calculated from the background data exceeds the published IAC 567, Chapter 137 Statewide Standard (10.0 ug/L). Review of the information included on Table 5A indicates that the Control limit for cobalt (25.17 ug/L) at GWD-1 calculated from the background data exceeds the published IAC 567, Chapter 137 Statewide Standard (2.1 ug/L). The Well-Specific GWPS should not be set lower than the Control Limit calculated from the background data. For this report, the control limit for arsenic (12.49 ug/L) and cobalt (25.17 ug/L) at GWD-1 is utilized as the Well-Specific GWPS for the intrawell evaluations of GWD-1.

Review of the information included on Table 5A indicates that the Control limit for cobalt (35.7 ug/L) at GWD-2 calculated from the background data exceeds the published IAC 567, Chapter 137 Statewide Standard (2.1 ug/L). The Well-Specific GWPS should not be set lower than the Control Limit calculated from the background data. For this report, the control limit for cobalt (35.7 ug/L) at GWD-2 is utilized as the Well-Specific GWPS for the intrawell evaluations of GWD-2.

For all other compounds the published IAC 567, Chapter 137 Statewide Standard are utilized as the GWPS.

STATISTICALLY SIGNIFICANT INCREASES (SSI)

Groundwater Underdrains – Intrawell Statistical Evaluations

The detected concentration of each compound is compared to the well-specific control limit for each respective compound. A detected concentration for a compound that is in excess of the calculated control limit is recorded as a Statistically Significant Increase (SSI) at a detection monitoring groundwater underdrain.

Since the Control Limit for VOC is set at the laboratory Reporting Level, any VOC detection in an underdrain is recorded as an SSI.

Table 6 is a summary of all *current* prediction limit in 2025. There are *no verified control limit exceedances* recorded in the current *detection* groundwater underdrains (GWD-1 or GWD-2).

Table 7 includes an on-going summary of compound detections in GWD-1 and GWD-2 and the associated intrawell control limits exceedances over time (highlighted in light brown) for compounds of interest. *None are recorded.*

Monitoring Wells – Interwell Statistical Evaluations

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

Since the Prediction limit for VOC is set at the laboratory Reporting Level, any VOC detection is recorded as an SSI. Table 6 is a summary of all compounds at site monitoring wells that have exceeded a *current* prediction limit in 2025. There are *no verified prediction limit exceedances* recorded in the current *detection* monitoring system wells.

Prediction limit exceedances are again recorded at wells that are currently included in the assessment monitoring system (MW-3, MW-12, MW-15). Table 7 includes an on-going summary of compound detections that exceed the prediction limits (highlighted in light brown).

Exceedances of the Prediction Limit at a well that is in the assessment monitoring system is not an SSI, instead the exceedance is further evaluated by Confidence Interval Statistics.

Exceedance of the Prediction Limits for the current year is summarized on Table 1. A running summary of recorded Prediction Limit exceedances by year since 2022 is included in Appendix E.

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

ASSESSMENT MONITORING SUMMARY

A five (5) year frequency for full Appendix II sampling was approved in Special Provision X.4.f of the Permit, dated October 31, 2024 (Doc #111237).

The full Appendix II (assessment) monitoring is current. A minimum of three (3) rounds of full Appendix II sampling are completed at MW-3, MW-12, and MW-15.

Compounds detected to date beyond the Appendix I list are limited to bis(2-ethylhexyl) phthalate at a single well (MW-15) during a single sample collection episode (9/1/2022).

The summary of assessment monitoring detections 2009 to date is presented in Appendix F. The full Appendix II sampling episodes are highlighted in green in the tables in Appendix F.

Based on the results to date, bis (2-ethylhexyl) phthalate will continue to be monitored as appropriate to findings during assessment monitoring episodes at assessment monitoring wells (see Table 2).

STATISTICALLY SIGNIFICANT LEVELS (SSL)

The compounds with detections that exceed site prediction limits in monitoring wells or the control limits in groundwater underdrains (see summary in Tables 1 & 7) 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 required the plume of impact to be defined in the horizontal and vertical directions and required completion of an Assessment of Corrective Measures (ACM).

The SSL Evaluation is based on data collected since September 17, 2014. The Confidence Intervals (95% LCL and 95% UCL) are calculated during each statistical evaluation based on the most recent four (4) data points. The 95% LCL evaluation is presented in Table 7. Any 95% LCL that exceeds the GWPS would be highlighted in yellow. *There are no SSL recorded to date*

ASSESSMENT OF CORRECTIVE MEASURES (ACM)

Not Required.

CORRECTIVE MEASURES MONITORING

Not Required.

Section 4.0 Leachate Collection System Performance Evaluation

The Fremont County Sanitary Landfill initially was constructed as a trench type fill. An area fill method is now being used as documented in the previously approved design plans.

The Fremont County Sanitary Landfill was originally permitted in 1974. The site was initially constructed and operated as a ravine-type fill. In 1998, Barker-Lemar and Associates conducted a leachate control study and submitted a *Leachate Control System Plan* for IDNR approval.

The collection system installed in 1999 includes a toe drain in the south fill area with three laterals extending into the adjoining cells. The toe drain was designed to gravity flow into an underground storage tank system located on the east end. Two 1,000-gallon polyethylene storage tanks were installed into the waste. The collection line flows directly into the west storage tank and can overflow into the east storage tank if additional capacity is needed. The levels in the tanks were checked semi-annually through 2022. To date, the east storage tank has never had any leachate in it and only minimal liquid in the west tank. On March 13, 2025, IDNR approved the abandonment of the two (2) leachate holding tanks and abandonment of LW-3 and LW-4 (Doc #112562).

In 2007, a Subtitle D expansion was constructed which included a composite liner, leachate collection system, and groundwater dewatering system. A 10,000-gallon storage tank was also installed adjacent to the Phase 1 and Phase 2 expansion cells for storage of the leachate from the Subtitle D cells.

Waste was initially placed in the new Subtitle D cells late in September 2007. A leachate piezometer (PZ-1) was installed in the new cell to measure any accumulated leachate.

During 2010, an abutment FML composite liner was installed on the north-facing slope of the old unlined area and directly adjacent to Phase 1 and Phase 2. Leachate from this area drains directly into the collection system of Phase 1 and Phase 2.

During 2013, Phase 4S was construction as a new Subtitle D cell. Leachate from this cell flows into the existing lines in Phase 1 and 2. No additional storage was required.

During 2019, Phase 5 Expansion was constructed adjacent to Phase 4S and an old waste cell. Leachate from this cell flows into the existing lines in Phase 1 and 2. No additional storage was required.

A renewed treatment agreement was approved with the Shenandoah POTW on August 23, 2021. A copy of the Treatment Agreement is included in Appendix G.1. Currently, all the leachate is transported to the Shenandoah POTW. Fremont County Landfill staff are actively pursuing a supplemental Treatment Agreement with a “back-up” facility.

Between January 1, 2025, and December 31, 2025, approximately 455,700 gallons of leachate were hauled to treatment. Fremont County Landfill transported all leachate to the Shenandoah POTW. A summary of the leachate volume hauled by month is included in Appendix G.2.

As required by the treatment agreement Shenandoah leachate is tested monthly for BOD, total suspended solids, and ammonia nitrogen; and annually (in March) for a more comprehensive list of constituents. A summary table and a copy of the Monthly Laboratory Reports are included in Appendix G.3. A copy of the Annual Testing Results is included in Appendix G.4.

Leachate Line Cleaning

IAC 567-113.7(5)b(5) requires that the leachate system be cleaned every three (3) years at a minimum. The landfill manager reports that the leachate gravity collection lines were cleaned December 23, 2025. All leachate lines should be cleaned again in 2028 in accordance with regulations.

Leachate Level Monitoring

On March 13, 2025, IDNR approved the abandonment of LW-3 and LW-4 (Doc #112562). Monitoring in the Original Landfill is not required.

Monitoring of the leachate piezometer in the lined Subtitle D cells (LPZ-1) is conducted monthly. Table 12 provides the results of the 2025 monitoring events.

Section 5.0 Gas Monitoring

Explosive gas monitoring per 113.9(2) and the approved GMSP in Special Provision X.5. of the Revised Permit, dated October 31, 2024 (Doc #111237) was conducted quarterly during the last reporting period (2025). The monitoring includes both indoor ambient air monitoring in buildings and subsurface monitoring in dedicated gas probes.

Monitoring points currently include four (4) buildings, four (4) subsurface gas probes, and two (2) underdrain line outfalls. Figure 1 illustrate the monitoring points.

Explosive gas concentrations (%LEL) were undetected *and/or* were below action levels during the monitoring episodes. A summary table of gas monitoring is included as Table 13.

Section 6.0 Recommendations

It is recommended that the detection monitoring and assessment monitoring continue to be performed on a semi-annual basis at the monitoring points listed in Table 1 and Table 2.

It is recommended that the prediction limits for cobalt (14.4 ug/L) be utilized as the Site-Specific GWPS in the *interwell* evaluations at monitoring wells. It is also recommended that the following well-specific GWPS be applied to GWD-1 and GWD-2 during *intra*well statistical evaluations:

GWD-1 arsenic (12.49 ug/L)

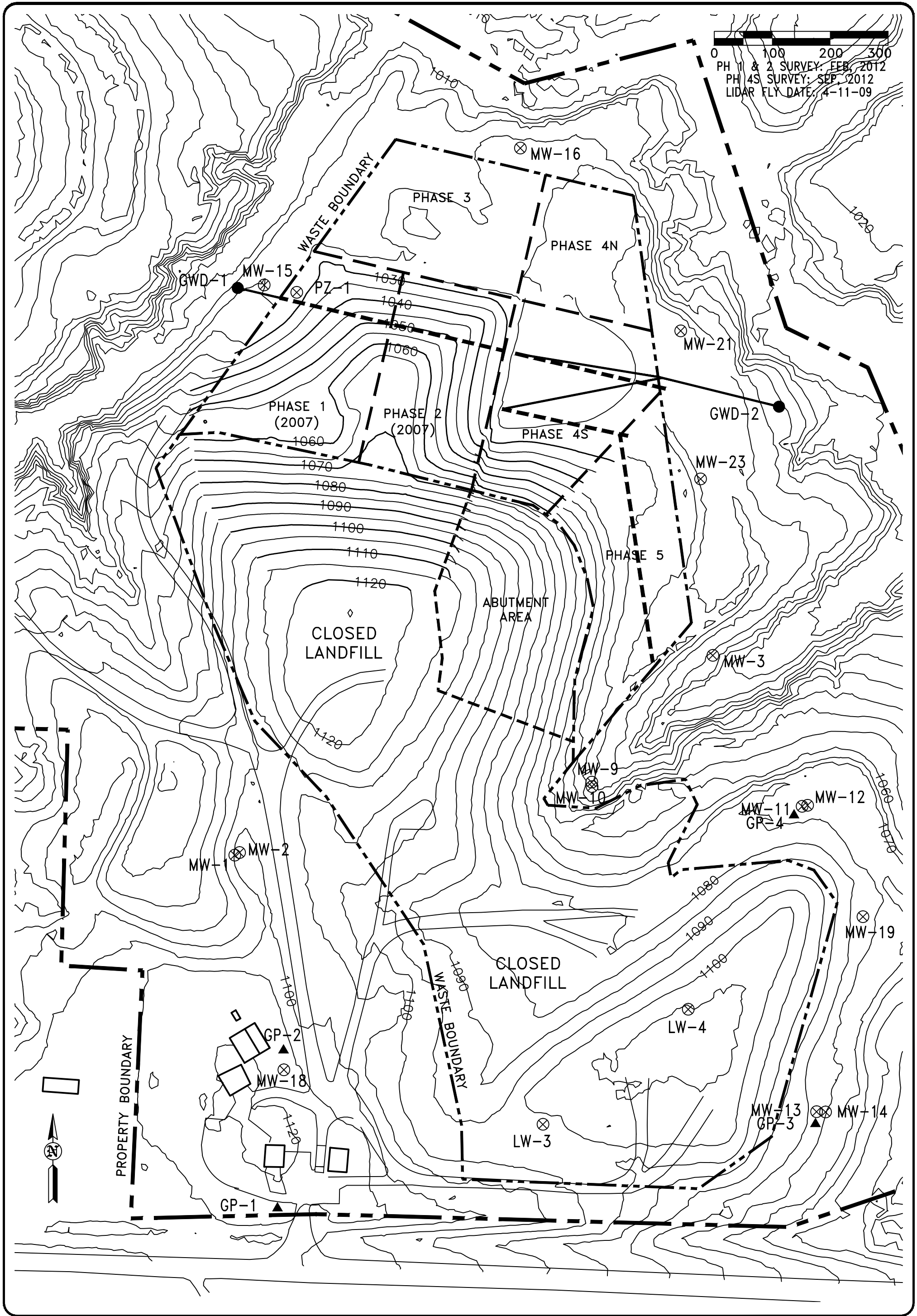
GWD-1 cobalt (25.17 ug/L)

GWD-2 cobalt (35.7 ug/L)

For all other compounds, it is recommended that the published IAC 567, Chapter 137 Statewide Standard be utilized as the GWPS.

Sediment in the drainage creek below GWD-1 should be removed to allow the discharge pipe GWD-1 to flow freely and to be sampled readily. The pipe end is currently under silt and/or water in the silt-filled drainage creek.

Figures



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SITE PLAN

FREMONT COUNTY SANITARY LANDFILL
SIDNEY, IOWA

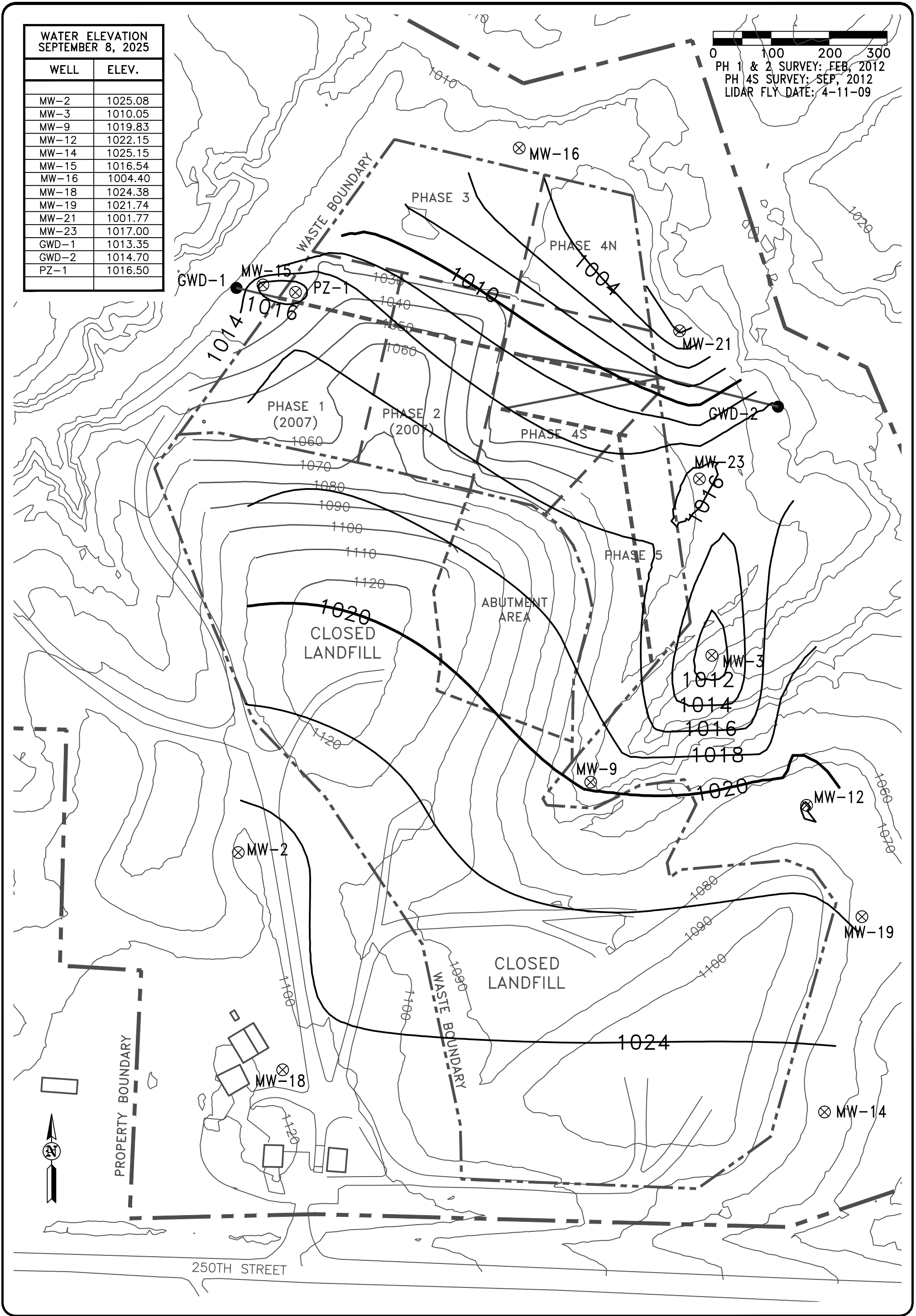
FIGURE:

1

REVISION	NO.	DATE
DRAWN DRA	PROJECT NO. 6046	DATE 9-30-25

WATER ELEVATION SEPTEMBER 8, 2025	
WELL	ELEV.
MW-2	1025.08
MW-3	1010.05
MW-9	1019.83
MW-12	1022.15
MW-14	1025.15
MW-15	1016.54
MW-16	1004.40
MW-18	1024.38
MW-19	1021.74
MW-21	1001.77
MW-23	1017.00
GWD-1	1013.35
GWD-2	1014.70
PZ-1	1016.50

0 100 200 300
PH 1 & 2 SURVEY: FEB, 2012
PH 4S SURVEY: SEP, 2012
LIDAR FLY DATE: 4-11-09



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GROUNDWATER CONTOURS

FREMONT COUNTY SANITARY LANDFILL
SIDNEY, IOWA

FIGURE: 2

REVISION	NO.	DATE
DRAWN DRA	PROJECT NO. 6046	DATE 9-30-25

Tables (in IDNR Format)

Table Index

Table 1 – Monitoring Program Summary

Table 2 – Monitoring Program Implementation Schedule

Table 2A – Historic Monitoring Summary

Table 3 – Monitoring Well Maintenance Performance Reevaluation Schedule

Table 4 – Monitoring Well Maintenance Performance Reevaluation Summary

Table 4A – Historic Water Elevation Summary

Table 5 – Background and GWPS Summary – Interwell for MW

Table 5A – Background and GWPS Summary – Intrawell for GWD

Table 6 – Summary of Detections

Table 7 – Summary of Ongoing and Newly Identified SSI

Table 8 - Summary of Ongoing and Newly Identified SSL – **Not Required**

Table 9 – Analytical Data Summary

Table 10 – Historic SSI and SSL (Confidence Interval Evaluation) – **Not Required**

Table 11 – Corrective Action Trend Analysis – **Not Required**

Table 12 – Leachate Level Summary

Table 13 – Gas Monitoring Summary

Table 1 – Monitoring Program Summary

Table 1
Monitoring Program Summary
Annual Water Quality Report
Fremont County Sanitary Landfill
Permit No. 36-SDP-01-74P

[illegible]

Table 2 – Monitoring Program Implementation Schedule

Table 2
Monitoring Program Implementation Schedule
Annual Water Quality Report
Fremont County Sanitary Landfill
Permit No. 36-SDP-01-74P

Monitoring Well	Recent Sampling Dates and Constituents	Upcoming Sampling Dates and Constituents		Full Appendix II Sample Dates	
		March, 2026	September, 2026	Previously Collected	Next Event
MW-2		Appendix I	Appendix I		N/A
MW-14		Appendix I	Appendix I		N/A
MW-18		Appendix I	Appendix I		N/A
MW-19		Appendix I	Appendix I		N/A
MW-3	See Table 2A	Appendix I	Appendix II	6/1/2010, 10/11/2011, 9/19/2016, 9/9/2021	9/2026
MW-9		Appendix I	Appendix I		N/A
MW-12		Appendix I	Appendix I	10/10/2013, 9/1/2022, 9/8/2023	9/2028
MW-15		Appendix I	Appendix I	6/1/2010, 10/11/2011, 10/10/2013, 9/1/2022, 9/8/2023	9/2028
MW-21		Appendix I	Appendix I		N/A
MW-23		Appendix I	Appendix I		N/A
GWD-1		Appendix I	Appendix I	9/23/2009, 10/11/2011	N/A
GWD-2		Appendix I	Appendix I	9/8/2023	N/A

Table 2A – Monitoring Program Summary

Table 2A -- Itemized Summary of Hydrologic Monitoring (2018-present)

WELL	10/6/2015	4/19/2016	9/19/2016	3/21/2017
MW-2 (b)	Appendix I	Appendix I	Appendix I	Appendix I
MW-18 (b)	Appendix I	Appendix I	Appendix I	Appendix I
MW-3	Appendix I	Appendix I	Appendix II	Appendix I
MW-9	Appendix I	Appendix I	Appendix I	Appendix I
MW-12	Appendix I	Appendix I	Appendix I	Appendix I
MW-14	Appendix I	Appendix I	Appendix I	Appendix I
MW-15	Appendix I	Appendix I	Appendix I	Appendix I
MW-18	Appendix I	Appendix I	Appendix I	Appendix I
MW-19	Appendix I	Appendix I	Appendix I	Appendix I
MW-21	Appendix I	Appendix I	Appendix I	Appendix I
MW-23	DNE	DNE	DNE	DNE
GWD-1	Appendix I	Appendix I	Appendix I	Appendix I
GWD-2	Appendix I	Appendix I	Appendix I	Appendix I
Duplicate				

(1) Appendix I plus dichlorodifluoromethane
(2) Appendix I plus bis(2ethylhexyl)phthalate

(R) = Resample

WELL	10/12/2017	3/8/2018	9/6/2018	5/13/2019
MW-2 (b)	Appendix I	Appendix I	Appendix I	Appendix I
MW-18 (b)	Appendix I	Appendix I	Appendix I	Appendix I
MW-3	Appendix I	Appendix I	Appendix I	Appendix I
MW-9	Appendix I	Appendix I	Appendix I	Appendix I
MW-12	Appendix I	Appendix I	Appendix I	Appendix I
MW-14	Appendix I	Appendix I	Appendix I	Appendix I
MW-15	Appendix I	Appendix I	Appendix I	Appendix I
MW-18	Appendix I	Appendix I	Appendix I	Appendix I
MW-19	Appendix I	Appendix I	Appendix I	Appendix I
MW-21	Appendix I	Appendix I	Appendix I	Appendix I
MW-23	DNE	DNE	DNE	DNE
GWD-1	Appendix I	Appendix I	Appendix I	Appendix I
GWD-2	Appendix I	Appendix I	Appendix I	Appendix I
Duplicate		At GWD-2	At MW-15	At GWD-1

(1) Appendix I plus dichlorodifluoromethane
(2) Appendix I plus bis(2ethylhexyl)phthalate

(R) = Resample
DNE – Did Not Exist

WELL	9/26/2019	11/14/2019	3/30/2020	6/25/2020
MW-2 (b)	Appendix I		Appendix I	
MW-18 (b)	Appendix I		Appendix I	
MW-3	Appendix I		Appendix I	
MW-9	Appendix I		Appendix I	
MW-12	Appendix I	R - Cd	Appendix I	R - Ni
MW-14	Appendix I		Appendix I	R - Cu
MW-15	Appendix I		Appendix I	
MW-18	Appendix I		Appendix I	
MW-19	Appendix I	R - Zn	Appendix I	
MW-21	Appendix I		Appendix I	
MW-23	Appendix I		Appendix I	
GWD-1	Appendix I		Appendix I	
GWD-2	Appendix I		Appendix I	
Duplicate	At MW-23		At MW-15	

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- (1) Appendix I plus dichlorodifluoromethane
(2) Appendix I plus bis(2ethylhexyl)phthalate
-

(R) = Resample

WELL	9/17/2020	12/3/2020	3/9/2021	6/3/2021
MW-2 (b)	Appendix I		Appendix I	
MW-18 (b)	Appendix I		Appendix I	
MW-3	Appendix I		Appendix I	
MW-9	Appendix I		Appendix I	
MW-12	Appendix I		Appendix I	
MW-14	Appendix I	R - Se	Appendix I	
MW-15	Appendix I		Appendix I	
MW-18	Appendix I		Appendix I	R - Cd
MW-19	Appendix I		Appendix I	
MW-21	Appendix I		Appendix I	R - Ba
MW-23	Appendix I		Appendix I	
GWD-1	Appendix I		Appendix I	R - Ba
GWD-2	Appendix I	R - As, Ba, Co	Appendix I	
Duplicate	At GWD-2		At MW-21	

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- (1) Appendix I plus dichlorodifluoromethane
(2) Appendix I plus bis(2ethylhexyl)phthalate
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(R) = Resample

WELL	9/9/2021	12/8/2021	3/14/2022	6/14/2022
MW-2 (b)	Appendix I		Appendix I	
MW-18 (b)	Appendix I		Appendix I	
MW-3	Appendix II		Appendix I ⁽¹⁾	
MW-9	Appendix I		Appendix I	
MW-12	Appendix I	R - Ni	Appendix I	
MW-14	Appendix I		Appendix I	
MW-15	Appendix I	R - Ba	Appendix I	
MW-18	Appendix I		Appendix I	
MW-19	Appendix I		Appendix I	
MW-21	Appendix I		Appendix I	R – cis-1,2DCE
MW-23	Appendix I		Appendix I	
GWD-1	Appendix I		NT	
GWD-2	Appendix I		NT	
Duplicate	At GWD-2		At MW-15	

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- (1) Appendix I plus dichlorodifluoromethane
(2) Appendix I plus bis(2ethylhexyl)phthalate
-

(R) = Resample

WELL	9/1/2022	3/6/2023	5/9/2023	9/8/2023
MW-2 (b)	Appendix I	Appendix I		Appendix I
MW-18 (b)	Appendix I	Appendix I		Appendix I
MW-3	Appendix I ⁽¹⁾	Appendix I ⁽¹⁾		Appendix I
MW-9	Appendix I	Appendix I		Appendix I
MW-12	Appendix II	Appendix I		Appendix II
MW-14	Appendix I	Appendix I		Appendix I
MW-15	Appendix II	Appendix I	R-bis(2EH)P	Appendix II
MW-18	Appendix I	Appendix I		Appendix I
MW-19	Appendix I	Appendix I		Appendix I
MW-21	Appendix I	Appendix I		Appendix I
MW-23	Appendix I	Appendix I		Appendix I
GWD-1	NT	Appendix I		Appendix I
GWD-2	NT	Appendix I	R- Ba	Appendix II
Duplicate	At MW-21	At GWD-1		At MW-21

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- (1) Appendix I plus dichlorodifluoromethane
(2) Appendix I plus bis(2ethylhexyl)phthalate
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(R) = Resample

WELL	3/20/2024	6/14/2024	9/25/2024	11/25/2024
MW-2 (b)	Appendix I		Appendix I	
MW-14 (b)	Appendix I		Appendix I	
MW-18 (b)	Appendix I		Appendix I	
MW-19 (b)	Appendix I		Appendix I	
MW-3	Appendix I		Appendix I	
MW-9	Appendix I		Appendix I	
MW-12	Appendix I		Appendix I	
MW-15	Appendix I		Appendix I	
MW-21	Appendix I	R- As, Ba	Appendix I	
MW-23	Appendix I		Appendix I	
GWD-1	Appendix I	Submerged	Appendix I	Submerged
GWD-2	Appendix I	R- As, Ba	Appendix I	
Duplicate	At MW-14		At MW-14	

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- (1) Appendix I plus dichlorodifluoromethane
(2) Appendix I plus bis(2ethylhexyl)phthalate
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(R) = Resample

WELL	3/11/2025	9/8/2025		
MW-2 (b)	Appendix I	Appendix I		
MW-14 (b)	Appendix I	Appendix I		
MW-18 (b)	Appendix I	Appendix I		
MW-19 (b)	Appendix I	Appendix I		
MW-3	Appendix I	Appendix I		
MW-9	Appendix I	Appendix I		
MW-12	Appendix I	Appendix I		
MW-15	Appendix I	Appendix I		
MW-21	Appendix I	Appendix I		
MW-23	Appendix I	Appendix I		
GWD-1	NT	NT		
GWD-2	Appendix I	Dry		
Duplicate	At MW-9	At MW-15		

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- (1) Appendix I plus dichlorodifluoromethane
(2) Appendix I plus bis(2ethylhexyl)phthalate
-

(R) = Resample

Table 3 – Monitoring Well Maintenance Performance Reevaluation Schedule

Table 3
Monitoring Well Maintenance and Performance Revaluation Schedule
Annual Water Quality Report
Fremont County Sanitary Landfill
Permit No. 36-SDP-01-74P

Compliance with:	Monitoring Calendar Years									
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
567 IAC 113.10(2)"f"(1) high and low water levels (biennial)	X	X	X	X	X	X	X	P	P	P
567 IAC 113.10(2)"f"(2) changes in the hydrologic setting and flow paths (biennial)		X		X		X		P		P
567 IAC 113.10(2)"f"(3) well depths (annual)		X	X	X	X	X	X	P	P	P
567 IAC 113.10(2)"f"(4) well recharge rates and chemistry (biennial)		X		X		X		P		P
Waste separation from ground water 113.6(2)"l"						X	X	P	P	P

Compliance with:	Monitoring Calendar Years									
	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
567 IAC 113.10(2)"f"(1) high and low water levels (biennial)	P	P	P	P	P	P	P	P	P	P
567 IAC 113.10(2)"f"(2) changes in the hydrologic setting and flow paths (biennial)		P		P		P		P		P
567 IAC 113.10(2)"f"(3) well depths (annual)	P	P	P	P	P	P	P	P	P	P
567 IAC 113.10(2)"f"(4) well recharge rates and chemistry (biennial)		P		P		P		P		P
Waste separation from ground water 113.6(2)"l"	P	P	P	P	P	P	P	P	P	P

X = completed

P = Planned

N/A = Not Applicable

Table 4 – Monitoring Well Maintenance Performance Reevaluation Summary

Table 4
Monitoring Well Maintenance and Performance Summary
Annual Water Quality Report
Fremont County Sanitary Landfill
Permit No. 36-SDP-01-74C

Well	Top of casing	Top of Screen	Total Depth		Date of Measurements		Maximum Depth Discrepancy (ft)	Hydraulic Cond. (cm/sec)/date	Most Recent Recharge Rate	
					3/11/2025	9/8/2025			3/20/2024	Change
MW-2	1114.14	1018.04	102.2	Groundwater Level (ft)	88.8	89.06	0	0.006 2004	No Drawdown	None percieved
				Groundwater Elevation (Ft MSL)	1025.34	1025.08				
				Measured Well Depth (ft)	102.2	102.2				
				Submerged (+) or Exposed screen (-)	7.3	7.04				
MW-3	1031.78	1009.78	33.1	Groundwater Level (ft)	20.65	21.73	0	0.00007 2004	No Drawdown	None percieved
				Groundwater Elevation (Ft MSL)	1011.13	1010.05				
				Measured Well Depth (ft)	33.1	33.1				
				Submerged (+) or Exposed screen (-)	1.35	0.27				
MW-9	1040.72	1004.92	46.15	Groundwater Level (ft)	20.66	20.89	0	0.0001 2004	Full recovery in 2 hour	None percieved
				Groundwater Elevation (Ft MSL)	1020.06	1019.83				
				Measured Well Depth (ft)	46.15	46.15				
				Submerged (+) or Exposed screen (-)	15.14	14.91				
MW-12	1074.98	1035.5	55.3	Groundwater Level (ft)	52.61	52.83	0	0.004 2004	No Drawdown	None percieved
				Groundwater Elevation (Ft MSL)	1022.37	1022.15				
				Measured Well Depth (ft)	55.3	55.3				
				Submerged (+) or Exposed screen (-)	-13.13	-13.35				
MW-14	1076.25	1000.6	81.6	Groundwater Level (ft)	52.72	53.1	0	0.000002 2004	Full recovery in 24 hour	None percieved
				Groundwater Elevation (Ft MSL)	1023.53	1023.15				
				Measured Well Depth (ft)	81.6	81.6				
				Submerged (+) or Exposed screen (-)	22.93	22.55				
MW-15	1025.26	1007.56	27.7	Groundwater Level (ft)	9.95	8.72	0	0.004 2004	Full recovery in 2 hour	None percieved
				Groundwater Elevation (Ft MSL)	1015.31	1016.54				
				Measured Well Depth (ft)	27.7	27.7				
				Submerged (+) or Exposed screen (-)	7.75	8.98				
MW-18	1118.78	1034.78	99	Groundwater Level (ft)	94.4		1.0	0.004 2004	No Drawdown	None percieved
				Groundwater Elevation (Ft MSL)	1024.38	1118.78				
				Measured Well Depth (ft)	98	98				
				Submerged (+) or Exposed screen (-)	-10.4	84				
MW-19	1078.92	1032.22	61.65	Groundwater Level (ft)	57.18	57.55	0.1	0.004 2004	Full recovery in 3 hour	None percieved
				Groundwater Elevation (Ft MSL)	1021.74	1021.37				
				Measured Well Depth (ft)	61.55	61.55				
				Submerged (+) or Exposed screen (-)	-10.48	-10.85				
MW-21	1029.39	1000.59	38.8	Groundwater Level (ft)	27.62	28.04	0	0.004 2004	Full recovery in 2 hour	None percieved
				Groundwater Elevation (Ft MSL)	1001.77	1001.35				
				Measured Well Depth (ft)	38.8	38.8				
				Submerged (+) or Exposed screen (-)	1.18	0.76				
MW-23	1031.83	1015.03	26.8	Groundwater Level (ft)	14.83	14.48	0	0.000002 2004	Full recovery in 24 hour	None percieved
				Groundwater Elevation (Ft MSL)	1017	1017.35				
				Measured Well Depth (ft)	26.8	26.8				
				Submerged (+) or Exposed screen (-)	1.97	2.32				

Groundwater Underdrain Piezometer

Well		Date of Measurements	
		3/11/2025	9/8/2025
GPZ-1	Top PVC Casing	1024.8	1024.8
	Depth to water from Top PVC	10.47	8.3
	Elevation Water	1014.33	1016.5
	Base of Waste Elevation	1021.4	1021.4
	Separation (ft)	7.07	4.9

Table 4A – Summary of Water Elevation Data over Time

Table 4A.--- Water-level measurements, Fremont County Sanitary Landfill. TOC, top of casing.

Monitor Well/ TOC Elev. (ft)	Screened Interval		Water Level	DATE								Mean/ Std. Dev.	
	Depth (ft)	Elev. (ft)		4/12/2010	9/28/2010	5/3/2011	10/10/2011	4/23/2012	9/10/2012	4/4/2013	10/10/2013		
MW-2 1114.14	77.04 82.04	1037.10 1032.10	Depth (ft) Elev. (ft)	88.02 1026.12	87.37 1026.77	87.21 1026.93	87.42 1026.72	87.79 1026.35	88.09 1026.05	88.52 1025.62	88.45 1025.69	87.86 0.50	MW-2
MW-3 1025.28	15.50 25.50	1009.78 999.78	Depth (ft) Elev. (ft)	15.20 1010.08	15.63 1009.65	15.46 1009.82	15.86 1009.42	15.60 1009.68	16.40 1008.88	15.84 1009.44	16.00 1009.28	15.75 0.36	MW-3
MW-8 1058.26	29.00 39.00	1029.26 1019.26	Depth (ft) Elev. (ft)	35.66 1022.60	35.34 1022.92	35.19 1023.07	35.66 1022.60	35.80 1022.46				35.53 0.25	MW-8
MW-9 1040.72	35.80 45.80	1004.92 994.92	Depth (ft) Elev. (ft)	19.76 1020.96	20.05 1020.67	19.95 1020.77	20.39 1020.33	20.32 1020.40	20.90 1019.82	20.98 1019.74	21.42 1019.30	20.47 0.58	MW-9
MW-12 1074.98	39.48 54.48	1035.50 1020.50	Depth (ft) Elev. (ft)	51.62 1023.36	51.05 1023.93	50.99 1023.99	51.32 1023.66	51.60 1023.38	52.00 1022.98	52.37 1022.61	52.63 1022.35	51.70 0.60	MW-12
MW-14 1076.25	75.65 80.65	1000.60 995.60	Depth (ft) Elev. (ft)	52.51 1023.74	52.04 1024.21	51.72 1024.53	51.73 1024.52	52.10 1024.15	52.40 1023.85	53.01 1023.24	52.31 1023.94	52.23 0.43	MW-14
MW-15 1025.26	15.00 25.00	1010.26 1000.26	Depth (ft) Elev. (ft)	10.63 1014.63	11.37 1013.89	11.06 1014.20	11.86 1013.40	10.85 1014.41	12.68 1012.58	11.25 1014.01	11.40 1013.86	11.39 0.64	MW-15
MW-18 1118.78	82.85 97.85	1035.93 1020.93	Depth (ft) Elev. (ft)	93.51 1025.27	92.65 1026.13	92.52 1026.26	92.80 1025.98	93.24 1025.54	93.58 1025.20	94.10 1024.68	94.32 1024.46	93.34 0.66	MW-18
MW-19 1078.92	46.70 61.70	1032.22 1017.22	Depth (ft) Elev. (ft)	56.66 1022.26	56.20 1022.72	56.01 1022.91	56.38 1022.54	56.61 1022.31	56.90 1022.02	57.35 1021.57	57.23 1021.69	56.67 0.47	MW-19
MW-20 1037.83	11.69 21.69	1026.14 1016.14	Depth (ft) Elev. (ft)	15.59 1022.24	15.46 1022.37	15.30 1022.53	15.51 1022.32	15.60 1022.23				15.49 0.12	MW-20
MW-21 1029.39	26.50 36.50	1002.89 992.89	Depth (ft) Elev. (ft)							28.55 1000.84	28.23 1001.16	28.39 0.23	MW-21
MW-22 1031.31	9.50 19.50	1021.81 1011.81	Depth (ft) Elev. (ft)							10.17 1021.14	11.56 1019.75	10.87 0.98	MW-22

Table 4A Ct'd.--- Water-level measurements, Fremont County Sanitary Landfill. TOC, top of casing.

Monitor Well/ TOC Elev. (ft)	Screened Interval		Water Level	DATE									Mean/ Std. Dev.
	Depth (ft)	Elev. (ft)		4/22/2014	9/17/2014	4/28/2015	10/7/2015	4/19/2016	9/19/16	3/21/2017	10/12/2017		
MW-2 1114.14	77.04 82.04	1037.10 1032.10	Depth (ft) Elev. (ft)	89.15 1024.99	89.36 1024.78	89.35 1024.79	88.49 1025.65	87.72 1026.42	85.48 1028.66	84.42 1029.72	84.90 1029.24	87.36 2.10	MW-2
MW-3 1031.78	15.50 25.50	1016.28 1006.28	Depth (ft) Elev. (ft)	15.87 1009.41	22.10 1009.68	22.04 1009.74	21.78 1010.00	21.66 1010.12	21.18 1010.60	21.58 1010.20	21.25 1010.53	20.93 2.07	MW-3
MW-9 1040.72	35.80 45.80	1004.92 994.92	Depth (ft) Elev. (ft)	21.37 1019.35	21.48 1019.24	20.78 1019.94	20.91 1019.81	20.24 1020.48	19.02 1021.70	18.71 1022.01	18.45 1022.27	20.12 1.22	MW-9
MW-12 1074.98	39.48 54.48	1035.50 1020.50	Depth (ft) Elev. (ft)	52.80 1022.18	53.02 1021.96	52.99 1021.99	52.56 1022.42	51.67 1023.31	50.04 1024.94	48.65 1026.33	48.33 1026.65	51.26 1.97	MW-12
MW-14 1076.25	75.65 80.65	1000.60 995.60	Depth (ft) Elev. (ft)	53.72 1022.53	53.78 1022.47	53.55 1022.70	52.87 1023.38	52.11 1024.14	49.94 1026.31	48.56 1027.69	48.17 1028.08	51.59 2.35	MW-14
MW-15 1025.26	15.00 25.00	1010.26 1000.26	Depth (ft) Elev. (ft)	9.79 1015.47	10.12 1015.14	9.90 1015.36	11.70 1013.56	12.16 1013.10	10.76 1014.50	11.02 1014.24	10.45 1014.81	10.74 0.85	MW-15
MW-18 1118.78	82.85 97.85	1035.93 1020.93	Depth (ft) Elev. (ft)	94.73 1024.05	94.94 1023.84	94.95 1023.83	94.06 1024.72	92.92 1025.86	90.01 1028.77	89.20 1029.58	88.21 1030.57	92.38 2.80	MW-18
MW-19 1078.92	46.70 61.70	1032.22 1017.22	Depth (ft) Elev. (ft)	57.66 1021.26	57.84 1021.08	57.80 1021.12	57.35 1021.57	56.49 1022.43	54.79 1024.13	53.24 1025.68	53.00 1025.92	56.02 2.05	MW-19
MW-21 1029.39	26.50 36.50	1002.89 992.89	Depth (ft) Elev. (ft)	27.85 1001.54	28.94 1000.45	28.39 1001.00	28.56 1000.83	28.32 1001.07	27.80 1001.59	27.85 1001.54	27.39 1002.00	28.14 0.50	MW-21
MW-22 1031.31	9.50 19.50	1021.81 1011.81	Depth (ft) Elev. (ft)	11.89 1019.42	11.89 1019.42	11.65 1019.66	11.58 1019.73	11.21 1020.10	10.30 1021.01	9.79 1021.52	8.85 1022.46	10.90 1.13	MW-22

NOTE: The TOC elevation for MW-3 changed due to adding additional casing during summer of 2014

Table 4A Ct'd.--- Water-level measurements, Fremont County Sanitary Landfill. TOC, top of casing.

Monitor Well/ TOC Elev. (ft)	Screened Interval		Water Level	DATE	3/8/2018	9/6/2018	5/13/2019	9/26/2019	3/30/2020	9/17/20	3/9/2021	9/9/2021	Mean/ Std. Dev.	
		Elev. (ft)												
MW-2	77.04	1037.10	Depth (ft)		84.15	85.20	84.28	82.87	82.77	83.78	84.36	85.37	84.10	MW-2
1114.14	82.04	1032.10	Elev. (ft)		1029.99	1028.94	1029.86	1031.27	1031.37	1030.36	1029.78	1028.77	0.95	
MW-3	15.50	1016.28	Depth (ft)		21.42	21.06	21.05	21.08	20.95	21.27	20.90	21.08	21.10	MW-3
1031.78	25.50	1006.28	Elev. (ft)		1010.36	1010.72	1010.73	1010.70	1010.83	1010.51	1010.88	1010.70	0.17	
MW-9	35.80	1004.92	Depth (ft)		18.43	18.94	19.81	17.55	17.35	18.25	18.51	18.20	18.38	MW-9
1040.72	45.80	994.92	Elev. (ft)		1022.29	1021.78	1020.91	1023.17	1023.37	1022.47	1022.21	1022.52	0.77	
MW-12	39.48	1035.50	Depth (ft)		48.52	49.42	48.15	47.18	47.25	48.20	48.88	49.50	48.39	MW-12
1074.98	54.48	1020.50	Elev. (ft)		1026.46	1025.56	1026.83	1027.80	1027.73	1026.78	1026.10	1025.48	0.88	
MW-14	75.65	1000.60	Depth (ft)		48.41	49.28	47.82	46.75	46.70	47.85	48.67	49.40	48.11	MW-14
1076.25	80.65	995.60	Elev. (ft)		1027.84	1026.97	1028.43	1029.50	1029.55	1028.40	1027.58	1026.85	1.03	
MW-15	15.00	1010.26	Depth (ft)		11.14	9.86	10.15	10.82	9.80	11.98	9.42	11.75	10.62	MW-15
1025.26	25.00	1000.26	Elev. (ft)		1014.12	1015.40	1015.11	1014.44	1015.46	1013.28	1015.84	1013.51	0.95	
MW-18	82.85	1035.93	Depth (ft)		88.42	90.30	89.02	87.37	87.27	88.58	89.37	90.55	88.86	MW-18
1118.78	97.85	1020.93	Elev. (ft)		1030.36	1028.48	1029.76	1031.41	1031.51	1030.20	1029.41	1028.23	1.21	
MW-19	46.70	1032.22	Depth (ft)		53.15	54.03	52.85	51.82	51.65	52.88	53.49	54.24	53.01	MW-19
1078.92	61.70	1017.22	Elev. (ft)		1025.77	1024.89	1026.07	1027.10	1027.27	1026.04	1025.43	1024.68	0.93	
MW-21	26.50	1002.89	Depth (ft)		27.54	26.98	26.8	27.19	27.00	27.37	26.91	27.49	27.16	MW-21
1029.39	36.50	992.89	Elev. (ft)		1001.85	1002.41	1002.59	1002.20	1002.39	1002.02	1002.48	1001.90	0.28	
MW-22	9.50	1021.82	Depth (ft)		9.13	8.08							8.61	MW-22
1031.32	19.50	1011.82	Elev. (ft)		1022.18	1023.23							0.74	
MW-23	16.80	1015.03	Depth (ft)					13.96	13.78	14.06	13.46	14.10	13.87	MW-23
1031.83	26.80	1005.03	Elev. (ft)					1017.87	1018.05	1017.77	1018.37	1017.73	0.26	

NOTE: MW-22 was abandoned May 13, 2019
MW-23 was constructed May 13, 2019

Table 4A Ct'd.--- Water-level measurements, Fremont County Sanitary Landfill. TOC, top of casing.

Monitor Well/ TOC Elev. (ft)	Screened Interval Depth (ft) Elev. (ft)		Water Level	DATE	3/14/2022	9/1/2022	3/6/2023	9/8/2023	3/20/2024	9/25/2024	3/11/2025	9/8/2025	Mean/ Std. Dev.	
MW-2 1114.14	77.04 82.04	1037.10 1032.10	Depth (ft) Elev. (ft)		86.00 1028.14	86.51 1027.63	87.18 1026.96	87.47 1026.67	87.68 1026.46	88.1 1026.04	88.80 1025.34	89.06 1025.08	87.60 1.05	MW-2
MW-3 1031.78	15.50 25.50	1016.28 1006.28	Depth (ft) Elev. (ft)		20.85 1010.93	21.27 1010.51	20.73 1011.05	21.85 1009.93	20.96 1010.82	21.85 1009.93	20.65 1011.13	21.73 1010.05	21.24 0.51	MW-3
MW-9 1040.72	35.80 45.80	1004.92 994.92	Depth (ft) Elev. (ft)		19.50 1021.22	19.75 1020.97	19.91 1020.81	20.21 1020.51	20.18 1020.54	20.58 1020.14	20.66 1020.06	20.89 1019.83	20.21 0.48	MW-9
MW-12 1074.98	39.48 54.48	1035.50 1020.50	Depth (ft) Elev. (ft)		50.15 1024.83	50.49 1024.49	51.15 1023.83	51.53 1023.45	51.71 1023.27	52.05 1022.93	52.61 1022.37	52.83 1022.15	51.57 0.95	MW-12
MW-14 1076.25	75.65 80.65	1000.60 995.60	Depth (ft) Elev. (ft)		51.10 1025.15	50.60 1025.65	51.26 1024.99	51.57 1024.68	51.83 1024.42	52.3 1023.95	52.72 1023.53	53.10 1023.15	51.81 0.85	MW-14
MW-15 1025.26	15.00 25.00	1010.26 1000.26	Depth (ft) Elev. (ft)		10.95 1014.31	12.10 1013.16	9.73 1015.53	9.04 1016.22	8.68 1016.58	11.40 1013.86	9.95 1015.31	8.72 1016.54	10.07 1.29	MW-15
MW-16 1027.43	23.37 33.37	1004.06 994.06	Depth (ft) Elev. (ft)		20.51 1004.75	22.29 1002.97	20.90 1004.36	22.64 1002.62	20.55 1004.71	24.82 1000.44	21.22 1004.04	20.86 1004.40	21.72 1.48	MW-16
MW-18 1118.78	82.85 97.85	1035.93 1020.93	Depth (ft) Elev. (ft)		91.23 1027.55	91.95 1026.83	92.65 1026.13	93.09 1025.69	93.41 1025.37	93.85 1024.93	94.40 1024.38		92.94 1.09	MW-18
MW-19 1078.92	46.70 61.70	1032.22 1017.22	Depth (ft) Elev. (ft)		54.89 1024.03		55.92 1023.00	56.31 1022.61	56.55 1022.37	56.85 1022.07	57.18 1021.74	57.55 1021.37	56.46 0.88	MW-19
MW-21 1029.39	26.50 36.50	1002.89 992.89	Depth (ft) Elev. (ft)		27.32 1002.07	27.84 1001.55	27.25 1002.14	28.35 1001.04	27.46 1001.93	29.03 1000.36	27.62 1001.77	28.04 1001.35	27.86 0.60	MW-21
MW-23 1031.83	16.80 26.80	1015.03 1005.03	Depth (ft) Elev. (ft)		14.28 1017.55	14.35 1017.48	14.03 1017.8	14.14 1017.69	14.13 1017.7	14.69 1017.14	14.83 1017.00	14.48 1017.35	14.37 0.28	MW-23
GPZ-1 1024.8	4.70 14.70	1020.10 1010.10	Depth (ft) Elev. (ft)							14.60 1010.20	10.47 1014.33	8.30 1016.50	11.12 1013.68	GPZ-1

NOTE: MW-22 was abandoned May 13, 2019
MW-23 was constructed May 13, 2019

Table 5 – Interwell (Monitoring Well) Background and GWPS Summary

Table 5
Background and GWPS Summary - Interwell for Monitoring Wells
Annual Water Quality Report
Fremont County Sanitary Landfill
Permit No. 36-SDP-01-74P

Interwell Background Wells (MW-14, MW-18, MW-19, and MW-2)

Inorganics - Appendix I										
Constituent	Units	Model Type	Samples - N	Detections	Mean	SD	Prediction Limit	Confidence	GWPS	Source
Antimony (Sb)	µg/l	nonparametric	89	1			2.0000	0.99	6	SS
Arsenic (As)	µg/l	nonparametric	88	3			6.1000	0.99	10	SS
Barium (Ba)	µg/l	normal	87	87	314.4713	109.3213	575.1005	0.99	2000	SS
Beryllium (Be)	µg/l	nonparametric	86	0			4.0000	0.99	4	SS
Cadmium (Cd)	µg/l	nonparametric	89	14			1.0000	0.99	5	SS
Chromium (Cr)	µg/l	nonparametric	86	9			17.2000	0.99	100	SS
Cobalt (Co)	µg/l	nonparametric	88	38			14.4000	0.99	14.4	Site
Copper (Cu)	µg/l	nonparametric	88	7			10.8000	0.99	1300	SS
Lead (Pb)	µg/l	nonparametric	85	5			8.7000	0.99	15	SS
Nickel (Ni)	µg/l	nonparametric	87	24			20.7000	0.99	100	SS
Selenium (Se)	µg/l	nonparametric	90	16			7.4000	0.99	50	SS
Silver (Ag)	µg/l	nonparametric	89	0			4.0000	0.99	100	SS
Thallium (Tl)	µg/l	nonparametric	86	0			2.0000	0.99	2	SS
Vanadium (V)	µg/l	nonparametric	85	3			27.5000	0.99	35	SS
Zinc (Zn)	µg/l	nonparametric	89	32			68.3000	0.99	2000	SS
VOC - Appendix I										
Constituent	Units	Model Type	Samples - N	Detections	Mean	SD	Prediction Limit	Confidence	GWPS	Source
All	µg/l	DQR	89	0	<1	<1	<1	<1	various	SS

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

Table 5A – Intrawell (Groundwater Underdrains) Background and GWPS Summary

Table 5A
Background and GWPS Summary - Intrawell for Groundwater Underdrains
Annual Water Quality Report
Fremont County Sanitary Landfill
Permit No. 36-SDP-01-74P

Monitoring Point	Compound	Units	IAC 567-137 Statewide Standards	Intrawell Statistical Control Limit	Well-Specific GWPS Utilized
GWD-1	Antimony, total	ug/L	6	2.00	6
GWD-1	Arsenic, total	ug/L	10	12.49	12.49
GWD-1	Barium, total	ug/L	2000	832.78	2000
GWD-1	Beryllium, total	ug/L	4	4.00	4
GWD-1	Cadmium, total	ug/L	5	0.80	5
GWD-1	Chromium, total	ug/L	100	8.00	100
GWD-1	Cobalt, total	ug/L	2.1	25.17	25.17
GWD-1	Copper, total	ug/L	1300	6.60	1300
GWD-1	Lead, total	ug/L	15	4.00	15
GWD-1	Nickel, total	ug/L	100	9.40	100
GWD-1	Selenium, total	ug/L	50	4.00	50
GWD-1	Silver, total	ug/L	100	4.00	100
GWD-1	Thallium, total	ug/L	2	2.00	2
GWD-1	Vanadium, total	ug/L	35	20.00	35
GWD-1	Zinc, total	ug/L	2000	28.60	2000.00
GWD-2	Antimony, total	ug/L	6	2.00	6
GWD-2	Arsenic, total	ug/L	10	4.00	10
GWD-2	Barium, total	ug/L	2000	1290.93	2000
GWD-2	Beryllium, total	ug/L	4	4.00	4
GWD-2	Cadmium, total	ug/L	5	0.80	5
GWD-2	Chromium, total	ug/L	100	8.00	100
GWD-2	Cobalt, total	ug/L	2.1	35.70	35.7
GWD-2	Copper, total	ug/L	1300	4.00	1300
GWD-2	Lead, total	ug/L	15	4.00	15
GWD-2	Nickel, total	ug/L	100	28.43	100
GWD-2	Selenium, total	ug/L	50	4.00	50
GWD-2	Silver, total	ug/L	100	4.00	100
GWD-2	Thallium, total	ug/L	2	4.00	2
GWD-2	Vanadium, total	ug/L	35	20.00	35
GWD-2	Zinc, total	ug/L	2000	46.61	2000

Table 6 – Summary of Detections

Table 6
Summary of Well/Detected Constituent Pairs that Exceed the Background Standard
Annual Water Quality Report
Fremont County Sanitary Landfill
Permit No. 36-SDP-01-74P

2025

Interwell Statistics

Well	System	Constituent	Date	Units	Result	Prediction Limit	GWPS
MW-3	Till	Barium	3/11/2025	ug/L	736.0	565.3	2000
MW-3	Till	Barium	9/8/2025	ug/L	815.0	575.1	2000
MW-12	Till	Arsenic	3/11/2025	ug/L	7.6	6.1	10
MW-12	Till	Nickel	3/11/2025	ug/L	31.4	20.7	100

2025

Intrawell Statistics

Well	System	Constituent	Date	Units	Result	Control Limits	GWPS
GWD-1	Till	None	2025				
GWD-2	Till	None	2025				

** = Site-Specific GWPS*

*** = not verified*

Table 7 – Summary of Ongoing and Newly Identified SSI

Table 7
Summary of Ongoing & Newly Identified SSI
Annual Water Quality Report
Fremont County Sanitary Landfill
Permit No. 36-SDP-01-74P

KEY:	SSI	SSL LCL>GWPS

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW-3	Barium	9/18/2014	655.00	554.0	---	2000	9/6/2016	NA	9/5/2017
MW-3	Barium	4/29/2015	761.00	554.0	---	2000	9/6/2016	NA	9/5/2017
MW-3	Barium	10/7/2015	640.00	554.0	---	2000	9/6/2016	NA	9/5/2017
MW-3	Barium	4/19/2016	748.00	554.0	647.042	2000	9/6/2016	NA	9/5/2017
MW-3	Barium	9/19/2016	784.00	554.0	677.89	2000	9/6/2016	NA	9/5/2017
MW-3	Barium	3/21/2017	710.00	554.0	667.164	2000	9/6/2016	NA	9/5/2017
MW-3	Barium	10/12/2017	743.00	554.0	720.017	2000	9/6/2016	NA	9/5/2017
MW-3	Barium	3/8/2018	1020.00	554.0	692.602	2000	9/6/2016	NA	9/5/2017
MW-3	Barium	9/6/2018	796.00	554.0	696.239	2000	9/6/2016	NA	9/5/2017
MW-3	Barium	5/13/2019	865.00	554.0	751.901	2000	9/6/2016	NA	9/5/2017
MW-3	Barium	9/26/2019	951.00	554.0	823.168	2000	9/6/2016	NA	9/5/2017
MW-3	Barium	3/30/2020	867.00	554.0	814.817	2000	9/6/2016	NA	9/5/2017
MW-3	Barium	9/17/2020	884.00	554.0	856.754	2000	9/6/2016	NA	9/5/2017
MW-3	Barium	3/9/2021	1090.00	554.0	860.208	2000	9/6/2016	NA	9/5/2017
MW-3	Barium	9/9/2021	785.00	554.0	794.138	2000	9/6/2016	NA	9/5/2017
MW-3	Barium	3/14/2022	843.00	554.0	785.577	2000	9/6/2016	NA	9/5/2017
MW-3	Barium	9/1/2022	783.00	554.0	748.944	2000	9/6/2016	NA	9/5/2017
MW-3	Barium	3/6/2023	785.00	554.0	764.478	2000	9/6/2016	NA	9/5/2017
MW-3	Barium	9/8/2023	730.00	554.0	730.95	2000	9/6/2016	NA	9/5/2017
MW-3	Barium	3/202/2024	747.00	614.0	729.275	2000	9/6/2016	NA	9/5/2017
MW-3	Barium	9/25/2024	755.00	614.0	727.197	2000	9/6/2016	NA	9/5/2017
MW-3	Barium	3/11/2025	736.00	565.3	728.866	2000	9/6/2016	NA	9/5/2017
MW-3	Barium	9/8/2025	815.00	575.1	721.647	2000	9/6/2016	NA	9/5/2017

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

Table 7
Summary of Ongoing & Newly Identified SSI
Annual Water Quality Report
Fremont County Sanitary Landfill
Permit No. 36-SDP-01-74P

KEY:	SSI	SSL LCL>GWPS

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW-12	Arsenic	9/18/2014	4.1	4.4	---	10	4/29/2015	N/A	9/19/2016
MW-12	Arsenic	4/29/2015	4.6	4.4	---	10	4/29/2015	N/A	9/19/2016
MW-12	Arsenic	10/7/2015	<4.0	4.4	---	10	4/29/2015	N/A	9/19/2016
MW-12	Arsenic	4/19/2016	<4.0	4.4	---	10	4/29/2015	N/A	9/19/2016
MW-12	Arsenic	9/19/2016	4.3	4.4	---	10	4/29/2015	N/A	9/19/2016
MW-12	Arsenic	3/21/2017	<4.0	4.4	---	10	4/29/2015	N/A	9/19/2016
MW-12	Arsenic	10/12/2017	<4.0	4.4	---	10	4/29/2015	N/A	9/19/2016
MW-12	Arsenic	3/8/2018	<4.0	4.4	---	10	4/29/2015	N/A	9/19/2016
MW-12	Arsenic	9/6/2018	<4.0	4.4	2.000	10	4/29/2015	N/A	9/19/2016
MW-12	Arsenic	5/13/2019	<4.0	4.4	2.000	10	4/29/2015	N/A	9/19/2016
MW-12	Arsenic	9/26/2019	<4.0	4.4	2.000	10	4/29/2015	N/A	9/19/2016
MW-12	Arsenic	3/30/2020	<4.0	4.4	2.000	10	4/29/2015	N/A	9/19/2016
MW-12	Arsenic	9/17/2020	<4.0	4.4	2.000	10	4/29/2015	N/A	9/19/2016
MW-12	Arsenic	3/9/2021	<4.0	4.4	2.000	10	4/29/2015	N/A	9/19/2016
MW-12	Arsenic	9/9/2021	<4.0	4.4	2.000	10	4/29/2015	N/A	9/19/2016
MW-12	Arsenic	3/14/2022	<4.0	4.4	2.000	10	4/29/2015	N/A	9/19/2016
MW-12	Arsenic	9/1/2022	<4.0	4.4	2.000	10	4/29/2015	N/A	9/19/2016
MW-12	Arsenic	3/6/2023	7.30	6.1	0.208	10	4/29/2015	N/A	9/19/2016
MW-12	Arsenic	9/8/2023	<4.0	6.1	0.208	10	4/29/2015	N/A	9/19/2016
MW-12	Arsenic	3/20/2024	15.90	6.1	0.000	10	4/29/2015	N/A	9/19/2016
MW-12	Arsenic	9/25/2024	<4.0	6.1	0.000	10	4/29/2015	N/A	9/19/2016
MW-12	Arsenic	3/11/2025	7.60	6.1	0.000	10	4/29/2015	N/A	9/19/2016
MW-12	Arsenic	9/8/2025	<2.0	6.1	0.000	10	4/29/2015	N/A	9/19/2016

Table 7
Summary of Ongoing & Newly Identified SSI
Annual Water Quality Report
Fremont County Sanitary Landfill
Permit No. 36-SDP-01-74P

KEY:	SSI	SSL LCL>GWPS

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI Initial	Resamples Due	5th Background Sample
							Exceedance		
MW-12	Nickel	9/18/2014	5.8	13.60	---	100	9/9/2021	N/A	9/19/2016
MW-12	Nickel	4/29/2015	4.6	13.60	---	100	9/9/2021	N/A	9/19/2016
MW-12	Nickel	10/7/2015	<4.0	13.60	---	100	9/9/2021	N/A	9/19/2016
MW-12	Nickel	4/19/2016	4.1	13.60	---	100	9/9/2021	N/A	9/19/2016
MW-12	Nickel	9/19/2016	<4.0	13.60	---	100	9/9/2021	N/A	9/19/2016
MW-12	Nickel	3/21/2017	<4.0	13.60	---	100	9/9/2021	N/A	9/19/2016
MW-12	Nickel	10/12/2017	<4.0	13.60	---	100	9/9/2021	N/A	9/19/2016
MW-12	Nickel	3/8/2018	<4.0	13.60	2.000	100	9/9/2021	N/A	9/19/2016
MW-12	Nickel	9/6/2018	<4.0	13.60	2.000	100	9/9/2021	N/A	9/19/2016
MW-12	Nickel	5/13/2019	<4.0	13.60	2.000	100	9/9/2021	N/A	9/19/2016
MW-12	Nickel	9/26/2019	5.2	13.60	1.414	100	9/9/2021	N/A	9/19/2016
MW-12	Nickel	3/30/2020	15.7	13.60	0.601	100	9/9/2021	N/A	9/19/2016
MW-12	Nickel	6/25/2020	7.9	13.60	2.631	100	9/9/2021	N/A	9/19/2016
MW-12	Nickel	9/17/2020	5.9	13.60	4.500	100	9/9/2021	N/A	9/19/2016
MW-12	Nickel	3/9/2021	11.9	13.60	6.581	100	9/9/2021	N/A	9/19/2016
MW-12	Nickel	9/9/2021	15.6	13.60	6.591	100	9/9/2021	N/A	9/19/2016
MW-12	Nickel	12/8/2021	31.60	13.60	6.736	100	9/9/2021	N/A	9/19/2016
MW-12	Nickel	3/14/2022	12.30	13.60	9.783	100	9/9/2021	N/A	9/19/2016
MW-12	Nickel	9/1/2022	6.70	13.60	7.297	100	9/9/2021	N/A	9/19/2016
MW-12	Nickel	3/6/2023	27.60	13.60	5.505	100	9/9/2021	N/A	9/19/2016
MW-12	Nickel	9/8/2023	11.60	13.60	3.905	100	9/9/2021	N/A	9/19/2016
MW-12	Nickel	3/20/2024	63.10	13.60	0.000	100	9/9/2021	N/A	9/19/2016
MW-12	Nickel	9/25/2024	10.20	13.60	0.000	100	9/9/2021	N/A	9/19/2016
MW-12	Nickel	3/11/2025	31.40	20.70	0.065	100	9/9/2021	N/A	9/19/2016
MW-12	Nickel	9/8/2025	<5.0	20.70	0.000	100	9/9/2021	N/A	9/19/2016

Bold Result = Detected above the MRL

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

Table 7
Summary of Ongoing & Newly Identified SSI
Annual Water Quality Report
Fremont County Sanitary Landfill
Permit No. 36-SDP-01-74P

KEY:	SSI	SSL LCL>GWPS

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW-15	Barium	9/18/2014	359.00	554.0	---	2000	9/26/2019	NA	9/19/2016
MW-15	Barium	4/29/2015	374.00	554.0	---	2000	9/26/2019	NA	9/19/2016
MW-15	Barium	10/7/2015	315.00	554.0	---	2000	9/26/2019	NA	9/19/2016
MW-15	Barium	4/19/2016	341.00	554.0	325.268	2000	9/26/2019	NA	9/19/2016
MW-15	Barium	9/19/2016	311.00	554.0	310.087	2000	9/26/2019	NA	9/19/2016
MW-15	Barium	3/21/2017	330.00	554.0	312.263	2000	9/26/2019	NA	9/19/2016
MW-15	Barium	10/12/2017	318.00	554.0	313.533	2000	9/26/2019	NA	9/19/2016
MW-15	Barium	3/8/2018	339.00	554.0	313.718	2000	9/26/2019	NA	9/19/2016
MW-15	Barium	9/6/2018	306.00	554.0	310.813	2000	9/26/2019	NA	9/19/2016
MW-15	Barium	5/13/2019	365.00	554.0	309.583	2000	9/26/2019	NA	9/19/2016
MW-15	Barium	9/26/2019	664.00	554.0	275.227	2000	9/26/2019	NA	9/19/2016
MW-15	Barium	3/30/2020	434.00	554.0	306.444	2000	9/26/2019	NA	9/19/2016
MW-15	Barium	9/17/2020	686.00	554.0	397.14	2000	9/26/2019	NA	9/19/2016
MW-15	Barium	3/9/2021	390.00	554.0	410.855	2000	9/26/2019	NA	9/19/2016
MW-15	Barium	9/9/2021	741.00	554.0	409.957	2000	9/26/2019	NA	9/19/2016
MW-15	Barium	3/14/2022	751.00	554.0	494.418	2000	9/26/2019	NA	9/19/2016
MW-15	Barium	9/1/2022	392.00	554.0	390.963	2000	9/26/2019	NA	9/19/2016
MW-15	Barium	3/6/2023	431.00	554.0	297.811	2000	9/26/2019	NA	9/19/2016
MW-15	Barium	9/8/2023	430.00	554.0	395.874	2000	9/26/2019	NA	9/19/2016
MW-15	Barium	3/20/2024	549.00	614.0	383.516	2000	9/26/2019	NA	9/19/2016
MW-15	Barium	9/25/2024	509.00	614.0	409.607	2000	9/26/2019	NA	9/19/2016
MW-15	Barium	3/11/2025	486.00	565.3	436.317	2000	9/26/2019	NA	9/19/2016
MW-15	Barium	9/8/2025	556.00	575.1	495.981	2000	9/26/2019	NA	9/19/2016

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

Table 7
Summary of Ongoing & Newly Identified SSI
Annual Water Quality Report
Fremont County Sanitary Landfill
Permit No. 36-SDP-01-74P

KEY:	SSI	SSL LCL>GWPS

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	INTRAWELL		GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
				Control Limit (ug/L)	95% LCL (ug/L)				
GWD-1	Barium	9/11/2012	297.00	832.8	---	2000	NA	NA	9/19/2016
GWD-1	Barium	4/5/2013	318.00	832.8	---	2000	NA	NA	9/19/2016
GWD-1	Barium	10/7/2015	405.00	832.8	---	2000	NA	NA	9/19/2016
GWD-1	Barium	4/19/2016	415.00	832.8	---	2000	NA	NA	9/19/2016
GWD-1	Barium	9/19/2016	445.00	832.8	---	2000	NA	NA	9/19/2016
GWD-1	Barium	3/21/2017	436.00	832.8	---	2000	NA	NA	9/19/2016
GWD-1	Barium	10/12/2017	465.00	832.8	---	2000	NA	NA	9/19/2016
GWD-1	Barium	3/8/2018	471.00	832.8	---	2000	NA	NA	9/19/2016
GWD-1	Barium	9/6/2018	495.00	832.8	---	2000	NA	NA	9/19/2016
GWD-1	Barium	5/13/2019	472.00	832.8	---	2000	NA	NA	9/19/2016
GWD-1	Barium	9/26/2019	489.00	832.8	---	2000	NA	NA	9/19/2016
GWD-1	Barium	3/30/2020	524.00	832.8	---	2000	NA	NA	9/19/2016
GWD-1	Barium	9/17/2020	592.00	832.8	---	2000	NA	NA	9/19/2016
GWD-1	Barium	3/9/2021	566.00	832.8	---	2000	NA	NA	9/19/2016
GWD-1	Barium	6/3/2021	518.00	832.8	---	2000	NA	NA	9/19/2016
GWD-1	Barium	9/9/2021	503.00	832.8	---	2000	NA	NA	9/19/2016
GWD-1	Barium	3/6/2023	458.00	832.8	---	2000	NA	NA	9/19/2016
GWD-1	Barium	3/20/2024	387.00	832.8	377.239	2000	NA	NA	9/19/2016
GWD-1	Barium	9/25/2024	619.00	832.8	377.239	2000	NA	NA	9/19/2016
GWD-1	Barium	3/11/2025	<i>buried</i>	832.8	377.239	2000	NA	NA	9/19/2016
GWD-1	Barium	9/8/2025	<i>buried</i>	832.8	377.239	2000	NA	NA	9/19/2016

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

Table 7
Summary of Ongoing & Newly Identified SSI
Annual Water Quality Report
Fremont County Sanitary Landfill
Permit No. 36-SDP-01-74P

KEY:	SSI	SSL LCL>GWPS

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	INTRAWELL		GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
				Control Limit (ug/L)	95% LCL (ug/L)				
GWD-2	Barium	9/18/2014	307.00	1290.9	---	2000	NA	NA	9/19/2016
GWD-2	Barium	4/29/2015	341.00	1290.9	---	2000	NA	NA	9/19/2016
GWD-2	Barium	10/7/2015	316.00	1290.9	---	2000	NA	NA	9/19/2016
GWD-2	Barium	4/19/2016	329.00	1290.9	310.359	2000	NA	NA	9/19/2016
GWD-2	Barium	9/19/2016	321.00	1290.9	317.306	2000	NA	NA	9/19/2016
GWD-2	Barium	3/21/2017	330.00	1290.9	318.212	2000	NA	NA	9/19/2016
GWD-2	Barium	10/12/2017	354.00	1290.9	321.161	2000	NA	NA	9/19/2016
GWD-2	Barium	3/8/2018	357.00	1290.9	325.130	2000	NA	NA	9/19/2016
GWD-2	Barium	9/6/2018	333.00	1290.9	331.407	2000	NA	NA	9/19/2016
GWD-2	Barium	5/13/2019	385.00	1290.9	338.752	2000	NA	NA	9/19/2016
GWD-2	Barium	9/26/2019	405.00	1290.9	342.669	2000	NA	NA	9/19/2016
GWD-2	Barium	3/30/2020	484.00	1290.9	347.476	2000	NA	NA	9/19/2016
GWD-2	Barium	9/17/2020	824.00	1290.9	347.666	2000	NA	NA	9/19/2016
GWD-2	Barium	12/3/2020	534.00	1290.9	403.509	2000	NA	NA	9/19/2016
GWD-2	Barium	3/9/2021	544.00	1290.9	463.201	2000	NA	NA	9/19/2016
GWD-2	Barium	9/9/2021	554.00	1290.9	492.550	2000	NA	NA	9/19/2016
GWD-2	Barium	3/6/2023	574.00	1290.9	536.710	2000	NA	NA	9/19/2016
GWD-2	Barium	5/9/2023	565.00	1290.9	531.411	2000	NA	NA	9/19/2016
GWD-2	Barium	9/8/2023	825.00	1290.9	475.889	2000	NA	NA	9/19/2016
GWD-2	Barium	3/20/2024	665.00	1290.9	515.377	2000	NA	NA	9/19/2016
GWD-2	Barium	6/14/2024	870.00	1290.9	514.167	2000	NA	NA	9/19/2016
GWD-2	Barium	9/25/2024	496.00	1290.9	514.167	2000	NA	NA	9/19/2016
GWD-2	Barium	3/11/2025	455.00	1290.9	399.229	2000	NA	NA	9/19/2016
GWD-2	Barium	9/8/2025	Dry	1290.9	399.229	2000	NA	NA	9/19/2016

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

Table 8 - Summary of Ongoing and Newly Identified SSL
(NOT REQUIRED)

Table 9 – Analytical Data Summary

Table 9

Analytical Data Summary for GWD-1

Constituents	Units	10/7/2015	1/18/2016	4/19/2016	9/19/2016	3/21/2017	10/12/2017	3/8/2018	9/6/2018	5/13/2019
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
Aluminum, total	ug/L									
Antimony, total	ug/L	<2		<2	<2	<2	<2	<2	<2	<2
Arsenic, total	ug/L	8.1	5.0	6.4	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Barium, total	ug/L	405		415	445	436	465	471	495	472
Benzene	ug/L	<1		<1	<1	<1	<1	<1	<1	<1
Beryllium, total	ug/L	<4		<4	<4	<4	<4	<4	<4	<4
Bod (5 day)	mg/L									
Boron, total	ug/L									
Bromochloromethane	ug/L	<1		<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1		<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<1		<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1		<1	<1	<1	<1	<1	<1	<1
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
Chloride	mg/L									
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	6.9		9.5	9.6	6.7	2.0	<2.0	.8	2.4
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
Fluoride	mg/L									
Iron, total	ug/L									
Lead, total	ug/L	<4		<4	<4	<4	<4	<4	<4	<4
Lithium, total	ug/L									
Manganese, total	ug/L									
Methyl iodide	ug/L	<1		<1	<1	<1	<1	<1	<1	<1
Methylene chloride	ug/L	<5		<5	<5	<5	<5	<5	<5	<5
Molybdenum, total	ug/L									
Nickel, total	ug/L	9.4		8.2	<4.0	5.4	<4.0	<4.0	<8.0	<4.0
Nitrogen, ammonia	mg/L									
Nitrogen, Kjeldahl, total	mg/L									
Nitrogen, Nitrate+Nitrite	mg/L									
Selenium, total	ug/L	<4		<4	<4	<4	<4	<4	<4	<4
Silica, dissolved	mg/L									
Silver, total	ug/L	<4		<4	<4	<4	<4	<4	<8	<4
Solids, total suspended	mg/L	3		<2	<2	2	<2			
Styrene	ug/L	<1		<1	<1	<1	<1	<1	<1	<1
Sulfate	mg/L									
Tetrachloroethylene	ug/L	<1		<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4		<4	<4	<4	<4	<4	<4	<2
Toluene	ug/L	<1		<1	<1	<1	<1	<1	<1	<1
Trans-1,2-dichloroethylene	ug/L	<1		<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1		<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5		<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	ug/L	<1		<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1		<1	<1	<1	<1	<1	<1	<1
Vanadium, total	ug/L	<20		<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	ug/L	<5		<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1		<1	<1	<1	<1	<1	<1	<1
Xylenes, total	ug/L	<2		<2	<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	<8.0		<8.0	<8.0	<8.0	<8.0	<8.0	28.6	<8.0

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

Table 9

Analytical Data Summary for GWD-1

Constituents	9/26/2019	3/30/2020	9/17/2020	3/9/2021	6/3/2021	9/9/2021	3/14/2022	3/6/2023	3/20/2024	9/25/2024
1,1,1,2-tetrachloroethane	<1	<1	<1	<1		<1		<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1		<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1		<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1		<1		<1	<1	<1
1,1-dichloroethane	<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
1,2-dibromo-3-chloropropane	<1	<5	<5	<5		<5		<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1		<1		<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1		<1		<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1		<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<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		<10	<10	<10
2-hexanone (mbk)	<5	<5	<5	<5		<5		<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5		<5		<5	<5	<5
Acetone	<10	<10	<10	<10		<10		<10	<10	<10
Acrylonitrile	<5	<5	<5	<5		<5		<5	<5	<5
Aluminum, total							<50			
Antimony, total	<2	<2	<2	<2		<2		<2	<2	<2
Arsenic, total	4.1	<4.0	<4.0	<4.0		<4.0	<4.0	<4.0	11.4	<4.0
Barium, total	489	524	592	566	518	503		458	387	619
Benzene	<1	<1	<1	<1		<1	<1	<1	<1	<1
Beryllium, total	<4	<4	<4	<4		<4	<4	<4	<4	<4
Bod (5 day)							<5			
Boron, total							<100			
Bromochloromethane	<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
Cadmium, total	<.8	<.8	<.8	<.8		<.8	<.8	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1		<1		<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1		<1	<1	<1	<1	<1
Chloride							109			
Chlorobenzene	<1	<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	<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	2.1	1.6	1.1	1.5		.5	.7	.7	3.6	2.3
Copper, total	6.6	<4.0	<4.0	<4.0		<4.0	<4.0	<4.0	<4.0	<4.0
Dibromochloromethane	<1	<1	<1	<1		<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1		<1		<1	<1	<1
Ethylbenzene	<1	<1	<1	<1		<1	<1	<1	<1	<1
Fluoride							.2			
Iron, total							368			
Lead, total	<4	<4	<4	<4		<4	<4	<4	<4	<4
Lithium, total							<50			
Manganese, total							525			
Methyl iodide	<1	<2	<1	<1		<1		<1	<1	<1
Methylene chloride	<5	<5	<5	<5		<5		<5	<5	<5
Molybdenum, total							<4			
Nickel, total	<4.0	<4.0	<4.0	<4.0		<4.0	<4.0	<4.0	4.9	4.1
Nitrogen, ammonia							<.1			
Nitrogen, Kjeldahl, total							1.03			
Nitrogen, Nitrate+Nitrite							5.03			
Selenium, total	<4	<4	<4	<4		4	<4	<4	<4	<4
Silica, dissolved							22.2			
Silver, total	<4	<4	<4	<4		<4		<4	<4	<4
Solids, total suspended							<2			
Styrene	<1	<1	<1	<1		<1		<1	<1	<1
Sulfate							18.6			
Tetrachloroethylene	<1	<1	<1	<1		<1	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2		<2		<2	<2	<2
Toluene	<1	<1	<1	<1		<1	<1	<1	<1	<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
Trans-1,4-dichloro-2-butene	<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
Vanadium, total	<20	<20	<20	<20		<20	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5		<5		<5	<5	<5
Vinyl chloride	<1	<1	<1	<1		<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2		<2		<2	<2	<2
Zinc, total	<8.0	<20.0	<20.0	<20.0		<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 9

Analytical Data Summary for GWD-2

Constituents	Units	9/18/2014	4/28/2015	10/7/2015	4/19/2016	9/19/2016	3/21/2017	10/12/2017	3/8/2018
(3,4)-methylphenol	ug/L								
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloropropene	ug/L								
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene	ug/L								
1,2,4-trichlorobenzene	ug/L								
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dinitrobenzene	ug/L								
1,3,5-trinitrobenzene	ug/L								
1,3-dichlorobenzene	ug/L								
1,3-dichloropropane	ug/L								
1,3-dinitrobenzene	ug/L								
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,4-naphthoquinone	ug/L								
1,4-phenylenediamine	ug/L								
1-naphthylamine	ug/L								
2,2-dichloropropane	ug/L								
2,3,4,6-tetrachlorophenol	ug/L								
2,4,5-t	ug/L								
2,4,5-tp (silvex)	ug/L								
2,4,5-trichlorophenol	ug/L								
2,4,6-trichlorophenol	ug/L								
2,4-d	ug/L								
2,4-dichlorophenol	ug/L								
2,4-dimethylphenol	ug/L								
2,4-dinitrophenol	ug/L								
2,4-dinitrotoluene	ug/L								
2,6-dichlorophenol	ug/L								
2,6-dinitrotoluene	ug/L								
2-acetylaminofluorene	ug/L								
2-butanone (mek)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
2-chloronaphthalene	ug/L								
2-chlorophenol	ug/L								
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
2-methylnaphthalene	ug/L								
2-methylphenol	ug/L								
2-naphthylamine	ug/L								
2-nitroaniline	ug/L								
2-nitrophenol	ug/L								
3,3'-dichlorobenzidine	ug/L								
3,3'-dimethylbenzidine	ug/L								
3-methylcholanthrene	ug/L								
3-nitroaniline	ug/L								
4,4'-ddd	ug/L								
4,4'-dde	ug/L								
4,4'-ddt	ug/L								
4,6-dinitro-2-methylphenol	ug/L								
4-aminobiphenyl	ug/L								
4-bromophenyl phenyl ether	ug/L								
4-chloro-3-methylphenol	ug/L								
4-chloroaniline	ug/L								
4-chlorophenyl phenyl ether	ug/L								
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
4-nitroaniline	ug/L								
4-nitrophenol	ug/L								
5-nitro-o-toluidine	ug/L								
7,12-dimethylbenz(a)anthracene	ug/L								
Acenaphthene	ug/L								
Acenaphthylene	ug/L								
Acetone	ug/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	18.2	<10.0
Acetonitrile	ug/L								
Acetophenone	ug/L								
Acrolein	ug/L								
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Aldrin	ug/L								
Allyl chloride	ug/L								
Alpha-bhc	ug/L								
Aluminum, total	ug/L								

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

Table 9

Analytical Data Summary for GWD-2

Constituents	9/6/2018	5/13/2019	9/26/2019	3/30/2020	9/17/2020	12/3/2020	3/9/2021	9/9/2021	3/14/2022
(3,4)-methylphenol									
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1		<1	<1	
1,1,1-trichloroethane	<1	<1	<1	<1	<1		<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1		<1	<1	
1,1,2-trichloroethane	<1	<1	<1	<1	<1		<1	<1	
1,1-dichloroethane	<1	<1	<1	<1	<1		<1	<1	
1,1-dichloroethylene	<1	<1	<1	<1	<1		<1	<1	<1
1,1-dichloropropene									
1,2,3-trichloropropane	<1	<1	<1	<1	<1		<1	<1	
1,2,4,5-tetrachlorobenzene									
1,2,4-trichlorobenzene									
1,2-dibromo-3-chloropropane	<1	<1	<1	<5	<5		<5	<5	
1,2-dibromoethane	<1	<1	<1	<1	<1		<1	<1	
1,2-dichlorobenzene	<1	<1	<1	<1	<1		<1	<1	
1,2-dichloroethane	<1	<1	<1	<1	<1		<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1		<1	<1	<1
1,2-dinitrobenzene									
1,3,5-trinitrobenzene									
1,3-dichlorobenzene									
1,3-dichloropropane									
1,3-dinitrobenzene									
1,4-dichlorobenzene	<1	<1	<1	<1	<1		<1	<1	
1,4-naphthoquinone									
1,4-phenylenediamine									
1-naphthylamine									
2,2-dichloropropane									
2,3,4,6-tetrachlorophenol									
2,4,5-t									
2,4,5-tp (silvex)									
2,4,5-trichlorophenol									
2,4,6-trichlorophenol									
2,4-d									
2,4-dichlorophenol									
2,4-dimethylphenol									
2,4-dinitrophenol									
2,4-dinitrotoluene									
2,6-dichlorophenol									
2,6-dinitrotoluene									
2-acetylaminofluorene									
2-butanone (mek)	<5	<5	<5	<5	<5		<5	<5	
2-chloronaphthalene									
2-chlorophenol									
2-hexanone (mbk)	<5	<5	<5	<5	<5		<5	<5	
2-methylnaphthalene									
2-methylphenol									
2-naphthylamine									
2-nitroaniline									
2-nitrophenol									
3,3'-dichlorobenzidine									
3,3'-dimethylbenzidine									
3-methylcholanthrene									
3-nitroaniline									
4,4'-ddd									
4,4'-dde									
4,4'-ddt									
4,6-dinitro-2-methylphenol									
4-aminobiphenyl									
4-bromophenyl phenyl ether									
4-chloro-3-methylphenol									
4-chloroaniline									
4-chlorophenyl phenyl ether									
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5		<5	<5	
4-nitroaniline									
4-nitrophenol									
5-nitro-o-toluidine									
7,12-dimethylbenz(a)anthracene									
Acenaphthene									
Acenaphthylene									
Acetone	<10.0	<10.0	<10.0	<10.0	<10.0		<10.0	<10.0	
Acetonitrile									
Acetophenone									
Acrolein									
Acrylonitrile	<5	<5	<5	<5	<5		<5	<5	
Aldrin									
Allyl chloride									
Alpha-bhc									
Aluminum, total									<50

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

Table 9

Analytical Data Summary for GWD-2

Constituents	3/6/2023	5/9/2023	9/8/2023	3/20/2024	6/14/2024	9/25/2024	3/11/2025
(3,4)-methylphenol			<8				
1,1,1,2-tetrachloroethane	<1		<1	<1		<1	<1
1,1,1-trichloroethane	<1		<1			<1	<1
1,1,2,2-tetrachloroethane	<1		<1	<1		<1	<1
1,1,2-trichloroethane	<1		<1	<1		<1	<1
1,1-dichloroethane	<1		<1	<1		<1	<1
1,1-dichloroethylene	<1		<1	<1		<1	<1
1,1-dichloropropene			<1				
1,2,3-trichloropropane	<1		<1	<1		<1	<1
1,2,4,5-tetrachlorobenzene			<8				
1,2,4-trichlorobenzene			<1				
1,2-dibromo-3-chloropropane	<5		<1	<5		<5	<5
1,2-dibromoethane	<1		<1	<1		<1	<1
1,2-dichlorobenzene	<1		<1	<1		<1	<1
1,2-dichloroethane	<1		<1	<1		<1	<1
1,2-dichloropropane	<1		<1	<1		<1	<1
1,2-dinitrobenzene			<8				
1,3,5-trinitrobenzene			<8				
1,3-dichlorobenzene			<1				
1,3-dichloropropane			<1				
1,3-dinitrobenzene			<8				
1,4-dichlorobenzene	<1		<1	<1		<1	<1
1,4-naphthoquinone			<8				
1,4-phenylenediamine			<8				
1-naphthylamine			<8				
2,2-dichloropropane			<1				
2,3,4,6-tetrachlorophenol			<8				
2,4,5-t			<5				
2,4,5-tp (silvex)			<5				
2,4,5-trichlorophenol			<8				
2,4,6-trichlorophenol			<8				
2,4-d			<2				
2,4-dichlorophenol			<8				
2,4-dimethylphenol			<8				
2,4-dinitrophenol			<8				
2,4-dinitrotoluene			<8				
2,6-dichlorophenol			<8				
2,6-dinitrotoluene			<8				
2-acetylaminofluorene			<8				
2-butanone (mek)	<10		<5	<10		<10	<10
2-chloronaphthalene			<8				
2-chlorophenol			<8				
2-hexanone (mbk)	<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
4-nitroaniline			<8				
4-nitrophenol			<8				
5-nitro-o-toluidine			<8				
7,12-dimethylbenz(a)anthracene			<8				
Acenaphthene			<8				
Acenaphthylene			<8				
Acetone	<10.0		<10.0	<10.0		<10.0	<10.0
Acetonitrile			<10				
Acetophenone			<8				
Acrolein			<10				
Acrylonitrile	<5		<5	<5		<5	<5
Aldrin			<.05				
Allyl chloride			<1				
Alpha-bhc			<.05				
Aluminum, total							

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

Table 9

Analytical Data Summary for GWD-2

Constituents	Units	9/18/2014	4/28/2015	10/7/2015	4/19/2016	9/19/2016	3/21/2017	10/12/2017	3/8/2018
Anthracene	ug/L								
Antimony, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
Arochlor 1016	ug/L								
Arochlor 1221	ug/L								
Arochlor 1232	ug/L								
Arochlor 1242	ug/L								
Arochlor 1248	ug/L								
Arochlor 1254	ug/L								
Arochlor 1260	ug/L								
Arsenic, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Azobenzene	ug/L								
Barium, total	ug/L	307	341	316	329	321	330	354	357
Benzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Benzo(a)anthracene	ug/L								
Benzo(a)pyrene	ug/L								
Benzo(b)fluoranthene	ug/L								
Benzo(g,h,i)perylene	ug/L								
Benzo(k)fluoranthene	ug/L								
Benzyl alcohol	ug/L								
Beryllium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Beta-bhc	ug/L								
Bis (2-chloroethoxy) methane	ug/L								
Bis(2-chloroethyl) ether	ug/L								
Bis(2-chloroisopropyl) ether	ug/L								
Bis(2-ethylhexyl) phthalate	ug/L								
Bod (5 day)	mg/L								
Boron, total	ug/L								
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate	ug/L								
Cadmium, total	ug/L	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chlordane	ug/L								
Chloride	mg/L								
Chlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzilate	ug/L								
Chloroethane	ug/L	<1	<1	1	<1	<1	<1	<1	<1
Chloroform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloroprene	ug/L								
Chromium, total	ug/L	<8	<8	<8	<8	<8	<8	<8	<8
Chrysene	ug/L								
Cis-1,2-dichloroethylene	ug/L	<1	<1	1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	<.8	<.8	.9	1.0	4.3	7.7	7.3	6.2
Copper, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Cyanide, total	mg/L								
Delta-bhc	ug/L								
Diallate	ug/L								
Dibenzo(a,h)anthracene	ug/L								
Dibenzofuran	ug/L								
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L								
Dieldrin	ug/L								
Diethyl phthalate	ug/L								
Dimethoate	ug/L								
Dimethylphthalate	ug/L								
Di-n-butyl phthalate	ug/L								
Di-n-octyl phthalate	ug/L								
Dinoseb	ug/L								
Diphenylamine	ug/L								
Disulfoton	ug/L								
Endosulfan i	ug/L								
Endosulfan ii	ug/L								
Endosulfan sulfate	ug/L								
Endrin	ug/L								
Endrin aldehyde	ug/L								
Ethyl methacrylate	ug/L								
Ethyl methanesulfonate	ug/L								
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Famphur	ug/L								
Fluoranthene	ug/L								
Fluorene	ug/L								

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

Table 9

Analytical Data Summary for GWD-2

Constituents	9/6/2018	5/13/2019	9/26/2019	3/30/2020	9/17/2020	12/3/2020	3/9/2021	9/9/2021	3/14/2022
Anthracene									
Antimony, total	<2	<2	<2	<2	<2		<2	<2	
Arochlor 1016									
Arochlor 1221									
Arochlor 1232									
Arochlor 1242									
Arochlor 1248									
Arochlor 1254									
Arochlor 1260									
Arsenic, total	<4.0	<4.0	<4.0	<4.0	73.5	<4.0	<4.0	<4.0	<4.0
Azobenzene									
Barium, total	333	385	405	484	824	534	544	554	
Benzene	<1	<1	<1	<1	<1		<1	<1	<1
Benzo(a)anthracene									
Benzo(a)pyrene									
Benzo(b)fluoranthene									
Benzo(g,h,i)perylene									
Benzo(k)fluoranthene									
Benzyl alcohol									
Beryllium, total	<4	<4	<4	<4	<4		<4	<4	<4
Beta-bhc									
Bis (2-chloroethoxy) methane									
Bis(2-chloroethyl) ether									
Bis(2-chloroisopropyl) ether									
Bis(2-ethylhexyl) phthalate									
Bod (5 day)									<5
Boron, total									<100
Bromochloromethane	<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	
Butyl benzyl phthalate									
Cadmium, total	<.8	<.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	<1
Chlordane									
Chloride									21.3
Chlorobenzene	<1	<1	<1	<1	<1		<1	<1	<1
Chlorobenzilate									
Chloroethane	<1	<1	<1	<1	<1		<1	<1	
Chloroform	<1	<1	<1	<1	<1		<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1		<1	<1	
Chloroprene									
Chromium, total	<8	<8	<8	<8	<8		<8	<8	
Chrysene									
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1		<1	<1	
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1		<1	<1	
Cobalt, total	3.1	2.3	8.7	9.4	16.7	6.7	5.9	3.7	4.6
Copper, total	<4	<4	<4	<4	<4		<4	<4	<4
Cyanide, total									
Delta-bhc									
Diallate									
Dibenzo(a,h)anthracene									
Dibenzofuran									
Dibromochloromethane	<1	<1	<1	<1	<1		<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1		<1	<1	
Dichlorodifluoromethane									
Dieldrin									
Diethyl phthalate									
Dimethoate									
Dimethylphthalate									
Di-n-butyl phthalate									
Di-n-octyl phthalate									
Dinoseb									
Diphenylamine									
Disulfoton									
Endosulfan i									
Endosulfan ii									
Endosulfan sulfate									
Endrin									
Endrin aldehyde									
Ethyl methacrylate									
Ethyl methanesulfonate									
Ethylbenzene	<1	<1	<1	<1	<1		<1	<1	<1
Famphur									
Fluoranthene									
Fluorene									

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

Table 9

Analytical Data Summary for GWD-2

Constituents	3/6/2023	5/9/2023	9/8/2023	3/20/2024	6/14/2024	9/25/2024	3/11/2025
Anthracene			<8				
Antimony, total	<2		<2	<2		<2	<2
Arochlor 1016			<2				
Arochlor 1221			<2				
Arochlor 1232			<2				
Arochlor 1242			<2				
Arochlor 1248			<2				
Arochlor 1254			<2				
Arochlor 1260			<2				
Arsenic, total	<4.0		<4.0	5.9	13.8	<4.0	<4.0
Azobenzene			<8				
Barium, total	574	565	825	665	870	496	455
Benzene	<1		<1	<1		<1	<1
Benzo(a)anthracene			<8				
Benzo(a)pyrene			<8				
Benzo(b)fluoranthene			<8				
Benzo(g,h,i)perylene			<8				
Benzo(k)fluoranthene			<8				
Benzyl alcohol			<8				
Beryllium, total	<4		<4	<4		<4	<4
Beta-bhc			<.05				
Bis (2-chloroethoxy) methane			<8				
Bis(2-chloroethyl) ether			<8				
Bis(2-chloroisopropyl) ether			<8				
Bis(2-ethylhexyl) phthalate			<6				
Bod (5 day)							
Boron, total							
Bromochloromethane	<1		<1	<1		<1	<1
Bromodichloromethane	<1		<1	<1		<1	<1
Bromoform	<1		<1	<1		<1	<1
Bromomethane	<1		<1	<1		<1	<1
Butyl benzyl phthalate			<8				
Cadmium, total	<.8		<.8	<.8		<.8	<.8
Carbon disulfide	<1		<1	<1		<1	<1
Carbon tetrachloride	<1		<1	<1		<1	<1
Chlordane			<.1				
Chloride							
Chlorobenzene	<1		<1	<1		<1	<1
Chlorobenzilate			<8				
Chloroethane	<1		<1	<1		<1	<1
Chloroform	<1		<1	<1		<1	<1
Chloromethane	<1		<1	<1		<1	<1
Chloroprene			<1				
Chromium, total	<8		<8	<8		<8	<8
Chrysene			<8				
Cis-1,2-dichloroethylene	<1		<1	<1		<1	<1
Cis-1,3-dichloropropene	<1		<1	<1		<1	<1
Cobalt, total	3.4		5.2	3.4		3.6	1.4
Copper, total	<4		<4	<4		<4	<4
Cyanide, total			<.005				
Delta-bhc			<.05				
Diallate			<8				
Dibenzo(a,h)anthracene			<8				
Dibenzofuran			<8				
Dibromochloromethane	<1		<1	<1		<1	<1
Dibromomethane	<1		<1	<1		<1	<1
Dichlorodifluoromethane			<1				
Dieldrin			<.05				
Diethyl phthalate			<8				
Dimethoate			<.4				
Dimethylphthalate			<8				
Di-n-butyl phthalate			<8				
Di-n-octyl phthalate			<8				
Dinoseb			<.5				
Diphenylamine			<8				
Disulfoton			<.4				
Endosulfan i			<.05				
Endosulfan ii			<.05				
Endosulfan sulfate			<.05				
Endrin			<.05				
Endrin aldehyde			<.05				
Ethyl methacrylate			<10				
Ethyl methanesulfonate			<8				
Ethylbenzene	<1		<1	<1		<1	<1
Famphur			<.4				
Fluoranthene			<8				
Fluorene			<8				

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

Table 9

Analytical Data Summary for GWD-2

Constituents	Units	9/18/2014	4/28/2015	10/7/2015	4/19/2016	9/19/2016	3/21/2017	10/12/2017	3/8/2018
Fluoride	mg/L								
Gamma-bhc (lindane)	ug/L								
Heptachlor	ug/L								
Heptachlor epoxide	ug/L								
Hexachlorobenzene	ug/L								
Hexachlorobutadiene	ug/L								
Hexachlorocyclopentadiene	ug/L								
Hexachloroethane	ug/L								
Hexachloropropene	ug/L								
Indeno(1,2,3-cd)pyrene	ug/L								
Iron, total	ug/L								
Isobutanol	mg/L								
Isodrin	ug/L								
Isophorone	ug/L								
Isosafrole	ug/L								
Kepone	ug/L								
Lead, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Lithium, total	ug/L								
Manganese, total	ug/L								
Mercury, total	ug/L								
Methacrylonitrile	ug/L								
Methapyriline	ug/L								
Methoxychlor	ug/L								
Methyl iodide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Methyl methacrylate	ug/L								
Methyl methanesulfonate	ug/L								
Methyl parathion	ug/L								
Methylene chloride	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Molybdenum, total	ug/L								
Naphthalene	ug/L								
Nickel, total	ug/L	4.0	<4.0	6.2	6.6	6.7	12.1	11.2	10.1
Nitrobenzene	ug/L								
Nitrogen, ammonia	mg/L								
Nitrogen, Kjeldahl, total	mg/L								
Nitrogen, Nitrate+Nitrite	mg/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
Silica, dissolved	mg/L								
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Solids, total suspended	mg/L	<2	<2	<2	<2	<2	<2	<2	<2
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Sulfate	mg/L								
Sulfide, total	mg/L								
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Thionazin	ug/L								
Tin, total	ug/L								
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Toxaphene	ug/L								
Trans-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	ug/L	1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	1.9	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Vanadium, total	ug/L	<20	<20	<20	<20	<20	<20	<20	<20

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

Table 9

Analytical Data Summary for GWD-2

Constituents	9/6/2018	5/13/2019	9/26/2019	3/30/2020	9/17/2020	12/3/2020	3/9/2021	9/9/2021	3/14/2022
Fluoride									.2
Gamma-bhc (lindane)									
Heptachlor									
Heptachlor epoxide									
Hexachlorobenzene									
Hexachlorobutadiene									
Hexachlorocyclopentadiene									
Hexachloroethane									
Hexachloropropene									
Indeno(1,2,3-cd)pyrene									
Iron, total									277
Isobutanol									
Isodrin									
Isophorone									
Isosafrole									
Kepone									
Lead, total	<4	<4	<4	<4	<4		<4	<4	<4
Lithium, total									<50
Manganese, total									1670
Mercury, total									
Methacrylonitrile									
Methapyrilene									
Methoxychlor									
Methyl iodide	<1	<1	<1	<1	<1		<1	<1	
Methyl methacrylate									
Methyl methanesulfonate									
Methyl parathion									
Methylene chloride	<5	<5	<5	<5	<5		<5	<5	
Molybdenum, total									4.6
Naphthalene									
Nickel, total	<4.0	<4.0	8.2	7.3	13.0		6.1	<4.0	4.1
Nitrobenzene									
Nitrogen, ammonia									<.1
Nitrogen, Kjeldahl, total									155
Nitrogen, Nitrate+Nitrite									9.86
N-nitrosodiethylamine									
N-nitrosodimethylamine									
N-nitrosodi-n-butylamine									
N-nitroso-di-n-propylamine									
N-nitrosodiphenylamine									
N-nitrosomethylethylamine									
N-nitrosopiperidine									
N-nitrosopyrrolidine									
O,o,o-triethyl phosphorothioate									
O-toluidine									
Parathion									
P-dimethylaminoazobenzene									
Pentachlorobenzene									
Pentachloronitrobenzene (pcnb)									
Pentachlorophenol									
Phenacetin									
Phenanthrene									
Phenol									
Phorate									
Pronamide									
Propionitrile									
Pyrene									
Safrole									
Selenium, total	<4	<4	<4	<4	<4		<4	<4	<4
Silica, dissolved									24.1
Silver, total	<8	<4	<4	<4	<4		<4	<4	
Solids, total suspended									<2
Styrene	<1	<1	<1	<1	<1		<1	<1	
Sulfate									22.8
Sulfide, total									
Tetrachloroethylene	<1	<1	<1	<1	<1		<1	<1	<1
Thallium, total	<4	<2	<2	<2	<2		<2	<2	
Thionazin									
Tin, total									
Toluene	<1	<1	<1	<1	<1		<1	<1	<1
Toxaphene									
Trans-1,2-dichloroethylene	<1	<1	<1	<1	<1		<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1		<1	<1	
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5		<5	<5	
Trichloroethylene	<1	<1	<1	<1	<1		<1	<1	<1
Trichlorofluoromethane	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	<1.0	
Vanadium, total	<20	<20	<20	<20	<20		<20	<20	<20

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

Table 9

Analytical Data Summary for GWD-2

Constituents	3/6/2023	5/9/2023	9/8/2023	3/20/2024	6/14/2024	9/25/2024	3/11/2025
Fluoride							
Gamma-bhc (lindane)			<.05				
Heptachlor			<.05				
Heptachlor epoxide			<.05				
Hexachlorobenzene			<.05				
Hexachlorobutadiene			<8				
Hexachlorocyclopentadiene			<8				
Hexachloroethane			<8				
Hexachloropropene			<8				
Indeno(1,2,3-cd)pyrene			<8				
Iron, total							
Isobutanol			<1				
Isodrin			<8				
Isophorone			<8				
Isosafrole			<8				
Kepone			<8				
Lead, total	<4		<4	<4		<4	<4
Lithium, total							
Manganese, total							
Mercury, total			<.5				
Methacrylonitrile			<1				
Methapyrilene			<8				
Methoxychlor			<.05				
Methyl iodide	<1		<2	<1		<1	<1
Methyl methacrylate			<1				
Methyl methanesulfonate			<8				
Methyl parathion			<.4				
Methylene chloride	<5		<5	<5		<5	<5
Molybdenum, total							
Naphthalene			<8				
Nickel, total	4.0		<4.0	<4.0		4.4	<4.0
Nitrobenzene			<8				
Nitrogen, ammonia							
Nitrogen, Kjeldahl, total							
Nitrogen, Nitrate+Nitrite							
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
Silica, dissolved							
Silver, total	<4		<4	<4		<4	<4
Solids, total suspended							
Styrene	<1		<1	<1		<1	<1
Sulfate							
Sulfide, total			<.1				
Tetrachloroethylene	<1		<1	<1		<1	<1
Thallium, total	<2		<2	<2		<2	<2
Thionazin			<.4				
Tin, total			<20				
Toluene	<1		<1	<1		<1	<1
Toxaphene			<.2				
Trans-1,2-dichloroethylene	<1		<1	<1		<1	<1
Trans-1,3-dichloropropene	<1		<1	<1		<1	<1
Trans-1,4-dichloro-2-butene	<5		<5	<5		<5	<5
Trichloroethylene	<1		<1	<1		<1	<1
Trichlorofluoromethane	<1.0		<1.0	<1.0		<1.0	<1.0
Vanadium, total	<20		<20	<20		<20	<20

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

Table 9

Analytical Data Summary for GWD-2

Constituents	Units	9/18/2014	4/28/2015	10/7/2015	4/19/2016	9/19/2016	3/21/2017	10/12/2017	3/8/2018
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	9.1	<8.0	<8.0	<8.0	20.6	24.6	<8.0	<8.0

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

Table 9

Analytical Data Summary for GWD-2

Constituents	9/6/2018	5/13/2019	9/26/2019	3/30/2020	9/17/2020	12/3/2020	3/9/2021	9/9/2021	3/14/2022
Vinyl acetate	<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	
Zinc, total	13.2	<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 9

Analytical Data Summary for GWD-2

Constituents	3/6/2023	5/9/2023	9/8/2023	3/20/2024	6/14/2024	9/25/2024	3/11/2025
Vinyl acetate	<5		<5	<5		<5	<5
Vinyl chloride	<1		<1	<1		<1	<1
Xylenes, total	<2		<2	<2		<2	<2
Zinc, total	<20.0		<20.0	<20.0		<20.0	<20.0

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

Table 9

Analytical Data Summary for MW-12

Constituents	Units	9/18/2014	4/28/2015	10/7/2015	4/19/2016	9/19/2016	3/22/2017	10/12/2017	3/8/2018
(3,4)-methylphenol	ug/L								
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloropropene	ug/L								
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene	ug/L								
1,2,4-trichlorobenzene	ug/L								
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dinitrobenzene	ug/L								
1,3,5-trinitrobenzene	ug/L								
1,3-dichlorobenzene	ug/L								
1,3-dichloropropane	ug/L								
1,3-dinitrobenzene	ug/L								
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,4-naphthoquinone	ug/L								
1,4-phenylenediamine	ug/L								
1-naphthylamine	ug/L								
2,2-dichloropropane	ug/L								
2,3,4,6-tetrachlorophenol	ug/L								
2,4,5-t	ug/L								
2,4,5-tp (silvex)	ug/L								
2,4,5-trichlorophenol	ug/L								
2,4,6-trichlorophenol	ug/L								
2,4-d	ug/L								
2,4-dichlorophenol	ug/L								
2,4-dimethylphenol	ug/L								
2,4-dinitrophenol	ug/L								
2,4-dinitrotoluene	ug/L								
2,6-dichlorophenol	ug/L								
2,6-dinitrotoluene	ug/L								
2-acetylaminofluorene	ug/L								
2-butanone (mek)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
2-chloronaphthalene	ug/L								
2-chlorophenol	ug/L								
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
2-methylnaphthalene	ug/L								
2-methylphenol	ug/L								
2-naphthylamine	ug/L								
2-nitroaniline	ug/L								
2-nitrophenol	ug/L								
3,3'-dichlorobenzidine	ug/L								
3,3'-dimethylbenzidine	ug/L								
3-methylcholanthrene	ug/L								
3-nitroaniline	ug/L								
4,4'-ddd	ug/L								
4,4'-dde	ug/L								
4,4'-ddt	ug/L								
4,6-dinitro-2-methylphenol	ug/L								
4-aminobiphenyl	ug/L								
4-bromophenyl phenyl ether	ug/L								
4-chloro-3-methylphenol	ug/L								
4-chloroaniline	ug/L								
4-chlorophenyl phenyl ether	ug/L								
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
4-nitroaniline	ug/L								
4-nitrophenol	ug/L								
5-nitro-o-toluidine	ug/L								
7,12-dimethylbenz(a)anthracene	ug/L								
Acenaphthene	ug/L								
Acenaphthylene	ug/L								
Acetone	ug/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	12.9	<10.0
Acetonitrile	ug/L								
Acetophenone	ug/L								
Acrolein	ug/L								
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Aldrin	ug/L								
Allyl chloride	ug/L								
Alpha-bhc	ug/L								
Anthracene	ug/L								

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

Table 9

Analytical Data Summary for MW-12

Constituents	9/6/2018	5/13/2019	9/26/2019	11/14/2019	3/30/2020	6/25/2020	9/17/2020	3/9/2021	9/9/2021
(3,4)-methylphenol									
1,1,1,2-tetrachloroethane	<1	<1	<1		<1		<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1		<1		<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1		<1		<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1		<1		<1	<1	<1
1,1-dichloroethane	<1	<1	<1		<1		<1	<1	<1
1,1-dichloroethylene	<1	<1	<1		<1		<1	<1	<1
1,1-dichloropropene									
1,2,3-trichloropropane	<1	<1	<1		<1		<1	<1	<1
1,2,4,5-tetrachlorobenzene									
1,2,4-trichlorobenzene									
1,2-dibromo-3-chloropropane	<1	<1	<1		<5		<5	<5	<5
1,2-dibromoethane	<1	<1	<1		<1		<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1		<1		<1	<1	<1
1,2-dichloroethane	<1	<1	<1		<1		<1	<1	<1
1,2-dichloropropane	<1	<1	<1		<1		<1	<1	<1
1,2-dinitrobenzene									
1,3,5-trinitrobenzene									
1,3-dichlorobenzene									
1,3-dichloropropane									
1,3-dinitrobenzene									
1,4-dichlorobenzene	<1	<1	<1		<1		<1	<1	<1
1,4-naphthoquinone									
1,4-phenylenediamine									
1-naphthylamine									
2,2-dichloropropane									
2,3,4,6-tetrachlorophenol									
2,4,5-t									
2,4,5-tp (silvex)									
2,4,5-trichlorophenol									
2,4,6-trichlorophenol									
2,4-d									
2,4-dichlorophenol									
2,4-dimethylphenol									
2,4-dinitrophenol									
2,4-dinitrotoluene									
2,6-dichlorophenol									
2,6-dinitrotoluene									
2-acetylaminofluorene									
2-butanone (mek)	<5	<5	<5		<5		<5	<5	<5
2-chloronaphthalene									
2-chlorophenol									
2-hexanone (mbk)	<5	<5	<5		<5		<5	<5	<5
2-methylnaphthalene									
2-methylphenol									
2-naphthylamine									
2-nitroaniline									
2-nitrophenol									
3,3'-dichlorobenzidine									
3,3'-dimethylbenzidine									
3-methylcholanthrene									
3-nitroaniline									
4,4'-ddd									
4,4'-dde									
4,4'-ddt									
4,6-dinitro-2-methylphenol									
4-aminobiphenyl									
4-bromophenyl phenyl ether									
4-chloro-3-methylphenol									
4-chloroaniline									
4-chlorophenyl phenyl ether									
4-methyl-2-pentanone (mibk)	<5	<5	<5		<5		<5	<5	<5
4-nitroaniline									
4-nitrophenol									
5-nitro-o-toluidine									
7,12-dimethylbenz(a)anthracene									
Acenaphthene									
Acenaphthylene									
Acetone	<10.0	<10.0	<10.0		<10.0		<10.0	<10.0	<10.0
Acetonitrile									
Acetophenone									
Acrolein									
Acrylonitrile	<5	<5	<5		<5		<5	<5	<5
Aldrin									
Allyl chloride									
Alpha-bhc									
Anthracene									

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

Table 9

Analytical Data Summary for MW-12

Constituents	12/8/2021	3/14/2022	9/1/2022	3/6/2023	9/8/2023	3/20/2024	9/25/2024	3/11/2025	9/8/2025
(3,4)-methylphenol			<8						
1,1,1,2-tetrachloroethane		<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane		<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane		<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane		<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane		<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene		<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloropropene			<1		<1				
1,2,3-trichloropropane		<1	<1	<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene			<8						
1,2,4-trichlorobenzene			<1		<1				
1,2-dibromo-3-chloropropane		<5	<1	<5	<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
1,2-dinitrobenzene			<8						
1,3,5-trinitrobenzene			<8						
1,3-dichlorobenzene			<1		<1				
1,3-dichloropropane			<1		<1				
1,3-dinitrobenzene			<8						
1,4-dichlorobenzene		<1	<1	<1	<1	<1	<1	<1	<1
1,4-naphthoquinone			<8						
1,4-phenylenediamine			<8						
1-naphthylamine			<8						
2,2-dichloropropane			<1		<1				
2,3,4,6-tetrachlorophenol			<8						
2,4,5-t			<.5						
2,4,5-tp (silvex)			<.5						
2,4,5-trichlorophenol			<8						
2,4,6-trichlorophenol			<8						
2,4-d			<2						
2,4-dichlorophenol			<8						
2,4-dimethylphenol			<8						
2,4-dinitrophenol			<8						
2,4-dinitrotoluene			<8						
2,6-dichlorophenol			<8						
2,6-dinitrotoluene			<8						
2-acetylaminofluorene			<8						
2-butanone (mek)		<10	<5	<10	<5	<10	<10	<10	<10
2-chloronaphthalene			<8						
2-chlorophenol			<8						
2-hexanone (mbk)		<5	<5	<5	<5	<5	<5	<5	<5
2-methylnaphthalene			<8						
2-methylphenol			<8						
2-naphthylamine			<8						
2-nitroaniline			<8						
2-nitrophenol			<8						
3,3'-dichlorobenzidine			<8						
3,3'-dimethylbenzidine			<8						
3-methylcholanthrene			<8						
3-nitroaniline			<8						
4,4'-ddd			<.05						
4,4'-dde			<.05						
4,4'-ddt			<.05						
4,6-dinitro-2-methylphenol			<8						
4-aminobiphenyl			<8						
4-bromophenyl phenyl ether			<8						
4-chloro-3-methylphenol			<8						
4-chloroaniline			<8						
4-chlorophenyl phenyl ether			<8						
4-methyl-2-pentanone (mibk)		<5	<5	<5	<5	<5	<5	<5	<5
4-nitroaniline			<8						
4-nitrophenol			<8						
5-nitro-o-toluidine			<8						
7,12-dimethylbenz(a)anthracene			<8						
Acenaphthene			<8						
Acenaphthylene			<8						
Acetone		<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Acetonitrile			<10		<10				
Acetophenone			<8						
Acrolein			<10		<10				
Acrylonitrile		<5	<5	<5	<5	<5	<5	<5	<5
Aldrin			<.05						
Allyl chloride			<1		<1				
Alpha-bhc			<.05						
Anthracene			<8						

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

Table 9

Analytical Data Summary for MW-12

Constituents	Units	9/18/2014	4/28/2015	10/7/2015	4/19/2016	9/19/2016	3/22/2017	10/12/2017	3/8/2018
Antimony, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
Arochlor 1016	ug/L								
Arochlor 1221	ug/L								
Arochlor 1232	ug/L								
Arochlor 1242	ug/L								
Arochlor 1248	ug/L								
Arochlor 1254	ug/L								
Arochlor 1260	ug/L								
Arsenic, total	ug/L	4.1	4.6	<4.0	<4.0	4.3	<4.0	<4.0	<4.0
Azobenzene	ug/L								
Barium, total	ug/L	364	409	403	396	390	303	305	295
Benzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Benzo(a)anthracene	ug/L								
Benzo(a)pyrene	ug/L								
Benzo(b)fluoranthene	ug/L								
Benzo(g,h,i)perylene	ug/L								
Benzo(k)fluoranthene	ug/L								
Benzyl alcohol	ug/L								
Beryllium, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Beta-bhc	ug/L								
Bis (2-chloroethoxy) methane	ug/L								
Bis(2-chloroethyl) ether	ug/L								
Bis(2-chloroisopropyl) ether	ug/L								
Bis(2-ethylhexyl) phthalate	ug/L								
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate	ug/L								
Cadmium, total	ug/L	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chlordane	ug/L								
Chlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzilate	ug/L								
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroprene	ug/L								
Chromium, total	ug/L	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0
Chrysene	ug/L								
Cis-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	3.4	2.6	1.7	2.0	2.2	<.8	<.8	<2.0
Copper, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Cyanide, total	mg/L								
Delta-bhc	ug/L								
Diallate	ug/L								
Dibenzo(a,h)anthracene	ug/L								
Dibenzofuran	ug/L								
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L								
Dieldrin	ug/L								
Diethyl phthalate	ug/L								
Dimethoate	ug/L								
Dimethylphthalate	ug/L								
Di-n-butyl phthalate	ug/L								
Di-n-octyl phthalate	ug/L								
Dinoseb	ug/L								
Diphenylamine	ug/L								
Disulfoton	ug/L								
Endosulfan i	ug/L								
Endosulfan ii	ug/L								
Endosulfan sulfate	ug/L								
Endrin	ug/L								
Endrin aldehyde	ug/L								
Ethyl methacrylate	ug/L								
Ethyl methanesulfonate	ug/L								
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Famphur	ug/L								
Fluoranthene	ug/L								
Fluorene	ug/L								
Gamma-bhc (lindane)	ug/L								
Heptachlor	ug/L								
Heptachlor epoxide	ug/L								
Hexachlorobenzene	ug/L								

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

Table 9

Analytical Data Summary for MW-12

Constituents	9/6/2018	5/13/2019	9/26/2019	11/14/2019	3/30/2020	6/25/2020	9/17/2020	3/9/2021	9/9/2021
Antimony, total	<2	<2	<2		<2		<2	<2	<2
Arochlor 1016									
Arochlor 1221									
Arochlor 1232									
Arochlor 1242									
Arochlor 1248									
Arochlor 1254									
Arochlor 1260									
Arsenic, total	<4.0	<4.0	<4.0		<4.0		<4.0	<4.0	<4.0
Azobenzene									
Barium, total	286	280	295		397		301	416	425
Benzene	<1	<1	<1		<1		<1	<1	<1
Benzo(a)anthracene									
Benzo(a)pyrene									
Benzo(b)fluoranthene									
Benzo(g,h,i)perylene									
Benzo(k)fluoranthene									
Benzyl alcohol									
Beryllium, total	<4.0	<4.0	<4.0		<4.0		<4.0	<4.0	<4.0
Beta-bhc									
Bis (2-chloroethoxy) methane									
Bis(2-chloroethyl) ether									
Bis(2-chloroisopropyl) ether									
Bis(2-ethylhexyl) phthalate									
Bromochloromethane	<1	<1	<1		<1		<1	<1	<1
Bromodichloromethane	<1	<1	<1		<1		<1	<1	<1
Bromoform	<1	<1	<1		<1		<1	<1	<1
Bromomethane	<1	<1	<1		<1		<1	<1	<1
Butyl benzyl phthalate									
Cadmium, total	<.8	<.8	1.3	<.8 *	<.8		<.8	<.8	<.8
Carbon disulfide	<1	<1	<1		<1		<1	<1	<1
Carbon tetrachloride	<1	<1	<1		<1		<1	<1	<1
Chlordane									
Chlorobenzene	<1	<1	<1		<1		<1	<1	<1
Chlorobenzilate									
Chloroethane	<1	<1	<1		<1		<1	<1	<1
Chloroform	<1	<1	<1		<1		<1	<1	<1
Chloromethane	<1.0	<1.0	<1.0		<1.0		<1.0	<1.0	<1.0
Chloroprene									
Chromium, total	<8.0	<8.0	<8.0		<8.0		<8.0	<8.0	<8.0
Chrysene									
Cis-1,2-dichloroethylene	<1	<1	<1		<1		<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1		<1		<1	<1	<1
Cobalt, total	<.8	<.8	<.8		6.7		.4	1.3	1.9
Copper, total	<4.0	<4.0	<4.0		8.0		<4.0	<4.0	<4.0
Cyanide, total									
Delta-bhc									
Diallate									
Dibenzo(a,h)anthracene									
Dibenzofuran									
Dibromochloromethane	<1	<1	<1		<1		<1	<1	<1
Dibromomethane	<1	<1	<1		<1		<1	<1	<1
Dichlorodifluoromethane									
Dieldrin									
Diethyl phthalate									
Dimethoate									
Dimethylphthalate									
Di-n-butyl phthalate									
Di-n-octyl phthalate									
Dinoseb									
Diphenylamine									
Disulfoton									
Endosulfan i									
Endosulfan ii									
Endosulfan sulfate									
Endrin									
Endrin aldehyde									
Ethyl methacrylate									
Ethyl methanesulfonate									
Ethylbenzene	<1	<1	<1		<1		<1	<1	<1
Famphur									
Fluoranthene									
Fluorene									
Gamma-bhc (lindane)									
Heptachlor									
Heptachlor epoxide									
Hexachlorobenzene									

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

Table 9

Analytical Data Summary for MW-12

Constituents	12/8/2021	3/14/2022	9/1/2022	3/6/2023	9/8/2023	3/20/2024	9/25/2024	3/11/2025	9/8/2025
Antimony, total		<2	<2	<2	<2	<2	<2	<2	<1
Arochlor 1016			<.1						
Arochlor 1221			<.2						
Arochlor 1232			<.2						
Arochlor 1242			<.2						
Arochlor 1248			<.2						
Arochlor 1254			<.1						
Arochlor 1260			<.1						
Arsenic, total		<4.0	<4.0	7.3	<4.0	15.9	<4.0	7.6	<2.0
Azobenzene			<8						
Barium, total		544	322	547	465	856	509	671	384
Benzene		<1	<1	<1	<1	<1	<1	<1	<1
Benzo(a)anthracene			<8						
Benzo(a)pyrene			<8						
Benzo(b)fluoranthene			<8						
Benzo(g,h,i)perylene			<8						
Benzo(k)fluoranthene			<8						
Benzyl alcohol			<8						
Beryllium, total		<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<.5
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
Bromodichloromethane		<1	<1	<1	<1	<1	<1	<1	<1
Bromoform		<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane		<1	<1	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate			<8						
Cadmium, total		<.8	<.8	<.8	<.8	<.8	<.8	<.8	.9
Carbon disulfide		<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride		<1	<1	<1	<1	<1	<1	<1	<1
Chlordane			<.1						
Chlorobenzene		<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzilate			<8						
Chloroethane		<1	<1	<1	<1	<1	<1	<1	<1
Chloroform		<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane		<1.0	<1.0	<1.0	<1.0	1.4	<1.0	<1.0	<1.0
Chloroprene			<1		<1				
Chromium, total		<8.0	<8.0	12.7	<8.0	22.7	<8.0	14.6	1.9
Chrysene			<8						
Cis-1,2-dichloroethylene		<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene		<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total		.8	1.3	8.2	.6	21.3	.9	10.9	<.5
Copper, total		<4.0	<4.0	6.5	<4.0	18.0	<4.0	7.7	<5.0
Cyanide, total			<.005		<.005				
Delta-bhc			<.05						
Diallate			<8						
Dibenzo(a,h)anthracene			<8						
Dibenzofuran			<8						
Dibromochloromethane		<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane		<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane			<1		<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		<10				
Ethyl methanesulfonate			<8						
Ethylbenzene		<1	<1	<1	<1	<1	<1	<1	<1
Famphur			<.4						
Fluoranthene			<8						
Fluorene			<8						
Gamma-bhc (lindane)			<.05						
Heptachlor			<.05						
Heptachlor epoxide			<.05						
Hexachlorobenzene			<.05						

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

Table 9

Analytical Data Summary for MW-12

Constituents	Units	9/18/2014	4/28/2015	10/7/2015	4/19/2016	9/19/2016	3/22/2017	10/12/2017	3/8/2018
Hexachlorobutadiene	ug/L								
Hexachlorocyclopentadiene	ug/L								
Hexachloroethane	ug/L								
Hexachloropropene	ug/L								
Indeno(1,2,3-cd)pyrene	ug/L								
Isobutanol	mg/L								
Isodrin	ug/L								
Isophorone	ug/L								
Isosafrole	ug/L								
Kepone	ug/L								
Lead, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Mercury, total	ug/L								
Methacrylonitrile	ug/L								
Methapyrene	ug/L								
Methoxychlor	ug/L								
Methyl iodide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Methyl methacrylate	ug/L								
Methyl methanesulfonate	ug/L								
Methyl parathion	ug/L								
Methylene chloride	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene	ug/L								
Nickel, total	ug/L	5.8	4.6	<4.0	4.1	<4.0	<4.0	<4.0	<4.0
Nitrobenzene	ug/L								
N-nitrosodiethylamine	ug/L								
N-nitrosodimethylamine	ug/L								
N-nitrosodi-n-butylamine	ug/L								
N-nitroso-di-n-propylamine	ug/L								
N-nitrosodiphenylamine	ug/L								
N-nitrosomethylethylamine	ug/L								
N-nitrosopiperidine	ug/L								
N-nitrosopyrrolidine	ug/L								
O,o,o-triethyl phosphorothioate	ug/L								
O-toluidine	ug/L								
Parathion	ug/L								
P-dimethylaminoazobenzene	ug/L								
Pentachlorobenzene	ug/L								
Pentachloronitrobenzene (pcnb)	ug/L								
Pentachlorophenol	ug/L								
Phenacetin	ug/L								
Phenanthrene	ug/L								
Phenol	ug/L								
Phorate	ug/L								
Pronamide	ug/L								
Propionitrile	ug/L								
Pyrene	ug/L								
Safrole	ug/L								
Selenium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Solids, total suspended	mg/L	50	51	39	42	50	74	454	
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Sulfide, total	mg/L								
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Thionazin	ug/L								
Tin, total	ug/L								
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Toxaphene	ug/L								
Trans-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	ug/L	<20.0	<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	10.3	<8.0	9.1	<8.0	<8.0	<8.0	<8.0	9.3

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

Table 9

Analytical Data Summary for MW-12

Constituents	9/6/2018	5/13/2019	9/26/2019	11/14/2019	3/30/2020	6/25/2020	9/17/2020	3/9/2021	9/9/2021
Hexachlorobutadiene									
Hexachlorocyclopentadiene									
Hexachloroethane									
Hexachloropropene									
Indeno(1,2,3-cd)pyrene									
Isobutanol									
Isodrin									
Isophorone									
Isosafrole									
Kepone									
Lead, total	<4.0	6.7	<4.0		6.0		<4.0	<4.0	<4.0
Mercury, total									
Methacrylonitrile									
Methapyrilene									
Methoxychlor									
Methyl iodide	<1	<1	<1		<2		<1	<1	<1
Methyl methacrylate									
Methyl methanesulfonate									
Methyl parathion									
Methylene chloride	<5	<5	<5		<5		<5	<5	<5
Naphthalene									
Nickel, total	<8.0	<4.0	5.2		15.7	7.9	5.9	11.9	15.6
Nitrobenzene									
N-nitrosodiethylamine									
N-nitrosodimethylamine									
N-nitrosodi-n-butylamine									
N-nitroso-di-n-propylamine									
N-nitrosodiphenylamine									
N-nitrosomethylethylamine									
N-nitrosopiperidine									
N-nitrosopyrrolidine									
O,o,o-triethyl phosphorothioate									
O-toluidine									
Parathion									
P-dimethylaminoazobenzene									
Pentachlorobenzene									
Pentachloronitrobenzene (pcnb)									
Pentachlorophenol									
Phenacetin									
Phenanthrene									
Phenol									
Phorate									
Pronamide									
Propionitrile									
Pyrene									
Safrole									
Selenium, total	<4	<4	<4		<4		<4	<4	<4
Silver, total	<8	<4	<4		<4		<4	<4	<4
Solids, total suspended									
Styrene	<1	<1	<1		<1		<1	<1	<1
Sulfide, total									
Tetrachloroethylene	<1	<1	<1		<1		<1	<1	<1
Thallium, total	<4.0	<2.0	<2.0		<2.0		<2.0	<2.0	<2.0
Thionazin									
Tin, total									
Toluene	<1	<1	<1		<1		<1	<1	<1
Toxaphene									
Trans-1,2-dichloroethylene	<1	<1	<1		<1		<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1		<1		<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5		<5		<5	<5	<5
Trichloroethylene	<1	<1	<1		<1		<1	<1	<1
Trichlorofluoromethane	<1	<1	<1		<1		<1	<1	<1
Vanadium, total	<20.0	<20.0	<20.0		<20.0		<20.0	<20.0	<20.0
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	30.3	13.6	27.6		<20.0		<20.0	<20.0	<20.0

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

Table 9

Analytical Data Summary for MW-12

Constituents	12/8/2021	3/14/2022	9/1/2022	3/6/2023	9/8/2023	3/20/2024	9/25/2024	3/11/2025	9/8/2025
Hexachlorobutadiene			<8						
Hexachlorocyclopentadiene			<8						
Hexachloroethane			<8						
Hexachloropropene			<8						
Indeno(1,2,3-cd)pyrene			<8						
Isobutanol			<1		<1				
Isodrin			<8						
Isophorone			<8						
Isosafrole			<8						
Kepone			<8						
Lead, total		<4.0	<4.0	4.1	<4.0	8.9	<4.0	5.1	<1.0
Mercury, total			<.5		<.5				
Methacrylonitrile			<1		<1				
Methapyrilene			<8						
Methoxychlor			<.05						
Methyl iodide		<1	<2	<1	<2	<1	<1	<1	<1
Methyl methacrylate			<1		<1				
Methyl methanesulfonate			<8						
Methyl parathion			<.4						
Methylene chloride		<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene			<8						
Nickel, total	31.6	12.3	6.7	27.6	11.6	63.1	10.2	31.4	<5.0
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		<10				
Pyrene			<8						
Safrole			<8						
Selenium, total		<4	<4	<4	<4	<4	<4	<4	<2
Silver, total		<4	<4	<4	<4	<4	<4	<4	<5
Solids, total suspended									
Styrene		<1	<1	<1	<1	<1	<1	<1	<1
Sulfide, total			<.1		<.1				
Tetrachloroethylene		<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<.5
Thionazin			<.4						
Tin, total			<20		<20				
Toluene		<1	<1	<1	<1	<1	<1	<1	<1
Toxaphene			<.2						
Trans-1,2-dichloroethylene		<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene		<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene		<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene		<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane		<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total		<20.0	<20.0	<20.0	<20.0	38.6	<20.0	22.9	<2.0
Vinyl acetate		<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride		<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total		<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total		<20.0	<20.0	<20.0	<20.0	36.3	<20.0	21.0	6.9

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

Table 9

Analytical Data Summary for MW-14

Constituents	Units	9/18/2014	4/29/2015	10/6/2015	4/19/2016	9/19/2016	3/22/2017	10/12/2017	3/8/2018	9/6/2018
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	277	290	273	272	272	255	257	265	242
Benzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
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	<8.0	<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	<1
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	.9	<.8	<.8	<.8	<.8	<.8	<.8	<2.0	<.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	5.4	<4.0	<4.0	<4.0	<8.0
Selenium, total	ug/L	4.7	4.6	4.0	4.2	4.0	<4.0	<4.0	6.3	<4.0
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<8
Solids, total suspended	mg/L	15	46	5	4	3	12	558		
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	ug/L	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	9.3	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	11.1	27.7

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

Table 9

Analytical Data Summary for MW-14

Constituents	5/13/2019	9/26/2019	3/30/2020	6/25/2020	9/17/2020	12/3/2020	3/9/2021	9/9/2021	3/14/2022
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	<1	<1	<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	<5	<5		<5		<5	<5	<10
2-hexanone (mbk)	<5	<5	<5		<5		<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5		<5		<5	<5	<5
Acetone	<10	<10	<10		<10		<10	<10	<10
Acrylonitrile	<5	<5	<5		<5		<5	<5	<5
Antimony, total	<2	<2	<2		<2		<2	<2	<2
Arsenic, total	<4	<4	<4		<4		<4	<4	<4
Barium, total	247	255	259		410		249	265	243
Benzene	<1	<1	<1		<1		<1	<1	<1
Beryllium, total	<4.0	<4.0	<4.0		<4.0		<4.0	<4.0	<4.0
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	1.0	<.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	<8.0	<8.0	<8.0		<8.0		<8.0	<8.0	<8.0
Cis-1,2-dichloroethylene	<1	<1	<1		<1		<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1		<1		<1	<1	<1
Cobalt, total	<.8	<.8	<.8		<.4		<.4	<.4	.5
Copper, total	<4.0	<4.0	32.2	<4.0	<4.0		<4.0	<4.0	<4.0
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	<2		<1		<1	<1	<1
Methylene chloride	<5	<5	<5		<5		<5	<5	<5
Nickel, total	<4.0	<4.0	<4.0		<4.0		<4.0	<4.0	<4.0
Selenium, total	4.4	4.5	<4.0		7.4	4.2	<4.0	<4.0	<4.0
Silver, total	<4	<4	<4		<4		<4	<4	<4
Solids, total suspended									
Styrene	<1	<1	<1		<1		<1	<1	<1
Tetrachloroethylene	<1	<1	<1		<1		<1	<1	<1
Thallium, total	<2.0	<2.0	<2.0		<2.0		<2.0	<2.0	<2.0
Toluene	<1	<1	<1		<1		<1	<1	<1
Trans-1,2-dichloroethylene	<1	<1	<1		<1		<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1		<1		<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5		<5		<5	<5	<5
Trichloroethylene	<1	<1	<1		<1		<1	<1	<1
Trichlorofluoromethane	<1	<1	<1		<1		<1	<1	<1
Vanadium, total	<20	<20	<20		<20		<20	<20	<20
Vinyl acetate	<5	<5	<5		<5		<5	<5	<5
Vinyl chloride	<1	<1	<1		<1		<1	<1	<1
Xylenes, total	<2	<2	<2		<2		<2	<2	<2
Zinc, total	24.1	19.1	25.3		<20.0		<20.0	<20.0	<20.0

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

Table 9

Analytical Data Summary for MW-14

Constituents	9/1/2022	3/6/2023	9/8/2023	3/20/2024	9/25/2024	3/11/2025	9/8/2025
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)	<10	<10	<10	<10	<10	<10	<10
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5	<5	<5
Acetone	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5
Antimony, total	<2	<2	<2	<2	<2	<2	<1
Arsenic, total	<4	<4	<4	<4	<4	<4	<2
Barium, total	259	258	243	248	241	255	259
Benzene	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<5
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	.5
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	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	2.1
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	<.4	<.4	<.4	<.4	<.4	<.4	<.5
Copper, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<5.0
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	<1
Methyl iodide	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5	<5	<5	<5
Nickel, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<5.0
Selenium, total	4.2	<4.0	<4.0	<4.0	<4.0	4.3	4.1
Silver, total	<4	<4	<4	<4	<4	<4	<5
Solids, total suspended							
Styrene	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<.5
Toluene	<1	<1	<1	<1	<1	<1	<1
Trans-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20	<20	<20	<2
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	8.9

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

Table 9

Analytical Data Summary for MW-15

Constituents	Units	9/18/2014	4/29/2015	10/7/2015	4/19/2016	9/19/2016	3/21/2017	10/12/2017	3/8/2018
(3,4)-methylphenol	ug/L								
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloropropene	ug/L								
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene	ug/L								
1,2,4-trichlorobenzene	ug/L								
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dinitrobenzene	ug/L								
1,3,5-trinitrobenzene	ug/L								
1,3-dichlorobenzene	ug/L								
1,3-dichloropropane	ug/L								
1,3-dinitrobenzene	ug/L								
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,4-naphthoquinone	ug/L								
1,4-phenylenediamine	ug/L								
1-naphthylamine	ug/L								
2,2-dichloropropane	ug/L								
2,3,4,6-tetrachlorophenol	ug/L								
2,4,5-t	ug/L								
2,4,5-tp (silvex)	ug/L								
2,4,5-trichlorophenol	ug/L								
2,4,6-trichlorophenol	ug/L								
2,4-d	ug/L								
2,4-dichlorophenol	ug/L								
2,4-dimethylphenol	ug/L								
2,4-dinitrophenol	ug/L								
2,4-dinitrotoluene	ug/L								
2,6-dichlorophenol	ug/L								
2,6-dinitrotoluene	ug/L								
2-acetylaminofluorene	ug/L								
2-butanone (mek)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
2-chloronaphthalene	ug/L								
2-chlorophenol	ug/L								
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
2-methylnaphthalene	ug/L								
2-methylphenol	ug/L								
2-naphthylamine	ug/L								
2-nitroaniline	ug/L								
2-nitrophenol	ug/L								
3,3'-dichlorobenzidine	ug/L								
3,3'-dimethylbenzidine	ug/L								
3-methylcholanthrene	ug/L								
3-nitroaniline	ug/L								
4,4'-ddd	ug/L								
4,4'-dde	ug/L								
4,4'-ddt	ug/L								
4,6-dinitro-2-methylphenol	ug/L								
4-aminobiphenyl	ug/L								
4-bromophenyl phenyl ether	ug/L								
4-chloro-3-methylphenol	ug/L								
4-chloroaniline	ug/L								
4-chlorophenyl phenyl ether	ug/L								
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
4-nitroaniline	ug/L								
4-nitrophenol	ug/L								
5-nitro-o-toluidine	ug/L								
7,12-dimethylbenz(a)anthracene	ug/L								
Acenaphthene	ug/L								
Acenaphthylene	ug/L								
Acetone	ug/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	15.5	<10.0
Acetonitrile	ug/L								
Acetophenone	ug/L								
Acrolein	ug/L								
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Aldrin	ug/L								
Allyl chloride	ug/L								
Alpha-bhc	ug/L								
Anthracene	ug/L								

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

Table 9

Analytical Data Summary for MW-15

Constituents	9/6/2018	5/13/2019	9/26/2019	3/30/2020	9/17/2020	3/9/2021	9/9/2021	12/8/2021	3/14/2022
(3,4)-methylphenol									
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1		<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1		<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1		<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1		<1
1,1-dichloroethane	<1	<1	<1	<1	<1	<1	<1		<1
1,1-dichloroethylene	<1	<1	<1	<1	<1	<1	<1		<1
1,1-dichloropropene									
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1		<1
1,2,4,5-tetrachlorobenzene									
1,2,4-trichlorobenzene									
1,2-dibromo-3-chloropropane	<1	<1	<1	<5	<5	<5	<5		<5
1,2-dibromoethane	<1	<1	<1	<1	<1	<1	<1		<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1		<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1		<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1		<1
1,2-dinitrobenzene									
1,3,5-trinitrobenzene									
1,3-dichlorobenzene									
1,3-dichloropropane									
1,3-dinitrobenzene									
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1		<1
1,4-naphthoquinone									
1,4-phenylenediamine									
1-naphthylamine									
2,2-dichloropropane									
2,3,4,6-tetrachlorophenol									
2,4,5-t									
2,4,5-tp (silvex)									
2,4,5-trichlorophenol									
2,4,6-trichlorophenol									
2,4-d									
2,4-dichlorophenol									
2,4-dimethylphenol									
2,4-dinitrophenol									
2,4-dinitrotoluene									
2,6-dichlorophenol									
2,6-dinitrotoluene									
2-acetylaminofluorene									
2-butanone (mek)	<5	<5	<5	<5	<5	<5	<5		<10
2-chloronaphthalene									
2-chlorophenol									
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5	<5		<5
2-methylnaphthalene									
2-methylphenol									
2-naphthylamine									
2-nitroaniline									
2-nitrophenol									
3,3'-dichlorobenzidine									
3,3'-dimethylbenzidine									
3-methylcholanthrene									
3-nitroaniline									
4,4'-ddd									
4,4'-dde									
4,4'-ddt									
4,6-dinitro-2-methylphenol									
4-aminobiphenyl									
4-bromophenyl phenyl ether									
4-chloro-3-methylphenol									
4-chloroaniline									
4-chlorophenyl phenyl ether									
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5	<5	<5		<5
4-nitroaniline									
4-nitrophenol									
5-nitro-o-toluidine									
7,12-dimethylbenz(a)anthracene									
Acenaphthene									
Acenaphthylene									
Acetone	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0		<10.0
Acetonitrile									
Acetophenone									
Acrolein									
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5		<5
Aldrin									
Allyl chloride									
Alpha-bhc									
Anthracene									

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

Table 9

Analytical Data Summary for MW-15

Constituents	9/1/2022	3/6/2023	5/9/2023	9/8/2023	3/20/2024	9/25/2024	3/11/2025	9/8/2025
(3,4)-methylphenol	<8			<8				
1,1,1,2-tetrachloroethane	<1	<1		<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1		<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1		<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1		<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1		<1	<1	<1	<1	<1
1,1-dichloroethylene	<1	<1		<1	<1	<1	<1	<1
1,1-dichloropropene	<1			<1				
1,2,3-trichloropropane	<1	<1		<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene	<8			<8				
1,2,4-trichlorobenzene	<1			<1				
1,2-dibromo-3-chloropropane	<1	<5		<1	<5	<5	<5	<5
1,2-dibromoethane	<1	<1		<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1		<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1		<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1		<1	<1	<1	<1	<1
1,2-dinitrobenzene	<8			<8				
1,3,5-trinitrobenzene	<8			<8				
1,3-dichlorobenzene	<1			<1				
1,3-dichloropropane	<1			<1				
1,3-dinitrobenzene	<8			<8				
1,4-dichlorobenzene	<1	<1		<1	<1	<1	<1	<1
1,4-naphthoquinone	<8			<8				
1,4-phenylenediamine	<8			<8				
1-naphthylamine	<8			<8				
2,2-dichloropropane	<1			<1				
2,3,4,6-tetrachlorophenol	<8			<8				
2,4,5-t	<5			<5				
2,4,5-tp (silvex)	<5			<5				
2,4,5-trichlorophenol	<8			<8				
2,4,6-trichlorophenol	<8			<8				
2,4-d	<2			<2				
2,4-dichlorophenol	<8			<8				
2,4-dimethylphenol	<8			<8				
2,4-dinitrophenol	<8			<8				
2,4-dinitrotoluene	<8			<8				
2,6-dichlorophenol	<8			<8				
2,6-dinitrotoluene	<8			<8				
2-acetylaminofluorene	<8			<8				
2-butanone (mek)	<5	<10		<5	<10	<10	<10	<10
2-chloronaphthalene	<8			<8				
2-chlorophenol	<8			<8				
2-hexanone (mbk)	<5	<5		<5	<5	<5	<5	<5
2-methylnaphthalene	<8			<8				
2-methylphenol	<8			<8				
2-naphthylamine	<8			<8				
2-nitroaniline	<8			<8				
2-nitrophenol	<8			<8				
3,3'-dichlorobenzidine	<8			<8				
3,3'-dimethylbenzidine	<8			<8				
3-methylcholanthrene	<8			<8				
3-nitroaniline	<8			<8				
4,4'-ddd	<.05			<.05				
4,4'-dde	<.05			<.05				
4,4'-ddt	<.05			<.05				
4,6-dinitro-2-methylphenol	<8			<8				
4-aminobiphenyl	<8			<8				
4-bromophenyl phenyl ether	<8			<8				
4-chloro-3-methylphenol	<8			<8				
4-chloroaniline	<8			<8				
4-chlorophenyl phenyl ether	<8			<8				
4-methyl-2-pentanone (mibk)	<5	<5		<5	<5	<5	<5	<5
4-nitroaniline	<8			<8				
4-nitrophenol	<8			<8				
5-nitro-o-toluidine	<8			<8				
7,12-dimethylbenz(a)anthracene	<8			<8				
Acenaphthene	<8			<8				
Acenaphthylene	<8			<8				
Acetone	<10.0	<10.0		<10.0	<10.0	<10.0	<10.0	<10.0
Acetonitrile	<10			<10				
Acetophenone	<8			<8				
Acrolein	<10			<10				
Acrylonitrile	<5	<5		<5	<5	<5	<5	<5
Aldrin	<.05			<.05				
Allyl chloride	<1			<1				
Alpha-bhc	<.05			<.05				
Anthracene	<8			<8				

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

Table 9

Analytical Data Summary for MW-15

Constituents	Units	9/18/2014	4/29/2015	10/7/2015	4/19/2016	9/19/2016	3/21/2017	10/12/2017	3/8/2018
Antimony, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
Arochlor 1016	ug/L								
Arochlor 1221	ug/L								
Arochlor 1232	ug/L								
Arochlor 1242	ug/L								
Arochlor 1248	ug/L								
Arochlor 1254	ug/L								
Arochlor 1260	ug/L								
Arsenic, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Azobenzene	ug/L								
Barium, total	ug/L	359	374	315	341	311	330	318	339
Benzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Benzo(a)anthracene	ug/L								
Benzo(a)pyrene	ug/L								
Benzo(b)fluoranthene	ug/L								
Benzo(g,h,i)perylene	ug/L								
Benzo(k)fluoranthene	ug/L								
Benzyl alcohol	ug/L								
Beryllium, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Beta-bhc	ug/L								
Bis (2-chloroethoxy) methane	ug/L								
Bis(2-chloroethyl) ether	ug/L								
Bis(2-chloroisopropyl) ether	ug/L								
Bis(2-ethylhexyl) phthalate	ug/L								
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate	ug/L								
Cadmium, total	ug/L	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chlordane	ug/L								
Chlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzilate	ug/L								
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloroprene	ug/L								
Chromium, total	ug/L	<8	<8	<8	<8	<8	<8	<8	<8
Chrysene	ug/L								
Cis-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	2.5	2.7	<.8	<.8	<.8	<.8	<.8	<2.0
Copper, total	ug/L	5.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Cyanide, total	mg/L								
Delta-bhc	ug/L								
Diallate	ug/L								
Dibenzo(a,h)anthracene	ug/L								
Dibenzofuran	ug/L								
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L								
Dieldrin	ug/L								
Diethyl phthalate	ug/L								
Dimethoate	ug/L								
Dimethylphthalate	ug/L								
Di-n-butyl phthalate	ug/L								
Di-n-octyl phthalate	ug/L								
Dinoseb	ug/L								
Diphenylamine	ug/L								
Disulfoton	ug/L								
Endosulfan i	ug/L								
Endosulfan ii	ug/L								
Endosulfan sulfate	ug/L								
Endrin	ug/L								
Endrin aldehyde	ug/L								
Ethyl methacrylate	ug/L								
Ethyl methanesulfonate	ug/L								
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Famphur	ug/L								
Fluoranthene	ug/L								
Fluorene	ug/L								
Gamma-bhc (lindane)	ug/L								
Heptachlor	ug/L								
Heptachlor epoxide	ug/L								
Hexachlorobenzene	ug/L								

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

Table 9

Analytical Data Summary for MW-15

Constituents	9/6/2018	5/13/2019	9/26/2019	3/30/2020	9/17/2020	3/9/2021	9/9/2021	12/8/2021	3/14/2022
Antimony, total	<2	<2	<2	<2	<2	<2	<2		<2
Arochlor 1016									
Arochlor 1221									
Arochlor 1232									
Arochlor 1242									
Arochlor 1248									
Arochlor 1254									
Arochlor 1260									
Arsenic, total	<4.0	<4.0	4.1	<4.0	<4.0	<4.0	<4.0		<4.0
Azobenzene									
Barium, total	306	365	664	434	686	390	741	751	392
Benzene	<1	<1	<1	<1	<1	<1	<1		<1
Benzo(a)anthracene									
Benzo(a)pyrene									
Benzo(b)fluoranthene									
Benzo(g,h,i)perylene									
Benzo(k)fluoranthene									
Benzyl alcohol									
Beryllium, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0		<4.0
Beta-bhc									
Bis (2-chloroethoxy) methane									
Bis(2-chloroethyl) ether									
Bis(2-chloroisopropyl) ether									
Bis(2-ethylhexyl) phthalate									
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1		<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1		<1
Bromoform	<1	<1	<1	<1	<1	<1	<1		<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1		<1
Butyl benzyl phthalate									
Cadmium, total	<.8	<.8	.8	<.8	<.8	<.8	<.8		<.8
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1		<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1		<1
Chlordane									
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1		<1
Chlorobenzilate									
Chloroethane	<1	<1	<1	<1	<1	<1	<1		<1
Chloroform	<1	<1	<1	<1	<1	<1	<1		<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1		<1
Chloroprene									
Chromium, total	<8	<8	<8	<8	<8	<8	<8		<8
Chrysene									
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1		<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1		<1
Cobalt, total	<.8	<.8	<.8	<.8	.5	<.4	.4		.5
Copper, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0		<4.0
Cyanide, total									
Delta-bhc									
Diallate									
Dibenzo(a,h)anthracene									
Dibenzofuran									
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1		<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1		<1
Dichlorodifluoromethane									
Dieldrin									
Diethyl phthalate									
Dimethoate									
Dimethylphthalate									
Di-n-butyl phthalate									
Di-n-octyl phthalate									
Dinoseb									
Diphenylamine									
Disulfoton									
Endosulfan i									
Endosulfan ii									
Endosulfan sulfate									
Endrin									
Endrin aldehyde									
Ethyl methacrylate									
Ethyl methanesulfonate									
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1		<1
Famphur									
Fluoranthene									
Fluorene									
Gamma-bhc (lindane)									
Heptachlor									
Heptachlor epoxide									
Hexachlorobenzene									

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

Table 9

Analytical Data Summary for MW-15

Constituents	9/1/2022	3/6/2023	5/9/2023	9/8/2023	3/20/2024	9/25/2024	3/11/2025	9/8/2025
Antimony, total	<2	<2		<2	<2	<2	<2	<1
Arochlor 1016	<.1			<.2				
Arochlor 1221	<.2			<.2				
Arochlor 1232	<.2			<.2				
Arochlor 1242	<.2			<.2				
Arochlor 1248	<.2			<.2				
Arochlor 1254	<.1			<.2				
Arochlor 1260	<.1			<.2				
Arsenic, total	<4.0	<4.0		<4.0	<4.0	<4.0	<4.0	<2.0
Azobenzene	<8			<8				
Barium, total	416	431		430	549	545	486	556
Benzene	<1	<1		<1	<1	<1	<1	<1
Benzo(a)anthracene	<8			<8				
Benzo(a)pyrene	<8			<8				
Benzo(b)fluoranthene	<8			<8				
Benzo(g,h,i)perylene	<8			<8				
Benzo(k)fluoranthene	<8			<8				
Benzyl alcohol	<8			<8				
Beryllium, total	<4.0	<4.0		<4.0	<4.0	<4.0	<4.0	<.5
Beta-bhc	<.05			<.05				
Bis (2-chloroethoxy) methane	<8			<8				
Bis(2-chloroethyl) ether	<8			<8				
Bis(2-chloroisopropyl) ether	<8			<8				
Bis(2-ethylhexyl) phthalate	7		<6	<6				
Bromochloromethane	<1	<1		<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1		<1	<1	<1	<1	<1
Bromoform	<1	<1		<1	<1	<1	<1	<1
Bromomethane	<1	<1		<1	<1	<1	<1	<1
Butyl benzyl phthalate	<8			<8				
Cadmium, total	<.8	<.8		<.8	<.8	<.8	<.8	<.2
Carbon disulfide	<1	<1		<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1		<1	<1	<1	<1	<1
Chlordane	<.1			<.1				
Chlorobenzene	<1	<1		<1	<1	<1	<1	<1
Chlorobenzilate	<8			<8				
Chloroethane	<1	<1		<1	<1	<1	<1	<1
Chloroform	<1	<1		<1	<1	<1	<1	<1
Chloromethane	<1	<1		<1	<1	<1	<1	<1
Chloroprene	<1			<1				
Chromium, total	<8	<8		<8	<8	<8	<8	<1
Chrysene	<8			<8				
Cis-1,2-dichloroethylene	<1	<1		<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1		<1	<1	<1	<1	<1
Cobalt, total	<.4	.4		<.4	<.4	.4	<.4	<.5
Copper, total	<4.0	<4.0		<4.0	6.9	<4.0	<4.0	<5.0
Cyanide, total	<.005			<.005				
Delta-bhc	<.05			<.05				
Diallate	<8			<8				
Dibenzo(a,h)anthracene	<8			<8				
Dibenzofuran	<8			<8				
Dibromochloromethane	<1	<1		<1	<1	<1	<1	<1
Dibromomethane	<1	<1		<1	<1	<1	<1	<1
Dichlorodifluoromethane	<1			<1				
Dieldrin	<.05			<.05				
Diethyl phthalate	<8			<8				
Dimethoate	<.4			<.4				
Dimethylphthalate	<8			<8				
Di-n-butyl phthalate	<8			<8				
Di-n-octyl phthalate	<8			<8				
Dinoseb	<.5			<.5				
Diphenylamine	<8			<8				
Disulfoton	<.4			<.4				
Endosulfan i	<.05			<.05				
Endosulfan ii	<.05			<.05				
Endosulfan sulfate	<.05			<.05				
Endrin	<.05			<.05				
Endrin aldehyde	<.05			<.05				
Ethyl methacrylate	<10			<10				
Ethyl methanesulfonate	<8			<8				
Ethylbenzene	<1	<1		<1	<1	<1	<1	<1
Famphur	<.4			<.4				
Fluoranthene	<8			<8				
Fluorene	<8			<8				
Gamma-bhc (lindane)	<.05			<.05				
Heptachlor	<.05			<.05				
Heptachlor epoxide	<.05			<.05				
Hexachlorobenzene	<.05			<.05				

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

Table 9

Analytical Data Summary for MW-15

Constituents	Units	9/18/2014	4/29/2015	10/7/2015	4/19/2016	9/19/2016	3/21/2017	10/12/2017	3/8/2018
Hexachlorobutadiene	ug/L								
Hexachlorocyclopentadiene	ug/L								
Hexachloroethane	ug/L								
Hexachloropropene	ug/L								
Indeno(1,2,3-cd)pyrene	ug/L								
Isobutanol	mg/L								
Isodrin	ug/L								
Isophorone	ug/L								
Isosafrole	ug/L								
Kepone	ug/L								
Lead, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Mercury, total	ug/L								
Methacrylonitrile	ug/L								
Methapyrilene	ug/L								
Methoxychlor	ug/L								
Methyl iodide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Methyl methacrylate	ug/L								
Methyl methanesulfonate	ug/L								
Methyl parathion	ug/L								
Methylene chloride	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene	ug/L								
Nickel, total	ug/L	5.9	6.4	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Nitrobenzene	ug/L								
N-nitrosodiethylamine	ug/L								
N-nitrosodimethylamine	ug/L								
N-nitrosodi-n-butylamine	ug/L								
N-nitroso-di-n-propylamine	ug/L								
N-nitrosodiphenylamine	ug/L								
N-nitrosomethylethylamine	ug/L								
N-nitrosopiperidine	ug/L								
N-nitrosopyrrolidine	ug/L								
O,o,o-triethyl phosphorothioate	ug/L								
O-toluidine	ug/L								
Parathion	ug/L								
P-dimethylaminoazobenzene	ug/L								
Pentachlorobenzene	ug/L								
Pentachloronitrobenzene (pcnb)	ug/L								
Pentachlorophenol	ug/L								
Phenacetin	ug/L								
Phenanthrene	ug/L								
Phenol	ug/L								
Phorate	ug/L								
Pronamide	ug/L								
Propionitrile	ug/L								
Pyrene	ug/L								
Safrole	ug/L								
Selenium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Solids, total suspended	mg/L	117	327	11	16	4	43	630	
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Sulfide, total	mg/L								
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Thionazin	ug/L								
Tin, total	ug/L								
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Toxaphene	ug/L								
Trans-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	ug/L	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	17.7	10.1	<8.0	<8.0	<8.0	<8.0	<8.0	10.7

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

Table 9

Analytical Data Summary for MW-15

Constituents	9/6/2018	5/13/2019	9/26/2019	3/30/2020	9/17/2020	3/9/2021	9/9/2021	12/8/2021	3/14/2022
Hexachlorobutadiene									
Hexachlorocyclopentadiene									
Hexachloroethane									
Hexachloropropene									
Indeno(1,2,3-cd)pyrene									
Isobutanol									
Isodrin									
Isophorone									
Isosafrole									
Kepone									
Lead, total	<4	<4	<4	<4	<4	<4	<4		<4
Mercury, total									
Methacrylonitrile									
Methapyrilene									
Methoxychlor									
Methyl iodide	<1	<1	<1	<2	<1	<1	<1		<1
Methyl methacrylate									
Methyl methanesulfonate									
Methyl parathion									
Methylene chloride	<5	<5	<5	<5	<5	<5	<5		<5
Naphthalene									
Nickel, total	<8.0	<4.0	7.7	<4.0	5.1	<4.0	6.8		5.1
Nitrobenzene									
N-nitrosodiethylamine									
N-nitrosodimethylamine									
N-nitrosodi-n-butylamine									
N-nitroso-di-n-propylamine									
N-nitrosodiphenylamine									
N-nitrosomethylethylamine									
N-nitrosopiperidine									
N-nitrosopyrrolidine									
O,o,o-triethyl phosphorothioate									
O-toluidine									
Parathion									
P-dimethylaminoazobenzene									
Pentachlorobenzene									
Pentachloronitrobenzene (pcnb)									
Pentachlorophenol									
Phenacetin									
Phenanthrene									
Phenol									
Phorate									
Pronamide									
Propionitrile									
Pyrene									
Safrole									
Selenium, total	<4	<4	<4	<4	<4	<4	<4		<4
Silver, total	<8	<4	<4	<4	<4	<4	<4		<4
Solids, total suspended									
Styrene	<1	<1	<1	<1	<1	<1	<1		<1
Sulfide, total									
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1		<1
Thallium, total	<4.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0		<2.0
Thionazin									
Tin, total									
Toluene	<1	<1	<1	<1	<1	<1	<1		<1
Toxaphene									
Trans-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1		<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1		<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5		<5
Trichloroethylene	<1	<1	<1	<1	<1	<1	<1		<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1		<1
Vanadium, total	<20	<20	<20	<20	<20	<20	<20		<20
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5		<5
Vinyl chloride	<1	<1	<1	<1	<1	<1	<1		<1
Xylenes, total	<2	<2	<2	<2	<2	<2	<2		<2
Zinc, total	<20.0	8.0	25.0	<20.0	<20.0	<20.0	<20.0		<20.0

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

Table 9

Analytical Data Summary for MW-15

Constituents	9/1/2022	3/6/2023	5/9/2023	9/8/2023	3/20/2024	9/25/2024	3/11/2025	9/8/2025
Hexachlorobutadiene	<8			<8				
Hexachlorocyclopentadiene	<8			<8				
Hexachloroethane	<8			<8				
Hexachloropropene	<8			<8				
Indeno(1,2,3-cd)pyrene	<8			<8				
Isobutanol	<1			<1				
Isodrin	<8			<8				
Isophorone	<8			<8				
Isosafrole	<8			<8				
Kepone	<8			<8				
Lead, total	<4	<4		<4	<4	<4	<4	<1
Mercury, total	<.5			<.5				
Methacrylonitrile	<1			<1				
Methapyrilene	<8			<8				
Methoxychlor	<.05			<.05				
Methyl iodide	<2	<1		<2	<1	<1	<1	<1
Methyl methacrylate	<1			<1				
Methyl methanesulfonate	<8			<8				
Methyl parathion	<.4			<.4				
Methylene chloride	<5	<5		<5	<5	<5	<5	<5
Naphthalene	<8			<8				
Nickel, total	8.2	4.3		5.0	12.3	11.4	8.1	5.5
Nitrobenzene	<8			<8				
N-nitrosodiethylamine	<8			<8				
N-nitrosodimethylamine	<8			<8				
N-nitrosodi-n-butylamine	<8			<8				
N-nitroso-di-n-propylamine	<8			<8				
N-nitrosodiphenylamine	<8			<8				
N-nitrosomethylethylamine	<8			<8				
N-nitrosopiperidine	<8			<8				
N-nitrosopyrrolidine	<8			<8				
O,o,o-triethyl phosphorothioate	<.4			<.4				
O-toluidine	<8			<8				
Parathion	<.4			<.4				
P-dimethylaminoazobenzene	<8			<8				
Pentachlorobenzene	<8			<8				
Pentachloronitrobenzene (pcnb)	<8			<8				
Pentachlorophenol	<8			<8				
Phenacetin	<8			<8				
Phenanthrene	<8			<8				
Phenol	<8			<8				
Phorate	<.4			<.4				
Pronamide	<8			<8				
Propionitrile	<10			<10				
Pyrene	<8			<8				
Safrole	<8			<8				
Selenium, total	<4	<4		<4	<4	<4	<4	<2
Silver, total	<4	<4		<4	<4	<4	<4	<5
Solids, total suspended								
Styrene	<1	<1		<1	<1	<1	<1	<1
Sulfide, total	<.1			<.1				
Tetrachloroethylene	<1	<1		<1	<1	<1	<1	<1
Thallium, total	<2.0	<2.0		<2.0	<2.0	<2.0	<2.0	<.5
Thionazin	<.4			<.4				
Tin, total	<20			<20				
Toluene	<1	<1		<1	<1	<1	<1	<1
Toxaphene	<.2			<.2				
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	<2
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	<5.0

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

Table 9

Analytical Data Summary for MW-18

Constituents	Units	9/18/2014	4/29/2015	10/6/2015	4/19/2016	9/19/2016	3/21/2017	10/12/2017	3/8/2018	9/6/2018
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	ug/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	10.2	<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	<4.0	<4.0	<4.0	<4.0	4.4	<4.0	<4.0	<4.0	<4.0
Barium, total	ug/L	333	402	355	360	439	295	554	373	352
Benzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
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	<8.0	<8.0	<8.0	<8.0	15.4	<8.0	<8.0	9.8	<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	1.1	3.1	<8	1.1	10.6	<8	2.5	4.8	<8
Copper, total	ug/L	<4.0	<4.0	<4.0	10.8	10.4	<4.0	<4.0	5.5	<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	<4.0	<4.0	<4.0	8.7	<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	<4.0	5.2	<4.0	<4.0	13.6	<4.0	<4.0	9.7	<8.0
Selenium, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	6.3	<4.0	<4.0
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<8
Solids, total suspended	mg/L	22	60	23	23	170	126	520		
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	ug/L	<20.0	<20.0	<20.0	<20.0	27.5	<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	<8.0	<8.0	<8.0	27.6	<8.0	9.5	16.5	32.5

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

Table 9

Analytical Data Summary for MW-18

Constituents	5/13/2019	9/26/2019	3/30/2020	9/17/2020	3/9/2021	6/3/2021	9/9/2021	3/14/2022	9/1/2022	3/6/2023
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1		<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1		<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1		<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1		<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1		<1	<1	<1	<1
1,1-dichloroethylene	<1	<1	<1	<1	<1		<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1		<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<1	<1	<5	<5	<5		<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1		<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1		<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1		<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1		<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1	<1		<1	<1	<1	<1
2-butanone (mek)	<5	<5	<5	<5	<5		<5	<10	<10	<10
2-hexanone (mbk)	<5	<5	<5	<5	<5		<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5		<5	<5	<5	<5
Acetone	<10.0	<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	<4.0	<4.0	<4.0	<4.0	19.9		<4.0	7.8	<4.0	<4.0
Barium, total	368	372	418	365	1250	355	361	651	400	407
Benzene	<1	<1	<1	<1	<1		<1	<1	<1	<1
Beryllium, total	<4.0	<4.0	<4.0	<4.0	4.5		<4.0	<4.0	<4.0	<4.0
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	1.4		.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	8.7	<8.0	73.4		<8.0	33.2	<8.0	9.7
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	<8	<8	3.4	1.2	72.8		<4	28.3	2.4	6.1
Copper, total	<4.0	<4.0	<4.0	<4.0	62.1		<4.0	22.1	<4.0	4.9
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	57.7		<4.0	20.0	<4.0	4.8
Methyl iodide	<1	<1	<2	<1	<1		<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5	<5		<5	<5	<5	<5
Nickel, total	<4.0	<4.0	6.0	<4.0	113.0		<4.0	48.4	4.4	11.6
Selenium, total	<4.0	<4.0	<4.0	<4.0	10.6		<4.0	<4.0	<4.0	<4.0
Silver, total	<4	<4	<4	<4	<4		<4	<4	<4	<4
Solids, total suspended										
Styrene	<1	<1	<1	<1	<1		<1	<1	<1	<1
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	<20.0	<20.0	<20.0	<20.0	123.0		<20.0	54.4	<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	13.3	11.5	<20.0	<20.0	166.0		<20.0	58.7	<20.0	<20.0

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

Table 9

Analytical Data Summary for MW-18

Constituents	9/8/2023	3/20/2024	9/25/2024	3/11/2025
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	<10.0	<10.0	<10.0	<10.0
Acrylonitrile	<5	<5	<5	<5
Antimony, total	<2	<2	<2	<2
Arsenic, total	<4.0	<4.0	<4.0	<4.0
Barium, total	327	378	447	366
Benzene	<1	<1	<1	<1
Beryllium, total	<4.0	<4.0	<4.0	<4.0
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	14.2	17.2	<8.0
Cis-1,2-dichloroethylene	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1
Cobalt, total	<.4	1.9	11.2	3.0
Copper, total	<4.0	<4.0	10.6	<4.0
Dibromochloromethane	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1
Lead, total	<4.0	<4.0	8.5	<4.0
Methyl iodide	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5
Nickel, total	<4.0	8.3	20.7	5.5
Selenium, total	<4.0	<4.0	<4.0	<4.0
Silver, total	<4	<4	<4	<4
Solids, total suspended				
Styrene	<1	<1	<1	<1
Tetrachloroethylene	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2
Toluene	<1	<1	<1	<1
Trans-1,2-dichloroethylene	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1
Vanadium, total	<20.0	<20.0	26.9	<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	29.0	<20.0

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

Table 9

Analytical Data Summary for MW-19

Constituents	Units	9/18/2014	4/28/2015	10/6/2015	4/19/2016	9/19/2016	3/22/2017	10/12/2017	3/8/2018	9/6/2018
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	6.0	<4.0	6.1	<4.0	<4.0	<4.0	<4.0
Barium, total	ug/L	380.0	459.0	431.0	416.0	503.0	346.0	343.0	401.0	361.0
Benzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
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	<8.0	<8.0	<8.0	<8.0	9.3	<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	1.7	1.1	2.6	<.8	3.7	<.8	.9	8.5	6.3
Copper, total	ug/L	<4.0	<4.0	<4.0	<4.0	6.8	<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	8.1	<4.0	<4.0	5.2	<8.0
Selenium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<8
Solids, total suspended	mg/L	89	69	7	23	19	10	808		
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	ug/L	<20.0	<20.0	<20.0	<20.0	20.7	<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	16.1	<8.0	11.5	<8.0	27.7	<8.0	<8.0	9.7	<20.0

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

Table 9

Analytical Data Summary for MW-19

Constituents	5/13/2019	9/26/2019	11/14/2019	3/30/2020	9/17/2020	3/9/2021	9/9/2021	3/14/2022	3/6/2023
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		<5	<5	<5	<5	<5	<5
1,2-dibromoethane	<1	<1		<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1		<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1		<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1		<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1		<1	<1	<1	<1	<1	<1
2-butanone (mek)	<5	<5		<5	<5	<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	<10		<10	<10	<10	<10	<10	<10
Acrylonitrile	<5	<5		<5	<5	<5	<5	<5	<5
Antimony, total	<2	<2		<2	<2	<2	<2	<2	<2
Arsenic, total	<4.0	<4.0		<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Barium, total	418.0	409.0		366.0	614.0	393.0	402.0	359.0	336.0
Benzene	<1	<1		<1	<1	<1	<1	<1	<1
Beryllium, total	<4.0	<4.0		<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
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	1.0		<.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	<8.0	<8.0		<8.0	<8.0	<8.0	<8.0	<8.0	<8.0
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	6.1	9.7		2.3	2.9	2.5	5.3	3.3	3.6
Copper, total	<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
Dibromomethane	<1	<1		<1	<1	<1	<1	<1	<1
Ethylbenzene	<1	<1		<1	<1	<1	<1	<1	<1
Lead, total	<4	<4		<4	<4	<4	<4	<4	<4
Methyl iodide	<1	<1		<2	<1	<1	<1	<1	<1
Methylene chloride	<5	<5		<5	<5	<5	<5	<5	<5
Nickel, total	5.0	7.9		<4.0	5.6	<4.0	<4.0	<4.0	4.3
Selenium, total	<4	5		<4	<4	<4	<4	<4	<4
Silver, total	<4	<4		<4	<4	<4	<4	<4	<4
Solids, total suspended									
Styrene	<1	<1		<1	<1	<1	<1	<1	<1
Tetrachloroethylene	<1	<1		<1	<1	<1	<1	<1	<1
Thallium, total	<2.0	<2.0		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Toluene	<1	<1		<1	<1	<1	<1	<1	<1
Trans-1,2-dichloroethylene	<1	<1		<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1		<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5		<5	<5	<5	<5	<5	<5
Trichloroethylene	<1	<1		<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1		<1	<1	<1	<1	<1	<1
Vanadium, total	<20.0	<20.0		<20.0	<20.0	<20.0	<20.0	<20.0	<20.0
Vinyl acetate	<5	<5		<5	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1		<1	<1	<1	<1	<1	<1
Xylenes, total	<2	<2		<2	<2	<2	<2	<2	<2
Zinc, total	30.2	68.3	<20.0 *	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 9

Analytical Data Summary for MW-19

Constituents	9/8/2023	3/20/2024	9/25/2024	3/11/2025	9/8/2025
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	<1
Arsenic, total	<4.0	<4.0	<4.0	<4.0	<2.0
Barium, total	373.0	26.9	532.0	577.0	599.0
Benzene	<1	<1	<1	<1	<1
Beryllium, total	<4.0	<4.0	<4.0	<4.0	<.5
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	.9
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	1.2
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1
Cobalt, total	2.0	<.4	14.4	4.6	4.0
Copper, total	<4.0	<4.0	<4.0	<4.0	<5.0
Dibromochloromethane	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1	<1
Lead, total	<4	<4	<4	<4	<1
Methyl iodide	<1	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5	<5
Nickel, total	<4.0	8.9	15.7	4.7	6.1
Selenium, total	<4	<4	<4	<4	<2
Silver, total	<4	<4	<4	<4	<5
Solids, total suspended					
Styrene	<1	<1	<1	<1	<1
Tetrachloroethylene	<1	<1	<1	<1	<1
Thallium, total	<2.0	<2.0	<2.0	<2.0	<.5
Toluene	<1	<1	<1	<1	<1
Trans-1,2-dichloroethylene	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1
Vanadium, total	<20.0	<20.0	<20.0	<20.0	<2.0
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	25.3

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

Table 9

Analytical Data Summary for MW-2

Constituents	Units	9/17/2014	4/29/2015	10/7/2015	4/19/2016	9/19/2016	3/22/2017	10/12/2017	3/8/2018	9/6/2018
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	204.0	258.0	182.0	291.0	263.0	177.0	276.0	173.0	160.0
Benzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
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	1.0	<.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	<8.0	<8.0	9.6	<8.0	<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	<.8	1.7	<.8	3.5	2.2	<.8	<.8	<2.0	<.8
Copper, total	ug/L	<4.0	<4.0	<4.0	5.1	<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	<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	<4.0	<4.0	<4.0	7.8	<4.0	<4.0	<4.0	<4.0	<8.0
Selenium, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	4.4	<4.0	<4.0
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<8
Solids, total suspended	mg/L	25	58	14	41	54	12	162		
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	ug/L	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	<8.0	9.7	11.8	12.6	10.2	10.5	11.3	25.8	23.3

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

Table 9

Analytical Data Summary for MW-2

Constituents	5/13/2019	9/26/2019	3/30/2020	9/17/2020	3/9/2021	9/9/2021	3/14/2022	9/1/2022	3/6/2023	9/8/2023
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	<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	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	<5	<5	<5	<5	<5	<5	<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	<2.0	<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	<4
Barium, total	172.0	175.0	169.0	156.0	174.0	164.0	162.0	153.0	157.0	176.0
Benzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
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	.9	.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	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<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	<4	<4	<4	.4	<4	<4	<4
Copper, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	5.4	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Methyl iodide	<1	<1	<2	<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	5.3	4.2	<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
Solids, total suspended										
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<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	<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	25.9	15.5	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 9

Analytical Data Summary for MW-2

Constituents	3/20/2024	9/26/2024	3/11/2025	9/8/2025
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	1.4
Arsenic, total	<4	<4	<4	<2
Barium, total	219.0	179.0	54.1	180.0
Benzene	<1	<1	<1	<1
Beryllium, total	<4.0	<4.0	<4.0	<.5
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	.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	<8.0	<8.0	<8.0	5.3
Cis-1,2-dichloroethylene	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1
Cobalt, total	<.4	<.4	<.4	<.5
Copper, total	<4.0	<4.0	<4.0	<5.0
Dibromochloromethane	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1
Lead, total	<4.0	<4.0	<4.0	<1.0
Methyl iodide	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5
Nickel, total	<4.0	<4.0	4.8	5.1
Selenium, total	<4.0	<4.0	<4.0	<2.0
Silver, total	<4	<4	<4	<5
Solids, total suspended				
Styrene	<1	<1	<1	<1
Tetrachloroethylene	<1	<1	<1	<1
Thallium, total	<2.0	<2.0	<2.0	<.5
Toluene	<1	<1	<1	<1
Trans-1,2-dichloroethylene	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<2
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	17.3

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

Table 9

Analytical Data Summary for MW-21

Constituents	Units	9/17/2014	4/28/2015	10/7/2015	4/19/2016	9/19/2016	3/21/2017	10/12/2017	3/8/2018	9/6/2018
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	ug/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	15.3	<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	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Barium, total	ug/L	318	377	351	338	316	305	287	322	305
Benzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
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	<1.0	<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
Cobalt, total	ug/L	.8	<.8	<.8	<.8	<.8	<.8	<.8	<2.0	<.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	<4.0	<4.0	<8.0
Selenium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<8
Solids, total suspended	mg/L	45	32	3	3	7	8	313		
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	ug/L	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	11.5	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	13.5	<20.0

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

Table 9

Analytical Data Summary for MW-21

Constituents	5/13/2019	9/26/2019	3/30/2020	9/17/2020	3/9/2021	6/3/2021	9/9/2021	3/14/2022	6/14/2022	9/1/2022
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	<5	<5	<5		<5	<5		<5
1,2-dibromoethane	<1	<1	<1	<1	<1		<1	<1		<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1		<1	<1		<1
1,2-dichloroethane	<1	<1	<1	<1	<1		<1	<1		<1
1,2-dichloropropane	<1	<1	<1	<1	<1		<1	<1		<1
1,4-dichlorobenzene	<1	<1	<1	<1	<1		<1	<1		<1
2-butanone (mek)	<5	<5	<5	<5	<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		<2
Arsenic, total	<4.0	<4.0	<4.0	<4.0	<4.0		<4.0	<4.0		<4.0
Barium, total	313	344	354	337	380		325	317		341
Benzene	<1	<1	<1	<1	<1		<1	<1		<1
Beryllium, total	<4.0	<4.0	<4.0	<4.0	<4.0		<4.0	<4.0		<4.0
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	1.8	<.8	<.8	<.8		<.8
Carbon disulfide	<1	<1	<1	<1	<1		<1	<1		<1
Carbon tetrachloride	<1	<1	<1	<1	<1		<1	<1		<1
Chlorobenzene	<1	<1	<1	<1	<1		<1	<1		<1
Chloroethane	<1	<1	<1	<1	<1		<1	<1		<1
Chloroform	<1	<1	<1	<1	<1		<1	<1		<1
Chloromethane	<1	<1	<1	<1	<1		<1	<1		<1
Chromium, total	<8	<8	<8	<8	<8		<8	<8		<8
Cis-1,2-dichloroethylene	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	1.1	<1.0	<1.0
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1		<1	<1		<1
Cobalt, total	<.8	<.8	<.8	<.4	.6		.4	.4		<.4
Copper, total	<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
Dibromomethane	<1	<1	<1	<1	<1		<1	<1		<1
Ethylbenzene	<1	<1	<1	<1	<1		<1	<1		<1
Lead, total	<4	<4	<4	<4	<4		<4	<4		<4
Methyl iodide	<1	<1	<2	<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	<4	<4	<4	<4		<4	<4		<4
Silver, total	<4	<4	<4	<4	<4		<4	<4		<4
Solids, total suspended										
Styrene	<1	<1	<1	<1	<1		<1	<1		<1
Tetrachloroethylene	<1	<1	<1	<1	<1		<1	<1		<1
Thallium, total	<2.0	<2.0	<2.0	<2.0	<2.0		<2.0	<2.0		<2.0
Toluene	<1	<1	<1	<1	<1		<1	<1		<1
Trans-1,2-dichloroethylene	<1	<1	<1	<1	<1		<1	<1		<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1		<1	<1		<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5		<5	<5		<5
Trichloroethylene	<1	<1	<1	<1	<1		<1	<1		<1
Trichlorofluoromethane	<1	<1	<1	<1	<1		<1	<1		<1
Vanadium, total	<20	<20	<20	<20	<20		<20	<20		<20
Vinyl acetate	<5	<5	<5	<5	<5		<5	<5		<5
Vinyl chloride	<1	<1	<1	<1	<1		<1	<1		<1
Xylenes, total	<2	<2	<2	<2	<2		<2	<2		<2
Zinc, total	17.4	21.7	<20.0	<20.0	<20.0		<20.0	<20.0		<20.0

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

Table 9

Analytical Data Summary for MW-21

Constituents	3/6/2023	9/8/2023	3/20/2024	6/14/2024	9/25/2024	3/11/2025	9/8/2025
1,1,1,2-tetrachloroethane	<1	<1	<1		<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1		<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1		<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1		<1	<1	<1
1,1-dichloroethane	<1	<1	<1		<1	<1	<1
1,1-dichloroethylene	<1	<1	<1		<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1		<1	<1	<1
1,2-dibromo-3-chloropropane	<5	<5	<5		<5	<5	<5
1,2-dibromoethane	<1	<1	<1		<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1		<1	<1	<1
1,2-dichloroethane	<1	<1	<1		<1	<1	<1
1,2-dichloropropane	<1	<1	<1		<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1		<1	<1	<1
2-butanone (mek)	<10	<10	<10		<10	<10	<10
2-hexanone (mbk)	<5	<5	<5		<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5		<5	<5	<5
Acetone	<10.0	<10.0	<10.0		<10.0	<10.0	<10.0
Acrylonitrile	<5	<5	<5		<5	<5	<5
Antimony, total	<2	<2	<2		<2	<2	<1
Arsenic, total	<4.0	<4.0	24.4	<4.0	<4.0	<4.0	<2.0
Barium, total	365	354	1100	391	341	362	376
Benzene	<1	<1	<1		<1	<1	<1
Beryllium, total	<4.0	<4.0	<4.0		<4.0	<4.0	<5
Bromochloromethane	<1	<1	<1		<1	<1	<1
Bromodichloromethane	<1	<1	<1		<1	<1	<1
Bromoform	<1	<1	<1		<1	<1	<1
Bromomethane	<1	<1	<1		<1	<1	<1
Cadmium, total	<.8	<.8	<.8		<.8	<.8	<.2
Carbon disulfide	<1	<1	<1		<1	<1	<1
Carbon tetrachloride	<1	<1	<1		<1	<1	<1
Chlorobenzene	<1	<1	<1		<1	<1	<1
Chloroethane	<1	<1	<1		<1	<1	<1
Chloroform	<1	<1	<1		<1	<1	<1
Chloromethane	<1	<1	<1		<1	<1	<1
Chromium, total	<8	<8	<8		<8	<8	<1
Cis-1,2-dichloroethylene	<1.0	<1.0	<1.0		<1.0	<1.0	<1.0
Cis-1,3-dichloropropene	<1	<1	<1		<1	<1	<1
Cobalt, total	<.4	<.4	.6		<.4	<.4	<.5
Copper, total	<4.0	9.3	<4.0		<4.0	<4.0	8.2
Dibromochloromethane	<1	<1	<1		<1	<1	<1
Dibromomethane	<1	<1	<1		<1	<1	<1
Ethylbenzene	<1	<1	<1		<1	<1	<1
Lead, total	<4	<4	<4		<4	<4	<1
Methyl iodide	<1	<1	<1		<1	<1	<1
Methylene chloride	<5	<5	<5		<5	<5	<5
Nickel, total	<4.0	<4.0	6.6		<4.0	<4.0	<5.0
Selenium, total	<4	<4	<4		<4	<4	<2
Silver, total	<4	<4	<4		<4	<4	<5
Solids, total suspended							
Styrene	<1	<1	<1		<1	<1	<1
Tetrachloroethylene	<1	<1	<1		<1	<1	<1
Thallium, total	<2.0	<2.0	<2.0		<2.0	<2.0	<.5
Toluene	<1	<1	<1		<1	<1	<1
Trans-1,2-dichloroethylene	<1	<1	<1		<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1		<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5		<5	<5	<5
Trichloroethylene	<1	<1	<1		<1	<1	<1
Trichlorofluoromethane	<1	<1	<1		<1	<1	<1
Vanadium, total	<20	<20	<20		<20	<20	2
Vinyl acetate	<5	<5	<5		<5	<5	<5
Vinyl chloride	<1	<1	<1		<1	<1	<1
Xylenes, total	<2	<2	<2		<2	<2	<2
Zinc, total	<20.0	<20.0	<20.0		<20.0	<20.0	<5.0

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

Table 9

Analytical Data Summary for MW-22

Constituents	Units	9/17/2014	4/28/2015	10/7/2015	4/19/2016	9/19/2016	3/21/2017	10/12/2017	3/8/2018	9/6/2018
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	ug/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	13.7	<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	<4.0	5.3	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Barium, total	ug/L	405	404	360	407	417	387	343	327	277
Benzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	ug/L	<8	<8	<8	<8	<8	<8	<8	<8	<8
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	ug/L	<1	<1	<1	<1	<1	1	<1	<1	<1
Chloroform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	ug/L	<8.0	9.8	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0
Cis-1,2-dichloroethylene	ug/L	1.3	<1.0	1.2	2.0	1.4	2.0	1.0	1.5	1.7
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	5.2	7.2	<8	<8	<8	<8	<8	<2.0	<8
Copper, total	ug/L	<4.0	7.3	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<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	4.3	<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	9.5	12.3	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<8.0
Selenium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<8
Solids, total suspended	mg/L	178	133	28	4	8	11	414		
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,2-dichloroethylene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.3	<1.0
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	15.1	22.2	<8.0	<8.0	<8.0	<8.0	<8.0	8.8	20.4

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

Table 9

Analytical Data Summary for MW-23

Constituents	Units	9/26/2019	3/30/2020	9/17/2020	3/9/2021	9/9/2021	3/14/2022	9/1/2022	3/6/2023	9/8/2023
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	<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	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	ug/L	<5	<5	<5	<5	<5	<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	<4	<4	<4	<4	<4	<4	<4	<4
Barium, total	ug/L	311	322	323	309	327	324	325	301	307
Benzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
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	<8.0	<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	<1
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	<.8	<.8	<.4	<.4	.5	.5	.6	.4	<.4
Copper, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<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	<2	<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	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	ug/L	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	10.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 9

Analytical Data Summary for MW-23

Constituents	3/20/2024	9/25/2024	3/11/2025	9/8/2025
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	<1
Arsenic, total	<4	<4	<4	<2
Barium, total	328	306	338	352
Benzene	<1	<1	<1	<1
Beryllium, total	<4.0	<4.0	<4.0	<.5
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	<.2
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	2.1
Cis-1,2-dichloroethylene	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1
Cobalt, total	.6	<.4	<.4	<.5
Copper, total	<4	<4	<4	<5
Dibromochloromethane	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1
Lead, total	<4	<4	<4	<1
Methyl iodide	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5
Nickel, total	<4	<4	<4	<5
Selenium, total	<4	<4	<4	<2
Silver, total	<4	<4	<4	<5
Styrene	<1	<1	<1	<1
Tetrachloroethylene	<1	<1	<1	<1
Thallium, total	<2.0	<2.0	<2.0	<.5
Toluene	<1	<1	<1	<1
Trans-1,2-dichloroethylene	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<2
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	9.4

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

Table 9

Analytical Data Summary for MW-3

Constituents	Units	9/18/2014	4/29/2015	10/7/2015	4/19/2016	9/19/2016	3/21/2017	10/12/2017	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-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloropropene	ug/L					<1.0			
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene	ug/L					<8			
1,2,4-trichlorobenzene	ug/L					<1			
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dinitrobenzene	ug/L					<8			
1,3,5-trinitrobenzene	ug/L					<8			
1,3-dichlorobenzene	ug/L					<1			
1,3-dichloropropane	ug/L					<1			
1,3-dinitrobenzene	ug/L					<8			
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,4-naphthoquinone	ug/L					<8			
1,4-phenylenediamine	ug/L					<8			
1-naphthylamine	ug/L					<8			
2,2-dichloropropane	ug/L					<1			
2,3,4,6-tetrachlorophenol	ug/L					<8			
2,4,5-t	ug/L					<6			
2,4,5-tp (silvex)	ug/L					<6			
2,4,5-trichlorophenol	ug/L					<8			
2,4,6-trichlorophenol	ug/L					<8			
2,4-d	ug/L					<2.5			
2,4-dichlorophenol	ug/L					<8			
2,4-dimethylphenol	ug/L					<8			
2,4-dinitrophenol	ug/L					<8			
2,4-dinitrotoluene	ug/L					<8			
2,6-dichlorophenol	ug/L					<8			
2,6-dinitrotoluene	ug/L					<8			
2-acetylaminofluorene	ug/L					<8			
2-butanone (mek)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
2-chloronaphthalene	ug/L					<8			
2-chlorophenol	ug/L					<8			
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
2-methylnaphthalene	ug/L					<8			
2-methylphenol	ug/L					<8			
2-naphthylamine	ug/L					<8			
2-nitroaniline	ug/L					<8			
2-nitrophenol	ug/L					<8			
3,3'-dichlorobenzidine	ug/L					<8			
3,3'-dimethylbenzidine	ug/L					<8			
3-methylcholanthrene	ug/L					<8			
3-nitroaniline	ug/L					<8			
4,4'-ddd	ug/L					<.05			
4,4'-dde	ug/L					<.05			
4,4'-ddt	ug/L					<.05			
4,6-dinitro-2-methylphenol	ug/L					<8			
4-aminobiphenyl	ug/L					<8			
4-bromophenyl phenyl ether	ug/L					<8			
4-chloro-3-methylphenol	ug/L					<8			
4-chloroaniline	ug/L					<8			
4-chlorophenyl phenyl ether	ug/L					<8			
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
4-nitroaniline	ug/L					<8			
4-nitrophenol	ug/L					<8			
5-nitro-o-toluidine	ug/L					<8			
7,12-dimethylbenz(a)anthracene	ug/L					<8			
Acenaphthene	ug/L					<8			
Acenaphthylene	ug/L					<8			
Acetone	ug/L	<10	<10	<10	<10	<10	<10	<10	<10
Acetonitrile	ug/L					<10			
Acetophenone	ug/L					<8			
Acrolein	ug/L					<10			
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Aldrin	ug/L					<.05			
Allyl chloride	ug/L					<1			
Alpha-bhc	ug/L					<.05			
Anthracene	ug/L					<8			

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

Table 9

Analytical Data Summary for MW-3

Constituents	9/6/2018	5/13/2019	9/26/2019	3/30/2020	9/17/2020	3/9/2021	9/9/2021	3/14/2022	9/1/2022	3/6/2023
(3,4)-methylphenol							<8			
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
1,1-dichloropropene							4.8	<1.0	<1.0	<1.0
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene							<8			
1,2,4-trichlorobenzene							<1			
1,2-dibromo-3-chloropropane	<1	<1	<1	<5	<5	<5	<1	<5	<5	<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
1,2-dinitrobenzene							<8			
1,3,5-trinitrobenzene							<8			
1,3-dichlorobenzene							<1			
1,3-dichloropropane							<1			
1,3-dinitrobenzene							<8			
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-naphthoquinone							<8			
1,4-phenylenediamine							<8			
1-naphthylamine							<8			
2,2-dichloropropane							<1			
2,3,4,6-tetrachlorophenol							<8			
2,4,5-t							<5			
2,4,5-tp (silvex)							<5			
2,4,5-trichlorophenol							<8			
2,4,6-trichlorophenol							<8			
2,4-d							<2.0			
2,4-dichlorophenol							<8			
2,4-dimethylphenol							<8			
2,4-dinitrophenol							<8			
2,4-dinitrotoluene							<8			
2,6-dichlorophenol							<8			
2,6-dinitrotoluene							<8			
2-acetylaminofluorene							<8			
2-butanone (mek)	<5	<5	<5	<5	<5	<5	<5	<10	<10	<10
2-chloronaphthalene							<8			
2-chlorophenol							<8			
2-hexanone (mbk)	<5	<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	<5
4-nitroaniline							<8			
4-nitrophenol							<8			
5-nitro-o-toluidine							<8			
7,12-dimethylbenz(a)anthracene							<8			
Acenaphthene							<8			
Acenaphthylene							<8			
Acetone	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acetonitrile							<10			
Acetophenone							<8			
Acrolein							<10			
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Aldrin							<.05			
Allyl chloride							<1			
Alpha-bhc							<.05			
Anthracene							<8			

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

Table 9

Analytical Data Summary for MW-3

Constituents	9/8/2023	3/20/2024	9/25/2024	3/11/2025	9/8/2025
(3,4)-methylphenol					
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1
1,1-dichloroethylene	<1	<1	<1	<1	<1
1,1-dichloropropene					
1,2,3-trichloropropane	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene					
1,2,4-trichlorobenzene					
1,2-dibromo-3-chloropropane	<5	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1
1,2-dinitrobenzene					
1,3,5-trinitrobenzene					
1,3-dichlorobenzene					
1,3-dichloropropane					
1,3-dinitrobenzene					
1,4-dichlorobenzene	<1	<1	<1	<1	<1
1,4-naphthoquinone					
1,4-phenylenediamine					
1-naphthylamine					
2,2-dichloropropane					
2,3,4,6-tetrachlorophenol					
2,4,5-t					
2,4,5-tp (silvex)					
2,4,5-trichlorophenol					
2,4,6-trichlorophenol					
2,4-d					
2,4-dichlorophenol					
2,4-dimethylphenol					
2,4-dinitrophenol					
2,4-dinitrotoluene					
2,6-dichlorophenol					
2,6-dinitrotoluene					
2-acetylaminofluorene					
2-butanone (mek)	<10	<10	<10	<10	<10
2-chloronaphthalene					
2-chlorophenol					
2-hexanone (mbk)	<5	<5	<5	<5	<5
2-methylnaphthalene					
2-methylphenol					
2-naphthylamine					
2-nitroaniline					
2-nitrophenol					
3,3'-dichlorobenzidine					
3,3'-dimethylbenzidine					
3-methylcholanthrene					
3-nitroaniline					
4,4'-ddd					
4,4'-dde					
4,4'-ddt					
4,6-dinitro-2-methylphenol					
4-aminobiphenyl					
4-bromophenyl phenyl ether					
4-chloro-3-methylphenol					
4-chloroaniline					
4-chlorophenyl phenyl ether					
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5
4-nitroaniline					
4-nitrophenol					
5-nitro-o-toluidine					
7,12-dimethylbenz(a)anthracene					
Acenaphthene					
Acenaphthylene					
Acetone	<10	<10	<10	<10	<10
Acetonitrile					
Acetophenone					
Acrolein					
Acrylonitrile	<5	<5	<5	<5	<5
Aldrin					
Allyl chloride					
Alpha-bhc					
Anthracene					

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

Table 9

Analytical Data Summary for MW-3

Constituents	Units	9/18/2014	4/29/2015	10/7/2015	4/19/2016	9/19/2016	3/21/2017	10/12/2017	3/8/2018
Antimony, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
Arochlor 1016	ug/L					<.1			
Arochlor 1221	ug/L					<.2			
Arochlor 1232	ug/L					<.2			
Arochlor 1242	ug/L					<.2			
Arochlor 1248	ug/L					<.2			
Arochlor 1254	ug/L					<.1			
Arochlor 1260	ug/L					<.1			
Arsenic, total	ug/L	<4.0	<4.0	<4.0	<4.0	5.7	<4.0	<4.0	5.1
Azobenzene	ug/L					<8			
Barium, total	ug/L	655	761	640	748	784	710	743	1020
Benzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Benzo(a)anthracene	ug/L					<8			
Benzo(a)pyrene	ug/L					<8			
Benzo(b)fluoranthene	ug/L					<8			
Benzo(g,h,i)perylene	ug/L					<8			
Benzo(k)fluoranthene	ug/L					<8			
Benzyl alcohol	ug/L					<8			
Beryllium, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Beta-bhc	ug/L					<.05			
Bis (2-chloroethoxy) methane	ug/L					<8			
Bis(2-chloroethyl) ether	ug/L					<8			
Bis(2-chloroisopropyl) ether	ug/L					<8			
Bis(2-ethylhexyl) phthalate	ug/L					<8			
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate	ug/L					<8			
Cadmium, total	ug/L	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chlordane	ug/L					<.1			
Chlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzilate	ug/L					<8			
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloroprene	ug/L					<1			
Chromium, total	ug/L	<8	<8	<8	<8	<8	<8	<8	<8
Chrysene	ug/L					<8			
Cis-1,2-dichloroethylene	ug/L	<1.0	<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
Cobalt, total	ug/L	<.8	1.8	<.8	<.8	2.0	<.8	<.8	<2.0
Copper, total	ug/L	<4.0	<4.0	<4.0	<4.0	4.4	<4.0	<4.0	<4.0
Cyanide, total	mg/L					<.005			
Delta-bhc	ug/L					<.05			
Diallate	ug/L					<8			
Dibenzo(a,h)anthracene	ug/L					<8			
Dibenzofuran	ug/L					<8			
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L					<1			
Dieldrin	ug/L					<.05			
Diethyl phthalate	ug/L					<8			
Dimethoate	ug/L					<.4			
Dimethylphthalate	ug/L					<8			
Di-n-butyl phthalate	ug/L					<8			
Di-n-octyl phthalate	ug/L					<8			
Dinoseb	ug/L					<.6			
Diphenylamine	ug/L					<8			
Disulfoton	ug/L					<.4			
Endosulfan i	ug/L					<.05			
Endosulfan ii	ug/L					<.05			
Endosulfan sulfate	ug/L					<.05			
Endrin	ug/L					<.05			
Endrin aldehyde	ug/L					<.05			
Ethyl methacrylate	ug/L					<10			
Ethyl methanesulfonate	ug/L					<8			
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Famphur	ug/L					<.4			
Fluoranthene	ug/L					<8			
Fluorene	ug/L					<8			
Gamma-bhc (lindane)	ug/L					<.05			
Heptachlor	ug/L					<.05			
Heptachlor epoxide	ug/L					<.05			
Hexachlorobenzene	ug/L					<.05			

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

Table 9

Analytical Data Summary for MW-3

Constituents	9/6/2018	5/13/2019	9/26/2019	3/30/2020	9/17/2020	3/9/2021	9/9/2021	3/14/2022	9/1/2022	3/6/2023
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arochlor 1016							<.1			
Arochlor 1221							<.2			
Arochlor 1232							<.2			
Arochlor 1242							<.2			
Arochlor 1248							<.2			
Arochlor 1254							<.1			
Arochlor 1260							<.1			
Arsenic, total	<4.0	<4.0	<4.0	<4.0	<4.0	4.4	5.0	<4.0	<4.0	<4.0
Azobenzene							<8			
Barium, total	796	865	951	867	884	1090	785	843	783	785
Benzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Benzo(a)anthracene							<8			
Benzo(a)pyrene							<8			
Benzo(b)fluoranthene							<8			
Benzo(g,h,i)perylene							<8			
Benzo(k)fluoranthene							<8			
Benzyl alcohol							<8			
Beryllium, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<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	<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
Butyl benzyl phthalate							<8			
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
Chlordane							<.1			
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzilate							<8			
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
Chloroprene							<1			
Chromium, total	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Chrysene							<8			
Cis-1,2-dichloroethylene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.1	1.6	<1.0	<1.0
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	<.8	<.8	<.8	<.8	<.4	<.4	1.3	1.5	<.4	<.4
Copper, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Cyanide, total							<.005			
Delta-bhc							<.05			
Diallate							<8			
Dibenzo(a,h)anthracene							<8			
Dibenzofuran							<8			
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane							<1			
Dieldrin							<.05			
Diethyl phthalate							<8			
Dimethoate							<.4			
Dimethylphthalate							<8			
Di-n-butyl phthalate							<8			
Di-n-octyl phthalate							<8			
Dinoseb							<.5			
Diphenylamine							<8			
Disulfoton							<.4			
Endosulfan i							<.05			
Endosulfan ii							<.05			
Endosulfan sulfate							<.05			
Endrin							<.05			
Endrin aldehyde							<.05			
Ethyl methacrylate							<10			
Ethyl methanesulfonate							<8			
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Famphur							<.4			
Fluoranthene							<8			
Fluorene							<8			
Gamma-bhc (lindane)							<.05			
Heptachlor							<.05			
Heptachlor epoxide							<.05			
Hexachlorobenzene							<.05			

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

Table 9

Analytical Data Summary for MW-3

Constituents	9/8/2023	3/20/2024	9/25/2024	3/11/2025	9/8/2025
Antimony, total	<2	<2	<2	<2	<1
Arochlor 1016					
Arochlor 1221					
Arochlor 1232					
Arochlor 1242					
Arochlor 1248					
Arochlor 1254					
Arochlor 1260					
Arsenic, total	<4.0	<4.0	<4.0	<4.0	<2.0
Azobenzene					
Barium, total	730	747	755	736	815
Benzene	<1	<1	<1	<1	<1
Benzo(a)anthracene					
Benzo(a)pyrene					
Benzo(b)fluoranthene					
Benzo(g,h,i)perylene					
Benzo(k)fluoranthene					
Benzyl alcohol					
Beryllium, total	<4.0	<4.0	<4.0	<4.0	<.5
Beta-bhc					
Bis (2-chloroethoxy) methane					
Bis(2-chloroethyl) ether					
Bis(2-chloroisopropyl) ether					
Bis(2-ethylhexyl) phthalate					
Bromochloromethane	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1
Butyl benzyl phthalate					
Cadmium, total	<.8	<.8	<.8	<.8	<.2
Carbon disulfide	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1
Chlordane					
Chlorobenzene	<1	<1	<1	<1	<1
Chlorobenzilate					
Chloroethane	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1
Chloroprene					
Chromium, total	<8	<8	<8	<8	<1
Chrysene					
Cis-1,2-dichloroethylene	<1.0	<1.0	<1.0	<1.0	<1.0
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1
Cobalt, total	<.4	<.4	<.4	<.4	<.5
Copper, total	<4.0	<4.0	<4.0	<4.0	<5.0
Cyanide, total					
Delta-bhc					
Diallate					
Dibenzo(a,h)anthracene					
Dibenzofuran					
Dibromochloromethane	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1
Dichlorodifluoromethane					
Dieldrin					
Diethyl phthalate					
Dimethoate					
Dimethylphthalate					
Di-n-butyl phthalate					
Di-n-octyl phthalate					
Dinoseb					
Diphenylamine					
Disulfoton					
Endosulfan i					
Endosulfan ii					
Endosulfan sulfate					
Endrin					
Endrin aldehyde					
Ethyl methacrylate					
Ethyl methanesulfonate					
Ethylbenzene	<1	<1	<1	<1	<1
Famphur					
Fluoranthene					
Fluorene					
Gamma-bhc (lindane)					
Heptachlor					
Heptachlor epoxide					
Hexachlorobenzene					

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

Table 9

Analytical Data Summary for MW-3

Constituents	Units	9/18/2014	4/29/2015	10/7/2015	4/19/2016	9/19/2016	3/21/2017	10/12/2017	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	mg/L					<1			
Isodrin	ug/L					<8			
Isophorone	ug/L					<8			
Isosafrole	ug/L					<8			
Kepone	ug/L					<8			
Lead, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Mercury, total	ug/L					<.5			
Methacrylonitrile	ug/L					<1			
Methapyrilene	ug/L					<8			
Methoxychlor	ug/L					<.05			
Methyl iodide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Methyl methacrylate	ug/L					<1			
Methyl methanesulfonate	ug/L					<8			
Methyl parathion	ug/L					<.4			
Methylene chloride	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene	ug/L					<8			
Nickel, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Nitrobenzene	ug/L					<8			
N-nitrosodiethylamine	ug/L					<8			
N-nitrosodimethylamine	ug/L					<8			
N-nitrosodi-n-butylamine	ug/L					<8			
N-nitroso-di-n-propylamine	ug/L					<8			
N-nitrosodiphenylamine	ug/L					<8			
N-nitrosomethylethylamine	ug/L					<8			
N-nitrosopiperidine	ug/L					<8			
N-nitrosopyrrolidine	ug/L					<8			
O,o,o-triethyl phosphorothioate	ug/L					<.4			
O-toluidine	ug/L					<8			
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
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Solids, total suspended	mg/L	33	179	23	14	101	45	718	
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Sulfide, total	mg/L					<.1			
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Thionazin	ug/L					<.4			
Tin, total	ug/L					<20			
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Toxaphene	ug/L					<.2			
Trans-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	ug/L	<20.0	<20.0	<20.0	<20.0	20.1	<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	10.1	16.1	<8.0	<8.0	13.2	<8.0	<8.0	<8.0

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

Table 9

Analytical Data Summary for MW-3

Constituents	9/6/2018	5/13/2019	9/26/2019	3/30/2020	9/17/2020	3/9/2021	9/9/2021	3/14/2022	9/1/2022	3/6/2023
Hexachlorobutadiene							<8			
Hexachlorocyclopentadiene							<8			
Hexachloroethane							<8			
Hexachloropropene							<8			
Indeno(1,2,3-cd)pyrene							<8			
Isobutanol							<1			
Isodrin							<8			
Isophorone							<8			
Isosafrole							<8			
Kepone							<8			
Lead, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Mercury, total							<.5			
Methacrylonitrile							<1			
Methapyrene							<8			
Methoxychlor							<.05			
Methyl iodide	<1	<1	<1	<2	<1	<1	<2	<1	<1	<1
Methyl methacrylate							<1			
Methyl methanesulfonate							<8			
Methyl parathion							<.4			
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene							<8			
Nickel, total	<8.0	<4.0	<4.0	<4.0	<4.0	<4.0	7.1	13.1	9.6	<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	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	<8	<4	<4	<4	<4	<4	<4	<4	<4	<4
Solids, total suspended										
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfide, total							<.1			
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Thionazin							<.4			
Tin, total							<20			
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toxaphene							<.2			
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	<20.0	<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	37.9	17.6	28.2	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 9

Analytical Data Summary for MW-3

Constituents	9/8/2023	3/20/2024	9/25/2024	3/11/2025	9/8/2025
Hexachlorobutadiene					
Hexachlorocyclopentadiene					
Hexachloroethane					
Hexachloropropene					
Indeno(1,2,3-cd)pyrene					
Isobutanol					
Isodrin					
Isophorone					
Isosafrole					
Kepone					
Lead, total	<4	<4	<4	<4	<1
Mercury, total					
Methacrylonitrile					
Methapyrilene					
Methoxychlor					
Methyl iodide	<1	<1	<1	<1	<1
Methyl methacrylate					
Methyl methanesulfonate					
Methyl parathion					
Methylene chloride	<5	<5	<5	<5	<5
Naphthalene					
Nickel, total	<4.0	<4.0	<4.0	<4.0	<5.0
Nitrobenzene					
N-nitrosodiethylamine					
N-nitrosodimethylamine					
N-nitrosodi-n-butylamine					
N-nitroso-di-n-propylamine					
N-nitrosodiphenylamine					
N-nitrosomethylethylamine					
N-nitrosopiperidine					
N-nitrosopyrrolidine					
O,o,o-triethyl phosphorothioate					
O-toluidine					
Parathion					
P-dimethylaminoazobenzene					
Pentachlorobenzene					
Pentachloronitrobenzene (pcnb)					
Pentachlorophenol					
Phenacetin					
Phenanthrene					
Phenol					
Phorate					
Pronamide					
Propionitrile					
Pyrene					
Safrole					
Selenium, total	<4	<4	<4	<4	<2
Silver, total	<4	<4	<4	<4	<5
Solids, total suspended					
Styrene	<1	<1	<1	<1	<1
Sulfide, total					
Tetrachloroethylene	<1	<1	<1	<1	<1
Thallium, total	<2.0	<2.0	<2.0	<2.0	<.5
Thionazin					
Tin, total					
Toluene	<1	<1	<1	<1	<1
Toxaphene					
Trans-1,2-dichloroethylene	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1
Vanadium, total	<20.0	<20.0	<20.0	<20.0	4.8
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	19.0

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

Table 9

Analytical Data Summary for MW-9

Constituents	Units	9/17/2014	4/29/2015	10/7/2015	4/19/2016	9/19/2016	3/21/2017	10/12/2017	3/8/2018	9/6/2018
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	ug/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	16.7	<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	<4.0	<4.0	<4.0	<4.0	4.6	<4.0	<4.0	<4.0	<4.0
Barium, total	ug/L	423	488	435	425	432	383	373	374	364
Benzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Bis(2-ethylhexyl) phthalate	ug/L	<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	<1.0	<1.0	<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	<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	<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	<1
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	1.5	1.9	5.0	1.4	10.1	1.4	<.8	<2.0	<.8
Copper, total	ug/L	4.4	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	4.2	6.8	9.0	<4.0	<4.0	<4.0	<4.0	<4.0	<8.0
Selenium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<8
Solids, total suspended	mg/L	266	145	8	15	14	44	1140		
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	ug/L	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	13.2	13.5	<8.0	<8.0	<8.0	<8.0	12.4	11.0	29.4

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

Table 9

Analytical Data Summary for MW-9

Constituents	5/13/2019	9/26/2019	3/30/2020	9/17/2020	3/9/2021	9/9/2021	3/14/2022	9/1/2022	3/6/2023	9/8/2023
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	<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	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	<5	<5	<5	<5	<5	<5	<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	<10.0	<10.0	<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	<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	385	401	375	355	316	353	344	318	351	325
Benzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
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	<.8	<.8
Carbon disulfide	<1.0	<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	<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	<8.0	<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	4.1	<.8	1.4	<.4	<.4	1.1	1.9	1.2	<.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	<2	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	<4.0	6.1	<4.0	5.9	<4.0	4.5	<4.0	<4.0	6.1	<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
Solids, total suspended										
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<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	<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	25.1	21.6	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 9

Analytical Data Summary for MW-9

Constituents	3/20/2024	9/25/2024	3/11/2025	9/8/2025
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	<10.0	<10.0	<10.0	<10.0
Acrylonitrile	<5	<5	<5	<5
Antimony, total	<2	<2	<2	<1
Arsenic, total	<4.0	<4.0	<4.0	<2.0
Barium, total	328	316	359	332
Benzene	<1	<1	<1	<1
Beryllium, total	<4.0	<4.0	<4.0	<.5
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	.9	.3
Carbon disulfide	<1.0	<1.0	<1.0	1.2
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	1.2
Cis-1,2-dichloroethylene	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1
Cobalt, total	.6	.6	1.3	.6
Copper, total	<4.0	<4.0	<4.0	<5.0
Dibromochloromethane	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1
Lead, total	<4	<4	<4	<1
Methyl iodide	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5
Nickel, total	<4.0	4.6	5.0	<5.0
Selenium, total	<4	<4	<4	<2
Silver, total	<4	<4	<4	<5
Solids, total suspended				
Styrene	<1	<1	<1	<1
Tetrachloroethylene	<1	<1	<1	<1
Thallium, total	<2.0	<2.0	<2.0	<.5
Toluene	<1	<1	<1	<1
Trans-1,2-dichloroethylene	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<2
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 10 – Historic SSI and SSL (Confidence Interval Evaluation)
(NOT REQUIRED)

Table 11 – Corrective Action Trend Analysis
(NOT REQUIRED)

Table 12 – Leachate Elevations

Table 12
Leachate Elevations
Annual Water Quality Report
Fremont County Sanitary Landfill
Permit No. 36-SDP-01-74P

Date/Location	PZ-1
1/16/25	0"
2/24/25	0"
3/14/25	0"
4/16/25	0"
5/30/25	0"
6/23/25	0"
7/31/25	0"
8/22/25	0"
9/26/25	0"
10/30/25	0"
11/17/25	0"
12/23/25	0"
Measurements By	Landfill Staff

Table 13 – Gas Monitoring Summary

Table 13
Explosive Gas Monitoring Report
Annual Water Quality Report
Fremont County Sanitary Landfill
Permit No. 36-SDP-01-74P

2025

Monitoring Well Headspace

Location/Date	1/16/25	4/16/25	7/31/25	10/30/25
	% LEL	% LEL	% LEL	% LEL
Old Office/Shop	0	0	0	0
Office	0	0	0	0
Equipment Bldg.	0	0	0	0
RCC Building	0	0	0	0
GP-1	0	0	0	0
GP-2	0	0	0	0
GP-3 (MW-13)	0	0	0	0
GP-4 (MW-11)	0	0	0	0
GWD-1	0	0	0	0
GWD-2	0	0	0	0
A-1	0	0	0	0
A-2	0	0	0	0
A-3	0	0	0	0
A-4	0	0	0	0
A-5	0	0	0	0
A-6	0	0	0	0
A-7	0	0	0	0
A-8	0	0	0	0
A-9	0	0	0	0
Measurements By	Casey Moyer	Casey Moyer	Casey Moyer	Casey Moyer

Appendix A

Field Sampling Forms

**FREMONT COUNTY SANITARY LANDFILL
PERMIT # 36-SDP-01-74P**

3/11/2025

Sampled by: Glenn Hunter

Weather Conditions: Sunny, breezy, 39-45 degrees

IDNR Form 542-1322

Monitoring Well: MW-2 (ug)

Primary Sampling Method:

Secondary Sampling Method:

No-Purge for Appendix I

Purge & Sample for all analytes beyond Appendix I

GENERAL INFORMATION

TOC	1114.14
Well Depth	101.10
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1114.14
Well Depth	101.10
Top Screen	1018.04
Bottom Screen	1013.04
Bottom Well	1013.04
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	96.00
Top sample	1018.14
Bottom sample	1014.14
Turbidity(NTU)	1.56

Date	Time	Water Level	Water Elevation	Notes
3/11/2025	9:13	88.80	1025.34	

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		1.56
Appendix I	Metals	150	150		1.56
Appendix I	VOC	240	240		1.56
Full Appendix II	10 more containers	5620			
Sulfide	Sulfide	250			
Supplemental	Minerals	750			
Total			400	0	

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

WATER SAMPLING METHOD: Purge by Water Method: Lift Pump, then Well Foot, then Sample Collection									
TOC	1114.14	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	101.10	Before purging	3/11/2025	9:13	88.80	1025.34		0.0	
		After purging				1114.14			
		Top of Screen January 1990				1018.04			
						7.30	feet above (+) or below (-) top screen		
		Bottom of Well January 1990				1013.04			
		Bottom of Well	3/11/2025		102.20	1011.94			
						-1.10	feet sedimentation		
		Before Sampling				1114.14			
		Recovery				1114.14			
		Recovery				1114.14			
		Recovery				1114.14			
		Recovery				1114.14			

Monitoring Well: MW-3 (dg)

Primary Sampling Method:

Secondary Sampling Method:

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

GENERAL INFORMATION

TOC	1031.78
Well Depth	33.10
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1031.78
Well Depth	33.10
Top Screen	1009.78
Bottom Screen	999.78
Bottom Well	999.78
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	27.00
Top sample	1004.78
Bottom sample	1000.78
Turbidity(NTU)	0.69

Date	Time	Water Level	Water Elevation	Notes
3/11/2025	10:19	20.65	1011.13	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		0.69
Appendix I	Metals	150	150		0.69
Appendix I	VOC	240	240		0.69
Full Appendix II	10 more containers	5620			
Sulfide	Sulfide	250			
Supplemental	Minerals	750			
Total			400	0	

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

TOC	1031.78	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	33.10	Before purging	3/11/2025	10:19	20.65	1011.13		0.0	
		After purging				1031.78			
		Top of Screen January 1990				1009.78			
						1.35			feet above (+) or below (-) top screen
		Bottom of Well January 1990				999.78			
		Bottom of Well	3/11/2025		33.10	998.68			
						-1.10			feet sedimentation
		Before Sampling				1031.78			
		Recovery				1031.78			
		Recovery				1031.78			
		Recovery				1031.78			
		Recovery				1031.78			

Monitoring Well: MW-9 (dg)

Primary Sampling Method:

Secondary Sampling Method:

No-Purge for Appendix I

Purge & Sample for all analytes beyond Appendix I

GENERAL INFORMATION

TOC	1040.72
Well Depth	45.80
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1040.72
Well Depth	45.80
Top Screen	1004.92
Bottom Screen	994.92
Bottom Well	994.92
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	40.00
Top sample	1000.72
Bottom sample	996.72
Turbidity(NTU)	4.62

Date	Time	Water Level	Water Elevation	Notes
3/11/2025	10:40	20.66	1020.06	

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		4.62
Appendix I	Metals	150	150		4.62
Appendix I	VOC	240	240		4.62
Full Appendix II	10 more containers	5620			
Sulfide	Sulfide	250			
Supplemental	Minerals	750	0		
Total			400	0	

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

TOC	1040.72	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	45.80	Before purging	3/11/2025	10:40	20.66	1020.06		0.0	
		After purging				1040.72			
		Top of Screen January 1990				1004.92			
						15.14			feet above (+) or below (-) top screen
		Bottom of Well January 1990				994.92			
		Bottom of Well	3/11/2025		46.15	994.57			
						-0.35			feet sedimentation
		Before Sampling				1040.72			
		Recovery				1040.72			
		Recovery				1040.72			
		Recovery				1040.72			
		Recovery				1040.72			

IDNR Form 542-1322

Monitoring Well: MW-12 (dg)
Background Well

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

GENERAL INFORMATION

TOC	1074.98
Well Depth	55.30
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1074.98
Well Depth	55.30
Top Screen	1035.50
Bottom Screen	1020.50
Bottom Well	1020.50
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	51.00
Top sample	1023.98
Bottom sample	1019.98
Turbidity(NTU)	75.80

Date	Time	Water Level	Water Elevation	Notes
3/11/2025	11:11	52.61	1022.37	

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		75.80
Appendix I	Metals	150	150		75.80
Appendix I	VOC	240	240		75.80
Full Appendix II	10 more containers	5620			
Sulfide	Sulfide	250			
Supplemental	Minerals	750			
Total			400	0	

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

TOC	1074.98	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	55.30	Before purging	3/11/2025	11:11	52.61	1022.37		0.0	
		After purging				1074.98			
		Top of Screen January 1990				1035.50			
						-13.13			feet above (+) or below (-) top screen
		Bottom of Well January 1990				1020.50			
		Bottom of Well	3/11/2025		55.30	1019.68			
						-0.82			feet sedimentation
		Before Sampling				1074.98			
		Recovery				1074.98			
		Recovery				1074.98			
		Recovery				1074.98			
		Recovery				1074.98			

IDNR Form 542-1322

Monitoring Well: MW-14 (dg)
Background Well

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

GENERAL INFORMATION

TOC	1076.25
Well Depth	81.30
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1076.25
Well Depth	81.30
Top Screen	1000.60
Bottom Screen	995.60
Bottom Well	995.60
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	75.00
Top sample	1001.25
Bottom sample	997.25
Turbidity(NTU)	1.07

Date	Time	Water Level	Water Elevation	Notes
3/11/2025	11:39	52.72	1023.53	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		1.07
Appendix I	Metals	150	150		1.07
Appendix I	VOC	240	240		1.07
Full Appendix II	10 more containers	5620			
Sulfide	Sulfide	250			
Supplemental	Minerals	750			
Total			400	0	

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

TOC	1076.25	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	81.30	Before purging	3/11/2025	11:39	52.72	1023.53		0.0	
		After purging				1076.25			
		Top of Screen January 1990				1000.60			
						22.93			feet above (+) or below (-) top screen
		Bottom of Well January 1990				995.60			
		Bottom of Well	3/11/2025		81.60	994.65			
						-0.95			feet sedimentation
		Before Sampling				1076.25			
		Recovery				1076.25			
		Recovery				1076.25			
		Recovery				1076.25			
		Recovery				1076.25			

Monitoring Well: MW-15 (dg)

Primary Sampling Method:

Secondary Sampling Method:

No-Purge for Appendix I

Purge & Sample for all analytes beyond Appendix I

GENERAL INFORMATION

TOC	1025.26
Well Depth	27.70
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	1025.26
Well Depth	27.70
Top Screen	1007.56
Bottom Screen	997.56
Bottom Well	997.56
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	21.00
Top sample	1004.26
Bottom sample	1000.26
Turbidity(NTU)	1.26

Date	Time	Water Level	Water Elevation	Notes
3/11/2025	9:26	9.95	1015.31	

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		1.26
Appendix I	Metals	150	150		1.26
Appendix I	VOC	240	240		1.26
Full Appendix II	10 more containers	5620			
Sulfide	Sulfide	250			
Supplemental	Minerals	750			
Total			400	0	

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

TOC	1025.26	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	27.70	Before purging	3/11/2025	9:26	9.95	1015.31		0.0	
		After purging				1025.26			
		Top of Screen January 1990				1007.56			
						7.75			feet above (+) or below (-) top screen
		Bottom of Well January 1990				997.56			
		Bottom of Well	3/11/2025		27.70	997.56			
						0.00			feet sedimentation
		Before Sampling				1025.26			
		Recovery				1025.26			
		Recovery				1025.26			
		Recovery				1025.26			
		Recovery				1025.26			

Monitoring Well: MW-18 (ug)

Primary Sampling Method:

Secondary Sampling Method:

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

GENERAL INFORMATION

TOC	1118.78
Well Depth	99.00
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	1118.78
Well Depth	99.00
Top Screen	1034.78
Bottom Screen	1019.78
Bottom Well	1019.78
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	93.00
Top sample	1025.78
Bottom sample	1021.78
Turbidity(NTU)	9.18

Date	Time	Water Level	Water Elevation	Notes
3/11/2025	8:57	94.40	1024.38	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		9.18
Appendix I	Metals	150	150		9.18
Appendix I	VOC	240	240		9.18
Full Appendix II	10 more containers	5620			
Sulfide	Sulfide	250			
Supplemental	Minerals	750			
Total			400	0	

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

TOC	1118.78	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	99.00	Before purging	3/11/2025		94.40	1024.38		0.0	
		After purging				1118.78			
		Top of Screen January 1990				1034.78			
						-10.40			feet above (+) or below (-) top screen
		Bottom of Well January 1990				1019.78			
		Bottom of Well	3/11/2025		98.00	1020.78			
						1.00			feet sedimentation
		Before Sampling				1118.78			
		Recovery				1118.78			
		Recovery				1118.78			
		Recovery				1118.78			
		Recovery				1118.78			

IDNR Form 542-1322

Monitoring Well: MW-19 (dg)

Primary Sampling Method:

Secondary Sampling Method:

No-Purge for Appendix I

Purge & Sample for all analytes beyond Appendix I

GENERAL INFORMATION

TOC	1078.92
Well Depth	61.65
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1078.92
Well Depth	61.65
Top Screen	1032.22
Bottom Screen	1017.22
Bottom Well	1017.22
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	57.00
Top sample	1021.92
Bottom sample	1017.92
Turbidity(NTU)	1.93

Date	Time	Water Level	Water Elevation	Notes
3/11/2025	11:23	57.18	1021.74	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		1.93
Appendix I	Metals	150	150		1.93
Appendix I	VOC	240	240		1.93
Full Appendix II	10 more containers	5620			
Sulfide	Sulfide	250			
Supplemental	Minerals	750			
Total			400	0	

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

TOC	1078.92	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	61.65	Before purging	3/11/2025	11:23	57.18	1021.74		0.0	
		After purging				1078.92			
		Top of Screen January 1990				1032.22			
						-10.48	feet above (+) or below (-) top screen		
		Bottom of Well January 1990				1017.22			
		Bottom of Well	3/11/2025		61.65	1017.27			
						0.05	feet sedimentation		
		Before Sampling				1078.92			
		Recovery				1078.92			
		Recovery				1078.92			
		Recovery				1078.92			
		Recovery				1078.92			

Monitoring Well: MW-21 (dg)

Primary Sampling Method:

Secondary Sampling Method:

No-Purge for Appendix I

Purge & Sample for all analytes beyond Appendix I

GENERAL INFORMATION

TOC	1029.39
Well Depth	38.80
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1029.39
Well Depth	38.80
Top Screen	1000.59
Bottom Screen	990.59
Bottom Well	990.59
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	32.00
Top sample	997.39
Bottom sample	993.39
Turbidity(NTU)	0.83

Date	Time	Water Level	Water Elevation	Notes
3/11/2025	9:43	27.62	1001.77	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		0.83
Appendix I	Metals	150	150		0.83
Appendix I	VOC	240	240		0.83
Full Appendix II	10 more containers	5620			
Sulfide	Sulfide	250			
Supplemental	Minerals	750			
Total			400	0	

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

TOC	1029.39	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	38.80	Before purging	3/11/2025	9:43	27.62	1001.77		0.0	
		After purging				1029.39			
		Top of Screen January 1990				1000.59			
						1.18			feet above (+) or below (-) top screen
		Bottom of Well January 1990				990.59			
		Bottom of Well	3/11/2025		38.80	990.59			
						0.00			feet sedimentation
		Before Sampling				1029.39			
		Recovery				1029.39			
		Recovery				1029.39			
		Recovery				1029.39			
		Recovery				1029.39			

Monitoring Well: MW-23 (dg)

Primary Sampling Method:

Secondary Sampling Method:

No-Purge for Appendix I

Purge & Sample for all analytes beyond Appendix I

GENERAL INFORMATION

TOC	1031.83
Well Depth	26.80
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1031.83
Well Depth	26.80
Top Screen	1015.03
Bottom Screen	1005.03
Bottom Well	1004.03
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	20.00
Top sample	1011.83
Bottom sample	1007.83
Turbidity(NTU)	0.79

Date	Time	Water Level	Water Elevation	Notes
3/11/2025	10:08	14.83	1017.00	

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		0.79
Appendix I	Metals	150	150		0.79
Appendix I	VOC	240	240		0.79
Full Appendix II	10 more containers	5620			
Sulfide	Sulfide	250			
Supplemental	Minerals	750			
Total			400	0	

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

TOC	1031.83	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	26.80	Before purging	3/11/2025	10:08	14.83	1017.00		0.0	
		After purging				1031.83			
		Top of Screen January 1990				1015.03			
						1.97			feet above (+) or below (-) top screen
		Bottom of Well January 1990				1005.03			
		Bottom of Well	3/11/2025		26.80	1005.03			
						0.00			feet sedimentation
		Before Sampling				1031.83			
		Recovery				1031.83			
		Recovery				1031.83			
		Recovery				1031.83			
		Recovery				1031.83			

FREMONT COUNTY SANITARY LANDFILL
PERMIT # 36-SDP-01-74P

3/11/2025 Sampled by: Glenn Hunter Weather Conditions: Sunny, breezy, 39-45 degrees

IDNR Form 542-1324

GWD-1	Date	Time	Type	Flowing	Quantity		Discolored	Odor	Litter
	3/11/2025		Underdrain	no	pooled		No	No	No
									Turbidity(NTU)

IDNR Form 542-1324

GWD-2	Date	Time	Type	Flowing	Quantity		Discolored	Odor	Litter
	3/11/2025	9:56	Underdrain	yes	250 ml/10 sec		No	No	No
									Turbidity(NTU)

0.81

FREMONT COUNTY SANITARY LANDFILL
PERMIT # 36-SDP-01-74P

9/8/2025

Sampled by: Todd Whipple

Weather Conditions: Sunny, calm, 65-75 degrees

IDNR Form 542-1322

Monitoring Well: MW-2 (ug)

Primary Sampling Method:
Secondary Sampling Method:

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

GENERAL INFORMATION

TOC	1114.14
Well Depth	101.10
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1114.14
Well Depth	101.10
Top Screen	1018.04
Bottom Screen	1013.04
Bottom Well	1013.04
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	95.00
Top sample	1019.14
Bottom sample	1015.14
Turbidity(NTU)	4.96

Date	Time	Water Level	Water Elevation	Notes
9/8/2025	9:30	89.06	1025.08	

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		4.96
Appendix I	Metals	150	150		4.96
Appendix I	VOC	240	240		4.96
Full Appendix II	10 more containers	5620			
Sulfide	Sulfide	250			
Supplemental	Minerals	750			
Total			400	0	

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

TOC	1114.14	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	101.10	Before purging	9/8/2025	9:30	89.06	1025.08		0.0	
		After purging				1114.14			
		Top of Screen January 1990				1018.04			
						7.04			feet above (+) or below (-) top screen
		Bottom of Well January 1990				1013.04			
		Bottom of Well	9/8/2025		102.20	1011.94			
						-1.10			feet sedimentation
		Before Sampling				1114.14			
		Recovery				1114.14			
		Recovery				1114.14			
		Recovery				1114.14			
		Recovery				1114.14			

Monitoring Well: MW-3 (dg)

Primary Sampling Method:

Secondary Sampling Method:

No-Purge for Appendix I

Purge & Sample for all analytes beyond Appendix I

GENERAL INFORMATION

TOC	1031.78
Well Depth	33.10
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1031.78
Well Depth	33.10
Top Screen	1009.78
Bottom Screen	999.78
Bottom Well	999.78
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	27.00
Top sample	1004.78
Bottom sample	1000.78
Turbidity(NTU)	0.80

Date	Time	Water Level	Water Elevation	Notes
9/8/2025	11:13	21.73	1010.05	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		0.80
Appendix I	Metals	150	150		0.80
Appendix I	VOC	240	240		0.80
Full Appendix II	10 more containers	5620			
Sulfide	Sulfide	250			
Supplemental	Minerals	750			
Total			400	0	

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

TOC	1031.78	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	33.10	Before purging	9/8/2025	11:13	21.73	1010.05		0.0	
		After purging				1031.78			
		Top of Screen January 1990				1009.78			
						0.27			feet above (+) or below (-) top screen
		Bottom of Well January 1990				999.78			
		Bottom of Well	9/8/2025		33.10	998.68			
						-1.10			feet sedimentation
		Before Sampling				1031.78			
		Recovery				1031.78			
		Recovery				1031.78			
		Recovery				1031.78			
		Recovery				1031.78			

Monitoring Well: MW-9 (dg)

Primary Sampling Method:

Secondary Sampling Method:

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

GENERAL INFORMATION

TOC	1040.72
Well Depth	45.80
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1040.72
Well Depth	45.80
Top Screen	1004.92
Bottom Screen	994.92
Bottom Well	994.92
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	40.00
Top sample	1000.72
Bottom sample	996.72
Turbidity(NTU)	2.66

Date	Time	Water Level	Water Elevation	Notes
9/8/2025	11:00	20.89	1019.83	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		2.66
Appendix I	Metals	150	150		2.66
Appendix I	VOC	240	240		2.66
Full Appendix II	10 more containers	5620			
Sulfide	Sulfide	250			
Supplemental	Minerals	750	0		
Total			400	0	

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

TOC	1040.72	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	45.80	Before purging	9/8/2025	11:00	20.89	1019.83		0.0	
		After purging				1040.72			
		Top of Screen January 1990				1004.92			
						14.91	feet above (+) or below (-) top screen		
		Bottom of Well January 1990				994.92			
		Bottom of Well	9/8/2025		46.15	994.57			
						-0.35	feet sedimentation		
		Before Sampling				1040.72			
		Recovery				1040.72			
		Recovery				1040.72			
		Recovery				1040.72			
		Recovery				1040.72			

IDNR Form 542-1322

Monitoring Well: MW-12 (dg)
Background Well

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

GENERAL INFORMATION

TOC	1074.98
Well Depth	55.30
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1074.98
Well Depth	55.30
Top Screen	1035.50
Bottom Screen	1020.50
Bottom Well	1020.50
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	53.00
Top sample	1021.98
Bottom sample	1017.98
Turbidity(NTU)	4.14

Date	Time	Water Level	Water Elevation	Notes
9/8/2025	12:00	52.83	1022.15	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		4.14
Appendix I	Metals	150	150		4.14
Appendix I	VOC	240	240		4.14
Full Appendix II	10 more containers	5620			
Sulfide	Sulfide	250			
Supplemental	Minerals	750			
Total			400	0	

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

TOC	1074.98	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	55.30	Before purging	9/8/2025	12:00	52.83	1022.15		0.0	
		After purging				1074.98			
		Top of Screen January 1990				1035.50			
						-13.35			feet above (+) or below (-) top screen
		Bottom of Well January 1990				1020.50			
		Bottom of Well	9/8/2025		55.30	1019.68			
						-0.82			feet sedimentation
		Before Sampling				1074.98			
		Recovery				1074.98			
		Recovery				1074.98			
		Recovery				1074.98			
		Recovery				1074.98			

IDNR Form 542-1322

Monitoring Well: MW-14 (dg)
Background Well

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

GENERAL INFORMATION

TOC	1076.25
Well Depth	81.30
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1076.25
Well Depth	81.30
Top Screen	1000.60
Bottom Screen	995.60
Bottom Well	995.60
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	75.00
Top sample	1001.25
Bottom sample	997.25
Turbidity(NTU)	1.41

Date	Time	Water Level	Water Elevation	Notes
9/8/2025	11:34	53.10	1023.15	

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		1.41
Appendix I	Metals	150	150		1.41
Appendix I	VOC	240	240		1.41
Full Appendix II	10 more containers	5620			
Sulfide	Sulfide	250			
Supplemental	Minerals	750			
Total			400	0	

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

TOC	1076.25	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	81.30	Before purging	9/8/2025	11:34	53.10	1023.15		0.0	
		After purging				1076.25			
		Top of Screen January 1990				1000.60			
						22.55			feet above (+) or below (-) top screen
		Bottom of Well January 1990				995.60			
		Bottom of Well	9/8/2025		81.60	994.65			
						-0.95			feet sedimentation
		Before Sampling				1076.25			
		Recovery				1076.25			
		Recovery				1076.25			
		Recovery				1076.25			
		Recovery				1076.25			

Monitoring Well: MW-15 (dg)

Primary Sampling Method:

Secondary Sampling Method:

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

GENERAL INFORMATION

TOC	1025.26
Well Depth	27.70
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	1025.26
Well Depth	27.70
Top Screen	1007.56
Bottom Screen	997.56
Bottom Well	997.56
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	22.00
Top sample	1003.26
Bottom sample	999.26
Turbidity(NTU)	0.51

Date	Time	Water Level	Water Elevation	Notes
9/8/2025	9:44	8.72	1016.54	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		0.51
Appendix I	Metals	150	150		0.51
Appendix I	VOC	240	240		0.51
Full Appendix II	10 more containers	5620			
Sulfide	Sulfide	250			
Supplemental	Minerals	750			
Total			400	0	

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

TOC	1025.26	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	27.70	Before purging	9/8/2025	9:44	8.72	1016.54		0.0	
		After purging				1025.26			
		Top of Screen January 1990				1007.56			
						8.98			feet above (+) or below (-) top screen
		Bottom of Well January 1990				997.56			
		Bottom of Well	9/8/2025		27.70	997.56			
						0.00			feet sedimentation
		Before Sampling				1025.26			
		Recovery				1025.26			
		Recovery				1025.26			
		Recovery				1025.26			
		Recovery				1025.26			

Monitoring Well: MW-18 (ug)

Primary Sampling Method:

Secondary Sampling Method:

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

GENERAL INFORMATION

TOC	1118.78
Well Depth	99.00
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	1118.78
Well Depth	99.00
Top Screen	1034.78
Bottom Screen	1019.78
Bottom Well	1019.78
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	
Top sample	1118.78
Bottom sample	1114.78
Turbidity(NTU)	

Date	Time	Water Level	Water Elevation	Notes
9/8/2025			1118.78	No Sample Wasps

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		0.00
Appendix I	Metals	150	150		0.00
Appendix I	VOC	240	240		0.00
Full Appendix II	10 more containers	5620			
Sulfide	Sulfide	250			
Supplemental	Minerals	750			
Total			400	0	

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

TOC	1118.78	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	99.00	Before purging	9/8/2025		0.00	1118.78		0.0	
		After purging				1118.78			
		Top of Screen January 1990				1034.78			
						84.00			feet above (+) or below (-) top screen
		Bottom of Well January 1990				1019.78			
		Bottom of Well	9/8/2025			1118.78			
						99.00			feet sedimentation
		Before Sampling				1118.78			
		Recovery				1118.78			
		Recovery				1118.78			
		Recovery				1118.78			
		Recovery				1118.78			

IDNR Form 542-1322

Monitoring Well: MW-19 (dg)

Primary Sampling Method:
Secondary Sampling Method:

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

GENERAL INFORMATION

TOC	1078.92
Well Depth	61.65
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1078.92
Well Depth	61.65
Top Screen	1032.22
Bottom Screen	1017.22
Bottom Well	1017.22
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	58.00
Top sample	1020.92
Bottom sample	1016.92
Turbidity(NTU)	2.42

Date	Time	Water Level	Water Elevation	Notes
9/8/2025	11:45	57.55	1021.37	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		2.42
Appendix I	Metals	150	150		2.42
Appendix I	VOC	240	240		2.42
Full Appendix II	10 more containers	5620			
Sulfide	Sulfide	250			
Supplemental	Minerals	750			
Total			400	0	

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

TOC	1078.92	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	61.65	Before purging	9/8/2025	11:45	57.55	1021.37		0.0	
		After purging				1078.92			
		Top of Screen January 1990				1032.22			
						-10.85			feet above (+) or below (-) top screen
		Bottom of Well January 1990				1017.22			
		Bottom of Well	9/8/2025		61.55	1017.37			
						0.15			feet sedimentation
		Before Sampling				1078.92			
		Recovery				1078.92			
		Recovery				1078.92			
		Recovery				1078.92			
		Recovery				1078.92			

Monitoring Well: MW-21 (dg)

Primary Sampling Method:
Secondary Sampling Method:

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

GENERAL INFORMATION

TOC	1029.39
Well Depth	38.80
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1029.39
Well Depth	38.80
Top Screen	1000.59
Bottom Screen	990.59
Bottom Well	990.59
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	33.00
Top sample	996.39
Bottom sample	992.39
Turbidity(NTU)	1.30

Date	Time	Water Level	Water Elevation	Notes
9/8/2025	10:09	28.04	1001.35	

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		1.30
Appendix I	Metals	150	150		1.30
Appendix I	VOC	240	240		1.30
Full Appendix II	10 more containers	5620			
Sulfide	Sulfide	250			
Supplemental	Minerals	750			
Total			400	0	

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

TOC	1029.39	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	38.80	Before purging	9/8/2025	10:09	28.04	1001.35		0.0	
		After purging				1029.39			
		Top of Screen January 1990				1000.59			
						0.76			feet above (+) or below (-) top screen
		Bottom of Well January 1990				990.59			
		Bottom of Well	9/8/2025		38.80	990.59			
						0.00			feet sedimentation
		Before Sampling				1029.39			
		Recovery				1029.39			
		Recovery				1029.39			
		Recovery				1029.39			
		Recovery				1029.39			

Monitoring Well: MW-23 (dg)

Primary Sampling Method:

Secondary Sampling Method:

No-Purge for Appendix I

Purge & Sample for all analytes beyond Appendix I

GENERAL INFORMATION

TOC	1031.83
Well Depth	26.80
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1031.83
Well Depth	26.80
Top Screen	1015.03
Bottom Screen	1005.03
Bottom Well	1004.03
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	21.00
Top sample	1010.83
Bottom sample	1006.83
Turbidity(NTU)	0.65

Date	Time	Water Level	Water Elevation	Notes
9/8/2025	10:40	14.48	1017.35	

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		0.65
Appendix I	Metals	150	150		0.65
Appendix I	VOC	240	240		0.65
Full Appendix II	10 more containers	5620			
Sulfide	Sulfide	250			
Supplemental	Minerals	750			
Total			400	0	

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

TOC	1031.83	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	26.80	Before purging	9/8/2025	10:40	14.48	1017.35		0.0	
		After purging				1031.83			
		Top of Screen January 1990				1015.03			
						2.32			feet above (+) or below (-) top screen
		Bottom of Well January 1990				1005.03			
		Bottom of Well	9/8/2025		26.80	1005.03			
						0.00			feet sedimentation
		Before Sampling				1031.83			
		Recovery				1031.83			
		Recovery				1031.83			
		Recovery				1031.83			
		Recovery				1031.83			

**FREMONT COUNTY SANITARY LANDFILL
PERMIT # 36-SDP-01-74P**

9/8/2025

Sampled by: Todd Whipple

Weather Conditions: Sunny, calm, 65-75 degrees

IDNR Form 542-1324

GWD-1	Date	Time	Type	Flowing	Quantity		Discolored	Odor	Litter
	9/8/2025		Underdrain	no	pooled		No	No	No
									Turbidity(NTU)

IDNR Form 542-1324

GWD-2	Date	Time	Type	Flowing	Quantity	Discolored	Odor	Litter
	9/8/2025		Underdrain	dry		No	No	No
								Turbidity(NTU)

Appendix B

Statistical Report

APPENDIX B.1 –1st Statistical Evaluation

GROUND WATER STATISTICS
FOR THE
FREMONT COUNTY LANDFILL

First Semi-Annual Monitoring Period in 2025

Prepared for:
Fremont County Landfill
2879 250th Street
Sidney, Fremont County, IA

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

March 2025

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 period in 2025 at the Fremont County Landfill in Sidney, Fremont 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 current Fremont County Landfill data. The statistical plan conforms with IAC 567, Chapter 113.10 and the USEPA Unified Guidance document (*“Statistical Analysis of Ground-Water Monitoring Data at RCRA Facilities, March 2009”*).

Ground Water Monitoring Program

The groundwater monitoring network for Fremont County Sanitary Landfill includes sample points GWD-1, GWD-2, MW-2, MW-3, MW-9, MW-12, MW-14, MW-15, MW-18, MW-19, MW-21, and MW-23. Monitoring wells MW-16 and MW-17 are to be phased in with the completed construction of Phase 3 and Phase 4, respectively. Each of the groundwater monitoring wells is to be sampled at least semiannually and analyzed for the detection monitoring parameters listed in 113.10(5), which includes 15 inorganic constituents and 47 organic compounds, summarized in Table 1 below.

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

Organic Compounds:

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

Inorganic constituents:

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

The ground water data obtained during the first semi-annual monitoring period in 2025 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 limits method was applied to the Fremont 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 eight samples have been collected, the practical quantitation limit (PQL) becomes the nonparametric prediction limit.

Results of the Interwell Statistics

The background data used in this statistical analysis includes the ground water data collected from ground water wells MW-2, MW-14, MW-18, and MW-19 during the period from September 2014, when the sampling protocol changed, through the current data. A summary of the background data 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 GWD-2, MW-3, MW-9, MW-12, MW-15, MW-21, and MW-23 compared to the site prediction limits. Prediction limit exceedances are flagged with asterisks. For the most current data, the site prediction limit exceedances detected are summarized in the table below.

Trace Metal Prediction Limit Exceedances during the First Semi-Annual Monitoring Event in 2025

Well	Trace Metal Detected	Result, µg/L	Prediction Limit, µg/L	Prediction Limit Type	Verified/ Awaiting verification
MW-12	Arsenic	7.6	6.1000	Nonparametric	Awaiting verification
	Barium	671	565.3280	Normal	Awaiting verification
	Nickel	31.4	20.7000	Nonparametric	Awaiting verification
MW-3	Barium	736	565.3280	Normal	Verified

The detection frequencies of the parameters in the up and down gradient monitoring wells are summarized in Table 3. Only barium is detected at a frequency greater than or equal to 50% in the upgradient wells so only barium was tested for normality. The remainder of the metals are rarely detected (less than 50%) in the upgradient wells so nonparametric prediction limits were used in those cases. Table 4 summarizes the results of the Shapiro-Wilk test.

Table 5 is a summary of the statistics and prediction limits determined for the metals. Time series graphs of each of the parameters at each well with the corresponding prediction limits are attached.

A statistical power curve indicates the expected false assessments for the site as a whole. The false positive rate for interwell analyses is the percentage of failures when the upgradient versus downgradient true mean difference equals zero. False negative rate indicates the chance of missing contamination at a single well for a single constituent. The statistical power is a function of the number of wells included, the number of constituents compared, the detection frequencies, and the data distributions involved. For interwell analysis, the site-wide false positive rate is 1% and the test becomes sensitive to 4 standard deviation unit increases over background.

Intrawell statistics

Sample point GWD-2 was also compared to background using intrawell comparisons. Intrawell statistics are appropriate for facilities where the upgradient wells do not accurately characterize the natural ground water conditions downgradient from the facility. This may be due to different hydrogeological conditions where the wells are screened, having too few upgradient wells to account for the spatial variability, or the site exhibiting no definable hydraulic gradient. Intrawell statistics compare new measurements to the historical data at each ground water monitoring well independently. It is recommended that at least eight background samples be obtained prior to performing the statistics.

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

The combined Shewhart-CUSUM control chart assumes that the data are independent and normally distributed with a fixed mean and a constant variance. Independent data is much more critical than the normality assumption. To achieve independence, it is recommended that data are collected no more frequently than quarterly to account for seasonal variation. The combined Shewhart-CUSUM control chart

is extremely robust to deviations from normality. Because the control charts do not use a specific multiplier based on a normal distribution, it is more conservative to assume normality.

It is recommended that at least eight rounds of data be available to provide a reliable estimate of the mean and standard deviation of the parameter concentration, although the control charts will be generated with as few as four data points. Having only four data points may produce greater uncertainty in the mean and standard deviation of the background data, leading to higher control limits, thus having a potentially high false negative rate.

Many groundwater monitoring parameters are not detected at a frequency great enough to generate the combined Shewhart-CUSUM control charts. For constituents that are detected less than 25% of the time at a particular well, the data should be plotted as a time series until a sufficient number of data points are available to provide a 99% confidence nonparametric prediction limit. Thirteen independent measurements (with 1 resample) are necessary to achieve a 99% confidence (1% false positive rate) nonparametric prediction limit. Eight independent measurements (for pass 1 of 2 resamples) are necessary to achieve a 99% confidence nonparametric prediction limit. The nonparametric prediction limit is the largest determination out of the data set collected for that well and parameter. If the detection frequency is 0% after thirteen samples have been collected, the practical quantitation limit (PQL) becomes the nonparametric prediction limit.

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

The verification resample plan is an integral function of the statistical plan to reduce the probability that anomalous data obtained after the background has been established, is indicative of a landfill release.

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

Results of the Intrawell Statistics

The trace metals data at GWD-2 were evaluated using the combined Shewhart-CUSUM control chart method. The background at GWD-2 includes the data obtained from September 2014 through 2020.

As ground water monitoring at a municipal solid waste facility proceeds, it is recommended to update background data sets periodically with valid detection monitoring results that are representative of background groundwater quality not affected by leakage from a monitored unit. Failure to update background will exclude factors such as natural temporal variation, changes in field or laboratory methodologies, and changes in the water table due to meteorological conditions or other influences.

A summary of the intrawell statistics is included in Attachment C, Table 1 “Summary Statistics and Intermediate Computations for Combined Shewhart-CUSUM Control Charts.” The control charts or time series graphs follow the summary table. For the parameters evaluated, there were no statistical limit exceedances identified.

Slight increasing trends were detected in the background data for barium and cobalt at GWD-2.

A control chart factor was selected to provide a balance of the site-wide false positive and false negative rates. A statistical power curve indicates the expected false assessments for the site as a whole. For intrawell analysis, the site-wide false positive rate is 2% and the test becomes sensitive to 4 standard deviation units over background.

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

The 95% LCLs for the detected metals are below MCLs or Iowa groundwater protection 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. There were no VOCs detected in the ground water at Fremont County Landfill during the first semi-annual monitoring event in 2025. Historical VOC detections in the ground water are summarized in Attachment E.

CONCLUSIONS

This report summarizes the statistical analyses used to evaluate the ground water data obtained during the first semi-annual monitoring period in 2025 at Fremont County Landfill. Ground water wells GWD-2, MW-2, MW-3, MW-9, MW-12, MW-14, MW-15, MW-18, MW-19, MW-21, and MW-23 were sampled on March 11, 2025 and analyzed for the detection monitoring parameters listed in 113.10(5), which includes 15 inorganic constituents and 47 organic compounds.

The ground water data was compared to background using prediction limits. There is a verified site prediction limit exceedance for barium at MW-3 and prediction limit exceedances for arsenic, barium, and nickel at MW-12 awaiting verification. There were no control limit exceedances at GWD-2 using intrawell comparisons. Of the organic compounds monitored for during the first semi-annual monitoring period in 2025, there were no detections.

Attachment A

Summary of the Data obtained during the First Semi-Annual Monitoring Period in 2025

Table 1

Analytical Data Summary for 3/11/2025

Constituents	Units	GWD-2	MW-12	MW-14	MW-15	MW-18	MW-19	MW-2	MW-21	MW-23	MW-3	MW-9
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Antimony, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	ug/L	<4.0	7.6	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Barium, total	ug/L	455.0	671.0	255.0	486.0	366.0	577.0	54.1	362.0	338.0	736.0	359.0
Benzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	ug/L	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	.9
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	ug/L	<8.0	14.6	<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	<1	<1	<1
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	1.4	10.9	<.4	<.4	3.0	4.6	<.4	<.4	<.4	<.4	1.3
Copper, total	ug/L	<4.0	7.7	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	ug/L	<4.0	5.1	<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	<1	<1
Methylene chloride	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	ug/L	<4.0	31.4	<4.0	8.1	5.5	4.7	4.8	<4.0	<4.0	<4.0	5.0
Selenium, total	ug/L	<4.0	<4.0	4.3	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	ug/L	<20.0	22.9	<20.0	<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	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	<20	21	<20	<20	<20	<20	<20	<20	<20	<20	<20

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

Attachment B

Summary Tables and Graphs for the Interwell Comparisons

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Antimony, total	ug/L	MW-14	09/18/2014	ND	2.0000		
Antimony, total	ug/L	MW-14	04/29/2015	ND	2.0000		
Antimony, total	ug/L	MW-14	10/06/2015	ND	2.0000		
Antimony, total	ug/L	MW-14	04/19/2016	ND	2.0000		
Antimony, total	ug/L	MW-14	09/19/2016	ND	2.0000		
Antimony, total	ug/L	MW-14	03/22/2017	ND	2.0000		
Antimony, total	ug/L	MW-14	10/12/2017	ND	2.0000		
Antimony, total	ug/L	MW-14	03/08/2018	ND	2.0000		
Antimony, total	ug/L	MW-14	09/06/2018	ND	2.0000		
Antimony, total	ug/L	MW-14	05/13/2019	ND	2.0000		
Antimony, total	ug/L	MW-14	09/26/2019	ND	2.0000		
Antimony, total	ug/L	MW-14	03/30/2020	ND	2.0000		
Antimony, total	ug/L	MW-14	09/17/2020	ND	2.0000		
Antimony, total	ug/L	MW-14	03/09/2021	ND	2.0000		
Antimony, total	ug/L	MW-14	09/09/2021	ND	2.0000		
Antimony, total	ug/L	MW-14	03/14/2022	ND	2.0000		
Antimony, total	ug/L	MW-14	09/01/2022	ND	2.0000		
Antimony, total	ug/L	MW-14	03/06/2023	ND	2.0000		
Antimony, total	ug/L	MW-14	09/08/2023	ND	2.0000		
Antimony, total	ug/L	MW-14	03/20/2024	ND	2.0000		
Antimony, total	ug/L	MW-14	09/25/2024	ND	2.0000		
Antimony, total	ug/L	MW-14	03/11/2025	ND	2.0000		
Arsenic, total	ug/L	MW-14	09/18/2014	ND	4.0000		
Arsenic, total	ug/L	MW-14	04/29/2015	ND	4.0000		
Arsenic, total	ug/L	MW-14	10/06/2015	ND	4.0000		
Arsenic, total	ug/L	MW-14	04/19/2016	ND	4.0000		
Arsenic, total	ug/L	MW-14	09/19/2016	ND	4.0000		
Arsenic, total	ug/L	MW-14	03/22/2017	ND	4.0000		
Arsenic, total	ug/L	MW-14	10/12/2017	ND	4.0000		
Arsenic, total	ug/L	MW-14	03/08/2018	ND	4.0000		
Arsenic, total	ug/L	MW-14	09/06/2018	ND	4.0000		
Arsenic, total	ug/L	MW-14	05/13/2019	ND	4.0000		
Arsenic, total	ug/L	MW-14	09/26/2019	ND	4.0000		
Arsenic, total	ug/L	MW-14	03/30/2020	ND	4.0000		
Arsenic, total	ug/L	MW-14	09/17/2020	ND	4.0000		
Arsenic, total	ug/L	MW-14	03/09/2021	ND	4.0000		
Arsenic, total	ug/L	MW-14	09/09/2021	ND	4.0000		
Arsenic, total	ug/L	MW-14	03/14/2022	ND	4.0000		
Arsenic, total	ug/L	MW-14	09/01/2022	ND	4.0000		
Arsenic, total	ug/L	MW-14	03/06/2023	ND	4.0000		
Arsenic, total	ug/L	MW-14	09/08/2023	ND	4.0000		
Arsenic, total	ug/L	MW-14	03/20/2024	ND	4.0000		
Arsenic, total	ug/L	MW-14	09/25/2024	ND	4.0000		
Arsenic, total	ug/L	MW-14	03/11/2025	ND	4.0000		
Barium, total	ug/L	MW-14	09/18/2014		277.0000		
Barium, total	ug/L	MW-14	04/29/2015		290.0000		
Barium, total	ug/L	MW-14	10/06/2015		273.0000		
Barium, total	ug/L	MW-14	04/19/2016		272.0000		
Barium, total	ug/L	MW-14	09/19/2016		272.0000		
Barium, total	ug/L	MW-14	03/22/2017		255.0000		
Barium, total	ug/L	MW-14	10/12/2017		257.0000		
Barium, total	ug/L	MW-14	03/08/2018		265.0000		
Barium, total	ug/L	MW-14	09/06/2018		242.0000		
Barium, total	ug/L	MW-14	05/13/2019		247.0000		
Barium, total	ug/L	MW-14	09/26/2019		255.0000		
Barium, total	ug/L	MW-14	03/30/2020		259.0000		
Barium, total	ug/L	MW-14	09/17/2020		410.0000		
Barium, total	ug/L	MW-14	03/09/2021		249.0000		
Barium, total	ug/L	MW-14	09/09/2021		265.0000		
Barium, total	ug/L	MW-14	03/14/2022		243.0000		
Barium, total	ug/L	MW-14	09/01/2022		259.0000		
Barium, total	ug/L	MW-14	03/06/2023		258.0000		
Barium, total	ug/L	MW-14	09/08/2023		243.0000		
Barium, total	ug/L	MW-14	03/20/2024		248.0000		
Barium, total	ug/L	MW-14	09/25/2024		241.0000		
Barium, total	ug/L	MW-14	03/11/2025		255.0000		
Beryllium, total	ug/L	MW-14	09/18/2014	ND	4.0000		
Beryllium, total	ug/L	MW-14	04/29/2015	ND	4.0000		
Beryllium, total	ug/L	MW-14	10/06/2015	ND	4.0000		
Beryllium, total	ug/L	MW-14	04/19/2016	ND	4.0000		
Beryllium, total	ug/L	MW-14	09/19/2016	ND	4.0000		
Beryllium, total	ug/L	MW-14	03/22/2017	ND	4.0000		
Beryllium, total	ug/L	MW-14	10/12/2017	ND	4.0000		
Beryllium, total	ug/L	MW-14	03/08/2018	ND	4.0000		

* - Outlier for that well and constituent.

** - ND value replaced with median RL.

*** - ND value replaced with manual RL.

ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Beryllium, total	ug/L	MW-14	09/06/2018	ND	4.0000		
Beryllium, total	ug/L	MW-14	05/13/2019	ND	4.0000		
Beryllium, total	ug/L	MW-14	09/26/2019	ND	4.0000		
Beryllium, total	ug/L	MW-14	03/30/2020	ND	4.0000		
Beryllium, total	ug/L	MW-14	09/17/2020	ND	4.0000		
Beryllium, total	ug/L	MW-14	03/09/2021	ND	4.0000		
Beryllium, total	ug/L	MW-14	09/09/2021	ND	4.0000		
Beryllium, total	ug/L	MW-14	03/14/2022	ND	4.0000		
Beryllium, total	ug/L	MW-14	09/01/2022	ND	4.0000		
Beryllium, total	ug/L	MW-14	03/06/2023	ND	4.0000		
Beryllium, total	ug/L	MW-14	09/08/2023	ND	4.0000		
Beryllium, total	ug/L	MW-14	03/20/2024	ND	4.0000		
Beryllium, total	ug/L	MW-14	09/25/2024	ND	4.0000		
Beryllium, total	ug/L	MW-14	03/11/2025	ND	4.0000		
Cadmium, total	ug/L	MW-14	09/18/2014	ND	0.8000		
Cadmium, total	ug/L	MW-14	04/29/2015	ND	0.8000		
Cadmium, total	ug/L	MW-14	10/06/2015	ND	0.8000		
Cadmium, total	ug/L	MW-14	04/19/2016	ND	0.8000		
Cadmium, total	ug/L	MW-14	09/19/2016	ND	0.8000		
Cadmium, total	ug/L	MW-14	03/22/2017	ND	0.8000		
Cadmium, total	ug/L	MW-14	10/12/2017	ND	0.8000		
Cadmium, total	ug/L	MW-14	03/08/2018	ND	0.8000		
Cadmium, total	ug/L	MW-14	09/06/2018	ND	0.8000		
Cadmium, total	ug/L	MW-14	05/13/2019	ND	0.8000		
Cadmium, total	ug/L	MW-14	09/26/2019		1.0000		
Cadmium, total	ug/L	MW-14	03/30/2020	ND	0.8000		
Cadmium, total	ug/L	MW-14	09/17/2020	ND	0.8000		
Cadmium, total	ug/L	MW-14	03/09/2021	ND	0.8000		
Cadmium, total	ug/L	MW-14	09/09/2021	ND	0.8000		
Cadmium, total	ug/L	MW-14	03/14/2022	ND	0.8000		
Cadmium, total	ug/L	MW-14	09/01/2022	ND	0.8000		
Cadmium, total	ug/L	MW-14	03/06/2023	ND	0.8000		
Cadmium, total	ug/L	MW-14	09/08/2023	ND	0.8000		
Cadmium, total	ug/L	MW-14	03/20/2024	ND	0.8000		
Cadmium, total	ug/L	MW-14	09/25/2024	ND	0.8000		
Cadmium, total	ug/L	MW-14	03/11/2025	ND	0.8000		
Chromium, total	ug/L	MW-14	09/18/2014	ND	8.0000		
Chromium, total	ug/L	MW-14	04/29/2015	ND	8.0000		
Chromium, total	ug/L	MW-14	10/06/2015	ND	8.0000		
Chromium, total	ug/L	MW-14	04/19/2016	ND	8.0000		
Chromium, total	ug/L	MW-14	09/19/2016	ND	8.0000		
Chromium, total	ug/L	MW-14	03/22/2017	ND	8.0000		
Chromium, total	ug/L	MW-14	10/12/2017	ND	8.0000		
Chromium, total	ug/L	MW-14	03/08/2018	ND	8.0000		
Chromium, total	ug/L	MW-14	09/06/2018	ND	8.0000		
Chromium, total	ug/L	MW-14	05/13/2019	ND	8.0000		
Chromium, total	ug/L	MW-14	09/26/2019	ND	8.0000		
Chromium, total	ug/L	MW-14	03/30/2020	ND	8.0000		
Chromium, total	ug/L	MW-14	09/17/2020	ND	8.0000		
Chromium, total	ug/L	MW-14	03/09/2021	ND	8.0000		
Chromium, total	ug/L	MW-14	09/09/2021	ND	8.0000		
Chromium, total	ug/L	MW-14	03/14/2022	ND	8.0000		
Chromium, total	ug/L	MW-14	09/01/2022	ND	8.0000		
Chromium, total	ug/L	MW-14	03/06/2023	ND	8.0000		
Chromium, total	ug/L	MW-14	09/08/2023	ND	8.0000		
Chromium, total	ug/L	MW-14	03/20/2024	ND	8.0000		
Chromium, total	ug/L	MW-14	09/25/2024	ND	8.0000		
Chromium, total	ug/L	MW-14	03/11/2025	ND	8.0000		
Cobalt, total	ug/L	MW-14	09/18/2014		0.9000		
Cobalt, total	ug/L	MW-14	04/29/2015	ND	0.8000		
Cobalt, total	ug/L	MW-14	10/06/2015	ND	0.8000		
Cobalt, total	ug/L	MW-14	04/19/2016	ND	0.8000		
Cobalt, total	ug/L	MW-14	09/19/2016	ND	0.8000		
Cobalt, total	ug/L	MW-14	03/22/2017	ND	0.8000		
Cobalt, total	ug/L	MW-14	10/12/2017	ND	0.8000		
Cobalt, total	ug/L	MW-14	03/08/2018	ND	2.0000	0.8000	**
Cobalt, total	ug/L	MW-14	09/06/2018	ND	0.8000		
Cobalt, total	ug/L	MW-14	05/13/2019	ND	0.8000		
Cobalt, total	ug/L	MW-14	09/26/2019	ND	0.8000		
Cobalt, total	ug/L	MW-14	03/30/2020	ND	0.8000		
Cobalt, total	ug/L	MW-14	09/17/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-14	03/09/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-14	09/09/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-14	03/14/2022		0.5000		

* - 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	
Cobalt, total	ug/L	MW-14	09/01/2022	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-14	03/06/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-14	09/08/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-14	03/20/2024	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-14	09/25/2024	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-14	03/11/2025	ND	0.4000	0.8000	**
Copper, total	ug/L	MW-14	09/18/2014	ND	4.0000		
Copper, total	ug/L	MW-14	04/29/2015	ND	4.0000		
Copper, total	ug/L	MW-14	10/06/2015	ND	4.0000		
Copper, total	ug/L	MW-14	04/19/2016	ND	4.0000		
Copper, total	ug/L	MW-14	09/19/2016	ND	4.0000		
Copper, total	ug/L	MW-14	03/22/2017	ND	4.0000		
Copper, total	ug/L	MW-14	10/12/2017	ND	4.0000		
Copper, total	ug/L	MW-14	03/08/2018	ND	4.0000		
Copper, total	ug/L	MW-14	09/06/2018	ND	4.0000		
Copper, total	ug/L	MW-14	05/13/2019	ND	4.0000		
Copper, total	ug/L	MW-14	09/26/2019	ND	4.0000		
Copper, total	ug/L	MW-14	03/30/2020		32.2000		*
Copper, total	ug/L	MW-14	06/25/2020	ND	4.0000		
Copper, total	ug/L	MW-14	09/17/2020	ND	4.0000		
Copper, total	ug/L	MW-14	03/09/2021	ND	4.0000		
Copper, total	ug/L	MW-14	09/09/2021	ND	4.0000		
Copper, total	ug/L	MW-14	03/14/2022	ND	4.0000		
Copper, total	ug/L	MW-14	09/01/2022	ND	4.0000		
Copper, total	ug/L	MW-14	03/06/2023	ND	4.0000		
Copper, total	ug/L	MW-14	09/08/2023	ND	4.0000		
Copper, total	ug/L	MW-14	03/20/2024	ND	4.0000		
Copper, total	ug/L	MW-14	09/25/2024	ND	4.0000		
Copper, total	ug/L	MW-14	03/11/2025	ND	4.0000		
Lead, total	ug/L	MW-14	09/18/2014	ND	4.0000		
Lead, total	ug/L	MW-14	04/29/2015	ND	4.0000		
Lead, total	ug/L	MW-14	10/06/2015	ND	4.0000		
Lead, total	ug/L	MW-14	04/19/2016	ND	4.0000		
Lead, total	ug/L	MW-14	09/19/2016	ND	4.0000		
Lead, total	ug/L	MW-14	03/22/2017	ND	4.0000		
Lead, total	ug/L	MW-14	10/12/2017	ND	4.0000		
Lead, total	ug/L	MW-14	03/08/2018	ND	4.0000		
Lead, total	ug/L	MW-14	09/06/2018	ND	4.0000		
Lead, total	ug/L	MW-14	05/13/2019	ND	4.0000		
Lead, total	ug/L	MW-14	09/26/2019	ND	4.0000		
Lead, total	ug/L	MW-14	03/30/2020	ND	4.0000		
Lead, total	ug/L	MW-14	09/17/2020	ND	4.0000		
Lead, total	ug/L	MW-14	03/09/2021	ND	4.0000		
Lead, total	ug/L	MW-14	09/09/2021	ND	4.0000		
Lead, total	ug/L	MW-14	03/14/2022	ND	4.0000		
Lead, total	ug/L	MW-14	09/01/2022	ND	4.0000		
Lead, total	ug/L	MW-14	03/06/2023	ND	4.0000		
Lead, total	ug/L	MW-14	09/08/2023	ND	4.0000		
Lead, total	ug/L	MW-14	03/20/2024	ND	4.0000		
Lead, total	ug/L	MW-14	09/25/2024	ND	4.0000		
Lead, total	ug/L	MW-14	03/11/2025	ND	4.0000		
Nickel, total	ug/L	MW-14	09/18/2014	ND	4.0000		
Nickel, total	ug/L	MW-14	04/29/2015	ND	4.0000		
Nickel, total	ug/L	MW-14	10/06/2015	ND	4.0000		
Nickel, total	ug/L	MW-14	04/19/2016	ND	4.0000		
Nickel, total	ug/L	MW-14	09/19/2016		5.4000		
Nickel, total	ug/L	MW-14	03/22/2017	ND	4.0000		
Nickel, total	ug/L	MW-14	10/12/2017	ND	4.0000		
Nickel, total	ug/L	MW-14	03/08/2018	ND	4.0000		
Nickel, total	ug/L	MW-14	09/06/2018	ND	8.0000	4.0000	**
Nickel, total	ug/L	MW-14	05/13/2019	ND	4.0000		
Nickel, total	ug/L	MW-14	09/26/2019	ND	4.0000		
Nickel, total	ug/L	MW-14	03/30/2020	ND	4.0000		
Nickel, total	ug/L	MW-14	09/17/2020	ND	4.0000		
Nickel, total	ug/L	MW-14	03/09/2021	ND	4.0000		
Nickel, total	ug/L	MW-14	09/09/2021	ND	4.0000		
Nickel, total	ug/L	MW-14	03/14/2022	ND	4.0000		
Nickel, total	ug/L	MW-14	09/01/2022	ND	4.0000		
Nickel, total	ug/L	MW-14	03/06/2023	ND	4.0000		
Nickel, total	ug/L	MW-14	09/08/2023	ND	4.0000		
Nickel, total	ug/L	MW-14	03/20/2024	ND	4.0000		
Nickel, total	ug/L	MW-14	09/25/2024	ND	4.0000		
Nickel, total	ug/L	MW-14	03/11/2025	ND	4.0000		
Selenium, total	ug/L	MW-14	09/18/2014		4.7000		

* - 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	
Selenium, total	ug/L	MW-14	04/29/2015		4.6000		
Selenium, total	ug/L	MW-14	10/06/2015		4.0000		
Selenium, total	ug/L	MW-14	04/19/2016		4.2000		
Selenium, total	ug/L	MW-14	09/19/2016		4.0000		
Selenium, total	ug/L	MW-14	03/22/2017	ND	4.0000		
Selenium, total	ug/L	MW-14	10/12/2017	ND	4.0000		
Selenium, total	ug/L	MW-14	03/08/2018		6.3000		
Selenium, total	ug/L	MW-14	09/06/2018	ND	4.0000		
Selenium, total	ug/L	MW-14	05/13/2019		4.4000		
Selenium, total	ug/L	MW-14	09/26/2019		4.5000		
Selenium, total	ug/L	MW-14	03/30/2020	ND	4.0000		
Selenium, total	ug/L	MW-14	09/17/2020		7.4000		
Selenium, total	ug/L	MW-14	12/03/2020		4.2000		
Selenium, total	ug/L	MW-14	03/09/2021	ND	4.0000		
Selenium, total	ug/L	MW-14	09/09/2021	ND	4.0000		
Selenium, total	ug/L	MW-14	03/14/2022	ND	4.0000		
Selenium, total	ug/L	MW-14	09/01/2022		4.2000		
Selenium, total	ug/L	MW-14	03/06/2023	ND	4.0000		
Selenium, total	ug/L	MW-14	09/08/2023	ND	4.0000		
Selenium, total	ug/L	MW-14	03/20/2024	ND	4.0000		
Selenium, total	ug/L	MW-14	09/25/2024	ND	4.0000		
Selenium, total	ug/L	MW-14	03/11/2025		4.3000		
Silver, total	ug/L	MW-14	09/18/2014	ND	4.0000		
Silver, total	ug/L	MW-14	04/29/2015	ND	4.0000		
Silver, total	ug/L	MW-14	10/06/2015	ND	4.0000		
Silver, total	ug/L	MW-14	04/19/2016	ND	4.0000		
Silver, total	ug/L	MW-14	09/19/2016	ND	4.0000		
Silver, total	ug/L	MW-14	03/22/2017	ND	4.0000		
Silver, total	ug/L	MW-14	10/12/2017	ND	4.0000		
Silver, total	ug/L	MW-14	03/08/2018	ND	4.0000		
Silver, total	ug/L	MW-14	09/06/2018	ND	8.0000	4.0000	**
Silver, total	ug/L	MW-14	05/13/2019	ND	4.0000		
Silver, total	ug/L	MW-14	09/26/2019	ND	4.0000		
Silver, total	ug/L	MW-14	03/30/2020	ND	4.0000		
Silver, total	ug/L	MW-14	09/17/2020	ND	4.0000		
Silver, total	ug/L	MW-14	03/09/2021	ND	4.0000		
Silver, total	ug/L	MW-14	09/09/2021	ND	4.0000		
Silver, total	ug/L	MW-14	03/14/2022	ND	4.0000		
Silver, total	ug/L	MW-14	09/01/2022	ND	4.0000		
Silver, total	ug/L	MW-14	03/06/2023	ND	4.0000		
Silver, total	ug/L	MW-14	09/08/2023	ND	4.0000		
Silver, total	ug/L	MW-14	03/20/2024	ND	4.0000		
Silver, total	ug/L	MW-14	09/25/2024	ND	4.0000		
Silver, total	ug/L	MW-14	03/11/2025	ND	4.0000		
Thallium, total	ug/L	MW-14	09/18/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-14	04/29/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-14	10/06/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-14	04/19/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-14	09/19/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-14	03/22/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-14	10/12/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-14	03/08/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-14	09/06/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-14	05/13/2019	ND	2.0000		
Thallium, total	ug/L	MW-14	09/26/2019	ND	2.0000		
Thallium, total	ug/L	MW-14	03/30/2020	ND	2.0000		
Thallium, total	ug/L	MW-14	09/17/2020	ND	2.0000		
Thallium, total	ug/L	MW-14	03/09/2021	ND	2.0000		
Thallium, total	ug/L	MW-14	09/09/2021	ND	2.0000		
Thallium, total	ug/L	MW-14	03/14/2022	ND	2.0000		
Thallium, total	ug/L	MW-14	09/01/2022	ND	2.0000		
Thallium, total	ug/L	MW-14	03/06/2023	ND	2.0000		
Thallium, total	ug/L	MW-14	09/08/2023	ND	2.0000		
Thallium, total	ug/L	MW-14	03/20/2024	ND	2.0000		
Thallium, total	ug/L	MW-14	09/25/2024	ND	2.0000		
Thallium, total	ug/L	MW-14	03/11/2025	ND	2.0000		
Vanadium, total	ug/L	MW-14	09/18/2014	ND	20.0000		
Vanadium, total	ug/L	MW-14	04/29/2015	ND	20.0000		
Vanadium, total	ug/L	MW-14	10/06/2015	ND	20.0000		
Vanadium, total	ug/L	MW-14	04/19/2016	ND	20.0000		
Vanadium, total	ug/L	MW-14	09/19/2016	ND	20.0000		
Vanadium, total	ug/L	MW-14	03/22/2017	ND	20.0000		
Vanadium, total	ug/L	MW-14	10/12/2017	ND	20.0000		
Vanadium, total	ug/L	MW-14	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	MW-14	09/06/2018	ND	20.0000		
Vanadium, total	ug/L	MW-14	05/13/2019	ND	20.0000		
Vanadium, total	ug/L	MW-14	09/26/2019	ND	20.0000		
Vanadium, total	ug/L	MW-14	03/30/2020	ND	20.0000		
Vanadium, total	ug/L	MW-14	09/17/2020	ND	20.0000		
Vanadium, total	ug/L	MW-14	03/09/2021	ND	20.0000		
Vanadium, total	ug/L	MW-14	09/09/2021	ND	20.0000		
Vanadium, total	ug/L	MW-14	03/14/2022	ND	20.0000		
Vanadium, total	ug/L	MW-14	09/01/2022	ND	20.0000		
Vanadium, total	ug/L	MW-14	03/06/2023	ND	20.0000		
Vanadium, total	ug/L	MW-14	09/08/2023	ND	20.0000		
Vanadium, total	ug/L	MW-14	03/20/2024	ND	20.0000		
Vanadium, total	ug/L	MW-14	09/25/2024	ND	20.0000		
Vanadium, total	ug/L	MW-14	03/11/2025	ND	20.0000		
Zinc, total	ug/L	MW-14	09/18/2014		9.3000		
Zinc, total	ug/L	MW-14	04/29/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-14	10/06/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-14	04/19/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-14	09/19/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-14	03/22/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-14	10/12/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-14	03/08/2018		11.1000		
Zinc, total	ug/L	MW-14	09/06/2018		27.7000		
Zinc, total	ug/L	MW-14	05/13/2019		24.1000		
Zinc, total	ug/L	MW-14	09/26/2019		19.1000		
Zinc, total	ug/L	MW-14	03/30/2020		25.3000		
Zinc, total	ug/L	MW-14	09/17/2020	ND	20.0000		
Zinc, total	ug/L	MW-14	03/09/2021	ND	20.0000		
Zinc, total	ug/L	MW-14	09/09/2021	ND	20.0000		
Zinc, total	ug/L	MW-14	03/14/2022	ND	20.0000		
Zinc, total	ug/L	MW-14	09/01/2022	ND	20.0000		
Zinc, total	ug/L	MW-14	03/06/2023	ND	20.0000		
Zinc, total	ug/L	MW-14	09/08/2023	ND	20.0000		
Zinc, total	ug/L	MW-14	03/20/2024	ND	20.0000		
Zinc, total	ug/L	MW-14	09/25/2024	ND	20.0000		
Zinc, total	ug/L	MW-14	03/11/2025	ND	20.0000		
Antimony, total	ug/L	MW-18	09/18/2014	ND	2.0000		
Antimony, total	ug/L	MW-18	04/29/2015	ND	2.0000		
Antimony, total	ug/L	MW-18	10/06/2015	ND	2.0000		
Antimony, total	ug/L	MW-18	04/19/2016	ND	2.0000		
Antimony, total	ug/L	MW-18	09/19/2016	ND	2.0000		
Antimony, total	ug/L	MW-18	03/21/2017	ND	2.0000		
Antimony, total	ug/L	MW-18	10/12/2017	ND	2.0000		
Antimony, total	ug/L	MW-18	03/08/2018	ND	2.0000		
Antimony, total	ug/L	MW-18	09/06/2018	ND	2.0000		
Antimony, total	ug/L	MW-18	05/13/2019	ND	2.0000		
Antimony, total	ug/L	MW-18	09/26/2019	ND	2.0000		
Antimony, total	ug/L	MW-18	03/30/2020	ND	2.0000		
Antimony, total	ug/L	MW-18	09/17/2020	ND	2.0000		
Antimony, total	ug/L	MW-18	03/09/2021	ND	2.0000		*
Antimony, total	ug/L	MW-18	09/09/2021	ND	2.0000		
Antimony, total	ug/L	MW-18	03/14/2022	ND	2.0000		
Antimony, total	ug/L	MW-18	09/01/2022	ND	2.0000		
Antimony, total	ug/L	MW-18	03/06/2023	ND	2.0000		
Antimony, total	ug/L	MW-18	09/08/2023	ND	2.0000		
Antimony, total	ug/L	MW-18	03/20/2024	ND	2.0000		
Antimony, total	ug/L	MW-18	09/25/2024	ND	2.0000		
Antimony, total	ug/L	MW-18	03/11/2025	ND	2.0000		
Arsenic, total	ug/L	MW-18	09/18/2014	ND	4.0000		
Arsenic, total	ug/L	MW-18	04/29/2015	ND	4.0000		
Arsenic, total	ug/L	MW-18	10/06/2015	ND	4.0000		
Arsenic, total	ug/L	MW-18	04/19/2016	ND	4.0000		
Arsenic, total	ug/L	MW-18	09/19/2016		4.4000		
Arsenic, total	ug/L	MW-18	03/21/2017	ND	4.0000		
Arsenic, total	ug/L	MW-18	10/12/2017	ND	4.0000		
Arsenic, total	ug/L	MW-18	03/08/2018	ND	4.0000		
Arsenic, total	ug/L	MW-18	09/06/2018	ND	4.0000		
Arsenic, total	ug/L	MW-18	05/13/2019	ND	4.0000		
Arsenic, total	ug/L	MW-18	09/26/2019	ND	4.0000		
Arsenic, total	ug/L	MW-18	03/30/2020	ND	4.0000		
Arsenic, total	ug/L	MW-18	09/17/2020	ND	4.0000		
Arsenic, total	ug/L	MW-18	03/09/2021		19.9000		*
Arsenic, total	ug/L	MW-18	09/09/2021	ND	4.0000		
Arsenic, total	ug/L	MW-18	03/14/2022		7.8000		*

* - 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	
Arsenic, total	ug/L	MW-18	09/01/2022	ND	4.0000		
Arsenic, total	ug/L	MW-18	03/06/2023	ND	4.0000		
Arsenic, total	ug/L	MW-18	09/08/2023	ND	4.0000		
Arsenic, total	ug/L	MW-18	03/20/2024	ND	4.0000		
Arsenic, total	ug/L	MW-18	09/25/2024	ND	4.0000		
Arsenic, total	ug/L	MW-18	03/11/2025	ND	4.0000		
Barium, total	ug/L	MW-18	09/18/2014		333.0000		
Barium, total	ug/L	MW-18	04/29/2015		402.0000		
Barium, total	ug/L	MW-18	10/06/2015		355.0000		
Barium, total	ug/L	MW-18	04/19/2016		360.0000		
Barium, total	ug/L	MW-18	09/19/2016		439.0000		
Barium, total	ug/L	MW-18	03/21/2017		295.0000		
Barium, total	ug/L	MW-18	10/12/2017		554.0000		
Barium, total	ug/L	MW-18	03/08/2018		373.0000		
Barium, total	ug/L	MW-18	09/06/2018		352.0000		
Barium, total	ug/L	MW-18	05/13/2019		368.0000		
Barium, total	ug/L	MW-18	09/26/2019		372.0000		
Barium, total	ug/L	MW-18	03/30/2020		418.0000		
Barium, total	ug/L	MW-18	09/17/2020		365.0000		
Barium, total	ug/L	MW-18	03/09/2021		1250.0000		*
Barium, total	ug/L	MW-18	06/03/2021		355.0000		
Barium, total	ug/L	MW-18	09/09/2021		361.0000		
Barium, total	ug/L	MW-18	03/14/2022		651.0000		*
Barium, total	ug/L	MW-18	09/01/2022		400.0000		
Barium, total	ug/L	MW-18	03/06/2023		407.0000		
Barium, total	ug/L	MW-18	09/08/2023		327.0000		
Barium, total	ug/L	MW-18	03/20/2024		378.0000		
Barium, total	ug/L	MW-18	09/25/2024		447.0000		
Barium, total	ug/L	MW-18	03/11/2025		366.0000		
Beryllium, total	ug/L	MW-18	09/18/2014	ND	4.0000		
Beryllium, total	ug/L	MW-18	04/29/2015	ND	4.0000		
Beryllium, total	ug/L	MW-18	10/06/2015	ND	4.0000		
Beryllium, total	ug/L	MW-18	04/19/2016	ND	4.0000		
Beryllium, total	ug/L	MW-18	09/19/2016	ND	4.0000		
Beryllium, total	ug/L	MW-18	03/21/2017	ND	4.0000		
Beryllium, total	ug/L	MW-18	10/12/2017	ND	4.0000		
Beryllium, total	ug/L	MW-18	03/08/2018	ND	4.0000		
Beryllium, total	ug/L	MW-18	09/06/2018	ND	4.0000		
Beryllium, total	ug/L	MW-18	05/13/2019	ND	4.0000		
Beryllium, total	ug/L	MW-18	09/26/2019	ND	4.0000		
Beryllium, total	ug/L	MW-18	03/30/2020	ND	4.0000		
Beryllium, total	ug/L	MW-18	09/17/2020	ND	4.0000		
Beryllium, total	ug/L	MW-18	03/09/2021		4.5000		*
Beryllium, total	ug/L	MW-18	09/09/2021	ND	4.0000		
Beryllium, total	ug/L	MW-18	03/14/2022	ND	4.0000		
Beryllium, total	ug/L	MW-18	09/01/2022	ND	4.0000		
Beryllium, total	ug/L	MW-18	03/06/2023	ND	4.0000		
Beryllium, total	ug/L	MW-18	09/08/2023	ND	4.0000		
Beryllium, total	ug/L	MW-18	03/20/2024	ND	4.0000		
Beryllium, total	ug/L	MW-18	09/25/2024	ND	4.0000		
Beryllium, total	ug/L	MW-18	03/11/2025	ND	4.0000		
Cadmium, total	ug/L	MW-18	09/18/2014	ND	0.8000		
Cadmium, total	ug/L	MW-18	04/29/2015	ND	0.8000		
Cadmium, total	ug/L	MW-18	10/06/2015	ND	0.8000		
Cadmium, total	ug/L	MW-18	04/19/2016	ND	0.8000		
Cadmium, total	ug/L	MW-18	09/19/2016	ND	0.8000		
Cadmium, total	ug/L	MW-18	03/21/2017	ND	0.8000		
Cadmium, total	ug/L	MW-18	10/12/2017	ND	0.8000		
Cadmium, total	ug/L	MW-18	03/08/2018	ND	0.8000		
Cadmium, total	ug/L	MW-18	09/06/2018	ND	0.8000		
Cadmium, total	ug/L	MW-18	05/13/2019	ND	0.8000		
Cadmium, total	ug/L	MW-18	09/26/2019	ND	0.8000		
Cadmium, total	ug/L	MW-18	03/30/2020	ND	0.8000		
Cadmium, total	ug/L	MW-18	09/17/2020	ND	0.8000		
Cadmium, total	ug/L	MW-18	03/09/2021		1.4000		*
Cadmium, total	ug/L	MW-18	09/09/2021		0.8000		
Cadmium, total	ug/L	MW-18	03/14/2022	ND	0.8000		
Cadmium, total	ug/L	MW-18	09/01/2022	ND	0.8000		
Cadmium, total	ug/L	MW-18	03/06/2023	ND	0.8000		
Cadmium, total	ug/L	MW-18	09/08/2023	ND	0.8000		
Cadmium, total	ug/L	MW-18	03/20/2024	ND	0.8000		
Cadmium, total	ug/L	MW-18	09/25/2024	ND	0.8000		
Cadmium, total	ug/L	MW-18	03/11/2025	ND	0.8000		
Chromium, total	ug/L	MW-18	09/18/2014	ND	8.0000		

* - Outlier for that well and constituent.

** - ND value replaced with median RL.

*** - ND value replaced with manual RL.

ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Chromium, total	ug/L	MW-18	04/29/2015	ND	8.0000		
Chromium, total	ug/L	MW-18	10/06/2015	ND	8.0000		
Chromium, total	ug/L	MW-18	04/19/2016	ND	8.0000		
Chromium, total	ug/L	MW-18	09/19/2016		15.4000		
Chromium, total	ug/L	MW-18	03/21/2017	ND	8.0000		
Chromium, total	ug/L	MW-18	10/12/2017	ND	8.0000		
Chromium, total	ug/L	MW-18	03/08/2018		9.8000		
Chromium, total	ug/L	MW-18	09/06/2018	ND	8.0000		
Chromium, total	ug/L	MW-18	05/13/2019	ND	8.0000		
Chromium, total	ug/L	MW-18	09/26/2019	ND	8.0000		
Chromium, total	ug/L	MW-18	03/30/2020		8.7000		
Chromium, total	ug/L	MW-18	09/17/2020	ND	8.0000		
Chromium, total	ug/L	MW-18	03/09/2021		73.4000		*
Chromium, total	ug/L	MW-18	09/09/2021	ND	8.0000		
Chromium, total	ug/L	MW-18	03/14/2022		33.2000		*
Chromium, total	ug/L	MW-18	09/01/2022	ND	8.0000		
Chromium, total	ug/L	MW-18	03/06/2023		9.7000		
Chromium, total	ug/L	MW-18	09/08/2023	ND	8.0000		
Chromium, total	ug/L	MW-18	03/20/2024		14.2000		
Chromium, total	ug/L	MW-18	09/25/2024		17.2000		
Chromium, total	ug/L	MW-18	03/11/2025	ND	8.0000		
Cobalt, total	ug/L	MW-18	09/18/2014		1.1000		
Cobalt, total	ug/L	MW-18	04/29/2015		3.1000		
Cobalt, total	ug/L	MW-18	10/06/2015	ND	0.8000		
Cobalt, total	ug/L	MW-18	04/19/2016		1.1000		
Cobalt, total	ug/L	MW-18	09/19/2016		10.6000		
Cobalt, total	ug/L	MW-18	03/21/2017	ND	0.8000		
Cobalt, total	ug/L	MW-18	10/12/2017		2.5000		
Cobalt, total	ug/L	MW-18	03/08/2018		4.8000		
Cobalt, total	ug/L	MW-18	09/06/2018	ND	0.8000		
Cobalt, total	ug/L	MW-18	05/13/2019	ND	0.8000		
Cobalt, total	ug/L	MW-18	09/26/2019	ND	0.8000		
Cobalt, total	ug/L	MW-18	03/30/2020		3.4000		
Cobalt, total	ug/L	MW-18	09/17/2020		1.2000		
Cobalt, total	ug/L	MW-18	03/09/2021		72.8000		*
Cobalt, total	ug/L	MW-18	09/09/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-18	03/14/2022		28.3000		*
Cobalt, total	ug/L	MW-18	09/01/2022		2.4000		
Cobalt, total	ug/L	MW-18	03/06/2023		6.1000		
Cobalt, total	ug/L	MW-18	09/08/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-18	03/20/2024		1.9000		
Cobalt, total	ug/L	MW-18	09/25/2024		11.2000		
Cobalt, total	ug/L	MW-18	03/11/2025		3.0000		
Copper, total	ug/L	MW-18	09/18/2014	ND	4.0000		
Copper, total	ug/L	MW-18	04/29/2015	ND	4.0000		
Copper, total	ug/L	MW-18	10/06/2015	ND	4.0000		
Copper, total	ug/L	MW-18	04/19/2016		10.8000		
Copper, total	ug/L	MW-18	09/19/2016		10.4000		
Copper, total	ug/L	MW-18	03/21/2017	ND	4.0000		
Copper, total	ug/L	MW-18	10/12/2017	ND	4.0000		
Copper, total	ug/L	MW-18	03/08/2018		5.5000		
Copper, total	ug/L	MW-18	09/06/2018	ND	4.0000		
Copper, total	ug/L	MW-18	05/13/2019	ND	4.0000		
Copper, total	ug/L	MW-18	09/26/2019	ND	4.0000		
Copper, total	ug/L	MW-18	03/30/2020	ND	4.0000		
Copper, total	ug/L	MW-18	09/17/2020	ND	4.0000		
Copper, total	ug/L	MW-18	03/09/2021		62.1000		*
Copper, total	ug/L	MW-18	09/09/2021	ND	4.0000		
Copper, total	ug/L	MW-18	03/14/2022		22.1000		*
Copper, total	ug/L	MW-18	09/01/2022	ND	4.0000		
Copper, total	ug/L	MW-18	03/06/2023		4.9000		
Copper, total	ug/L	MW-18	09/08/2023	ND	4.0000		
Copper, total	ug/L	MW-18	03/20/2024	ND	4.0000		
Copper, total	ug/L	MW-18	09/25/2024		10.6000		
Copper, total	ug/L	MW-18	03/11/2025	ND	4.0000		
Lead, total	ug/L	MW-18	09/18/2014	ND	4.0000		
Lead, total	ug/L	MW-18	04/29/2015	ND	4.0000		
Lead, total	ug/L	MW-18	10/06/2015	ND	4.0000		
Lead, total	ug/L	MW-18	04/19/2016	ND	4.0000		
Lead, total	ug/L	MW-18	09/19/2016		8.7000		
Lead, total	ug/L	MW-18	03/21/2017	ND	4.0000		
Lead, total	ug/L	MW-18	10/12/2017	ND	4.0000		
Lead, total	ug/L	MW-18	03/08/2018	ND	4.0000		
Lead, total	ug/L	MW-18	09/06/2018	ND	4.0000		

* - Outlier for that well and constituent.

** - ND value replaced with median RL.

*** - ND value replaced with manual RL.

ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Lead, total	ug/L	MW-18	05/13/2019	ND	4.0000		
Lead, total	ug/L	MW-18	09/26/2019	ND	4.0000		
Lead, total	ug/L	MW-18	03/30/2020	ND	4.0000		
Lead, total	ug/L	MW-18	09/17/2020	ND	4.0000		
Lead, total	ug/L	MW-18	03/09/2021		57.7000		*
Lead, total	ug/L	MW-18	09/09/2021	ND	4.0000		
Lead, total	ug/L	MW-18	03/14/2022		20.0000		*
Lead, total	ug/L	MW-18	09/01/2022	ND	4.0000		
Lead, total	ug/L	MW-18	03/06/2023		4.8000		
Lead, total	ug/L	MW-18	09/08/2023	ND	4.0000		
Lead, total	ug/L	MW-18	03/20/2024	ND	4.0000		
Lead, total	ug/L	MW-18	09/25/2024		8.5000		
Lead, total	ug/L	MW-18	03/11/2025	ND	4.0000		
Nickel, total	ug/L	MW-18	09/18/2014	ND	4.0000		
Nickel, total	ug/L	MW-18	04/29/2015		5.2000		
Nickel, total	ug/L	MW-18	10/06/2015	ND	4.0000		
Nickel, total	ug/L	MW-18	04/19/2016	ND	4.0000		
Nickel, total	ug/L	MW-18	09/19/2016		13.6000		
Nickel, total	ug/L	MW-18	03/21/2017	ND	4.0000		
Nickel, total	ug/L	MW-18	10/12/2017	ND	4.0000		
Nickel, total	ug/L	MW-18	03/08/2018		9.7000		
Nickel, total	ug/L	MW-18	09/06/2018	ND	8.0000	4.0000	**
Nickel, total	ug/L	MW-18	05/13/2019	ND	4.0000		
Nickel, total	ug/L	MW-18	09/26/2019	ND	4.0000		
Nickel, total	ug/L	MW-18	03/30/2020		6.0000		
Nickel, total	ug/L	MW-18	09/17/2020	ND	4.0000		
Nickel, total	ug/L	MW-18	03/09/2021		113.0000		*
Nickel, total	ug/L	MW-18	09/09/2021	ND	4.0000		
Nickel, total	ug/L	MW-18	03/14/2022		48.4000		*
Nickel, total	ug/L	MW-18	09/01/2022		4.4000		
Nickel, total	ug/L	MW-18	03/06/2023		11.6000		
Nickel, total	ug/L	MW-18	09/08/2023	ND	4.0000		
Nickel, total	ug/L	MW-18	03/20/2024		8.3000		
Nickel, total	ug/L	MW-18	09/25/2024		20.7000		
Nickel, total	ug/L	MW-18	03/11/2025		5.5000		
Selenium, total	ug/L	MW-18	09/18/2014	ND	4.0000		
Selenium, total	ug/L	MW-18	04/29/2015	ND	4.0000		
Selenium, total	ug/L	MW-18	10/06/2015	ND	4.0000		
Selenium, total	ug/L	MW-18	04/19/2016	ND	4.0000		
Selenium, total	ug/L	MW-18	09/19/2016	ND	4.0000		
Selenium, total	ug/L	MW-18	03/21/2017	ND	4.0000		
Selenium, total	ug/L	MW-18	10/12/2017		6.3000		
Selenium, total	ug/L	MW-18	03/08/2018	ND	4.0000		
Selenium, total	ug/L	MW-18	09/06/2018	ND	4.0000		
Selenium, total	ug/L	MW-18	05/13/2019	ND	4.0000		
Selenium, total	ug/L	MW-18	09/26/2019	ND	4.0000		
Selenium, total	ug/L	MW-18	03/30/2020	ND	4.0000		
Selenium, total	ug/L	MW-18	09/17/2020	ND	4.0000		
Selenium, total	ug/L	MW-18	03/09/2021		10.6000		*
Selenium, total	ug/L	MW-18	09/09/2021	ND	4.0000		
Selenium, total	ug/L	MW-18	03/14/2022	ND	4.0000		
Selenium, total	ug/L	MW-18	09/01/2022	ND	4.0000		
Selenium, total	ug/L	MW-18	03/06/2023	ND	4.0000		
Selenium, total	ug/L	MW-18	09/08/2023	ND	4.0000		
Selenium, total	ug/L	MW-18	03/20/2024	ND	4.0000		
Selenium, total	ug/L	MW-18	09/25/2024	ND	4.0000		
Selenium, total	ug/L	MW-18	03/11/2025	ND	4.0000		
Silver, total	ug/L	MW-18	09/18/2014	ND	4.0000		
Silver, total	ug/L	MW-18	04/29/2015	ND	4.0000		
Silver, total	ug/L	MW-18	10/06/2015	ND	4.0000		
Silver, total	ug/L	MW-18	04/19/2016	ND	4.0000		
Silver, total	ug/L	MW-18	09/19/2016	ND	4.0000		
Silver, total	ug/L	MW-18	03/21/2017	ND	4.0000		
Silver, total	ug/L	MW-18	10/12/2017	ND	4.0000		
Silver, total	ug/L	MW-18	03/08/2018	ND	4.0000		
Silver, total	ug/L	MW-18	09/06/2018	ND	8.0000	4.0000	**
Silver, total	ug/L	MW-18	05/13/2019	ND	4.0000		
Silver, total	ug/L	MW-18	09/26/2019	ND	4.0000		
Silver, total	ug/L	MW-18	03/30/2020	ND	4.0000		
Silver, total	ug/L	MW-18	09/17/2020	ND	4.0000		
Silver, total	ug/L	MW-18	03/09/2021	ND	4.0000		*
Silver, total	ug/L	MW-18	09/09/2021	ND	4.0000		
Silver, total	ug/L	MW-18	03/14/2022	ND	4.0000		
Silver, total	ug/L	MW-18	09/01/2022	ND	4.0000		

* - Outlier for that well and constituent.

** - ND value replaced with median RL.

*** - ND value replaced with manual RL.

ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Silver, total	ug/L	MW-18	03/06/2023	ND	4.0000		
Silver, total	ug/L	MW-18	09/08/2023	ND	4.0000		
Silver, total	ug/L	MW-18	03/20/2024	ND	4.0000		
Silver, total	ug/L	MW-18	09/25/2024	ND	4.0000		
Silver, total	ug/L	MW-18	03/11/2025	ND	4.0000		
Thallium, total	ug/L	MW-18	09/18/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-18	04/29/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-18	10/06/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-18	04/19/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-18	09/19/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-18	03/21/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-18	10/12/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-18	03/08/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-18	09/06/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-18	05/13/2019	ND	2.0000		
Thallium, total	ug/L	MW-18	09/26/2019	ND	2.0000		
Thallium, total	ug/L	MW-18	03/30/2020	ND	2.0000		
Thallium, total	ug/L	MW-18	09/17/2020	ND	2.0000		
Thallium, total	ug/L	MW-18	03/09/2021	ND	2.0000		*
Thallium, total	ug/L	MW-18	09/09/2021	ND	2.0000		
Thallium, total	ug/L	MW-18	03/14/2022	ND	2.0000		
Thallium, total	ug/L	MW-18	09/01/2022	ND	2.0000		
Thallium, total	ug/L	MW-18	03/06/2023	ND	2.0000		
Thallium, total	ug/L	MW-18	09/08/2023	ND	2.0000		
Thallium, total	ug/L	MW-18	03/20/2024	ND	2.0000		
Thallium, total	ug/L	MW-18	09/25/2024	ND	2.0000		
Thallium, total	ug/L	MW-18	03/11/2025	ND	2.0000		
Vanadium, total	ug/L	MW-18	09/18/2014	ND	20.0000		
Vanadium, total	ug/L	MW-18	04/29/2015	ND	20.0000		
Vanadium, total	ug/L	MW-18	10/06/2015	ND	20.0000		
Vanadium, total	ug/L	MW-18	04/19/2016	ND	20.0000		
Vanadium, total	ug/L	MW-18	09/19/2016	ND	27.5000		
Vanadium, total	ug/L	MW-18	03/21/2017	ND	20.0000		
Vanadium, total	ug/L	MW-18	10/12/2017	ND	20.0000		
Vanadium, total	ug/L	MW-18	03/08/2018	ND	20.0000		
Vanadium, total	ug/L	MW-18	09/06/2018	ND	20.0000		
Vanadium, total	ug/L	MW-18	05/13/2019	ND	20.0000		
Vanadium, total	ug/L	MW-18	09/26/2019	ND	20.0000		
Vanadium, total	ug/L	MW-18	03/30/2020	ND	20.0000		
Vanadium, total	ug/L	MW-18	09/17/2020	ND	20.0000		
Vanadium, total	ug/L	MW-18	03/09/2021	ND	123.0000		*
Vanadium, total	ug/L	MW-18	09/09/2021	ND	20.0000		
Vanadium, total	ug/L	MW-18	03/14/2022	ND	54.4000		*
Vanadium, total	ug/L	MW-18	09/01/2022	ND	20.0000		
Vanadium, total	ug/L	MW-18	03/06/2023	ND	20.0000		
Vanadium, total	ug/L	MW-18	09/08/2023	ND	20.0000		
Vanadium, total	ug/L	MW-18	03/20/2024	ND	20.0000		
Vanadium, total	ug/L	MW-18	09/25/2024	ND	26.9000		
Vanadium, total	ug/L	MW-18	03/11/2025	ND	20.0000		
Zinc, total	ug/L	MW-18	09/18/2014	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-18	04/29/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-18	10/06/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-18	04/19/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-18	09/19/2016	ND	27.6000		
Zinc, total	ug/L	MW-18	03/21/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-18	10/12/2017		9.5000		
Zinc, total	ug/L	MW-18	03/08/2018		16.5000		
Zinc, total	ug/L	MW-18	09/06/2018		32.5000		
Zinc, total	ug/L	MW-18	05/13/2019		13.3000		
Zinc, total	ug/L	MW-18	09/26/2019		11.5000		
Zinc, total	ug/L	MW-18	03/30/2020	ND	20.0000		
Zinc, total	ug/L	MW-18	09/17/2020	ND	20.0000		
Zinc, total	ug/L	MW-18	03/09/2021		166.0000		*
Zinc, total	ug/L	MW-18	09/09/2021	ND	20.0000		
Zinc, total	ug/L	MW-18	03/14/2022		58.7000		*
Zinc, total	ug/L	MW-18	09/01/2022	ND	20.0000		
Zinc, total	ug/L	MW-18	03/06/2023	ND	20.0000		
Zinc, total	ug/L	MW-18	09/08/2023	ND	20.0000		
Zinc, total	ug/L	MW-18	03/20/2024	ND	20.0000		
Zinc, total	ug/L	MW-18	09/25/2024		29.0000		
Zinc, total	ug/L	MW-18	03/11/2025	ND	20.0000		
Antimony, total	ug/L	MW-19	09/18/2014	ND	2.0000		
Antimony, total	ug/L	MW-19	04/28/2015	ND	2.0000		
Antimony, total	ug/L	MW-19	10/06/2015	ND	2.0000		

* - Outlier for that well and constituent.

** - ND value replaced with median RL.

*** - ND value replaced with manual RL.

ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Antimony, total	ug/L	MW-19	04/19/2016	ND	2.0000		
Antimony, total	ug/L	MW-19	09/19/2016	ND	2.0000		
Antimony, total	ug/L	MW-19	03/22/2017	ND	2.0000		
Antimony, total	ug/L	MW-19	10/12/2017	ND	2.0000		
Antimony, total	ug/L	MW-19	03/08/2018	ND	2.0000		
Antimony, total	ug/L	MW-19	09/06/2018	ND	2.0000		
Antimony, total	ug/L	MW-19	05/13/2019	ND	2.0000		
Antimony, total	ug/L	MW-19	09/26/2019	ND	2.0000		
Antimony, total	ug/L	MW-19	03/30/2020	ND	2.0000		
Antimony, total	ug/L	MW-19	09/17/2020	ND	2.0000		
Antimony, total	ug/L	MW-19	03/09/2021	ND	2.0000		
Antimony, total	ug/L	MW-19	09/09/2021	ND	2.0000		
Antimony, total	ug/L	MW-19	03/14/2022	ND	2.0000		
Antimony, total	ug/L	MW-19	03/06/2023	ND	2.0000		
Antimony, total	ug/L	MW-19	09/08/2023	ND	2.0000		
Antimony, total	ug/L	MW-19	03/20/2024	ND	2.0000		
Antimony, total	ug/L	MW-19	09/25/2024	ND	2.0000		
Antimony, total	ug/L	MW-19	03/11/2025	ND	2.0000		
Arsenic, total	ug/L	MW-19	09/18/2014	ND	4.0000		
Arsenic, total	ug/L	MW-19	04/28/2015	ND	4.0000		
Arsenic, total	ug/L	MW-19	10/06/2015		6.0000		
Arsenic, total	ug/L	MW-19	04/19/2016	ND	4.0000		
Arsenic, total	ug/L	MW-19	09/19/2016		6.1000		
Arsenic, total	ug/L	MW-19	03/22/2017	ND	4.0000		
Arsenic, total	ug/L	MW-19	10/12/2017	ND	4.0000		
Arsenic, total	ug/L	MW-19	03/08/2018	ND	4.0000		
Arsenic, total	ug/L	MW-19	09/06/2018	ND	4.0000		
Arsenic, total	ug/L	MW-19	05/13/2019	ND	4.0000		
Arsenic, total	ug/L	MW-19	09/26/2019	ND	4.0000		
Arsenic, total	ug/L	MW-19	03/30/2020	ND	4.0000		
Arsenic, total	ug/L	MW-19	09/17/2020	ND	4.0000		
Arsenic, total	ug/L	MW-19	03/09/2021	ND	4.0000		
Arsenic, total	ug/L	MW-19	09/09/2021	ND	4.0000		
Arsenic, total	ug/L	MW-19	03/14/2022	ND	4.0000		
Arsenic, total	ug/L	MW-19	03/06/2023	ND	4.0000		
Arsenic, total	ug/L	MW-19	09/08/2023	ND	4.0000		
Arsenic, total	ug/L	MW-19	03/20/2024	ND	4.0000		
Arsenic, total	ug/L	MW-19	09/25/2024	ND	4.0000		
Arsenic, total	ug/L	MW-19	03/11/2025	ND	4.0000		
Barium, total	ug/L	MW-19	09/18/2014		380.0000		
Barium, total	ug/L	MW-19	04/28/2015		459.0000		
Barium, total	ug/L	MW-19	10/06/2015		431.0000		
Barium, total	ug/L	MW-19	04/19/2016		416.0000		
Barium, total	ug/L	MW-19	09/19/2016		503.0000		
Barium, total	ug/L	MW-19	03/22/2017		346.0000		
Barium, total	ug/L	MW-19	10/12/2017		343.0000		
Barium, total	ug/L	MW-19	03/08/2018		401.0000		
Barium, total	ug/L	MW-19	09/06/2018		361.0000		
Barium, total	ug/L	MW-19	05/13/2019		418.0000		
Barium, total	ug/L	MW-19	09/26/2019		409.0000		
Barium, total	ug/L	MW-19	03/30/2020		366.0000		
Barium, total	ug/L	MW-19	09/17/2020		614.0000		
Barium, total	ug/L	MW-19	03/09/2021		393.0000		
Barium, total	ug/L	MW-19	09/09/2021		402.0000		
Barium, total	ug/L	MW-19	03/14/2022		359.0000		
Barium, total	ug/L	MW-19	03/06/2023		336.0000		
Barium, total	ug/L	MW-19	09/08/2023		373.0000		
Barium, total	ug/L	MW-19	03/20/2024		26.9000		*
Barium, total	ug/L	MW-19	09/25/2024		532.0000		
Barium, total	ug/L	MW-19	03/11/2025		577.0000		
Beryllium, total	ug/L	MW-19	09/18/2014	ND	4.0000		
Beryllium, total	ug/L	MW-19	04/28/2015	ND	4.0000		
Beryllium, total	ug/L	MW-19	10/06/2015	ND	4.0000		
Beryllium, total	ug/L	MW-19	04/19/2016	ND	4.0000		
Beryllium, total	ug/L	MW-19	09/19/2016	ND	4.0000		
Beryllium, total	ug/L	MW-19	03/22/2017	ND	4.0000		
Beryllium, total	ug/L	MW-19	10/12/2017	ND	4.0000		
Beryllium, total	ug/L	MW-19	03/08/2018	ND	4.0000		
Beryllium, total	ug/L	MW-19	09/06/2018	ND	4.0000		
Beryllium, total	ug/L	MW-19	05/13/2019	ND	4.0000		
Beryllium, total	ug/L	MW-19	09/26/2019	ND	4.0000		
Beryllium, total	ug/L	MW-19	03/30/2020	ND	4.0000		
Beryllium, total	ug/L	MW-19	09/17/2020	ND	4.0000		
Beryllium, total	ug/L	MW-19	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	
Beryllium, total	ug/L	MW-19	09/09/2021	ND	4.0000		
Beryllium, total	ug/L	MW-19	03/14/2022	ND	4.0000		
Beryllium, total	ug/L	MW-19	03/06/2023	ND	4.0000		
Beryllium, total	ug/L	MW-19	09/08/2023	ND	4.0000		
Beryllium, total	ug/L	MW-19	03/20/2024	ND	4.0000		
Beryllium, total	ug/L	MW-19	09/25/2024	ND	4.0000		
Beryllium, total	ug/L	MW-19	03/11/2025	ND	4.0000		
Cadmium, total	ug/L	MW-19	09/18/2014	ND	0.8000		
Cadmium, total	ug/L	MW-19	04/28/2015	ND	0.8000		
Cadmium, total	ug/L	MW-19	10/06/2015	ND	0.8000		
Cadmium, total	ug/L	MW-19	04/19/2016	ND	0.8000		
Cadmium, total	ug/L	MW-19	09/19/2016	ND	0.8000		
Cadmium, total	ug/L	MW-19	03/22/2017	ND	0.8000		
Cadmium, total	ug/L	MW-19	10/12/2017	ND	0.8000		
Cadmium, total	ug/L	MW-19	03/08/2018	ND	0.8000		
Cadmium, total	ug/L	MW-19	09/06/2018	ND	0.8000		
Cadmium, total	ug/L	MW-19	05/13/2019	ND	0.8000		
Cadmium, total	ug/L	MW-19	09/26/2019		1.0000		
Cadmium, total	ug/L	MW-19	03/30/2020	ND	0.8000		
Cadmium, total	ug/L	MW-19	09/17/2020	ND	0.8000		
Cadmium, total	ug/L	MW-19	03/09/2021	ND	0.8000		
Cadmium, total	ug/L	MW-19	09/09/2021	ND	0.8000		
Cadmium, total	ug/L	MW-19	03/14/2022	ND	0.8000		
Cadmium, total	ug/L	MW-19	03/06/2023	ND	0.8000		
Cadmium, total	ug/L	MW-19	09/08/2023	ND	0.8000		
Cadmium, total	ug/L	MW-19	03/20/2024	ND	0.8000		
Cadmium, total	ug/L	MW-19	09/25/2024	ND	0.8000		
Cadmium, total	ug/L	MW-19	03/11/2025	ND	0.8000		
Chromium, total	ug/L	MW-19	09/18/2014	ND	8.0000		
Chromium, total	ug/L	MW-19	04/28/2015	ND	8.0000		
Chromium, total	ug/L	MW-19	10/06/2015	ND	8.0000		
Chromium, total	ug/L	MW-19	04/19/2016	ND	8.0000		
Chromium, total	ug/L	MW-19	09/19/2016		9.3000		
Chromium, total	ug/L	MW-19	03/22/2017	ND	8.0000		
Chromium, total	ug/L	MW-19	10/12/2017	ND	8.0000		
Chromium, total	ug/L	MW-19	03/08/2018	ND	8.0000		
Chromium, total	ug/L	MW-19	09/06/2018	ND	8.0000		
Chromium, total	ug/L	MW-19	05/13/2019	ND	8.0000		
Chromium, total	ug/L	MW-19	09/26/2019	ND	8.0000		
Chromium, total	ug/L	MW-19	03/30/2020	ND	8.0000		
Chromium, total	ug/L	MW-19	09/17/2020	ND	8.0000		
Chromium, total	ug/L	MW-19	03/09/2021	ND	8.0000		
Chromium, total	ug/L	MW-19	09/09/2021	ND	8.0000		
Chromium, total	ug/L	MW-19	03/14/2022	ND	8.0000		
Chromium, total	ug/L	MW-19	03/06/2023	ND	8.0000		
Chromium, total	ug/L	MW-19	09/08/2023	ND	8.0000		
Chromium, total	ug/L	MW-19	03/20/2024	ND	8.0000		
Chromium, total	ug/L	MW-19	09/25/2024	ND	8.0000		
Chromium, total	ug/L	MW-19	03/11/2025	ND	8.0000		
Cobalt, total	ug/L	MW-19	09/18/2014		1.7000		
Cobalt, total	ug/L	MW-19	04/28/2015		1.1000		
Cobalt, total	ug/L	MW-19	10/06/2015		2.6000		
Cobalt, total	ug/L	MW-19	04/19/2016	ND	0.8000		
Cobalt, total	ug/L	MW-19	09/19/2016		3.7000		
Cobalt, total	ug/L	MW-19	03/22/2017	ND	0.8000		
Cobalt, total	ug/L	MW-19	10/12/2017		0.9000		
Cobalt, total	ug/L	MW-19	03/08/2018		8.5000		
Cobalt, total	ug/L	MW-19	09/06/2018		6.3000		
Cobalt, total	ug/L	MW-19	05/13/2019		6.1000		
Cobalt, total	ug/L	MW-19	09/26/2019		9.7000		
Cobalt, total	ug/L	MW-19	03/30/2020		2.3000		
Cobalt, total	ug/L	MW-19	09/17/2020		2.9000		
Cobalt, total	ug/L	MW-19	03/09/2021		2.5000		
Cobalt, total	ug/L	MW-19	09/09/2021		5.3000		
Cobalt, total	ug/L	MW-19	03/14/2022		3.3000		
Cobalt, total	ug/L	MW-19	03/06/2023		3.6000		
Cobalt, total	ug/L	MW-19	09/08/2023		2.0000		
Cobalt, total	ug/L	MW-19	03/20/2024	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-19	09/25/2024		14.4000		
Cobalt, total	ug/L	MW-19	03/11/2025		4.6000		
Copper, total	ug/L	MW-19	09/18/2014	ND	4.0000		
Copper, total	ug/L	MW-19	04/28/2015	ND	4.0000		
Copper, total	ug/L	MW-19	10/06/2015	ND	4.0000		
Copper, total	ug/L	MW-19	04/19/2016	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	MW-19	09/19/2016		6.8000		
Copper, total	ug/L	MW-19	03/22/2017	ND	4.0000		
Copper, total	ug/L	MW-19	10/12/2017	ND	4.0000		
Copper, total	ug/L	MW-19	03/08/2018	ND	4.0000		
Copper, total	ug/L	MW-19	09/06/2018	ND	4.0000		
Copper, total	ug/L	MW-19	05/13/2019	ND	4.0000		
Copper, total	ug/L	MW-19	09/26/2019	ND	4.0000		
Copper, total	ug/L	MW-19	03/30/2020	ND	4.0000		
Copper, total	ug/L	MW-19	09/17/2020	ND	4.0000		
Copper, total	ug/L	MW-19	03/09/2021	ND	4.0000		
Copper, total	ug/L	MW-19	09/09/2021	ND	4.0000		
Copper, total	ug/L	MW-19	03/14/2022	ND	4.0000		
Copper, total	ug/L	MW-19	03/06/2023	ND	4.0000		
Copper, total	ug/L	MW-19	09/08/2023	ND	4.0000		
Copper, total	ug/L	MW-19	03/20/2024	ND	4.0000		
Copper, total	ug/L	MW-19	09/25/2024	ND	4.0000		
Copper, total	ug/L	MW-19	03/11/2025	ND	4.0000		
Lead, total	ug/L	MW-19	09/18/2014	ND	4.0000		
Lead, total	ug/L	MW-19	04/28/2015	ND	4.0000		
Lead, total	ug/L	MW-19	10/06/2015	ND	4.0000		
Lead, total	ug/L	MW-19	04/19/2016	ND	4.0000		
Lead, total	ug/L	MW-19	09/19/2016		4.0000		
Lead, total	ug/L	MW-19	03/22/2017	ND	4.0000		
Lead, total	ug/L	MW-19	10/12/2017	ND	4.0000		
Lead, total	ug/L	MW-19	03/08/2018	ND	4.0000		
Lead, total	ug/L	MW-19	09/06/2018	ND	4.0000		
Lead, total	ug/L	MW-19	05/13/2019	ND	4.0000		
Lead, total	ug/L	MW-19	09/26/2019	ND	4.0000		
Lead, total	ug/L	MW-19	03/30/2020	ND	4.0000		
Lead, total	ug/L	MW-19	09/17/2020	ND	4.0000		
Lead, total	ug/L	MW-19	03/09/2021	ND	4.0000		
Lead, total	ug/L	MW-19	09/09/2021	ND	4.0000		
Lead, total	ug/L	MW-19	03/14/2022	ND	4.0000		
Lead, total	ug/L	MW-19	03/06/2023	ND	4.0000		
Lead, total	ug/L	MW-19	09/08/2023	ND	4.0000		
Lead, total	ug/L	MW-19	03/20/2024	ND	4.0000		
Lead, total	ug/L	MW-19	09/25/2024	ND	4.0000		
Lead, total	ug/L	MW-19	03/11/2025	ND	4.0000		
Nickel, total	ug/L	MW-19	09/18/2014	ND	4.0000		
Nickel, total	ug/L	MW-19	04/28/2015	ND	4.0000		
Nickel, total	ug/L	MW-19	10/06/2015	ND	4.0000		
Nickel, total	ug/L	MW-19	04/19/2016	ND	4.0000		
Nickel, total	ug/L	MW-19	09/19/2016		8.1000		
Nickel, total	ug/L	MW-19	03/22/2017	ND	4.0000		
Nickel, total	ug/L	MW-19	10/12/2017	ND	4.0000		
Nickel, total	ug/L	MW-19	03/08/2018		5.2000		
Nickel, total	ug/L	MW-19	09/06/2018	ND	8.0000	4.0000	**
Nickel, total	ug/L	MW-19	05/13/2019		5.0000		
Nickel, total	ug/L	MW-19	09/26/2019		7.9000		
Nickel, total	ug/L	MW-19	03/30/2020	ND	4.0000		
Nickel, total	ug/L	MW-19	09/17/2020		5.6000		
Nickel, total	ug/L	MW-19	03/09/2021	ND	4.0000		
Nickel, total	ug/L	MW-19	09/09/2021	ND	4.0000		
Nickel, total	ug/L	MW-19	03/14/2022	ND	4.0000		
Nickel, total	ug/L	MW-19	03/06/2023		4.3000		
Nickel, total	ug/L	MW-19	09/08/2023	ND	4.0000		
Nickel, total	ug/L	MW-19	03/20/2024		8.9000		
Nickel, total	ug/L	MW-19	09/25/2024		15.7000		*
Nickel, total	ug/L	MW-19	03/11/2025		4.7000		
Selenium, total	ug/L	MW-19	09/18/2014	ND	4.0000		
Selenium, total	ug/L	MW-19	04/28/2015	ND	4.0000		
Selenium, total	ug/L	MW-19	10/06/2015	ND	4.0000		
Selenium, total	ug/L	MW-19	04/19/2016	ND	4.0000		
Selenium, total	ug/L	MW-19	09/19/2016	ND	4.0000		
Selenium, total	ug/L	MW-19	03/22/2017	ND	4.0000		
Selenium, total	ug/L	MW-19	10/12/2017	ND	4.0000		
Selenium, total	ug/L	MW-19	03/08/2018	ND	4.0000		
Selenium, total	ug/L	MW-19	09/06/2018	ND	4.0000		
Selenium, total	ug/L	MW-19	05/13/2019	ND	4.0000		
Selenium, total	ug/L	MW-19	09/26/2019		5.0000		
Selenium, total	ug/L	MW-19	03/30/2020	ND	4.0000		
Selenium, total	ug/L	MW-19	09/17/2020	ND	4.0000		
Selenium, total	ug/L	MW-19	03/09/2021	ND	4.0000		
Selenium, total	ug/L	MW-19	09/09/2021	ND	4.0000		

* - Outlier for that well and constituent.

** - ND value replaced with median RL.

*** - ND value replaced with manual RL.

ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Selenium, total	ug/L	MW-19	03/14/2022	ND	4.0000		
Selenium, total	ug/L	MW-19	03/06/2023	ND	4.0000		
Selenium, total	ug/L	MW-19	09/08/2023	ND	4.0000		
Selenium, total	ug/L	MW-19	03/20/2024	ND	4.0000		
Selenium, total	ug/L	MW-19	09/25/2024	ND	4.0000		
Selenium, total	ug/L	MW-19	03/11/2025	ND	4.0000		
Silver, total	ug/L	MW-19	09/18/2014	ND	4.0000		
Silver, total	ug/L	MW-19	04/28/2015	ND	4.0000		
Silver, total	ug/L	MW-19	10/06/2015	ND	4.0000		
Silver, total	ug/L	MW-19	04/19/2016	ND	4.0000		
Silver, total	ug/L	MW-19	09/19/2016	ND	4.0000		
Silver, total	ug/L	MW-19	03/22/2017	ND	4.0000		
Silver, total	ug/L	MW-19	10/12/2017	ND	4.0000		
Silver, total	ug/L	MW-19	03/08/2018	ND	4.0000		
Silver, total	ug/L	MW-19	09/06/2018	ND	8.0000	4.0000	**
Silver, total	ug/L	MW-19	05/13/2019	ND	4.0000		
Silver, total	ug/L	MW-19	09/26/2019	ND	4.0000		
Silver, total	ug/L	MW-19	03/30/2020	ND	4.0000		
Silver, total	ug/L	MW-19	09/17/2020	ND	4.0000		
Silver, total	ug/L	MW-19	03/09/2021	ND	4.0000		
Silver, total	ug/L	MW-19	09/09/2021	ND	4.0000		
Silver, total	ug/L	MW-19	03/14/2022	ND	4.0000		
Silver, total	ug/L	MW-19	03/06/2023	ND	4.0000		
Silver, total	ug/L	MW-19	09/08/2023	ND	4.0000		
Silver, total	ug/L	MW-19	03/20/2024	ND	4.0000		
Silver, total	ug/L	MW-19	09/25/2024	ND	4.0000		
Silver, total	ug/L	MW-19	03/11/2025	ND	4.0000		
Thallium, total	ug/L	MW-19	09/18/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-19	04/28/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-19	10/06/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-19	04/19/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-19	09/19/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-19	03/22/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-19	10/12/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-19	03/08/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-19	09/06/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-19	05/13/2019	ND	2.0000		
Thallium, total	ug/L	MW-19	09/26/2019	ND	2.0000		
Thallium, total	ug/L	MW-19	03/30/2020	ND	2.0000		
Thallium, total	ug/L	MW-19	09/17/2020	ND	2.0000		
Thallium, total	ug/L	MW-19	03/09/2021	ND	2.0000		
Thallium, total	ug/L	MW-19	09/09/2021	ND	2.0000		
Thallium, total	ug/L	MW-19	03/14/2022	ND	2.0000		
Thallium, total	ug/L	MW-19	03/06/2023	ND	2.0000		
Thallium, total	ug/L	MW-19	09/08/2023	ND	2.0000		
Thallium, total	ug/L	MW-19	03/20/2024	ND	2.0000		
Thallium, total	ug/L	MW-19	09/25/2024	ND	2.0000		
Thallium, total	ug/L	MW-19	03/11/2025	ND	2.0000		
Vanadium, total	ug/L	MW-19	09/18/2014	ND	20.0000		
Vanadium, total	ug/L	MW-19	04/28/2015	ND	20.0000		
Vanadium, total	ug/L	MW-19	10/06/2015	ND	20.0000		
Vanadium, total	ug/L	MW-19	04/19/2016	ND	20.0000		
Vanadium, total	ug/L	MW-19	09/19/2016		20.7000		
Vanadium, total	ug/L	MW-19	03/22/2017	ND	20.0000		
Vanadium, total	ug/L	MW-19	10/12/2017	ND	20.0000		
Vanadium, total	ug/L	MW-19	03/08/2018	ND	20.0000		
Vanadium, total	ug/L	MW-19	09/06/2018	ND	20.0000		
Vanadium, total	ug/L	MW-19	05/13/2019	ND	20.0000		
Vanadium, total	ug/L	MW-19	09/26/2019	ND	20.0000		
Vanadium, total	ug/L	MW-19	03/30/2020	ND	20.0000		
Vanadium, total	ug/L	MW-19	09/17/2020	ND	20.0000		
Vanadium, total	ug/L	MW-19	03/09/2021	ND	20.0000		
Vanadium, total	ug/L	MW-19	09/09/2021	ND	20.0000		
Vanadium, total	ug/L	MW-19	03/14/2022	ND	20.0000		
Vanadium, total	ug/L	MW-19	03/06/2023	ND	20.0000		
Vanadium, total	ug/L	MW-19	09/08/2023	ND	20.0000		
Vanadium, total	ug/L	MW-19	03/20/2024	ND	20.0000		
Vanadium, total	ug/L	MW-19	09/25/2024	ND	20.0000		
Vanadium, total	ug/L	MW-19	03/11/2025	ND	20.0000		
Zinc, total	ug/L	MW-19	09/18/2014		16.1000		
Zinc, total	ug/L	MW-19	04/28/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-19	10/06/2015		11.5000		
Zinc, total	ug/L	MW-19	04/19/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-19	09/19/2016		27.7000		

* - 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	
Zinc, total	ug/L	MW-19	03/22/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-19	10/12/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-19	03/08/2018		9.7000		
Zinc, total	ug/L	MW-19	09/06/2018	ND	20.0000		
Zinc, total	ug/L	MW-19	05/13/2019		30.2000		
Zinc, total	ug/L	MW-19	09/26/2019		68.3000		
Zinc, total	ug/L	MW-19	11/14/2019	ND	20.0000		
Zinc, total	ug/L	MW-19	03/30/2020	ND	20.0000		
Zinc, total	ug/L	MW-19	09/17/2020	ND	20.0000		
Zinc, total	ug/L	MW-19	03/09/2021	ND	20.0000		
Zinc, total	ug/L	MW-19	09/09/2021	ND	20.0000		
Zinc, total	ug/L	MW-19	03/14/2022	ND	20.0000		
Zinc, total	ug/L	MW-19	03/06/2023	ND	20.0000		
Zinc, total	ug/L	MW-19	09/08/2023	ND	20.0000		
Zinc, total	ug/L	MW-19	03/20/2024	ND	20.0000		
Zinc, total	ug/L	MW-19	09/25/2024	ND	20.0000		
Zinc, total	ug/L	MW-19	03/11/2025	ND	20.0000		
Antimony, total	ug/L	MW-2	09/17/2014	ND	2.0000		
Antimony, total	ug/L	MW-2	04/29/2015	ND	2.0000		
Antimony, total	ug/L	MW-2	10/07/2015	ND	2.0000		
Antimony, total	ug/L	MW-2	04/19/2016	ND	2.0000		
Antimony, total	ug/L	MW-2	09/19/2016	ND	2.0000		
Antimony, total	ug/L	MW-2	03/22/2017	ND	2.0000		
Antimony, total	ug/L	MW-2	10/12/2017	ND	2.0000		
Antimony, total	ug/L	MW-2	03/08/2018	ND	2.0000		
Antimony, total	ug/L	MW-2	09/06/2018	ND	2.0000		
Antimony, total	ug/L	MW-2	05/13/2019	ND	2.0000		
Antimony, total	ug/L	MW-2	09/26/2019	ND	2.0000		
Antimony, total	ug/L	MW-2	03/30/2020	ND	2.0000		
Antimony, total	ug/L	MW-2	09/17/2020	ND	2.0000		
Antimony, total	ug/L	MW-2	03/09/2021	ND	2.0000		
Antimony, total	ug/L	MW-2	09/09/2021	ND	2.0000		
Antimony, total	ug/L	MW-2	03/14/2022	ND	2.0000		
Antimony, total	ug/L	MW-2	09/01/2022	ND	2.0000		
Antimony, total	ug/L	MW-2	03/06/2023	ND	2.0000		
Antimony, total	ug/L	MW-2	09/08/2023	ND	2.0000		
Antimony, total	ug/L	MW-2	03/20/2024	ND	2.0000		
Antimony, total	ug/L	MW-2	09/26/2024	ND	2.0000		
Antimony, total	ug/L	MW-2	03/11/2025	ND	2.0000		
Arsenic, total	ug/L	MW-2	09/17/2014	ND	4.0000		
Arsenic, total	ug/L	MW-2	04/29/2015	ND	4.0000		
Arsenic, total	ug/L	MW-2	10/07/2015	ND	4.0000		
Arsenic, total	ug/L	MW-2	04/19/2016	ND	4.0000		
Arsenic, total	ug/L	MW-2	09/19/2016	ND	4.0000		
Arsenic, total	ug/L	MW-2	03/22/2017	ND	4.0000		
Arsenic, total	ug/L	MW-2	10/12/2017	ND	4.0000		
Arsenic, total	ug/L	MW-2	03/08/2018	ND	4.0000		
Arsenic, total	ug/L	MW-2	09/06/2018	ND	4.0000		
Arsenic, total	ug/L	MW-2	05/13/2019	ND	4.0000		
Arsenic, total	ug/L	MW-2	09/26/2019	ND	4.0000		
Arsenic, total	ug/L	MW-2	03/30/2020	ND	4.0000		
Arsenic, total	ug/L	MW-2	09/17/2020	ND	4.0000		
Arsenic, total	ug/L	MW-2	03/09/2021	ND	4.0000		
Arsenic, total	ug/L	MW-2	09/09/2021	ND	4.0000		
Arsenic, total	ug/L	MW-2	03/14/2022	ND	4.0000		
Arsenic, total	ug/L	MW-2	09/01/2022	ND	4.0000		
Arsenic, total	ug/L	MW-2	03/06/2023	ND	4.0000		
Arsenic, total	ug/L	MW-2	09/08/2023	ND	4.0000		
Arsenic, total	ug/L	MW-2	03/20/2024	ND	4.0000		
Arsenic, total	ug/L	MW-2	09/26/2024	ND	4.0000		
Arsenic, total	ug/L	MW-2	03/11/2025	ND	4.0000		
Barium, total	ug/L	MW-2	09/17/2014		204.0000		
Barium, total	ug/L	MW-2	04/29/2015		258.0000		
Barium, total	ug/L	MW-2	10/07/2015		182.0000		
Barium, total	ug/L	MW-2	04/19/2016		291.0000		
Barium, total	ug/L	MW-2	09/19/2016		263.0000		
Barium, total	ug/L	MW-2	03/22/2017		177.0000		
Barium, total	ug/L	MW-2	10/12/2017		276.0000		
Barium, total	ug/L	MW-2	03/08/2018		173.0000		
Barium, total	ug/L	MW-2	09/06/2018		160.0000		
Barium, total	ug/L	MW-2	05/13/2019		172.0000		
Barium, total	ug/L	MW-2	09/26/2019		175.0000		
Barium, total	ug/L	MW-2	03/30/2020		169.0000		
Barium, total	ug/L	MW-2	09/17/2020		156.0000		

* - Outlier for that well and constituent.

** - ND value replaced with median RL.

*** - ND value replaced with manual RL.

ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Barium, total	ug/L	MW-2	03/09/2021		174.0000		
Barium, total	ug/L	MW-2	09/09/2021		164.0000		
Barium, total	ug/L	MW-2	03/14/2022		162.0000		
Barium, total	ug/L	MW-2	09/01/2022		153.0000		
Barium, total	ug/L	MW-2	03/06/2023		157.0000		
Barium, total	ug/L	MW-2	09/08/2023		176.0000		
Barium, total	ug/L	MW-2	03/20/2024		219.0000		
Barium, total	ug/L	MW-2	09/26/2024		179.0000		
Barium, total	ug/L	MW-2	03/11/2025		54.1000		*
Beryllium, total	ug/L	MW-2	09/17/2014	ND	4.0000		
Beryllium, total	ug/L	MW-2	04/29/2015	ND	4.0000		
Beryllium, total	ug/L	MW-2	10/07/2015	ND	4.0000		
Beryllium, total	ug/L	MW-2	04/19/2016	ND	4.0000		
Beryllium, total	ug/L	MW-2	09/19/2016	ND	4.0000		
Beryllium, total	ug/L	MW-2	03/22/2017	ND	4.0000		
Beryllium, total	ug/L	MW-2	10/12/2017	ND	4.0000		
Beryllium, total	ug/L	MW-2	03/08/2018	ND	4.0000		
Beryllium, total	ug/L	MW-2	09/06/2018	ND	4.0000		
Beryllium, total	ug/L	MW-2	05/13/2019	ND	4.0000		
Beryllium, total	ug/L	MW-2	09/26/2019	ND	4.0000		
Beryllium, total	ug/L	MW-2	03/30/2020	ND	4.0000		
Beryllium, total	ug/L	MW-2	09/17/2020	ND	4.0000		
Beryllium, total	ug/L	MW-2	03/09/2021	ND	4.0000		
Beryllium, total	ug/L	MW-2	09/09/2021	ND	4.0000		
Beryllium, total	ug/L	MW-2	03/14/2022	ND	4.0000		
Beryllium, total	ug/L	MW-2	09/01/2022	ND	4.0000		
Beryllium, total	ug/L	MW-2	03/06/2023	ND	4.0000		
Beryllium, total	ug/L	MW-2	09/08/2023	ND	4.0000		
Beryllium, total	ug/L	MW-2	03/20/2024	ND	4.0000		
Beryllium, total	ug/L	MW-2	09/26/2024	ND	4.0000		
Beryllium, total	ug/L	MW-2	03/11/2025	ND	4.0000		
Cadmium, total	ug/L	MW-2	09/17/2014	ND	0.8000		
Cadmium, total	ug/L	MW-2	04/29/2015	ND	0.8000		
Cadmium, total	ug/L	MW-2	10/07/2015		0.8000		
Cadmium, total	ug/L	MW-2	04/19/2016	ND	0.8000		
Cadmium, total	ug/L	MW-2	09/19/2016	ND	0.8000		
Cadmium, total	ug/L	MW-2	03/22/2017		1.0000		
Cadmium, total	ug/L	MW-2	10/12/2017	ND	0.8000		
Cadmium, total	ug/L	MW-2	03/08/2018		0.8000		
Cadmium, total	ug/L	MW-2	09/06/2018	ND	0.8000		
Cadmium, total	ug/L	MW-2	05/13/2019		0.8000		
Cadmium, total	ug/L	MW-2	09/26/2019	ND	0.8000		
Cadmium, total	ug/L	MW-2	03/30/2020	ND	0.8000		
Cadmium, total	ug/L	MW-2	09/17/2020	ND	0.8000		
Cadmium, total	ug/L	MW-2	03/09/2021		0.9000		
Cadmium, total	ug/L	MW-2	09/09/2021		0.8000		
Cadmium, total	ug/L	MW-2	03/14/2022	ND	0.8000		
Cadmium, total	ug/L	MW-2	09/01/2022	ND	0.8000		
Cadmium, total	ug/L	MW-2	03/06/2023		0.9000		
Cadmium, total	ug/L	MW-2	09/08/2023		0.8000		
Cadmium, total	ug/L	MW-2	03/20/2024	ND	0.8000		
Cadmium, total	ug/L	MW-2	09/26/2024	ND	0.8000		
Cadmium, total	ug/L	MW-2	03/11/2025	ND	0.8000		
Chromium, total	ug/L	MW-2	09/17/2014	ND	8.0000		
Chromium, total	ug/L	MW-2	04/29/2015	ND	8.0000		
Chromium, total	ug/L	MW-2	10/07/2015	ND	8.0000		
Chromium, total	ug/L	MW-2	04/19/2016		9.6000		
Chromium, total	ug/L	MW-2	09/19/2016	ND	8.0000		
Chromium, total	ug/L	MW-2	03/22/2017	ND	8.0000		
Chromium, total	ug/L	MW-2	10/12/2017	ND	8.0000		
Chromium, total	ug/L	MW-2	03/08/2018	ND	8.0000		
Chromium, total	ug/L	MW-2	09/06/2018	ND	8.0000		
Chromium, total	ug/L	MW-2	05/13/2019	ND	8.0000		
Chromium, total	ug/L	MW-2	09/26/2019	ND	8.0000		
Chromium, total	ug/L	MW-2	03/30/2020	ND	8.0000		
Chromium, total	ug/L	MW-2	09/17/2020	ND	8.0000		
Chromium, total	ug/L	MW-2	03/09/2021	ND	8.0000		
Chromium, total	ug/L	MW-2	09/09/2021	ND	8.0000		
Chromium, total	ug/L	MW-2	03/14/2022	ND	8.0000		
Chromium, total	ug/L	MW-2	09/01/2022	ND	8.0000		
Chromium, total	ug/L	MW-2	03/06/2023	ND	8.0000		
Chromium, total	ug/L	MW-2	09/08/2023	ND	8.0000		
Chromium, total	ug/L	MW-2	03/20/2024	ND	8.0000		
Chromium, total	ug/L	MW-2	09/26/2024	ND	8.0000		

* - Outlier for that well and constituent.

** - ND value replaced with median RL.

*** - ND value replaced with manual RL.

ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Chromium, total	ug/L	MW-2	03/11/2025	ND	8.0000		
Cobalt, total	ug/L	MW-2	09/17/2014	ND	0.8000		
Cobalt, total	ug/L	MW-2	04/29/2015		1.7000		
Cobalt, total	ug/L	MW-2	10/07/2015	ND	0.8000		
Cobalt, total	ug/L	MW-2	04/19/2016		3.5000		
Cobalt, total	ug/L	MW-2	09/19/2016		2.2000		
Cobalt, total	ug/L	MW-2	03/22/2017	ND	0.8000		
Cobalt, total	ug/L	MW-2	10/12/2017	ND	0.8000		
Cobalt, total	ug/L	MW-2	03/08/2018	ND	2.0000	0.8000	**
Cobalt, total	ug/L	MW-2	09/06/2018	ND	0.8000		
Cobalt, total	ug/L	MW-2	05/13/2019	ND	0.8000		
Cobalt, total	ug/L	MW-2	09/26/2019	ND	0.8000		
Cobalt, total	ug/L	MW-2	03/30/2020	ND	0.8000		
Cobalt, total	ug/L	MW-2	09/17/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-2	03/09/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-2	09/09/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-2	03/14/2022		0.4000		
Cobalt, total	ug/L	MW-2	09/01/2022	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-2	03/06/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-2	09/08/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-2	03/20/2024	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-2	09/26/2024	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-2	03/11/2025	ND	0.4000	0.8000	**
Copper, total	ug/L	MW-2	09/17/2014	ND	4.0000		
Copper, total	ug/L	MW-2	04/29/2015	ND	4.0000		
Copper, total	ug/L	MW-2	10/07/2015	ND	4.0000		
Copper, total	ug/L	MW-2	04/19/2016		5.1000		
Copper, total	ug/L	MW-2	09/19/2016	ND	4.0000		
Copper, total	ug/L	MW-2	03/22/2017	ND	4.0000		
Copper, total	ug/L	MW-2	10/12/2017	ND	4.0000		
Copper, total	ug/L	MW-2	03/08/2018	ND	4.0000		
Copper, total	ug/L	MW-2	09/06/2018	ND	4.0000		
Copper, total	ug/L	MW-2	05/13/2019	ND	4.0000		
Copper, total	ug/L	MW-2	09/26/2019	ND	4.0000		
Copper, total	ug/L	MW-2	03/30/2020	ND	4.0000		
Copper, total	ug/L	MW-2	09/17/2020	ND	4.0000		
Copper, total	ug/L	MW-2	03/09/2021	ND	4.0000		
Copper, total	ug/L	MW-2	09/09/2021	ND	4.0000		
Copper, total	ug/L	MW-2	03/14/2022	ND	4.0000		
Copper, total	ug/L	MW-2	09/01/2022	ND	4.0000		
Copper, total	ug/L	MW-2	03/06/2023	ND	4.0000		
Copper, total	ug/L	MW-2	09/08/2023	ND	4.0000		
Copper, total	ug/L	MW-2	03/20/2024	ND	4.0000		
Copper, total	ug/L	MW-2	09/26/2024	ND	4.0000		
Copper, total	ug/L	MW-2	03/11/2025	ND	4.0000		
Lead, total	ug/L	MW-2	09/17/2014	ND	4.0000		
Lead, total	ug/L	MW-2	04/29/2015	ND	4.0000		
Lead, total	ug/L	MW-2	10/07/2015	ND	4.0000		
Lead, total	ug/L	MW-2	04/19/2016	ND	4.0000		
Lead, total	ug/L	MW-2	09/19/2016	ND	4.0000		
Lead, total	ug/L	MW-2	03/22/2017	ND	4.0000		
Lead, total	ug/L	MW-2	10/12/2017	ND	4.0000		
Lead, total	ug/L	MW-2	03/08/2018	ND	4.0000		
Lead, total	ug/L	MW-2	09/06/2018	ND	4.0000		
Lead, total	ug/L	MW-2	05/13/2019		5.4000		
Lead, total	ug/L	MW-2	09/26/2019	ND	4.0000		
Lead, total	ug/L	MW-2	03/30/2020	ND	4.0000		
Lead, total	ug/L	MW-2	09/17/2020	ND	4.0000		
Lead, total	ug/L	MW-2	03/09/2021	ND	4.0000		
Lead, total	ug/L	MW-2	09/09/2021	ND	4.0000		
Lead, total	ug/L	MW-2	03/14/2022	ND	4.0000		
Lead, total	ug/L	MW-2	09/01/2022	ND	4.0000		
Lead, total	ug/L	MW-2	03/06/2023	ND	4.0000		
Lead, total	ug/L	MW-2	09/08/2023	ND	4.0000		
Lead, total	ug/L	MW-2	03/20/2024	ND	4.0000		
Lead, total	ug/L	MW-2	09/26/2024	ND	4.0000		
Lead, total	ug/L	MW-2	03/11/2025	ND	4.0000		
Nickel, total	ug/L	MW-2	09/17/2014	ND	4.0000		
Nickel, total	ug/L	MW-2	04/29/2015	ND	4.0000		
Nickel, total	ug/L	MW-2	10/07/2015	ND	4.0000		
Nickel, total	ug/L	MW-2	04/19/2016		7.8000		
Nickel, total	ug/L	MW-2	09/19/2016	ND	4.0000		
Nickel, total	ug/L	MW-2	03/22/2017	ND	4.0000		
Nickel, total	ug/L	MW-2	10/12/2017	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	
Nickel, total	ug/L	MW-2	03/08/2018	ND	4.0000	4.0000	**
Nickel, total	ug/L	MW-2	09/06/2018	ND	8.0000		
Nickel, total	ug/L	MW-2	05/13/2019	ND	4.0000		
Nickel, total	ug/L	MW-2	09/26/2019	ND	4.0000		
Nickel, total	ug/L	MW-2	03/30/2020	ND	4.0000		
Nickel, total	ug/L	MW-2	09/17/2020	ND	4.0000		
Nickel, total	ug/L	MW-2	03/09/2021	ND	4.0000		
Nickel, total	ug/L	MW-2	09/09/2021	ND	4.0000		
Nickel, total	ug/L	MW-2	03/14/2022	ND	4.0000		
Nickel, total	ug/L	MW-2	09/01/2022		5.3000		
Nickel, total	ug/L	MW-2	03/06/2023		4.2000		
Nickel, total	ug/L	MW-2	09/08/2023	ND	4.0000		
Nickel, total	ug/L	MW-2	03/20/2024	ND	4.0000		
Nickel, total	ug/L	MW-2	09/26/2024	ND	4.0000		
Nickel, total	ug/L	MW-2	03/11/2025		4.8000		
Selenium, total	ug/L	MW-2	09/17/2014	ND	4.0000		
Selenium, total	ug/L	MW-2	04/29/2015	ND	4.0000		
Selenium, total	ug/L	MW-2	10/07/2015	ND	4.0000		
Selenium, total	ug/L	MW-2	04/19/2016	ND	4.0000		
Selenium, total	ug/L	MW-2	09/19/2016	ND	4.0000		
Selenium, total	ug/L	MW-2	03/22/2017	ND	4.0000		
Selenium, total	ug/L	MW-2	10/12/2017		4.4000		
Selenium, total	ug/L	MW-2	03/08/2018	ND	4.0000		
Selenium, total	ug/L	MW-2	09/06/2018	ND	4.0000		
Selenium, total	ug/L	MW-2	05/13/2019	ND	4.0000		
Selenium, total	ug/L	MW-2	09/26/2019	ND	4.0000		
Selenium, total	ug/L	MW-2	03/30/2020	ND	4.0000		
Selenium, total	ug/L	MW-2	09/17/2020	ND	4.0000		
Selenium, total	ug/L	MW-2	03/09/2021	ND	4.0000		
Selenium, total	ug/L	MW-2	09/09/2021	ND	4.0000		
Selenium, total	ug/L	MW-2	03/14/2022	ND	4.0000		
Selenium, total	ug/L	MW-2	09/01/2022	ND	4.0000		
Selenium, total	ug/L	MW-2	03/06/2023	ND	4.0000		
Selenium, total	ug/L	MW-2	09/08/2023	ND	4.0000		
Selenium, total	ug/L	MW-2	03/20/2024	ND	4.0000		
Selenium, total	ug/L	MW-2	09/26/2024	ND	4.0000		
Selenium, total	ug/L	MW-2	03/11/2025	ND	4.0000		
Silver, total	ug/L	MW-2	09/17/2014	ND	4.0000	4.0000	**
Silver, total	ug/L	MW-2	04/29/2015	ND	4.0000		
Silver, total	ug/L	MW-2	10/07/2015	ND	4.0000		
Silver, total	ug/L	MW-2	04/19/2016	ND	4.0000		
Silver, total	ug/L	MW-2	09/19/2016	ND	4.0000		
Silver, total	ug/L	MW-2	03/22/2017	ND	4.0000		
Silver, total	ug/L	MW-2	10/12/2017	ND	4.0000		
Silver, total	ug/L	MW-2	03/08/2018	ND	4.0000		
Silver, total	ug/L	MW-2	09/06/2018	ND	8.0000		
Silver, total	ug/L	MW-2	05/13/2019	ND	4.0000		
Silver, total	ug/L	MW-2	09/26/2019	ND	4.0000		
Silver, total	ug/L	MW-2	03/30/2020	ND	4.0000		
Silver, total	ug/L	MW-2	09/17/2020	ND	4.0000		
Silver, total	ug/L	MW-2	03/09/2021	ND	4.0000		
Silver, total	ug/L	MW-2	09/09/2021	ND	4.0000		
Silver, total	ug/L	MW-2	03/14/2022	ND	4.0000		
Silver, total	ug/L	MW-2	09/01/2022	ND	4.0000		
Silver, total	ug/L	MW-2	03/06/2023	ND	4.0000		
Silver, total	ug/L	MW-2	09/08/2023	ND	4.0000		
Silver, total	ug/L	MW-2	03/20/2024	ND	4.0000		
Silver, total	ug/L	MW-2	09/26/2024	ND	4.0000		
Silver, total	ug/L	MW-2	03/11/2025	ND	4.0000		
Thallium, total	ug/L	MW-2	09/17/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-2	04/29/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-2	10/07/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-2	04/19/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-2	09/19/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-2	03/22/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-2	10/12/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-2	03/08/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-2	09/06/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-2	05/13/2019	ND	2.0000		
Thallium, total	ug/L	MW-2	09/26/2019	ND	2.0000		
Thallium, total	ug/L	MW-2	03/30/2020	ND	2.0000		
Thallium, total	ug/L	MW-2	09/17/2020	ND	2.0000		
Thallium, total	ug/L	MW-2	03/09/2021	ND	2.0000		
Thallium, total	ug/L	MW-2	09/09/2021	ND	2.0000		

* - Outlier for that well and constituent.

** - ND value replaced with median RL.

*** - ND value replaced with manual RL.

ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Thallium, total	ug/L	MW-2	03/14/2022	ND	2.0000		
Thallium, total	ug/L	MW-2	09/01/2022	ND	2.0000		
Thallium, total	ug/L	MW-2	03/06/2023	ND	2.0000		
Thallium, total	ug/L	MW-2	09/08/2023	ND	2.0000		
Thallium, total	ug/L	MW-2	03/20/2024	ND	2.0000		
Thallium, total	ug/L	MW-2	09/26/2024	ND	2.0000		
Thallium, total	ug/L	MW-2	03/11/2025	ND	2.0000		
Vanadium, total	ug/L	MW-2	09/17/2014	ND	20.0000		
Vanadium, total	ug/L	MW-2	04/29/2015	ND	20.0000		
Vanadium, total	ug/L	MW-2	10/07/2015	ND	20.0000		
Vanadium, total	ug/L	MW-2	04/19/2016	ND	20.0000		
Vanadium, total	ug/L	MW-2	09/19/2016	ND	20.0000		
Vanadium, total	ug/L	MW-2	03/22/2017	ND	20.0000		
Vanadium, total	ug/L	MW-2	10/12/2017	ND	20.0000		
Vanadium, total	ug/L	MW-2	03/08/2018	ND	20.0000		
Vanadium, total	ug/L	MW-2	09/06/2018	ND	20.0000		
Vanadium, total	ug/L	MW-2	05/13/2019	ND	20.0000		
Vanadium, total	ug/L	MW-2	09/26/2019	ND	20.0000		
Vanadium, total	ug/L	MW-2	03/30/2020	ND	20.0000		
Vanadium, total	ug/L	MW-2	09/17/2020	ND	20.0000		
Vanadium, total	ug/L	MW-2	03/09/2021	ND	20.0000		
Vanadium, total	ug/L	MW-2	09/09/2021	ND	20.0000		
Vanadium, total	ug/L	MW-2	03/14/2022	ND	20.0000		
Vanadium, total	ug/L	MW-2	09/01/2022	ND	20.0000		
Vanadium, total	ug/L	MW-2	03/06/2023	ND	20.0000		
Vanadium, total	ug/L	MW-2	09/08/2023	ND	20.0000		
Vanadium, total	ug/L	MW-2	03/20/2024	ND	20.0000		
Vanadium, total	ug/L	MW-2	09/26/2024	ND	20.0000		
Vanadium, total	ug/L	MW-2	03/11/2025	ND	20.0000		
Zinc, total	ug/L	MW-2	09/17/2014	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-2	04/29/2015		9.7000		
Zinc, total	ug/L	MW-2	10/07/2015		11.8000		
Zinc, total	ug/L	MW-2	04/19/2016		12.6000		
Zinc, total	ug/L	MW-2	09/19/2016		10.2000		
Zinc, total	ug/L	MW-2	03/22/2017		10.5000		
Zinc, total	ug/L	MW-2	10/12/2017		11.3000		
Zinc, total	ug/L	MW-2	03/08/2018		25.8000		
Zinc, total	ug/L	MW-2	09/06/2018		23.3000		
Zinc, total	ug/L	MW-2	05/13/2019		25.9000		
Zinc, total	ug/L	MW-2	09/26/2019		15.5000		
Zinc, total	ug/L	MW-2	03/30/2020	ND	20.0000		
Zinc, total	ug/L	MW-2	09/17/2020	ND	20.0000		
Zinc, total	ug/L	MW-2	03/09/2021	ND	20.0000		
Zinc, total	ug/L	MW-2	09/09/2021	ND	20.0000		
Zinc, total	ug/L	MW-2	03/14/2022	ND	20.0000		
Zinc, total	ug/L	MW-2	09/01/2022	ND	20.0000		
Zinc, total	ug/L	MW-2	03/06/2023	ND	20.0000		
Zinc, total	ug/L	MW-2	09/08/2023	ND	20.0000		
Zinc, total	ug/L	MW-2	03/20/2024	ND	20.0000		
Zinc, total	ug/L	MW-2	09/26/2024	ND	20.0000		
Zinc, total	ug/L	MW-2	03/11/2025	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	GWD-2	03/11/2025	ND	2.0000		2.0000
Arsenic, total	ug/L	GWD-2	03/11/2025	ND	4.0000		6.1000
Barium, total	ug/L	GWD-2	03/11/2025		455.0000		565.3280
Beryllium, total	ug/L	GWD-2	03/11/2025	ND	4.0000		4.0000
Cadmium, total	ug/L	GWD-2	03/11/2025	ND	0.8000		1.0000
Chromium, total	ug/L	GWD-2	03/11/2025	ND	8.0000		17.2000
Cobalt, total	ug/L	GWD-2	03/11/2025		1.4000		14.4000
Copper, total	ug/L	GWD-2	03/11/2025	ND	4.0000		10.8000
Lead, total	ug/L	GWD-2	03/11/2025	ND	4.0000		8.7000
Nickel, total	ug/L	GWD-2	03/11/2025	ND	4.0000		20.7000
Selenium, total	ug/L	GWD-2	03/11/2025	ND	4.0000		7.4000
Silver, total	ug/L	GWD-2	03/11/2025	ND	4.0000		4.0000
Thallium, total	ug/L	GWD-2	03/11/2025	ND	2.0000		2.0000
Vanadium, total	ug/L	GWD-2	03/11/2025	ND	20.0000		27.5000
Zinc, total	ug/L	GWD-2	03/11/2025	ND	20.0000		68.3000
Antimony, total	ug/L	MW-12	03/11/2025	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-12	03/11/2025		7.6000	*	6.1000
Barium, total	ug/L	MW-12	03/11/2025		671.0000	*	565.3280
Beryllium, total	ug/L	MW-12	03/11/2025	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-12	03/11/2025	ND	0.8000		1.0000
Chromium, total	ug/L	MW-12	03/11/2025		14.6000		17.2000
Cobalt, total	ug/L	MW-12	03/11/2025		10.9000		14.4000
Copper, total	ug/L	MW-12	03/11/2025		7.7000		10.8000
Lead, total	ug/L	MW-12	03/11/2025		5.1000		8.7000
Nickel, total	ug/L	MW-12	03/11/2025		31.4000	*	20.7000
Selenium, total	ug/L	MW-12	03/11/2025	ND	4.0000		7.4000
Silver, total	ug/L	MW-12	03/11/2025	ND	4.0000		4.0000
Thallium, total	ug/L	MW-12	03/11/2025	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-12	03/11/2025		22.9000		27.5000
Zinc, total	ug/L	MW-12	03/11/2025		21.0000		68.3000
Antimony, total	ug/L	MW-15	03/11/2025	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-15	03/11/2025	ND	4.0000		6.1000
Barium, total	ug/L	MW-15	03/11/2025		486.0000		565.3280
Beryllium, total	ug/L	MW-15	03/11/2025	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-15	03/11/2025	ND	0.8000		1.0000
Chromium, total	ug/L	MW-15	03/11/2025	ND	8.0000		17.2000
Cobalt, total	ug/L	MW-15	03/11/2025	ND	0.4000		14.4000
Copper, total	ug/L	MW-15	03/11/2025	ND	4.0000		10.8000
Lead, total	ug/L	MW-15	03/11/2025	ND	4.0000		8.7000
Nickel, total	ug/L	MW-15	03/11/2025		8.1000		20.7000
Selenium, total	ug/L	MW-15	03/11/2025	ND	4.0000		7.4000
Silver, total	ug/L	MW-15	03/11/2025	ND	4.0000		4.0000
Thallium, total	ug/L	MW-15	03/11/2025	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-15	03/11/2025	ND	20.0000		27.5000
Zinc, total	ug/L	MW-15	03/11/2025	ND	20.0000		68.3000
Antimony, total	ug/L	MW-21	03/11/2025	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-21	03/11/2025	ND	4.0000		6.1000
Barium, total	ug/L	MW-21	03/11/2025		362.0000		565.3280
Beryllium, total	ug/L	MW-21	03/11/2025	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-21	03/11/2025	ND	0.8000		1.0000
Chromium, total	ug/L	MW-21	03/11/2025	ND	8.0000		17.2000
Cobalt, total	ug/L	MW-21	03/11/2025	ND	0.4000		14.4000
Copper, total	ug/L	MW-21	03/11/2025	ND	4.0000		10.8000
Lead, total	ug/L	MW-21	03/11/2025	ND	4.0000		8.7000
Nickel, total	ug/L	MW-21	03/11/2025	ND	4.0000		20.7000
Selenium, total	ug/L	MW-21	03/11/2025	ND	4.0000		7.4000
Silver, total	ug/L	MW-21	03/11/2025	ND	4.0000		4.0000
Thallium, total	ug/L	MW-21	03/11/2025	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-21	03/11/2025	ND	20.0000		27.5000
Zinc, total	ug/L	MW-21	03/11/2025	ND	20.0000		68.3000
Antimony, total	ug/L	MW-23	03/11/2025	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-23	03/11/2025	ND	4.0000		6.1000
Barium, total	ug/L	MW-23	03/11/2025		338.0000		565.3280
Beryllium, total	ug/L	MW-23	03/11/2025	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-23	03/11/2025	ND	0.8000		1.0000
Chromium, total	ug/L	MW-23	03/11/2025	ND	8.0000		17.2000
Cobalt, total	ug/L	MW-23	03/11/2025	ND	0.4000		14.4000
Copper, total	ug/L	MW-23	03/11/2025	ND	4.0000		10.8000
Lead, total	ug/L	MW-23	03/11/2025	ND	4.0000		8.7000
Nickel, total	ug/L	MW-23	03/11/2025	ND	4.0000		20.7000
Selenium, total	ug/L	MW-23	03/11/2025	ND	4.0000		7.4000
Silver, total	ug/L	MW-23	03/11/2025	ND	4.0000		4.0000

* - Current value failed - awaiting verification.

** - Current value passed - previous exceedance not verified.

*** - Current value failed - exceedance verified.

**** - Current value passed - awaiting one more verification.

***** - Insufficient background data to compute prediction limit.

ND = Not Detected, Result = detection limit.

Table 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Thallium, total	ug/L	MW-23	03/11/2025	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-23	03/11/2025	ND	20.0000		27.5000
Zinc, total	ug/L	MW-23	03/11/2025	ND	20.0000		68.3000
Antimony, total	ug/L	MW-3	03/11/2025	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-3	03/11/2025	ND	4.0000		6.1000
Barium, total	ug/L	MW-3	03/11/2025		736.0000	***	565.3280
Beryllium, total	ug/L	MW-3	03/11/2025	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-3	03/11/2025	ND	0.8000		1.0000
Chromium, total	ug/L	MW-3	03/11/2025	ND	8.0000		17.2000
Cobalt, total	ug/L	MW-3	03/11/2025	ND	0.4000		14.4000
Copper, total	ug/L	MW-3	03/11/2025	ND	4.0000		10.8000
Lead, total	ug/L	MW-3	03/11/2025	ND	4.0000		8.7000
Nickel, total	ug/L	MW-3	03/11/2025	ND	4.0000		20.7000
Selenium, total	ug/L	MW-3	03/11/2025	ND	4.0000		7.4000
Silver, total	ug/L	MW-3	03/11/2025	ND	4.0000		4.0000
Thallium, total	ug/L	MW-3	03/11/2025	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-3	03/11/2025	ND	20.0000		27.5000
Zinc, total	ug/L	MW-3	03/11/2025	ND	20.0000		68.3000
Antimony, total	ug/L	MW-9	03/11/2025	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-9	03/11/2025	ND	4.0000		6.1000
Barium, total	ug/L	MW-9	03/11/2025		359.0000		565.3280
Beryllium, total	ug/L	MW-9	03/11/2025	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-9	03/11/2025		0.9000		1.0000
Chromium, total	ug/L	MW-9	03/11/2025	ND	8.0000		17.2000
Cobalt, total	ug/L	MW-9	03/11/2025		1.3000		14.4000
Copper, total	ug/L	MW-9	03/11/2025	ND	4.0000		10.8000
Lead, total	ug/L	MW-9	03/11/2025	ND	4.0000		8.7000
Nickel, total	ug/L	MW-9	03/11/2025		5.0000		20.7000
Selenium, total	ug/L	MW-9	03/11/2025	ND	4.0000		7.4000
Silver, total	ug/L	MW-9	03/11/2025	ND	4.0000		4.0000
Thallium, total	ug/L	MW-9	03/11/2025	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-9	03/11/2025	ND	20.0000		27.5000
Zinc, total	ug/L	MW-9	03/11/2025	ND	20.0000		68.3000

* - Current value failed - awaiting verification.

** - Current value passed - previous exceedance not verified.

*** - Current value failed - exceedance verified.

**** - Current value passed - awaiting one more verification.

***** - Insufficient background data to compute prediction limit.

ND = Not Detected, Result = detection limit.

Table 3**Detection Frequencies in Upgradient and Downgradient Wells**

Constituent	Detect	Upgradient N	Proportion	Detect	Downgradient N	Proportion
Antimony, total	0	86	0.000	1	217	0.005
Arsenic, total	3	85	0.035	52	221	0.235
Barium, total	84	84	1.000	222	222	1.000
Beryllium, total	0	86	0.000	0	218	0.000
Cadmium, total	11	86	0.128	9	220	0.041
Chromium, total	8	85	0.094	29	217	0.134
Cobalt, total	37	85	0.435	94	219	0.429
Copper, total	7	85	0.082	58	218	0.266
Lead, total	5	85	0.059	42	218	0.193
Nickel, total	22	84	0.262	126	220	0.573
Selenium, total	15	87	0.172	0	218	0.000
Silver, total	0	86	0.000	0	217	0.000
Thallium, total	0	86	0.000	0	217	0.000
Vanadium, total	3	85	0.035	27	218	0.124
Zinc, total	29	86	0.337	94	218	0.431

N = Total number of measurements in all wells.

Detect = Total number of detections in all wells.

Proportion = Detect/N.

Table 4

Shapiro-Wilk Multiple Group Test of Normality

Constituent	Detect	N	Detect Freq	G raw	G log	G cbrt	G sqrt	G sqr	G cub	Crit Value	Dist Form	Model Type
Antimony, total	0	86	0.000									nonpar
Arsenic, total	3	85	0.035									nonpar
Barium, total	84	84	1.000	7.283	5.741					2.326	non-norm	normal
Beryllium, total	0	86	0.000									nonpar
Cadmium, total	11	86	0.128	2.566	2.544					2.326	non-norm	nonpar
Chromium, total	8	85	0.094	0.609	0.628					2.326	normal	nonpar
Cobalt, total	37	85	0.435	1.862	1.253					2.326	normal	nonpar
Copper, total	7	85	0.082	1.817	1.797					2.326	normal	nonpar
Lead, total	5	85	0.059	1.357	1.505					2.326	normal	nonpar
Nickel, total	22	84	0.262	1.644	0.233					2.326	normal	nonpar
Selenium, total	15	87	0.172	3.590	3.134					2.326	non-norm	nonpar
Silver, total	0	86	0.000									nonpar
Thallium, total	0	86	0.000									nonpar
Vanadium, total	3	85	0.035									nonpar
Zinc, total	29	86	0.337	2.541	1.374					2.326	lognor	nonpar

* - Distribution override for that constituent.

Fit to distribution is confirmed if G <= critical value.

Model type may not match distributional form when detection frequency < 50%.

Table 5

Summary Statistics and Prediction Limits

Constituent	Units	Detect	N	Mean	SD	alpha	Factor	Pred Limit	Type		Conf
Antimony, total	ug/L	0	86	313.3452	105.6007	0.0100	2.3862	2.0000	nonpar	***	0.99
Arsenic, total	ug/L	3	85					6.1000	nonpar		0.99
Barium, total	ug/L	84	84					565.3280	normal		
Beryllium, total	ug/L	0	86					4.0000	nonpar	***	0.99
Cadmium, total	ug/L	11	86					1.0000	nonpar		0.99
Chromium, total	ug/L	8	85					17.2000	nonpar		0.99
Cobalt, total	ug/L	37	85					14.4000	nonpar		0.99
Copper, total	ug/L	7	85					10.8000	nonpar		0.99
Lead, total	ug/L	5	85					8.7000	nonpar		0.99
Nickel, total	ug/L	22	84					20.7000	nonpar		0.99
Selenium, total	ug/L	15	87					7.4000	nonpar		0.99
Silver, total	ug/L	0	86					4.0000	nonpar	***	0.99
Thallium, total	ug/L	0	86					2.0000	nonpar	***	0.99
Vanadium, total	ug/L	3	85					27.5000	nonpar		0.99
Zinc, total	ug/L	29	86					68.3000	nonpar		0.99

Conf = confidence level for passing initial test or one verification resample at all downgradient wells for a single constituent (nonparametric test only).

* - Insufficient Data.

** - Calculated limit raised to Manual Reporting Limit.

*** - Nonparametric limit based on ND value.

For transformed data, mean and SD in transformed units and prediction limit in original units.

All sample sizes and statistics are based on outlier free data.

For nonparametric limits, median reporting limits are substituted for extreme reporting limit values.

Table 6

**Dixon's Test Outliers
5% Significance Level**

Constituent	Units	Well	Date	Result	ND Qualifier	Date Range	N	Critical Value
Copper, total	ug/L	MW-14	03/30/2020	32.2000		09/18/2014-03/11/2025	23	0.4218
Barium, total	ug/L	MW-19	03/20/2024	26.9000		09/18/2014-03/11/2025	21	0.4398
Nickel, total	ug/L	MW-19	09/25/2024	15.7000		09/18/2014-03/11/2025	21	0.4398
Barium, total	ug/L	MW-2	03/11/2025	54.1000		09/17/2014-03/11/2025	22	0.4305

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

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

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

Table 8

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

Constituent	Units	Well	Date		Result	Pred. Limit
Arsenic, total	ug/L	MW-12	04/15/2008		8.0000 *	6.1000
Arsenic, total	ug/L	MW-12	06/18/2008	ND	5.0000	6.1000
Arsenic, total	ug/L	MW-12	08/19/2008	ND	5.0000	6.1000
Arsenic, total	ug/L	MW-12	10/18/2008	ND	4.0000	6.1000
Arsenic, total	ug/L	MW-12	12/04/2008		4.3000	6.1000
Arsenic, total	ug/L	MW-12	03/16/2009		5.1000	6.1000
Arsenic, total	ug/L	MW-12	09/23/2009		4.1000	6.1000
Arsenic, total	ug/L	MW-12	04/12/2010	ND	4.0000	6.1000
Arsenic, total	ug/L	MW-12	09/28/2010	ND	4.0000	6.1000
Arsenic, total	ug/L	MW-12	05/03/2011	ND	4.0000	6.1000
Arsenic, total	ug/L	MW-12	10/10/2011	ND	4.0000	6.1000
Arsenic, total	ug/L	MW-12	04/23/2012		7.8000 *	6.1000
Arsenic, total	ug/L	MW-12	09/10/2012		6.9000 *	6.1000
Arsenic, total	ug/L	MW-12	04/05/2013	ND	4.0000	6.1000
Arsenic, total	ug/L	MW-12	10/11/2013		4.7000	6.1000
Arsenic, total	ug/L	MW-12	04/22/2014		6.8000 *	6.1000
Arsenic, total	ug/L	MW-12	09/18/2014		4.1000	6.1000
Arsenic, total	ug/L	MW-12	04/28/2015		4.6000	6.1000
Arsenic, total	ug/L	MW-12	10/07/2015	ND	4.0000	6.1000
Arsenic, total	ug/L	MW-12	04/19/2016	ND	4.0000	6.1000
Arsenic, total	ug/L	MW-12	09/19/2016		4.3000	6.1000
Arsenic, total	ug/L	MW-12	03/22/2017	ND	4.0000	6.1000
Arsenic, total	ug/L	MW-12	10/12/2017	ND	4.0000	6.1000
Arsenic, total	ug/L	MW-12	03/08/2018	ND	4.0000	6.1000
Arsenic, total	ug/L	MW-12	09/06/2018	ND	4.0000	6.1000
Arsenic, total	ug/L	MW-12	05/13/2019	ND	4.0000	6.1000
Arsenic, total	ug/L	MW-12	09/26/2019	ND	4.0000	6.1000
Arsenic, total	ug/L	MW-12	03/30/2020	ND	4.0000	6.1000
Arsenic, total	ug/L	MW-12	09/17/2020	ND	4.0000	6.1000
Arsenic, total	ug/L	MW-12	03/09/2021	ND	4.0000	6.1000
Arsenic, total	ug/L	MW-12	09/09/2021	ND	4.0000	6.1000
Arsenic, total	ug/L	MW-12	03/14/2022	ND	4.0000	6.1000
Arsenic, total	ug/L	MW-12	09/01/2022	ND	4.0000	6.1000
Arsenic, total	ug/L	MW-12	03/06/2023		7.3000 *	6.1000
Arsenic, total	ug/L	MW-12	09/08/2023	ND	4.0000	6.1000
Arsenic, total	ug/L	MW-12	03/20/2024		15.9000 *	6.1000
Arsenic, total	ug/L	MW-12	09/25/2024	ND	4.0000	6.1000
Arsenic, total	ug/L	MW-12	03/11/2025		7.6000 *	6.1000
Barium, total	ug/L	MW-12	04/15/2008		447.0000	565.3280
Barium, total	ug/L	MW-12	06/18/2008		430.0000	565.3280
Barium, total	ug/L	MW-12	08/19/2008		420.0000	565.3280
Barium, total	ug/L	MW-12	10/18/2008		405.0000	565.3280
Barium, total	ug/L	MW-12	12/04/2008		472.0000	565.3280
Barium, total	ug/L	MW-12	03/16/2009		494.0000	565.3280
Barium, total	ug/L	MW-12	09/23/2009		476.0000	565.3280
Barium, total	ug/L	MW-12	04/12/2010		421.0000	565.3280
Barium, total	ug/L	MW-12	09/28/2010		477.0000	565.3280
Barium, total	ug/L	MW-12	05/03/2011		440.0000	565.3280
Barium, total	ug/L	MW-12	10/10/2011		537.0000	565.3280
Barium, total	ug/L	MW-12	04/23/2012		471.0000	565.3280
Barium, total	ug/L	MW-12	09/10/2012		416.0000	565.3280
Barium, total	ug/L	MW-12	04/05/2013		461.0000	565.3280
Barium, total	ug/L	MW-12	10/11/2013		416.0000	565.3280
Barium, total	ug/L	MW-12	04/22/2014		366.0000	565.3280
Barium, total	ug/L	MW-12	09/18/2014		364.0000	565.3280
Barium, total	ug/L	MW-12	04/28/2015		409.0000	565.3280
Barium, total	ug/L	MW-12	10/07/2015		403.0000	565.3280
Barium, total	ug/L	MW-12	04/19/2016		396.0000	565.3280
Barium, total	ug/L	MW-12	09/19/2016		390.0000	565.3280
Barium, total	ug/L	MW-12	03/22/2017		303.0000	565.3280
Barium, total	ug/L	MW-12	10/12/2017		305.0000	565.3280
Barium, total	ug/L	MW-12	03/08/2018		295.0000	565.3280
Barium, total	ug/L	MW-12	09/06/2018		286.0000	565.3280
Barium, total	ug/L	MW-12	05/13/2019		280.0000	565.3280
Barium, total	ug/L	MW-12	09/26/2019		295.0000	565.3280
Barium, total	ug/L	MW-12	03/30/2020		397.0000	565.3280
Barium, total	ug/L	MW-12	09/17/2020		301.0000	565.3280
Barium, total	ug/L	MW-12	03/09/2021		416.0000	565.3280
Barium, total	ug/L	MW-12	09/09/2021		425.0000	565.3280
Barium, total	ug/L	MW-12	03/14/2022		544.0000	565.3280
Barium, total	ug/L	MW-12	09/01/2022		322.0000	565.3280

* - Significantly increased over background.

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

*** - Manual exclusion.

ND = Not Detected, Result = detection limit.

Table 8

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

Constituent	Units	Well	Date		Result	Pred. Limit
Barium, total	ug/L	MW-12	03/06/2023		547.0000	565.3280
Barium, total	ug/L	MW-12	09/08/2023		465.0000	565.3280
Barium, total	ug/L	MW-12	03/20/2024		856.0000	565.3280
Barium, total	ug/L	MW-12	09/25/2024		509.0000	565.3280
Barium, total	ug/L	MW-12	03/11/2025		671.0000	565.3280
Nickel, total	ug/L	MW-12	04/15/2008		14.0000	20.7000
Nickel, total	ug/L	MW-12	06/18/2008		8.0000	20.7000
Nickel, total	ug/L	MW-12	08/19/2008		6.0000	20.7000
Nickel, total	ug/L	MW-12	10/18/2008		5.3000	20.7000
Nickel, total	ug/L	MW-12	12/04/2008		6.9000	20.7000
Nickel, total	ug/L	MW-12	03/16/2009		10.1000	20.7000
Nickel, total	ug/L	MW-12	09/23/2009		6.5000	20.7000
Nickel, total	ug/L	MW-12	04/12/2010		10.2000	20.7000
Nickel, total	ug/L	MW-12	09/28/2010		6.2000	20.7000
Nickel, total	ug/L	MW-12	05/03/2011		9.3000	20.7000
Nickel, total	ug/L	MW-12	10/10/2011		13.4000	20.7000
Nickel, total	ug/L	MW-12	04/23/2012		7.5000	20.7000
Nickel, total	ug/L	MW-12	09/10/2012		6.3000	20.7000
Nickel, total	ug/L	MW-12	04/05/2013		9.1000	20.7000
Nickel, total	ug/L	MW-12	10/11/2013		5.2000	20.7000
Nickel, total	ug/L	MW-12	04/22/2014		6.2000	20.7000
Nickel, total	ug/L	MW-12	09/18/2014		5.8000	20.7000
Nickel, total	ug/L	MW-12	04/28/2015		4.6000	20.7000
Nickel, total	ug/L	MW-12	10/07/2015	ND	4.0000	20.7000
Nickel, total	ug/L	MW-12	04/19/2016		4.1000	20.7000
Nickel, total	ug/L	MW-12	09/19/2016	ND	4.0000	20.7000
Nickel, total	ug/L	MW-12	03/22/2017	ND	4.0000	20.7000
Nickel, total	ug/L	MW-12	10/12/2017	ND	4.0000	20.7000
Nickel, total	ug/L	MW-12	03/08/2018	ND	4.0000	20.7000
Nickel, total	ug/L	MW-12	09/06/2018	ND	8.0000	20.7000
Nickel, total	ug/L	MW-12	05/13/2019	ND	4.0000	20.7000
Nickel, total	ug/L	MW-12	09/26/2019		5.2000	20.7000
Nickel, total	ug/L	MW-12	03/30/2020		15.7000	20.7000
Nickel, total	ug/L	MW-12	06/25/2020		7.9000	20.7000
Nickel, total	ug/L	MW-12	09/17/2020		5.9000	20.7000
Nickel, total	ug/L	MW-12	03/09/2021		11.9000	20.7000
Nickel, total	ug/L	MW-12	09/09/2021		15.6000	20.7000
Nickel, total	ug/L	MW-12	12/08/2021		31.6000	20.7000
Nickel, total	ug/L	MW-12	03/14/2022		12.3000	20.7000
Nickel, total	ug/L	MW-12	09/01/2022		6.7000	20.7000
Nickel, total	ug/L	MW-12	03/06/2023		27.6000	20.7000
Nickel, total	ug/L	MW-12	09/08/2023		11.6000	20.7000
Nickel, total	ug/L	MW-12	03/20/2024		63.1000	20.7000
Nickel, total	ug/L	MW-12	09/25/2024		10.2000	20.7000
Nickel, total	ug/L	MW-12	03/11/2025		31.4000	20.7000
Barium, total	ug/L	MW-3	04/15/2008		572.0000	565.3280
Barium, total	ug/L	MW-3	06/18/2008		547.0000	565.3280
Barium, total	ug/L	MW-3	08/19/2008		624.0000	565.3280
Barium, total	ug/L	MW-3	10/18/2008		706.0000	565.3280
Barium, total	ug/L	MW-3	12/04/2008		700.0000	565.3280
Barium, total	ug/L	MW-3	03/16/2009		740.0000	565.3280
Barium, total	ug/L	MW-3	09/23/2009		826.0000	565.3280
Barium, total	ug/L	MW-3	04/12/2010		661.0000	565.3280
Barium, total	ug/L	MW-3	06/01/2010		790.0000	565.3280
Barium, total	ug/L	MW-3	09/28/2010		742.0000	565.3280
Barium, total	ug/L	MW-3	05/03/2011		647.0000	565.3280
Barium, total	ug/L	MW-3	10/11/2011		808.0000	565.3280
Barium, total	ug/L	MW-3	04/24/2012		844.0000	565.3280
Barium, total	ug/L	MW-3	09/10/2012		201.0000	565.3280
Barium, total	ug/L	MW-3	04/05/2013		727.0000	565.3280
Barium, total	ug/L	MW-3	10/10/2013		755.0000	565.3280
Barium, total	ug/L	MW-3	04/22/2014		758.0000	565.3280
Barium, total	ug/L	MW-3	09/18/2014		655.0000	565.3280
Barium, total	ug/L	MW-3	04/29/2015		761.0000	565.3280
Barium, total	ug/L	MW-3	10/07/2015		640.0000	565.3280
Barium, total	ug/L	MW-3	04/19/2016		748.0000	565.3280
Barium, total	ug/L	MW-3	09/19/2016		784.0000	565.3280
Barium, total	ug/L	MW-3	03/21/2017		710.0000	565.3280
Barium, total	ug/L	MW-3	10/12/2017		743.0000	565.3280
Barium, total	ug/L	MW-3	03/08/2018		1020.0000	565.3280
Barium, total	ug/L	MW-3	09/06/2018		796.0000	565.3280

* - Significantly increased over background.

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

*** - Manual exclusion.

ND = Not Detected, Result = detection limit.

Table 8

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

Constituent	Units	Well	Date		Result		Pred. Limit
Barium, total	ug/L	MW-3	05/13/2019		865.0000	*	565.3280
Barium, total	ug/L	MW-3	09/26/2019		951.0000	*	565.3280
Barium, total	ug/L	MW-3	03/30/2020		867.0000	*	565.3280
Barium, total	ug/L	MW-3	09/17/2020		884.0000	*	565.3280
Barium, total	ug/L	MW-3	03/09/2021		1090.0000	*	565.3280
Barium, total	ug/L	MW-3	09/09/2021		785.0000	*	565.3280
Barium, total	ug/L	MW-3	03/14/2022		843.0000	*	565.3280
Barium, total	ug/L	MW-3	09/01/2022		783.0000	*	565.3280
Barium, total	ug/L	MW-3	03/06/2023		785.0000	*	565.3280
Barium, total	ug/L	MW-3	09/08/2023		730.0000	*	565.3280
Barium, total	ug/L	MW-3	03/20/2024		747.0000	*	565.3280
Barium, total	ug/L	MW-3	09/25/2024		755.0000	*	565.3280
Barium, total	ug/L	MW-3	03/11/2025		736.0000	*	565.3280

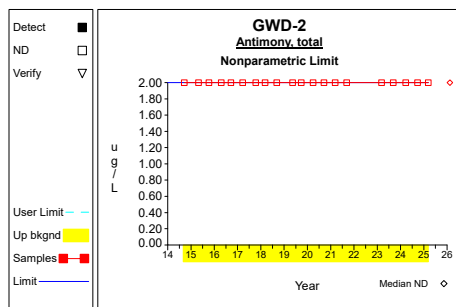
* - Significantly increased over background.

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

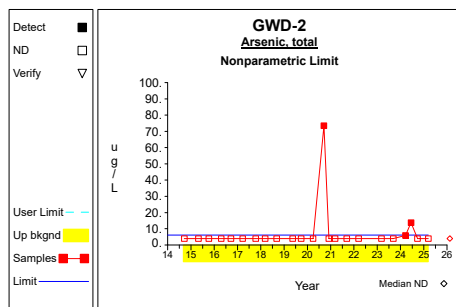
*** - Manual exclusion.

ND = Not Detected, Result = detection limit.

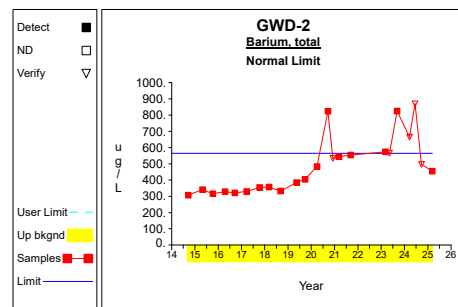
Up vs. Down Prediction Limits



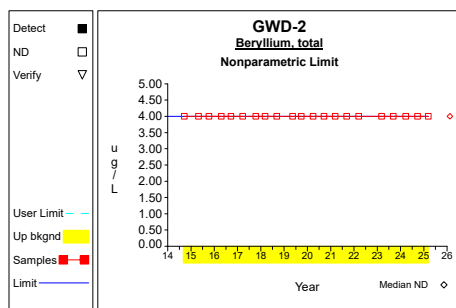
Graph 1



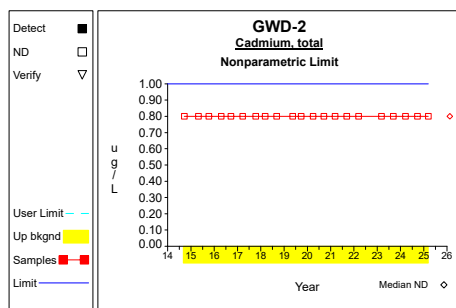
Graph 2



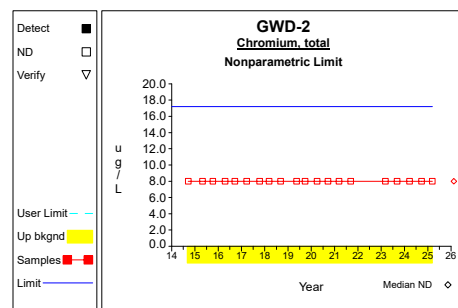
Graph 3



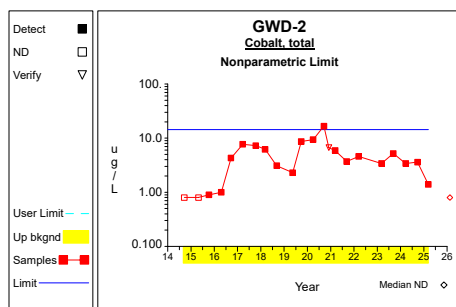
Graph 4



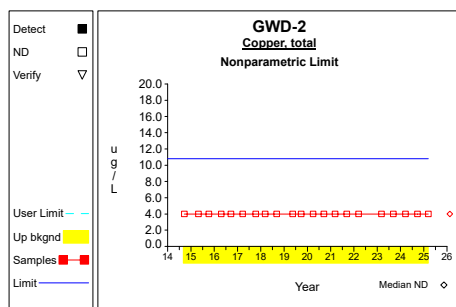
Graph 5



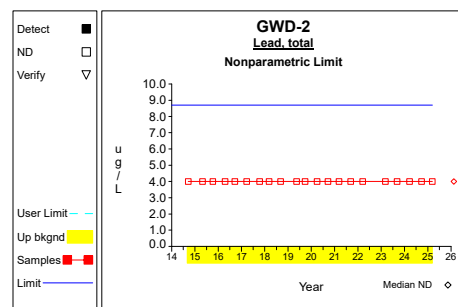
Graph 6



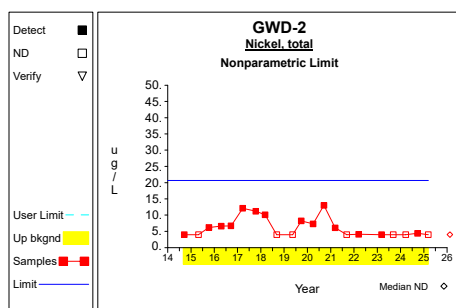
Graph 7



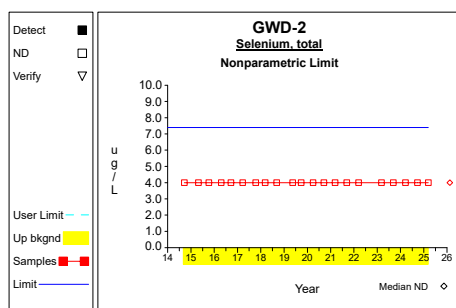
Graph 8



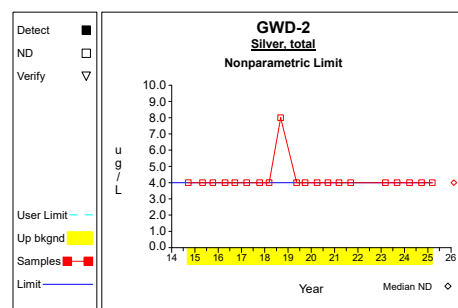
Graph 9



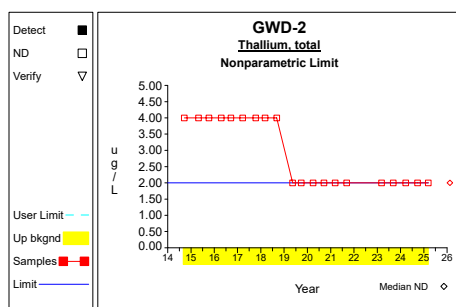
Graph 10



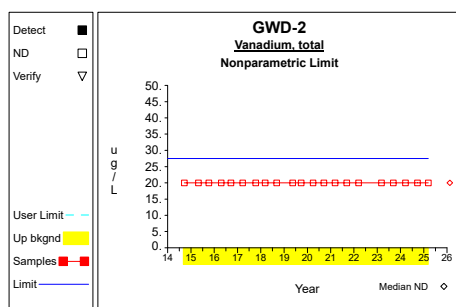
Graph 11



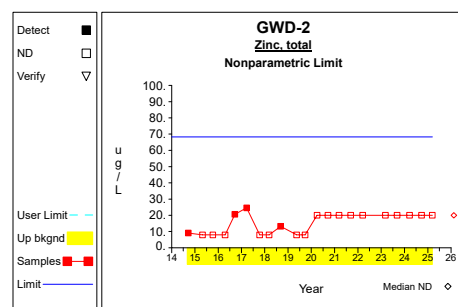
Graph 12



Graph 13

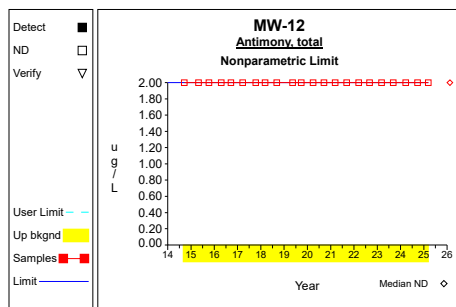


Graph 14

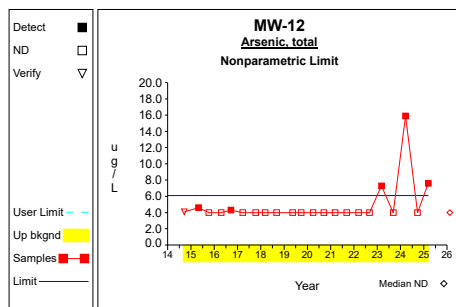


Graph 15

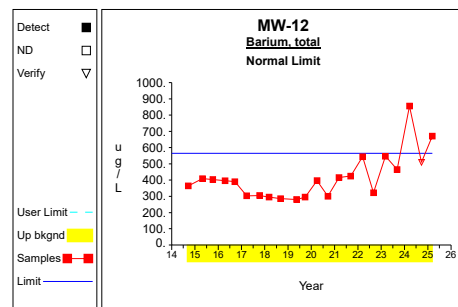
Up vs. Down Prediction Limits



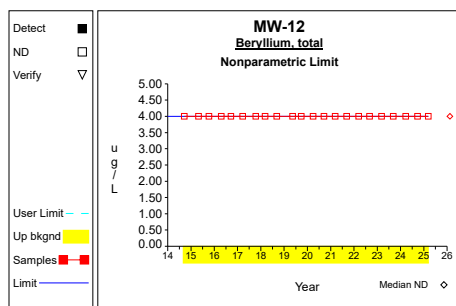
Graph 16



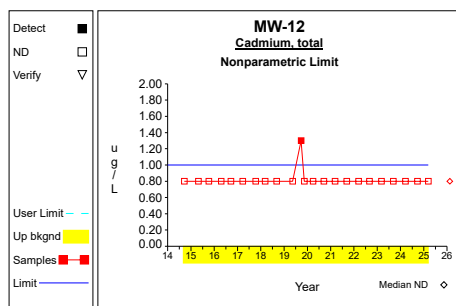
Graph 17



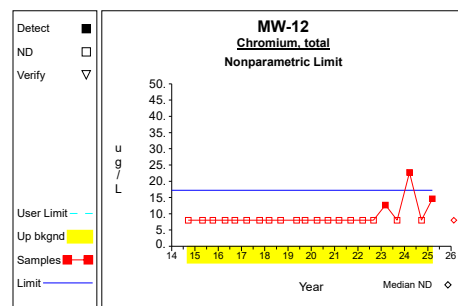
Graph 18



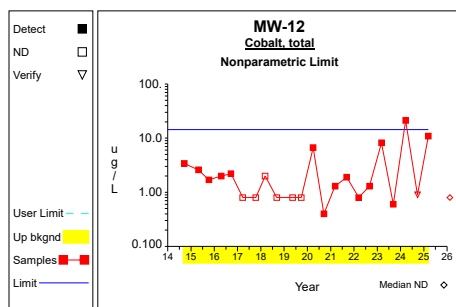
Graph 19



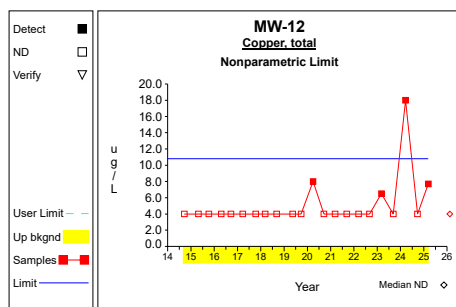
Graph 20



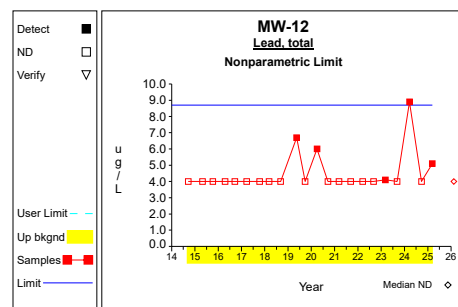
Graph 21



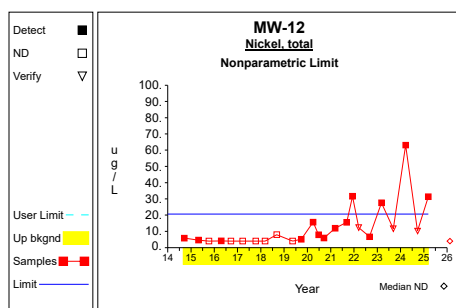
Graph 22



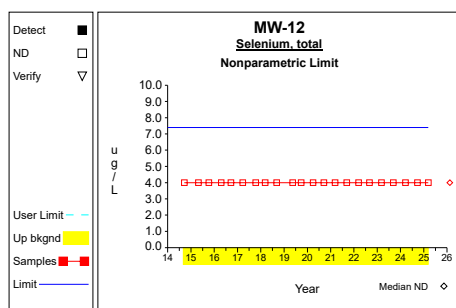
Graph 23



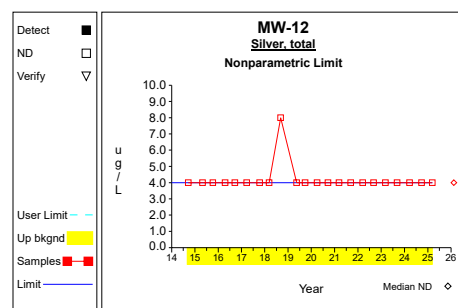
Graph 24



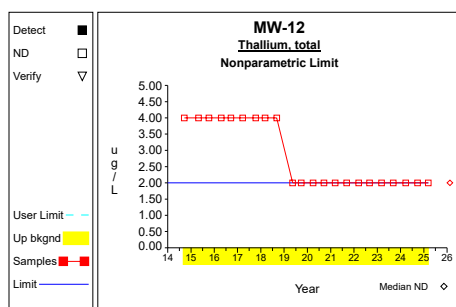
Graph 25



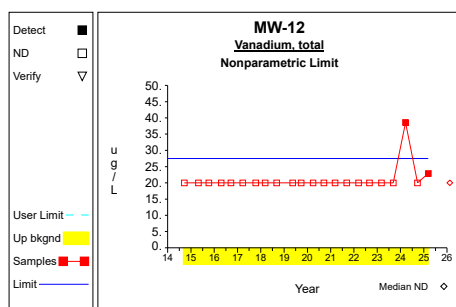
Graph 26



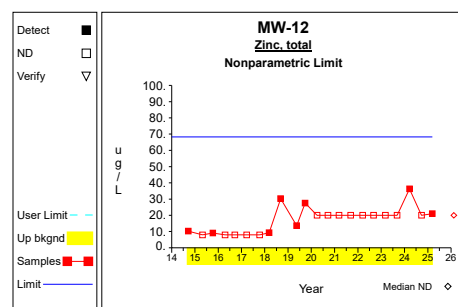
Graph 27



Graph 28

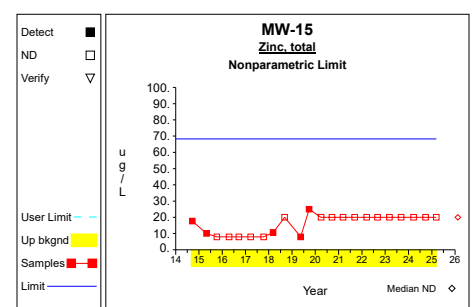
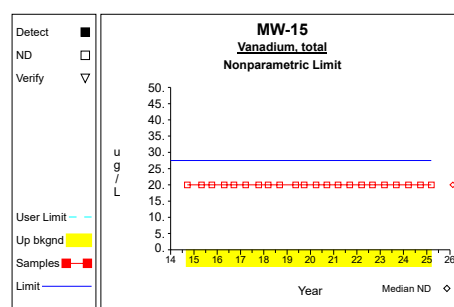
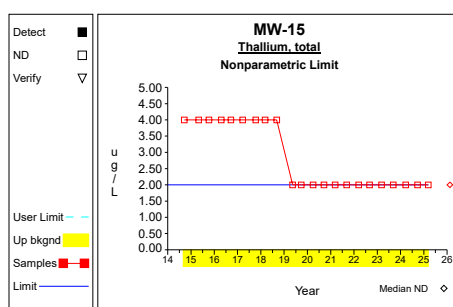
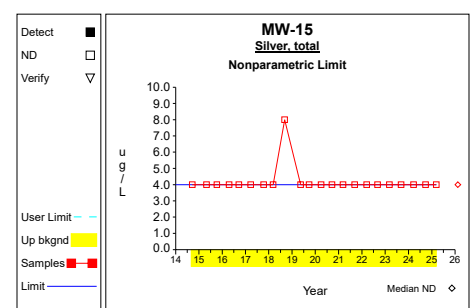
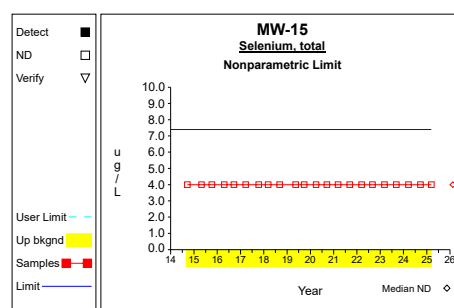
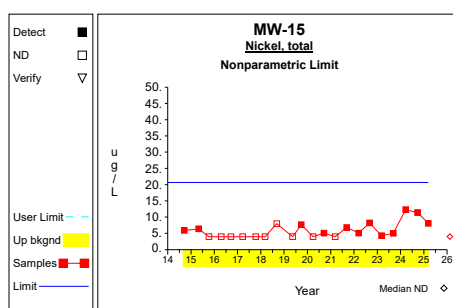
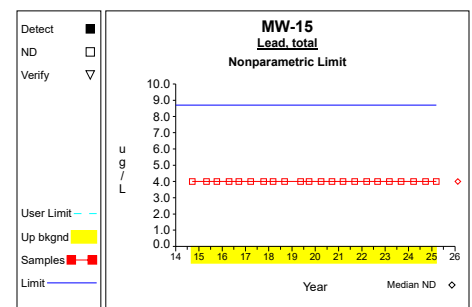
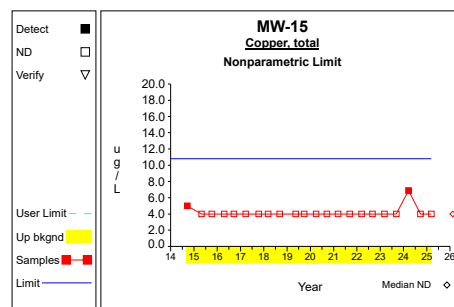
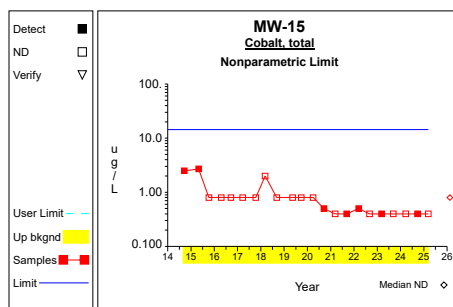
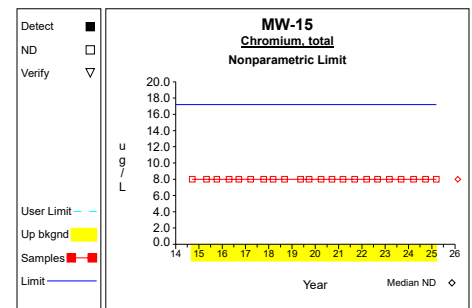
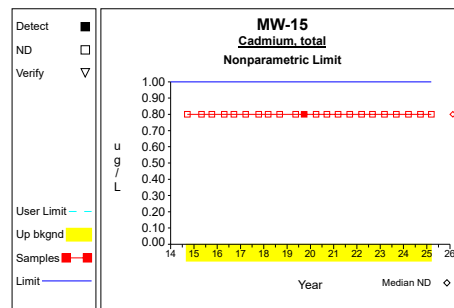
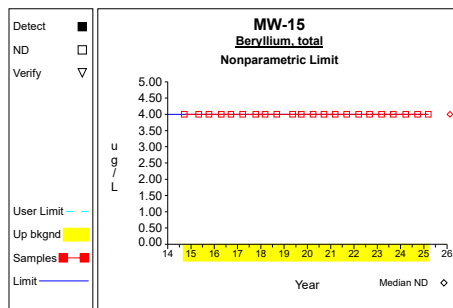
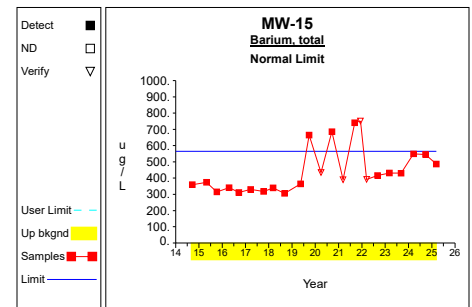
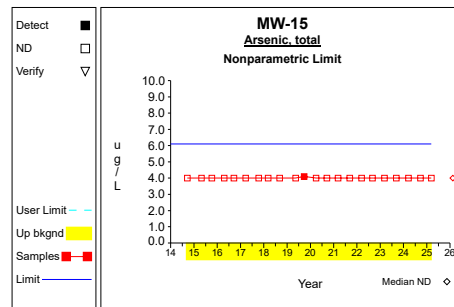
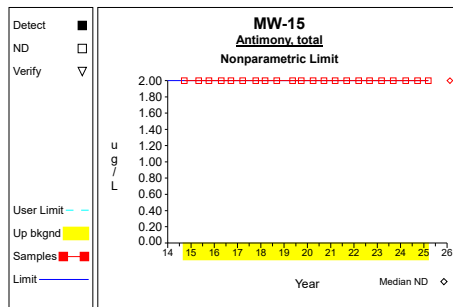


Graph 29

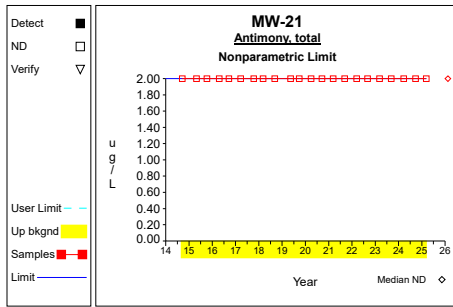


Graph 30

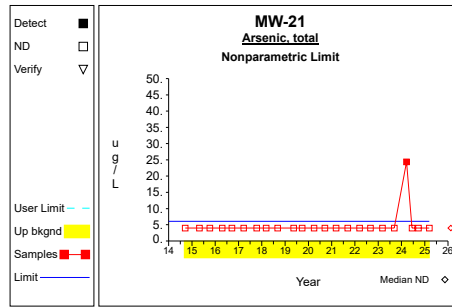
Up vs. Down Prediction Limits



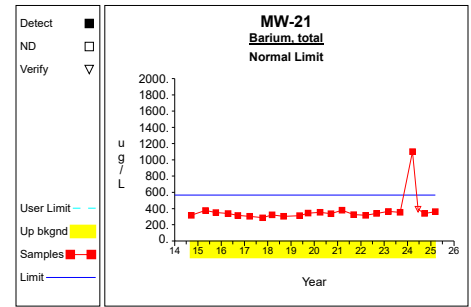
Up vs. Down Prediction Limits



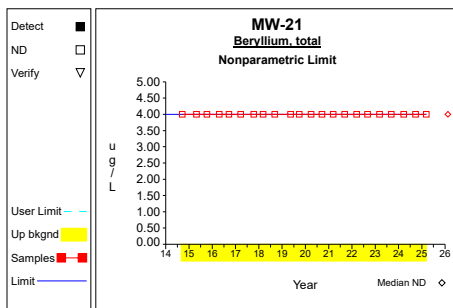
Graph 46



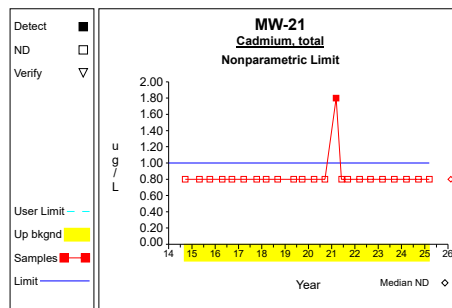
Graph 47



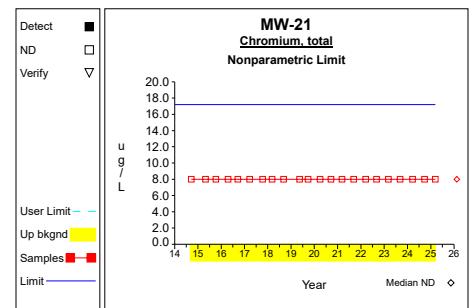
Graph 48



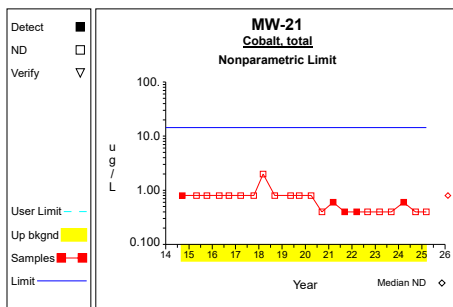
Graph 49



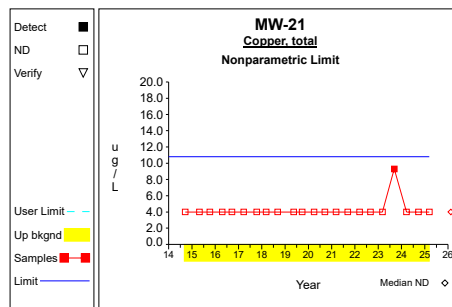
Graph 50



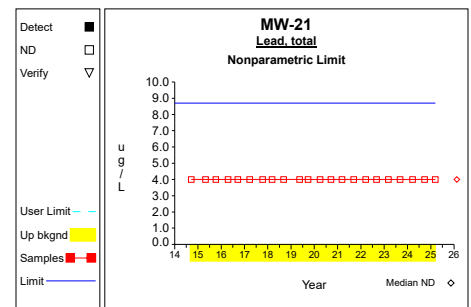
Graph 51



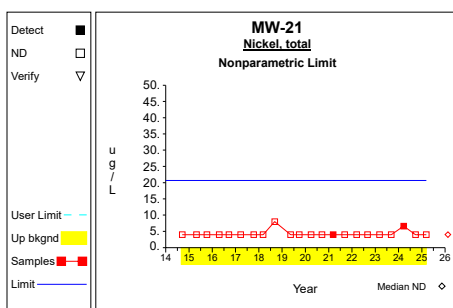
Graph 52



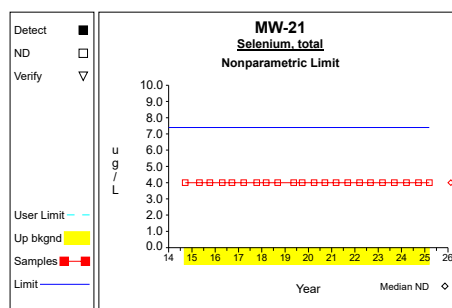
Graph 53



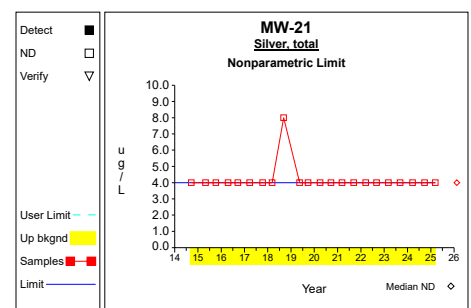
Graph 54



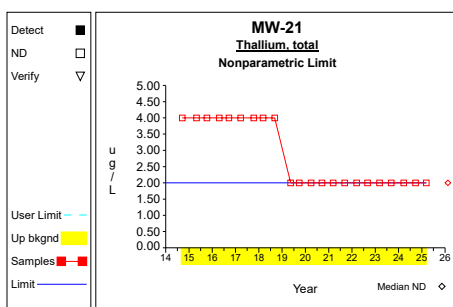
Graph 55



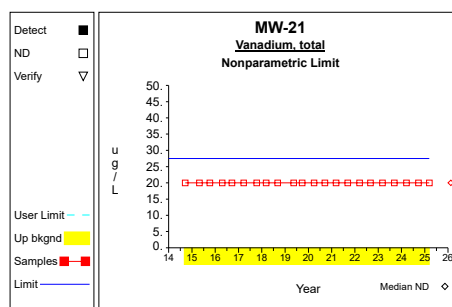
Graph 56



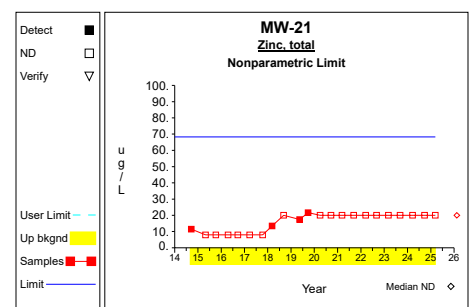
Graph 57



Graph 58

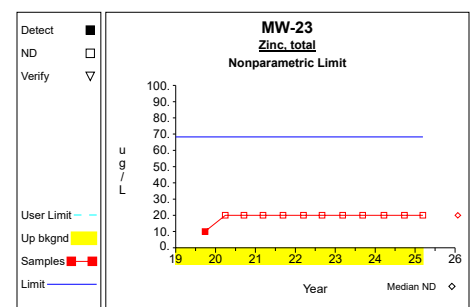
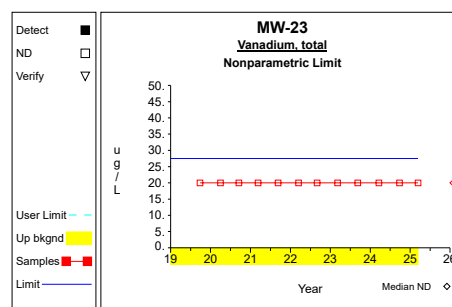
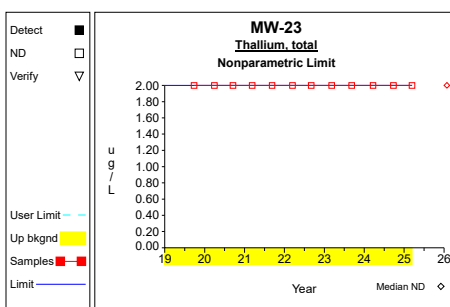
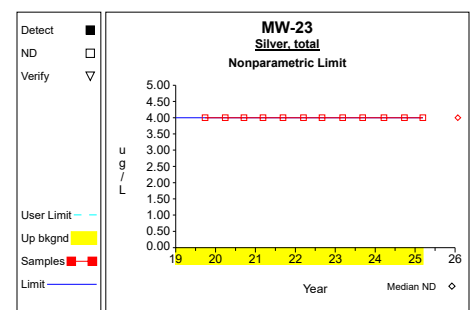
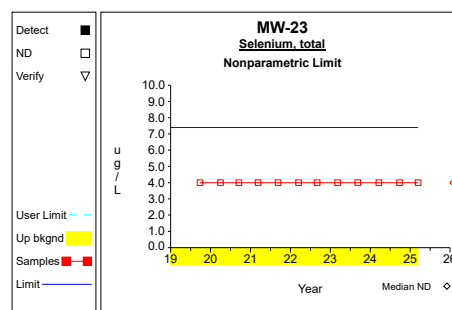
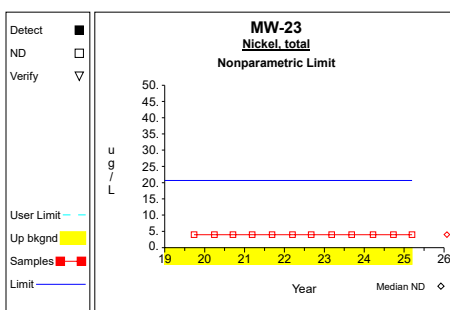
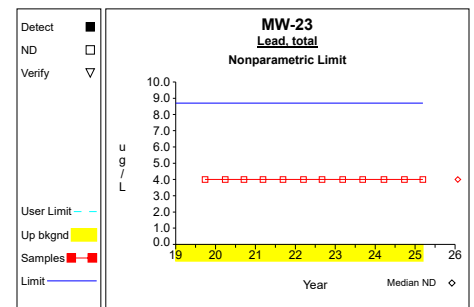
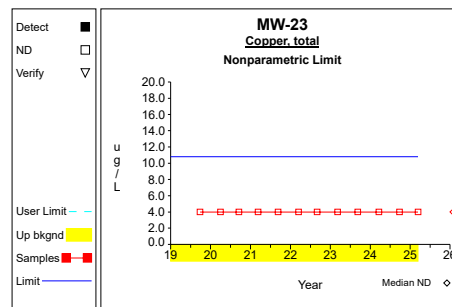
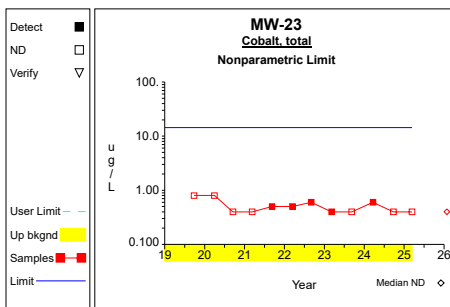
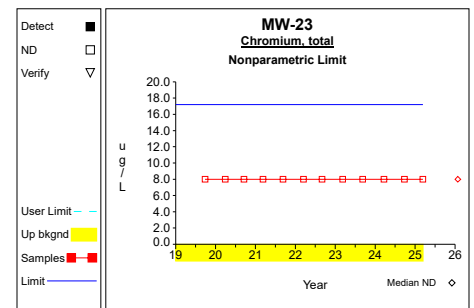
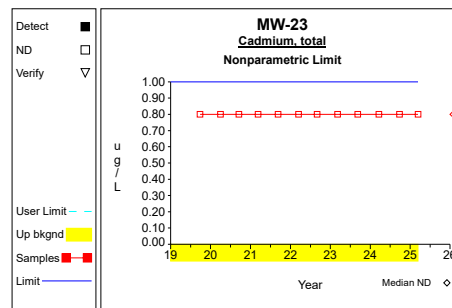
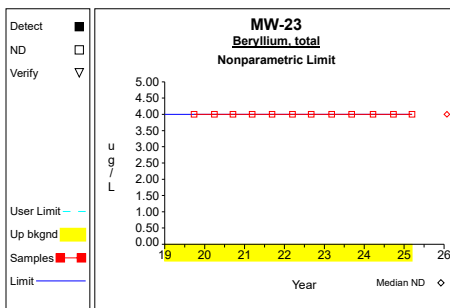
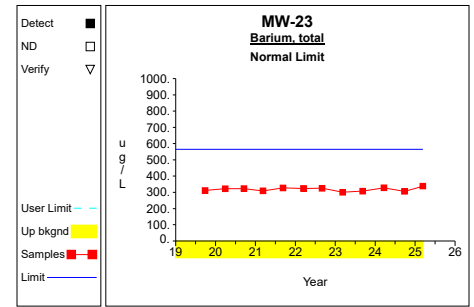
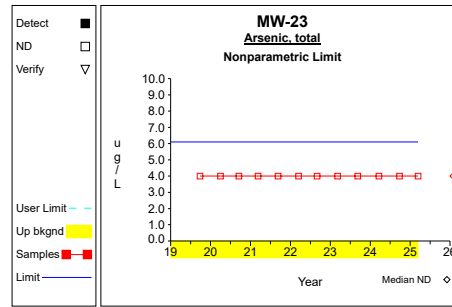
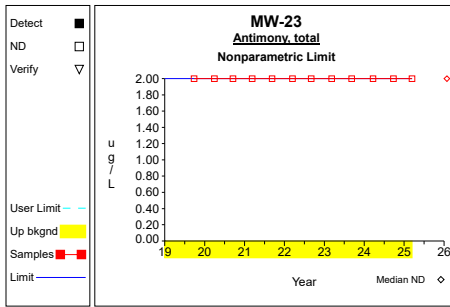


Graph 59

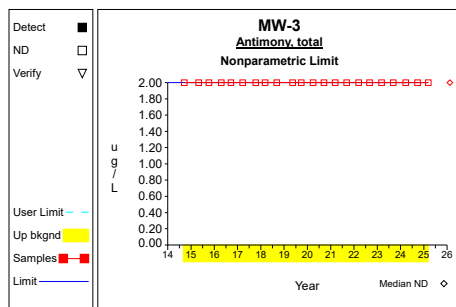


Graph 60

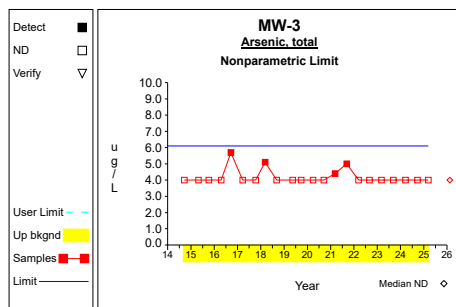
Up vs. Down Prediction Limits



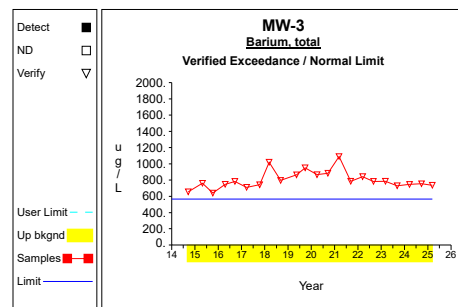
Up vs. Down Prediction Limits



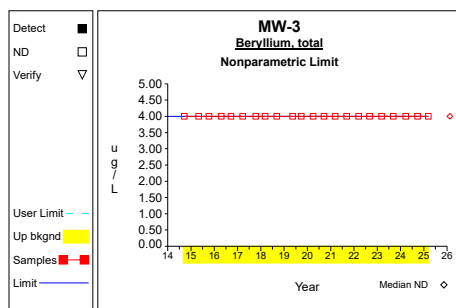
Graph 76



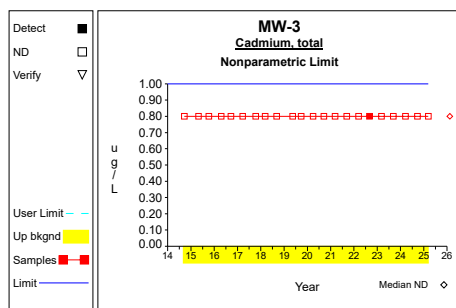
Graph 77



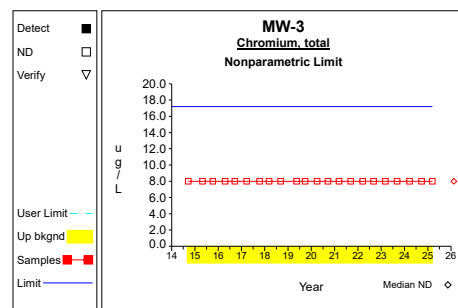
Graph 78



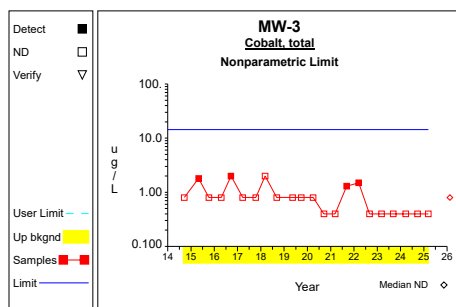
Graph 79



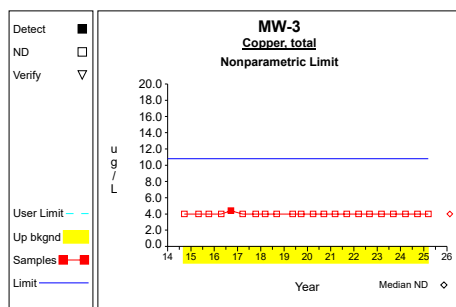
Graph 80



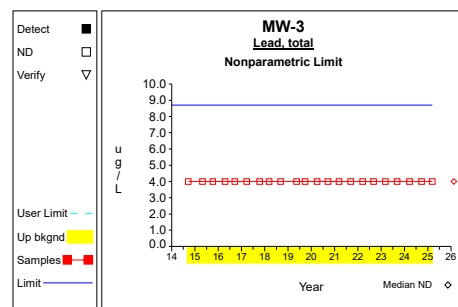
Graph 81



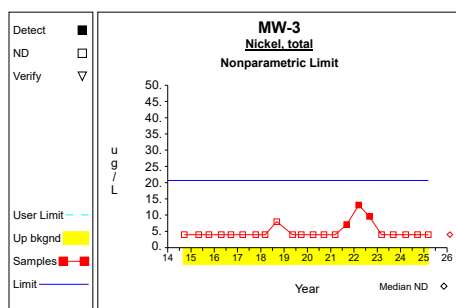
Graph 82



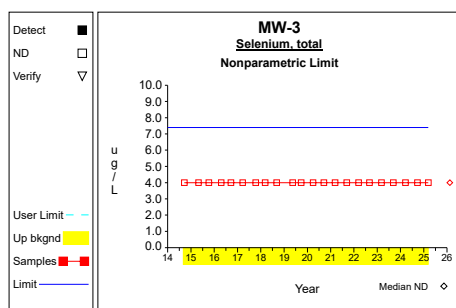
Graph 83



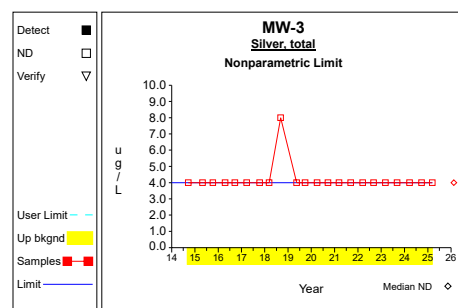
Graph 84



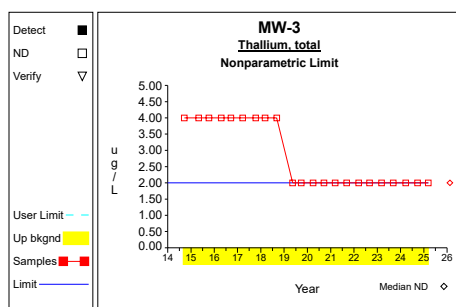
Graph 85



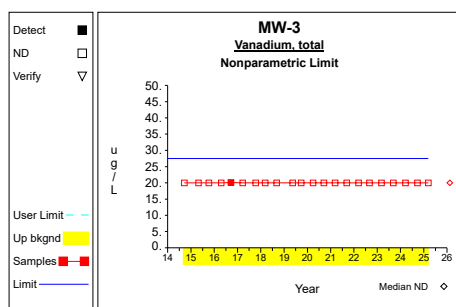
Graph 86



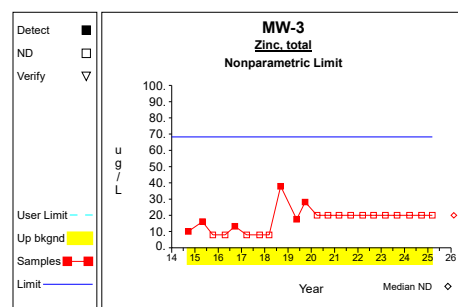
Graph 87



Graph 88

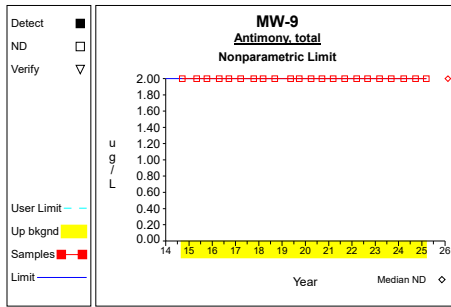


Graph 89

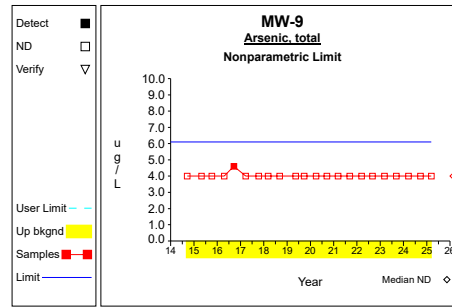


Graph 90

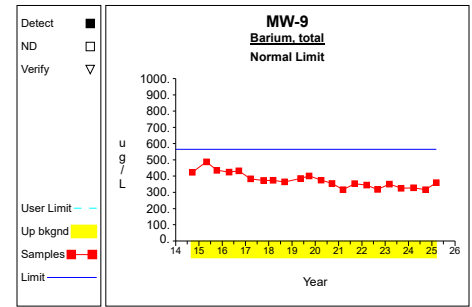
Up vs. Down Prediction Limits



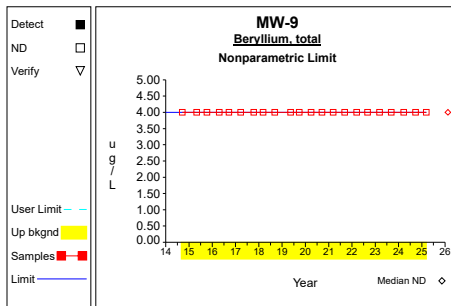
Graph 91



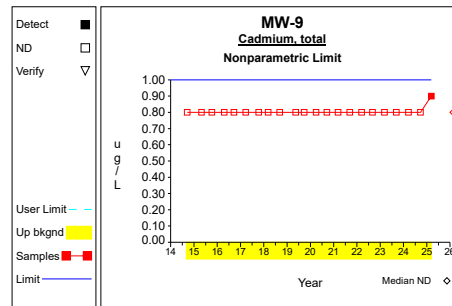
Graph 92



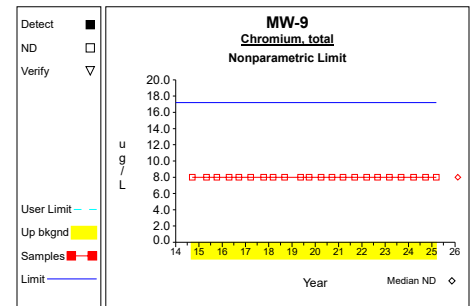
Graph 93



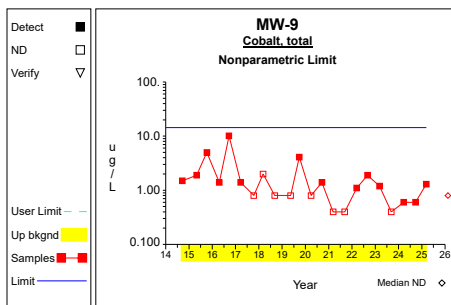
Graph 94



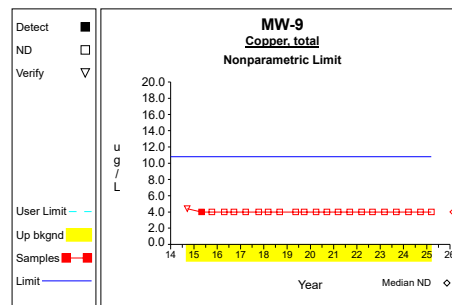
Graph 95



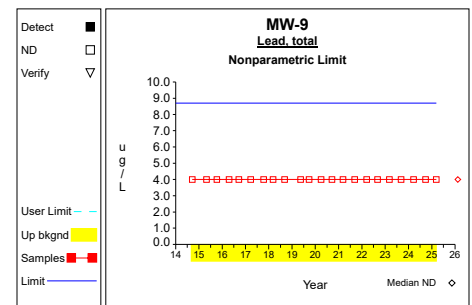
Graph 96



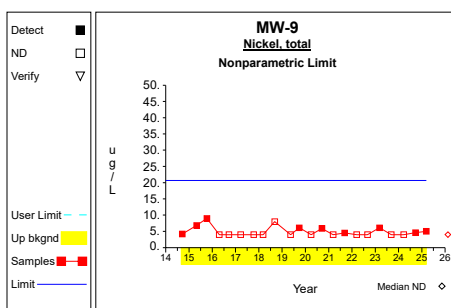
Graph 97



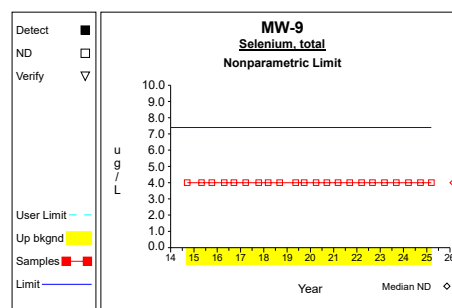
Graph 98



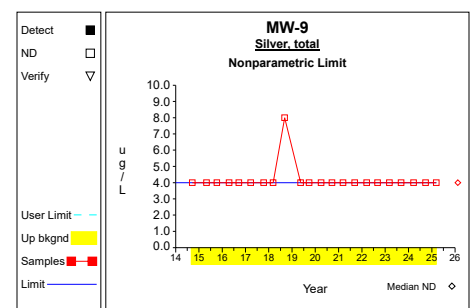
Graph 99



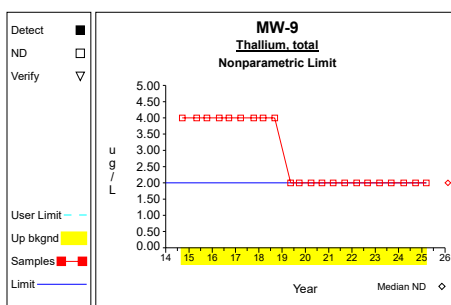
Graph 100



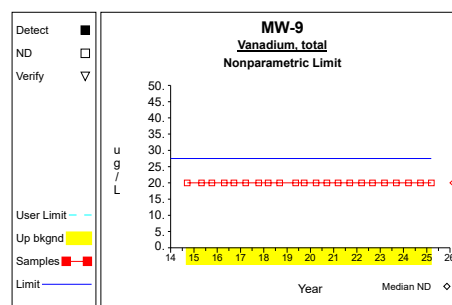
Graph 101



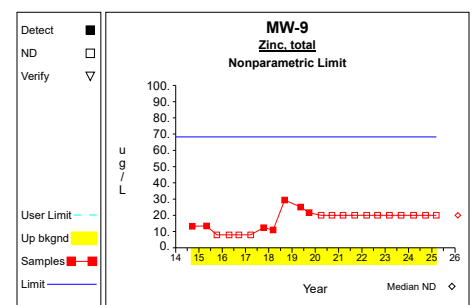
Graph 102



Graph 103

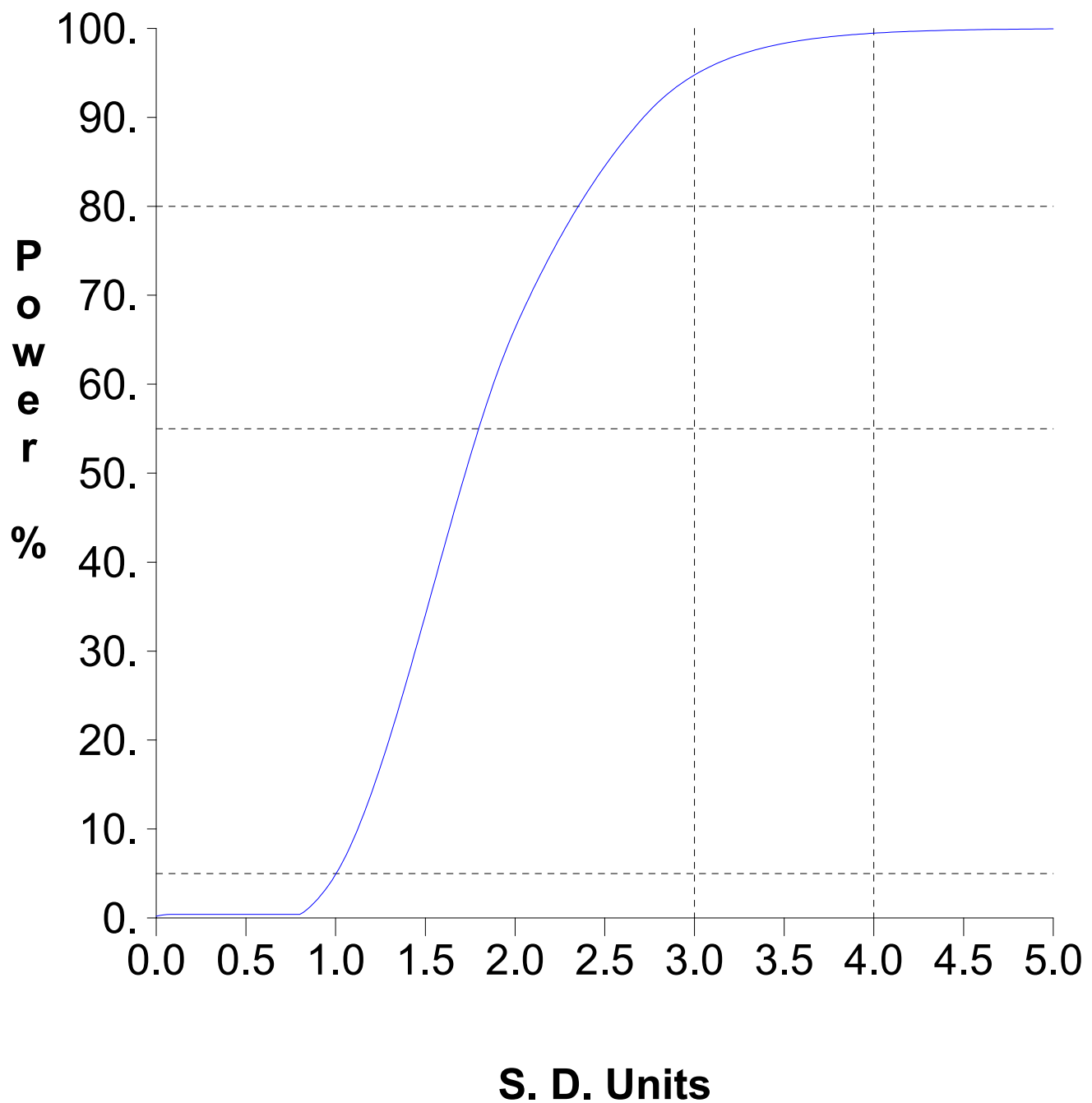


Graph 104



Graph 105

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



Attachment C

Summary Tables and Graphs for the Intrawell Comparisons

Table 1

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

Constituent	Units	Well	N(back)	N(mon)	N(tot)	Mean	SD	R(i-1)	R(i)	S(i-1)	S(i)	Limit	Type	Conf	
Antimony, total	ug/L	GWD-2	13	7	22			2.0000	2.0000			2.0000	nonpar	.99	**
Arsenic, total	ug/L	GWD-2	12	10	25			4.0000	4.0000			4.0000	nonpar	.99	**
Barium, total	ug/L	GWD-2	13	10	25	391.2308	138.4149	496.0000	455.0000	1187.8950	1147.8531	1290.9278	normal		
Beryllium, total	ug/L	GWD-2	13	8	23			4.0000	4.0000			4.0000	nonpar	.99	**
Cadmium, total	ug/L	GWD-2	13	8	23			0.8000	0.8000			0.8000	nonpar	.99	**
Chromium, total	ug/L	GWD-2	13	7	22			8.0000	8.0000			8.0000	nonpar	.99	**
Cobalt, total	ug/L	GWD-2	13	9	24	5.3231	4.6734	3.6000	1.4000	5.3231	5.3231	35.6999	normal		
Copper, total	ug/L	GWD-2	13	8	23			4.0000	4.0000			4.0000	nonpar	.99	**
Lead, total	ug/L	GWD-2	13	8	23			4.0000	4.0000			4.0000	nonpar	.99	**
Nickel, total	ug/L	GWD-2	13	8	23	7.4923	3.2214	4.4000	4.0000	7.4923	7.4923	28.4314	normal		
Selenium, total	ug/L	GWD-2	13	8	23			4.0000	4.0000			4.0000	nonpar	.99	**
Silver, total	ug/L	GWD-2	13	7	22			4.0000	4.0000			4.0000	nonpar	.99	**
Thallium, total	ug/L	GWD-2	13	7	22			2.0000	2.0000			4.0000	nonpar	.99	**
Vanadium, total	ug/L	GWD-2	13	8	23			20.0000	20.0000			20.0000	nonpar	.99	**
Zinc, total	ug/L	GWD-2	13	8	23	10.7308	5.5199	20.0000	20.0000	10.7308	10.7308	46.6099	normal		

N(back) and N(mon) = Non-outlier measurements in the background and monitoring periods.

N(tot) = All independent measurements for that constituent and well.

For transformed data, mean and SD in transformed units and control limit in original units.

Conf = confidence level for passing initial test or one of two verification resamples (nonparametric test only).

* - Insufficient Data.

** - Detection Frequency < 25%.

*** - Zero Variance.

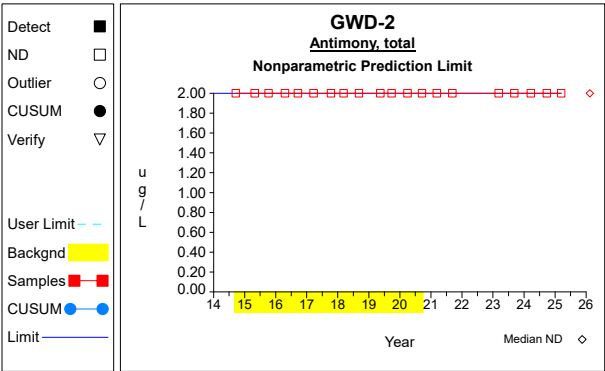
Table 4

Dixon's Test Outliers
5% Significance Level

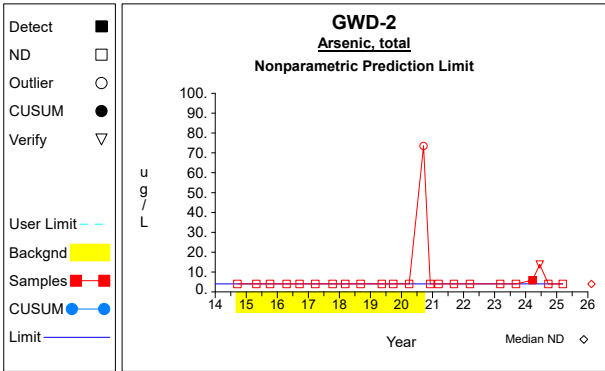
Constituent	Units	Well	Date	Result	ND Qualifier	Date Range	N	Critical Value
Arsenic, total	ug/L	GWD-2	09/17/2020	73.5000		09/18/2014-09/17/2020	13	0.5213

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

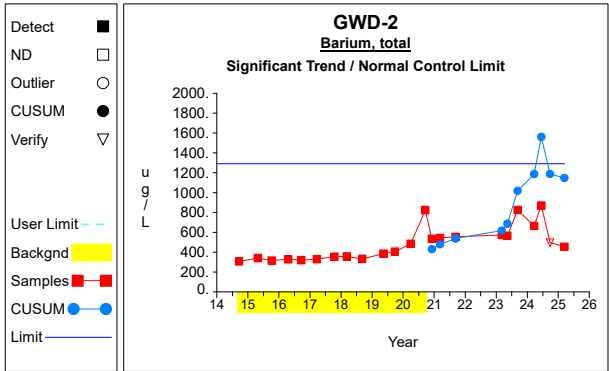
Intra-Well Control Charts / Prediction Limits



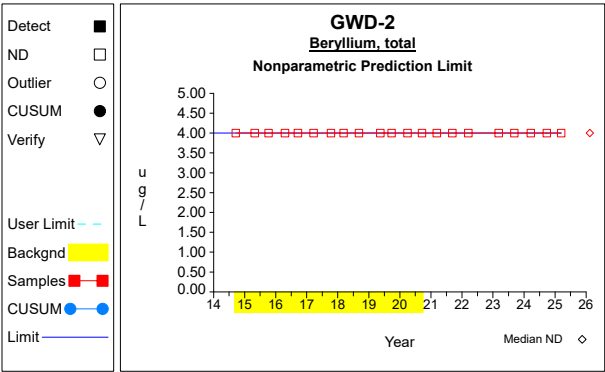
Graph 1



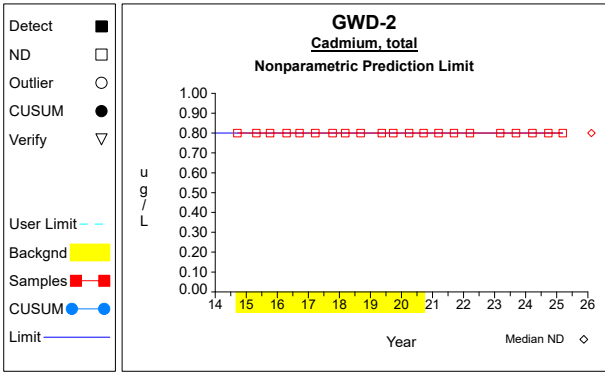
Graph 2



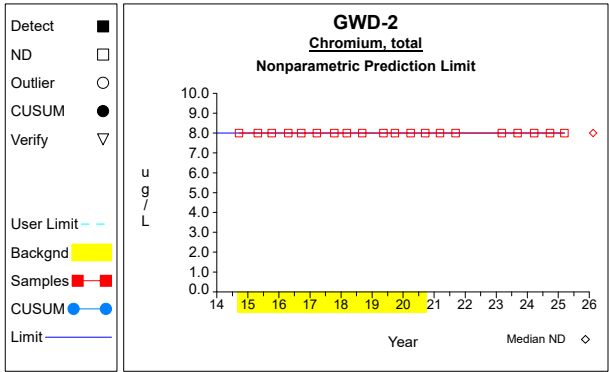
Graph 3



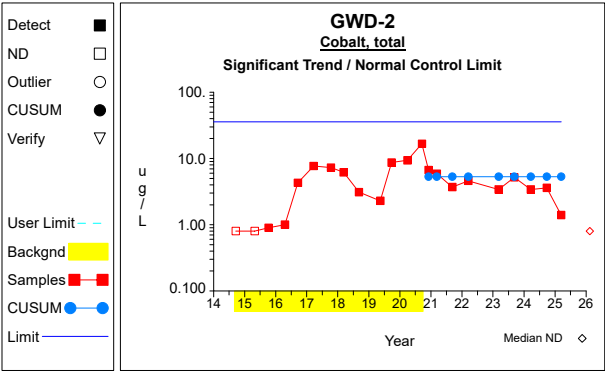
Graph 4



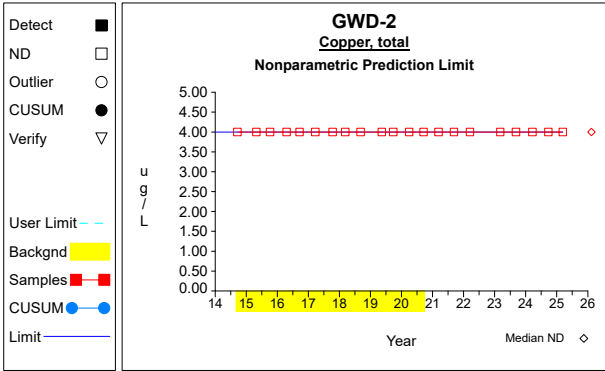
Graph 5



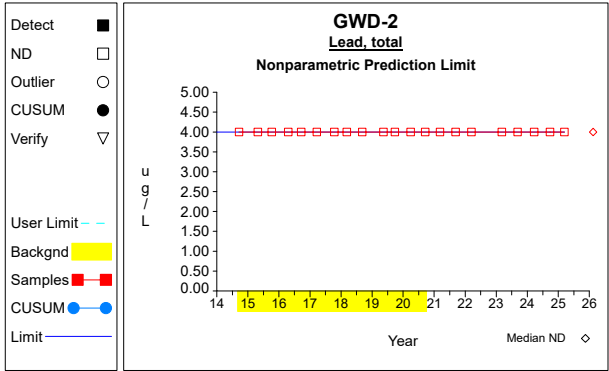
Graph 6



Graph 7

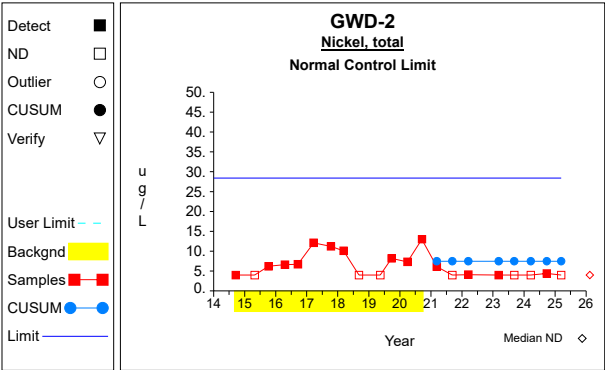


Graph 8

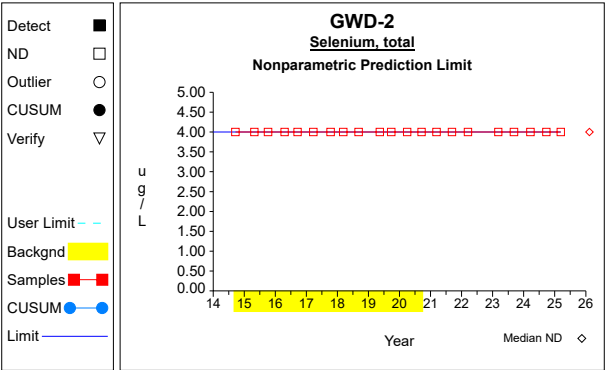


Graph 9

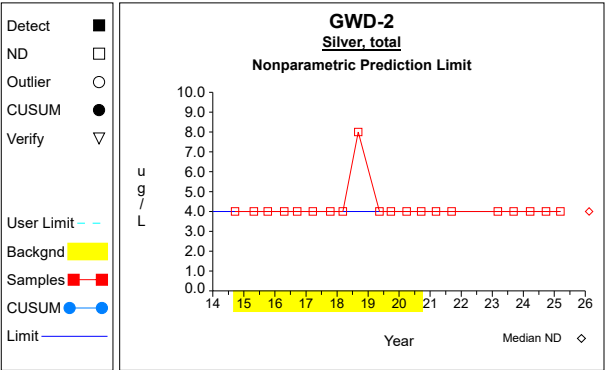
Intra-Well Control Charts / Prediction Limits



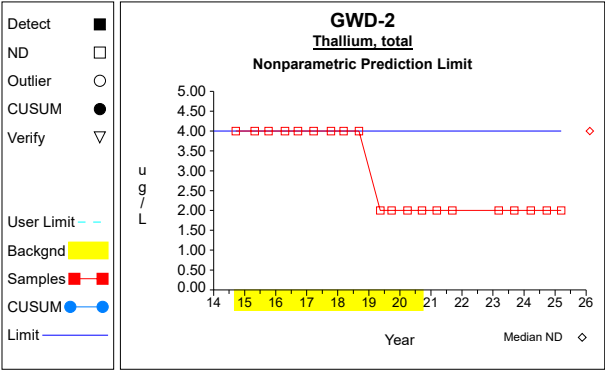
Graph 10



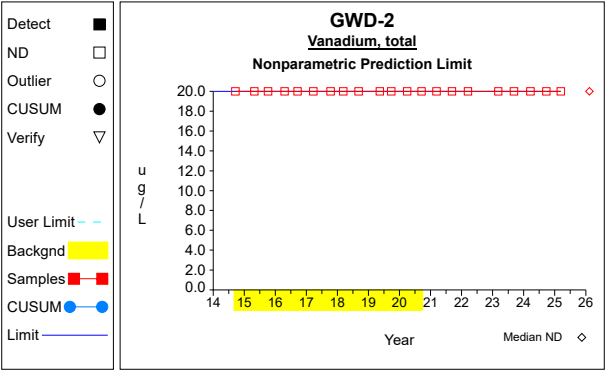
Graph 11



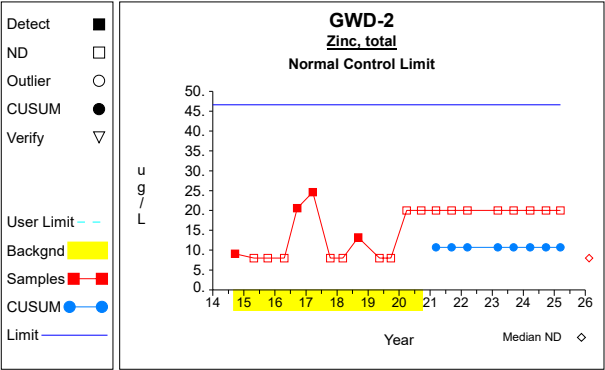
Graph 12



Graph 13

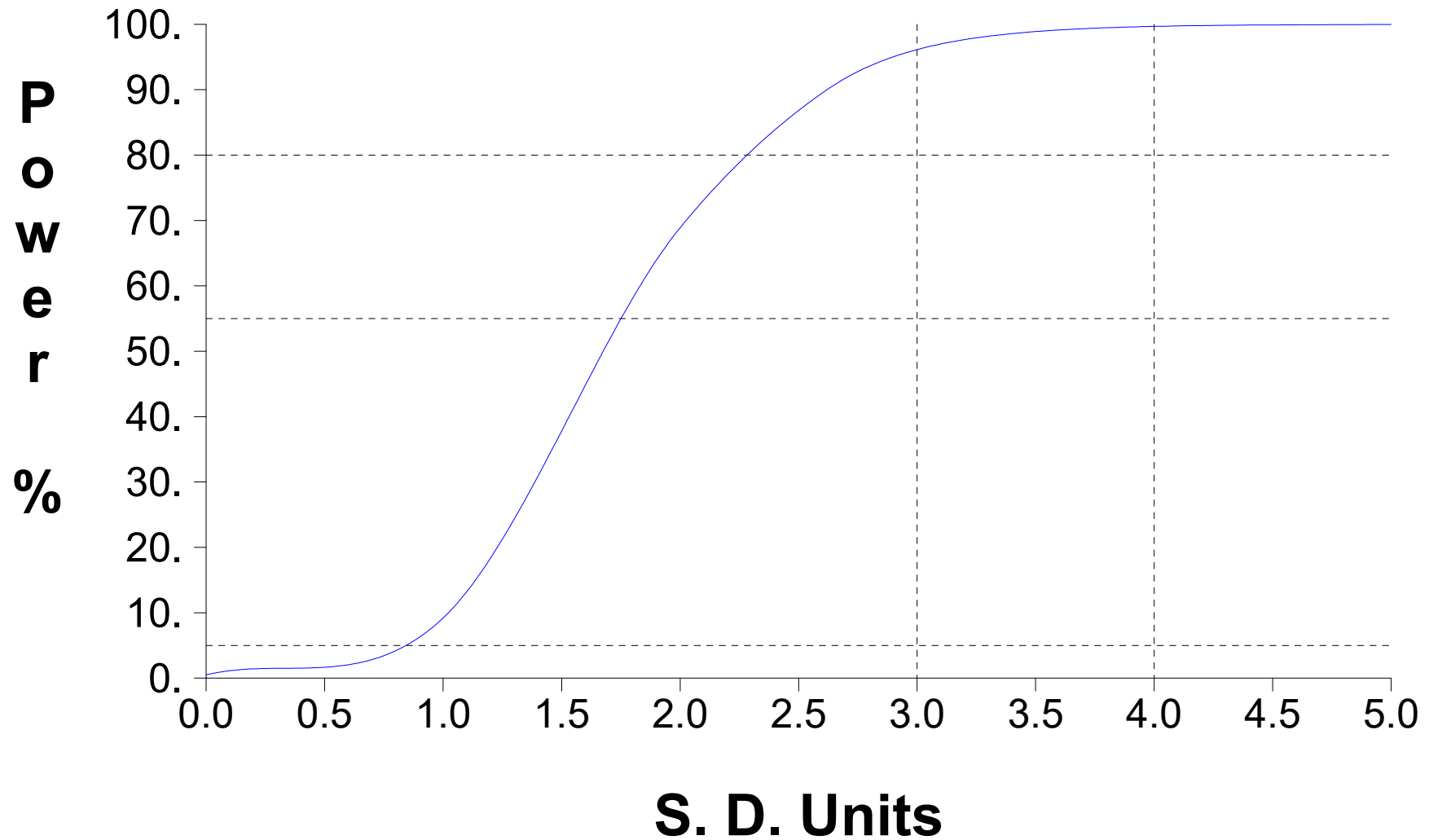


Graph 14



Graph 15

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



Attachment D

Assessment Statistics for Verified Trace Metal Exceedances

Table 1

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

Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend
Arsenic, total	ug/L	GWD-2	4	5.925	5.563	1.176	0.000	12.468	10.000	inc
Barium, total	ug/L	GWD-2	4	621.500	188.959	1.176	399.229	843.771	2000.000	
Cobalt, total	ug/L	GWD-2	4	3.400	1.558	1.176	1.568	5.232	2.100	
Nickel, total	ug/L	GWD-2	4	2.600	1.200	1.176	1.188	4.012	100.000	
Arsenic, total	ug/L	MW-12	4	6.875	6.570	1.176	0.000	14.604	10.000	
Barium, total	ug/L	MW-12	4	625.250	177.513	1.176	416.443	834.057	2000.000	
Cobalt, total	ug/L	MW-12	4	8.425	9.828	1.176	0.000	19.985	2.100	
Nickel, total	ug/L	MW-12	4	29.075	24.663	1.176	0.065	58.085	100.000	
Arsenic, total	ug/L	MW-15	4	2.000	0.000	1.176	2.000	2.000	10.000	dec
Barium, total	ug/L	MW-15	4	502.500	56.264	1.176	436.317	568.683	2000.000	
Cobalt, total	ug/L	MW-15	4	0.400	0.000	1.176	0.400	0.400	2.100	
Nickel, total	ug/L	MW-15	4	9.200	3.332	1.176	5.281	13.119	100.000	
Arsenic, total	ug/L	MW-19	4	2.000	0.000	1.176	2.000	2.000	10.000	dec
Barium, total	ug/L	MW-19	4	377.225	249.407	1.176	83.851	670.599	2000.000	
Cobalt, total	ug/L	MW-19	4	5.750	5.895	1.176	0.000	12.685	2.100	
Nickel, total	ug/L	MW-19	4	7.825	5.968	1.176	0.804	14.846	100.000	
Arsenic, total	ug/L	MW-3	4	2.000	0.000	1.176	2.000	2.000	10.000	inc
Barium, total	ug/L	MW-3	4	742.000	11.165	1.176	728.866	755.134	2000.000	
Cobalt, total	ug/L	MW-3	4	0.400	0.000	1.176	0.400	0.400	2.100	
Nickel, total	ug/L	MW-3	4	2.000	0.000	1.176	2.000	2.000	100.000	
Arsenic, total	ug/L	MW-9	4	2.000	0.000	1.176	2.000	2.000	10.000	dec
Barium, total	ug/L	MW-9	4	332.000	18.708	1.176	309.994	354.006	2000.000	
Cobalt, total	ug/L	MW-9	4	1.125	0.670	1.176	0.337	1.913	2.100	
Nickel, total	ug/L	MW-9	4	3.400	1.625	1.176	1.489	5.311	100.000	

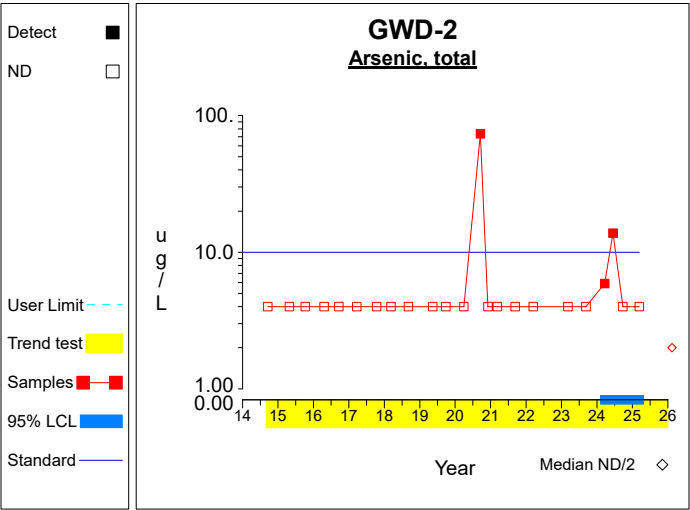
* - Insufficient Data

** - Significant Exceedance

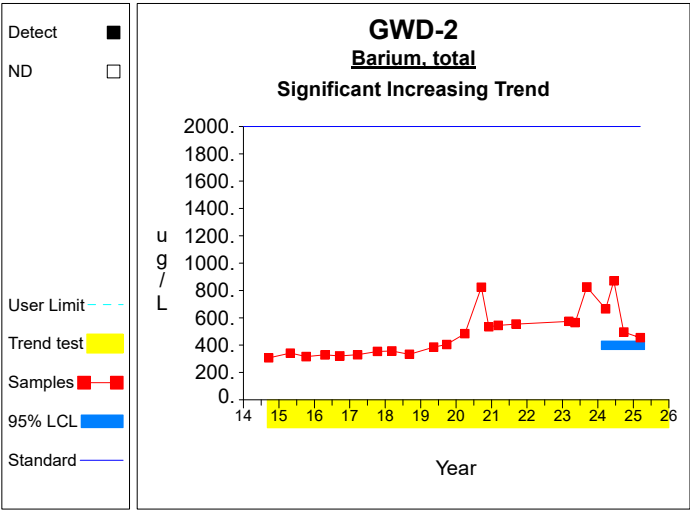
LCL = Lower Confidence Limit

UCL = Upper Confidence Limit

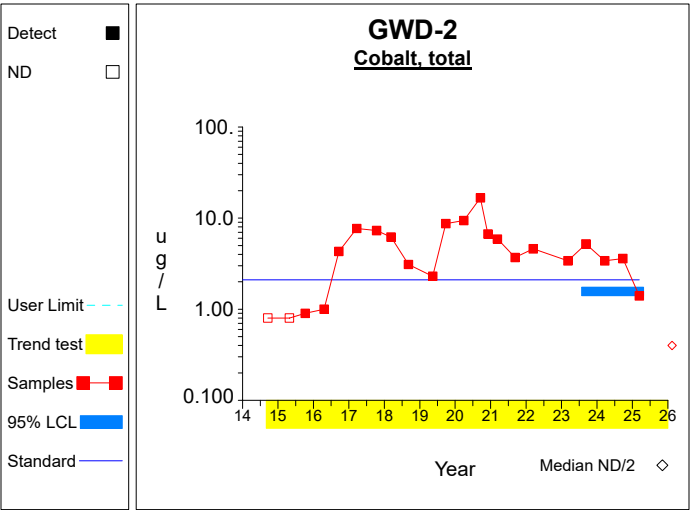
Confidence Limits (Assessment)



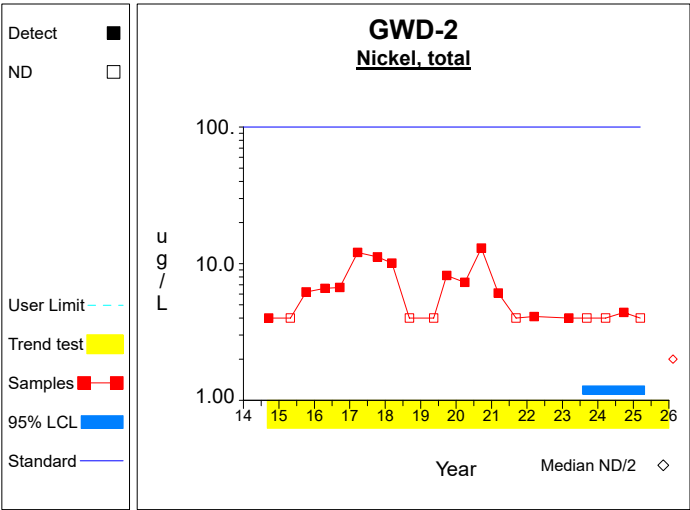
Graph 1



Graph 2

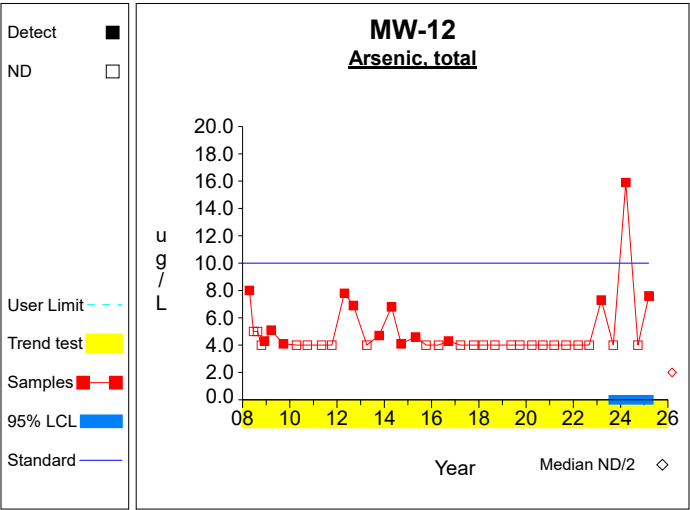


Graph 3

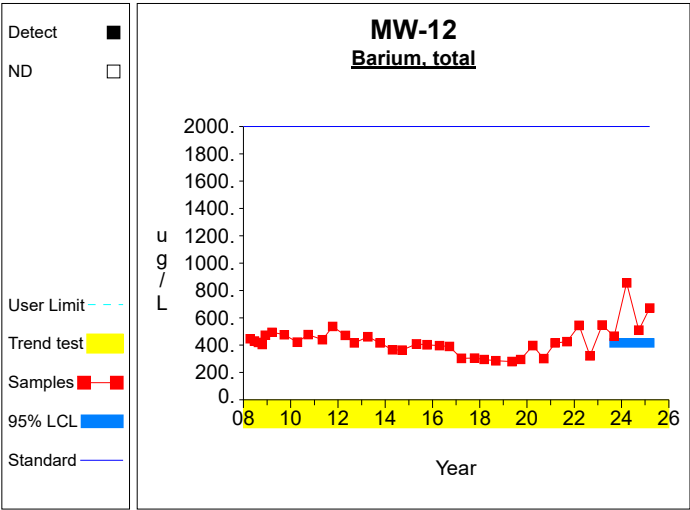


Graph 4

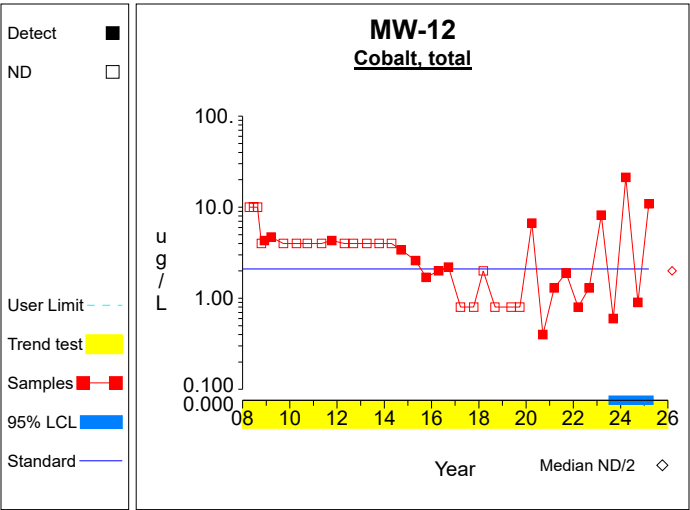
Confidence Limits (Assessment)



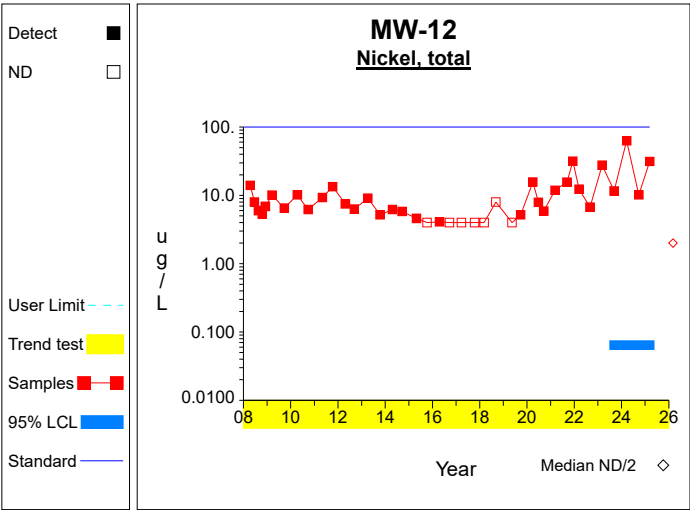
Graph 5



Graph 6

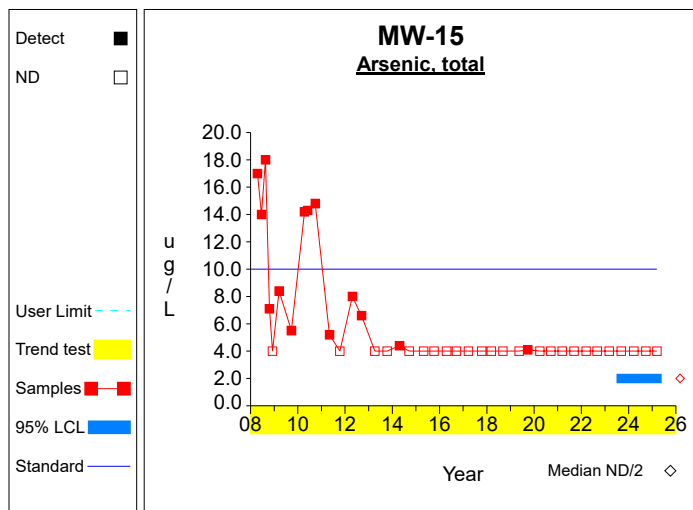


Graph 7

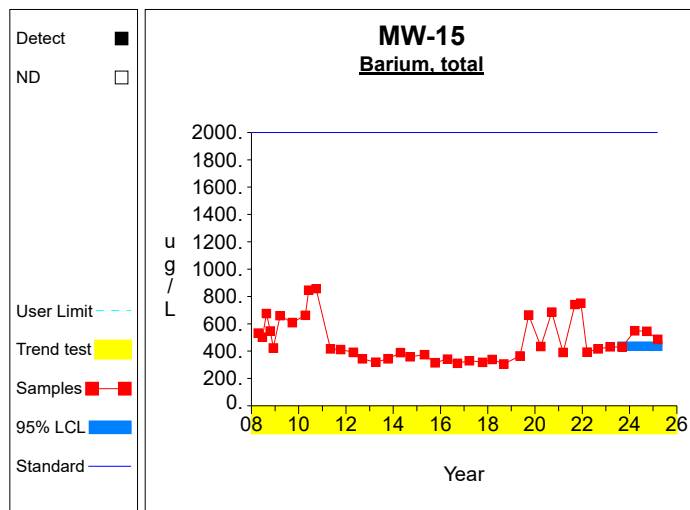


Graph 8

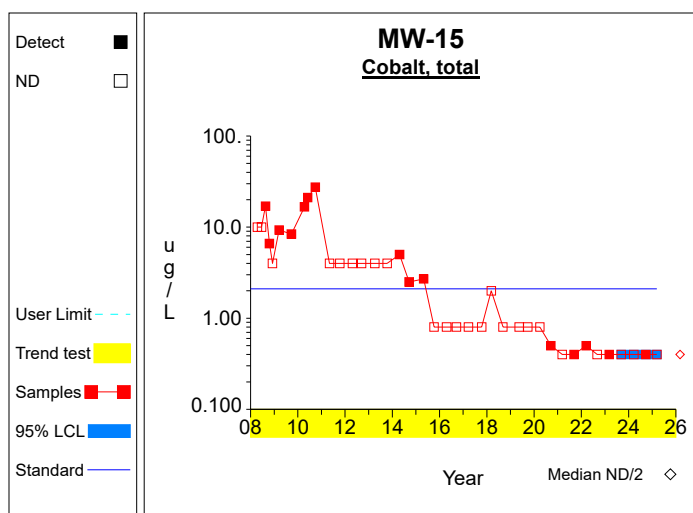
Confidence Limits (Assessment)



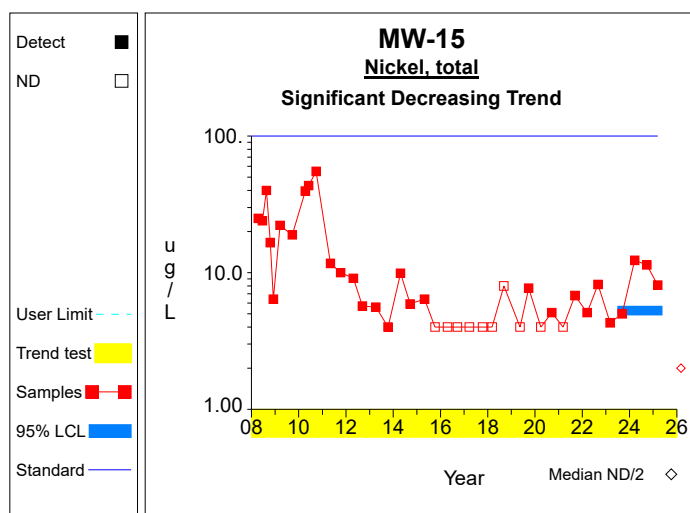
Graph 9



Graph 10

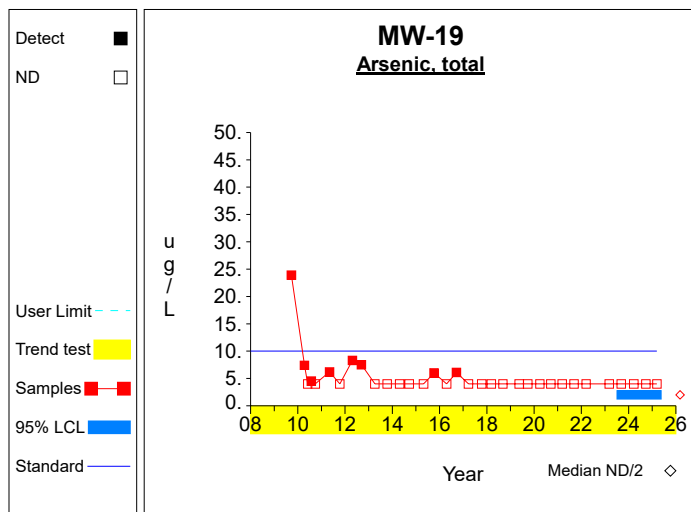


Graph 11

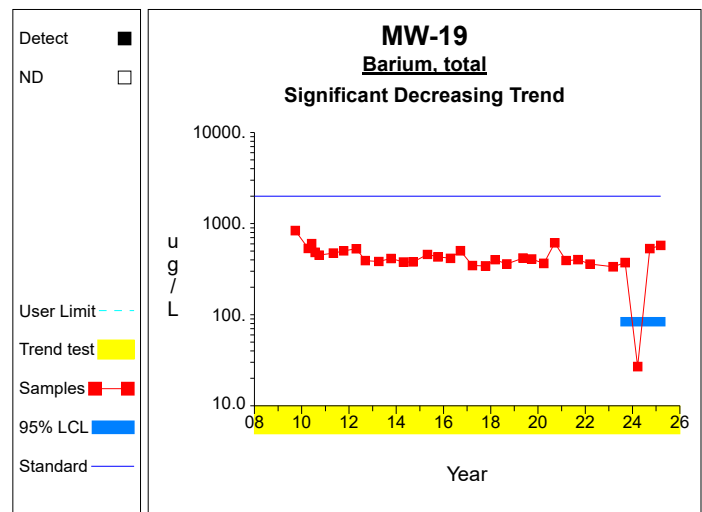


Graph 12

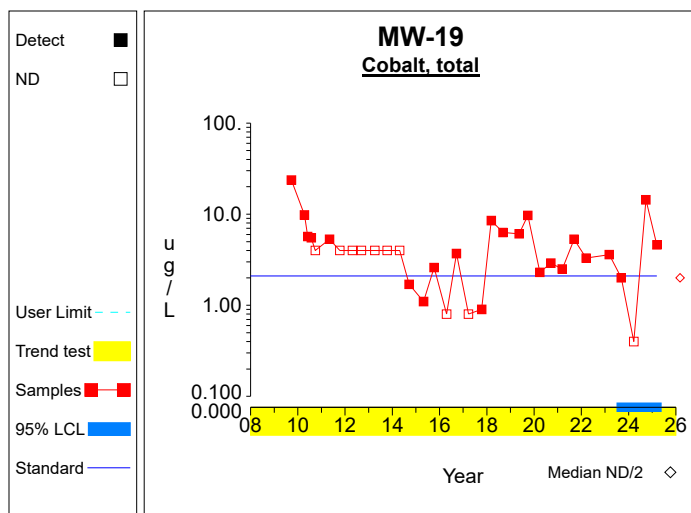
Confidence Limits (Assessment)



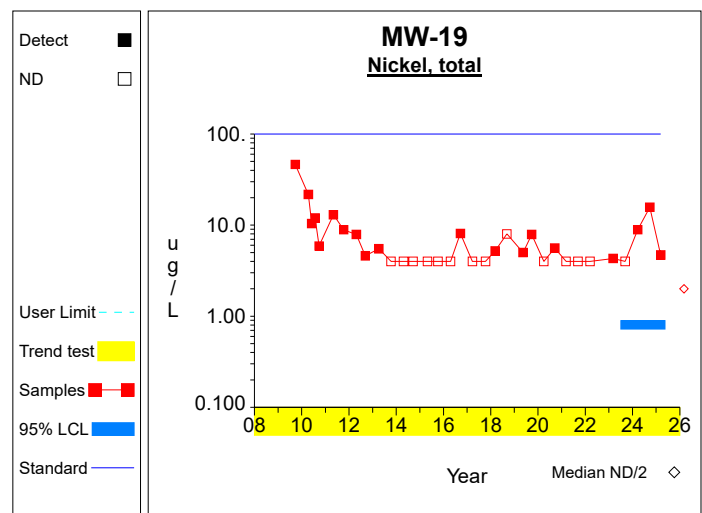
Graph 13



Graph 14



Graph 15



Graph 16

MW-3
Arsenic, total

u g / L

Year

Median ND/2

Detect

ND

User Limit

Trend test

Samples

95% LCL

Standard

MW-3
Barium, total

Significant Increasing Trend

Y-axis: ug / L (0 to 2000)
X-axis: Year (08 to 26)

Legend:

- Detect (Black square)
- ND (White square)
- User Limit (Dashed line)
- Trend test (Yellow square)
- Samples (Red square)
- 95% LCL (Blue square)
- Standard (Blue line)

MW-3
Cobalt, total

ug / L

Year

Median ND/2

Detect ■

ND □

User Limit

Trend test

Samples ■—■

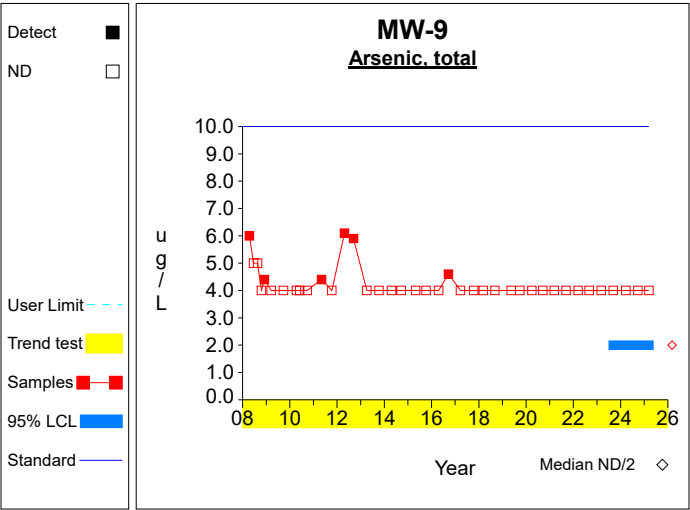
95% LCL

Standard

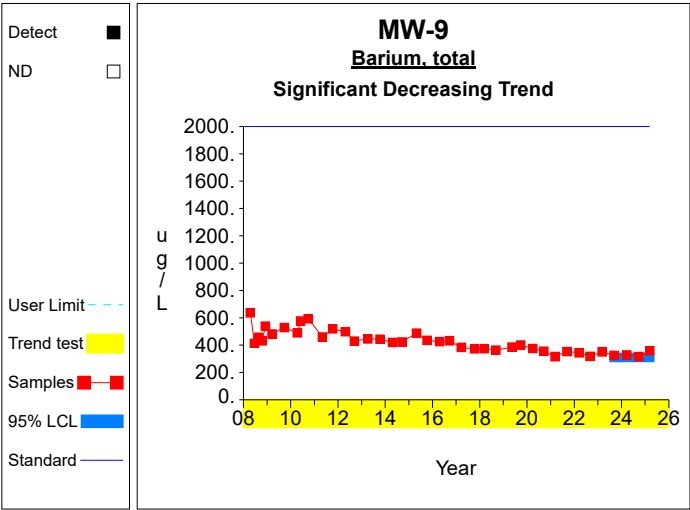
Year	Concentration (ug/L)	Status
2008	10.0	Detect
2009	4.0	Detect
2010	6.0	Detect
2011	4.0	Detect
2012	4.0	Detect
2013	4.0	Detect
2014	4.0	Detect
2015	0.8	Detect
2016	2.0	Detect
2017	0.8	Detect
2018	2.0	Detect
2019	0.8	Detect
2020	0.8	Detect
2021	0.5	Detect
2022	1.2	Detect
2023	0.5	Detect
2024	0.5	Detect
2025	0.5	Detect
2026	0.5	Detect
2008	10.0	ND
2009	4.0	ND
2010	6.0	ND
2011	4.0	ND
2012	4.0	ND
2013	4.0	ND
2014	4.0	ND
2015	0.8	ND
2016	2.0	ND
2017	0.8	ND
2018	2.0	ND
2019	0.8	ND
2020	0.8	ND
2021	0.5	ND
2022	1.2	ND
2023	0.5	ND
2024	0.5	ND
2025	0.5	ND
2026	0.5	ND

Prepared by: Otter Creek Environmental

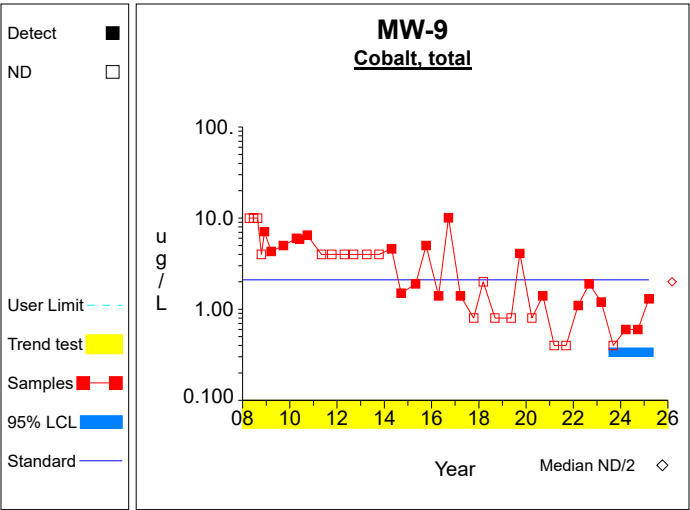
Confidence Limits (Assessment)



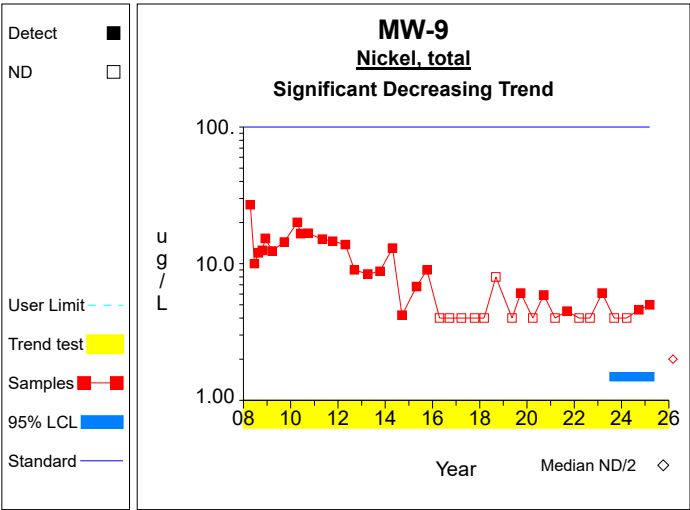
Graph 21



Graph 22



Graph 23



Graph 24

Attachment E

Summary of Historical VOC Detections

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
1,1-dichloroethane	GWD-1	6/18/2008		1.1	1.0	ug/L
Chloroethane	GWD-1	4/15/2008		2.0	1.0	ug/L
Chloroethane	GWD-1	6/18/2008		2.2	1.0	ug/L
Chloroethane	GWD-1	8/19/2008		1.9	1.0	ug/L
Chloroethane	GWD-1	12/04/2008		1.8	1.0	ug/L
Chloroethane	GWD-1	3/16/2009		1.4	1.0	ug/L
Chloroethane	GWD-1	4/12/2010		1.2	1.0	ug/L
Trichlorofluoromethane	GWD-1	9/23/2009		1.1	1.0	ug/L
Acetone	GWD-2	10/12/2017		18.2	10.0	ug/L
Chloroethane	GWD-2	10/07/2015		1	1	ug/L
Cis-1,2-dichloroethylene	GWD-2	10/07/2015		1	1	ug/L
Trichloroethylene	GWD-2	9/18/2014		1	1	ug/L
Trichlorofluoromethane	GWD-2	9/18/2014		1.9	1.0	ug/L
Acetone	MW-12	10/12/2017		12.9	10.0	ug/L
Chloromethane	MW-12	3/20/2024		1.4	1.0	ug/L
Acetone	MW-14	10/12/2017		10	10	ug/L
Trichloroethylene	MW-14	3/16/2009		2.8	1.0	ug/L
1,1-dichloroethane	MW-15	12/04/2008		1.3	1.0	ug/L
1,4-dichlorobenzene	MW-15	12/04/2008		4.3	1.0	ug/L
Acetone	MW-15	10/12/2017		15.5	10.0	ug/L
Benzene	MW-15	12/04/2008		2	1	ug/L
Bis(2-ethylhexyl) phthalate	MW-15	9/01/2022		7	6	ug/L
Chlorobenzene	MW-15	12/04/2008		14.3	1.0	ug/L
Chloroethane	MW-15	10/18/2008		1.6	1.0	ug/L
Acetone	MW-18	10/12/2017		10.2	10.0	ug/L
Trichlorofluoromethane	MW-19	4/12/2010		3.4	1.0	ug/L
Trichlorofluoromethane	MW-19	6/01/2010		4.1	1.0	ug/L
Trichlorofluoromethane	MW-19	7/27/2010		4.7	1.0	ug/L
Trichlorofluoromethane	MW-19	9/28/2010		2.8	1.0	ug/L
Trichlorofluoromethane	MW-19	10/11/2011		2.2	1.0	ug/L
Trichlorofluoromethane	MW-19	4/23/2012		1.1	1.0	ug/L
Acetone	MW-21	10/12/2017		15.3	10.0	ug/L
Cis-1,2-dichloroethylene	MW-21	3/14/2022		1.1	1.0	ug/L
1,1-dichloropropene	MW-3	9/09/2021		4.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW-3	9/09/2021		1.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-3	3/14/2022		1.6	1.0	ug/L
Toluene	MW-3	10/10/2013		2.8	1.0	ug/L
Trichloroethylene	MW-3	10/10/2013		1	1	ug/L
1,2-dichloroethane	MW-9	9/23/1998		.5	.4	ug/L
Acetone	MW-9	10/12/2017		16.7	10.0	ug/L
Bis(2-ethylhexyl) phthalate	MW-9	6/01/2010		21	8	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 B.2 –2nd Statistical Evaluation

GROUND WATER STATISTICS
FOR THE
FREMONT COUNTY LANDFILL

Second Semi-Annual Monitoring Period in 2025

Prepared for:
Fremont County Landfill
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INTRODUCTION

This report summarizes the results of the statistical analysis used to evaluate the ground water quality data obtained during the second semi-annual monitoring period in 2025 at the Fremont County Landfill in Sidney, Fremont 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 current Fremont County Landfill data. The statistical plan conforms with IAC 567, Chapter 113.10 and the USEPA Unified Guidance document (*“Statistical Analysis of Ground-Water Monitoring Data at RCRA Facilities, March 2009”*).

Ground Water Monitoring Program

The groundwater monitoring network for Fremont County Sanitary Landfill includes sample points GWD-1, GWD-2, MW-2, MW-3, MW-9, MW-12, MW-14, MW-15, MW-18, MW-19, MW-21, and MW-23. Monitoring wells MW-16 and MW-17 are to be phased in with the completed construction of Phase 3 and Phase 4, respectively. Each of the groundwater monitoring wells is to be sampled at least semiannually and analyzed for the detection monitoring parameters listed in 113.10(5), which includes 15 inorganic constituents and 47 organic compounds, summarized in Table 1 below.

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

Organic Compounds:

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

Inorganic constituents:

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

The ground water data obtained during the second semi-annual monitoring period in 2025 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 limits method was applied to the Fremont 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 eight samples have been collected, the practical quantitation limit (PQL) becomes the nonparametric prediction limit.

Results of the Interwell Statistics

The background data used in this statistical analysis includes the ground water data collected from ground water wells MW-2, MW-14, MW-18, and MW-19 during the period from September 2014, when the sampling protocol changed, through the current data. A summary of the background data used to determine the site prediction limits, is listed in Attachment B, Table 1 “Upgradient Data”. This statistical method compares the current downgradient determinations to site prediction limits and checks for exceedances.

Table 2 “Most Current Downgradient Monitoring Data”, summarizes the current data from downgradient wells MW-3, MW-9, MW-12, MW-15, MW-21, and MW-23 compared to the site prediction limits. Prediction limit exceedances are flagged with asterisks. For the most current data, the site prediction limit exceedances detected are summarized in the table below.

Trace Metal Prediction Limit Exceedances during the Second Semi-Annual Monitoring Event in 2025

Well	Trace Metal Detected	Result, µg/L	Prediction Limit, µg/L	Prediction Limit Type	Verified/ Awaiting verification
MW-3	Barium	815	575.1005	Normal	Verified

The detection frequencies of the parameters in the up and down gradient monitoring wells are summarized in Table 3. Only barium is detected at a frequency greater than or equal to 50% in the upgradient wells so only barium was tested for normality. The remainder of the metals are rarely detected (less than 50%) in the upgradient wells so nonparametric prediction limits were used in those cases. Table 4 summarizes the results of the Shapiro-Wilk test.

Table 5 is a summary of the statistics and prediction limits determined for the metals. Time series graphs of each of the parameters at each well with the corresponding prediction limits are attached.

A statistical power curve indicates the expected false assessments for the site as a whole. The false positive rate for interwell analyses is the percentage of failures when the upgradient versus downgradient true mean difference equals zero. False negative rate indicates the chance of missing contamination at a single well for a single constituent. The statistical power is a function of the number of wells included, the number of constituents compared, the detection frequencies, and the data distributions involved. For interwell analysis, the site-wide false positive rate is 1% and the test becomes sensitive to 4 standard deviation unit increases over background.

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

The 95% LCLs for the detected metals are below MCLs or Iowa groundwater protection 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. The only VOC detected in the ground water at Fremont County Landfill during the second semi-annual monitoring event in 2025 was carbon disulfide (1.2 µg/L) at MW-9. Carbon disulfide detections are likely artifacts of the sampling or analysis. Historical VOC detections in the ground water are summarized in Attachment D.

Attachment A

Summary of the Data obtained during the Second Semi-Annual Monitoring Period in 2025

Table 1

Analytical Data Summary for 9/8/2025

Constituents	Units	MW-12	MW-14	MW-15	MW-19	MW-2	MW-21	MW-23	MW-3	MW-9
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	<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	<1	<1	<1	<1	<1	<1	<1	<1
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	<1.0	<1.0	<1.0	<1.0	1.4	<1.0	<1.0	<1.0	<1.0
Arsenic, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Barium, total	ug/L	384	259	556	599	180	376	352	815	332
Benzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	ug/L	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5
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	.9	.5	<.2	.9	.6	<.2	<.2	<.2	.3
Carbon disulfide	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.2
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	1.9	2.1	<1.0	1.2	5.3	<1.0	2.1	<1.0	1.2
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	<.5	<.5	4.0	<.5	<.5	<.5	<.5	.6
Copper, total	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	8.2	<5.0	<5.0	<5.0
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	<1	<1	<1	<1	<1	<1	<1	<1	<1
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	<5.0	<5.0	5.5	6.1	5.1	<5.0	<5.0	<5.0	<5.0
Selenium, total	ug/L	<2.0	4.1	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Silver, total	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
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	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5
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	<2.0	<2.0	<2.0	<2.0	<2.0	2.0	<2.0	4.8	<2.0
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	6.9	8.9	<5.0	25.3	17.3	<5.0	9.4	19.0	20.0

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

Attachment B

Summary Tables and Graphs for the Interwell Comparisons

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Antimony, total	ug/L	MW-14	09/18/2014	ND	2.0000		
Antimony, total	ug/L	MW-14	04/29/2015	ND	2.0000		
Antimony, total	ug/L	MW-14	10/06/2015	ND	2.0000		
Antimony, total	ug/L	MW-14	04/19/2016	ND	2.0000		
Antimony, total	ug/L	MW-14	09/19/2016	ND	2.0000		
Antimony, total	ug/L	MW-14	03/22/2017	ND	2.0000		
Antimony, total	ug/L	MW-14	10/12/2017	ND	2.0000		
Antimony, total	ug/L	MW-14	03/08/2018	ND	2.0000		
Antimony, total	ug/L	MW-14	09/06/2018	ND	2.0000		
Antimony, total	ug/L	MW-14	05/13/2019	ND	2.0000		
Antimony, total	ug/L	MW-14	09/26/2019	ND	2.0000		
Antimony, total	ug/L	MW-14	03/30/2020	ND	2.0000		
Antimony, total	ug/L	MW-14	09/17/2020	ND	2.0000		
Antimony, total	ug/L	MW-14	03/09/2021	ND	2.0000		
Antimony, total	ug/L	MW-14	09/09/2021	ND	2.0000		
Antimony, total	ug/L	MW-14	03/14/2022	ND	2.0000		
Antimony, total	ug/L	MW-14	09/01/2022	ND	2.0000		
Antimony, total	ug/L	MW-14	03/06/2023	ND	2.0000		
Antimony, total	ug/L	MW-14	09/08/2023	ND	2.0000		
Antimony, total	ug/L	MW-14	03/20/2024	ND	2.0000		
Antimony, total	ug/L	MW-14	09/25/2024	ND	2.0000		
Antimony, total	ug/L	MW-14	03/11/2025	ND	2.0000		
Antimony, total	ug/L	MW-14	09/08/2025	ND	1.0000	2.0000	**
Antimony, total	ug/L	MW-18	09/18/2014	ND	2.0000		
Antimony, total	ug/L	MW-18	04/29/2015	ND	2.0000		
Antimony, total	ug/L	MW-18	10/06/2015	ND	2.0000		
Antimony, total	ug/L	MW-18	04/19/2016	ND	2.0000		
Antimony, total	ug/L	MW-18	09/19/2016	ND	2.0000		
Antimony, total	ug/L	MW-18	03/21/2017	ND	2.0000		
Antimony, total	ug/L	MW-18	10/12/2017	ND	2.0000		
Antimony, total	ug/L	MW-18	03/08/2018	ND	2.0000		
Antimony, total	ug/L	MW-18	09/06/2018	ND	2.0000		
Antimony, total	ug/L	MW-18	05/13/2019	ND	2.0000		
Antimony, total	ug/L	MW-18	09/26/2019	ND	2.0000		
Antimony, total	ug/L	MW-18	03/30/2020	ND	2.0000		
Antimony, total	ug/L	MW-18	09/17/2020	ND	2.0000		
Antimony, total	ug/L	MW-18	03/09/2021	ND	2.0000		
Antimony, total	ug/L	MW-18	09/09/2021	ND	2.0000		
Antimony, total	ug/L	MW-18	03/14/2022	ND	2.0000		
Antimony, total	ug/L	MW-18	09/01/2022	ND	2.0000		
Antimony, total	ug/L	MW-18	03/06/2023	ND	2.0000		
Antimony, total	ug/L	MW-18	09/08/2023	ND	2.0000		
Antimony, total	ug/L	MW-18	03/20/2024	ND	2.0000		
Antimony, total	ug/L	MW-18	09/25/2024	ND	2.0000		
Antimony, total	ug/L	MW-18	03/11/2025	ND	2.0000		
Antimony, total	ug/L	MW-19	09/18/2014	ND	2.0000		
Antimony, total	ug/L	MW-19	04/28/2015	ND	2.0000		
Antimony, total	ug/L	MW-19	10/06/2015	ND	2.0000		
Antimony, total	ug/L	MW-19	04/19/2016	ND	2.0000		
Antimony, total	ug/L	MW-19	09/19/2016	ND	2.0000		
Antimony, total	ug/L	MW-19	03/22/2017	ND	2.0000		
Antimony, total	ug/L	MW-19	10/12/2017	ND	2.0000		
Antimony, total	ug/L	MW-19	03/08/2018	ND	2.0000		
Antimony, total	ug/L	MW-19	09/06/2018	ND	2.0000		
Antimony, total	ug/L	MW-19	05/13/2019	ND	2.0000		
Antimony, total	ug/L	MW-19	09/26/2019	ND	2.0000		
Antimony, total	ug/L	MW-19	03/30/2020	ND	2.0000		
Antimony, total	ug/L	MW-19	09/17/2020	ND	2.0000		
Antimony, total	ug/L	MW-19	03/09/2021	ND	2.0000		
Antimony, total	ug/L	MW-19	09/09/2021	ND	2.0000		
Antimony, total	ug/L	MW-19	03/14/2022	ND	2.0000		
Antimony, total	ug/L	MW-19	03/06/2023	ND	2.0000		
Antimony, total	ug/L	MW-19	09/08/2023	ND	2.0000		
Antimony, total	ug/L	MW-19	03/20/2024	ND	2.0000		
Antimony, total	ug/L	MW-19	09/25/2024	ND	2.0000		
Antimony, total	ug/L	MW-19	03/11/2025	ND	2.0000		
Antimony, total	ug/L	MW-19	09/08/2025	ND	1.0000	2.0000	**
Antimony, total	ug/L	MW-2	09/17/2014	ND	2.0000		
Antimony, total	ug/L	MW-2	04/29/2015	ND	2.0000		
Antimony, total	ug/L	MW-2	10/07/2015	ND	2.0000		
Antimony, total	ug/L	MW-2	04/19/2016	ND	2.0000		
Antimony, total	ug/L	MW-2	09/19/2016	ND	2.0000		
Antimony, total	ug/L	MW-2	03/22/2017	ND	2.0000		
Antimony, total	ug/L	MW-2	10/12/2017	ND	2.0000		

* - Outlier for that well and constituent.

** - ND value replaced with median RL.

*** - ND value replaced with manual RL.

ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Antimony, total	ug/L	MW-2	03/08/2018	ND	2.0000		
Antimony, total	ug/L	MW-2	09/06/2018	ND	2.0000		
Antimony, total	ug/L	MW-2	05/13/2019	ND	2.0000		
Antimony, total	ug/L	MW-2	09/26/2019	ND	2.0000		
Antimony, total	ug/L	MW-2	03/30/2020	ND	2.0000		
Antimony, total	ug/L	MW-2	09/17/2020	ND	2.0000		
Antimony, total	ug/L	MW-2	03/09/2021	ND	2.0000		
Antimony, total	ug/L	MW-2	09/09/2021	ND	2.0000		
Antimony, total	ug/L	MW-2	03/14/2022	ND	2.0000		
Antimony, total	ug/L	MW-2	09/01/2022	ND	2.0000		
Antimony, total	ug/L	MW-2	03/06/2023	ND	2.0000		
Antimony, total	ug/L	MW-2	09/08/2023	ND	2.0000		
Antimony, total	ug/L	MW-2	03/20/2024	ND	2.0000		
Antimony, total	ug/L	MW-2	09/26/2024	ND	2.0000		
Antimony, total	ug/L	MW-2	03/11/2025	ND	2.0000		
Antimony, total	ug/L	MW-2	09/08/2025		1.4000		
Arsenic, total	ug/L	MW-14	09/18/2014	ND	4.0000		
Arsenic, total	ug/L	MW-14	04/29/2015	ND	4.0000		
Arsenic, total	ug/L	MW-14	10/06/2015	ND	4.0000		
Arsenic, total	ug/L	MW-14	04/19/2016	ND	4.0000		
Arsenic, total	ug/L	MW-14	09/19/2016	ND	4.0000		
Arsenic, total	ug/L	MW-14	03/22/2017	ND	4.0000		
Arsenic, total	ug/L	MW-14	10/12/2017	ND	4.0000		
Arsenic, total	ug/L	MW-14	03/08/2018	ND	4.0000		
Arsenic, total	ug/L	MW-14	09/06/2018	ND	4.0000		
Arsenic, total	ug/L	MW-14	05/13/2019	ND	4.0000		
Arsenic, total	ug/L	MW-14	09/26/2019	ND	4.0000		
Arsenic, total	ug/L	MW-14	03/30/2020	ND	4.0000		
Arsenic, total	ug/L	MW-14	09/17/2020	ND	4.0000		
Arsenic, total	ug/L	MW-14	03/09/2021	ND	4.0000		
Arsenic, total	ug/L	MW-14	09/09/2021	ND	4.0000		
Arsenic, total	ug/L	MW-14	03/14/2022	ND	4.0000		
Arsenic, total	ug/L	MW-14	09/01/2022	ND	4.0000		
Arsenic, total	ug/L	MW-14	03/06/2023	ND	4.0000		
Arsenic, total	ug/L	MW-14	09/08/2023	ND	4.0000		
Arsenic, total	ug/L	MW-14	03/20/2024	ND	4.0000		
Arsenic, total	ug/L	MW-14	09/25/2024	ND	4.0000		
Arsenic, total	ug/L	MW-14	03/11/2025	ND	4.0000		
Arsenic, total	ug/L	MW-14	09/08/2025	ND	2.0000	4.0000	**
Arsenic, total	ug/L	MW-18	09/18/2014	ND	4.0000		
Arsenic, total	ug/L	MW-18	04/29/2015	ND	4.0000		
Arsenic, total	ug/L	MW-18	10/06/2015	ND	4.0000		
Arsenic, total	ug/L	MW-18	04/19/2016	ND	4.0000		
Arsenic, total	ug/L	MW-18	09/19/2016		4.4000		
Arsenic, total	ug/L	MW-18	03/21/2017	ND	4.0000		
Arsenic, total	ug/L	MW-18	10/12/2017	ND	4.0000		
Arsenic, total	ug/L	MW-18	03/08/2018	ND	4.0000		
Arsenic, total	ug/L	MW-18	09/06/2018	ND	4.0000		
Arsenic, total	ug/L	MW-18	05/13/2019	ND	4.0000		
Arsenic, total	ug/L	MW-18	09/26/2019	ND	4.0000		
Arsenic, total	ug/L	MW-18	03/30/2020	ND	4.0000		
Arsenic, total	ug/L	MW-18	09/17/2020	ND	4.0000		
Arsenic, total	ug/L	MW-18	03/09/2021		19.9000		*
Arsenic, total	ug/L	MW-18	09/09/2021	ND	4.0000		
Arsenic, total	ug/L	MW-18	03/14/2022		7.8000		*
Arsenic, total	ug/L	MW-18	09/01/2022	ND	4.0000		
Arsenic, total	ug/L	MW-18	03/06/2023	ND	4.0000		
Arsenic, total	ug/L	MW-18	09/08/2023	ND	4.0000		
Arsenic, total	ug/L	MW-18	03/20/2024	ND	4.0000		
Arsenic, total	ug/L	MW-18	09/25/2024	ND	4.0000		
Arsenic, total	ug/L	MW-18	03/11/2025	ND	4.0000		
Arsenic, total	ug/L	MW-19	09/18/2014	ND	4.0000		
Arsenic, total	ug/L	MW-19	04/28/2015	ND	4.0000		
Arsenic, total	ug/L	MW-19	10/06/2015		6.0000		
Arsenic, total	ug/L	MW-19	04/19/2016	ND	4.0000		
Arsenic, total	ug/L	MW-19	09/19/2016		6.1000		
Arsenic, total	ug/L	MW-19	03/22/2017	ND	4.0000		
Arsenic, total	ug/L	MW-19	10/12/2017	ND	4.0000		
Arsenic, total	ug/L	MW-19	03/08/2018	ND	4.0000		
Arsenic, total	ug/L	MW-19	09/06/2018	ND	4.0000		
Arsenic, total	ug/L	MW-19	05/13/2019	ND	4.0000		
Arsenic, total	ug/L	MW-19	09/26/2019	ND	4.0000		
Arsenic, total	ug/L	MW-19	03/30/2020	ND	4.0000		
Arsenic, total	ug/L	MW-19	09/17/2020	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	MW-19	03/09/2021	ND	4.0000		
Arsenic, total	ug/L	MW-19	09/09/2021	ND	4.0000		
Arsenic, total	ug/L	MW-19	03/14/2022	ND	4.0000		
Arsenic, total	ug/L	MW-19	03/06/2023	ND	4.0000		
Arsenic, total	ug/L	MW-19	09/08/2023	ND	4.0000		
Arsenic, total	ug/L	MW-19	03/20/2024	ND	4.0000		
Arsenic, total	ug/L	MW-19	09/25/2024	ND	4.0000		
Arsenic, total	ug/L	MW-19	03/11/2025	ND	4.0000		
Arsenic, total	ug/L	MW-19	09/08/2025	ND	2.0000	4.0000	**
Arsenic, total	ug/L	MW-2	09/17/2014	ND	4.0000		
Arsenic, total	ug/L	MW-2	04/29/2015	ND	4.0000		
Arsenic, total	ug/L	MW-2	10/07/2015	ND	4.0000		
Arsenic, total	ug/L	MW-2	04/19/2016	ND	4.0000		
Arsenic, total	ug/L	MW-2	09/19/2016	ND	4.0000		
Arsenic, total	ug/L	MW-2	03/22/2017	ND	4.0000		
Arsenic, total	ug/L	MW-2	10/12/2017	ND	4.0000		
Arsenic, total	ug/L	MW-2	03/08/2018	ND	4.0000		
Arsenic, total	ug/L	MW-2	09/06/2018	ND	4.0000		
Arsenic, total	ug/L	MW-2	05/13/2019	ND	4.0000		
Arsenic, total	ug/L	MW-2	09/26/2019	ND	4.0000		
Arsenic, total	ug/L	MW-2	03/30/2020	ND	4.0000		
Arsenic, total	ug/L	MW-2	09/17/2020	ND	4.0000		
Arsenic, total	ug/L	MW-2	03/09/2021	ND	4.0000		
Arsenic, total	ug/L	MW-2	09/09/2021	ND	4.0000		
Arsenic, total	ug/L	MW-2	03/14/2022	ND	4.0000		
Arsenic, total	ug/L	MW-2	09/01/2022	ND	4.0000		
Arsenic, total	ug/L	MW-2	03/06/2023	ND	4.0000		
Arsenic, total	ug/L	MW-2	09/08/2023	ND	4.0000		
Arsenic, total	ug/L	MW-2	03/20/2024	ND	4.0000		
Arsenic, total	ug/L	MW-2	09/26/2024	ND	4.0000		
Arsenic, total	ug/L	MW-2	03/11/2025	ND	4.0000		
Arsenic, total	ug/L	MW-2	09/08/2025	ND	2.0000	4.0000	**
Barium, total	ug/L	MW-14	09/18/2014		277.0000		
Barium, total	ug/L	MW-14	04/29/2015		290.0000		
Barium, total	ug/L	MW-14	10/06/2015		273.0000		
Barium, total	ug/L	MW-14	04/19/2016		272.0000		
Barium, total	ug/L	MW-14	09/19/2016		272.0000		
Barium, total	ug/L	MW-14	03/22/2017		255.0000		
Barium, total	ug/L	MW-14	10/12/2017		257.0000		
Barium, total	ug/L	MW-14	03/08/2018		265.0000		
Barium, total	ug/L	MW-14	09/06/2018		242.0000		
Barium, total	ug/L	MW-14	05/13/2019		247.0000		
Barium, total	ug/L	MW-14	09/26/2019		255.0000		
Barium, total	ug/L	MW-14	03/30/2020		259.0000		
Barium, total	ug/L	MW-14	09/17/2020		410.0000		
Barium, total	ug/L	MW-14	03/09/2021		249.0000		
Barium, total	ug/L	MW-14	09/09/2021		265.0000		
Barium, total	ug/L	MW-14	03/14/2022		243.0000		
Barium, total	ug/L	MW-14	09/01/2022		259.0000		
Barium, total	ug/L	MW-14	03/06/2023		258.0000		
Barium, total	ug/L	MW-14	09/08/2023		243.0000		
Barium, total	ug/L	MW-14	03/20/2024		248.0000		
Barium, total	ug/L	MW-14	09/25/2024		241.0000		
Barium, total	ug/L	MW-14	03/11/2025		255.0000		
Barium, total	ug/L	MW-14	09/08/2025		259.0000		
Barium, total	ug/L	MW-18	09/18/2014		333.0000		
Barium, total	ug/L	MW-18	04/29/2015		402.0000		
Barium, total	ug/L	MW-18	10/06/2015		355.0000		
Barium, total	ug/L	MW-18	04/19/2016		360.0000		
Barium, total	ug/L	MW-18	09/19/2016		439.0000		
Barium, total	ug/L	MW-18	03/21/2017		295.0000		
Barium, total	ug/L	MW-18	10/12/2017		554.0000		
Barium, total	ug/L	MW-18	03/08/2018		373.0000		
Barium, total	ug/L	MW-18	09/06/2018		352.0000		
Barium, total	ug/L	MW-18	05/13/2019		368.0000		
Barium, total	ug/L	MW-18	09/26/2019		372.0000		
Barium, total	ug/L	MW-18	03/30/2020		418.0000		
Barium, total	ug/L	MW-18	09/17/2020		365.0000		
Barium, total	ug/L	MW-18	03/09/2021		1250.0000		*
Barium, total	ug/L	MW-18	06/03/2021		355.0000		
Barium, total	ug/L	MW-18	09/09/2021		361.0000		
Barium, total	ug/L	MW-18	03/14/2022		651.0000		*
Barium, total	ug/L	MW-18	09/01/2022		400.0000		
Barium, total	ug/L	MW-18	03/06/2023		407.0000		

* - Outlier for that well and constituent.

** - ND value replaced with median RL.

*** - ND value replaced with manual RL.

ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Barium, total	ug/L	MW-18	09/08/2023		327.0000		
Barium, total	ug/L	MW-18	03/20/2024		378.0000		
Barium, total	ug/L	MW-18	09/25/2024		447.0000		
Barium, total	ug/L	MW-18	03/11/2025		366.0000		
Barium, total	ug/L	MW-19	09/18/2014		380.0000		
Barium, total	ug/L	MW-19	04/28/2015		459.0000		
Barium, total	ug/L	MW-19	10/06/2015		431.0000		
Barium, total	ug/L	MW-19	04/19/2016		416.0000		
Barium, total	ug/L	MW-19	09/19/2016		503.0000		
Barium, total	ug/L	MW-19	03/22/2017		346.0000		
Barium, total	ug/L	MW-19	10/12/2017		343.0000		
Barium, total	ug/L	MW-19	03/08/2018		401.0000		
Barium, total	ug/L	MW-19	09/06/2018		361.0000		
Barium, total	ug/L	MW-19	05/13/2019		418.0000		
Barium, total	ug/L	MW-19	09/26/2019		409.0000		
Barium, total	ug/L	MW-19	03/30/2020		366.0000		
Barium, total	ug/L	MW-19	09/17/2020		614.0000		
Barium, total	ug/L	MW-19	03/09/2021		393.0000		
Barium, total	ug/L	MW-19	09/09/2021		402.0000		
Barium, total	ug/L	MW-19	03/14/2022		359.0000		
Barium, total	ug/L	MW-19	03/06/2023		336.0000		
Barium, total	ug/L	MW-19	09/08/2023		373.0000		
Barium, total	ug/L	MW-19	03/20/2024		26.9000		*
Barium, total	ug/L	MW-19	09/25/2024		532.0000		
Barium, total	ug/L	MW-19	03/11/2025		577.0000		
Barium, total	ug/L	MW-19	09/08/2025		599.0000		
Barium, total	ug/L	MW-2	09/17/2014		204.0000		
Barium, total	ug/L	MW-2	04/29/2015		258.0000		
Barium, total	ug/L	MW-2	10/07/2015		182.0000		
Barium, total	ug/L	MW-2	04/19/2016		291.0000		
Barium, total	ug/L	MW-2	09/19/2016		263.0000		
Barium, total	ug/L	MW-2	03/22/2017		177.0000		
Barium, total	ug/L	MW-2	10/12/2017		276.0000		
Barium, total	ug/L	MW-2	03/08/2018		173.0000		
Barium, total	ug/L	MW-2	09/06/2018		160.0000		
Barium, total	ug/L	MW-2	05/13/2019		172.0000		
Barium, total	ug/L	MW-2	09/26/2019		175.0000		
Barium, total	ug/L	MW-2	03/30/2020		169.0000		
Barium, total	ug/L	MW-2	09/17/2020		156.0000		
Barium, total	ug/L	MW-2	03/09/2021		174.0000		
Barium, total	ug/L	MW-2	09/09/2021		164.0000		
Barium, total	ug/L	MW-2	03/14/2022		162.0000		
Barium, total	ug/L	MW-2	09/01/2022		153.0000		
Barium, total	ug/L	MW-2	03/06/2023		157.0000		
Barium, total	ug/L	MW-2	09/08/2023		176.0000		
Barium, total	ug/L	MW-2	03/20/2024		219.0000		
Barium, total	ug/L	MW-2	09/26/2024		179.0000		
Barium, total	ug/L	MW-2	03/11/2025		54.1000		*
Barium, total	ug/L	MW-2	09/08/2025		180.0000		
Beryllium, total	ug/L	MW-14	09/18/2014	ND	4.0000		
Beryllium, total	ug/L	MW-14	04/29/2015	ND	4.0000		
Beryllium, total	ug/L	MW-14	10/06/2015	ND	4.0000		
Beryllium, total	ug/L	MW-14	04/19/2016	ND	4.0000		
Beryllium, total	ug/L	MW-14	09/19/2016	ND	4.0000		
Beryllium, total	ug/L	MW-14	03/22/2017	ND	4.0000		
Beryllium, total	ug/L	MW-14	10/12/2017	ND	4.0000		
Beryllium, total	ug/L	MW-14	03/08/2018	ND	4.0000		
Beryllium, total	ug/L	MW-14	09/06/2018	ND	4.0000		
Beryllium, total	ug/L	MW-14	05/13/2019	ND	4.0000		
Beryllium, total	ug/L	MW-14	09/26/2019	ND	4.0000		
Beryllium, total	ug/L	MW-14	03/30/2020	ND	4.0000		
Beryllium, total	ug/L	MW-14	09/17/2020	ND	4.0000		
Beryllium, total	ug/L	MW-14	03/09/2021	ND	4.0000		
Beryllium, total	ug/L	MW-14	09/09/2021	ND	4.0000		
Beryllium, total	ug/L	MW-14	03/14/2022	ND	4.0000		
Beryllium, total	ug/L	MW-14	09/01/2022	ND	4.0000		
Beryllium, total	ug/L	MW-14	03/06/2023	ND	4.0000		
Beryllium, total	ug/L	MW-14	09/08/2023	ND	4.0000		
Beryllium, total	ug/L	MW-14	03/20/2024	ND	4.0000		
Beryllium, total	ug/L	MW-14	09/25/2024	ND	4.0000		
Beryllium, total	ug/L	MW-14	03/11/2025	ND	4.0000		
Beryllium, total	ug/L	MW-14	09/08/2025	ND	0.5000		*
Beryllium, total	ug/L	MW-18	09/18/2014	ND	4.0000		
Beryllium, total	ug/L	MW-18	04/29/2015	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	
Beryllium, total	ug/L	MW-18	10/06/2015	ND	4.0000		
Beryllium, total	ug/L	MW-18	04/19/2016	ND	4.0000		
Beryllium, total	ug/L	MW-18	09/19/2016	ND	4.0000		
Beryllium, total	ug/L	MW-18	03/21/2017	ND	4.0000		
Beryllium, total	ug/L	MW-18	10/12/2017	ND	4.0000		
Beryllium, total	ug/L	MW-18	03/08/2018	ND	4.0000		
Beryllium, total	ug/L	MW-18	09/06/2018	ND	4.0000		
Beryllium, total	ug/L	MW-18	05/13/2019	ND	4.0000		
Beryllium, total	ug/L	MW-18	09/26/2019	ND	4.0000		
Beryllium, total	ug/L	MW-18	03/30/2020	ND	4.0000		
Beryllium, total	ug/L	MW-18	09/17/2020	ND	4.0000		
Beryllium, total	ug/L	MW-18	03/09/2021		4.5000		*
Beryllium, total	ug/L	MW-18	09/09/2021	ND	4.0000		
Beryllium, total	ug/L	MW-18	03/14/2022	ND	4.0000		
Beryllium, total	ug/L	MW-18	09/01/2022	ND	4.0000		
Beryllium, total	ug/L	MW-18	03/06/2023	ND	4.0000		
Beryllium, total	ug/L	MW-18	09/08/2023	ND	4.0000		
Beryllium, total	ug/L	MW-18	03/20/2024	ND	4.0000		
Beryllium, total	ug/L	MW-18	09/25/2024	ND	4.0000		
Beryllium, total	ug/L	MW-18	03/11/2025	ND	4.0000		
Beryllium, total	ug/L	MW-19	09/18/2014	ND	4.0000		
Beryllium, total	ug/L	MW-19	04/28/2015	ND	4.0000		
Beryllium, total	ug/L	MW-19	10/06/2015	ND	4.0000		
Beryllium, total	ug/L	MW-19	04/19/2016	ND	4.0000		
Beryllium, total	ug/L	MW-19	09/19/2016	ND	4.0000		
Beryllium, total	ug/L	MW-19	03/22/2017	ND	4.0000		
Beryllium, total	ug/L	MW-19	10/12/2017	ND	4.0000		
Beryllium, total	ug/L	MW-19	03/08/2018	ND	4.0000		
Beryllium, total	ug/L	MW-19	09/06/2018	ND	4.0000		
Beryllium, total	ug/L	MW-19	05/13/2019	ND	4.0000		
Beryllium, total	ug/L	MW-19	09/26/2019	ND	4.0000		
Beryllium, total	ug/L	MW-19	03/30/2020	ND	4.0000		
Beryllium, total	ug/L	MW-19	09/17/2020	ND	4.0000		
Beryllium, total	ug/L	MW-19	03/09/2021	ND	4.0000		
Beryllium, total	ug/L	MW-19	09/09/2021	ND	4.0000		
Beryllium, total	ug/L	MW-19	03/14/2022	ND	4.0000		
Beryllium, total	ug/L	MW-19	03/06/2023	ND	4.0000		
Beryllium, total	ug/L	MW-19	09/08/2023	ND	4.0000		
Beryllium, total	ug/L	MW-19	03/20/2024	ND	4.0000		
Beryllium, total	ug/L	MW-19	09/25/2024	ND	4.0000		
Beryllium, total	ug/L	MW-19	03/11/2025	ND	4.0000		
Beryllium, total	ug/L	MW-19	09/08/2025	ND	0.5000		*
Beryllium, total	ug/L	MW-2	09/17/2014	ND	4.0000		
Beryllium, total	ug/L	MW-2	04/29/2015	ND	4.0000		
Beryllium, total	ug/L	MW-2	10/07/2015	ND	4.0000		
Beryllium, total	ug/L	MW-2	04/19/2016	ND	4.0000		
Beryllium, total	ug/L	MW-2	09/19/2016	ND	4.0000		
Beryllium, total	ug/L	MW-2	03/22/2017	ND	4.0000		
Beryllium, total	ug/L	MW-2	10/12/2017	ND	4.0000		
Beryllium, total	ug/L	MW-2	03/08/2018	ND	4.0000		
Beryllium, total	ug/L	MW-2	09/06/2018	ND	4.0000		
Beryllium, total	ug/L	MW-2	05/13/2019	ND	4.0000		
Beryllium, total	ug/L	MW-2	09/26/2019	ND	4.0000		
Beryllium, total	ug/L	MW-2	03/30/2020	ND	4.0000		
Beryllium, total	ug/L	MW-2	09/17/2020	ND	4.0000		
Beryllium, total	ug/L	MW-2	03/09/2021	ND	4.0000		
Beryllium, total	ug/L	MW-2	09/09/2021	ND	4.0000		
Beryllium, total	ug/L	MW-2	03/14/2022	ND	4.0000		
Beryllium, total	ug/L	MW-2	09/01/2022	ND	4.0000		
Beryllium, total	ug/L	MW-2	03/06/2023	ND	4.0000		
Beryllium, total	ug/L	MW-2	09/08/2023	ND	4.0000		
Beryllium, total	ug/L	MW-2	03/20/2024	ND	4.0000		
Beryllium, total	ug/L	MW-2	09/26/2024	ND	4.0000		
Beryllium, total	ug/L	MW-2	03/11/2025	ND	4.0000		
Beryllium, total	ug/L	MW-2	09/08/2025	ND	0.5000		*
Cadmium, total	ug/L	MW-14	09/18/2014	ND	0.8000		
Cadmium, total	ug/L	MW-14	04/29/2015	ND	0.8000		
Cadmium, total	ug/L	MW-14	10/06/2015	ND	0.8000		
Cadmium, total	ug/L	MW-14	04/19/2016	ND	0.8000		
Cadmium, total	ug/L	MW-14	09/19/2016	ND	0.8000		
Cadmium, total	ug/L	MW-14	03/22/2017	ND	0.8000		
Cadmium, total	ug/L	MW-14	10/12/2017	ND	0.8000		
Cadmium, total	ug/L	MW-14	03/08/2018	ND	0.8000		
Cadmium, total	ug/L	MW-14	09/06/2018	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	
Cadmium, total	ug/L	MW-14	05/13/2019	ND	0.8000		
Cadmium, total	ug/L	MW-14	09/26/2019		1.0000		
Cadmium, total	ug/L	MW-14	03/30/2020	ND	0.8000		
Cadmium, total	ug/L	MW-14	09/17/2020	ND	0.8000		
Cadmium, total	ug/L	MW-14	03/09/2021	ND	0.8000		
Cadmium, total	ug/L	MW-14	09/09/2021	ND	0.8000		
Cadmium, total	ug/L	MW-14	03/14/2022	ND	0.8000		
Cadmium, total	ug/L	MW-14	09/01/2022	ND	0.8000		
Cadmium, total	ug/L	MW-14	03/06/2023	ND	0.8000		
Cadmium, total	ug/L	MW-14	09/08/2023	ND	0.8000		
Cadmium, total	ug/L	MW-14	03/20/2024	ND	0.8000		
Cadmium, total	ug/L	MW-14	09/25/2024	ND	0.8000		
Cadmium, total	ug/L	MW-14	03/11/2025	ND	0.8000		
Cadmium, total	ug/L	MW-14	09/08/2025		0.5000		
Cadmium, total	ug/L	MW-18	09/18/2014	ND	0.8000		
Cadmium, total	ug/L	MW-18	04/29/2015	ND	0.8000		
Cadmium, total	ug/L	MW-18	10/06/2015	ND	0.8000		
Cadmium, total	ug/L	MW-18	04/19/2016	ND	0.8000		
Cadmium, total	ug/L	MW-18	09/19/2016	ND	0.8000		
Cadmium, total	ug/L	MW-18	03/21/2017	ND	0.8000		
Cadmium, total	ug/L	MW-18	10/12/2017	ND	0.8000		
Cadmium, total	ug/L	MW-18	03/08/2018	ND	0.8000		
Cadmium, total	ug/L	MW-18	09/06/2018	ND	0.8000		
Cadmium, total	ug/L	MW-18	05/13/2019	ND	0.8000		
Cadmium, total	ug/L	MW-18	09/26/2019	ND	0.8000		
Cadmium, total	ug/L	MW-18	03/30/2020	ND	0.8000		
Cadmium, total	ug/L	MW-18	09/17/2020	ND	0.8000		
Cadmium, total	ug/L	MW-18	03/09/2021		1.4000		*
Cadmium, total	ug/L	MW-18	09/09/2021		0.8000		
Cadmium, total	ug/L	MW-18	03/14/2022	ND	0.8000		
Cadmium, total	ug/L	MW-18	09/01/2022	ND	0.8000		
Cadmium, total	ug/L	MW-18	03/06/2023	ND	0.8000		
Cadmium, total	ug/L	MW-18	09/08/2023	ND	0.8000		
Cadmium, total	ug/L	MW-18	03/20/2024	ND	0.8000		
Cadmium, total	ug/L	MW-18	09/25/2024	ND	0.8000		
Cadmium, total	ug/L	MW-18	03/11/2025	ND	0.8000		
Cadmium, total	ug/L	MW-19	09/18/2014	ND	0.8000		
Cadmium, total	ug/L	MW-19	04/28/2015	ND	0.8000		
Cadmium, total	ug/L	MW-19	10/06/2015	ND	0.8000		
Cadmium, total	ug/L	MW-19	04/19/2016	ND	0.8000		
Cadmium, total	ug/L	MW-19	09/19/2016	ND	0.8000		
Cadmium, total	ug/L	MW-19	03/22/2017	ND	0.8000		
Cadmium, total	ug/L	MW-19	10/12/2017	ND	0.8000		
Cadmium, total	ug/L	MW-19	03/08/2018	ND	0.8000		
Cadmium, total	ug/L	MW-19	09/06/2018	ND	0.8000		
Cadmium, total	ug/L	MW-19	05/13/2019	ND	0.8000		
Cadmium, total	ug/L	MW-19	09/26/2019		1.0000		
Cadmium, total	ug/L	MW-19	03/30/2020	ND	0.8000		
Cadmium, total	ug/L	MW-19	09/17/2020	ND	0.8000		
Cadmium, total	ug/L	MW-19	03/09/2021	ND	0.8000		
Cadmium, total	ug/L	MW-19	09/09/2021	ND	0.8000		
Cadmium, total	ug/L	MW-19	03/14/2022	ND	0.8000		
Cadmium, total	ug/L	MW-19	03/06/2023	ND	0.8000		
Cadmium, total	ug/L	MW-19	09/08/2023	ND	0.8000		
Cadmium, total	ug/L	MW-19	03/20/2024	ND	0.8000		
Cadmium, total	ug/L	MW-19	09/25/2024	ND	0.8000		
Cadmium, total	ug/L	MW-19	03/11/2025	ND	0.8000		
Cadmium, total	ug/L	MW-19	09/08/2025		0.9000		
Cadmium, total	ug/L	MW-2	09/17/2014	ND	0.8000		
Cadmium, total	ug/L	MW-2	04/29/2015	ND	0.8000		
Cadmium, total	ug/L	MW-2	10/07/2015		0.8000		
Cadmium, total	ug/L	MW-2	04/19/2016	ND	0.8000		
Cadmium, total	ug/L	MW-2	09/19/2016	ND	0.8000		
Cadmium, total	ug/L	MW-2	03/22/2017		1.0000		
Cadmium, total	ug/L	MW-2	10/12/2017	ND	0.8000		
Cadmium, total	ug/L	MW-2	03/08/2018		0.8000		
Cadmium, total	ug/L	MW-2	09/06/2018	ND	0.8000		
Cadmium, total	ug/L	MW-2	05/13/2019		0.8000		
Cadmium, total	ug/L	MW-2	09/26/2019	ND	0.8000		
Cadmium, total	ug/L	MW-2	03/30/2020	ND	0.8000		
Cadmium, total	ug/L	MW-2	09/17/2020	ND	0.8000		
Cadmium, total	ug/L	MW-2	03/09/2021		0.9000		
Cadmium, total	ug/L	MW-2	09/09/2021		0.8000		
Cadmium, total	ug/L	MW-2	03/14/2022	ND	0.8000		

* - Outlier for that well and constituent.

** - ND value replaced with median RL.

*** - ND value replaced with manual RL.

ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Cadmium, total	ug/L	MW-2	09/01/2022	ND	0.8000		
Cadmium, total	ug/L	MW-2	03/06/2023		0.9000		
Cadmium, total	ug/L	MW-2	09/08/2023		0.8000		
Cadmium, total	ug/L	MW-2	03/20/2024	ND	0.8000		
Cadmium, total	ug/L	MW-2	09/26/2024	ND	0.8000		
Cadmium, total	ug/L	MW-2	03/11/2025	ND	0.8000		
Cadmium, total	ug/L	MW-2	09/08/2025		0.6000		
Chromium, total	ug/L	MW-14	09/18/2014	ND	8.0000		
Chromium, total	ug/L	MW-14	04/29/2015	ND	8.0000		
Chromium, total	ug/L	MW-14	10/06/2015	ND	8.0000		
Chromium, total	ug/L	MW-14	04/19/2016	ND	8.0000		
Chromium, total	ug/L	MW-14	09/19/2016	ND	8.0000		
Chromium, total	ug/L	MW-14	03/22/2017	ND	8.0000		
Chromium, total	ug/L	MW-14	10/12/2017	ND	8.0000		
Chromium, total	ug/L	MW-14	03/08/2018	ND	8.0000		
Chromium, total	ug/L	MW-14	09/06/2018	ND	8.0000		
Chromium, total	ug/L	MW-14	05/13/2019	ND	8.0000		
Chromium, total	ug/L	MW-14	09/26/2019	ND	8.0000		
Chromium, total	ug/L	MW-14	03/30/2020	ND	8.0000		
Chromium, total	ug/L	MW-14	09/17/2020	ND	8.0000		
Chromium, total	ug/L	MW-14	03/09/2021	ND	8.0000		
Chromium, total	ug/L	MW-14	09/09/2021	ND	8.0000		
Chromium, total	ug/L	MW-14	03/14/2022	ND	8.0000		
Chromium, total	ug/L	MW-14	09/01/2022	ND	8.0000		
Chromium, total	ug/L	MW-14	03/06/2023	ND	8.0000		
Chromium, total	ug/L	MW-14	09/08/2023	ND	8.0000		
Chromium, total	ug/L	MW-14	03/20/2024	ND	8.0000		
Chromium, total	ug/L	MW-14	09/25/2024	ND	8.0000		
Chromium, total	ug/L	MW-14	03/11/2025	ND	8.0000		
Chromium, total	ug/L	MW-14	09/08/2025		2.1000		*
Chromium, total	ug/L	MW-18	09/18/2014	ND	8.0000		
Chromium, total	ug/L	MW-18	04/29/2015	ND	8.0000		
Chromium, total	ug/L	MW-18	10/06/2015	ND	8.0000		
Chromium, total	ug/L	MW-18	04/19/2016	ND	8.0000		
Chromium, total	ug/L	MW-18	09/19/2016		15.4000		
Chromium, total	ug/L	MW-18	03/21/2017	ND	8.0000		
Chromium, total	ug/L	MW-18	10/12/2017	ND	8.0000		
Chromium, total	ug/L	MW-18	03/08/2018		9.8000		
Chromium, total	ug/L	MW-18	09/06/2018	ND	8.0000		
Chromium, total	ug/L	MW-18	05/13/2019	ND	8.0000		
Chromium, total	ug/L	MW-18	09/26/2019	ND	8.0000		
Chromium, total	ug/L	MW-18	03/30/2020		8.7000		
Chromium, total	ug/L	MW-18	09/17/2020	ND	8.0000		
Chromium, total	ug/L	MW-18	03/09/2021		73.4000		*
Chromium, total	ug/L	MW-18	09/09/2021	ND	8.0000		
Chromium, total	ug/L	MW-18	03/14/2022		33.2000		*
Chromium, total	ug/L	MW-18	09/01/2022	ND	8.0000		
Chromium, total	ug/L	MW-18	03/06/2023		9.7000		
Chromium, total	ug/L	MW-18	09/08/2023	ND	8.0000		
Chromium, total	ug/L	MW-18	03/20/2024		14.2000		
Chromium, total	ug/L	MW-18	09/25/2024		17.2000		
Chromium, total	ug/L	MW-18	03/11/2025	ND	8.0000		
Chromium, total	ug/L	MW-19	09/18/2014	ND	8.0000		
Chromium, total	ug/L	MW-19	04/28/2015	ND	8.0000		
Chromium, total	ug/L	MW-19	10/06/2015	ND	8.0000		
Chromium, total	ug/L	MW-19	04/19/2016	ND	8.0000		
Chromium, total	ug/L	MW-19	09/19/2016		9.3000		
Chromium, total	ug/L	MW-19	03/22/2017	ND	8.0000		
Chromium, total	ug/L	MW-19	10/12/2017	ND	8.0000		
Chromium, total	ug/L	MW-19	03/08/2018	ND	8.0000		
Chromium, total	ug/L	MW-19	09/06/2018	ND	8.0000		
Chromium, total	ug/L	MW-19	05/13/2019	ND	8.0000		
Chromium, total	ug/L	MW-19	09/26/2019	ND	8.0000		
Chromium, total	ug/L	MW-19	03/30/2020	ND	8.0000		
Chromium, total	ug/L	MW-19	09/17/2020	ND	8.0000		
Chromium, total	ug/L	MW-19	03/09/2021	ND	8.0000		
Chromium, total	ug/L	MW-19	09/09/2021	ND	8.0000		
Chromium, total	ug/L	MW-19	03/14/2022	ND	8.0000		
Chromium, total	ug/L	MW-19	03/06/2023	ND	8.0000		
Chromium, total	ug/L	MW-19	09/08/2023	ND	8.0000		
Chromium, total	ug/L	MW-19	03/20/2024	ND	8.0000		
Chromium, total	ug/L	MW-19	09/25/2024	ND	8.0000		
Chromium, total	ug/L	MW-19	03/11/2025	ND	8.0000		
Chromium, total	ug/L	MW-19	09/08/2025		1.2000		*

* - Outlier for that well and constituent.

** - ND value replaced with median RL.

*** - ND value replaced with manual RL.

ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Chromium, total	ug/L	MW-2	09/17/2014	ND	8.0000		
Chromium, total	ug/L	MW-2	04/29/2015	ND	8.0000		
Chromium, total	ug/L	MW-2	10/07/2015	ND	8.0000		
Chromium, total	ug/L	MW-2	04/19/2016		9.6000		
Chromium, total	ug/L	MW-2	09/19/2016	ND	8.0000		
Chromium, total	ug/L	MW-2	03/22/2017	ND	8.0000		
Chromium, total	ug/L	MW-2	10/12/2017	ND	8.0000		
Chromium, total	ug/L	MW-2	03/08/2018	ND	8.0000		
Chromium, total	ug/L	MW-2	09/06/2018	ND	8.0000		
Chromium, total	ug/L	MW-2	05/13/2019	ND	8.0000		
Chromium, total	ug/L	MW-2	09/26/2019	ND	8.0000		
Chromium, total	ug/L	MW-2	03/30/2020	ND	8.0000		
Chromium, total	ug/L	MW-2	09/17/2020	ND	8.0000		
Chromium, total	ug/L	MW-2	03/09/2021	ND	8.0000		
Chromium, total	ug/L	MW-2	09/09/2021	ND	8.0000		
Chromium, total	ug/L	MW-2	03/14/2022	ND	8.0000		
Chromium, total	ug/L	MW-2	09/01/2022	ND	8.0000		
Chromium, total	ug/L	MW-2	03/06/2023	ND	8.0000		
Chromium, total	ug/L	MW-2	09/08/2023	ND	8.0000		
Chromium, total	ug/L	MW-2	03/20/2024	ND	8.0000		
Chromium, total	ug/L	MW-2	09/26/2024	ND	8.0000		
Chromium, total	ug/L	MW-2	03/11/2025	ND	8.0000		
Chromium, total	ug/L	MW-2	09/08/2025		5.3000		
Cobalt, total	ug/L	MW-14	09/18/2014		0.9000		
Cobalt, total	ug/L	MW-14	04/29/2015	ND	0.8000		
Cobalt, total	ug/L	MW-14	10/06/2015	ND	0.8000		
Cobalt, total	ug/L	MW-14	04/19/2016	ND	0.8000		
Cobalt, total	ug/L	MW-14	09/19/2016	ND	0.8000		
Cobalt, total	ug/L	MW-14	03/22/2017	ND	0.8000		
Cobalt, total	ug/L	MW-14	10/12/2017	ND	0.8000		
Cobalt, total	ug/L	MW-14	03/08/2018	ND	2.0000	0.8000	**
Cobalt, total	ug/L	MW-14	09/06/2018	ND	0.8000		
Cobalt, total	ug/L	MW-14	05/13/2019	ND	0.8000		
Cobalt, total	ug/L	MW-14	09/26/2019	ND	0.8000		
Cobalt, total	ug/L	MW-14	03/30/2020	ND	0.8000		
Cobalt, total	ug/L	MW-14	09/17/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-14	03/09/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-14	09/09/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-14	03/14/2022		0.5000		
Cobalt, total	ug/L	MW-14	09/01/2022	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-14	03/06/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-14	09/08/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-14	03/20/2024	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-14	09/25/2024	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-14	03/11/2025	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-14	09/08/2025	ND	0.5000	0.8000	**
Cobalt, total	ug/L	MW-18	09/18/2014		1.1000		
Cobalt, total	ug/L	MW-18	04/29/2015		3.1000		
Cobalt, total	ug/L	MW-18	10/06/2015	ND	0.8000		
Cobalt, total	ug/L	MW-18	04/19/2016		1.1000		
Cobalt, total	ug/L	MW-18	09/19/2016		10.6000		
Cobalt, total	ug/L	MW-18	03/21/2017	ND	0.8000		
Cobalt, total	ug/L	MW-18	10/12/2017		2.5000		
Cobalt, total	ug/L	MW-18	03/08/2018		4.8000		
Cobalt, total	ug/L	MW-18	09/06/2018	ND	0.8000		
Cobalt, total	ug/L	MW-18	05/13/2019	ND	0.8000		
Cobalt, total	ug/L	MW-18	09/26/2019	ND	0.8000		
Cobalt, total	ug/L	MW-18	03/30/2020		3.4000		
Cobalt, total	ug/L	MW-18	09/17/2020		1.2000		
Cobalt, total	ug/L	MW-18	03/09/2021		72.8000		
Cobalt, total	ug/L	MW-18	09/09/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-18	03/14/2022		28.3000		*
Cobalt, total	ug/L	MW-18	09/01/2022		2.4000		
Cobalt, total	ug/L	MW-18	03/06/2023		6.1000		
Cobalt, total	ug/L	MW-18	09/08/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-18	03/20/2024		1.9000		
Cobalt, total	ug/L	MW-18	09/25/2024		11.2000		
Cobalt, total	ug/L	MW-18	03/11/2025		3.0000		
Cobalt, total	ug/L	MW-19	09/18/2014		1.7000		
Cobalt, total	ug/L	MW-19	04/28/2015		1.1000		
Cobalt, total	ug/L	MW-19	10/06/2015		2.6000		
Cobalt, total	ug/L	MW-19	04/19/2016	ND	0.8000		
Cobalt, total	ug/L	MW-19	09/19/2016		3.7000		
Cobalt, total	ug/L	MW-19	03/22/2017	ND	0.8000		

* - Outlier for that well and constituent.

** - ND value replaced with median RL.

*** - ND value replaced with manual RL.

ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Cobalt, total	ug/L	MW-19	10/12/2017		0.9000		
Cobalt, total	ug/L	MW-19	03/08/2018		8.5000		
Cobalt, total	ug/L	MW-19	09/06/2018		6.3000		
Cobalt, total	ug/L	MW-19	05/13/2019		6.1000		
Cobalt, total	ug/L	MW-19	09/26/2019		9.7000		
Cobalt, total	ug/L	MW-19	03/30/2020		2.3000		
Cobalt, total	ug/L	MW-19	09/17/2020		2.9000		
Cobalt, total	ug/L	MW-19	03/09/2021		2.5000		
Cobalt, total	ug/L	MW-19	09/09/2021		5.3000		
Cobalt, total	ug/L	MW-19	03/14/2022		3.3000		
Cobalt, total	ug/L	MW-19	03/06/2023		3.6000		
Cobalt, total	ug/L	MW-19	09/08/2023		2.0000		
Cobalt, total	ug/L	MW-19	03/20/2024	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-19	09/25/2024		14.4000		
Cobalt, total	ug/L	MW-19	03/11/2025		4.6000		
Cobalt, total	ug/L	MW-19	09/08/2025		4.0000		
Cobalt, total	ug/L	MW-2	09/17/2014	ND	0.8000		
Cobalt, total	ug/L	MW-2	04/29/2015		1.7000		
Cobalt, total	ug/L	MW-2	10/07/2015	ND	0.8000		
Cobalt, total	ug/L	MW-2	04/19/2016		3.5000		
Cobalt, total	ug/L	MW-2	09/19/2016		2.2000		
Cobalt, total	ug/L	MW-2	03/22/2017	ND	0.8000		
Cobalt, total	ug/L	MW-2	10/12/2017	ND	0.8000		
Cobalt, total	ug/L	MW-2	03/08/2018	ND	2.0000	0.8000	**
Cobalt, total	ug/L	MW-2	09/06/2018	ND	0.8000		
Cobalt, total	ug/L	MW-2	05/13/2019	ND	0.8000		
Cobalt, total	ug/L	MW-2	09/26/2019	ND	0.8000		
Cobalt, total	ug/L	MW-2	03/30/2020	ND	0.8000		
Cobalt, total	ug/L	MW-2	09/17/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-2	03/09/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-2	09/09/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-2	03/14/2022		0.4000		
Cobalt, total	ug/L	MW-2	09/01/2022	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-2	03/06/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-2	09/08/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-2	03/20/2024	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-2	09/26/2024	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-2	03/11/2025	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-2	09/08/2025	ND	0.5000	0.8000	**
Copper, total	ug/L	MW-14	09/18/2014	ND	4.0000		
Copper, total	ug/L	MW-14	04/29/2015	ND	4.0000		
Copper, total	ug/L	MW-14	10/06/2015	ND	4.0000		
Copper, total	ug/L	MW-14	04/19/2016	ND	4.0000		
Copper, total	ug/L	MW-14	09/19/2016	ND	4.0000		
Copper, total	ug/L	MW-14	03/22/2017	ND	4.0000		
Copper, total	ug/L	MW-14	10/12/2017	ND	4.0000		
Copper, total	ug/L	MW-14	03/08/2018	ND	4.0000		
Copper, total	ug/L	MW-14	09/06/2018	ND	4.0000		
Copper, total	ug/L	MW-14	05/13/2019	ND	4.0000		
Copper, total	ug/L	MW-14	09/26/2019	ND	4.0000		
Copper, total	ug/L	MW-14	03/30/2020		32.2000		*
Copper, total	ug/L	MW-14	06/25/2020	ND	4.0000		
Copper, total	ug/L	MW-14	09/17/2020	ND	4.0000		
Copper, total	ug/L	MW-14	03/09/2021	ND	4.0000		
Copper, total	ug/L	MW-14	09/09/2021	ND	4.0000		
Copper, total	ug/L	MW-14	03/14/2022	ND	4.0000		
Copper, total	ug/L	MW-14	09/01/2022	ND	4.0000		
Copper, total	ug/L	MW-14	03/06/2023	ND	4.0000		
Copper, total	ug/L	MW-14	09/08/2023	ND	4.0000		
Copper, total	ug/L	MW-14	03/20/2024	ND	4.0000		
Copper, total	ug/L	MW-14	09/25/2024	ND	4.0000		
Copper, total	ug/L	MW-14	03/11/2025	ND	4.0000		
Copper, total	ug/L	MW-14	09/08/2025	ND	5.0000	4.0000	**
Copper, total	ug/L	MW-18	09/18/2014	ND	4.0000		
Copper, total	ug/L	MW-18	04/29/2015	ND	4.0000		
Copper, total	ug/L	MW-18	10/06/2015	ND	4.0000		
Copper, total	ug/L	MW-18	04/19/2016		10.8000		
Copper, total	ug/L	MW-18	09/19/2016		10.4000		
Copper, total	ug/L	MW-18	03/21/2017	ND	4.0000		
Copper, total	ug/L	MW-18	10/12/2017	ND	4.0000		
Copper, total	ug/L	MW-18	03/08/2018		5.5000		
Copper, total	ug/L	MW-18	09/06/2018	ND	4.0000		
Copper, total	ug/L	MW-18	05/13/2019	ND	4.0000		
Copper, total	ug/L	MW-18	09/26/2019	ND	4.0000		

* - Outlier for that well and constituent.

** - ND value replaced with median RL.

*** - ND value replaced with manual RL.

ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Copper, total	ug/L	MW-18	03/30/2020	ND	4.0000		
Copper, total	ug/L	MW-18	09/17/2020	ND	4.0000		
Copper, total	ug/L	MW-18	03/09/2021		62.1000		*
Copper, total	ug/L	MW-18	09/09/2021	ND	4.0000		
Copper, total	ug/L	MW-18	03/14/2022		22.1000		*
Copper, total	ug/L	MW-18	09/01/2022	ND	4.0000		
Copper, total	ug/L	MW-18	03/06/2023		4.9000		
Copper, total	ug/L	MW-18	09/08/2023	ND	4.0000		
Copper, total	ug/L	MW-18	03/20/2024	ND	4.0000		
Copper, total	ug/L	MW-18	09/25/2024		10.6000		
Copper, total	ug/L	MW-18	03/11/2025	ND	4.0000		
Copper, total	ug/L	MW-19	09/18/2014	ND	4.0000		
Copper, total	ug/L	MW-19	04/28/2015	ND	4.0000		
Copper, total	ug/L	MW-19	10/06/2015	ND	4.0000		
Copper, total	ug/L	MW-19	04/19/2016	ND	4.0000		
Copper, total	ug/L	MW-19	09/19/2016		6.8000		
Copper, total	ug/L	MW-19	03/22/2017	ND	4.0000		
Copper, total	ug/L	MW-19	10/12/2017	ND	4.0000		
Copper, total	ug/L	MW-19	03/08/2018	ND	4.0000		
Copper, total	ug/L	MW-19	09/06/2018	ND	4.0000		
Copper, total	ug/L	MW-19	05/13/2019	ND	4.0000		
Copper, total	ug/L	MW-19	09/26/2019	ND	4.0000		
Copper, total	ug/L	MW-19	03/30/2020	ND	4.0000		
Copper, total	ug/L	MW-19	09/17/2020	ND	4.0000		
Copper, total	ug/L	MW-19	03/09/2021	ND	4.0000		
Copper, total	ug/L	MW-19	09/09/2021	ND	4.0000		
Copper, total	ug/L	MW-19	03/14/2022	ND	4.0000		
Copper, total	ug/L	MW-19	03/06/2023	ND	4.0000		
Copper, total	ug/L	MW-19	09/08/2023	ND	4.0000		
Copper, total	ug/L	MW-19	03/20/2024	ND	4.0000		
Copper, total	ug/L	MW-19	09/25/2024	ND	4.0000		
Copper, total	ug/L	MW-19	03/11/2025	ND	4.0000		
Copper, total	ug/L	MW-19	09/08/2025	ND	5.0000	4.0000	**
Copper, total	ug/L	MW-2	09/17/2014	ND	4.0000		
Copper, total	ug/L	MW-2	04/29/2015	ND	4.0000		
Copper, total	ug/L	MW-2	10/07/2015	ND	4.0000		
Copper, total	ug/L	MW-2	04/19/2016		5.1000		
Copper, total	ug/L	MW-2	09/19/2016	ND	4.0000		
Copper, total	ug/L	MW-2	03/22/2017	ND	4.0000		
Copper, total	ug/L	MW-2	10/12/2017	ND	4.0000		
Copper, total	ug/L	MW-2	03/08/2018	ND	4.0000		
Copper, total	ug/L	MW-2	09/06/2018	ND	4.0000		
Copper, total	ug/L	MW-2	05/13/2019	ND	4.0000		
Copper, total	ug/L	MW-2	09/26/2019	ND	4.0000		
Copper, total	ug/L	MW-2	03/30/2020	ND	4.0000		
Copper, total	ug/L	MW-2	09/17/2020	ND	4.0000		
Copper, total	ug/L	MW-2	03/09/2021	ND	4.0000		
Copper, total	ug/L	MW-2	09/09/2021	ND	4.0000		
Copper, total	ug/L	MW-2	03/14/2022	ND	4.0000		
Copper, total	ug/L	MW-2	09/01/2022	ND	4.0000		
Copper, total	ug/L	MW-2	03/06/2023	ND	4.0000		
Copper, total	ug/L	MW-2	09/08/2023	ND	4.0000		
Copper, total	ug/L	MW-2	03/20/2024	ND	4.0000		
Copper, total	ug/L	MW-2	09/26/2024	ND	4.0000		
Copper, total	ug/L	MW-2	03/11/2025	ND	4.0000		
Copper, total	ug/L	MW-2	09/08/2025	ND	5.0000	4.0000	**
Lead, total	ug/L	MW-14	09/18/2014	ND	4.0000		
Lead, total	ug/L	MW-14	04/29/2015	ND	4.0000		
Lead, total	ug/L	MW-14	10/06/2015	ND	4.0000		
Lead, total	ug/L	MW-14	04/19/2016	ND	4.0000		
Lead, total	ug/L	MW-14	09/19/2016	ND	4.0000		
Lead, total	ug/L	MW-14	03/22/2017	ND	4.0000		
Lead, total	ug/L	MW-14	10/12/2017	ND	4.0000		
Lead, total	ug/L	MW-14	03/08/2018	ND	4.0000		
Lead, total	ug/L	MW-14	09/06/2018	ND	4.0000		
Lead, total	ug/L	MW-14	05/13/2019	ND	4.0000		
Lead, total	ug/L	MW-14	09/26/2019	ND	4.0000		
Lead, total	ug/L	MW-14	03/30/2020	ND	4.0000		
Lead, total	ug/L	MW-14	09/17/2020	ND	4.0000		
Lead, total	ug/L	MW-14	03/09/2021	ND	4.0000		
Lead, total	ug/L	MW-14	09/09/2021	ND	4.0000		
Lead, total	ug/L	MW-14	03/14/2022	ND	4.0000		
Lead, total	ug/L	MW-14	09/01/2022	ND	4.0000		
Lead, total	ug/L	MW-14	03/06/2023	ND	4.0000		
Lead, total	ug/L	MW-14	09/08/2023	ND	4.0000		
Lead, total	ug/L	MW-14	03/20/2024	ND	4.0000		
Lead, total	ug/L	MW-14	09/26/2024	ND	4.0000		
Lead, total	ug/L	MW-14	03/11/2025	ND	4.0000		
Lead, total	ug/L	MW-14	09/08/2025	ND	5.0000	4.0000	**

* - Outlier for that well and constituent.

** - ND value replaced with median RL.

*** - ND value replaced with manual RL.

ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Lead, total	ug/L	MW-14	09/08/2023	ND	4.0000		
Lead, total	ug/L	MW-14	03/20/2024	ND	4.0000		
Lead, total	ug/L	MW-14	09/25/2024	ND	4.0000		
Lead, total	ug/L	MW-14	03/11/2025	ND	4.0000		
Lead, total	ug/L	MW-14	09/08/2025	ND	1.0000		*
Lead, total	ug/L	MW-18	09/18/2014	ND	4.0000		
Lead, total	ug/L	MW-18	04/29/2015	ND	4.0000		
Lead, total	ug/L	MW-18	10/06/2015	ND	4.0000		
Lead, total	ug/L	MW-18	04/19/2016	ND	4.0000		
Lead, total	ug/L	MW-18	09/19/2016		8.7000		
Lead, total	ug/L	MW-18	03/21/2017	ND	4.0000		
Lead, total	ug/L	MW-18	10/12/2017	ND	4.0000		
Lead, total	ug/L	MW-18	03/08/2018	ND	4.0000		
Lead, total	ug/L	MW-18	09/06/2018	ND	4.0000		
Lead, total	ug/L	MW-18	05/13/2019	ND	4.0000		
Lead, total	ug/L	MW-18	09/26/2019	ND	4.0000		
Lead, total	ug/L	MW-18	03/30/2020	ND	4.0000		
Lead, total	ug/L	MW-18	09/17/2020	ND	4.0000		
Lead, total	ug/L	MW-18	03/09/2021		57.7000		*
Lead, total	ug/L	MW-18	09/09/2021	ND	4.0000		
Lead, total	ug/L	MW-18	03/14/2022		20.0000		*
Lead, total	ug/L	MW-18	09/01/2022	ND	4.0000		
Lead, total	ug/L	MW-18	03/06/2023		4.8000		
Lead, total	ug/L	MW-18	09/08/2023	ND	4.0000		
Lead, total	ug/L	MW-18	03/20/2024	ND	4.0000		
Lead, total	ug/L	MW-18	09/25/2024		8.5000		
Lead, total	ug/L	MW-18	03/11/2025	ND	4.0000		
Lead, total	ug/L	MW-19	09/18/2014	ND	4.0000		
Lead, total	ug/L	MW-19	04/28/2015	ND	4.0000		
Lead, total	ug/L	MW-19	10/06/2015	ND	4.0000		
Lead, total	ug/L	MW-19	04/19/2016	ND	4.0000		
Lead, total	ug/L	MW-19	09/19/2016		4.0000		
Lead, total	ug/L	MW-19	03/22/2017	ND	4.0000		
Lead, total	ug/L	MW-19	10/12/2017	ND	4.0000		
Lead, total	ug/L	MW-19	03/08/2018	ND	4.0000		
Lead, total	ug/L	MW-19	09/06/2018	ND	4.0000		
Lead, total	ug/L	MW-19	05/13/2019	ND	4.0000		
Lead, total	ug/L	MW-19	09/26/2019	ND	4.0000		
Lead, total	ug/L	MW-19	03/30/2020	ND	4.0000		
Lead, total	ug/L	MW-19	09/17/2020	ND	4.0000		
Lead, total	ug/L	MW-19	03/09/2021	ND	4.0000		
Lead, total	ug/L	MW-19	09/09/2021	ND	4.0000		
Lead, total	ug/L	MW-19	03/14/2022	ND	4.0000		
Lead, total	ug/L	MW-19	03/06/2023	ND	4.0000		
Lead, total	ug/L	MW-19	09/08/2023	ND	4.0000		
Lead, total	ug/L	MW-19	03/20/2024	ND	4.0000		
Lead, total	ug/L	MW-19	09/25/2024	ND	4.0000		
Lead, total	ug/L	MW-19	03/11/2025	ND	4.0000		
Lead, total	ug/L	MW-19	09/08/2025	ND	1.0000		*
Lead, total	ug/L	MW-2	09/17/2014	ND	4.0000		
Lead, total	ug/L	MW-2	04/29/2015	ND	4.0000		
Lead, total	ug/L	MW-2	10/07/2015	ND	4.0000		
Lead, total	ug/L	MW-2	04/19/2016	ND	4.0000		
Lead, total	ug/L	MW-2	09/19/2016	ND	4.0000		
Lead, total	ug/L	MW-2	03/22/2017	ND	4.0000		
Lead, total	ug/L	MW-2	10/12/2017	ND	4.0000		
Lead, total	ug/L	MW-2	03/08/2018	ND	4.0000		
Lead, total	ug/L	MW-2	09/06/2018	ND	4.0000		
Lead, total	ug/L	MW-2	05/13/2019		5.4000		
Lead, total	ug/L	MW-2	09/26/2019	ND	4.0000		
Lead, total	ug/L	MW-2	03/30/2020	ND	4.0000		
Lead, total	ug/L	MW-2	09/17/2020	ND	4.0000		
Lead, total	ug/L	MW-2	03/09/2021	ND	4.0000		
Lead, total	ug/L	MW-2	09/09/2021	ND	4.0000		
Lead, total	ug/L	MW-2	03/14/2022	ND	4.0000		
Lead, total	ug/L	MW-2	09/01/2022	ND	4.0000		
Lead, total	ug/L	MW-2	03/06/2023	ND	4.0000		
Lead, total	ug/L	MW-2	09/08/2023	ND	4.0000		
Lead, total	ug/L	MW-2	03/20/2024	ND	4.0000		
Lead, total	ug/L	MW-2	09/26/2024	ND	4.0000		
Lead, total	ug/L	MW-2	03/11/2025	ND	4.0000		
Lead, total	ug/L	MW-2	09/08/2025	ND	1.0000		*
Nickel, total	ug/L	MW-14	09/18/2014	ND	4.0000		
Nickel, total	ug/L	MW-14	04/29/2015	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	
Nickel, total	ug/L	MW-14	10/06/2015	ND	4.0000		
Nickel, total	ug/L	MW-14	04/19/2016	ND	4.0000		
Nickel, total	ug/L	MW-14	09/19/2016		5.4000		
Nickel, total	ug/L	MW-14	03/22/2017	ND	4.0000		
Nickel, total	ug/L	MW-14	10/12/2017	ND	4.0000		
Nickel, total	ug/L	MW-14	03/08/2018	ND	4.0000		
Nickel, total	ug/L	MW-14	09/06/2018	ND	8.0000	4.0000	**
Nickel, total	ug/L	MW-14	05/13/2019	ND	4.0000		
Nickel, total	ug/L	MW-14	09/26/2019	ND	4.0000		
Nickel, total	ug/L	MW-14	03/30/2020	ND	4.0000		
Nickel, total	ug/L	MW-14	09/17/2020	ND	4.0000		
Nickel, total	ug/L	MW-14	03/09/2021	ND	4.0000		
Nickel, total	ug/L	MW-14	09/09/2021	ND	4.0000		
Nickel, total	ug/L	MW-14	03/14/2022	ND	4.0000		
Nickel, total	ug/L	MW-14	09/01/2022	ND	4.0000		
Nickel, total	ug/L	MW-14	03/06/2023	ND	4.0000		
Nickel, total	ug/L	MW-14	09/08/2023	ND	4.0000		
Nickel, total	ug/L	MW-14	03/20/2024	ND	4.0000		
Nickel, total	ug/L	MW-14	09/25/2024	ND	4.0000		
Nickel, total	ug/L	MW-14	03/11/2025	ND	4.0000		
Nickel, total	ug/L	MW-14	09/08/2025	ND	5.0000	4.0000	**
Nickel, total	ug/L	MW-18	09/18/2014	ND	4.0000		
Nickel, total	ug/L	MW-18	04/29/2015		5.2000		
Nickel, total	ug/L	MW-18	10/06/2015	ND	4.0000		
Nickel, total	ug/L	MW-18	04/19/2016	ND	4.0000		
Nickel, total	ug/L	MW-18	09/19/2016		13.6000		
Nickel, total	ug/L	MW-18	03/21/2017	ND	4.0000		
Nickel, total	ug/L	MW-18	10/12/2017	ND	4.0000		
Nickel, total	ug/L	MW-18	03/08/2018		9.7000		
Nickel, total	ug/L	MW-18	09/06/2018	ND	8.0000	4.0000	**
Nickel, total	ug/L	MW-18	05/13/2019	ND	4.0000		
Nickel, total	ug/L	MW-18	09/26/2019	ND	4.0000		
Nickel, total	ug/L	MW-18	03/30/2020		6.0000		
Nickel, total	ug/L	MW-18	09/17/2020	ND	4.0000		
Nickel, total	ug/L	MW-18	03/09/2021		113.0000		*
Nickel, total	ug/L	MW-18	09/09/2021	ND	4.0000		*
Nickel, total	ug/L	MW-18	03/14/2022		48.4000		
Nickel, total	ug/L	MW-18	09/01/2022		4.4000		
Nickel, total	ug/L	MW-18	03/06/2023		11.6000		
Nickel, total	ug/L	MW-18	09/08/2023	ND	4.0000		
Nickel, total	ug/L	MW-18	03/20/2024		8.3000		
Nickel, total	ug/L	MW-18	09/25/2024		20.7000		
Nickel, total	ug/L	MW-18	03/11/2025		5.5000		
Nickel, total	ug/L	MW-19	09/18/2014	ND	4.0000		
Nickel, total	ug/L	MW-19	04/28/2015	ND	4.0000		
Nickel, total	ug/L	MW-19	10/06/2015	ND	4.0000		
Nickel, total	ug/L	MW-19	04/19/2016	ND	4.0000		
Nickel, total	ug/L	MW-19	09/19/2016		8.1000		
Nickel, total	ug/L	MW-19	03/22/2017	ND	4.0000		
Nickel, total	ug/L	MW-19	10/12/2017	ND	4.0000		
Nickel, total	ug/L	MW-19	03/08/2018		5.2000		
Nickel, total	ug/L	MW-19	09/06/2018	ND	8.0000	4.0000	**
Nickel, total	ug/L	MW-19	05/13/2019		5.0000		
Nickel, total	ug/L	MW-19	09/26/2019		7.9000		
Nickel, total	ug/L	MW-19	03/30/2020	ND	4.0000		
Nickel, total	ug/L	MW-19	09/17/2020		5.6000		
Nickel, total	ug/L	MW-19	03/09/2021	ND	4.0000		
Nickel, total	ug/L	MW-19	09/09/2021	ND	4.0000		
Nickel, total	ug/L	MW-19	03/14/2022	ND	4.0000		
Nickel, total	ug/L	MW-19	03/06/2023		4.3000		
Nickel, total	ug/L	MW-19	09/08/2023	ND	4.0000		
Nickel, total	ug/L	MW-19	03/20/2024		8.9000		
Nickel, total	ug/L	MW-19	09/25/2024		15.7000		*
Nickel, total	ug/L	MW-19	03/11/2025		4.7000		
Nickel, total	ug/L	MW-19	09/08/2025		6.1000		
Nickel, total	ug/L	MW-2	09/17/2014	ND	4.0000		
Nickel, total	ug/L	MW-2	04/29/2015	ND	4.0000		
Nickel, total	ug/L	MW-2	10/07/2015	ND	4.0000		
Nickel, total	ug/L	MW-2	04/19/2016		7.8000		
Nickel, total	ug/L	MW-2	09/19/2016	ND	4.0000		
Nickel, total	ug/L	MW-2	03/22/2017	ND	4.0000		
Nickel, total	ug/L	MW-2	10/12/2017	ND	4.0000		
Nickel, total	ug/L	MW-2	03/08/2018	ND	4.0000		
Nickel, total	ug/L	MW-2	09/06/2018	ND	8.0000	4.0000	**

* - Outlier for that well and constituent.

** - ND value replaced with median RL.

*** - ND value replaced with manual RL.

ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Nickel, total	ug/L	MW-2	05/13/2019	ND	4.0000		
Nickel, total	ug/L	MW-2	09/26/2019	ND	4.0000		
Nickel, total	ug/L	MW-2	03/30/2020	ND	4.0000		
Nickel, total	ug/L	MW-2	09/17/2020	ND	4.0000		
Nickel, total	ug/L	MW-2	03/09/2021	ND	4.0000		
Nickel, total	ug/L	MW-2	09/09/2021	ND	4.0000		
Nickel, total	ug/L	MW-2	03/14/2022	ND	4.0000		
Nickel, total	ug/L	MW-2	09/01/2022		5.3000		
Nickel, total	ug/L	MW-2	03/06/2023		4.2000		
Nickel, total	ug/L	MW-2	09/08/2023	ND	4.0000		
Nickel, total	ug/L	MW-2	03/20/2024	ND	4.0000		
Nickel, total	ug/L	MW-2	09/26/2024	ND	4.0000		
Nickel, total	ug/L	MW-2	03/11/2025		4.8000		
Nickel, total	ug/L	MW-2	09/08/2025		5.1000		
Selenium, total	ug/L	MW-14	09/18/2014		4.7000		
Selenium, total	ug/L	MW-14	04/29/2015		4.6000		
Selenium, total	ug/L	MW-14	10/06/2015		4.0000		
Selenium, total	ug/L	MW-14	04/19/2016		4.2000		
Selenium, total	ug/L	MW-14	09/19/2016		4.0000		
Selenium, total	ug/L	MW-14	03/22/2017	ND	4.0000		
Selenium, total	ug/L	MW-14	10/12/2017	ND	4.0000		
Selenium, total	ug/L	MW-14	03/08/2018		6.3000		
Selenium, total	ug/L	MW-14	09/06/2018	ND	4.0000		
Selenium, total	ug/L	MW-14	05/13/2019		4.4000		
Selenium, total	ug/L	MW-14	09/26/2019		4.5000		
Selenium, total	ug/L	MW-14	03/30/2020	ND	4.0000		
Selenium, total	ug/L	MW-14	09/17/2020		7.4000		
Selenium, total	ug/L	MW-14	12/03/2020		4.2000		
Selenium, total	ug/L	MW-14	03/09/2021	ND	4.0000		
Selenium, total	ug/L	MW-14	09/09/2021	ND	4.0000		
Selenium, total	ug/L	MW-14	03/14/2022	ND	4.0000		
Selenium, total	ug/L	MW-14	09/01/2022		4.2000		
Selenium, total	ug/L	MW-14	03/06/2023	ND	4.0000		
Selenium, total	ug/L	MW-14	09/08/2023	ND	4.0000		
Selenium, total	ug/L	MW-14	03/20/2024	ND	4.0000		
Selenium, total	ug/L	MW-14	09/25/2024	ND	4.0000		
Selenium, total	ug/L	MW-14	03/11/2025		4.3000		
Selenium, total	ug/L	MW-14	09/08/2025		4.1000		
Selenium, total	ug/L	MW-18	09/18/2014	ND	4.0000		
Selenium, total	ug/L	MW-18	04/29/2015	ND	4.0000		
Selenium, total	ug/L	MW-18	10/06/2015	ND	4.0000		
Selenium, total	ug/L	MW-18	04/19/2016	ND	4.0000		
Selenium, total	ug/L	MW-18	09/19/2016	ND	4.0000		
Selenium, total	ug/L	MW-18	03/21/2017	ND	4.0000		
Selenium, total	ug/L	MW-18	10/12/2017		6.3000		
Selenium, total	ug/L	MW-18	03/08/2018	ND	4.0000		
Selenium, total	ug/L	MW-18	09/06/2018	ND	4.0000		
Selenium, total	ug/L	MW-18	05/13/2019	ND	4.0000		
Selenium, total	ug/L	MW-18	09/26/2019	ND	4.0000		
Selenium, total	ug/L	MW-18	03/30/2020	ND	4.0000		
Selenium, total	ug/L	MW-18	09/17/2020	ND	4.0000		
Selenium, total	ug/L	MW-18	03/09/2021		10.6000		*
Selenium, total	ug/L	MW-18	09/09/2021	ND	4.0000		
Selenium, total	ug/L	MW-18	03/14/2022	ND	4.0000		
Selenium, total	ug/L	MW-18	09/01/2022	ND	4.0000		
Selenium, total	ug/L	MW-18	03/06/2023	ND	4.0000		
Selenium, total	ug/L	MW-18	09/08/2023	ND	4.0000		
Selenium, total	ug/L	MW-18	03/20/2024	ND	4.0000		
Selenium, total	ug/L	MW-18	09/25/2024	ND	4.0000		
Selenium, total	ug/L	MW-18	03/11/2025	ND	4.0000		
Selenium, total	ug/L	MW-19	09/18/2014	ND	4.0000		
Selenium, total	ug/L	MW-19	04/28/2015	ND	4.0000		
Selenium, total	ug/L	MW-19	10/06/2015	ND	4.0000		
Selenium, total	ug/L	MW-19	04/19/2016	ND	4.0000		
Selenium, total	ug/L	MW-19	09/19/2016	ND	4.0000		
Selenium, total	ug/L	MW-19	03/22/2017	ND	4.0000		
Selenium, total	ug/L	MW-19	10/12/2017	ND	4.0000		
Selenium, total	ug/L	MW-19	03/08/2018	ND	4.0000		
Selenium, total	ug/L	MW-19	09/06/2018	ND	4.0000		
Selenium, total	ug/L	MW-19	05/13/2019	ND	4.0000		
Selenium, total	ug/L	MW-19	09/26/2019		5.0000		
Selenium, total	ug/L	MW-19	03/30/2020	ND	4.0000		
Selenium, total	ug/L	MW-19	09/17/2020	ND	4.0000		
Selenium, total	ug/L	MW-19	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	
Selenium, total	ug/L	MW-19	09/09/2021	ND	4.0000		
Selenium, total	ug/L	MW-19	03/14/2022	ND	4.0000		
Selenium, total	ug/L	MW-19	03/06/2023	ND	4.0000		
Selenium, total	ug/L	MW-19	09/08/2023	ND	4.0000		
Selenium, total	ug/L	MW-19	03/20/2024	ND	4.0000		
Selenium, total	ug/L	MW-19	09/25/2024	ND	4.0000		
Selenium, total	ug/L	MW-19	03/11/2025	ND	4.0000		
Selenium, total	ug/L	MW-19	09/08/2025	ND	2.0000	4.0000	**
Selenium, total	ug/L	MW-2	09/17/2014	ND	4.0000		
Selenium, total	ug/L	MW-2	04/29/2015	ND	4.0000		
Selenium, total	ug/L	MW-2	10/07/2015	ND	4.0000		
Selenium, total	ug/L	MW-2	04/19/2016	ND	4.0000		
Selenium, total	ug/L	MW-2	09/19/2016	ND	4.0000		
Selenium, total	ug/L	MW-2	03/22/2017	ND	4.0000		
Selenium, total	ug/L	MW-2	10/12/2017		4.4000		
Selenium, total	ug/L	MW-2	03/08/2018	ND	4.0000		
Selenium, total	ug/L	MW-2	09/06/2018	ND	4.0000		
Selenium, total	ug/L	MW-2	05/13/2019	ND	4.0000		
Selenium, total	ug/L	MW-2	09/26/2019	ND	4.0000		
Selenium, total	ug/L	MW-2	03/30/2020	ND	4.0000		
Selenium, total	ug/L	MW-2	09/17/2020	ND	4.0000		
Selenium, total	ug/L	MW-2	03/09/2021	ND	4.0000		
Selenium, total	ug/L	MW-2	09/09/2021	ND	4.0000		
Selenium, total	ug/L	MW-2	03/14/2022	ND	4.0000		
Selenium, total	ug/L	MW-2	09/01/2022	ND	4.0000		
Selenium, total	ug/L	MW-2	03/06/2023	ND	4.0000		
Selenium, total	ug/L	MW-2	09/08/2023	ND	4.0000		
Selenium, total	ug/L	MW-2	03/20/2024	ND	4.0000		
Selenium, total	ug/L	MW-2	09/26/2024	ND	4.0000		
Selenium, total	ug/L	MW-2	03/11/2025	ND	4.0000		
Selenium, total	ug/L	MW-2	09/08/2025	ND	2.0000	4.0000	**
Silver, total	ug/L	MW-14	09/18/2014	ND	4.0000		
Silver, total	ug/L	MW-14	04/29/2015	ND	4.0000		
Silver, total	ug/L	MW-14	10/06/2015	ND	4.0000		
Silver, total	ug/L	MW-14	04/19/2016	ND	4.0000		
Silver, total	ug/L	MW-14	09/19/2016	ND	4.0000		
Silver, total	ug/L	MW-14	03/22/2017	ND	4.0000		
Silver, total	ug/L	MW-14	10/12/2017	ND	4.0000		
Silver, total	ug/L	MW-14	03/08/2018	ND	4.0000		
Silver, total	ug/L	MW-14	09/06/2018	ND	8.0000	4.0000	**
Silver, total	ug/L	MW-14	05/13/2019	ND	4.0000		
Silver, total	ug/L	MW-14	09/26/2019	ND	4.0000		
Silver, total	ug/L	MW-14	03/30/2020	ND	4.0000		
Silver, total	ug/L	MW-14	09/17/2020	ND	4.0000		
Silver, total	ug/L	MW-14	03/09/2021	ND	4.0000		
Silver, total	ug/L	MW-14	09/09/2021	ND	4.0000		
Silver, total	ug/L	MW-14	03/14/2022	ND	4.0000		
Silver, total	ug/L	MW-14	09/01/2022	ND	4.0000		
Silver, total	ug/L	MW-14	03/06/2023	ND	4.0000		
Silver, total	ug/L	MW-14	09/08/2023	ND	4.0000		
Silver, total	ug/L	MW-14	03/20/2024	ND	4.0000		
Silver, total	ug/L	MW-14	09/25/2024	ND	4.0000		
Silver, total	ug/L	MW-14	03/11/2025	ND	4.0000		
Silver, total	ug/L	MW-14	09/08/2025	ND	5.0000	4.0000	**
Silver, total	ug/L	MW-18	09/18/2014	ND	4.0000		
Silver, total	ug/L	MW-18	04/29/2015	ND	4.0000		
Silver, total	ug/L	MW-18	10/06/2015	ND	4.0000		
Silver, total	ug/L	MW-18	04/19/2016	ND	4.0000		
Silver, total	ug/L	MW-18	09/19/2016	ND	4.0000		
Silver, total	ug/L	MW-18	03/21/2017	ND	4.0000		
Silver, total	ug/L	MW-18	10/12/2017	ND	4.0000		
Silver, total	ug/L	MW-18	03/08/2018	ND	4.0000		
Silver, total	ug/L	MW-18	09/06/2018	ND	8.0000	4.0000	**
Silver, total	ug/L	MW-18	05/13/2019	ND	4.0000		
Silver, total	ug/L	MW-18	09/26/2019	ND	4.0000		
Silver, total	ug/L	MW-18	03/30/2020	ND	4.0000		
Silver, total	ug/L	MW-18	09/17/2020	ND	4.0000		
Silver, total	ug/L	MW-18	03/09/2021	ND	4.0000		*
Silver, total	ug/L	MW-18	09/09/2021	ND	4.0000		
Silver, total	ug/L	MW-18	03/14/2022	ND	4.0000		
Silver, total	ug/L	MW-18	09/01/2022	ND	4.0000		
Silver, total	ug/L	MW-18	03/06/2023	ND	4.0000		
Silver, total	ug/L	MW-18	09/08/2023	ND	4.0000		
Silver, total	ug/L	MW-18	03/20/2024	ND	4.0000		

* - Outlier for that well and constituent.

** - ND value replaced with median RL.

*** - ND value replaced with manual RL.

ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Silver, total	ug/L	MW-18	09/25/2024	ND	4.0000		
Silver, total	ug/L	MW-18	03/11/2025	ND	4.0000		
Silver, total	ug/L	MW-19	09/18/2014	ND	4.0000		
Silver, total	ug/L	MW-19	04/28/2015	ND	4.0000		
Silver, total	ug/L	MW-19	10/06/2015	ND	4.0000		
Silver, total	ug/L	MW-19	04/19/2016	ND	4.0000		
Silver, total	ug/L	MW-19	09/19/2016	ND	4.0000		
Silver, total	ug/L	MW-19	03/22/2017	ND	4.0000		
Silver, total	ug/L	MW-19	10/12/2017	ND	4.0000		
Silver, total	ug/L	MW-19	03/08/2018	ND	4.0000		
Silver, total	ug/L	MW-19	09/06/2018	ND	8.0000	4.0000	**
Silver, total	ug/L	MW-19	05/13/2019	ND	4.0000		
Silver, total	ug/L	MW-19	09/26/2019	ND	4.0000		
Silver, total	ug/L	MW-19	03/30/2020	ND	4.0000		
Silver, total	ug/L	MW-19	09/17/2020	ND	4.0000		
Silver, total	ug/L	MW-19	03/09/2021	ND	4.0000		
Silver, total	ug/L	MW-19	09/09/2021	ND	4.0000		
Silver, total	ug/L	MW-19	03/14/2022	ND	4.0000		
Silver, total	ug/L	MW-19	03/06/2023	ND	4.0000		
Silver, total	ug/L	MW-19	09/08/2023	ND	4.0000		
Silver, total	ug/L	MW-19	03/20/2024	ND	4.0000		
Silver, total	ug/L	MW-19	09/25/2024	ND	4.0000		
Silver, total	ug/L	MW-19	03/11/2025	ND	4.0000		
Silver, total	ug/L	MW-19	09/08/2025	ND	5.0000	4.0000	**
Silver, total	ug/L	MW-2	09/17/2014	ND	4.0000		
Silver, total	ug/L	MW-2	04/29/2015	ND	4.0000		
Silver, total	ug/L	MW-2	10/07/2015	ND	4.0000		
Silver, total	ug/L	MW-2	04/19/2016	ND	4.0000		
Silver, total	ug/L	MW-2	09/19/2016	ND	4.0000		
Silver, total	ug/L	MW-2	03/22/2017	ND	4.0000		
Silver, total	ug/L	MW-2	10/12/2017	ND	4.0000		
Silver, total	ug/L	MW-2	03/08/2018	ND	4.0000		
Silver, total	ug/L	MW-2	09/06/2018	ND	8.0000	4.0000	**
Silver, total	ug/L	MW-2	05/13/2019	ND	4.0000		
Silver, total	ug/L	MW-2	09/26/2019	ND	4.0000		
Silver, total	ug/L	MW-2	03/30/2020	ND	4.0000		
Silver, total	ug/L	MW-2	09/17/2020	ND	4.0000		
Silver, total	ug/L	MW-2	03/09/2021	ND	4.0000		
Silver, total	ug/L	MW-2	09/09/2021	ND	4.0000		
Silver, total	ug/L	MW-2	03/14/2022	ND	4.0000		
Silver, total	ug/L	MW-2	09/01/2022	ND	4.0000		
Silver, total	ug/L	MW-2	03/06/2023	ND	4.0000		
Silver, total	ug/L	MW-2	09/08/2023	ND	4.0000		
Silver, total	ug/L	MW-2	03/20/2024	ND	4.0000		
Silver, total	ug/L	MW-2	09/26/2024	ND	4.0000		
Silver, total	ug/L	MW-2	03/11/2025	ND	4.0000		
Silver, total	ug/L	MW-2	09/08/2025	ND	5.0000	4.0000	**
Thallium, total	ug/L	MW-14	09/18/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-14	04/29/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-14	10/06/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-14	04/19/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-14	09/19/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-14	03/22/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-14	10/12/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-14	03/08/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-14	09/06/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-14	05/13/2019	ND	2.0000		
Thallium, total	ug/L	MW-14	09/26/2019	ND	2.0000		
Thallium, total	ug/L	MW-14	03/30/2020	ND	2.0000		
Thallium, total	ug/L	MW-14	09/17/2020	ND	2.0000		
Thallium, total	ug/L	MW-14	03/09/2021	ND	2.0000		
Thallium, total	ug/L	MW-14	09/09/2021	ND	2.0000		
Thallium, total	ug/L	MW-14	03/14/2022	ND	2.0000		
Thallium, total	ug/L	MW-14	09/01/2022	ND	2.0000		
Thallium, total	ug/L	MW-14	03/06/2023	ND	2.0000		
Thallium, total	ug/L	MW-14	09/08/2023	ND	2.0000		
Thallium, total	ug/L	MW-14	03/20/2024	ND	2.0000		
Thallium, total	ug/L	MW-14	09/25/2024	ND	2.0000		
Thallium, total	ug/L	MW-14	03/11/2025	ND	2.0000		
Thallium, total	ug/L	MW-14	09/08/2025	ND	0.5000		*
Thallium, total	ug/L	MW-18	09/18/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-18	04/29/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-18	10/06/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-18	04/19/2016	ND	4.0000	2.0000	**

* - Outlier for that well and constituent.

** - ND value replaced with median RL.

*** - ND value replaced with manual RL.

ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Thallium, total	ug/L	MW-18	09/19/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-18	03/21/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-18	10/12/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-18	03/08/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-18	09/06/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-18	05/13/2019	ND	2.0000		
Thallium, total	ug/L	MW-18	09/26/2019	ND	2.0000		
Thallium, total	ug/L	MW-18	03/30/2020	ND	2.0000		
Thallium, total	ug/L	MW-18	09/17/2020	ND	2.0000		
Thallium, total	ug/L	MW-18	03/09/2021	ND	2.0000		*
Thallium, total	ug/L	MW-18	09/09/2021	ND	2.0000		
Thallium, total	ug/L	MW-18	03/14/2022	ND	2.0000		
Thallium, total	ug/L	MW-18	09/01/2022	ND	2.0000		
Thallium, total	ug/L	MW-18	03/06/2023	ND	2.0000		
Thallium, total	ug/L	MW-18	09/08/2023	ND	2.0000		
Thallium, total	ug/L	MW-18	03/20/2024	ND	2.0000		
Thallium, total	ug/L	MW-18	09/25/2024	ND	2.0000		
Thallium, total	ug/L	MW-18	03/11/2025	ND	2.0000		
Thallium, total	ug/L	MW-19	09/18/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-19	04/28/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-19	10/06/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-19	04/19/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-19	09/19/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-19	03/22/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-19	10/12/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-19	03/08/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-19	09/06/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-19	05/13/2019	ND	2.0000		
Thallium, total	ug/L	MW-19	09/26/2019	ND	2.0000		
Thallium, total	ug/L	MW-19	03/30/2020	ND	2.0000		
Thallium, total	ug/L	MW-19	09/17/2020	ND	2.0000		
Thallium, total	ug/L	MW-19	03/09/2021	ND	2.0000		
Thallium, total	ug/L	MW-19	09/09/2021	ND	2.0000		
Thallium, total	ug/L	MW-19	03/14/2022	ND	2.0000		
Thallium, total	ug/L	MW-19	03/06/2023	ND	2.0000		
Thallium, total	ug/L	MW-19	09/08/2023	ND	2.0000		
Thallium, total	ug/L	MW-19	03/20/2024	ND	2.0000		
Thallium, total	ug/L	MW-19	09/25/2024	ND	2.0000		
Thallium, total	ug/L	MW-19	03/11/2025	ND	2.0000		
Thallium, total	ug/L	MW-19	09/08/2025	ND	0.5000		*
Thallium, total	ug/L	MW-2	09/17/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-2	04/29/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-2	10/07/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-2	04/19/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-2	09/19/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-2	03/22/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-2	10/12/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-2	03/08/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-2	09/06/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-2	05/13/2019	ND	2.0000		
Thallium, total	ug/L	MW-2	09/26/2019	ND	2.0000		
Thallium, total	ug/L	MW-2	03/30/2020	ND	2.0000		
Thallium, total	ug/L	MW-2	09/17/2020	ND	2.0000		
Thallium, total	ug/L	MW-2	03/09/2021	ND	2.0000		
Thallium, total	ug/L	MW-2	09/09/2021	ND	2.0000		
Thallium, total	ug/L	MW-2	03/14/2022	ND	2.0000		
Thallium, total	ug/L	MW-2	09/01/2022	ND	2.0000		
Thallium, total	ug/L	MW-2	03/06/2023	ND	2.0000		
Thallium, total	ug/L	MW-2	09/08/2023	ND	2.0000		
Thallium, total	ug/L	MW-2	03/20/2024	ND	2.0000		
Thallium, total	ug/L	MW-2	09/26/2024	ND	2.0000		
Thallium, total	ug/L	MW-2	03/11/2025	ND	2.0000		
Thallium, total	ug/L	MW-2	09/08/2025	ND	0.5000		*
Vanadium, total	ug/L	MW-14	09/18/2014	ND	20.0000		
Vanadium, total	ug/L	MW-14	04/29/2015	ND	20.0000		
Vanadium, total	ug/L	MW-14	10/06/2015	ND	20.0000		
Vanadium, total	ug/L	MW-14	04/19/2016	ND	20.0000		
Vanadium, total	ug/L	MW-14	09/19/2016	ND	20.0000		
Vanadium, total	ug/L	MW-14	03/22/2017	ND	20.0000		
Vanadium, total	ug/L	MW-14	10/12/2017	ND	20.0000		
Vanadium, total	ug/L	MW-14	03/08/2018	ND	20.0000		
Vanadium, total	ug/L	MW-14	09/06/2018	ND	20.0000		
Vanadium, total	ug/L	MW-14	05/13/2019	ND	20.0000		
Vanadium, total	ug/L	MW-14	09/26/2019	ND	20.0000		

* - Outlier for that well and constituent.

** - ND value replaced with median RL.

*** - ND value replaced with manual RL.

ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Vanadium, total	ug/L	MW-14	03/30/2020	ND	20.0000		
Vanadium, total	ug/L	MW-14	09/17/2020	ND	20.0000		
Vanadium, total	ug/L	MW-14	03/09/2021	ND	20.0000		
Vanadium, total	ug/L	MW-14	09/09/2021	ND	20.0000		
Vanadium, total	ug/L	MW-14	03/14/2022	ND	20.0000		
Vanadium, total	ug/L	MW-14	09/01/2022	ND	20.0000		
Vanadium, total	ug/L	MW-14	03/06/2023	ND	20.0000		
Vanadium, total	ug/L	MW-14	09/08/2023	ND	20.0000		
Vanadium, total	ug/L	MW-14	03/20/2024	ND	20.0000		
Vanadium, total	ug/L	MW-14	09/25/2024	ND	20.0000		
Vanadium, total	ug/L	MW-14	03/11/2025	ND	20.0000		
Vanadium, total	ug/L	MW-14	09/08/2025	ND	2.0000		*
Vanadium, total	ug/L	MW-18	09/18/2014	ND	20.0000		
Vanadium, total	ug/L	MW-18	04/29/2015	ND	20.0000		
Vanadium, total	ug/L	MW-18	10/06/2015	ND	20.0000		
Vanadium, total	ug/L	MW-18	04/19/2016	ND	20.0000		
Vanadium, total	ug/L	MW-18	09/19/2016		27.5000		
Vanadium, total	ug/L	MW-18	03/21/2017	ND	20.0000		
Vanadium, total	ug/L	MW-18	10/12/2017	ND	20.0000		
Vanadium, total	ug/L	MW-18	03/08/2018	ND	20.0000		
Vanadium, total	ug/L	MW-18	09/06/2018	ND	20.0000		
Vanadium, total	ug/L	MW-18	05/13/2019	ND	20.0000		
Vanadium, total	ug/L	MW-18	09/26/2019	ND	20.0000		
Vanadium, total	ug/L	MW-18	03/30/2020	ND	20.0000		
Vanadium, total	ug/L	MW-18	09/17/2020	ND	20.0000		
Vanadium, total	ug/L	MW-18	03/09/2021		123.0000		*
Vanadium, total	ug/L	MW-18	09/09/2021	ND	20.0000		
Vanadium, total	ug/L	MW-18	03/14/2022		54.4000		*
Vanadium, total	ug/L	MW-18	09/01/2022	ND	20.0000		
Vanadium, total	ug/L	MW-18	03/06/2023	ND	20.0000		
Vanadium, total	ug/L	MW-18	09/08/2023	ND	20.0000		
Vanadium, total	ug/L	MW-18	03/20/2024	ND	20.0000		
Vanadium, total	ug/L	MW-18	09/25/2024		26.9000		
Vanadium, total	ug/L	MW-18	03/11/2025	ND	20.0000		
Vanadium, total	ug/L	MW-19	09/18/2014	ND	20.0000		
Vanadium, total	ug/L	MW-19	04/28/2015	ND	20.0000		
Vanadium, total	ug/L	MW-19	10/06/2015	ND	20.0000		
Vanadium, total	ug/L	MW-19	04/19/2016	ND	20.0000		
Vanadium, total	ug/L	MW-19	09/19/2016		20.7000		
Vanadium, total	ug/L	MW-19	03/22/2017	ND	20.0000		
Vanadium, total	ug/L	MW-19	10/12/2017	ND	20.0000		
Vanadium, total	ug/L	MW-19	03/08/2018	ND	20.0000		
Vanadium, total	ug/L	MW-19	09/06/2018	ND	20.0000		
Vanadium, total	ug/L	MW-19	05/13/2019	ND	20.0000		
Vanadium, total	ug/L	MW-19	09/26/2019	ND	20.0000		
Vanadium, total	ug/L	MW-19	03/30/2020	ND	20.0000		
Vanadium, total	ug/L	MW-19	09/17/2020	ND	20.0000		
Vanadium, total	ug/L	MW-19	03/09/2021	ND	20.0000		
Vanadium, total	ug/L	MW-19	09/09/2021	ND	20.0000		
Vanadium, total	ug/L	MW-19	03/14/2022	ND	20.0000		
Vanadium, total	ug/L	MW-19	03/06/2023	ND	20.0000		
Vanadium, total	ug/L	MW-19	09/08/2023	ND	20.0000		
Vanadium, total	ug/L	MW-19	03/20/2024	ND	20.0000		
Vanadium, total	ug/L	MW-19	09/25/2024	ND	20.0000		
Vanadium, total	ug/L	MW-19	03/11/2025	ND	20.0000		
Vanadium, total	ug/L	MW-19	09/08/2025	ND	2.0000		*
Vanadium, total	ug/L	MW-2	09/17/2014	ND	20.0000		
Vanadium, total	ug/L	MW-2	04/29/2015	ND	20.0000		
Vanadium, total	ug/L	MW-2	10/07/2015	ND	20.0000		
Vanadium, total	ug/L	MW-2	04/19/2016	ND	20.0000		
Vanadium, total	ug/L	MW-2	09/19/2016	ND	20.0000		
Vanadium, total	ug/L	MW-2	03/22/2017	ND	20.0000		
Vanadium, total	ug/L	MW-2	10/12/2017	ND	20.0000		
Vanadium, total	ug/L	MW-2	03/08/2018	ND	20.0000		
Vanadium, total	ug/L	MW-2	09/06/2018	ND	20.0000		
Vanadium, total	ug/L	MW-2	05/13/2019	ND	20.0000		
Vanadium, total	ug/L	MW-2	09/26/2019	ND	20.0000		
Vanadium, total	ug/L	MW-2	03/30/2020	ND	20.0000		
Vanadium, total	ug/L	MW-2	09/17/2020	ND	20.0000		
Vanadium, total	ug/L	MW-2	03/09/2021	ND	20.0000		
Vanadium, total	ug/L	MW-2	09/09/2021	ND	20.0000		
Vanadium, total	ug/L	MW-2	03/14/2022	ND	20.0000		
Vanadium, total	ug/L	MW-2	09/01/2022	ND	20.0000		
Vanadium, total	ug/L	MW-2	03/06/2023	ND	20.0000		

* - Outlier for that well and constituent.

** - ND value replaced with median RL.

*** - ND value replaced with manual RL.

ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Vanadium, total	ug/L	MW-2	09/08/2023	ND	20.0000		
Vanadium, total	ug/L	MW-2	03/20/2024	ND	20.0000		
Vanadium, total	ug/L	MW-2	09/26/2024	ND	20.0000		
Vanadium, total	ug/L	MW-2	03/11/2025	ND	20.0000		
Vanadium, total	ug/L	MW-2	09/08/2025	ND	2.0000		*
Zinc, total	ug/L	MW-14	09/18/2014		9.3000		
Zinc, total	ug/L	MW-14	04/29/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-14	10/06/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-14	04/19/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-14	09/19/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-14	03/22/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-14	10/12/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-14	03/08/2018		11.1000		
Zinc, total	ug/L	MW-14	09/06/2018		27.7000		
Zinc, total	ug/L	MW-14	05/13/2019		24.1000		
Zinc, total	ug/L	MW-14	09/26/2019		19.1000		
Zinc, total	ug/L	MW-14	03/30/2020		25.3000		
Zinc, total	ug/L	MW-14	09/17/2020	ND	20.0000		
Zinc, total	ug/L	MW-14	03/09/2021	ND	20.0000		
Zinc, total	ug/L	MW-14	09/09/2021	ND	20.0000		
Zinc, total	ug/L	MW-14	03/14/2022	ND	20.0000		
Zinc, total	ug/L	MW-14	09/01/2022	ND	20.0000		
Zinc, total	ug/L	MW-14	03/06/2023	ND	20.0000		
Zinc, total	ug/L	MW-14	09/08/2023	ND	20.0000		
Zinc, total	ug/L	MW-14	03/20/2024	ND	20.0000		
Zinc, total	ug/L	MW-14	09/25/2024	ND	20.0000		
Zinc, total	ug/L	MW-14	03/11/2025	ND	20.0000		
Zinc, total	ug/L	MW-14	09/08/2025		8.9000		
Zinc, total	ug/L	MW-18	09/18/2014	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-18	04/29/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-18	10/06/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-18	04/19/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-18	09/19/2016		27.6000		
Zinc, total	ug/L	MW-18	03/21/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-18	10/12/2017		9.5000		
Zinc, total	ug/L	MW-18	03/08/2018		16.5000		
Zinc, total	ug/L	MW-18	09/06/2018		32.5000		
Zinc, total	ug/L	MW-18	05/13/2019		13.3000		
Zinc, total	ug/L	MW-18	09/26/2019		11.5000		
Zinc, total	ug/L	MW-18	03/30/2020	ND	20.0000		
Zinc, total	ug/L	MW-18	09/17/2020	ND	20.0000		
Zinc, total	ug/L	MW-18	03/09/2021		166.0000		*
Zinc, total	ug/L	MW-18	09/09/2021	ND	20.0000		
Zinc, total	ug/L	MW-18	03/14/2022		58.7000		*
Zinc, total	ug/L	MW-18	09/01/2022	ND	20.0000		
Zinc, total	ug/L	MW-18	03/06/2023	ND	20.0000		
Zinc, total	ug/L	MW-18	09/08/2023	ND	20.0000		
Zinc, total	ug/L	MW-18	03/20/2024	ND	20.0000		
Zinc, total	ug/L	MW-18	09/25/2024		29.0000		
Zinc, total	ug/L	MW-18	03/11/2025	ND	20.0000		
Zinc, total	ug/L	MW-19	09/18/2014		16.1000		
Zinc, total	ug/L	MW-19	04/28/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-19	10/06/2015		11.5000		
Zinc, total	ug/L	MW-19	04/19/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-19	09/19/2016		27.7000		
Zinc, total	ug/L	MW-19	03/22/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-19	10/12/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-19	03/08/2018		9.7000		
Zinc, total	ug/L	MW-19	09/06/2018	ND	20.0000		
Zinc, total	ug/L	MW-19	05/13/2019		30.2000		
Zinc, total	ug/L	MW-19	09/26/2019		68.3000		
Zinc, total	ug/L	MW-19	11/14/2019	ND	20.0000		
Zinc, total	ug/L	MW-19	03/30/2020	ND	20.0000		
Zinc, total	ug/L	MW-19	09/17/2020	ND	20.0000		
Zinc, total	ug/L	MW-19	03/09/2021	ND	20.0000		
Zinc, total	ug/L	MW-19	09/09/2021	ND	20.0000		
Zinc, total	ug/L	MW-19	03/14/2022	ND	20.0000		
Zinc, total	ug/L	MW-19	03/06/2023	ND	20.0000		
Zinc, total	ug/L	MW-19	09/08/2023	ND	20.0000		
Zinc, total	ug/L	MW-19	03/20/2024	ND	20.0000		
Zinc, total	ug/L	MW-19	09/25/2024	ND	20.0000		
Zinc, total	ug/L	MW-19	03/11/2025	ND	20.0000		
Zinc, total	ug/L	MW-19	09/08/2025		25.3000		
Zinc, total	ug/L	MW-2	09/17/2014	ND	8.0000	20.0000	**

* - Outlier for that well and constituent.

** - ND value replaced with median RL.

*** - ND value replaced with manual RL.

ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Zinc, total	ug/L	MW-2	04/29/2015		9.7000		
Zinc, total	ug/L	MW-2	10/07/2015		11.8000		
Zinc, total	ug/L	MW-2	04/19/2016		12.6000		
Zinc, total	ug/L	MW-2	09/19/2016		10.2000		
Zinc, total	ug/L	MW-2	03/22/2017		10.5000		
Zinc, total	ug/L	MW-2	10/12/2017		11.3000		
Zinc, total	ug/L	MW-2	03/08/2018		25.8000		
Zinc, total	ug/L	MW-2	09/06/2018		23.3000		
Zinc, total	ug/L	MW-2	05/13/2019		25.9000		
Zinc, total	ug/L	MW-2	09/26/2019		15.5000		
Zinc, total	ug/L	MW-2	03/30/2020	ND	20.0000		
Zinc, total	ug/L	MW-2	09/17/2020	ND	20.0000		
Zinc, total	ug/L	MW-2	03/09/2021	ND	20.0000		
Zinc, total	ug/L	MW-2	09/09/2021	ND	20.0000		
Zinc, total	ug/L	MW-2	03/14/2022	ND	20.0000		
Zinc, total	ug/L	MW-2	09/01/2022	ND	20.0000		
Zinc, total	ug/L	MW-2	03/06/2023	ND	20.0000		
Zinc, total	ug/L	MW-2	09/08/2023	ND	20.0000		
Zinc, total	ug/L	MW-2	03/20/2024	ND	20.0000		
Zinc, total	ug/L	MW-2	09/26/2024	ND	20.0000		
Zinc, total	ug/L	MW-2	03/11/2025	ND	20.0000		
Zinc, total	ug/L	MW-2	09/08/2025		17.3000		

* - Outlier for that well and constituent.

** - ND value replaced with median RL.

*** - ND value replaced with manual RL.

ND = Not detected, Result = detection limit.

Table 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Antimony, total	ug/L	MW-12	09/08/2025	ND	1.0000		2.0000
Antimony, total	ug/L	MW-15	09/08/2025	ND	1.0000		2.0000
Antimony, total	ug/L	MW-21	09/08/2025	ND	1.0000		2.0000
Antimony, total	ug/L	MW-23	09/08/2025	ND	1.0000		2.0000
Antimony, total	ug/L	MW-3	09/08/2025	ND	1.0000		2.0000
Antimony, total	ug/L	MW-9	09/08/2025	ND	1.0000		2.0000
Arsenic, total	ug/L	MW-12	09/08/2025	ND	2.0000	**	6.1000
Arsenic, total	ug/L	MW-15	09/08/2025	ND	2.0000		6.1000
Arsenic, total	ug/L	MW-21	09/08/2025	ND	2.0000		6.1000
Arsenic, total	ug/L	MW-23	09/08/2025	ND	2.0000		6.1000
Arsenic, total	ug/L	MW-3	09/08/2025	ND	2.0000		6.1000
Arsenic, total	ug/L	MW-9	09/08/2025	ND	2.0000		6.1000
Barium, total	ug/L	MW-12	09/08/2025		384.0000	**	575.1005
Barium, total	ug/L	MW-15	09/08/2025		556.0000		575.1005
Barium, total	ug/L	MW-21	09/08/2025		376.0000		575.1005
Barium, total	ug/L	MW-23	09/08/2025		352.0000		575.1005
Barium, total	ug/L	MW-3	09/08/2025		815.0000	***	575.1005
Barium, total	ug/L	MW-9	09/08/2025		332.0000		575.1005
Beryllium, total	ug/L	MW-12	09/08/2025	ND	0.5000		4.0000
Beryllium, total	ug/L	MW-15	09/08/2025	ND	0.5000		4.0000
Beryllium, total	ug/L	MW-21	09/08/2025	ND	0.5000		4.0000
Beryllium, total	ug/L	MW-23	09/08/2025	ND	0.5000		4.0000
Beryllium, total	ug/L	MW-3	09/08/2025	ND	0.5000		4.0000
Beryllium, total	ug/L	MW-9	09/08/2025	ND	0.5000		4.0000
Cadmium, total	ug/L	MW-12	09/08/2025		0.9000		1.0000
Cadmium, total	ug/L	MW-15	09/08/2025	ND	0.2000		1.0000
Cadmium, total	ug/L	MW-21	09/08/2025	ND	0.2000		1.0000
Cadmium, total	ug/L	MW-23	09/08/2025	ND	0.2000		1.0000
Cadmium, total	ug/L	MW-3	09/08/2025	ND	0.2000		1.0000
Cadmium, total	ug/L	MW-9	09/08/2025		0.3000		1.0000
Chromium, total	ug/L	MW-12	09/08/2025		1.9000		17.2000
Chromium, total	ug/L	MW-15	09/08/2025	ND	1.0000		17.2000
Chromium, total	ug/L	MW-21	09/08/2025	ND	1.0000		17.2000
Chromium, total	ug/L	MW-23	09/08/2025		2.1000		17.2000
Chromium, total	ug/L	MW-3	09/08/2025	ND	1.0000		17.2000
Chromium, total	ug/L	MW-9	09/08/2025		1.2000		17.2000
Cobalt, total	ug/L	MW-12	09/08/2025	ND	0.5000		14.4000
Cobalt, total	ug/L	MW-15	09/08/2025	ND	0.5000		14.4000
Cobalt, total	ug/L	MW-21	09/08/2025	ND	0.5000		14.4000
Cobalt, total	ug/L	MW-23	09/08/2025	ND	0.5000		14.4000
Cobalt, total	ug/L	MW-3	09/08/2025	ND	0.5000		14.4000
Cobalt, total	ug/L	MW-9	09/08/2025		0.6000		14.4000
Copper, total	ug/L	MW-12	09/08/2025	ND	5.0000		10.8000
Copper, total	ug/L	MW-15	09/08/2025	ND	5.0000		10.8000
Copper, total	ug/L	MW-21	09/08/2025		8.2000		10.8000
Copper, total	ug/L	MW-23	09/08/2025	ND	5.0000		10.8000
Copper, total	ug/L	MW-3	09/08/2025	ND	5.0000		10.8000
Copper, total	ug/L	MW-9	09/08/2025	ND	5.0000		10.8000
Lead, total	ug/L	MW-12	09/08/2025	ND	1.0000		8.7000
Lead, total	ug/L	MW-15	09/08/2025	ND	1.0000		8.7000
Lead, total	ug/L	MW-21	09/08/2025	ND	1.0000		8.7000
Lead, total	ug/L	MW-23	09/08/2025	ND	1.0000		8.7000
Lead, total	ug/L	MW-3	09/08/2025	ND	1.0000		8.7000
Lead, total	ug/L	MW-9	09/08/2025	ND	1.0000		8.7000
Nickel, total	ug/L	MW-12	09/08/2025	ND	5.0000	**	20.7000
Nickel, total	ug/L	MW-15	09/08/2025		5.5000		20.7000
Nickel, total	ug/L	MW-21	09/08/2025	ND	5.0000		20.7000
Nickel, total	ug/L	MW-23	09/08/2025	ND	5.0000		20.7000
Nickel, total	ug/L	MW-3	09/08/2025	ND	5.0000		20.7000
Nickel, total	ug/L	MW-9	09/08/2025	ND	5.0000		20.7000
Selenium, total	ug/L	MW-12	09/08/2025	ND	2.0000		7.4000
Selenium, total	ug/L	MW-15	09/08/2025	ND	2.0000		7.4000
Selenium, total	ug/L	MW-21	09/08/2025	ND	2.0000		7.4000
Selenium, total	ug/L	MW-23	09/08/2025	ND	2.0000		7.4000
Selenium, total	ug/L	MW-3	09/08/2025	ND	2.0000		7.4000
Selenium, total	ug/L	MW-9	09/08/2025	ND	2.0000		7.4000
Silver, total	ug/L	MW-12	09/08/2025	ND	5.0000		4.0000
Silver, total	ug/L	MW-15	09/08/2025	ND	5.0000		4.0000
Silver, total	ug/L	MW-21	09/08/2025	ND	5.0000		4.0000
Silver, total	ug/L	MW-23	09/08/2025	ND	5.0000		4.0000
Silver, total	ug/L	MW-3	09/08/2025	ND	5.0000		4.0000
Silver, total	ug/L	MW-9	09/08/2025	ND	5.0000		4.0000

* - Current value failed - awaiting verification.

** - Current value passed - previous exceedance not verified.

*** - Current value failed - exceedance verified.

**** - Current value passed - awaiting one more verification.

***** - Insufficient background data to compute prediction limit.

ND = Not Detected, Result = detection limit.

Table 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Thallium, total	ug/L	MW-12	09/08/2025	ND	0.5000		2.0000
Thallium, total	ug/L	MW-15	09/08/2025	ND	0.5000		2.0000
Thallium, total	ug/L	MW-21	09/08/2025	ND	0.5000		2.0000
Thallium, total	ug/L	MW-23	09/08/2025	ND	0.5000		2.0000
Thallium, total	ug/L	MW-3	09/08/2025	ND	0.5000		2.0000
Thallium, total	ug/L	MW-9	09/08/2025	ND	0.5000		2.0000
Vanadium, total	ug/L	MW-12	09/08/2025	ND	2.0000		27.5000
Vanadium, total	ug/L	MW-15	09/08/2025	ND	2.0000		27.5000
Vanadium, total	ug/L	MW-21	09/08/2025		2.0000		27.5000
Vanadium, total	ug/L	MW-23	09/08/2025	ND	2.0000		27.5000
Vanadium, total	ug/L	MW-3	09/08/2025		4.8000		27.5000
Vanadium, total	ug/L	MW-9	09/08/2025	ND	2.0000		27.5000
Zinc, total	ug/L	MW-12	09/08/2025		6.9000		68.3000
Zinc, total	ug/L	MW-15	09/08/2025	ND	5.0000		68.3000
Zinc, total	ug/L	MW-21	09/08/2025	ND	5.0000		68.3000
Zinc, total	ug/L	MW-23	09/08/2025		9.4000		68.3000
Zinc, total	ug/L	MW-3	09/08/2025		19.0000		68.3000
Zinc, total	ug/L	MW-9	09/08/2025		20.0000		68.3000

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

Table 3**Detection Frequencies in Upgradient and Downgradient Wells**

Constituent	Detect	Upgradient N	Proportion	Detect	Downgradient N	Proportion
Antimony, total	1	89	0.011	1	201	0.005
Arsenic, total	3	88	0.034	49	202	0.243
Barium, total	87	87	1.000	203	203	1.000
Beryllium, total	0	86	0.000	0	201	0.000
Cadmium, total	14	89	0.157	11	203	0.054
Chromium, total	9	86	0.105	32	201	0.159
Cobalt, total	38	88	0.432	75	201	0.373
Copper, total	7	88	0.080	59	201	0.294
Lead, total	5	85	0.059	42	201	0.209
Nickel, total	24	87	0.276	112	203	0.552
Selenium, total	16	90	0.178	0	201	0.000
Silver, total	0	89	0.000	0	201	0.000
Thallium, total	0	86	0.000	0	201	0.000
Vanadium, total	3	85	0.035	29	201	0.144
Zinc, total	32	89	0.360	93	201	0.463

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	1	89	0.011									nonpar
Arsenic, total	3	88	0.034									nonpar
Barium, total	87	87	1.000	7.492	5.981					2.326	non-norm	normal
Beryllium, total	0	86	0.000									nonpar
Cadmium, total	14	89	0.157	1.189	1.572					2.326	normal	nonpar
Chromium, total	9	86	0.105	0.609	0.628					2.326	normal	nonpar
Cobalt, total	38	88	0.432	1.930	1.389					2.326	normal	nonpar
Copper, total	7	88	0.080	1.817	1.797					2.326	normal	nonpar
Lead, total	5	85	0.059	1.357	1.505					2.326	normal	nonpar
Nickel, total	24	87	0.276	1.792	0.244					2.326	normal	nonpar
Selenium, total	16	90	0.178	3.887	3.420					2.326	non-norm	nonpar
Silver, total	0	89	0.000									nonpar
Thallium, total	0	86	0.000									nonpar
Vanadium, total	3	85	0.035									nonpar
Zinc, total	32	89	0.360	2.686	1.288					2.326	lognor	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	1	89	314.4713	109.3213	0.0100	2.3841	2.0000	nonpar	***	0.99
Arsenic, total	ug/L	3	88					6.1000	nonpar		0.99
Barium, total	ug/L	87	87					575.1005	normal		
Beryllium, total	ug/L	0	86					4.0000	nonpar	***	0.99
Cadmium, total	ug/L	14	89					1.0000	nonpar		0.99
Chromium, total	ug/L	9	86					17.2000	nonpar		0.99
Cobalt, total	ug/L	38	88					14.4000	nonpar		0.99
Copper, total	ug/L	7	88					10.8000	nonpar		0.99
Lead, total	ug/L	5	85					8.7000	nonpar		0.99
Nickel, total	ug/L	24	87					20.7000	nonpar		0.99
Selenium, total	ug/L	16	90	314.4713	109.3213	0.0100	2.3841	7.4000	nonpar		0.99
Silver, total	ug/L	0	89					4.0000	nonpar	***	0.99
Thallium, total	ug/L	0	86					2.0000	nonpar	***	0.99
Vanadium, total	ug/L	3	85					27.5000	nonpar		0.99
Zinc, total	ug/L	32	89					68.3000	nonpar		0.99

Conf = confidence level for passing initial test or one verification resample at all downgradient wells for a single constituent (nonparametric test only).

* - Insufficient Data.

** - Calculated limit raised to Manual Reporting Limit.

*** - Nonparametric limit based on ND value.

For transformed data, mean and SD in transformed units and prediction limit in original units.

All sample sizes and statistics are based on outlier free data.

For nonparametric limits, median reporting limits are substituted for extreme reporting limit values.

Table 6

**Dixon's Test Outliers
5% Significance Level**

Constituent	Units	Well	Date	Result	ND Qualifier	Date Range	N	Critical Value
Barium, total	ug/L	MW-19	03/20/2024	26.9000		09/18/2014-09/08/2025	22	0.4305
Barium, total	ug/L	MW-2	03/11/2025	54.1000		09/17/2014-09/08/2025	23	0.4218
Beryllium, total	ug/L	MW-14	09/08/2025	0.5000	< 0.5000	09/18/2014-09/08/2025	23	0.4218
Beryllium, total	ug/L	MW-19	09/08/2025	0.5000	< 0.5000	09/18/2014-09/08/2025	22	0.4305
Beryllium, total	ug/L	MW-2	09/08/2025	0.5000	< 0.5000	09/17/2014-09/08/2025	23	0.4218
Chromium, total	ug/L	MW-14	09/08/2025	2.1000		09/18/2014-09/08/2025	23	0.4218
Chromium, total	ug/L	MW-19	09/08/2025	1.2000		09/18/2014-09/08/2025	22	0.4305
Copper, total	ug/L	MW-14	03/30/2020	32.2000		09/18/2014-09/08/2025	24	0.4133
Lead, total	ug/L	MW-14	09/08/2025	1.0000	< 1.0000	09/18/2014-09/08/2025	23	0.4218
Lead, total	ug/L	MW-19	09/08/2025	1.0000	< 1.0000	09/18/2014-09/08/2025	22	0.4305
Lead, total	ug/L	MW-2	09/08/2025	1.0000	< 1.0000	09/17/2014-09/08/2025	23	0.4218
Nickel, total	ug/L	MW-19	09/25/2024	15.7000		09/18/2014-09/08/2025	22	0.4305
Thallium, total	ug/L	MW-14	09/08/2025	0.5000	< 0.5000	09/18/2014-09/08/2025	23	0.4218
Thallium, total	ug/L	MW-19	09/08/2025	0.5000	< 0.5000	09/18/2014-09/08/2025	22	0.4305
Thallium, total	ug/L	MW-2	09/08/2025	0.5000	< 0.5000	09/17/2014-09/08/2025	23	0.4218
Vanadium, total	ug/L	MW-14	09/08/2025	2.0000	< 2.0000	09/18/2014-09/08/2025	23	0.4218
Vanadium, total	ug/L	MW-19	09/08/2025	2.0000	< 2.0000	09/18/2014-09/08/2025	22	0.4305
Vanadium, total	ug/L	MW-2	09/08/2025	2.0000	< 2.0000	09/17/2014-09/08/2025	23	0.4218

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

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

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

Table 8

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

Constituent	Units	Well	Date		Result	Pred. Limit
Arsenic, total	ug/L	MW-12	04/15/2008		8.0000 *	6.1000
Arsenic, total	ug/L	MW-12	06/18/2008	ND	5.0000	6.1000
Arsenic, total	ug/L	MW-12	08/19/2008	ND	5.0000	6.1000
Arsenic, total	ug/L	MW-12	10/18/2008	ND	4.0000	6.1000
Arsenic, total	ug/L	MW-12	12/04/2008		4.3000	6.1000
Arsenic, total	ug/L	MW-12	03/16/2009		5.1000	6.1000
Arsenic, total	ug/L	MW-12	09/23/2009		4.1000	6.1000
Arsenic, total	ug/L	MW-12	04/12/2010	ND	4.0000	6.1000
Arsenic, total	ug/L	MW-12	09/28/2010	ND	4.0000	6.1000
Arsenic, total	ug/L	MW-12	05/03/2011	ND	4.0000	6.1000
Arsenic, total	ug/L	MW-12	10/10/2011	ND	4.0000	6.1000
Arsenic, total	ug/L	MW-12	04/23/2012		7.8000 *	6.1000
Arsenic, total	ug/L	MW-12	09/10/2012		6.9000 *	6.1000
Arsenic, total	ug/L	MW-12	04/05/2013	ND	4.0000	6.1000
Arsenic, total	ug/L	MW-12	10/11/2013		4.7000	6.1000
Arsenic, total	ug/L	MW-12	04/22/2014		6.8000 *	6.1000
Arsenic, total	ug/L	MW-12	09/18/2014		4.1000	6.1000
Arsenic, total	ug/L	MW-12	04/28/2015		4.6000	6.1000
Arsenic, total	ug/L	MW-12	10/07/2015	ND	4.0000	6.1000
Arsenic, total	ug/L	MW-12	04/19/2016	ND	4.0000	6.1000
Arsenic, total	ug/L	MW-12	09/19/2016		4.3000	6.1000
Arsenic, total	ug/L	MW-12	03/22/2017	ND	4.0000	6.1000
Arsenic, total	ug/L	MW-12	10/12/2017	ND	4.0000	6.1000
Arsenic, total	ug/L	MW-12	03/08/2018	ND	4.0000	6.1000
Arsenic, total	ug/L	MW-12	09/06/2018	ND	4.0000	6.1000
Arsenic, total	ug/L	MW-12	05/13/2019	ND	4.0000	6.1000
Arsenic, total	ug/L	MW-12	09/26/2019	ND	4.0000	6.1000
Arsenic, total	ug/L	MW-12	03/30/2020	ND	4.0000	6.1000
Arsenic, total	ug/L	MW-12	09/17/2020	ND	4.0000	6.1000
Arsenic, total	ug/L	MW-12	03/09/2021	ND	4.0000	6.1000
Arsenic, total	ug/L	MW-12	09/09/2021	ND	4.0000	6.1000
Arsenic, total	ug/L	MW-12	03/14/2022	ND	4.0000	6.1000
Arsenic, total	ug/L	MW-12	09/01/2022	ND	4.0000	6.1000
Arsenic, total	ug/L	MW-12	03/06/2023		7.3000 *	6.1000
Arsenic, total	ug/L	MW-12	09/08/2023	ND	4.0000	6.1000
Arsenic, total	ug/L	MW-12	03/20/2024		15.9000 *	6.1000
Arsenic, total	ug/L	MW-12	09/25/2024	ND	4.0000	6.1000
Arsenic, total	ug/L	MW-12	03/11/2025		7.6000 *	6.1000
Arsenic, total	ug/L	MW-12	09/08/2025	ND	2.0000	6.1000
Barium, total	ug/L	MW-12	04/15/2008		447.0000	575.1005
Barium, total	ug/L	MW-12	06/18/2008		430.0000	575.1005
Barium, total	ug/L	MW-12	08/19/2008		420.0000	575.1005
Barium, total	ug/L	MW-12	10/18/2008		405.0000	575.1005
Barium, total	ug/L	MW-12	12/04/2008		472.0000	575.1005
Barium, total	ug/L	MW-12	03/16/2009		494.0000	575.1005
Barium, total	ug/L	MW-12	09/23/2009		476.0000	575.1005
Barium, total	ug/L	MW-12	04/12/2010		421.0000	575.1005
Barium, total	ug/L	MW-12	09/28/2010		477.0000	575.1005
Barium, total	ug/L	MW-12	05/03/2011		440.0000	575.1005
Barium, total	ug/L	MW-12	10/10/2011		537.0000	575.1005
Barium, total	ug/L	MW-12	04/23/2012		471.0000	575.1005
Barium, total	ug/L	MW-12	09/10/2012		416.0000	575.1005
Barium, total	ug/L	MW-12	04/05/2013		461.0000	575.1005
Barium, total	ug/L	MW-12	10/11/2013		416.0000	575.1005
Barium, total	ug/L	MW-12	04/22/2014		366.0000	575.1005
Barium, total	ug/L	MW-12	09/18/2014		364.0000	575.1005
Barium, total	ug/L	MW-12	04/28/2015		409.0000	575.1005
Barium, total	ug/L	MW-12	10/07/2015		403.0000	575.1005
Barium, total	ug/L	MW-12	04/19/2016		396.0000	575.1005
Barium, total	ug/L	MW-12	09/19/2016		390.0000	575.1005
Barium, total	ug/L	MW-12	03/22/2017		303.0000	575.1005
Barium, total	ug/L	MW-12	10/12/2017		305.0000	575.1005
Barium, total	ug/L	MW-12	03/08/2018		295.0000	575.1005
Barium, total	ug/L	MW-12	09/06/2018		286.0000	575.1005
Barium, total	ug/L	MW-12	05/13/2019		280.0000	575.1005
Barium, total	ug/L	MW-12	09/26/2019		295.0000	575.1005
Barium, total	ug/L	MW-12	03/30/2020		397.0000	575.1005
Barium, total	ug/L	MW-12	09/17/2020		301.0000	575.1005
Barium, total	ug/L	MW-12	03/09/2021		416.0000	575.1005
Barium, total	ug/L	MW-12	09/09/2021		425.0000	575.1005
Barium, total	ug/L	MW-12	03/14/2022		544.0000	575.1005

* - Significantly increased over background.

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

*** - Manual exclusion.

ND = Not Detected, Result = detection limit.

Table 8

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

Constituent	Units	Well	Date		Result	Pred. Limit
Barium, total	ug/L	MW-12	09/01/2022		322.0000	575.1005
Barium, total	ug/L	MW-12	03/06/2023		547.0000	575.1005
Barium, total	ug/L	MW-12	09/08/2023		465.0000	575.1005
Barium, total	ug/L	MW-12	03/20/2024		856.0000 *	575.1005
Barium, total	ug/L	MW-12	09/25/2024		509.0000	575.1005
Barium, total	ug/L	MW-12	03/11/2025		671.0000 *	575.1005
Barium, total	ug/L	MW-12	09/08/2025		384.0000	575.1005
Barium, total	ug/L	MW-3	04/15/2008		572.0000	575.1005
Barium, total	ug/L	MW-3	06/18/2008		547.0000	575.1005
Barium, total	ug/L	MW-3	08/19/2008		624.0000 *	575.1005
Barium, total	ug/L	MW-3	10/18/2008		706.0000 *	575.1005
Barium, total	ug/L	MW-3	12/04/2008		700.0000 *	575.1005
Barium, total	ug/L	MW-3	03/16/2009		740.0000 *	575.1005
Barium, total	ug/L	MW-3	09/23/2009		826.0000 *	575.1005
Barium, total	ug/L	MW-3	04/12/2010		661.0000 *	575.1005
Barium, total	ug/L	MW-3	06/01/2010		790.0000 *	575.1005
Barium, total	ug/L	MW-3	09/28/2010		742.0000 *	575.1005
Barium, total	ug/L	MW-3	05/03/2011		647.0000 *	575.1005
Barium, total	ug/L	MW-3	10/11/2011		808.0000 *	575.1005
Barium, total	ug/L	MW-3	04/24/2012		844.0000 *	575.1005
Barium, total	ug/L	MW-3	09/10/2012		201.0000	575.1005
Barium, total	ug/L	MW-3	04/05/2013		727.0000 *	575.1005
Barium, total	ug/L	MW-3	10/10/2013		755.0000 *	575.1005
Barium, total	ug/L	MW-3	04/22/2014		758.0000 *	575.1005
Barium, total	ug/L	MW-3	09/18/2014		655.0000 *	575.1005
Barium, total	ug/L	MW-3	04/29/2015		761.0000 *	575.1005
Barium, total	ug/L	MW-3	10/07/2015		640.0000 *	575.1005
Barium, total	ug/L	MW-3	04/19/2016		748.0000 *	575.1005
Barium, total	ug/L	MW-3	09/19/2016		784.0000 *	575.1005
Barium, total	ug/L	MW-3	03/21/2017		710.0000 *	575.1005
Barium, total	ug/L	MW-3	10/12/2017		743.0000 *	575.1005
Barium, total	ug/L	MW-3	03/08/2018		1020.0000 *	575.1005
Barium, total	ug/L	MW-3	09/06/2018		796.0000 *	575.1005
Barium, total	ug/L	MW-3	05/13/2019		865.0000 *	575.1005
Barium, total	ug/L	MW-3	09/26/2019		951.0000 *	575.1005
Barium, total	ug/L	MW-3	03/30/2020		867.0000 *	575.1005
Barium, total	ug/L	MW-3	09/17/2020		884.0000 *	575.1005
Barium, total	ug/L	MW-3	03/09/2021		1090.0000 *	575.1005
Barium, total	ug/L	MW-3	09/09/2021		785.0000 *	575.1005
Barium, total	ug/L	MW-3	03/14/2022		843.0000 *	575.1005
Barium, total	ug/L	MW-3	09/01/2022		783.0000 *	575.1005
Barium, total	ug/L	MW-3	03/06/2023		785.0000 *	575.1005
Barium, total	ug/L	MW-3	09/08/2023		730.0000 *	575.1005
Barium, total	ug/L	MW-3	03/20/2024		747.0000 *	575.1005
Barium, total	ug/L	MW-3	09/25/2024		755.0000 *	575.1005
Barium, total	ug/L	MW-3	03/11/2025		736.0000 *	575.1005
Barium, total	ug/L	MW-3	09/08/2025		815.0000 *	575.1005
Nickel, total	ug/L	MW-12	04/15/2008		14.0000	20.7000
Nickel, total	ug/L	MW-12	06/18/2008		8.0000	20.7000
Nickel, total	ug/L	MW-12	08/19/2008		6.0000	20.7000
Nickel, total	ug/L	MW-12	10/18/2008		5.3000	20.7000
Nickel, total	ug/L	MW-12	12/04/2008		6.9000	20.7000
Nickel, total	ug/L	MW-12	03/16/2009		10.1000	20.7000
Nickel, total	ug/L	MW-12	09/23/2009		6.5000	20.7000
Nickel, total	ug/L	MW-12	04/12/2010		10.2000	20.7000
Nickel, total	ug/L	MW-12	09/28/2010		6.2000	20.7000
Nickel, total	ug/L	MW-12	05/03/2011		9.3000	20.7000
Nickel, total	ug/L	MW-12	10/10/2011		13.4000	20.7000
Nickel, total	ug/L	MW-12	04/23/2012		7.5000	20.7000
Nickel, total	ug/L	MW-12	09/10/2012		6.3000	20.7000
Nickel, total	ug/L	MW-12	04/05/2013		9.1000	20.7000
Nickel, total	ug/L	MW-12	10/11/2013		5.2000	20.7000
Nickel, total	ug/L	MW-12	04/22/2014		6.2000	20.7000
Nickel, total	ug/L	MW-12	09/18/2014		5.8000	20.7000
Nickel, total	ug/L	MW-12	04/28/2015		4.6000	20.7000
Nickel, total	ug/L	MW-12	10/07/2015	ND	4.0000	20.7000
Nickel, total	ug/L	MW-12	04/19/2016		4.1000	20.7000
Nickel, total	ug/L	MW-12	09/19/2016	ND	4.0000	20.7000
Nickel, total	ug/L	MW-12	03/22/2017	ND	4.0000	20.7000
Nickel, total	ug/L	MW-12	10/12/2017	ND	4.0000	20.7000
Nickel, total	ug/L	MW-12	03/08/2018	ND	4.0000	20.7000

* - Significantly increased over background.

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

*** - Manual exclusion.

ND = Not Detected, Result = detection limit.

Table 8

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

Constituent	Units	Well	Date		Result	Pred. Limit
Nickel, total	ug/L	MW-12	09/06/2018	ND	8.0000	20.7000
Nickel, total	ug/L	MW-12	05/13/2019	ND	4.0000	20.7000
Nickel, total	ug/L	MW-12	09/26/2019		5.2000	20.7000
Nickel, total	ug/L	MW-12	03/30/2020		15.7000	20.7000
Nickel, total	ug/L	MW-12	06/25/2020		7.9000	20.7000
Nickel, total	ug/L	MW-12	09/17/2020		5.9000	20.7000
Nickel, total	ug/L	MW-12	03/09/2021		11.9000	20.7000
Nickel, total	ug/L	MW-12	09/09/2021		15.6000	20.7000
Nickel, total	ug/L	MW-12	12/08/2021		31.6000 *	20.7000
Nickel, total	ug/L	MW-12	03/14/2022		12.3000	20.7000
Nickel, total	ug/L	MW-12	09/01/2022		6.7000	20.7000
Nickel, total	ug/L	MW-12	03/06/2023		27.6000 *	20.7000
Nickel, total	ug/L	MW-12	09/08/2023		11.6000	20.7000
Nickel, total	ug/L	MW-12	03/20/2024		63.1000 *	20.7000
Nickel, total	ug/L	MW-12	09/25/2024		10.2000	20.7000
Nickel, total	ug/L	MW-12	03/11/2025		31.4000 *	20.7000
Nickel, total	ug/L	MW-12	09/08/2025	ND	5.0000	20.7000

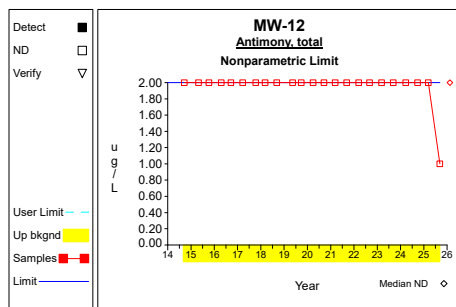
* - Significantly increased over background.

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

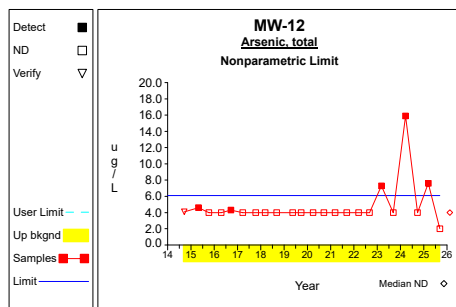
*** - Manual exclusion.

ND = Not Detected, Result = detection limit.

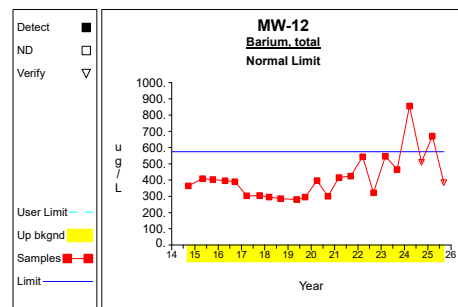
Up vs. Down Prediction Limits



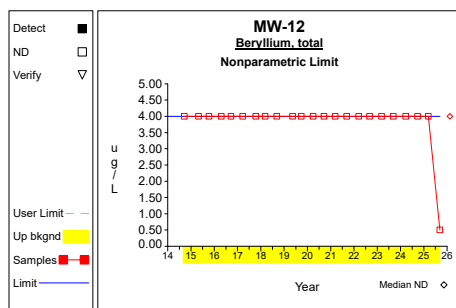
Graph 1



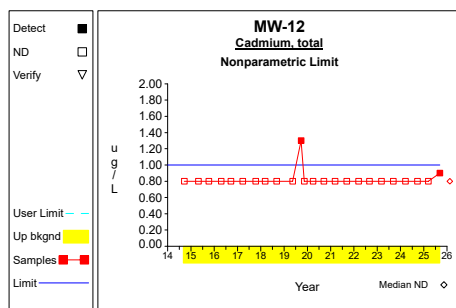
Graph 2



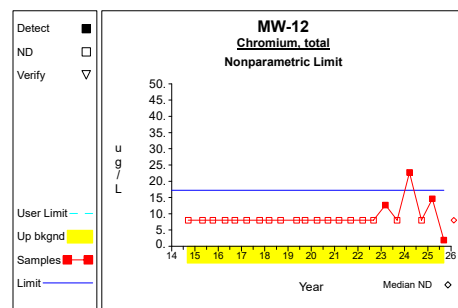
Graph 3



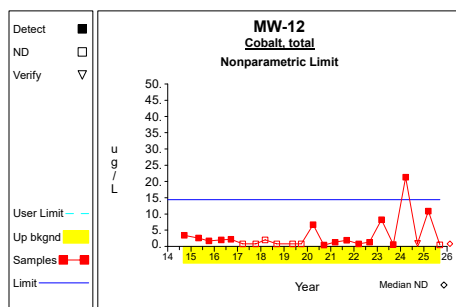
Graph 4



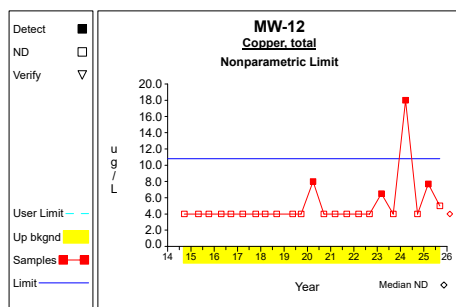
Graph 5



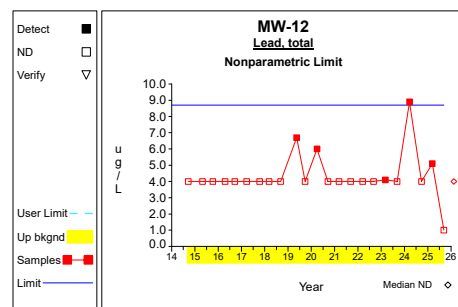
Graph 6



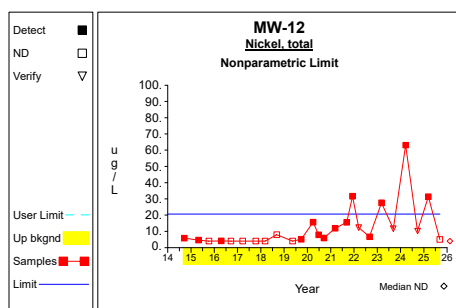
Graph 7



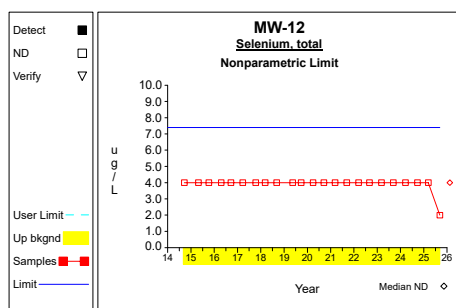
Graph 8



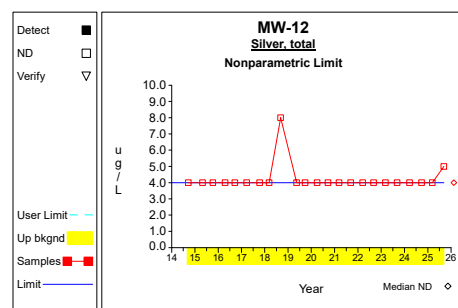
Graph 9



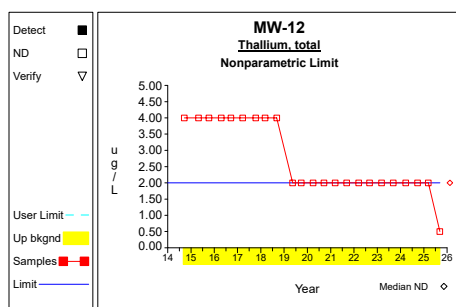
Graph 10



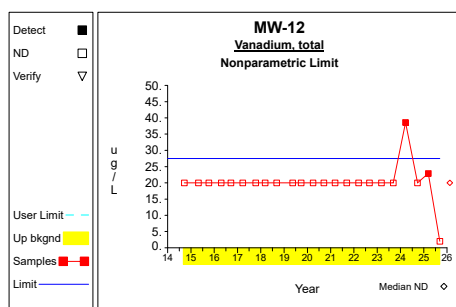
Graph 11



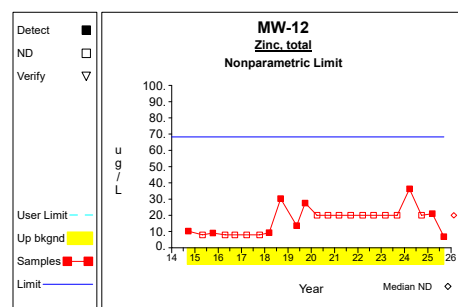
Graph 12



Graph 13

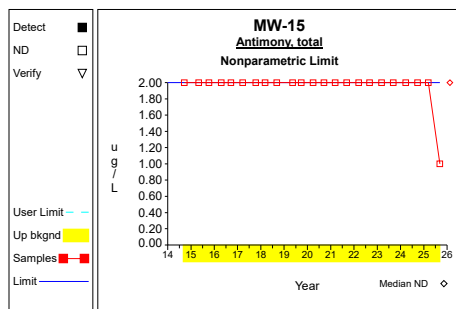


Graph 14

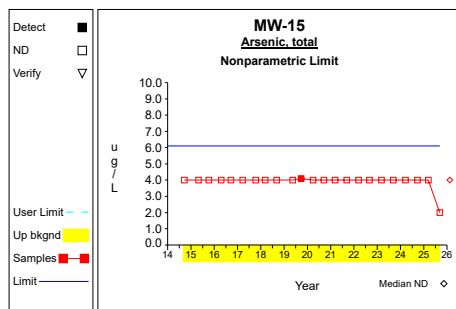


Graph 15

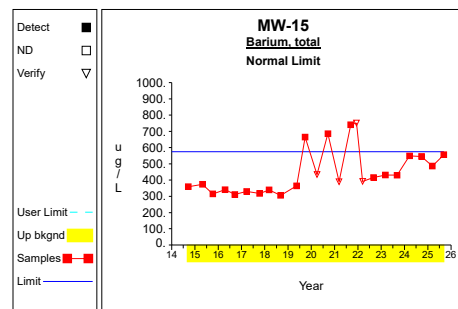
Up vs. Down Prediction Limits



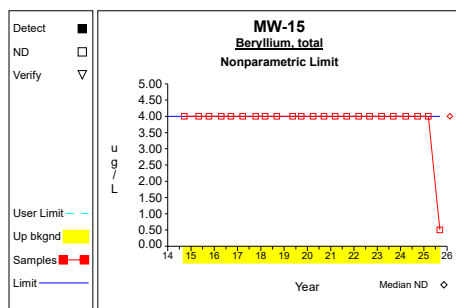
Graph 16



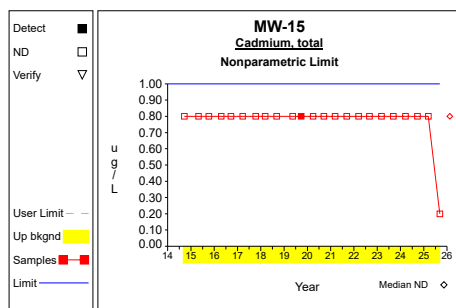
Graph 17



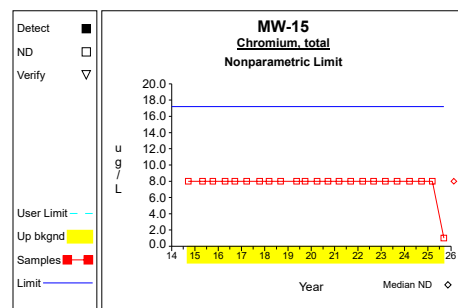
Graph 18



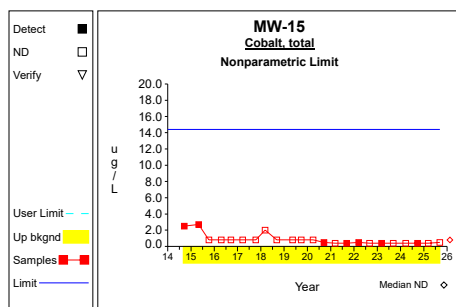
Graph 19



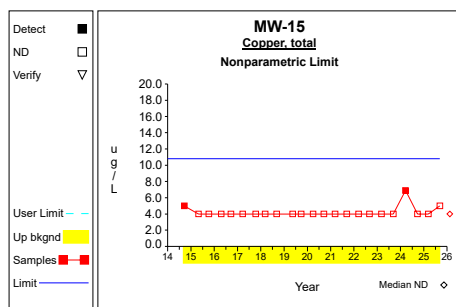
Graph 20



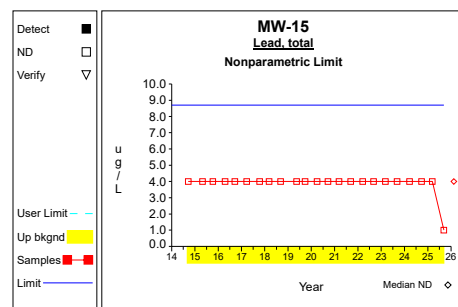
Graph 21



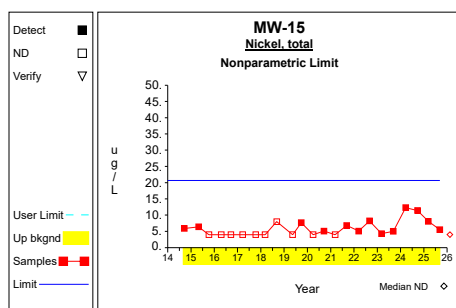
Graph 22



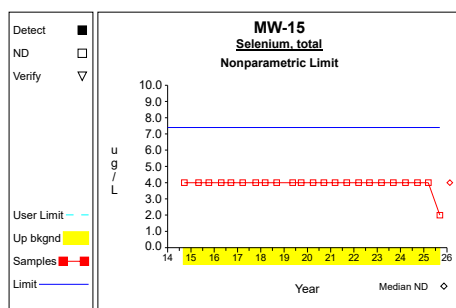
Graph 23



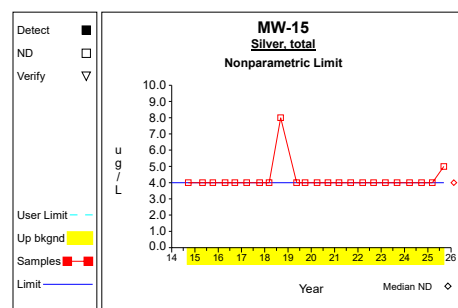
Graph 24



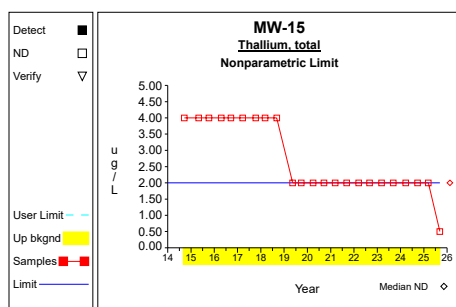
Graph 25



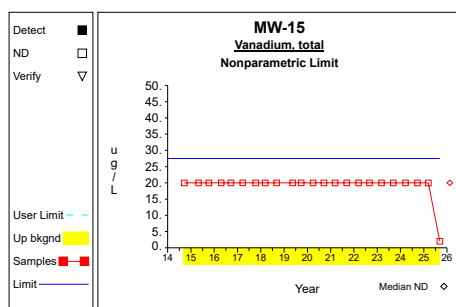
Graph 26



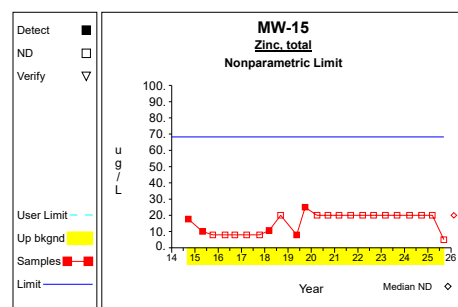
Graph 27



Graph 28

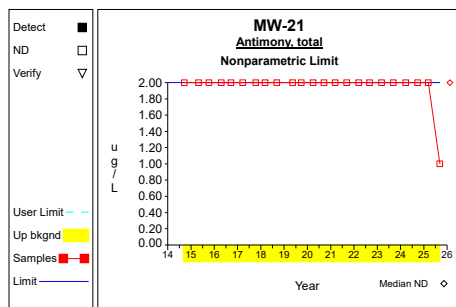


Graph 29

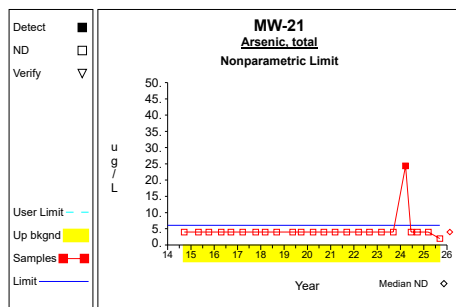


Graph 30

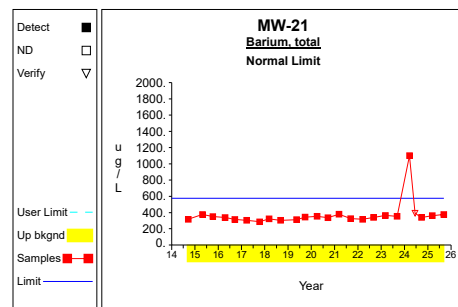
Up vs. Down Prediction Limits



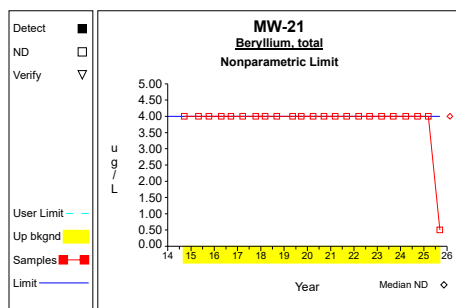
Graph 31



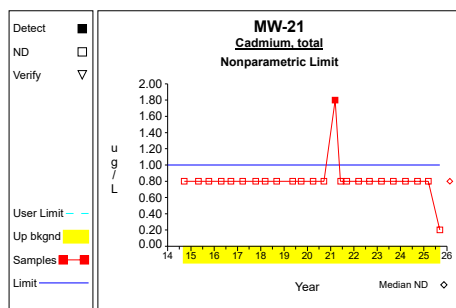
Graph 32



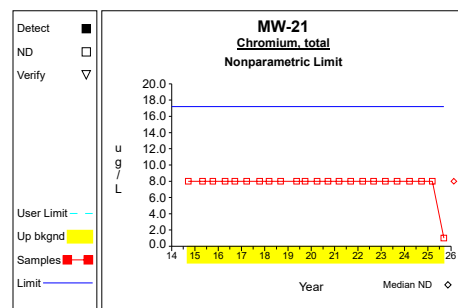
Graph 33



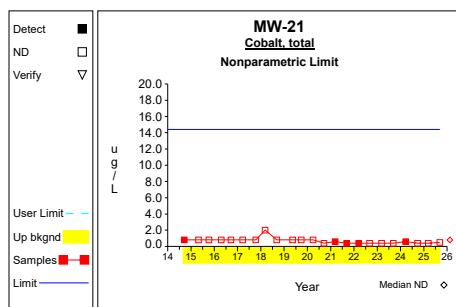
Graph 34



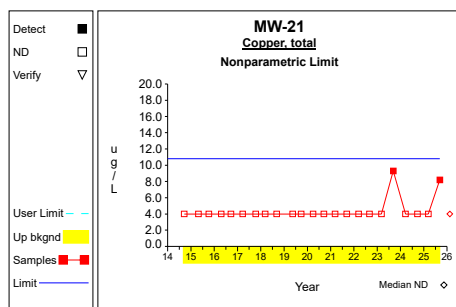
Graph 35



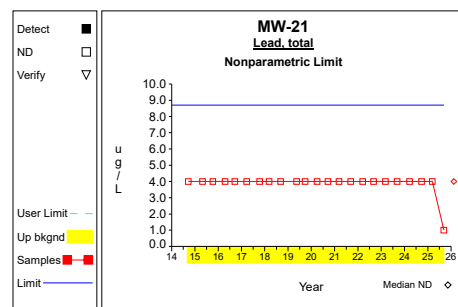
Graph 36



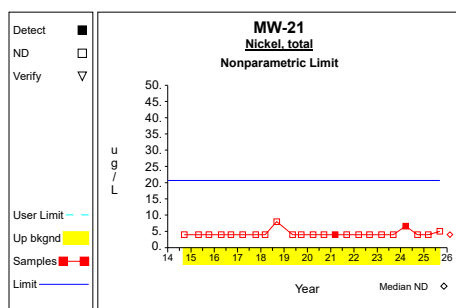
Graph 37



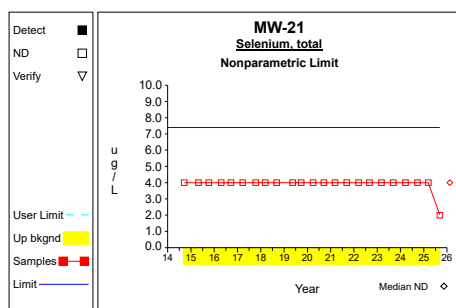
Graph 38



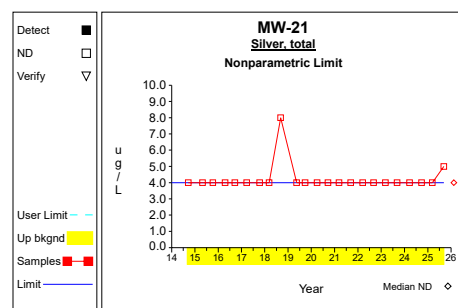
Graph 39



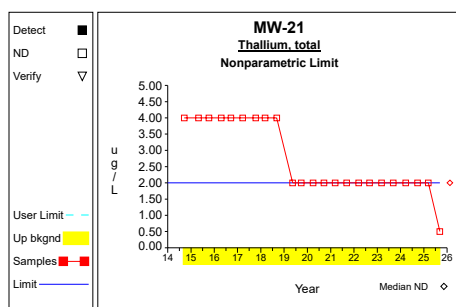
Graph 40



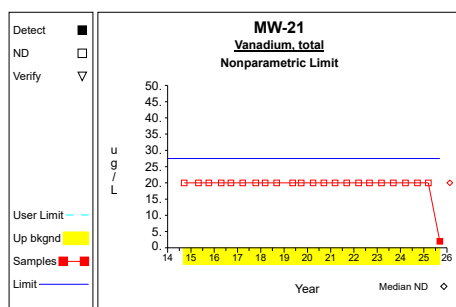
Graph 41



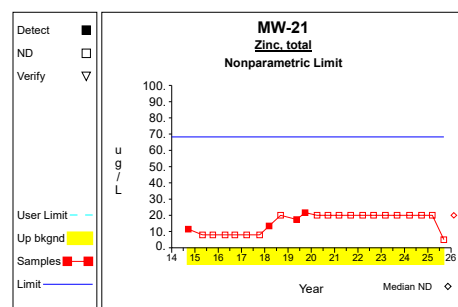
Graph 42



Graph 43

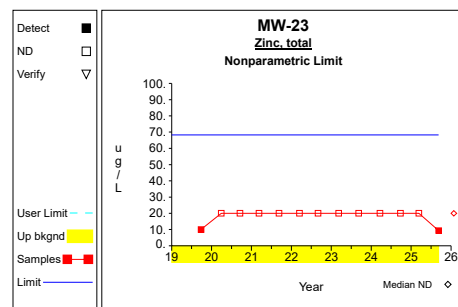
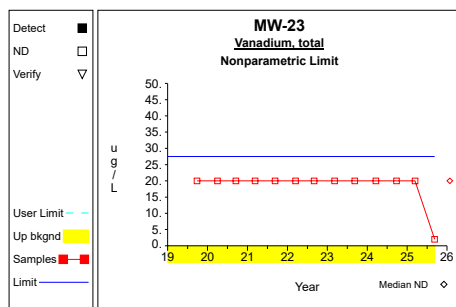
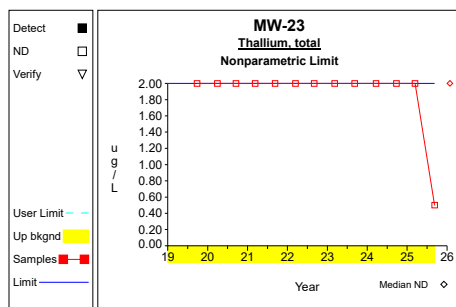
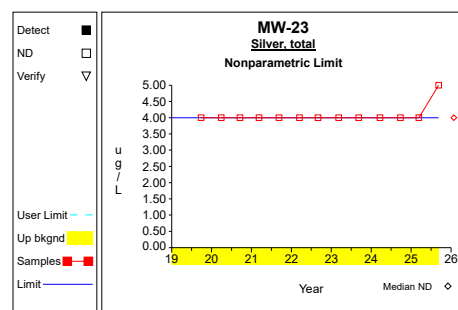
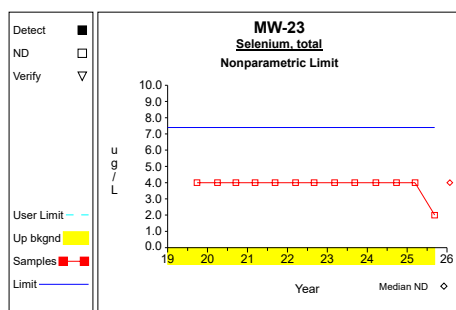
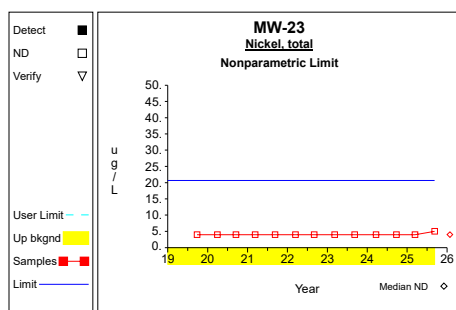
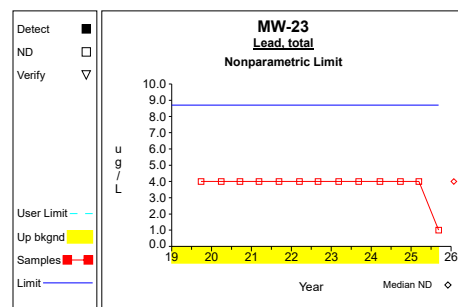
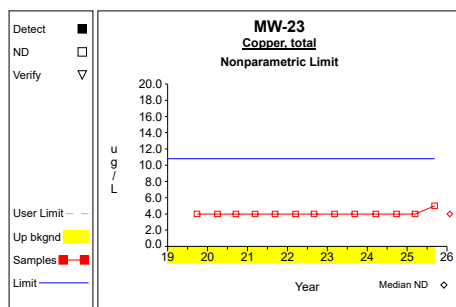
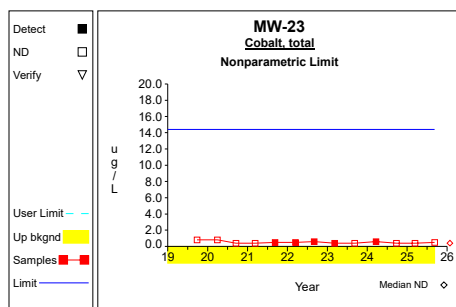
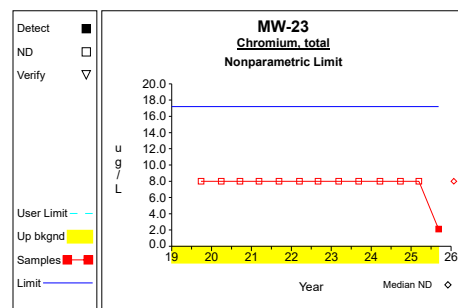
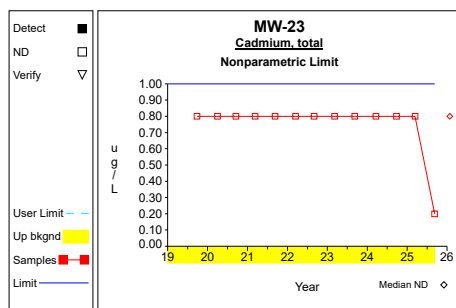
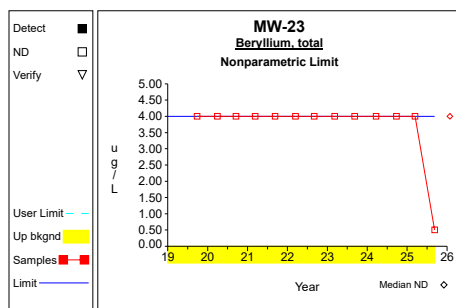
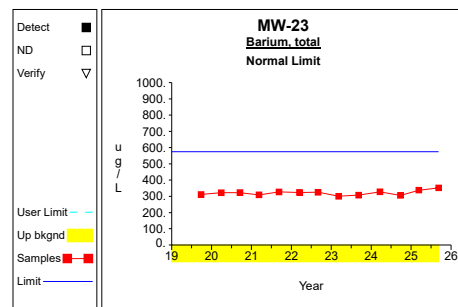
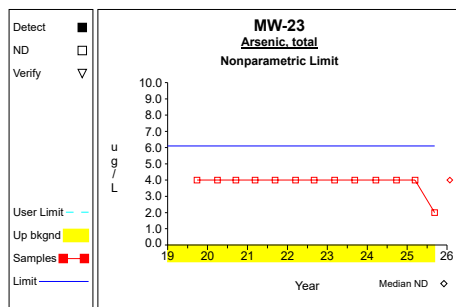
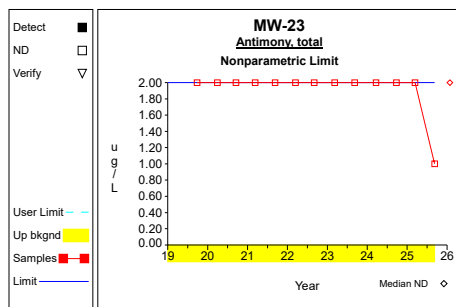


Graph 44

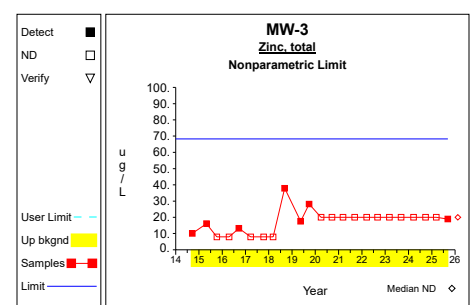
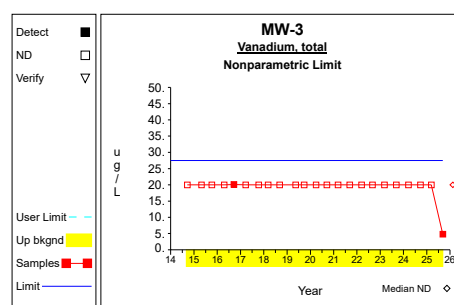
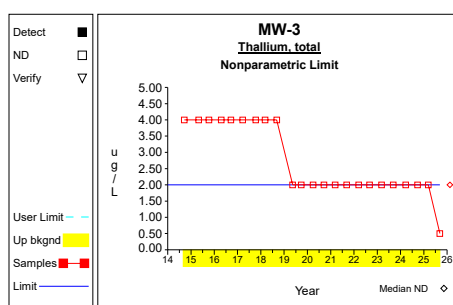
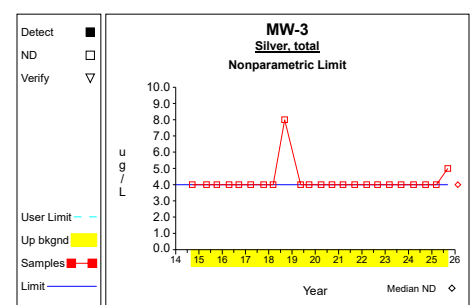
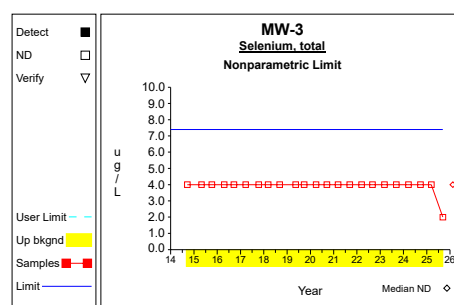
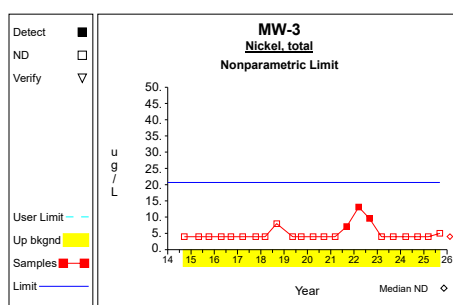
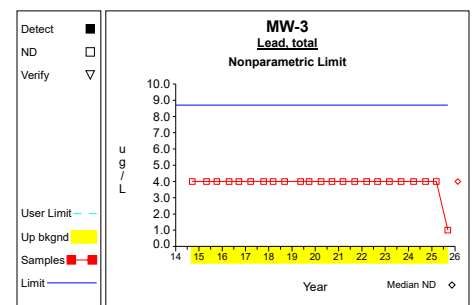
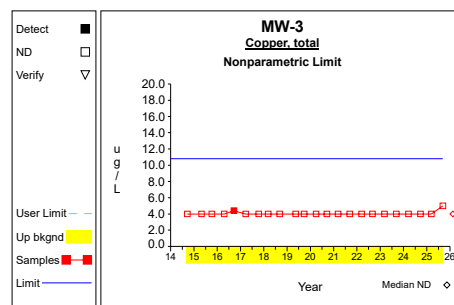
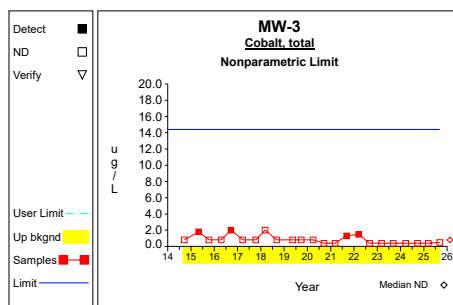
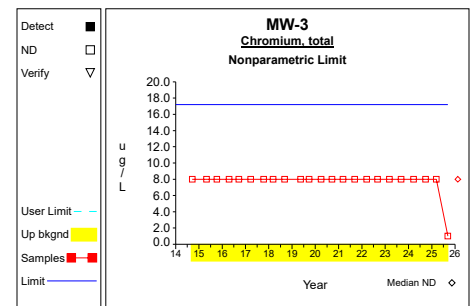
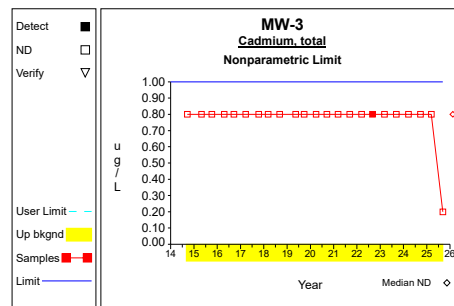
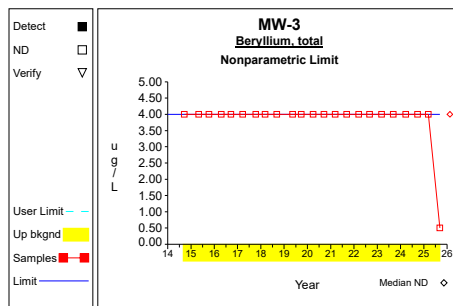
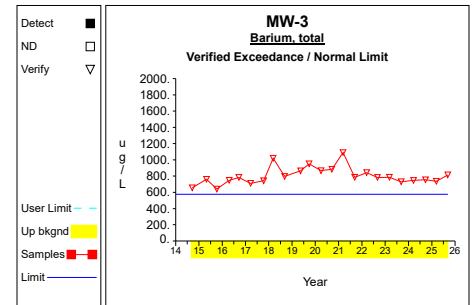
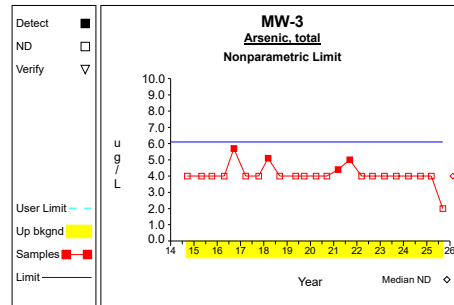
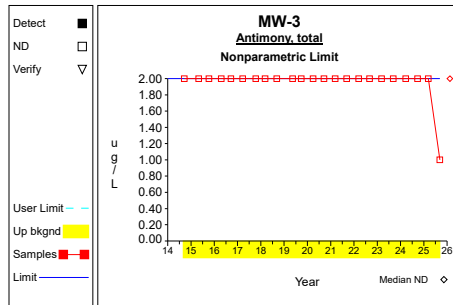


Graph 45

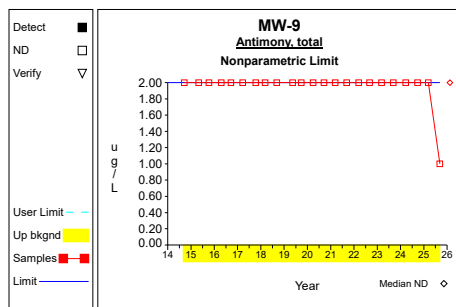
Up vs. Down Prediction Limits



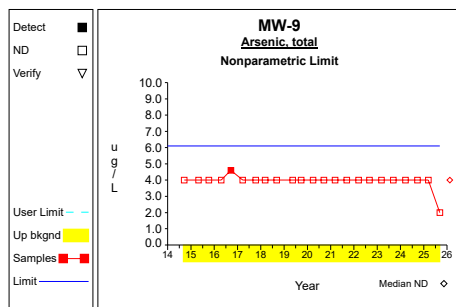
Up vs. Down Prediction Limits



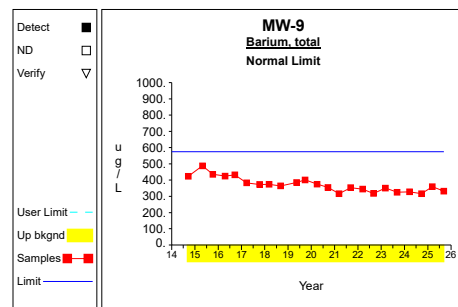
Up vs. Down Prediction Limits



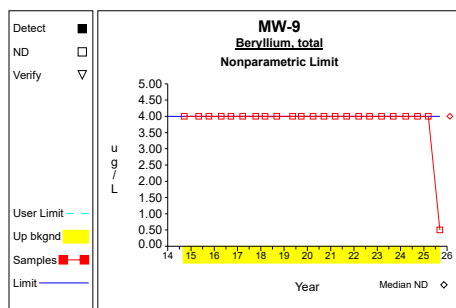
Graph 76



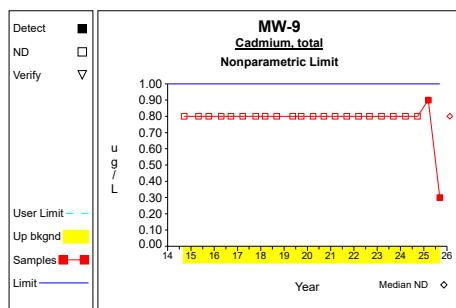
Graph 77



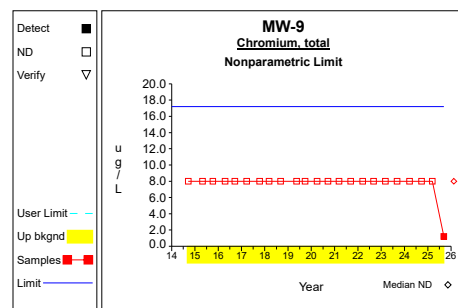
Graph 78



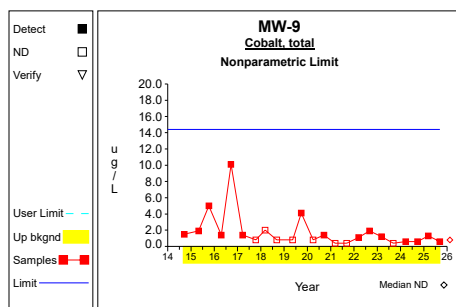
Graph 79



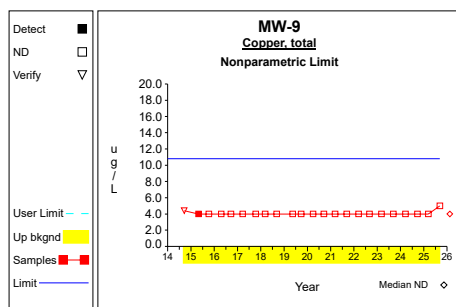
Graph 80



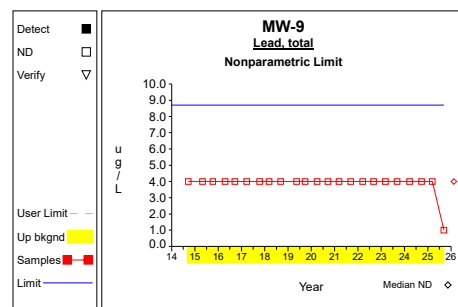
Graph 81



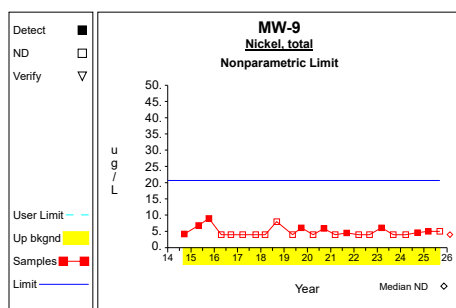
Graph 82



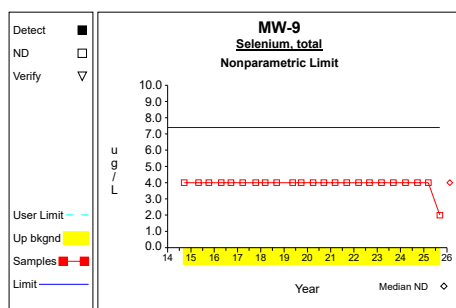
Graph 83



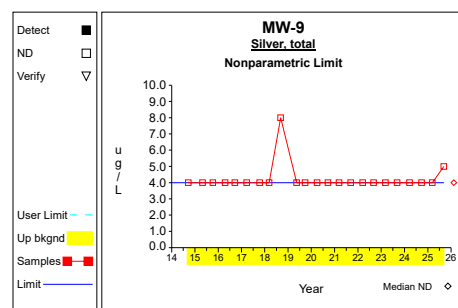
Graph 84



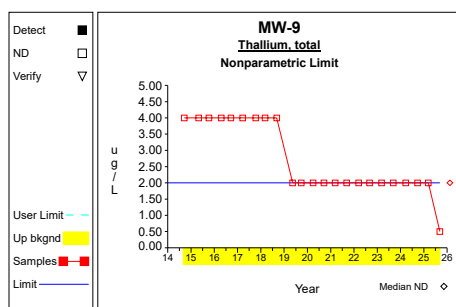
Graph 85



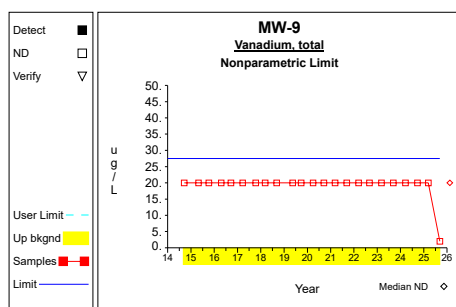
Graph 86



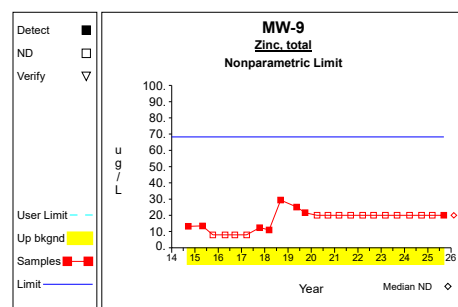
Graph 87



Graph 88

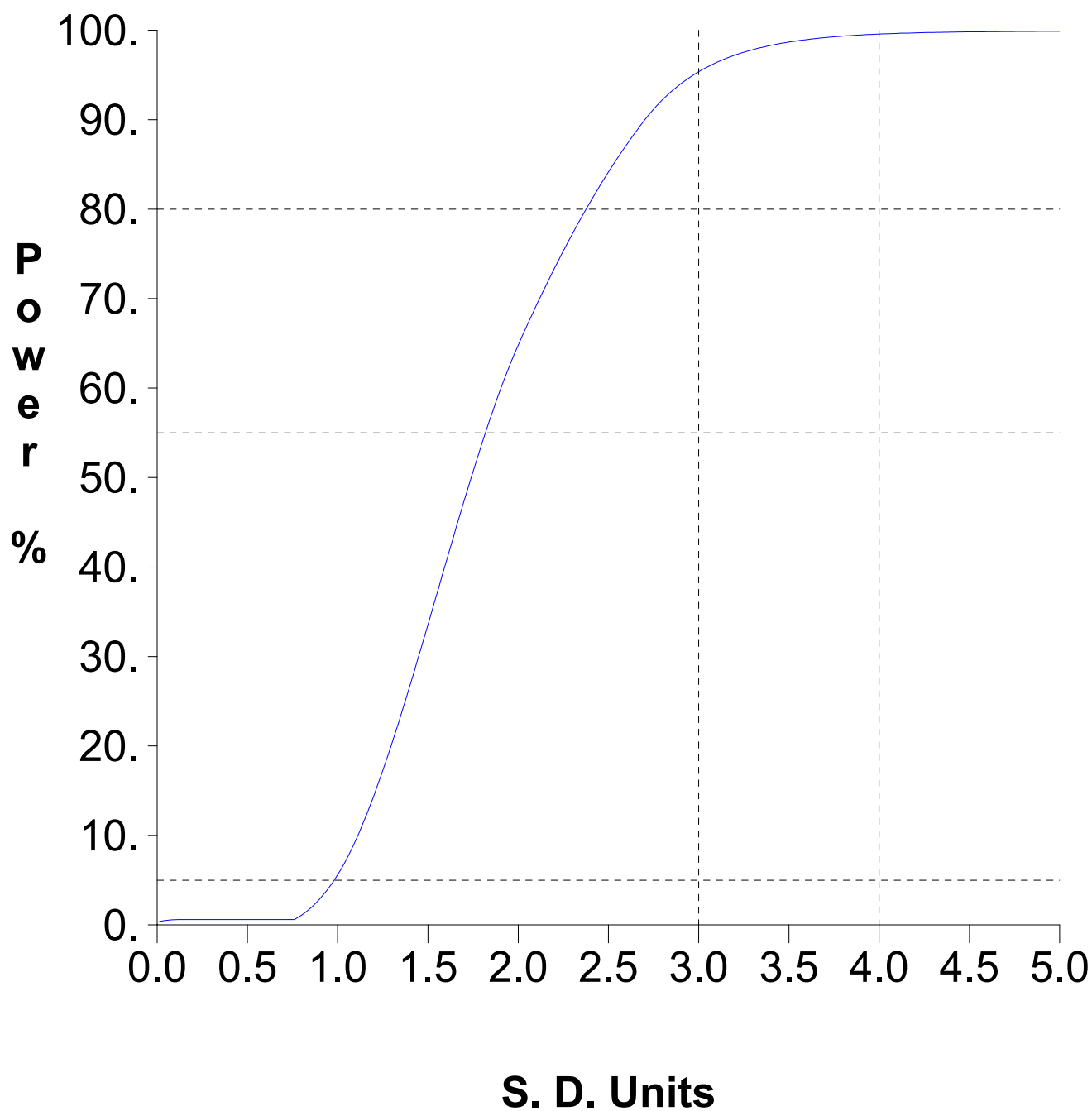


Graph 89



Graph 90

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



Attachment C

Assessment Statistics for Verified Trace Metal Exceedances

Table 1

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

Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend
Arsenic, total	ug/L	MW-12	4	6.875	6.570	1.176	0.000	14.604	10.000	
Arsenic, total	ug/L	MW-15	4	2.000	0.000	1.176	2.000	2.000	10.000	
Arsenic, total	ug/L	MW-19	4	2.000	0.000	1.176	2.000	2.000	10.000	
Arsenic, total	ug/L	MW-3	4	2.000	0.000	1.176	2.000	2.000	10.000	
Arsenic, total	ug/L	MW-9	4	2.000	0.000	1.176	2.000	2.000	10.000	
Barium, total	ug/L	MW-12	4	605.000	204.462	1.176	364.494	845.506	2000.000	
Barium, total	ug/L	MW-15	4	534.000	32.321	1.176	495.981	572.019	2000.000	
Barium, total	ug/L	MW-19	4	433.725	272.646	1.176	113.014	754.436	2000.000	
Barium, total	ug/L	MW-3	4	763.250	35.368	1.176	721.647	804.853	2000.000	inc
Barium, total	ug/L	MW-9	4	333.750	18.154	1.176	312.395	355.105	2000.000	dec
Cobalt, total	ug/L	MW-12	4	8.775	9.475	1.176	0.000	19.920	2.100	
Cobalt, total	ug/L	MW-15	4	0.400	0.000	1.176	0.400	0.400	2.100	
Cobalt, total	ug/L	MW-19	4	6.250	5.546	1.176	0.000	12.774	2.100	
Cobalt, total	ug/L	MW-3	4	0.400	0.000	1.176	0.400	0.400	2.100	
Cobalt, total	ug/L	MW-9	4	0.775	0.350	1.176	0.363	1.187	2.100	
Nickel, total	ug/L	MW-12	4	26.675	27.260	1.176	0.000	58.741	100.000	
Nickel, total	ug/L	MW-15	4	9.325	3.124	1.176	5.650	13.000	100.000	dec
Nickel, total	ug/L	MW-19	4	8.850	4.889	1.176	3.099	14.601	100.000	
Nickel, total	ug/L	MW-3	4	2.000	0.000	1.176	2.000	2.000	100.000	
Nickel, total	ug/L	MW-9	4	3.400	1.625	1.176	1.489	5.311	100.000	dec

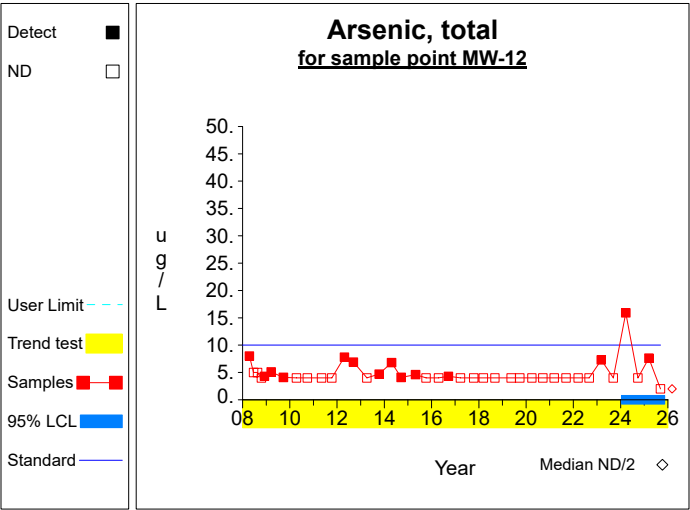
* - Insufficient Data

** - Significant Exceedance

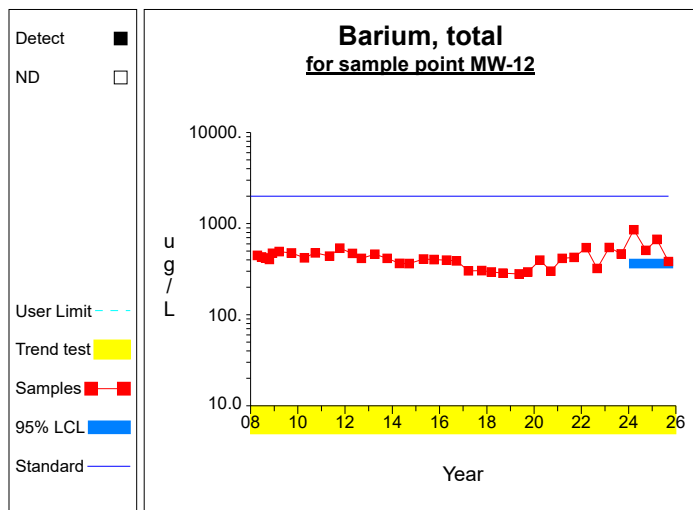
LCL = Lower Confidence Limit

UCL = Upper Confidence Limit

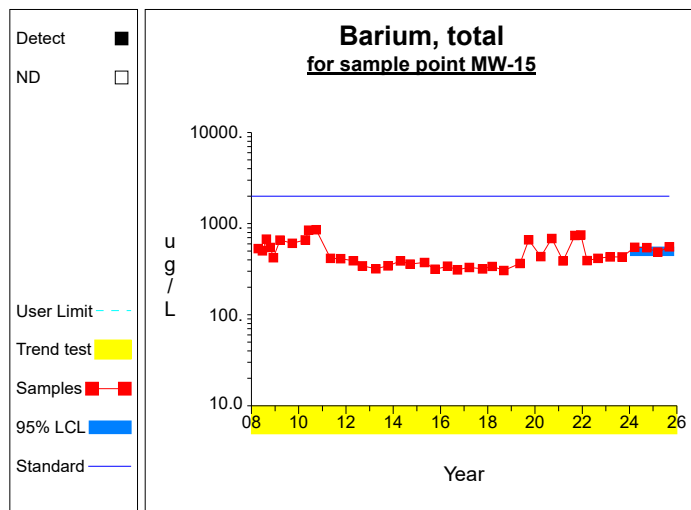
Confidence Limits (Assessment)



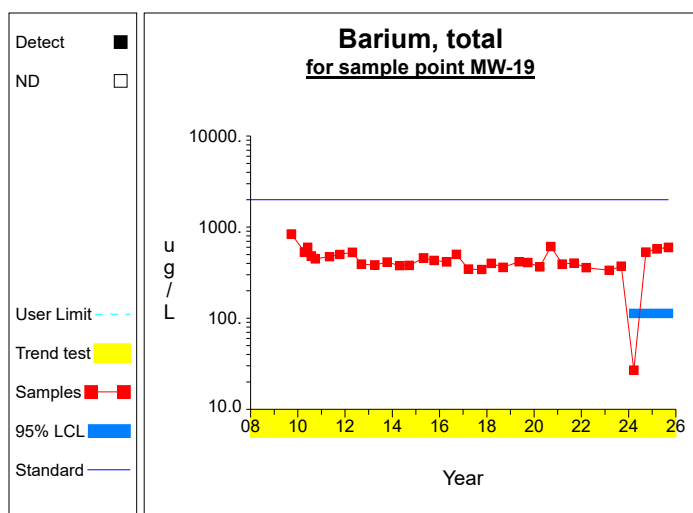
Confidence Limits (Assessment)



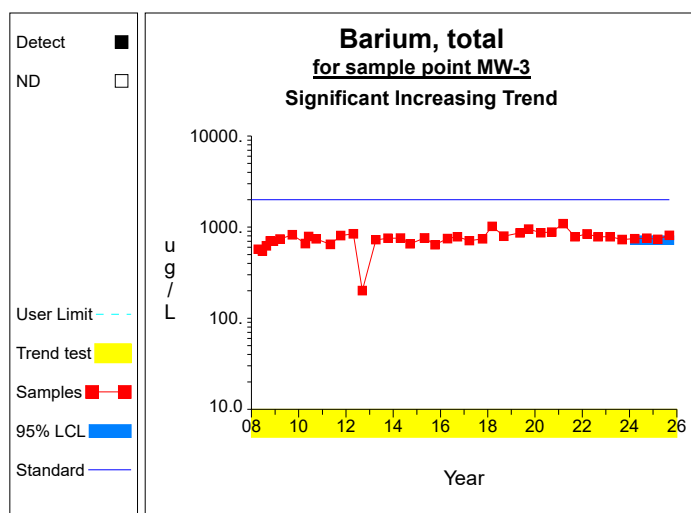
Graph 6



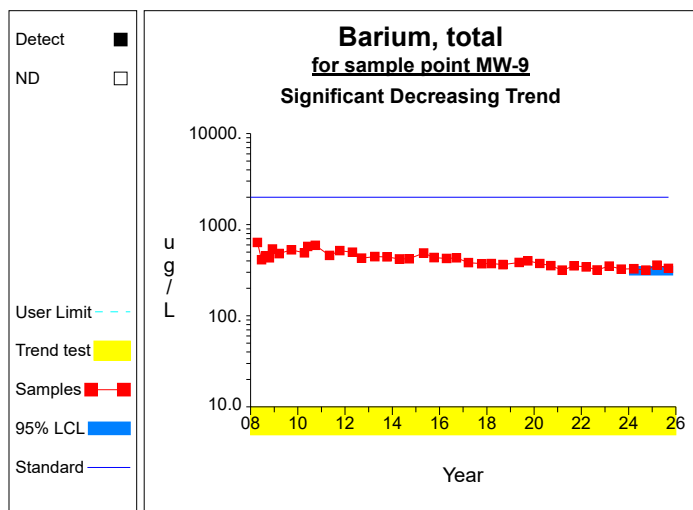
Graph 7



Graph 8

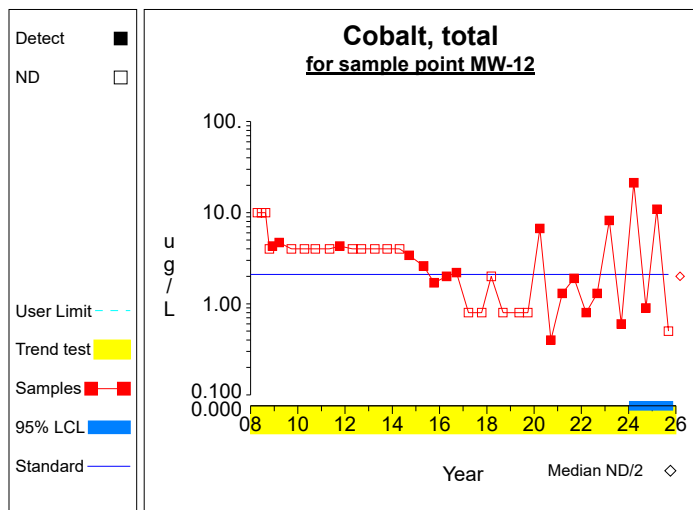


Graph 9

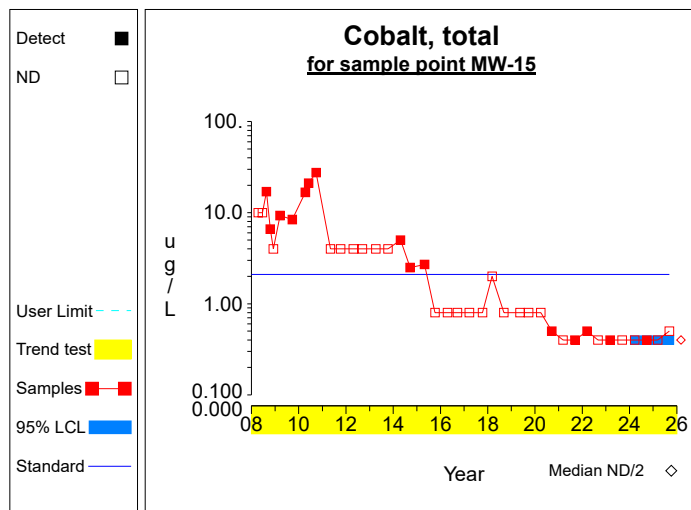


Graph 10

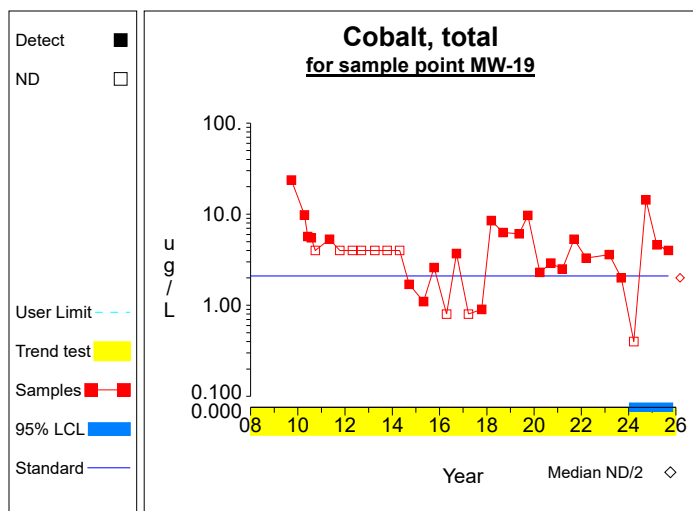
Confidence Limits (Assessment)



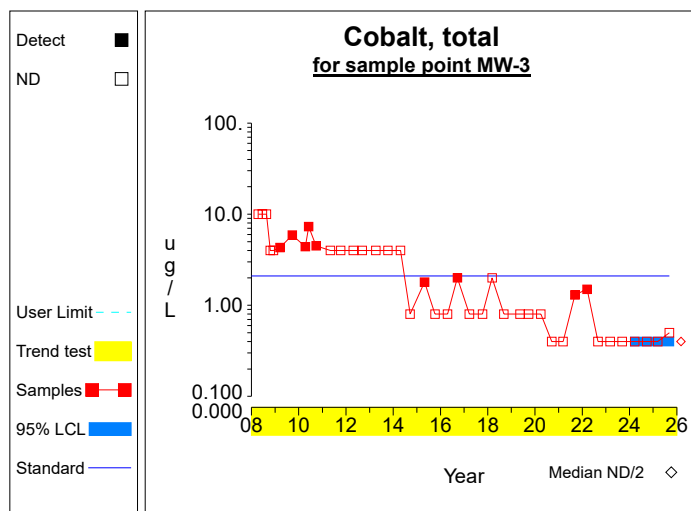
Graph 11



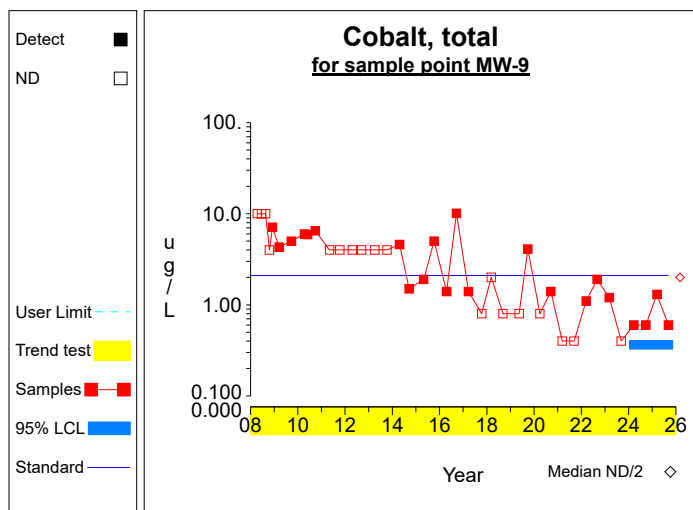
Graph 12



Graph 13

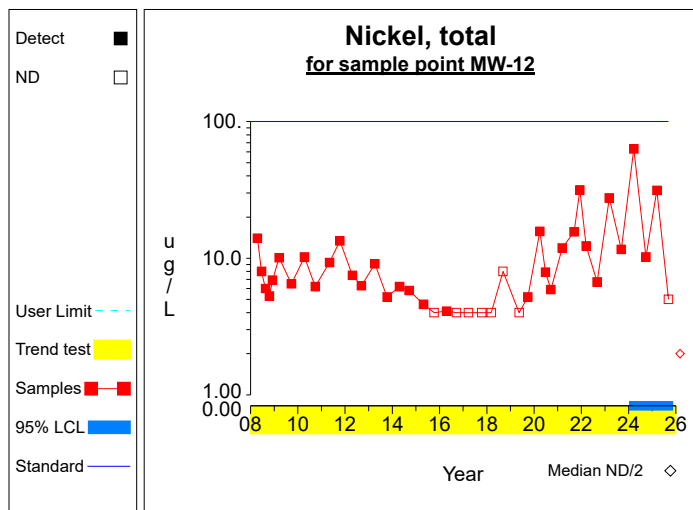


Graph 14

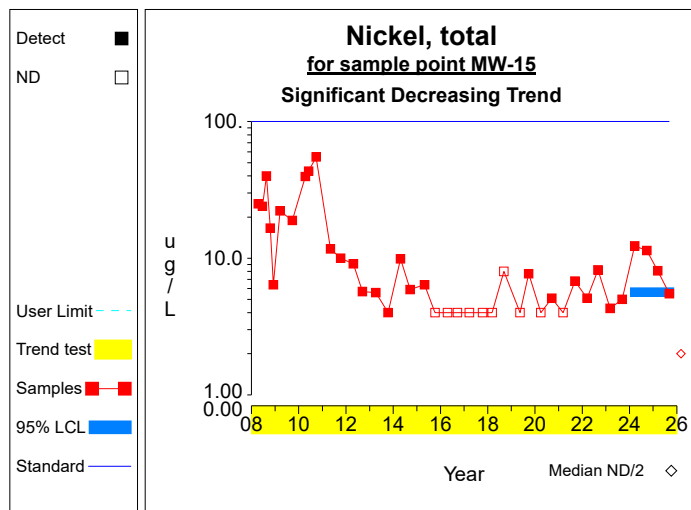


Graph 15

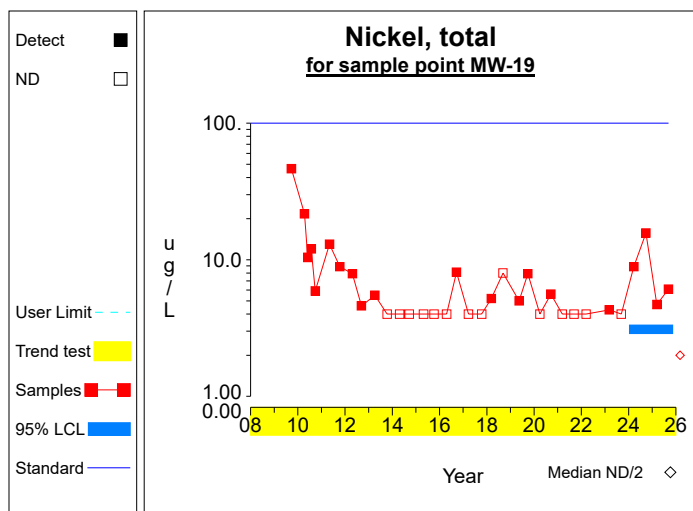
Confidence Limits (Assessment)



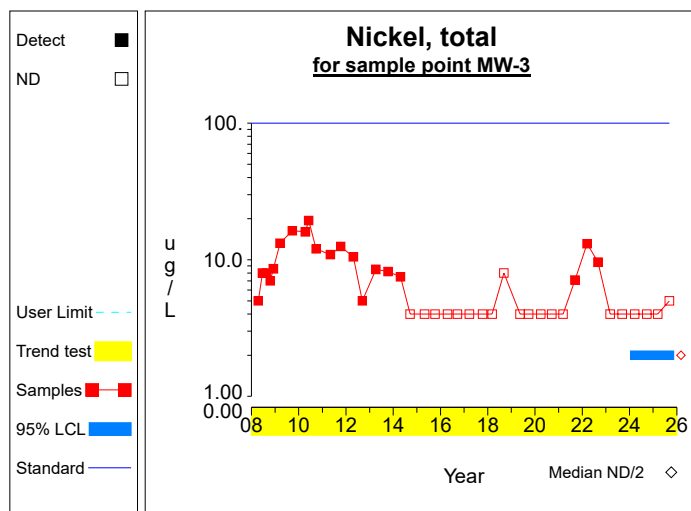
Graph 16



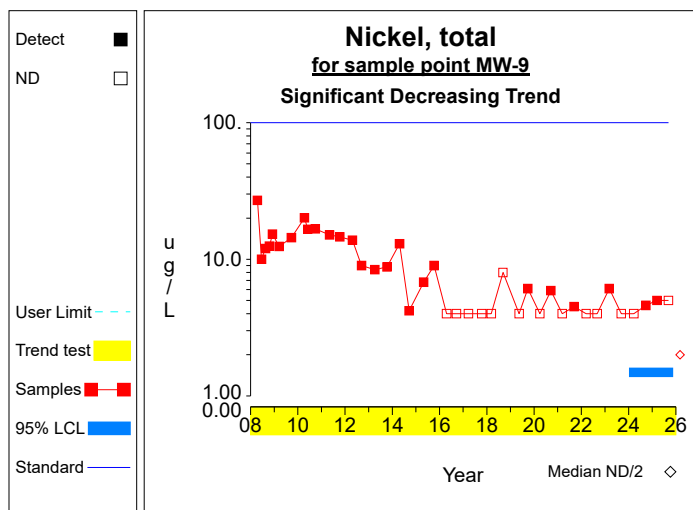
Graph 17



Graph 18



Graph 19



Graph 20

Attachment D

Summary of Historical VOC Detections

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
1,1-dichloroethane	GWD-1	6/18/2008		1.1	1.0	ug/L
Chloroethane	GWD-1	4/15/2008		2.0	1.0	ug/L
Chloroethane	GWD-1	6/18/2008		2.2	1.0	ug/L
Chloroethane	GWD-1	8/19/2008		1.9	1.0	ug/L
Chloroethane	GWD-1	12/04/2008		1.8	1.0	ug/L
Chloroethane	GWD-1	3/16/2009		1.4	1.0	ug/L
Chloroethane	GWD-1	4/12/2010		1.2	1.0	ug/L
Trichlorofluoromethane	GWD-1	9/23/2009		1.1	1.0	ug/L
Acetone	GWD-2	10/12/2017		18.2	10.0	ug/L
Chloroethane	GWD-2	10/07/2015		1	1	ug/L
Cis-1,2-dichloroethylene	GWD-2	10/07/2015		1	1	ug/L
Trichloroethylene	GWD-2	9/18/2014		1	1	ug/L
Trichlorofluoromethane	GWD-2	9/18/2014		1.9	1.0	ug/L
Acetone	MW-12	10/12/2017		12.9	10.0	ug/L
Chloromethane	MW-12	3/20/2024		1.4	1.0	ug/L
Acetone	MW-14	10/12/2017		10	10	ug/L
Trichloroethylene	MW-14	3/16/2009		2.8	1.0	ug/L
1,1-dichloroethane	MW-15	12/04/2008		1.3	1.0	ug/L
1,4-dichlorobenzene	MW-15	12/04/2008		4.3	1.0	ug/L
Acetone	MW-15	10/12/2017		15.5	10.0	ug/L
Benzene	MW-15	12/04/2008		2	1	ug/L
Bis(2-ethylhexyl) phthalate	MW-15	9/01/2022		7	6	ug/L
Chlorobenzene	MW-15	12/04/2008		14.3	1.0	ug/L
Chloroethane	MW-15	10/18/2008		1.6	1.0	ug/L
Acetone	MW-18	10/12/2017		10.2	10.0	ug/L
Trichlorofluoromethane	MW-19	4/12/2010		3.4	1.0	ug/L
Trichlorofluoromethane	MW-19	6/01/2010		4.1	1.0	ug/L
Trichlorofluoromethane	MW-19	7/27/2010		4.7	1.0	ug/L
Trichlorofluoromethane	MW-19	9/28/2010		2.8	1.0	ug/L
Trichlorofluoromethane	MW-19	10/11/2011		2.2	1.0	ug/L
Trichlorofluoromethane	MW-19	4/23/2012		1.1	1.0	ug/L
Acetone	MW-21	10/12/2017		15.3	10.0	ug/L
Cis-1,2-dichloroethylene	MW-21	3/14/2022		1.1	1.0	ug/L
1,1-dichloropropene	MW-3	9/09/2021		4.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW-3	9/09/2021		1.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-3	3/14/2022		1.6	1.0	ug/L
Toluene	MW-3	10/10/2013		2.8	1.0	ug/L
Trichloroethylene	MW-3	10/10/2013		1	1	ug/L
1,2-dichloroethane	MW-9	9/23/1998		.5	.4	ug/L
Acetone	MW-9	10/12/2017		16.7	10.0	ug/L
Bis(2-ethylhexyl) phthalate	MW-9	6/01/2010		21	8	ug/L
Carbon disulfide	MW-9	9/08/2025		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

Appendix C

Laboratory Reports for Reporting Period *With Chain of Custody*



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1IC0852

Project Description

6046

For:

Todd Whipple

HLW Engineering

204 West Broad St

Story City, IA 50248

Heather Murphy

Customer Relationship Specialist

Wednesday, March 26, 2025

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

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

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Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1IC0852

HLW Engineering

Todd Whipple
204 West Broad St
Story City, IA 50248

Project Name: 6046

Project / PO Number: N/A
Received: 03/12/2025
Reported: 03/26/2025

Sample Summary Report

<u>Sample Name</u>	<u>Laboratory ID</u>	<u>Client Matrix</u>	<u>Sample Type</u>	<u>Sample Begin</u>	<u>Sample Taken</u>	<u>Lab Received</u>
MW-2 (b)	1IC0852-01	Aqueous	GRAB		03/11/25 09:13	03/12/25 10:20
MW-18 (b)	1IC0852-02	Aqueous	GRAB		03/11/25 08:57	03/12/25 10:20
MW-3	1IC0852-03	Aqueous	GRAB		03/11/25 10:19	03/12/25 10:20
MW-9	1IC0852-04	Aqueous	GRAB		03/11/25 10:40	03/12/25 10:20
MW-12	1IC0852-05	Aqueous	GRAB		03/11/25 11:11	03/12/25 10:20
MW-14	1IC0852-06	Aqueous	GRAB		03/11/25 11:39	03/12/25 10:20
MW-15	1IC0852-07	Aqueous	GRAB		03/11/25 09:26	03/12/25 10:20
MW-19	1IC0852-08	Aqueous	GRAB		03/11/25 11:23	03/12/25 10:20
MW-21	1IC0852-09	Aqueous	GRAB		03/11/25 09:43	03/12/25 10:20
MW-23	1IC0852-10	Aqueous	GRAB		03/11/25 10:08	03/12/25 10:20
GWD-2	1IC0852-11	Aqueous	GRAB		03/11/25 09:56	03/12/25 10:20
Duplicate	1IC0852-12	Aqueous	GRAB		03/11/25 10:40	03/12/25 10:20



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

11C0852

Analytical Testing Parameters

Client Sample ID: MW-2 (b)
Sample Matrix: Aqueous
Lab Sample ID: 11C0852-01

Collected By: JGH
Collection Date: 03/11/2025 9:13

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		03/17/25 0000	03/18/25 1032	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1032	BDF
Bromomethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1032	BDF
Chloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1032	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1032	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1032	BDF
Acetone	<10.0	10.0	ug/L	1		03/17/25 0000	03/18/25 1032	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1032	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1032	BDF
Methylene Chloride	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 1032	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 1032	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1032	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1032	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 1032	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1032	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/17/25 0000	03/18/25 1032	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1032	BDF
Chloroform	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1032	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1032	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1032	BDF
Benzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1032	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1032	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1032	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1032	BDF
Dibromomethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1032	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1032	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1032	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 1032	BDF
Toluene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1032	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1032	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1032	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1032	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 1032	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1032	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1032	BDF
Chlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1032	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1032	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1032	BDF
Xylenes, total	<2.0	2.0	ug/L	1		03/17/25 0000	03/18/25 1032	BDF
Styrene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1032	BDF

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CERTIFICATE OF ANALYSIS

11C0852

Client Sample ID: MW-2 (b)
Sample Matrix: Aqueous
Lab Sample ID: 11C0852-01

Collected By: JGH
Collection Date: 03/11/2025 9:13

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Bromoform	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1032	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1032	BDF
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 1032	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1032	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1032	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1032	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 1032	BDF
Surrogate: Dibromofluoromethane	70.5	Limit: 75-136	% Rec	1	S2	03/17/25 0000	03/18/25 1032	BDF
Surrogate: Dibromofluoromethane	70.5	Limit: 57-134	% Rec	1		03/17/25 0000	03/18/25 1032	BDF
Surrogate: 1,2-Dichloroethane-d4	67.4	Limit: 53-140	% Rec	1		03/17/25 0000	03/18/25 1032	BDF
Surrogate: 1,2-Dichloroethane-d4	67.4	Limit: 61-142	% Rec	1		03/17/25 0000	03/18/25 1032	BDF
Surrogate: Toluene-d8	105	Limit: 82-121	% Rec	1		03/17/25 0000	03/18/25 1032	BDF
Surrogate: Toluene-d8	105	Limit: 86-114	% Rec	1		03/17/25 0000	03/18/25 1032	BDF
Surrogate: 4-Bromofluorobenzene	95.3	Limit: 80-116	% Rec	1		03/17/25 0000	03/18/25 1032	BDF
Surrogate: 4-Bromofluorobenzene	95.3	Limit: 78-121	% Rec	1		03/17/25 0000	03/18/25 1032	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		03/14/25 1600	03/20/25 0226	KKJ
Arsenic, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0226	KKJ
Barium, total	0.0541	0.0040	mg/L	4	M1	03/14/25 1600	03/20/25 0226	KKJ
Beryllium, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0226	KKJ
Cadmium, total	<0.0008	0.0008	mg/L	4		03/14/25 1600	03/20/25 0226	KKJ
Chromium, total	<0.0080	0.0080	mg/L	4		03/14/25 1600	03/20/25 0226	KKJ
Cobalt, total	<0.0004	0.0004	mg/L	4		03/14/25 1600	03/20/25 0226	KKJ
Copper, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0226	KKJ
Lead, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0226	KKJ
Nickel, total	0.0048	0.0040	mg/L	4		03/14/25 1600	03/20/25 0226	KKJ
Selenium, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0226	KKJ
Silver, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0226	KKJ
Thallium, total	<0.0020	0.0020	mg/L	4		03/14/25 1600	03/20/25 0226	KKJ
Vanadium, total	<0.0200	0.0200	mg/L	4		03/14/25 1600	03/20/25 0226	KKJ
Zinc, total	<0.0200	0.0200	mg/L	4		03/14/25 1600	03/20/25 0226	KKJ

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CERTIFICATE OF ANALYSIS

1IC0852

Client Sample ID: MW-18 (b)
Sample Matrix: Aqueous
Lab Sample ID: 1IC0852-02

Collected By: JGH
Collection Date: 03/11/2025 8:57

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		03/17/25 0000	03/18/25 1054	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1054	BDF
Bromomethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1054	BDF
Chloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1054	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1054	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1054	BDF
Acetone	<10.0	10.0	ug/L	1		03/17/25 0000	03/18/25 1054	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1054	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1054	BDF
Methylene Chloride	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 1054	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 1054	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1054	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1054	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 1054	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1054	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/17/25 0000	03/18/25 1054	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1054	BDF
Chloroform	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1054	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1054	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1054	BDF
Benzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1054	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1054	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1054	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1054	BDF
Dibromomethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1054	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1054	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1054	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 1054	BDF
Toluene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1054	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1054	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1054	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1054	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 1054	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1054	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1054	BDF
Chlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1054	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1054	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1054	BDF
Xylenes, total	<2.0	2.0	ug/L	1		03/17/25 0000	03/18/25 1054	BDF
Styrene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1054	BDF
Bromoform	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1054	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1054	BDF

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CERTIFICATE OF ANALYSIS

11C0852

Client Sample ID: MW-18 (b)
Sample Matrix: Aqueous
Lab Sample ID: 11C0852-02

Collected By: JGH
Collection Date: 03/11/2025 8:57

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		03/17/25 0000	03/18/25 1054	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1054	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1054	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1054	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 1054	BDF
Surrogate: Dibromofluoromethane	71.2	Limit: 75-136	% Rec	1	S2	03/17/25 0000	03/18/25 1054	BDF
Surrogate: Dibromofluoromethane	71.2	Limit: 57-134	% Rec	1		03/17/25 0000	03/18/25 1054	BDF
Surrogate: 1,2-Dichloroethane-d4	69.0	Limit: 53-140	% Rec	1		03/17/25 0000	03/18/25 1054	BDF
Surrogate: 1,2-Dichloroethane-d4	69.0	Limit: 61-142	% Rec	1		03/17/25 0000	03/18/25 1054	BDF
Surrogate: Toluene-d8	104	Limit: 82-121	% Rec	1		03/17/25 0000	03/18/25 1054	BDF
Surrogate: Toluene-d8	104	Limit: 86-114	% Rec	1		03/17/25 0000	03/18/25 1054	BDF
Surrogate: 4-Bromofluorobenzene	95.1	Limit: 80-116	% Rec	1		03/17/25 0000	03/18/25 1054	BDF
Surrogate: 4-Bromofluorobenzene	95.1	Limit: 78-121	% Rec	1		03/17/25 0000	03/18/25 1054	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		03/14/25 1600	03/20/25 0251	KKJ
Arsenic, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0251	KKJ
Barium, total	0.366	0.0040	mg/L	4		03/14/25 1600	03/20/25 0251	KKJ
Beryllium, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0251	KKJ
Cadmium, total	<0.0008	0.0008	mg/L	4		03/14/25 1600	03/20/25 0251	KKJ
Chromium, total	<0.0080	0.0080	mg/L	4		03/14/25 1600	03/20/25 0251	KKJ
Cobalt, total	0.0030	0.0004	mg/L	4		03/14/25 1600	03/20/25 0251	KKJ
Copper, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0251	KKJ
Lead, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0251	KKJ
Nickel, total	0.0055	0.0040	mg/L	4		03/14/25 1600	03/20/25 0251	KKJ
Selenium, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0251	KKJ
Silver, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0251	KKJ
Thallium, total	<0.0020	0.0020	mg/L	4		03/14/25 1600	03/20/25 0251	KKJ
Vanadium, total	<0.0200	0.0200	mg/L	4		03/14/25 1600	03/20/25 0251	KKJ
Zinc, total	<0.0200	0.0200	mg/L	4		03/14/25 1600	03/20/25 0251	KKJ

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CERTIFICATE OF ANALYSIS

11C0852

Client Sample ID: MW-3
Sample Matrix: Aqueous
Lab Sample ID: 11C0852-03

Collected By: JGH
Collection Date: 03/11/2025 10:19

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		03/17/25 0000	03/18/25 1441	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1441	BDF
Bromomethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1441	BDF
Chloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1441	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1441	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1441	BDF
Acetone	<10.0	10.0	ug/L	1		03/17/25 0000	03/18/25 1441	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1441	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1441	BDF
Methylene Chloride	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 1441	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 1441	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1441	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1441	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 1441	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1441	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/17/25 0000	03/18/25 1441	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1441	BDF
Chloroform	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1441	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1441	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1441	BDF
Benzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1441	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1441	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1441	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1441	BDF
Dibromomethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1441	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1441	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1441	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 1441	BDF
Toluene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1441	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1441	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1441	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1441	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 1441	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1441	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1441	BDF
Chlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1441	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1441	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1441	BDF
Xylenes, total	<2.0	2.0	ug/L	1		03/17/25 0000	03/18/25 1441	BDF
Styrene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1441	BDF
Bromoform	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1441	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1441	BDF

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CERTIFICATE OF ANALYSIS

11C0852

Client Sample ID: MW-3
Sample Matrix: Aqueous
Lab Sample ID: 11C0852-03

Collected By: JGH
Collection Date: 03/11/2025 10:19

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 1441	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1441	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1441	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 1441	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 1441	BDF
Surrogate: Dibromofluoromethane	71.3	Limit: 57-134	% Rec	1		03/17/25 0000	03/18/25 1441	BDF
Surrogate: Dibromofluoromethane	71.3	Limit: 75-136	% Rec	1	S2	03/17/25 0000	03/18/25 1441	BDF
Surrogate: 1,2-Dichloroethane-d4	71.1	Limit: 61-142	% Rec	1		03/17/25 0000	03/18/25 1441	BDF
Surrogate: 1,2-Dichloroethane-d4	71.1	Limit: 53-140	% Rec	1		03/17/25 0000	03/18/25 1441	BDF
Surrogate: Toluene-d8	102	Limit: 86-114	% Rec	1		03/17/25 0000	03/18/25 1441	BDF
Surrogate: Toluene-d8	102	Limit: 82-121	% Rec	1		03/17/25 0000	03/18/25 1441	BDF
Surrogate: 4-Bromofluorobenzene	94.2	Limit: 80-116	% Rec	1		03/17/25 0000	03/18/25 1441	BDF
Surrogate: 4-Bromofluorobenzene	94.2	Limit: 78-121	% Rec	1		03/17/25 0000	03/18/25 1441	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		03/14/25 1600	03/20/25 0257	KKJ
Arsenic, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0257	KKJ
Barium, total	0.736	0.0040	mg/L	4		03/14/25 1600	03/20/25 0257	KKJ
Beryllium, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0257	KKJ
Cadmium, total	<0.0008	0.0008	mg/L	4		03/14/25 1600	03/20/25 0257	KKJ
Chromium, total	<0.0080	0.0080	mg/L	4		03/14/25 1600	03/20/25 0257	KKJ
Cobalt, total	<0.0004	0.0004	mg/L	4		03/14/25 1600	03/20/25 0257	KKJ
Copper, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0257	KKJ
Lead, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0257	KKJ
Nickel, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0257	KKJ
Selenium, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0257	KKJ
Silver, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0257	KKJ
Thallium, total	<0.0020	0.0020	mg/L	4		03/14/25 1600	03/20/25 0257	KKJ
Vanadium, total	<0.0200	0.0200	mg/L	4		03/14/25 1600	03/20/25 0257	KKJ
Zinc, total	<0.0200	0.0200	mg/L	4		03/14/25 1600	03/20/25 0257	KKJ

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CERTIFICATE OF ANALYSIS

11C0852

Client Sample ID: MW-9
Sample Matrix: Aqueous
Lab Sample ID: 11C0852-04

Collected By: JGH
Collection Date: 03/11/2025 10:40

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		03/17/25 0000	03/17/25 2141	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2141	CSM
Bromomethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2141	CSM
Chloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2141	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2141	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2141	CSM
Acetone	<10.0	10.0	ug/L	1		03/17/25 0000	03/17/25 2141	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2141	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2141	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2141	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2141	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2141	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2141	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2141	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2141	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/17/25 0000	03/17/25 2141	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2141	CSM
Chloroform	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2141	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2141	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2141	CSM
Benzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2141	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2141	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2141	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2141	CSM
Dibromomethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2141	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2141	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2141	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2141	CSM
Toluene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2141	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2141	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2141	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2141	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2141	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2141	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2141	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2141	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2141	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2141	CSM
Xylenes, total	<2.0	2.0	ug/L	1		03/17/25 0000	03/17/25 2141	CSM
Styrene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2141	CSM
Bromoform	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2141	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2141	CSM

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CERTIFICATE OF ANALYSIS

11C0852

Client Sample ID: MW-9
Sample Matrix: Aqueous
Lab Sample ID: 11C0852-04

Collected By: JGH
Collection Date: 03/11/2025 10:40

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		03/17/25 0000	03/17/25 2141	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2141	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2141	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2141	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2141	CSM
Surrogate: Dibromofluoromethane	114	Limit: 57-134	% Rec	1		03/17/25 0000	03/17/25 2141	CSM
Surrogate: Dibromofluoromethane	114	Limit: 75-136	% Rec	1		03/17/25 0000	03/17/25 2141	CSM
Surrogate: 1,2-Dichloroethane-d4	120	Limit: 61-142	% Rec	1		03/17/25 0000	03/17/25 2141	CSM
Surrogate: 1,2-Dichloroethane-d4	120	Limit: 53-140	% Rec	1		03/17/25 0000	03/17/25 2141	CSM
Surrogate: Toluene-d8	96.1	Limit: 86-114	% Rec	1		03/17/25 0000	03/17/25 2141	CSM
Surrogate: Toluene-d8	96.1	Limit: 82-121	% Rec	1		03/17/25 0000	03/17/25 2141	CSM
Surrogate: 4-Bromofluorobenzene	98.5	Limit: 80-116	% Rec	1		03/17/25 0000	03/17/25 2141	CSM
Surrogate: 4-Bromofluorobenzene	98.5	Limit: 78-121	% Rec	1		03/17/25 0000	03/17/25 2141	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		03/14/25 1600	03/20/25 0303	KKJ
Arsenic, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0303	KKJ
Barium, total	0.359	0.0040	mg/L	4		03/14/25 1600	03/20/25 0303	KKJ
Beryllium, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0303	KKJ
Cadmium, total	0.0009	0.0008	mg/L	4		03/14/25 1600	03/20/25 0303	KKJ
Chromium, total	<0.0080	0.0080	mg/L	4		03/14/25 1600	03/20/25 0303	KKJ
Cobalt, total	0.0013	0.0004	mg/L	4		03/14/25 1600	03/20/25 0303	KKJ
Copper, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0303	KKJ
Lead, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0303	KKJ
Nickel, total	0.0050	0.0040	mg/L	4		03/14/25 1600	03/20/25 0303	KKJ
Selenium, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0303	KKJ
Silver, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0303	KKJ
Thallium, total	<0.0020	0.0020	mg/L	4		03/14/25 1600	03/20/25 0303	KKJ
Vanadium, total	<0.0200	0.0200	mg/L	4		03/14/25 1600	03/20/25 0303	KKJ
Zinc, total	<0.0200	0.0200	mg/L	4		03/14/25 1600	03/20/25 0303	KKJ

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CERTIFICATE OF ANALYSIS

11C0852

Client Sample ID: MW-12
Sample Matrix: Aqueous
Lab Sample ID: 11C0852-05

Collected By: JGH
Collection Date: 03/11/2025 11:11

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		03/17/25 0000	03/17/25 2203	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2203	CSM
Bromomethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2203	CSM
Chloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2203	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2203	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2203	CSM
Acetone	<10.0	10.0	ug/L	1		03/17/25 0000	03/17/25 2203	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2203	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2203	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2203	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2203	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2203	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2203	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2203	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2203	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/17/25 0000	03/17/25 2203	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2203	CSM
Chloroform	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2203	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2203	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2203	CSM
Benzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2203	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2203	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2203	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2203	CSM
Dibromomethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2203	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2203	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2203	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2203	CSM
Toluene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2203	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2203	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2203	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2203	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2203	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2203	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2203	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2203	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2203	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2203	CSM
Xylenes, total	<2.0	2.0	ug/L	1		03/17/25 0000	03/17/25 2203	CSM
Styrene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2203	CSM
Bromoform	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2203	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2203	CSM

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CERTIFICATE OF ANALYSIS

11C0852

Client Sample ID: MW-12
Sample Matrix: Aqueous
Lab Sample ID: 11C0852-05

Collected By: JGH
Collection Date: 03/11/2025 11:11

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2203	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2203	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2203	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2203	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2203	CSM
Surrogate: Dibromofluoromethane	112	Limit: 57-134	% Rec	1		03/17/25 0000	03/17/25 2203	CSM
Surrogate: Dibromofluoromethane	112	Limit: 75-136	% Rec	1		03/17/25 0000	03/17/25 2203	CSM
Surrogate: 1,2-Dichloroethane-d4	115	Limit: 53-140	% Rec	1		03/17/25 0000	03/17/25 2203	CSM
Surrogate: 1,2-Dichloroethane-d4	115	Limit: 61-142	% Rec	1		03/17/25 0000	03/17/25 2203	CSM
Surrogate: Toluene-d8	93.6	Limit: 86-114	% Rec	1		03/17/25 0000	03/17/25 2203	CSM
Surrogate: Toluene-d8	93.6	Limit: 82-121	% Rec	1		03/17/25 0000	03/17/25 2203	CSM
Surrogate: 4-Bromofluorobenzene	92.7	Limit: 78-121	% Rec	1		03/17/25 0000	03/17/25 2203	CSM
Surrogate: 4-Bromofluorobenzene	92.7	Limit: 80-116	% Rec	1		03/17/25 0000	03/17/25 2203	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		03/14/25 1600	03/20/25 0309	KKJ
Arsenic, total	0.0076	0.0040	mg/L	4		03/14/25 1600	03/20/25 0309	KKJ
Barium, total	0.671	0.0040	mg/L	4		03/14/25 1600	03/20/25 0309	KKJ
Beryllium, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0309	KKJ
Cadmium, total	<0.0008	0.0008	mg/L	4		03/14/25 1600	03/20/25 0309	KKJ
Chromium, total	0.0146	0.0080	mg/L	4		03/14/25 1600	03/20/25 0309	KKJ
Cobalt, total	0.0109	0.0004	mg/L	4		03/14/25 1600	03/20/25 0309	KKJ
Copper, total	0.0077	0.0040	mg/L	4		03/14/25 1600	03/20/25 0309	KKJ
Lead, total	0.0051	0.0040	mg/L	4		03/14/25 1600	03/20/25 0309	KKJ
Nickel, total	0.0314	0.0040	mg/L	4		03/14/25 1600	03/20/25 0309	KKJ
Selenium, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0309	KKJ
Silver, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0309	KKJ
Thallium, total	<0.0020	0.0020	mg/L	4		03/14/25 1600	03/20/25 0309	KKJ
Vanadium, total	0.0229	0.0200	mg/L	4		03/14/25 1600	03/20/25 0309	KKJ
Zinc, total	0.0210	0.0200	mg/L	4		03/14/25 1600	03/20/25 0309	KKJ

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CERTIFICATE OF ANALYSIS

11C0852

Client Sample ID: MW-14
Sample Matrix: Aqueous
Lab Sample ID: 11C0852-06

Collected By: JGH
Collection Date: 03/11/2025 11:39

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		03/17/25 0000	03/17/25 2225	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2225	CSM
Bromomethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2225	CSM
Chloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2225	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2225	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2225	CSM
Acetone	<10.0	10.0	ug/L	1		03/17/25 0000	03/17/25 2225	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2225	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2225	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2225	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2225	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2225	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2225	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2225	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2225	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/17/25 0000	03/17/25 2225	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2225	CSM
Chloroform	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2225	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2225	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2225	CSM
Benzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2225	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2225	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2225	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2225	CSM
Dibromomethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2225	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2225	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2225	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2225	CSM
Toluene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2225	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2225	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2225	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2225	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2225	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2225	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2225	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2225	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2225	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2225	CSM
Xylenes, total	<2.0	2.0	ug/L	1		03/17/25 0000	03/17/25 2225	CSM
Styrene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2225	CSM
Bromoform	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2225	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2225	CSM

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CERTIFICATE OF ANALYSIS

11C0852

Client Sample ID: MW-14
Sample Matrix: Aqueous
Lab Sample ID: 11C0852-06

Collected By: JGH
Collection Date: 03/11/2025 11:39

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		03/17/25 0000	03/17/25 2225	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2225	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2225	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2225	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2225	CSM
Surrogate: Dibromofluoromethane	114	Limit: 57-134	% Rec	1		03/17/25 0000	03/17/25 2225	CSM
Surrogate: Dibromofluoromethane	114	Limit: 75-136	% Rec	1		03/17/25 0000	03/17/25 2225	CSM
Surrogate: 1,2-Dichloroethane-d4	119	Limit: 53-140	% Rec	1		03/17/25 0000	03/17/25 2225	CSM
Surrogate: 1,2-Dichloroethane-d4	119	Limit: 61-142	% Rec	1		03/17/25 0000	03/17/25 2225	CSM
Surrogate: Toluene-d8	97.7	Limit: 86-114	% Rec	1		03/17/25 0000	03/17/25 2225	CSM
Surrogate: Toluene-d8	97.7	Limit: 82-121	% Rec	1		03/17/25 0000	03/17/25 2225	CSM
Surrogate: 4-Bromofluorobenzene	92.8	Limit: 78-121	% Rec	1		03/17/25 0000	03/17/25 2225	CSM
Surrogate: 4-Bromofluorobenzene	92.8	Limit: 80-116	% Rec	1		03/17/25 0000	03/17/25 2225	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		03/14/25 1600	03/20/25 0315	KKJ
Arsenic, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0315	KKJ
Barium, total	0.255	0.0040	mg/L	4		03/14/25 1600	03/20/25 0315	KKJ
Beryllium, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0315	KKJ
Cadmium, total	<0.0008	0.0008	mg/L	4		03/14/25 1600	03/20/25 0315	KKJ
Chromium, total	<0.0080	0.0080	mg/L	4		03/14/25 1600	03/20/25 0315	KKJ
Cobalt, total	<0.0004	0.0004	mg/L	4		03/14/25 1600	03/20/25 0315	KKJ
Copper, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0315	KKJ
Lead, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0315	KKJ
Nickel, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0315	KKJ
Selenium, total	0.0043	0.0040	mg/L	4		03/14/25 1600	03/20/25 0315	KKJ
Silver, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0315	KKJ
Thallium, total	<0.0020	0.0020	mg/L	4		03/14/25 1600	03/20/25 0315	KKJ
Vanadium, total	<0.0200	0.0200	mg/L	4		03/14/25 1600	03/20/25 0315	KKJ
Zinc, total	<0.0200	0.0200	mg/L	4		03/14/25 1600	03/20/25 0315	KKJ

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CERTIFICATE OF ANALYSIS

11C0852

Client Sample ID: MW-15
Sample Matrix: Aqueous
Lab Sample ID: 11C0852-07

Collected By: JGH
Collection Date: 03/11/2025 9:26

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		03/17/25 0000	03/17/25 2248	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2248	CSM
Bromomethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2248	CSM
Chloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2248	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2248	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2248	CSM
Acetone	<10.0	10.0	ug/L	1		03/17/25 0000	03/17/25 2248	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2248	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2248	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2248	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2248	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2248	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2248	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2248	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2248	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/17/25 0000	03/17/25 2248	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2248	CSM
Chloroform	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2248	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2248	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2248	CSM
Benzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2248	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2248	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2248	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2248	CSM
Dibromomethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2248	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2248	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2248	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2248	CSM
Toluene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2248	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2248	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2248	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2248	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2248	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2248	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2248	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2248	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2248	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2248	CSM
Xylenes, total	<2.0	2.0	ug/L	1		03/17/25 0000	03/17/25 2248	CSM
Styrene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2248	CSM
Bromoform	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2248	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2248	CSM

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CERTIFICATE OF ANALYSIS

11C0852

Client Sample ID: MW-15
Sample Matrix: Aqueous
Lab Sample ID: 11C0852-07

Collected By: JGH
Collection Date: 03/11/2025 9:26

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		03/17/25 0000	03/17/25 2248	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2248	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2248	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2248	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2248	CSM
Surrogate: Dibromofluoromethane	116	Limit: 75-136	% Rec	1		03/17/25 0000	03/17/25 2248	CSM
Surrogate: Dibromofluoromethane	116	Limit: 57-134	% Rec	1		03/17/25 0000	03/17/25 2248	CSM
Surrogate: 1,2-Dichloroethane-d4	118	Limit: 61-142	% Rec	1		03/17/25 0000	03/17/25 2248	CSM
Surrogate: 1,2-Dichloroethane-d4	118	Limit: 53-140	% Rec	1		03/17/25 0000	03/17/25 2248	CSM
Surrogate: Toluene-d8	94.7	Limit: 82-121	% Rec	1		03/17/25 0000	03/17/25 2248	CSM
Surrogate: Toluene-d8	94.7	Limit: 86-114	% Rec	1		03/17/25 0000	03/17/25 2248	CSM
Surrogate: 4-Bromofluorobenzene	88.9	Limit: 80-116	% Rec	1		03/17/25 0000	03/17/25 2248	CSM
Surrogate: 4-Bromofluorobenzene	88.9	Limit: 78-121	% Rec	1		03/17/25 0000	03/17/25 2248	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		03/14/25 1600	03/20/25 0322	KKJ
Arsenic, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0322	KKJ
Barium, total	0.486	0.0040	mg/L	4		03/14/25 1600	03/20/25 0322	KKJ
Beryllium, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0322	KKJ
Cadmium, total	<0.0008	0.0008	mg/L	4		03/14/25 1600	03/20/25 0322	KKJ
Chromium, total	<0.0080	0.0080	mg/L	4		03/14/25 1600	03/20/25 0322	KKJ
Cobalt, total	<0.0004	0.0004	mg/L	4		03/14/25 1600	03/20/25 0322	KKJ
Copper, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0322	KKJ
Lead, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0322	KKJ
Nickel, total	0.0081	0.0040	mg/L	4		03/14/25 1600	03/20/25 0322	KKJ
Selenium, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0322	KKJ
Silver, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0322	KKJ
Thallium, total	<0.0020	0.0020	mg/L	4		03/14/25 1600	03/20/25 0322	KKJ
Vanadium, total	<0.0200	0.0200	mg/L	4		03/14/25 1600	03/20/25 0322	KKJ
Zinc, total	<0.0200	0.0200	mg/L	4		03/14/25 1600	03/20/25 0322	KKJ

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CERTIFICATE OF ANALYSIS

11C0852

Client Sample ID: MW-19
Sample Matrix: Aqueous
Lab Sample ID: 11C0852-08

Collected By: JGH
Collection Date: 03/11/2025 11:23

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		03/17/25 0000	03/18/25 0733	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0733	BDF
Bromomethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0733	BDF
Chloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0733	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0733	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0733	BDF
Acetone	<10.0	10.0	ug/L	1		03/17/25 0000	03/18/25 0733	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0733	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0733	BDF
Methylene Chloride	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 0733	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 0733	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0733	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0733	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 0733	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0733	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/17/25 0000	03/18/25 0733	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0733	BDF
Chloroform	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0733	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0733	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0733	BDF
Benzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0733	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0733	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0733	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0733	BDF
Dibromomethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0733	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0733	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0733	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 0733	BDF
Toluene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0733	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0733	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0733	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0733	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 0733	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0733	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0733	BDF
Chlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0733	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0733	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0733	BDF
Xylenes, total	<2.0	2.0	ug/L	1		03/17/25 0000	03/18/25 0733	BDF
Styrene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0733	BDF
Bromoform	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0733	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0733	BDF

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CERTIFICATE OF ANALYSIS

11C0852

Client Sample ID: MW-19
Sample Matrix: Aqueous
Lab Sample ID: 11C0852-08

Collected By: JGH
Collection Date: 03/11/2025 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		03/17/25 0000	03/18/25 0733	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0733	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0733	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0733	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 0733	BDF
Surrogate: Dibromofluoromethane	79.3	Limit: 57-134	% Rec	1		03/17/25 0000	03/18/25 0733	BDF
Surrogate: Dibromofluoromethane	79.3	Limit: 75-136	% Rec	1		03/17/25 0000	03/18/25 0733	BDF
Surrogate: 1,2-Dichloroethane-d4	77.1	Limit: 61-142	% Rec	1		03/17/25 0000	03/18/25 0733	BDF
Surrogate: 1,2-Dichloroethane-d4	77.1	Limit: 53-140	% Rec	1		03/17/25 0000	03/18/25 0733	BDF
Surrogate: Toluene-d8	104	Limit: 86-114	% Rec	1		03/17/25 0000	03/18/25 0733	BDF
Surrogate: Toluene-d8	104	Limit: 82-121	% Rec	1		03/17/25 0000	03/18/25 0733	BDF
Surrogate: 4-Bromofluorobenzene	95.2	Limit: 80-116	% Rec	1		03/17/25 0000	03/18/25 0733	BDF
Surrogate: 4-Bromofluorobenzene	95.2	Limit: 78-121	% Rec	1		03/17/25 0000	03/18/25 0733	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		03/14/25 1600	03/20/25 0328	KKJ
Arsenic, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0328	KKJ
Barium, total	0.577	0.0040	mg/L	4		03/14/25 1600	03/20/25 0328	KKJ
Beryllium, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0328	KKJ
Cadmium, total	<0.0008	0.0008	mg/L	4		03/14/25 1600	03/20/25 0328	KKJ
Chromium, total	<0.0080	0.0080	mg/L	4		03/14/25 1600	03/20/25 0328	KKJ
Cobalt, total	0.0046	0.0004	mg/L	4		03/14/25 1600	03/20/25 0328	KKJ
Copper, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0328	KKJ
Lead, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0328	KKJ
Nickel, total	0.0047	0.0040	mg/L	4		03/14/25 1600	03/20/25 0328	KKJ
Selenium, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0328	KKJ
Silver, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0328	KKJ
Thallium, total	<0.0020	0.0020	mg/L	4		03/14/25 1600	03/20/25 0328	KKJ
Vanadium, total	<0.0200	0.0200	mg/L	4		03/14/25 1600	03/20/25 0328	KKJ
Zinc, total	<0.0200	0.0200	mg/L	4		03/14/25 1600	03/20/25 0328	KKJ

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CERTIFICATE OF ANALYSIS

11C0852

Client Sample ID: MW-21
Sample Matrix: Aqueous
Lab Sample ID: 11C0852-09

Collected By: JGH
Collection Date: 03/11/2025 9:43

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		03/17/25 0000	03/18/25 0755	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0755	BDF
Bromomethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0755	BDF
Chloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0755	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0755	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0755	BDF
Acetone	<10.0	10.0	ug/L	1		03/17/25 0000	03/18/25 0755	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0755	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0755	BDF
Methylene Chloride	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 0755	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 0755	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0755	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0755	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 0755	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0755	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/17/25 0000	03/18/25 0755	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0755	BDF
Chloroform	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0755	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0755	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0755	BDF
Benzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0755	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0755	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0755	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0755	BDF
Dibromomethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0755	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0755	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0755	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 0755	BDF
Toluene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0755	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0755	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0755	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0755	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 0755	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0755	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0755	BDF
Chlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0755	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0755	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0755	BDF
Xylenes, total	<2.0	2.0	ug/L	1		03/17/25 0000	03/18/25 0755	BDF
Styrene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0755	BDF
Bromoform	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0755	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0755	BDF

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CERTIFICATE OF ANALYSIS

11C0852

Client Sample ID: MW-21
Sample Matrix: Aqueous
Lab Sample ID: 11C0852-09

Collected By: JGH
Collection Date: 03/11/2025 9:43

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 0755	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0755	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0755	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0755	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 0755	BDF
Surrogate: Dibromofluoromethane	79.9	Limit: 57-134	% Rec	1		03/17/25 0000	03/18/25 0755	BDF
Surrogate: Dibromofluoromethane	79.9	Limit: 75-136	% Rec	1		03/17/25 0000	03/18/25 0755	BDF
Surrogate: 1,2-Dichloroethane-d4	76.0	Limit: 53-140	% Rec	1		03/17/25 0000	03/18/25 0755	BDF
Surrogate: 1,2-Dichloroethane-d4	76.0	Limit: 61-142	% Rec	1		03/17/25 0000	03/18/25 0755	BDF
Surrogate: Toluene-d8	104	Limit: 86-114	% Rec	1		03/17/25 0000	03/18/25 0755	BDF
Surrogate: Toluene-d8	104	Limit: 82-121	% Rec	1		03/17/25 0000	03/18/25 0755	BDF
Surrogate: 4-Bromofluorobenzene	96.4	Limit: 78-121	% Rec	1		03/17/25 0000	03/18/25 0755	BDF
Surrogate: 4-Bromofluorobenzene	96.4	Limit: 80-116	% Rec	1		03/17/25 0000	03/18/25 0755	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		03/14/25 1600	03/20/25 0334	KKJ
Arsenic, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0334	KKJ
Barium, total	0.362	0.0040	mg/L	4		03/14/25 1600	03/20/25 0334	KKJ
Beryllium, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0334	KKJ
Cadmium, total	<0.0008	0.0008	mg/L	4		03/14/25 1600	03/20/25 0334	KKJ
Chromium, total	<0.0080	0.0080	mg/L	4		03/14/25 1600	03/20/25 0334	KKJ
Cobalt, total	<0.0004	0.0004	mg/L	4		03/14/25 1600	03/20/25 0334	KKJ
Copper, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0334	KKJ
Lead, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0334	KKJ
Nickel, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0334	KKJ
Selenium, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0334	KKJ
Silver, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0334	KKJ
Thallium, total	<0.0020	0.0020	mg/L	4		03/14/25 1600	03/20/25 0334	KKJ
Vanadium, total	<0.0200	0.0200	mg/L	4		03/14/25 1600	03/20/25 0334	KKJ
Zinc, total	<0.0200	0.0200	mg/L	4		03/14/25 1600	03/20/25 0334	KKJ

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CERTIFICATE OF ANALYSIS

11C0852

Client Sample ID: MW-23
Sample Matrix: Aqueous
Lab Sample ID: 11C0852-10

Collected By: JGH
Collection Date: 03/11/2025 10:08

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		03/17/25 0000	03/18/25 0817	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0817	BDF
Bromomethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0817	BDF
Chloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0817	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0817	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0817	BDF
Acetone	<10.0	10.0	ug/L	1		03/17/25 0000	03/18/25 0817	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0817	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0817	BDF
Methylene Chloride	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 0817	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 0817	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0817	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0817	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 0817	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0817	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/17/25 0000	03/18/25 0817	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0817	BDF
Chloroform	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0817	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0817	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0817	BDF
Benzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0817	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0817	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0817	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0817	BDF
Dibromomethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0817	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0817	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0817	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 0817	BDF
Toluene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0817	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0817	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0817	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0817	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 0817	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0817	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0817	BDF
Chlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0817	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0817	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0817	BDF
Xylenes, total	<2.0	2.0	ug/L	1		03/17/25 0000	03/18/25 0817	BDF
Styrene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0817	BDF
Bromoform	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0817	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0817	BDF

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CERTIFICATE OF ANALYSIS

11C0852

Client Sample ID: MW-23
Sample Matrix: Aqueous
Lab Sample ID: 11C0852-10

Collected By: JGH
Collection Date: 03/11/2025 10:08

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 0817	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0817	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0817	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0817	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 0817	BDF
Surrogate: Dibromofluoromethane	73.3	Limit: 57-134	% Rec	1		03/17/25 0000	03/18/25 0817	BDF
Surrogate: Dibromofluoromethane	73.3	Limit: 75-136	% Rec	1	S2	03/17/25 0000	03/18/25 0817	BDF
Surrogate: 1,2-Dichloroethane-d4	71.7	Limit: 61-142	% Rec	1		03/17/25 0000	03/18/25 0817	BDF
Surrogate: 1,2-Dichloroethane-d4	71.7	Limit: 53-140	% Rec	1		03/17/25 0000	03/18/25 0817	BDF
Surrogate: Toluene-d8	102	Limit: 86-114	% Rec	1		03/17/25 0000	03/18/25 0817	BDF
Surrogate: Toluene-d8	102	Limit: 82-121	% Rec	1		03/17/25 0000	03/18/25 0817	BDF
Surrogate: 4-Bromofluorobenzene	98.5	Limit: 80-116	% Rec	1		03/17/25 0000	03/18/25 0817	BDF
Surrogate: 4-Bromofluorobenzene	98.5	Limit: 78-121	% Rec	1		03/17/25 0000	03/18/25 0817	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		03/14/25 1600	03/20/25 0340	KKJ
Arsenic, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0340	KKJ
Barium, total	0.338	0.0040	mg/L	4		03/14/25 1600	03/20/25 0340	KKJ
Beryllium, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0340	KKJ
Cadmium, total	<0.0008	0.0008	mg/L	4		03/14/25 1600	03/20/25 0340	KKJ
Chromium, total	<0.0080	0.0080	mg/L	4		03/14/25 1600	03/20/25 0340	KKJ
Cobalt, total	<0.0004	0.0004	mg/L	4		03/14/25 1600	03/20/25 0340	KKJ
Copper, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0340	KKJ
Lead, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0340	KKJ
Nickel, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0340	KKJ
Selenium, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0340	KKJ
Silver, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0340	KKJ
Thallium, total	<0.0020	0.0020	mg/L	4		03/14/25 1600	03/20/25 0340	KKJ
Vanadium, total	<0.0200	0.0200	mg/L	4		03/14/25 1600	03/20/25 0340	KKJ
Zinc, total	<0.0200	0.0200	mg/L	4		03/14/25 1600	03/20/25 0340	KKJ

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CERTIFICATE OF ANALYSIS

11C0852

Client Sample ID: GWD-2
Sample Matrix: Aqueous
Lab Sample ID: 11C0852-11

Collected By: JGH
Collection Date: 03/11/2025 9:56

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		03/17/25 0000	03/18/25 0840	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0840	BDF
Bromomethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0840	BDF
Chloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0840	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0840	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0840	BDF
Acetone	<10.0	10.0	ug/L	1		03/17/25 0000	03/18/25 0840	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0840	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0840	BDF
Methylene Chloride	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 0840	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 0840	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0840	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0840	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 0840	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0840	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/17/25 0000	03/18/25 0840	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0840	BDF
Chloroform	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0840	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0840	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0840	BDF
Benzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0840	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0840	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0840	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0840	BDF
Dibromomethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0840	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0840	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0840	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 0840	BDF
Toluene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0840	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0840	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0840	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0840	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 0840	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0840	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0840	BDF
Chlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0840	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0840	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0840	BDF
Xylenes, total	<2.0	2.0	ug/L	1		03/17/25 0000	03/18/25 0840	BDF
Styrene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0840	BDF
Bromoform	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0840	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0840	BDF

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CERTIFICATE OF ANALYSIS

11C0852

Client Sample ID: GWD-2
Sample Matrix: Aqueous
Lab Sample ID: 11C0852-11

Collected By: JGH
Collection Date: 03/11/2025 9:56

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 0840	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0840	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0840	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0840	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 0840	BDF
Surrogate: Dibromofluoromethane	75.4	Limit: 75-136	% Rec	1		03/17/25 0000	03/18/25 0840	BDF
Surrogate: Dibromofluoromethane	75.4	Limit: 57-134	% Rec	1		03/17/25 0000	03/18/25 0840	BDF
Surrogate: 1,2-Dichloroethane-d4	71.6	Limit: 53-140	% Rec	1		03/17/25 0000	03/18/25 0840	BDF
Surrogate: 1,2-Dichloroethane-d4	71.6	Limit: 61-142	% Rec	1		03/17/25 0000	03/18/25 0840	BDF
Surrogate: Toluene-d8	105	Limit: 82-121	% Rec	1		03/17/25 0000	03/18/25 0840	BDF
Surrogate: Toluene-d8	105	Limit: 86-114	% Rec	1		03/17/25 0000	03/18/25 0840	BDF
Surrogate: 4-Bromofluorobenzene	96.8	Limit: 80-116	% Rec	1		03/17/25 0000	03/18/25 0840	BDF
Surrogate: 4-Bromofluorobenzene	96.8	Limit: 78-121	% Rec	1		03/17/25 0000	03/18/25 0840	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		03/14/25 1600	03/20/25 0346	KKJ
Arsenic, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0346	KKJ
Barium, total	0.455	0.0040	mg/L	4		03/14/25 1600	03/20/25 0346	KKJ
Beryllium, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0346	KKJ
Cadmium, total	<0.0008	0.0008	mg/L	4		03/14/25 1600	03/20/25 0346	KKJ
Chromium, total	<0.0080	0.0080	mg/L	4		03/14/25 1600	03/20/25 0346	KKJ
Cobalt, total	0.0014	0.0004	mg/L	4		03/14/25 1600	03/20/25 0346	KKJ
Copper, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0346	KKJ
Lead, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0346	KKJ
Nickel, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0346	KKJ
Selenium, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0346	KKJ
Silver, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0346	KKJ
Thallium, total	<0.0020	0.0020	mg/L	4		03/14/25 1600	03/20/25 0346	KKJ
Vanadium, total	<0.0200	0.0200	mg/L	4		03/14/25 1600	03/20/25 0346	KKJ
Zinc, total	<0.0200	0.0200	mg/L	4		03/14/25 1600	03/20/25 0346	KKJ

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CERTIFICATE OF ANALYSIS

11C0852

Client Sample ID: Duplicate
Sample Matrix: Aqueous
Lab Sample ID: 11C0852-12

Collected By: JGH
Collection Date: 03/11/2025 10:40

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		03/17/25 0000	03/18/25 0902	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0902	BDF
Bromomethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0902	BDF
Chloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0902	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0902	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0902	BDF
Acetone	<10.0	10.0	ug/L	1		03/17/25 0000	03/18/25 0902	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0902	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0902	BDF
Methylene Chloride	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 0902	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 0902	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0902	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0902	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 0902	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0902	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/17/25 0000	03/18/25 0902	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0902	BDF
Chloroform	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0902	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0902	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0902	BDF
Benzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0902	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0902	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0902	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0902	BDF
Dibromomethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0902	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0902	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0902	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 0902	BDF
Toluene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0902	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0902	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0902	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0902	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 0902	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0902	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0902	BDF
Chlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0902	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0902	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0902	BDF
Xylenes, total	<2.0	2.0	ug/L	1		03/17/25 0000	03/18/25 0902	BDF
Styrene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0902	BDF
Bromoform	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0902	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0902	BDF

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CERTIFICATE OF ANALYSIS

11C0852

Client Sample ID: Duplicate
Sample Matrix: Aqueous
Lab Sample ID: 11C0852-12

Collected By: JGH
Collection Date: 03/11/2025 10:40

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		03/17/25 0000	03/18/25 0902	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0902	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0902	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0902	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 0902	BDF
Surrogate: Dibromofluoromethane	73.9	Limit: 57-134	% Rec	1		03/17/25 0000	03/18/25 0902	BDF
Surrogate: Dibromofluoromethane	73.9	Limit: 75-136	% Rec	1	S2	03/17/25 0000	03/18/25 0902	BDF
Surrogate: 1,2-Dichloroethane-d4	70.1	Limit: 61-142	% Rec	1		03/17/25 0000	03/18/25 0902	BDF
Surrogate: 1,2-Dichloroethane-d4	70.1	Limit: 53-140	% Rec	1		03/17/25 0000	03/18/25 0902	BDF
Surrogate: Toluene-d8	105	Limit: 86-114	% Rec	1		03/17/25 0000	03/18/25 0902	BDF
Surrogate: Toluene-d8	105	Limit: 82-121	% Rec	1		03/17/25 0000	03/18/25 0902	BDF
Surrogate: 4-Bromofluorobenzene	94.4	Limit: 80-116	% Rec	1		03/17/25 0000	03/18/25 0902	BDF
Surrogate: 4-Bromofluorobenzene	94.4	Limit: 78-121	% Rec	1		03/17/25 0000	03/18/25 0902	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		03/14/25 1600	03/20/25 0405	KKJ
Arsenic, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0405	KKJ
Barium, total	0.329	0.0040	mg/L	4		03/14/25 1600	03/20/25 0405	KKJ
Beryllium, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0405	KKJ
Cadmium, total	0.0008	0.0008	mg/L	4		03/14/25 1600	03/20/25 0405	KKJ
Chromium, total	<0.0080	0.0080	mg/L	4		03/14/25 1600	03/20/25 0405	KKJ
Cobalt, total	0.0008	0.0004	mg/L	4		03/14/25 1600	03/20/25 0405	KKJ
Copper, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0405	KKJ
Lead, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0405	KKJ
Nickel, total	0.0046	0.0040	mg/L	4		03/14/25 1600	03/20/25 0405	KKJ
Selenium, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0405	KKJ
Silver, total	<0.0040	0.0040	mg/L	4		03/14/25 1600	03/20/25 0405	KKJ
Thallium, total	<0.0020	0.0020	mg/L	4		03/14/25 1600	03/20/25 0405	KKJ
Vanadium, total	<0.0200	0.0200	mg/L	4		03/14/25 1600	03/20/25 0405	KKJ
Zinc, total	<0.0200	0.0200	mg/L	4		03/14/25 1600	03/20/25 0405	KKJ

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CERTIFICATE OF ANALYSIS

1IC0852

Batch Log Summary

Method	Batch	Laboratory ID	Client / Source ID
EPA 6020A	1IC0736	1IC0736-BLK1	
		1IC0736-BS1	
		1IC0736-MSD1	1IC0852-01
		1IC0736-MS1	1IC0852-01
		1IC0736-PS1	1IC0852-01
		1IC0852-01	MW-2 (b)
		1IC0852-02	MW-18 (b)
		1IC0852-03	MW-3
		1IC0852-04	MW-9
		1IC0852-05	MW-12
		1IC0852-06	MW-14
		1IC0852-07	MW-15
		1IC0852-08	MW-19
		1IC0852-09	MW-21
		1IC0852-10	MW-23
		1IC0852-11	GWD-2
		1IC0852-12	Duplicate
Method	Batch	Laboratory ID	Client / Source ID
EPA 8260D	1IC0807	1IC0807-BS1	
		1IC0807-BLK1	
		1IC0807-MS1	1IC0696-04
		1IC0807-MSD1	1IC0696-04
		1IC0807-BS2	
		1IC0807-BSD2	
		1IC0807-MS2	1IC0854-15
		1IC0807-MSD2	1IC0854-15
		1IC0807-BLK2	
		1IC0852-08	MW-19
		1IC0852-09	MW-21
		1IC0852-10	MW-23
		1IC0852-11	GWD-2
		1IC0852-12	Duplicate
		1IC0852-01	MW-2 (b)
		1IC0852-02	MW-18 (b)
		1IC0852-03	MW-3
Method	Batch	Laboratory ID	Client / Source ID
EPA 8260D	1IC0808	1IC0808-BS1	
		1IC0808-BSD1	

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CERTIFICATE OF ANALYSIS

11C0852

EPA 8260D	11C0808	11C0808-BLK1	
		11C0852-04	MW-9
		11C0852-05	MW-12
		11C0852-06	MW-14
		11C0852-07	MW-15
		11C0808-MS1	11C0568-01RE1
		11C0808-MSD1	11C0568-01RE1

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 11C0807 - EPA 5030B - EPA 8260D										
Blank (11C0807-BLK1)				Prepared: 03/17/25 00:00 Analyzed: 03/17/25 20:21						
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							

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CERTIFICATE OF ANALYSIS

1IC0852

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IC0807 - EPA 5030B - EPA 8260D										
Blank (1IC0807-BLK1)										
Prepared: 03/17/25 00:00 Analyzed: 03/17/25 20:21										
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							
1,1,1,2-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	43.6		ug/L	50.2		86.8	57-134			
Surrogate: Dibromofluoromethane	43.6		ug/L	50.2		86.8	75-136			
Surrogate: 1,2-Dichloroethane-d4	41.0		ug/L	50.1		81.8	53-140			
Surrogate: 1,2-Dichloroethane-d4	41.0		ug/L	50.1		81.8	61-142			
Surrogate: Toluene-d8	51.8		ug/L	50.4		103	86-114			
Surrogate: Toluene-d8	51.8		ug/L	50.4		103	82-121			
Surrogate: 4-Bromofluorobenzene	50.5		ug/L	50.1		101	78-121			
Surrogate: 4-Bromofluorobenzene	50.5		ug/L	50.1		101	80-116			
Blank (1IC0807-BLK2)										
Prepared: 03/17/25 00:00 Analyzed: 03/18/25 07:10										
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							

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CERTIFICATE OF ANALYSIS

11C0852

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11C0807 - EPA 5030B - EPA 8260D										
Blank (11C0807-BLK2)										
Prepared: 03/17/25 00:00 Analyzed: 03/18/25 07:10										
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										
	39.5		ug/L	50.2		78.7	57-134			
Surrogate: Dibromofluoromethane										
	39.5		ug/L	50.2		78.7	75-136			
Surrogate: 1,2-Dichloroethane-d4										
	37.2		ug/L	50.1		74.2	53-140			
Surrogate: 1,2-Dichloroethane-d4										
	37.2		ug/L	50.1		74.2	61-142			
Surrogate: Toluene-d8										
	52.7		ug/L	50.4		105	86-114			
Surrogate: Toluene-d8										
	52.7		ug/L	50.4		105	82-121			
Surrogate: 4-Bromofluorobenzene										
	49.5		ug/L	50.1		98.7	78-121			
Surrogate: 4-Bromofluorobenzene										
	49.5		ug/L	50.1		98.7	80-116			
LCS (11C0807-BS1)										
Prepared: 03/17/25 00:00 Analyzed: 03/17/25 19:01										
Chloromethane	31.99	1.0	ug/L	30.3		106	63-155			
Vinyl Chloride	30.87	1.0	ug/L	30.2		102	70-154			
Bromomethane	28.22	1.0	ug/L	30.1		93.7	52-176			
Chloroethane	31.66	1.0	ug/L	30.3		104	72-148			
Trichlorofluoromethane	29.32	1.0	ug/L	30.3		96.7	70-152			
1,1-Dichloroethylene	56.32	1.0	ug/L	50.1		112	70-148			
Acetone	130.6	10.0	ug/L	100		131	43-172			

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CERTIFICATE OF ANALYSIS

1IC0852

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IC0807 - EPA 5030B - EPA 8260D										
LCS (1IC0807-BS1)				Prepared: 03/17/25 00:00 Analyzed: 03/17/25 19:01						
Methyl Iodide	105.7	1.0	ug/L	100		106	69-170			
Carbon Disulfide	103.6	1.0	ug/L	100		104	72-162			
Methylene Chloride	52.46	5.0	ug/L	50.1		105	68-142			
Acrylonitrile	128.1	5.0	ug/L	50.2		255	56-135			Q4
trans-1,2-Dichloroethylene	56.56	1.0	ug/L	50.1		113	66-148			
1,1-Dichloroethane	56.01	1.0	ug/L	50.1		112	66-143			
Vinyl Acetate	182.9	5.0	ug/L	140		131	43-153			
cis-1,2-Dichloroethylene	56.29	1.0	ug/L	50.4		112	71-149			
2-Butanone (MEK)	108.2	10.0	ug/L	100		108	52-159			
Bromochloromethane	57.54	1.0	ug/L	50.4		114	69-143			
Chloroform	55.06	1.0	ug/L	50.1		110	69-144			
1,1,1-Trichloroethane	55.17	1.0	ug/L	50.1		110	62-129			
Carbon Tetrachloride	55.05	1.0	ug/L	50.1		110	63-141			
Benzene	49.00	1.0	ug/L	50.4		97.2	71-134			
1,2-Dichloroethane	55.01	1.0	ug/L	50.1		110	72-132			
Trichloroethylene	50.10	1.0	ug/L	50.1		100	71-135			
1,2-Dichloropropane	51.79	1.0	ug/L	50.1		103	69-136			
Dibromomethane	55.44	1.0	ug/L	50.4		110	73-147			
Bromodichloromethane	54.46	1.0	ug/L	50.1		109	68-129			
cis-1,3-Dichloropropene	54.03	1.0	ug/L	50.1		108	65-134			
4-Methyl-2-pentanone (MIBK)	112.0	5.0	ug/L	100		112	58-147			
Toluene	52.24	1.0	ug/L	50.5		103	72-133			
trans-1,3-Dichloropropene	54.08	1.0	ug/L	50.1		108	67-130			
1,1,2-Trichloroethane	51.16	1.0	ug/L	50.1		102	69-135			
Tetrachloroethylene	48.66	1.0	ug/L	50.1		97.1	69-130			
2-Hexanone (MBK)	121.3	5.0	ug/L	100		121	55-144			
Dibromochloromethane	55.26	1.0	ug/L	50.1		110	73-127			
1,2-Dibromoethane	55.88	1.0	ug/L	50.2		111	67-132			
Chlorobenzene	48.27	1.0	ug/L	50.1		96.4	72-123			
1,1,1,2-Tetrachloroethane	50.14	1.0	ug/L	50.3		99.6	73-127			
Ethylbenzene	51.97	1.0	ug/L	50.2		104	71-127			
Xylenes, total	160.4	2.0	ug/L	151		106	74-127			
Styrene	55.39	1.0	ug/L	50.4		110	66-126			
Bromoform	55.24	1.0	ug/L	50.1		110	68-130			
1,2,3-Trichloropropane	49.38	1.0	ug/L	50.3		98.1	63-136			
trans-1,4-Dichloro-2-butene	110.5	5.0	ug/L	100		111	54-134			
1,1,2,2-Tetrachloroethane	51.21	1.0	ug/L	50.1		102	61-131			
1,4-Dichlorobenzene	49.20	1.0	ug/L	50.1		98.2	70-129			
1,2-Dichlorobenzene	54.00	1.0	ug/L	50.1		108	69-126			
1,2-Dibromo-3-chloropropane	59.61	5.0	ug/L	50.1		119	50-143			
Surrogate: Dibromofluoromethane	55.3		ug/L	50.2		110	57-134			
Surrogate: Dibromofluoromethane	55.3		ug/L	50.2		110	75-136			

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CERTIFICATE OF ANALYSIS

1IC0852

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IC0807 - EPA 5030B - EPA 8260D										
LCS (1IC0807-BS1)				Prepared: 03/17/25 00:00 Analyzed: 03/17/25 19:01						
Surrogate: 1,2-Dichloroethane-d4	55.2		ug/L	50.1		110	53-140			
Surrogate: 1,2-Dichloroethane-d4	55.2		ug/L	50.1		110	61-142			
Surrogate: Toluene-d8	50.2		ug/L	50.4		99.6	86-114			
Surrogate: Toluene-d8	50.2		ug/L	50.4		99.6	82-121			
Surrogate: 4-Bromofluorobenzene	53.0		ug/L	50.1		106	78-121			
Surrogate: 4-Bromofluorobenzene	53.0		ug/L	50.1		106	80-116			
LCS (1IC0807-BS2)				Prepared: 03/17/25 00:00 Analyzed: 03/18/25 05:19						
Chloromethane	32.41	1.0	ug/L	30.3		107	63-155			
Vinyl Chloride	32.87	1.0	ug/L	30.2		109	70-154			
Bromomethane	30.60	1.0	ug/L	30.1		102	52-176			
Chloroethane	31.37	1.0	ug/L	30.3		103	72-148			
Trichlorofluoromethane	33.69	1.0	ug/L	30.3		111	70-152			
1,1-Dichloroethylene	56.66	1.0	ug/L	50.1		113	70-148			
Acetone	132.7	10.0	ug/L	100		133	43-172			
Methyl Iodide	100.7	1.0	ug/L	100		101	69-170			
Carbon Disulfide	103.5	1.0	ug/L	100		104	72-162			
Methylene Chloride	49.57	5.0	ug/L	50.1		98.9	68-142			
Acrylonitrile	57.03	5.0	ug/L	50.2		114	56-135			
trans-1,2-Dichloroethylene	56.18	1.0	ug/L	50.1		112	66-148			
1,1-Dichloroethane	56.08	1.0	ug/L	50.1		112	66-143			
Vinyl Acetate	172.8	5.0	ug/L	140		123	43-153			
cis-1,2-Dichloroethylene	56.61	1.0	ug/L	50.4		112	71-149			
2-Butanone (MEK)	111.6	10.0	ug/L	100		112	52-159			
Bromochloromethane	56.23	1.0	ug/L	50.4		112	69-143			
Chloroform	56.17	1.0	ug/L	50.1		112	69-144			
1,1,1-Trichloroethane	56.43	1.0	ug/L	50.1		113	62-129			
Carbon Tetrachloride	55.95	1.0	ug/L	50.1		112	63-141			
Benzene	50.09	1.0	ug/L	50.4		99.3	71-134			
1,2-Dichloroethane	53.51	1.0	ug/L	50.1		107	72-132			
Trichloroethylene	51.60	1.0	ug/L	50.1		103	71-135			
1,2-Dichloropropane	52.02	1.0	ug/L	50.1		104	69-136			
Dibromomethane	54.39	1.0	ug/L	50.4		108	73-147			
Bromodichloromethane	54.07	1.0	ug/L	50.1		108	68-129			
cis-1,3-Dichloropropene	51.63	1.0	ug/L	50.1		103	65-134			
4-Methyl-2-pentanone (MIBK)	112.6	5.0	ug/L	100		113	58-147			
Toluene	53.33	1.0	ug/L	50.5		106	72-133			
trans-1,3-Dichloropropene	50.10	1.0	ug/L	50.1		100	67-130			
1,1,2-Trichloroethane	52.01	1.0	ug/L	50.1		104	69-135			
Tetrachloroethylene	49.42	1.0	ug/L	50.1		98.6	69-130			
2-Hexanone (MBK)	114.2	5.0	ug/L	100		114	55-144			
Dibromochloromethane	55.13	1.0	ug/L	50.1		110	73-127			
1,2-Dibromoethane	53.91	1.0	ug/L	50.2		107	67-132			
Chlorobenzene	49.01	1.0	ug/L	50.1		97.9	72-123			

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CERTIFICATE OF ANALYSIS

11C0852

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11C0807 - EPA 5030B - EPA 8260D										
LCS (11C0807-BS2)										
				Prepared: 03/17/25 00:00 Analyzed: 03/18/25 05:19						
1,1,1,2-Tetrachloroethane	48.88	1.0	ug/L	50.3		97.1	73-127			
Ethylbenzene	52.41	1.0	ug/L	50.2		104	71-127			
Xylenes, total	158.3	2.0	ug/L	151		105	74-127			
Styrene	54.76	1.0	ug/L	50.4		109	66-126			
Bromoform	56.81	1.0	ug/L	50.1		113	68-130			
1,2,3-Trichloropropane	50.18	1.0	ug/L	50.3		99.7	63-136			
trans-1,4-Dichloro-2-butene	96.39	5.0	ug/L	100		96.4	54-134			
1,1,2,2-Tetrachloroethane	49.19	1.0	ug/L	50.1		98.2	61-131			
1,4-Dichlorobenzene	47.98	1.0	ug/L	50.1		95.7	70-129			
1,2-Dichlorobenzene	51.40	1.0	ug/L	50.1		103	69-126			
1,2-Dibromo-3-chloropropane	56.43	5.0	ug/L	50.1		113	50-143			
Surrogate: Dibromofluoromethane	56.0		ug/L	50.2		112	57-134			
Surrogate: Dibromofluoromethane	56.0		ug/L	50.2		112	75-136			
Surrogate: 1,2-Dichloroethane-d4	55.4		ug/L	50.1		111	53-140			
Surrogate: 1,2-Dichloroethane-d4	55.4		ug/L	50.1		111	61-142			
Surrogate: Toluene-d8	50.2		ug/L	50.4		99.7	86-114			
Surrogate: Toluene-d8	50.2		ug/L	50.4		99.7	82-121			
Surrogate: 4-Bromofluorobenzene	52.2		ug/L	50.1		104	78-121			
Surrogate: 4-Bromofluorobenzene	52.2		ug/L	50.1		104	80-116			
LCS Dup (11C0807-BSD2)										
				Prepared: 03/17/25 00:00 Analyzed: 03/18/25 05:41						
Chloromethane	30.24	1.0	ug/L	30.3		99.7	63-155	6.93	24	
Vinyl Chloride	30.29	1.0	ug/L	30.2		100	70-154	8.17	25	
Bromomethane	29.35	1.0	ug/L	30.1		97.4	52-176	4.17	27	
Chloroethane	29.21	1.0	ug/L	30.3		96.3	72-148	7.13	25	
Trichlorofluoromethane	31.08	1.0	ug/L	30.3		103	70-152	8.06	26	
1,1-Dichloroethylene	53.21	1.0	ug/L	50.1		106	70-148	6.28	24	
Acetone	128.2	10.0	ug/L	100		128	43-172	3.43	30	
Methyl Iodide	95.17	1.0	ug/L	100		95.2	69-170	5.65	30	
Carbon Disulfide	97.35	1.0	ug/L	100		97.4	72-162	6.13	24	
Methylene Chloride	47.40	5.0	ug/L	50.1		94.6	68-142	4.48	21	
Acrylonitrile	55.77	5.0	ug/L	50.2		111	56-135	2.23	16	
trans-1,2-Dichloroethylene	53.13	1.0	ug/L	50.1		106	66-148	5.58	27	
1,1-Dichloroethane	53.13	1.0	ug/L	50.1		106	66-143	5.40	24	
Vinyl Acetate	170.5	5.0	ug/L	140		122	43-153	1.36	30	
cis-1,2-Dichloroethylene	53.57	1.0	ug/L	50.4		106	71-149	5.52	26	
2-Butanone (MEK)	104.5	10.0	ug/L	100		105	52-159	6.53	27	
Bromochloromethane	55.07	1.0	ug/L	50.4		109	69-143	2.08	23	
Chloroform	52.62	1.0	ug/L	50.1		105	69-144	6.53	23	
1,1,1-Trichloroethane	53.00	1.0	ug/L	50.1		106	62-129	6.27	24	
Carbon Tetrachloride	52.13	1.0	ug/L	50.1		104	63-141	7.07	25	
Benzene	48.15	1.0	ug/L	50.4		95.5	71-134	3.95	24	
1,2-Dichloroethane	52.28	1.0	ug/L	50.1		104	72-132	2.33	24	
Trichloroethylene	47.77	1.0	ug/L	50.1		95.4	71-135	7.71	24	

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CERTIFICATE OF ANALYSIS

1IC0852

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IC0807 - EPA 5030B - EPA 8260D										
LCS Dup (1IC0807-BSD2)										
Prepared: 03/17/25 00:00 Analyzed: 03/18/25 05:41										
1,2-Dichloropropane	49.87	1.0	ug/L	50.1		99.6	69-136	4.22	24	
Dibromomethane	53.04	1.0	ug/L	50.4		105	73-147	2.51	25	
Bromodichloromethane	52.72	1.0	ug/L	50.1		105	68-129	2.53	22	
cis-1,3-Dichloropropene	49.96	1.0	ug/L	50.1		99.8	65-134	3.29	23	
4-Methyl-2-pentanone (MIBK)	112.4	5.0	ug/L	100		112	58-147	0.204	27	
Toluene	50.54	1.0	ug/L	50.5		100	72-133	5.37	24	
trans-1,3-Dichloropropene	48.04	1.0	ug/L	50.1		95.9	67-130	4.20	24	
1,1,2-Trichloroethane	50.12	1.0	ug/L	50.1		100	69-135	3.70	23	
Tetrachloroethylene	47.42	1.0	ug/L	50.1		94.7	69-130	4.13	25	
2-Hexanone (MBK)	115.0	5.0	ug/L	100		115	55-144	0.733	25	
Dibromochloromethane	52.89	1.0	ug/L	50.1		106	73-127	4.15	22	
1,2-Dibromoethane	53.48	1.0	ug/L	50.2		106	67-132	0.801	24	
Chlorobenzene	47.03	1.0	ug/L	50.1		93.9	72-123	4.12	23	
1,1,1,2-Tetrachloroethane	47.80	1.0	ug/L	50.3		94.9	73-127	2.23	24	
Ethylbenzene	50.17	1.0	ug/L	50.2		100	71-127	4.37	26	
Xylenes, total	151.9	2.0	ug/L	151		101	74-127	4.17	25	
Styrene	53.03	1.0	ug/L	50.4		105	66-126	3.21	23	
Bromoform	53.13	1.0	ug/L	50.1		106	68-130	6.69	23	
1,2,3-Trichloropropane	49.89	1.0	ug/L	50.3		99.1	63-136	0.580	24	
trans-1,4-Dichloro-2-butene	93.88	5.0	ug/L	100		93.9	54-134	2.64	27	
1,1,2,2-Tetrachloroethane	49.88	1.0	ug/L	50.1		99.6	61-131	1.39	29	
1,4-Dichlorobenzene	46.49	1.0	ug/L	50.1		92.7	70-129	3.15	24	
1,2-Dichlorobenzene	49.89	1.0	ug/L	50.1		99.6	69-126	2.98	26	
1,2-Dibromo-3-chloropropane	55.27	5.0	ug/L	50.1		110	50-143	2.08	30	
Surrogate: Dibromofluoromethane	54.1		ug/L	50.2		108	57-134			
Surrogate: Dibromofluoromethane	54.1		ug/L	50.2		108	75-136			
Surrogate: 1,2-Dichloroethane-d4	54.7		ug/L	50.1		109	53-140			
Surrogate: 1,2-Dichloroethane-d4	54.7		ug/L	50.1		109	61-142			
Surrogate: Toluene-d8	49.7		ug/L	50.4		98.7	86-114			
Surrogate: Toluene-d8	49.7		ug/L	50.4		98.7	82-121			
Surrogate: 4-Bromofluorobenzene	51.8		ug/L	50.1		103	78-121			
Surrogate: 4-Bromofluorobenzene	51.8		ug/L	50.1		103	80-116			
Matrix Spike (1IC0807-MS1)										
Source: 1IC0696-04										
Prepared: 03/17/25 00:00 Analyzed: 03/18/25 03:49										
Chloromethane	329.9	10.0	ug/L	303	ND	109	61-152			
Vinyl Chloride	342.5	10.0	ug/L	302	ND	113	66-149			
Bromomethane	311.5	10.0	ug/L	301	ND	103	43-171			
Chloroethane	331.4	10.0	ug/L	303	ND	109	69-148			
Trichlorofluoromethane	350.6	10.0	ug/L	303	ND	116	62-163			
1,1-Dichloroethylene	583.7	10.0	ug/L	501	ND	116	70-148			
Acetone	2086	100	ug/L	1000	ND	209	45-173			M1
Methyl Iodide	1021	10.0	ug/L	1000	ND	102	62-167			
Carbon Disulfide	1071	10.0	ug/L	1000	ND	107	71-163			
Methylene Chloride	503.7	50.0	ug/L	501	ND	101	69-140			

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CERTIFICATE OF ANALYSIS

1IC0852

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IC0807 - EPA 5030B - EPA 8260D										
Matrix Spike (1IC0807-MS1)	Source: 1IC0696-04			Prepared: 03/17/25 00:00 Analyzed: 03/18/25 03:49						
Acrylonitrile	592.1	50.0	ug/L	502	ND	118	38-147			
trans-1,2-Dichloroethylene	565.4	10.0	ug/L	501	ND	113	69-144			
1,1-Dichloroethane	569.7	10.0	ug/L	501	ND	114	70-138			
Vinyl Acetate	1710	50.0	ug/L	1400	ND	122	58-142			
cis-1,2-Dichloroethylene	575.6	10.0	ug/L	504	ND	114	68-151			
2-Butanone (MEK)	1091	100	ug/L	1000	ND	109	50-160			
Bromochloromethane	575.2	10.0	ug/L	504	ND	114	65-143			
Chloroform	562.3	10.0	ug/L	501	ND	112	71-143			
1,1,1-Trichloroethane	568.3	10.0	ug/L	501	ND	113	63-133			
Carbon Tetrachloride	569.5	10.0	ug/L	501	ND	114	63-142			
Benzene	504.3	10.0	ug/L	504	ND	100	69-133			
1,2-Dichloroethane	530.4	10.0	ug/L	501	ND	106	63-138			
Trichloroethylene	517.5	10.0	ug/L	501	ND	103	71-133			
1,2-Dichloropropane	514.7	10.0	ug/L	501	ND	103	69-132			
Dibromomethane	549.4	10.0	ug/L	504	ND	109	70-147			
Bromodichloromethane	537.5	10.0	ug/L	501	ND	107	67-130			
cis-1,3-Dichloropropene	502.0	10.0	ug/L	501	ND	100	61-126			
4-Methyl-2-pentanone (MIBK)	1126	50.0	ug/L	1000	ND	113	55-147			
Toluene	542.8	10.0	ug/L	505	ND	108	71-133			
trans-1,3-Dichloropropene	477.5	10.0	ug/L	501	ND	95.4	63-124			
1,1,2-Trichloroethane	533.4	10.0	ug/L	501	ND	106	69-133			
Tetrachloroethylene	498.5	10.0	ug/L	501	ND	99.5	70-124			
2-Hexanone (MBK)	1154	50.0	ug/L	1000	ND	115	53-141			
Dibromochloromethane	543.7	10.0	ug/L	501	ND	109	74-122			
1,2-Dibromoethane	543.0	10.0	ug/L	502	ND	108	66-127			
Chlorobenzene	491.2	10.0	ug/L	501	ND	98.1	76-116			
1,1,1,2-Tetrachloroethane	503.0	10.0	ug/L	503	ND	99.9	77-121			
Ethylbenzene	530.2	10.0	ug/L	502	ND	106	73-124			
Xylenes, total	1615	20.0	ug/L	1510	ND	107	75-123			
Styrene	550.2	10.0	ug/L	504	ND	109	70-120			
Bromoform	530.5	10.0	ug/L	501	ND	106	70-124			
1,2,3-Trichloropropane	527.4	10.0	ug/L	503	ND	105	62-135			
trans-1,4-Dichloro-2-butene	1015	50.0	ug/L	1000	ND	101	50-120			
1,1,2,2-Tetrachloroethane	511.0	10.0	ug/L	501	ND	102	63-126			
1,4-Dichlorobenzene	491.5	10.0	ug/L	501	ND	98.1	72-119			
1,2-Dichlorobenzene	510.9	10.0	ug/L	501	ND	102	71-117			
1,2-Dibromo-3-chloropropane	594.5	50.0	ug/L	501	ND	119	49-134			
Surrogate: Dibromofluoromethane	561		ug/L	502		112	57-134			
Surrogate: Dibromofluoromethane	561		ug/L	502		112	75-136			
Surrogate: 1,2-Dichloroethane-d4	545		ug/L	501		109	53-140			
Surrogate: 1,2-Dichloroethane-d4	545		ug/L	501		109	61-142			
Surrogate: Toluene-d8	502		ug/L	504		99.7	86-114			
Surrogate: Toluene-d8	502		ug/L	504		99.7	82-121			

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CERTIFICATE OF ANALYSIS

11C0852

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11C0807 - EPA 5030B - EPA 8260D										
Matrix Spike (11C0807-MS1)	Source: 11C0696-04			Prepared: 03/17/25 00:00 Analyzed: 03/18/25 03:49						
Surrogate: 4-Bromofluorobenzene	512		ug/L	501		102	78-121			
Surrogate: 4-Bromofluorobenzene	512		ug/L	501		102	80-116			
Matrix Spike (11C0807-MS2)	Source: 11C0854-15			Prepared: 03/17/25 00:00 Analyzed: 03/18/25 06:03						
Chloromethane	308.2	10.0	ug/L	303	ND	102	61-152			
Vinyl Chloride	313.4	10.0	ug/L	302	ND	104	66-149			
Bromomethane	292.8	10.0	ug/L	301	ND	97.2	43-171			
Chloroethane	304.3	10.0	ug/L	303	ND	100	69-148			
Trichlorofluoromethane	324.5	10.0	ug/L	303	ND	107	62-163			
1,1-Dichloroethylene	563.7	10.0	ug/L	501	ND	112	70-148			
Acetone	1331	100	ug/L	1000	ND	133	45-173			
Methyl Iodide	977.5	10.0	ug/L	1000	ND	97.8	62-167			
Carbon Disulfide	1019	10.0	ug/L	1000	ND	102	71-163			
Methylene Chloride	480.2	50.0	ug/L	501	ND	95.8	69-140			
Acrylonitrile	580.7	50.0	ug/L	502	ND	116	38-147			
trans-1,2-Dichloroethylene	560.3	10.0	ug/L	501	ND	112	69-144			
1,1-Dichloroethane	561.0	10.0	ug/L	501	ND	112	70-138			
Vinyl Acetate	1732	50.0	ug/L	1400	ND	124	58-142			
cis-1,2-Dichloroethylene	563.5	10.0	ug/L	504	ND	112	68-151			
2-Butanone (MEK)	1128	100	ug/L	1000	ND	113	50-160			
Bromochloromethane	565.7	10.0	ug/L	504	ND	112	65-143			
Chloroform	553.5	10.0	ug/L	501	ND	111	71-143			
1,1,1-Trichloroethane	560.7	10.0	ug/L	501	ND	112	63-133			
Carbon Tetrachloride	553.3	10.0	ug/L	501	ND	110	63-142			
Benzene	484.7	10.0	ug/L	504	ND	96.1	69-133			
1,2-Dichloroethane	527.5	10.0	ug/L	501	ND	105	63-138			
Trichloroethylene	505.1	10.0	ug/L	501	ND	101	71-133			
1,2-Dichloropropane	506.4	10.0	ug/L	501	ND	101	69-132			
Dibromomethane	525.4	10.0	ug/L	504	ND	104	70-147			
Bromodichloromethane	529.9	10.0	ug/L	501	ND	106	67-130			
cis-1,3-Dichloropropene	503.5	10.0	ug/L	501	ND	101	61-126			
4-Methyl-2-pentanone (MIBK)	1105	50.0	ug/L	1000	ND	111	55-147			
Toluene	513.9	10.0	ug/L	505	ND	102	71-133			
trans-1,3-Dichloropropene	479.2	10.0	ug/L	501	ND	95.7	63-124			
1,1,2-Trichloroethane	505.3	10.0	ug/L	501	ND	101	69-133			
Tetrachloroethylene	486.6	10.0	ug/L	501	ND	97.1	70-124			
2-Hexanone (MBK)	1154	50.0	ug/L	1000	ND	115	53-141			
Dibromochloromethane	544.9	10.0	ug/L	501	ND	109	74-122			
1,2-Dibromoethane	535.3	10.0	ug/L	502	ND	107	66-127			
Chlorobenzene	483.8	10.0	ug/L	501	ND	96.6	76-116			
1,1,1,2-Tetrachloroethane	493.2	10.0	ug/L	503	ND	98.0	77-121			
Ethylbenzene	516.5	10.0	ug/L	502	ND	103	73-124			
Xylenes, total	1550	20.0	ug/L	1510	ND	103	75-123			

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CERTIFICATE OF ANALYSIS

11C0852

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11C0807 - EPA 5030B - EPA 8260D										
Matrix Spike (11C0807-MS2)	Source: 11C0854-15			Prepared: 03/17/25 00:00 Analyzed: 03/18/25 06:03						
Styrene	543.6	10.0	ug/L	504	ND	108	70-120			
Bromoform	537.0	10.0	ug/L	501	ND	107	70-124			
1,2,3-Trichloropropane	485.3	10.0	ug/L	503	ND	96.4	62-135			
trans-1,4-Dichloro-2-butene	944.2	50.0	ug/L	1000	ND	94.4	50-120			
1,1,2,2-Tetrachloroethane	486.8	10.0	ug/L	501	ND	97.2	63-126			
1,4-Dichlorobenzene	459.4	10.0	ug/L	501	ND	91.7	72-119			
1,2-Dichlorobenzene	490.7	10.0	ug/L	501	ND	98.0	71-117			
1,2-Dibromo-3-chloropropane	553.9	50.0	ug/L	501	ND	110	49-134			
Surrogate: Dibromofluoromethane	566		ug/L	502		113	57-134			
Surrogate: Dibromofluoromethane	566		ug/L	502		113	75-136			
Surrogate: 1,2-Dichloroethane-d4	558		ug/L	501		111	53-140			
Surrogate: 1,2-Dichloroethane-d4	558		ug/L	501		111	61-142			
Surrogate: Toluene-d8	490		ug/L	504		97.3	86-114			
Surrogate: Toluene-d8	490		ug/L	504		97.3	82-121			
Surrogate: 4-Bromofluorobenzene	518		ug/L	501		103	78-121			
Surrogate: 4-Bromofluorobenzene	518		ug/L	501		103	80-116			
Matrix Spike Dup (11C0807-MSD1)	Source: 11C0696-04			Prepared: 03/17/25 00:00 Analyzed: 03/18/25 04:12						
Chloromethane	300.6	10.0	ug/L	303	ND	99.1	61-152	9.29	26	
Vinyl Chloride	301.0	10.0	ug/L	302	ND	99.5	66-149	12.9	23	
Bromomethane	287.6	10.0	ug/L	301	ND	95.5	43-171	7.98	29	
Chloroethane	298.5	10.0	ug/L	303	ND	98.5	69-148	10.4	25	
Trichlorofluoromethane	309.9	10.0	ug/L	303	ND	102	62-163	12.3	25	
1,1-Dichloroethylene	528.3	10.0	ug/L	501	ND	105	70-148	9.96	22	
Acetone	1332	100	ug/L	1000	ND	133	45-173	44.1	30	R1
Methyl Iodide	931.5	10.0	ug/L	1000	ND	93.2	62-167	9.19	24	
Carbon Disulfide	972.3	10.0	ug/L	1000	ND	97.2	71-163	9.65	22	
Methylene Chloride	475.7	50.0	ug/L	501	ND	94.9	69-140	5.72	19	
Acrylonitrile	593.1	50.0	ug/L	502	ND	118	38-147	0.169	30	
trans-1,2-Dichloroethylene	530.2	10.0	ug/L	501	ND	106	69-144	6.43	22	
1,1-Dichloroethane	536.5	10.0	ug/L	501	ND	107	70-138	6.00	20	
Vinyl Acetate	1680	50.0	ug/L	1400	ND	120	58-142	1.83	24	
cis-1,2-Dichloroethylene	540.0	10.0	ug/L	504	ND	107	68-151	6.38	22	
2-Butanone (MEK)	1050	100	ug/L	1000	ND	105	50-160	3.88	23	
Bromochloromethane	552.7	10.0	ug/L	504	ND	110	65-143	3.99	22	
Chloroform	527.0	10.0	ug/L	501	ND	105	71-143	6.48	21	
1,1,1-Trichloroethane	525.2	10.0	ug/L	501	ND	105	63-133	7.88	23	
Carbon Tetrachloride	520.7	10.0	ug/L	501	ND	104	63-142	8.95	22	
Benzene	471.2	10.0	ug/L	504	ND	93.4	69-133	6.79	18	
1,2-Dichloroethane	517.3	10.0	ug/L	501	ND	103	63-138	2.50	20	
Trichloroethylene	477.4	10.0	ug/L	501	ND	95.3	71-133	8.06	23	
1,2-Dichloropropane	502.4	10.0	ug/L	501	ND	100	69-132	2.42	20	
Dibromomethane	525.8	10.0	ug/L	504	ND	104	70-147	4.39	22	
Bromodichloromethane	515.4	10.0	ug/L	501	ND	103	67-130	4.20	21	

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CERTIFICATE OF ANALYSIS

1IC0852

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IC0807 - EPA 5030B - EPA 8260D										
Matrix Spike Dup (1IC0807-MSD1)	Source: 1IC0696-04			Prepared: 03/17/25 00:00 Analyzed: 03/18/25 04:12						
cis-1,3-Dichloropropene	492.3	10.0	ug/L	501	ND	98.3	61-126	1.95	21	
4-Methyl-2-pentanone (MIBK)	1102	50.0	ug/L	1000	ND	110	55-147	2.13	23	
Toluene	502.2	10.0	ug/L	505	ND	99.5	71-133	7.77	19	
trans-1,3-Dichloropropene	472.1	10.0	ug/L	501	ND	94.3	63-124	1.14	21	
1,1,2-Trichloroethane	500.0	10.0	ug/L	501	ND	99.8	69-133	6.46	19	
Tetrachloroethylene	454.7	10.0	ug/L	501	ND	90.8	70-124	9.19	24	
2-Hexanone (MBK)	1127	50.0	ug/L	1000	ND	113	53-141	2.33	24	
Dibromochloromethane	535.5	10.0	ug/L	501	ND	107	74-122	1.52	21	
1,2-Dibromoethane	539.7	10.0	ug/L	502	ND	107	66-127	0.610	23	
Chlorobenzene	462.4	10.0	ug/L	501	ND	92.3	76-116	6.04	21	
1,1,1,2-Tetrachloroethane	481.3	10.0	ug/L	503	ND	95.6	77-121	4.41	25	
Ethylbenzene	489.2	10.0	ug/L	502	ND	97.5	73-124	8.04	20	
Xylenes, total	1490	20.0	ug/L	1510	ND	98.6	75-123	8.06	20	
Styrene	522.0	10.0	ug/L	504	ND	104	70-120	5.26	23	
Bromoform	524.0	10.0	ug/L	501	ND	105	70-124	1.23	22	
1,2,3-Trichloropropane	466.8	10.0	ug/L	503	ND	92.7	62-135	12.2	28	
trans-1,4-Dichloro-2-butene	963.4	50.0	ug/L	1000	ND	96.3	50-120	5.18	26	
1,1,2,2-Tetrachloroethane	500.4	10.0	ug/L	501	ND	99.9	63-126	2.10	24	
1,4-Dichlorobenzene	463.7	10.0	ug/L	501	ND	92.5	72-119	5.82	24	
1,2-Dichlorobenzene	490.6	10.0	ug/L	501	ND	97.9	71-117	4.05	24	
1,2-Dibromo-3-chloropropane	600.0	50.0	ug/L	501	ND	120	49-134	0.921	28	
Surrogate: Dibromofluoromethane	545		ug/L	502		109	57-134			
Surrogate: Dibromofluoromethane	545		ug/L	502		109	75-136			
Surrogate: 1,2-Dichloroethane-d4	573		ug/L	501		114	53-140			
Surrogate: 1,2-Dichloroethane-d4	573		ug/L	501		114	61-142			
Surrogate: Toluene-d8	496		ug/L	504		98.5	86-114			
Surrogate: Toluene-d8	496		ug/L	504		98.5	82-121			
Surrogate: 4-Bromofluorobenzene	508		ug/L	501		101	78-121			
Surrogate: 4-Bromofluorobenzene	508		ug/L	501		101	80-116			
Matrix Spike Dup (1IC0807-MSD2)	Source: 1IC0854-15			Prepared: 03/17/25 00:00 Analyzed: 03/18/25 06:26						
Chloromethane	289.8	10.0	ug/L	303	ND	95.6	61-152	6.15	26	
Vinyl Chloride	288.9	10.0	ug/L	302	ND	95.5	66-149	8.14	23	
Bromomethane	276.2	10.0	ug/L	301	ND	91.7	43-171	5.83	29	
Chloroethane	288.5	10.0	ug/L	303	ND	95.2	69-148	5.33	25	
Trichlorofluoromethane	286.9	10.0	ug/L	303	ND	94.7	62-163	12.3	25	
1,1-Dichloroethylene	497.8	10.0	ug/L	501	ND	99.3	70-148	12.4	22	
Acetone	1176	100	ug/L	1000	ND	118	45-173	12.3	30	
Methyl Iodide	913.8	10.0	ug/L	1000	ND	91.4	62-167	6.74	24	
Carbon Disulfide	929.9	10.0	ug/L	1000	ND	93.0	71-163	9.10	22	
Methylene Chloride	448.3	50.0	ug/L	501	ND	89.5	69-140	6.87	19	
Acrylonitrile	541.9	50.0	ug/L	502	ND	108	38-147	6.91	30	
trans-1,2-Dichloroethylene	491.6	10.0	ug/L	501	ND	98.1	69-144	13.1	22	
1,1-Dichloroethane	488.8	10.0	ug/L	501	ND	97.6	70-138	13.8	20	

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CERTIFICATE OF ANALYSIS

1IC0852

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IC0807 - EPA 5030B - EPA 8260D										
Matrix Spike Dup (1IC0807-MSD2)	Source: 1IC0854-15			Prepared: 03/17/25 00:00 Analyzed: 03/18/25 06:26						
Vinyl Acetate	1556	50.0	ug/L	1400	ND	111	58-142	10.7	24	
cis-1,2-Dichloroethylene	496.4	10.0	ug/L	504	ND	98.6	68-151	12.7	22	
2-Butanone (MEK)	1031	100	ug/L	1000	ND	103	50-160	8.98	23	
Bromochloromethane	506.1	10.0	ug/L	504	ND	100	65-143	11.1	22	
Chloroform	488.0	10.0	ug/L	501	ND	97.4	71-143	12.6	21	
1,1,1-Trichloroethane	501.4	10.0	ug/L	501	ND	100	63-133	11.2	23	
Carbon Tetrachloride	496.6	10.0	ug/L	501	ND	99.1	63-142	10.8	22	
Benzene	448.0	10.0	ug/L	504	ND	88.8	69-133	7.87	18	
1,2-Dichloroethane	482.7	10.0	ug/L	501	ND	96.4	63-138	8.87	20	
Trichloroethylene	463.1	10.0	ug/L	501	ND	92.4	71-133	8.68	23	
1,2-Dichloropropane	470.2	10.0	ug/L	501	ND	93.9	69-132	7.41	20	
Dibromomethane	489.1	10.0	ug/L	504	ND	97.1	70-147	7.16	22	
Bromodichloromethane	483.2	10.0	ug/L	501	ND	96.5	67-130	9.22	21	
cis-1,3-Dichloropropene	464.4	10.0	ug/L	501	ND	92.7	61-126	8.08	21	
4-Methyl-2-pentanone (MIBK)	1055	50.0	ug/L	1000	ND	106	55-147	4.63	23	
Toluene	493.3	10.0	ug/L	505	ND	97.7	71-133	4.09	19	
trans-1,3-Dichloropropene	451.6	10.0	ug/L	501	ND	90.2	63-124	5.93	21	
1,1,2-Trichloroethane	480.8	10.0	ug/L	501	ND	96.0	69-133	4.97	19	
Tetrachloroethylene	433.8	10.0	ug/L	501	ND	86.6	70-124	11.5	24	
2-Hexanone (MBK)	1090	50.0	ug/L	1000	ND	109	53-141	5.72	24	
Dibromochloromethane	503.0	10.0	ug/L	501	ND	100	74-122	8.00	21	
1,2-Dibromoethane	497.4	10.0	ug/L	502	ND	99.0	66-127	7.34	23	
Chlorobenzene	446.0	10.0	ug/L	501	ND	89.1	76-116	8.13	21	
1,1,1,2-Tetrachloroethane	447.3	10.0	ug/L	503	ND	88.8	77-121	9.76	25	
Ethylbenzene	476.4	10.0	ug/L	502	ND	95.0	73-124	8.08	20	
Xylenes, total	1451	20.0	ug/L	1510	ND	96.1	75-123	6.60	20	
Styrene	504.2	10.0	ug/L	504	ND	100	70-120	7.52	23	
Bromoform	513.9	10.0	ug/L	501	ND	103	70-124	4.40	22	
1,2,3-Trichloropropane	451.0	10.0	ug/L	503	ND	89.6	62-135	7.33	28	
trans-1,4-Dichloro-2-butene	921.8	50.0	ug/L	1000	ND	92.2	50-120	2.40	26	
1,1,2,2-Tetrachloroethane	472.3	10.0	ug/L	501	ND	94.3	63-126	3.02	24	
1,4-Dichlorobenzene	449.6	10.0	ug/L	501	ND	89.7	72-119	2.16	24	
1,2-Dichlorobenzene	483.1	10.0	ug/L	501	ND	96.4	71-117	1.56	24	
1,2-Dibromo-3-chloropropane	572.5	50.0	ug/L	501	ND	114	49-134	3.30	28	
Surrogate: Dibromofluoromethane	530		ug/L	502		106	57-134			
Surrogate: Dibromofluoromethane	530		ug/L	502		106	75-136			
Surrogate: 1,2-Dichloroethane-d4	518		ug/L	501		103	53-140			
Surrogate: 1,2-Dichloroethane-d4	518		ug/L	501		103	61-142			
Surrogate: Toluene-d8	502		ug/L	504		99.6	86-114			
Surrogate: Toluene-d8	502		ug/L	504		99.6	82-121			
Surrogate: 4-Bromofluorobenzene	508		ug/L	501		101	78-121			
Surrogate: 4-Bromofluorobenzene	508		ug/L	501		101	80-116			

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CERTIFICATE OF ANALYSIS

1IC0852

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IC0808 - EPA 5030B - EPA 8260D										
Blank (1IC0808-BLK1)				Prepared: 03/17/25 00:00 Analyzed: 03/17/25 12:48						
Chloromethane	<1.0	1.0	ug/L							
Vinyl Chloride	<1.0	1.0	ug/L							
Bromomethane	<1.0	1.0	ug/L							
Chloroethane	<1.0	1.0	ug/L							
Trichlorofluoromethane	<1.0	1.0	ug/L							
1,1-Dichloroethylene	<1.0	1.0	ug/L							
Acetone	<10.0	10.0	ug/L							
Methyl Iodide	<1.0	1.0	ug/L							
Carbon Disulfide	<1.0	1.0	ug/L							
Methylene Chloride	<5.0	5.0	ug/L							
Acrylonitrile	<5.0	5.0	ug/L							
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L							
1,1-Dichloroethane	<1.0	1.0	ug/L							
Vinyl Acetate	<5.0	5.0	ug/L							
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L							
2-Butanone (MEK)	<10.0	10.0	ug/L							
Bromochloromethane	<1.0	1.0	ug/L							
Chloroform	<1.0	1.0	ug/L							
1,1,1-Trichloroethane	<1.0	1.0	ug/L							
Carbon Tetrachloride	<1.0	1.0	ug/L							
Benzene	<1.0	1.0	ug/L							
1,2-Dichloroethane	<1.0	1.0	ug/L							
Trichloroethylene	<1.0	1.0	ug/L							
1,2-Dichloropropane	<1.0	1.0	ug/L							
Dibromomethane	<1.0	1.0	ug/L							
Bromodichloromethane	<1.0	1.0	ug/L							
cis-1,3-Dichloropropene	<1.0	1.0	ug/L							
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L							
Toluene	<1.0	1.0	ug/L							
trans-1,3-Dichloropropene	<1.0	1.0	ug/L							
1,1,2-Trichloroethane	<1.0	1.0	ug/L							
Tetrachloroethylene	<1.0	1.0	ug/L							
2-Hexanone (MBK)	<5.0	5.0	ug/L							
Dibromochloromethane	<1.0	1.0	ug/L							
1,2-Dibromoethane	<1.0	1.0	ug/L							
Chlorobenzene	<1.0	1.0	ug/L							
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L							
Ethylbenzene	<1.0	1.0	ug/L							
Xylenes, total	<2.0	2.0	ug/L							
Styrene	<1.0	1.0	ug/L							
Bromoform	<1.0	1.0	ug/L							
1,2,3-Trichloropropane	<1.0	1.0	ug/L							
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L							

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CERTIFICATE OF ANALYSIS

1IC0852

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IC0808 - EPA 5030B - EPA 8260D										
Blank (1IC0808-BLK1)										
				Prepared: 03/17/25 00:00 Analyzed: 03/17/25 12:48						
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L							
1,4-Dichlorobenzene	<1.0	1.0	ug/L							
1,2-Dichlorobenzene	<1.0	1.0	ug/L							
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L							
Surrogate: Dibromofluoromethane	51.9		ug/L	50.2		104	57-134			
Surrogate: Dibromofluoromethane	51.9		ug/L	50.2		104	75-136			
Surrogate: 1,2-Dichloroethane-d4	51.8		ug/L	50.1		103	53-140			
Surrogate: 1,2-Dichloroethane-d4	51.8		ug/L	50.1		103	61-142			
Surrogate: Toluene-d8	46.5		ug/L	50.4		92.3	86-114			
Surrogate: Toluene-d8	46.5		ug/L	50.4		92.3	82-121			
Surrogate: 4-Bromofluorobenzene	49.1		ug/L	50.1		98.0	78-121			
Surrogate: 4-Bromofluorobenzene	49.1		ug/L	50.1		98.0	80-116			
LCS (1IC0808-BS1)										
				Prepared: 03/17/25 00:00 Analyzed: 03/17/25 11:41						
Chloromethane	26.46	1.0	ug/L	30.3		87.3	63-155			
Vinyl Chloride	31.56	1.0	ug/L	30.2		104	70-154			
Bromomethane	31.87	1.0	ug/L	30.1		106	52-176			
Chloroethane	33.36	1.0	ug/L	30.3		110	72-148			
Trichlorofluoromethane	37.00	1.0	ug/L	30.3		122	70-152			
1,1-Dichloroethylene	50.99	1.0	ug/L	50.1		102	70-148			
Acetone	107.4	10.0	ug/L	100		107	43-172			
Methyl Iodide	110.1	1.0	ug/L	100		110	69-170			
Carbon Disulfide	109.0	1.0	ug/L	100		109	72-162			
Methylene Chloride	50.45	5.0	ug/L	50.1		101	68-142			
Acrylonitrile	50.63	5.0	ug/L	50.2		101	56-135			
trans-1,2-Dichloroethylene	48.05	1.0	ug/L	50.1		95.9	66-148			
1,1-Dichloroethane	48.89	1.0	ug/L	50.1		97.6	66-143			
Vinyl Acetate	156.0	5.0	ug/L	140		111	43-153			
cis-1,2-Dichloroethylene	48.49	1.0	ug/L	50.4		96.3	71-149			
2-Butanone (MEK)	86.68	10.0	ug/L	100		86.7	52-159			
Bromochloromethane	48.66	1.0	ug/L	50.4		96.5	69-143			
Chloroform	48.27	1.0	ug/L	50.1		96.4	69-144			
1,1,1-Trichloroethane	47.43	1.0	ug/L	50.1		94.6	62-129			
Carbon Tetrachloride	46.59	1.0	ug/L	50.1		93.0	63-141			
Benzene	43.69	1.0	ug/L	50.4		86.6	71-134			
1,2-Dichloroethane	45.99	1.0	ug/L	50.1		91.8	72-132			
Trichloroethylene	44.74	1.0	ug/L	50.1		89.3	71-135			
1,2-Dichloropropane	44.43	1.0	ug/L	50.1		88.7	69-136			
Dibromomethane	44.33	1.0	ug/L	50.4		88.0	73-147			
Bromodichloromethane	46.77	1.0	ug/L	50.1		93.4	68-129			
cis-1,3-Dichloropropene	42.39	1.0	ug/L	50.1		84.6	65-134			
4-Methyl-2-pentanone (MIBK)	78.67	5.0	ug/L	100		78.7	58-147			
Toluene	43.35	1.0	ug/L	50.5		85.9	72-133			
trans-1,3-Dichloropropene	42.25	1.0	ug/L	50.1		84.4	67-130			

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CERTIFICATE OF ANALYSIS

1IC0852

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IC0808 - EPA 5030B - EPA 8260D										
LCS (1IC0808-BS1)										
Prepared: 03/17/25 00:00 Analyzed: 03/17/25 11:41										
1,1,2-Trichloroethane	51.71	1.0	ug/L	50.1		103	69-135			
Tetrachloroethylene	43.43	1.0	ug/L	50.1		86.7	69-130			
2-Hexanone (MBK)	79.22	5.0	ug/L	100		79.2	55-144			
Dibromochloromethane	47.34	1.0	ug/L	50.1		94.5	73-127			
1,2-Dibromoethane	44.28	1.0	ug/L	50.2		88.2	67-132			
Chlorobenzene	42.17	1.0	ug/L	50.1		84.2	72-123			
1,1,1,2-Tetrachloroethane	44.44	1.0	ug/L	50.3		88.3	73-127			
Ethylbenzene	41.07	1.0	ug/L	50.2		81.9	71-127			
Xylenes, total	126.3	2.0	ug/L	151		83.6	74-127			
Styrene	44.87	1.0	ug/L	50.4		89.1	66-126			
Bromoform	44.24	1.0	ug/L	50.1		88.3	68-130			
1,2,3-Trichloropropane	41.56	1.0	ug/L	50.3		82.6	63-136			
trans-1,4-Dichloro-2-butene	74.20	5.0	ug/L	100		74.2	54-134			
1,1,2,2-Tetrachloroethane	38.42	1.0	ug/L	50.1		76.7	61-131			
1,4-Dichlorobenzene	39.37	1.0	ug/L	50.1		78.5	70-129			
1,2-Dichlorobenzene	38.40	1.0	ug/L	50.1		76.7	69-126			
1,2-Dibromo-3-chloropropane	28.55	5.0	ug/L	50.1		57.0	50-143			
Surrogate: Dibromofluoromethane	55.7		ug/L	50.2		111	57-134			
Surrogate: Dibromofluoromethane	55.7		ug/L	50.2		111	75-136			
Surrogate: 1,2-Dichloroethane-d4	55.5		ug/L	50.1		111	53-140			
Surrogate: 1,2-Dichloroethane-d4	55.5		ug/L	50.1		111	61-142			
Surrogate: Toluene-d8	48.8		ug/L	50.4		96.8	86-114			
Surrogate: Toluene-d8	48.8		ug/L	50.4		96.8	82-121			
Surrogate: 4-Bromofluorobenzene	50.9		ug/L	50.1		102	78-121			
Surrogate: 4-Bromofluorobenzene	50.9		ug/L	50.1		102	80-116			
LCS Dup (1IC0808-BSD1)										
Prepared: 03/17/25 00:00 Analyzed: 03/17/25 12:03										
Chloromethane	24.19	1.0	ug/L	30.3		79.8	63-155	8.96	24	
Vinyl Chloride	29.02	1.0	ug/L	30.2		95.9	70-154	8.39	25	
Bromomethane	31.57	1.0	ug/L	30.1		105	52-176	0.946	27	
Chloroethane	30.90	1.0	ug/L	30.3		102	72-148	7.66	25	
Trichlorofluoromethane	33.19	1.0	ug/L	30.3		110	70-152	10.9	26	
1,1-Dichloroethylene	46.22	1.0	ug/L	50.1		92.2	70-148	9.81	24	
Acetone	121.0	10.0	ug/L	100		121	43-172	11.9	30	
Methyl Iodide	98.63	1.0	ug/L	100		98.6	69-170	11.0	30	
Carbon Disulfide	98.39	1.0	ug/L	100		98.4	72-162	10.3	24	
Methylene Chloride	50.24	5.0	ug/L	50.1		100	68-142	0.417	21	
Acrylonitrile	59.92	5.0	ug/L	50.2		119	56-135	16.8	16	R1
trans-1,2-Dichloroethylene	45.31	1.0	ug/L	50.1		90.5	66-148	5.87	27	
1,1-Dichloroethane	47.68	1.0	ug/L	50.1		95.2	66-143	2.51	24	
Vinyl Acetate	182.0	5.0	ug/L	140		130	43-153	15.4	30	
cis-1,2-Dichloroethylene	46.43	1.0	ug/L	50.4		92.2	71-149	4.34	26	
2-Butanone (MEK)	105.5	10.0	ug/L	100		105	52-159	19.6	27	
Bromochloromethane	51.54	1.0	ug/L	50.4		102	69-143	5.75	23	

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CERTIFICATE OF ANALYSIS

1IC0852

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IC0808 - EPA 5030B - EPA 8260D										
LCS Dup (1IC0808-BSD1)				Prepared: 03/17/25 00:00 Analyzed: 03/17/25 12:03						
Chloroform	48.22	1.0	ug/L	50.1		96.3	69-144	0.104	23	
1,1,1-Trichloroethane	45.07	1.0	ug/L	50.1		89.9	62-129	5.10	24	
Carbon Tetrachloride	44.79	1.0	ug/L	50.1		89.4	63-141	3.94	25	
Benzene	43.66	1.0	ug/L	50.4		86.6	71-134	0.0687	24	
1,2-Dichloroethane	51.71	1.0	ug/L	50.1		103	72-132	11.7	24	
Trichloroethylene	44.17	1.0	ug/L	50.1		88.2	71-135	1.28	24	
1,2-Dichloropropane	45.03	1.0	ug/L	50.1		89.9	69-136	1.34	24	
Dibromomethane	51.51	1.0	ug/L	50.4		102	73-147	15.0	25	
Bromodichloromethane	49.54	1.0	ug/L	50.1		98.9	68-129	5.75	22	
cis-1,3-Dichloropropene	45.48	1.0	ug/L	50.1		90.8	65-134	7.03	23	
4-Methyl-2-pentanone (MIBK)	105.9	5.0	ug/L	100		106	58-147	29.5	27	R1
Toluene	42.39	1.0	ug/L	50.5		84.0	72-133	2.24	24	
trans-1,3-Dichloropropene	48.57	1.0	ug/L	50.1		97.0	67-130	13.9	24	
1,1,2-Trichloroethane	56.24	1.0	ug/L	50.1		112	69-135	8.39	23	
Tetrachloroethylene	41.25	1.0	ug/L	50.1		82.3	69-130	5.15	25	
2-Hexanone (MBK)	89.49	5.0	ug/L	100		89.5	55-144	12.2	25	
Dibromochloromethane	49.46	1.0	ug/L	50.1		98.8	73-127	4.38	22	
1,2-Dibromoethane	51.31	1.0	ug/L	50.2		102	67-132	14.7	24	
Chlorobenzene	40.42	1.0	ug/L	50.1		80.7	72-123	4.24	23	
1,1,1,2-Tetrachloroethane	44.56	1.0	ug/L	50.3		88.5	73-127	0.270	24	
Ethylbenzene	39.05	1.0	ug/L	50.2		77.8	71-127	5.04	26	
Xylenes, total	121.1	2.0	ug/L	151		80.1	74-127	4.22	25	
Styrene	44.71	1.0	ug/L	50.4		88.8	66-126	0.357	23	
Bromoform	51.49	1.0	ug/L	50.1		103	68-130	15.1	23	
1,2,3-Trichloropropane	51.65	1.0	ug/L	50.3		103	63-136	21.7	24	
trans-1,4-Dichloro-2-butene	92.98	5.0	ug/L	100		93.0	54-134	22.5	27	
1,1,2,2-Tetrachloroethane	43.19	1.0	ug/L	50.1		86.2	61-131	11.7	29	
1,4-Dichlorobenzene	37.58	1.0	ug/L	50.1		75.0	70-129	4.65	24	
1,2-Dichlorobenzene	40.13	1.0	ug/L	50.1		80.1	69-126	4.41	26	
1,2-Dibromo-3-chloropropane	39.77	5.0	ug/L	50.1		79.3	50-143	32.8	30	R1
Surrogate: Dibromofluoromethane	58.5		ug/L	50.2		117	57-134			
Surrogate: Dibromofluoromethane	58.5		ug/L	50.2		117	75-136			
Surrogate: 1,2-Dichloroethane-d4	62.6		ug/L	50.1		125	53-140			
Surrogate: 1,2-Dichloroethane-d4	62.6		ug/L	50.1		125	61-142			
Surrogate: Toluene-d8	50.5		ug/L	50.4		100	86-114			
Surrogate: Toluene-d8	50.5		ug/L	50.4		100	82-121			
Surrogate: 4-Bromofluorobenzene	51.6		ug/L	50.1		103	78-121			
Surrogate: 4-Bromofluorobenzene	51.6		ug/L	50.1		103	80-116			
Matrix Spike (1IC0808-MS1)				Source: 1IC0568-01RE1 Prepared: 03/17/25 00:00 Analyzed: 03/17/25 23:32						
Chloromethane	262.9	10.0	ug/L	303	ND	86.7	61-152			
Vinyl Chloride	299.9	10.0	ug/L	302	ND	99.1	66-149			
Bromomethane	320.5	10.0	ug/L	301	ND	106	43-171			
Chloroethane	327.9	10.0	ug/L	303	ND	108	69-148			

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CERTIFICATE OF ANALYSIS

1IC0852

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IC0808 - EPA 5030B - EPA 8260D										
Matrix Spike (1IC0808-MS1) Source: 1IC0568-01RE1 Prepared: 03/17/25 00:00 Analyzed: 03/17/25 23:32										
Trichlorofluoromethane	372.6	10.0	ug/L	303	ND	123	62-163			
1,1-Dichloroethylene	517.2	10.0	ug/L	501	ND	103	70-148			
Acetone	1379	100	ug/L	1000	ND	138	45-173			
Methyl Iodide	1063	10.0	ug/L	1000	ND	106	62-167			
Carbon Disulfide	1067	10.0	ug/L	1000	ND	107	71-163			
Methylene Chloride	536.4	50.0	ug/L	501	ND	107	69-140			
Acrylonitrile	612.6	50.0	ug/L	502	ND	122	38-147			
trans-1,2-Dichloroethylene	505.6	10.0	ug/L	501	ND	101	69-144			
1,1-Dichloroethane	535.7	10.0	ug/L	501	ND	107	70-138			
Vinyl Acetate	1894	50.0	ug/L	1400	ND	135	58-142			
cis-1,2-Dichloroethylene	523.6	10.0	ug/L	504	ND	104	68-151			
2-Butanone (MEK)	1122	100	ug/L	1000	ND	112	50-160			
Bromochloromethane	547.2	10.0	ug/L	504	ND	109	65-143			
Chloroform	535.2	10.0	ug/L	501	ND	107	71-143			
1,1,1-Trichloroethane	513.3	10.0	ug/L	501	ND	102	63-133			
Carbon Tetrachloride	521.1	10.0	ug/L	501	ND	104	63-142			
Benzene	488.9	10.0	ug/L	504	ND	96.9	69-133			
1,2-Dichloroethane	573.0	10.0	ug/L	501	ND	114	63-138			
Trichloroethylene	488.8	10.0	ug/L	501	ND	97.6	71-133			
1,2-Dichloropropane	503.0	10.0	ug/L	501	ND	100	69-132			
Dibromomethane	550.8	10.0	ug/L	504	ND	109	70-147			
Bromodichloromethane	557.2	10.0	ug/L	501	ND	111	67-130			
cis-1,3-Dichloropropene	444.6	10.0	ug/L	501	ND	88.8	61-126			
4-Methyl-2-pentanone (MIBK)	990.7	50.0	ug/L	1000	ND	99.1	55-147			
Toluene	485.4	10.0	ug/L	505	ND	96.2	71-133			
trans-1,3-Dichloropropene	493.8	10.0	ug/L	501	ND	98.6	63-124			
1,1,2-Trichloroethane	599.1	10.0	ug/L	501	ND	120	69-133			
Tetrachloroethylene	478.3	10.0	ug/L	501	ND	95.5	70-124			
2-Hexanone (MBK)	839.7	50.0	ug/L	1000	ND	84.0	53-141			
Dibromochloromethane	526.5	10.0	ug/L	501	ND	105	74-122			
1,2-Dibromoethane	524.9	10.0	ug/L	502	ND	105	66-127			
Chlorobenzene	456.8	10.0	ug/L	501	ND	91.2	76-116			
1,1,1,2-Tetrachloroethane	490.8	10.0	ug/L	503	ND	97.5	77-121			
Ethylbenzene	442.1	10.0	ug/L	502	ND	88.1	73-124			
Xylenes, total	1366	20.0	ug/L	1510	ND	90.4	75-123			
Styrene	491.2	10.0	ug/L	504	ND	97.5	70-120			
Bromoform	535.4	10.0	ug/L	501	ND	107	70-124			
1,2,3-Trichloropropane	549.7	10.0	ug/L	503	ND	109	62-135			
trans-1,4-Dichloro-2-butene	922.7	50.0	ug/L	1000	ND	92.3	50-120			
1,1,2,2-Tetrachloroethane	455.1	10.0	ug/L	501	ND	90.8	63-126			
1,4-Dichlorobenzene	405.7	10.0	ug/L	501	ND	80.9	72-119			
1,2-Dichlorobenzene	428.0	10.0	ug/L	501	ND	85.4	71-117			
1,2-Dibromo-3-chloropropane	399.4	50.0	ug/L	501	ND	79.7	49-134			

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CERTIFICATE OF ANALYSIS

11C0852

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11C0808 - EPA 5030B - EPA 8260D										
Matrix Spike (11C0808-MS1) Source: 11C0568-01RE1 Prepared: 03/17/25 00:00 Analyzed: 03/17/25 23:32										
Surrogate: Dibromofluoromethane	606		ug/L	502		121	57-134			
Surrogate: Dibromofluoromethane	606		ug/L	502		121	75-136			
Surrogate: 1,2-Dichloroethane-d4	648		ug/L	501		129	53-140			
Surrogate: 1,2-Dichloroethane-d4	648		ug/L	501		129	61-142			
Surrogate: Toluene-d8	505		ug/L	504		100	86-114			
Surrogate: Toluene-d8	505		ug/L	504		100	82-121			
Surrogate: 4-Bromofluorobenzene	537		ug/L	501		107	78-121			
Surrogate: 4-Bromofluorobenzene	537		ug/L	501		107	80-116			
Matrix Spike Dup (11C0808-MSD1) Source: 11C0568-01RE1 Prepared: 03/17/25 00:00 Analyzed: 03/17/25 23:55										
Chloromethane	247.0	10.0	ug/L	303	ND	81.5	61-152	6.24	26	
Vinyl Chloride	297.2	10.0	ug/L	302	ND	98.3	66-149	0.904	23	
Bromomethane	316.9	10.0	ug/L	301	ND	105	43-171	1.13	29	
Chloroethane	312.0	10.0	ug/L	303	ND	103	69-148	4.97	25	
Trichlorofluoromethane	350.4	10.0	ug/L	303	ND	116	62-163	6.14	25	
1,1-Dichloroethylene	483.5	10.0	ug/L	501	ND	96.5	70-148	6.74	22	
Acetone	1418	100	ug/L	1000	ND	142	45-173	2.76	30	
Methyl Iodide	1050	10.0	ug/L	1000	ND	105	62-167	1.22	24	
Carbon Disulfide	1040	10.0	ug/L	1000	ND	104	71-163	2.55	22	
Methylene Chloride	530.3	50.0	ug/L	501	ND	106	69-140	1.14	19	
Acrylonitrile	634.7	50.0	ug/L	502	ND	126	38-147	3.54	30	
trans-1,2-Dichloroethylene	492.0	10.0	ug/L	501	ND	98.2	69-144	2.73	22	
1,1-Dichloroethane	511.7	10.0	ug/L	501	ND	102	70-138	4.58	20	
Vinyl Acetate	1924	50.0	ug/L	1400	ND	137	58-142	1.61	24	
cis-1,2-Dichloroethylene	502.1	10.0	ug/L	504	ND	99.7	68-151	4.19	22	
2-Butanone (MEK)	1093	100	ug/L	1000	ND	109	50-160	2.65	23	
Bromochloromethane	551.4	10.0	ug/L	504	ND	109	65-143	0.765	22	
Chloroform	527.2	10.0	ug/L	501	ND	105	71-143	1.51	21	
1,1,1-Trichloroethane	492.6	10.0	ug/L	501	ND	98.3	63-133	4.12	23	
Carbon Tetrachloride	494.4	10.0	ug/L	501	ND	98.7	63-142	5.26	22	
Benzene	474.5	10.0	ug/L	504	ND	94.1	69-133	2.99	18	
1,2-Dichloroethane	567.5	10.0	ug/L	501	ND	113	63-138	0.964	20	
Trichloroethylene	469.6	10.0	ug/L	501	ND	93.7	71-133	4.01	23	
1,2-Dichloropropane	483.9	10.0	ug/L	501	ND	96.6	69-132	3.87	20	
Dibromomethane	560.6	10.0	ug/L	504	ND	111	70-147	1.76	22	
Bromodichloromethane	543.6	10.0	ug/L	501	ND	109	67-130	2.47	21	
cis-1,3-Dichloropropene	444.1	10.0	ug/L	501	ND	88.7	61-126	0.113	21	
4-Methyl-2-pentanone (MIBK)	1073	50.0	ug/L	1000	ND	107	55-147	7.98	23	
Toluene	457.5	10.0	ug/L	505	ND	90.6	71-133	5.92	19	
trans-1,3-Dichloropropene	499.2	10.0	ug/L	501	ND	99.7	63-124	1.09	21	
1,1,2-Trichloroethane	605.5	10.0	ug/L	501	ND	121	69-133	1.06	19	
Tetrachloroethylene	456.8	10.0	ug/L	501	ND	91.2	70-124	4.60	24	
2-Hexanone (MBK)	905.0	50.0	ug/L	1000	ND	90.5	53-141	7.49	24	
Dibromochloromethane	539.2	10.0	ug/L	501	ND	108	74-122	2.38	21	

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CERTIFICATE OF ANALYSIS

1IC0852

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IC0808 - EPA 5030B - EPA 8260D										
Matrix Spike Dup (1IC0808-MSD1)	Source: 1IC0568-01RE1 Prepared: 03/17/25 00:00 Analyzed: 03/17/25 23:55									
1,2-Dibromoethane	534.8	10.0	ug/L	502	ND	106	66-127	1.87	23	
Chlorobenzene	440.0	10.0	ug/L	501	ND	87.9	76-116	3.75	21	
1,1,1,2-Tetrachloroethane	480.8	10.0	ug/L	503	ND	95.5	77-121	2.06	25	
Ethylbenzene	419.3	10.0	ug/L	502	ND	83.6	73-124	5.29	20	
Xylenes, total	1317	20.0	ug/L	1510	ND	87.2	75-123	3.61	20	
Styrene	483.2	10.0	ug/L	504	ND	95.9	70-120	1.64	23	
Bromoform	550.4	10.0	ug/L	501	ND	110	70-124	2.76	22	
1,2,3-Trichloropropane	558.1	10.0	ug/L	503	ND	111	62-135	1.52	28	
trans-1,4-Dichloro-2-butene	956.0	50.0	ug/L	1000	ND	95.6	50-120	3.55	26	
1,1,2,2-Tetrachloroethane	465.6	10.0	ug/L	501	ND	92.9	63-126	2.28	24	
1,4-Dichlorobenzene	400.5	10.0	ug/L	501	ND	79.9	72-119	1.29	24	
1,2-Dichlorobenzene	423.9	10.0	ug/L	501	ND	84.6	71-117	0.963	24	
1,2-Dibromo-3-chloropropane	424.2	50.0	ug/L	501	ND	84.6	49-134	6.02	28	
Surrogate: Dibromofluoromethane	604		ug/L	502		120	57-134			
Surrogate: Dibromofluoromethane	604		ug/L	502		120	75-136			
Surrogate: 1,2-Dichloroethane-d4	661		ug/L	501		132	53-140			
Surrogate: 1,2-Dichloroethane-d4	661		ug/L	501		132	61-142			
Surrogate: Toluene-d8	500		ug/L	504		99.3	86-114			
Surrogate: Toluene-d8	500		ug/L	504		99.3	82-121			
Surrogate: 4-Bromofluorobenzene	531		ug/L	501		106	78-121			
Surrogate: 4-Bromofluorobenzene	531		ug/L	501		106	80-116			
Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IC0736 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Blank (1IC0736-BLK1)	Prepared: 03/14/25 16:00 Analyzed: 03/20/25 01:49									
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							B
Zinc, total	<0.0200	0.0200	mg/L							
LCS (1IC0736-BS1)	Prepared: 03/14/25 16:00 Analyzed: 03/20/25 01:55									

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1IC0852

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IC0736 - EPA 3005A Total Recoverable Metals - EPA 6020A										
LCS (1IC0736-BS1)				Prepared: 03/14/25 16:00 Analyzed: 03/20/25 01:55						
Antimony, total	0.0874	0.0020	mg/L	0.100		87.4	80-120			
Arsenic, total	0.0929	0.0040	mg/L	0.100		92.9	80-120			
Barium, total	0.106	0.0040	mg/L	0.100		106	80-120			
Beryllium, total	0.0921	0.0040	mg/L	0.100		92.1	80-120			
Cadmium, total	0.0917	0.0008	mg/L	0.100		91.7	80-120			
Chromium, total	0.0926	0.0080	mg/L	0.100		92.6	80-120			
Cobalt, total	0.103	0.0004	mg/L	0.100		103	80-120			
Copper, total	0.0996	0.0040	mg/L	0.100		99.6	80-120			
Lead, total	0.0974	0.0040	mg/L	0.100		97.4	80-120			
Nickel, total	0.102	0.0040	mg/L	0.100		102	80-120			
Selenium, total	0.0967	0.0040	mg/L	0.100		96.7	80-120			
Silver, total	0.0977	0.0040	mg/L	0.100		97.7	80-120			
Thallium, total	0.0962	0.0020	mg/L	0.100		96.2	80-120			
Vanadium, total	0.0978	0.0200	mg/L	0.100		97.8	80-120			
Zinc, total	0.0927	0.0200	mg/L	0.100		92.7	80-120			
Matrix Spike (1IC0736-MS1)				Source: 1IC0852-01		Prepared: 03/14/25 16:00 Analyzed: 03/20/25 02:08				
Antimony, total	0.0896	0.0020	mg/L	0.100	ND	89.6	75-125			
Arsenic, total	0.0982	0.0040	mg/L	0.100	0.0022	96.0	75-125			
Barium, total	0.303	0.0040	mg/L	0.100	0.0541	249	75-125			M1
Beryllium, total	0.0903	0.0040	mg/L	0.100	ND	90.3	75-125			
Cadmium, total	0.0906	0.0008	mg/L	0.100	ND	90.6	75-125			
Chromium, total	0.0941	0.0080	mg/L	0.100	0.0006	94.1	75-125			
Cobalt, total	0.104	0.0004	mg/L	0.100	ND	104	75-125			
Copper, total	0.0951	0.0040	mg/L	0.100	0.0016	93.6	75-125			
Lead, total	0.0921	0.0040	mg/L	0.100	ND	92.1	75-125			
Nickel, total	0.102	0.0040	mg/L	0.100	0.0048	97.3	75-125			
Selenium, total	0.0943	0.0040	mg/L	0.100	ND	94.3	75-125			
Silver, total	0.0956	0.0040	mg/L	0.100	ND	95.6	75-125			
Thallium, total	0.0931	0.0020	mg/L	0.100	0.0003	92.8	75-125			
Vanadium, total	0.101	0.0200	mg/L	0.100	ND	101	75-125			
Zinc, total	0.0983	0.0200	mg/L	0.100	ND	98.3	75-125			
Matrix Spike Dup (1IC0736-MSD1)				Source: 1IC0852-01		Prepared: 03/14/25 16:00 Analyzed: 03/20/25 02:08				
Antimony, total	0.0896	0.0020	mg/L	0.100	ND	89.6	75-125	0.00	20	
Arsenic, total	0.0982	0.0040	mg/L	0.100	0.0022	96.0	75-125	0.00	20	
Barium, total	0.303	0.0040	mg/L	0.100	0.0541	249	75-125	0.00	20	M1
Beryllium, total	0.0903	0.0040	mg/L	0.100	ND	90.3	75-125	0.00	20	
Cadmium, total	0.0906	0.0008	mg/L	0.100	ND	90.6	75-125	0.00	20	
Chromium, total	0.0941	0.0080	mg/L	0.100	0.0006	94.1	75-125	0.00	20	
Cobalt, total	0.104	0.0004	mg/L	0.100	ND	104	75-125	0.00	20	
Copper, total	0.0951	0.0040	mg/L	0.100	0.0016	93.6	75-125	0.00	20	
Lead, total	0.0921	0.0040	mg/L	0.100	ND	92.1	75-125	0.00	20	
Nickel, total	0.102	0.0040	mg/L	0.100	0.0048	97.3	75-125	0.00	20	
Selenium, total	0.0943	0.0040	mg/L	0.100	ND	94.3	75-125	0.00	20	

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11C0852

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11C0736 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Matrix Spike Dup (11C0736-MSD1)		Source: 11C0852-01		Prepared: 03/14/25 16:00 Analyzed: 03/20/25 02:08						
Silver, total	0.0956	0.0040	mg/L	0.100	ND	95.6	75-125	0.00	20	
Thallium, total	0.0931	0.0020	mg/L	0.100	0.0003	92.8	75-125	0.00	20	
Vanadium, total	0.101	0.0200	mg/L	0.100	ND	101	75-125	0.00	20	
Zinc, total	0.0983	0.0200	mg/L	0.100	ND	98.3	75-125	0.00	20	
Post Spike (11C0736-PS1)		Source: 11C0852-01		Prepared: 03/14/25 16:00 Analyzed: 03/20/25 02:20						
Antimony, total	0.0728		mg/L	0.0800	0.0001	90.8	80-120			M1
Arsenic, total	0.0796		mg/L	0.0800	0.0021	96.8	80-120			
Barium, total	0.275		mg/L	0.0800	0.0531	277	80-120			
Beryllium, total	0.0742		mg/L	0.0800	-0.00001	92.8	80-120			
Cadmium, total	0.0736		mg/L	0.0800	0.00005	91.9	80-120			
Chromium, total	0.0785		mg/L	0.0800	0.0006	97.4	80-120			
Cobalt, total	0.0831		mg/L	0.0800	0.0002	104	80-120			
Copper, total	0.0760		mg/L	0.0800	0.0016	93.0	80-120			
Lead, total	0.0751		mg/L	0.0800	0.00004	93.8	80-120			
Nickel, total	0.0822		mg/L	0.0800	0.0047	96.8	80-120			
Selenium, total	0.0759		mg/L	0.0800	0.0004	94.4	80-120			
Silver, total	0.0767		mg/L	0.0800	-0.0001	95.8	80-120			
Thallium, total	0.0758		mg/L	0.0800	0.0003	94.4	80-120			
Vanadium, total	0.0864		mg/L	0.0800	0.0085	97.4	80-120			
Zinc, total	0.0780		mg/L	0.0800	0.0057	90.4	80-120			

Definitions

B:	The target analyte was detected in the blank at or above the method acceptance criteria.
M1:	Matrix spike recovery is above acceptance limits.
Q4:	ICV recovery is above acceptance limits. Values that are <RL are not affected
R1:	Duplicate RPD is outside acceptance criteria.
RL:	Reporting Limit
RPD:	Relative Percent Difference
S2:	Surrogate recovery is below acceptance limits.

Cooler Receipt Log

Cooler ID:	Default Cooler	Temp:	0.0°C	Cooler ID:	New Cooler	Temp:	2.9°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

11C0852

Report Comments

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

Reviewed and Approved By:

Heather Murphy
Customer Relationship Specialist
heather.murphy@microbac.com
03/26/25 16:44



600 E
Newt
641-7



1 I C 0 8 5 2

HLW Engineering
PM: Heather Murphy

Page 1 of

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Page 50 of 51

SITE INFORMATION

Sampler: LGH
Project: Fremont Co-New Regs
6046

REPORT TO

Todd Whipple
HLW Engineering
204 West Broad St
Story City, IA 50248

INVOICE TO

Casey Moyer
Fremont County Landfill
PO Box 487, 2879 250th St
Sidney, IA 51652

SPECIAL INSTRUCTIONS

None

Turn Around Time

☒ Standard ☐ RUSH, need by ___/___/___

LAB USE ONLY

Work Order IC0852

Temperature 0.0/2.9

Turn-Cooler: No

☐ Custody Seal
☒ Containers Intact
☒ COC/Labels Agree
☐ Preservation Confirmed
☒ Received on Ice

Number	Sample Identification / Client ID	Matrix	Sample Type	Date	Time	Number of Containers	Analyses	Lab Sample Number
-001	MW-2 (b)	Aqueous	GRAB	3/11/25	9:13	7	Indfill-app1-voc-group Indfill-app1-metals-6020	01
-001	MW-18 (b)	Aqueous	GRAB	3/11/25	8:57	7	Indfill-app1-voc-group Indfill-app1-metals-6020	02
-001	MW-3	Aqueous	GRAB	3/11/25	10:19	7	Indfill-app1-voc-group Indfill-app1-metals-6020	03
-001	MW-9	Aqueous	GRAB	3/11/25	10:40	7	Indfill-app1-voc-group Indfill-app1-metals-6020	04
-001	MW-12	Aqueous	GRAB	3/11/25	11:11	7	Indfill-app1-voc-group Indfill-app1-metals-6020	05
-001	MW-14	Aqueous	GRAB	3/11/25	11:39	7	Indfill-app1-voc-group Indfill-app1-metals-6020	06
-001	MW-15	Aqueous	GRAB	3/11/25	9:26	7	Indfill-app1-voc-group Indfill-app1-metals-6020	07

Relinquished By LGH Date/Time 3/11/25

Relinquished By [Signature] Date/Time 3/12/2025 10:20 AM

Remarks:

Received By _____ Date/Time _____

Received for Lab By [Signature] Date/Time 3/12/2025 10:20 AM

Original - Lab Copy Yellow - Sampler Copy



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Newton, IA 5
641-792-845

CH



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HLW Engineering
PM: Heather Murphy

Page 2 of
Printed: 2/18/2025 10:47:57A

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Page 51 of 51

SITE INFORMATION

Sampler: LeH
Project: Fremont Co-New Regs
6046

REPORT TO

Todd Whipple
HLW Engineering
204 West Broad St
Story City, IA 50248

INVOICE TO

Casey Moyer
Fremont County Landfill
PO Box 487, 2879 250th St
Sidney, IA 51652

SPECIAL INSTRUCTIONS

None

Turn Around Time

☒ Standard ☐ RUSH, need by ___/___/___

LAB USE ONLY

Work Order IC0852

Temperature 0.0/2.9

Turn-Cooler: No

☐ Custody Seal
☒ Containers Intact
☒ COC/Labels Agree
☐ Preservation Confirmed
☒ Received on Ice

Number	Sample Identification / Client ID	Matrix	Sample Type	Date	Time	Number of Containers	Analyses	Lab Sample Number
-001	MW-19	Aqueous	GRAB	3/11/25	11:23	7	Indfll-app1-voc-group Indfll-app1-metals-6020	<u>08</u>
-001	MW-21	Aqueous	GRAB	3/11/25	9:43	7	Indfll-app1-voc-group Indfll-app1-metals-6020	<u>09</u>
-001	MW-23	Aqueous	GRAB	3/11/25	10:08	7	Indfll-app1-voc-group Indfll-app1-metals-6020	<u>10</u>
-001	GWD-1 <u>NO SAMPLE</u>	Aqueous	GRAB	___/___/___	___	___	Indfll-app1-voc-group Indfll-app1-metals-6020	___
-001	GWD-2	Aqueous	GRAB	3/11/25	9:56	7	Indfll-app1-voc-group Indfll-app1-metals-6020	<u>11</u>
-001	Duplicate	Aqueous	GRAB	3/11/25	10:40	7	Indfll-app1-voc-group Indfll-app1-metals-6020	<u>12</u>

S. LORE 3/11/25
Relinquished By Date/Time

Received By Date/Time

[Signature] 3/12/25 10:20
Received for Lab By Date/Time
Original - Lab Copy Yellow - Sampler Copy

Remarks:



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1110767

Project Description

6046

For:

Todd Whipple

HLW Engineering

204 West Broad St

Story City, IA 50248

Heather Murphy

Customer Relationship Specialist

Friday, October 3, 2025

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

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

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CERTIFICATE OF ANALYSIS

11I0767

HLW Engineering

Todd Whipple
204 West Broad St
Story City, IA 50248

Project Name: 6046

Project / PO Number: N/A
Received: 09/09/2025
Reported: 10/03/2025

Sample Summary Report

<u>Sample Name</u>	<u>Laboratory ID</u>	<u>Client Matrix</u>	<u>Sample Type</u>	<u>Sample Begin</u>	<u>Sample Taken</u>	<u>Lab Received</u>
MW-2 (b)	11I0767-01	Aqueous	GRAB		09/08/25 09:30	09/09/25 10:50
MW-3	11I0767-02	Aqueous	GRAB		09/08/25 11:13	09/09/25 10:50
MW-9	11I0767-03	Aqueous	GRAB		09/08/25 11:00	09/09/25 10:50
MW-12	11I0767-04	Aqueous	GRAB		09/08/25 12:00	09/09/25 10:50
MW-14	11I0767-05	Aqueous	GRAB		09/08/25 11:34	09/09/25 10:50
MW-15	11I0767-06	Aqueous	GRAB		09/08/25 09:44	09/09/25 10:50
MW-19	11I0767-07	Aqueous	GRAB		09/08/25 11:45	09/09/25 10:50
MW-21	11I0767-08	Aqueous	GRAB		09/08/25 10:09	09/09/25 10:50
MW-23	11I0767-09	Aqueous	GRAB		09/08/25 10:40	09/09/25 10:50
Duplicate	11I0767-10	Aqueous	GRAB		09/08/25 00:00	09/09/25 10:50



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CERTIFICATE OF ANALYSIS

11I0767

Analytical Testing Parameters

Client Sample ID:	MW-2 (b)	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	09/08/2025 9:30
Lab Sample ID:	11I0767-01		

Determination of Volatile Organic Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260D							
Chloromethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1712	RAF
Vinyl Chloride	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1712	RAF
Bromomethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1712	RAF
Chloroethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1712	RAF
Trichlorofluoromethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1712	RAF
1,1-Dichloroethylene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1712	RAF
Acetone	<10.0	10.0	ug/L		09/11/25 0000	09/11/25 1712	RAF
Methyl Iodide	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1712	RAF
Carbon Disulfide	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1712	RAF
Methylene Chloride	<5.0	5.0	ug/L		09/11/25 0000	09/11/25 1712	RAF
Acrylonitrile	<5.0	5.0	ug/L		09/11/25 0000	09/11/25 1712	RAF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1712	RAF
1,1-Dichloroethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1712	RAF
Vinyl Acetate	<5.0	5.0	ug/L		09/11/25 0000	09/11/25 1712	RAF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1712	RAF
2-Butanone (MEK)	<10.0	10.0	ug/L		09/11/25 0000	09/11/25 1712	RAF
Bromochloromethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1712	RAF
Chloroform	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1712	RAF
1,1,1-Trichloroethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1712	RAF
Carbon Tetrachloride	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1712	RAF
Benzene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1712	RAF
1,2-Dichloroethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1712	RAF
Trichloroethylene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1712	RAF
1,2-Dichloropropane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1712	RAF
Dibromomethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1712	RAF
Bromodichloromethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1712	RAF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1712	RAF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L		09/11/25 0000	09/11/25 1712	RAF
Toluene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1712	RAF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1712	RAF
1,1,2-Trichloroethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1712	RAF
Tetrachloroethylene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1712	RAF
2-Hexanone (MBK)	<5.0	5.0	ug/L		09/11/25 0000	09/11/25 1712	RAF
Dibromochloromethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1712	RAF
1,2-Dibromoethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1712	RAF
Chlorobenzene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1712	RAF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1712	RAF
Ethylbenzene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1712	RAF
Xylenes, total	<2.0	2.0	ug/L		09/11/25 0000	09/11/25 1712	RAF
Styrene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1712	RAF

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Page 3 of 47



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CERTIFICATE OF ANALYSIS

11I0767

Client Sample ID: MW-2 (b)
Sample Matrix: Aqueous
Lab Sample ID: 11I0767-01

Collected By: Whipple, Todd
Collection Date: 09/08/2025 9:30

Determination of Volatile Organic Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
Bromoform	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1712	RAF
1,2,3-Trichloropropane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1712	RAF
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L		09/11/25 0000	09/11/25 1712	RAF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1712	RAF
1,4-Dichlorobenzene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1712	RAF
1,2-Dichlorobenzene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1712	RAF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L		09/11/25 0000	09/11/25 1712	RAF
Surrogate: Dibromofluoromethane	94.5	Limit: 57-128	% Rec		09/11/25 0000	09/11/25 1712	RAF
Surrogate: Dibromofluoromethane	94.5	Limit: 75-136	% Rec		09/11/25 0000	09/11/25 1712	RAF
Surrogate: 1,2-Dichloroethane-d4	92.7	Limit: 61-142	% Rec		09/11/25 0000	09/11/25 1712	RAF
Surrogate: 1,2-Dichloroethane-d4	92.7	Limit: 49-135	% Rec		09/11/25 0000	09/11/25 1712	RAF
Surrogate: Toluene-d8	99.6	Limit: 82-116	% Rec		09/11/25 0000	09/11/25 1712	RAF
Surrogate: Toluene-d8	99.6	Limit: 82-121	% Rec		09/11/25 0000	09/11/25 1712	RAF
Surrogate: 4-Bromofluorobenzene	92.4	Limit: 80-116	% Rec		09/11/25 0000	09/11/25 1712	RAF
Surrogate: 4-Bromofluorobenzene	92.4	Limit: 77-114	% Rec		09/11/25 0000	09/11/25 1712	RAF

Determination of Total Metals	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A							
Antimony, total	0.0014	0.0010	mg/L		09/11/25 0837	09/11/25 1740	JAR
Arsenic, total	<0.0020	0.0020	mg/L		09/11/25 0837	09/11/25 1740	JAR
Barium, total	0.180	0.0010	mg/L		09/11/25 0837	09/11/25 1740	JAR
Beryllium, total	<0.0005	0.0005	mg/L		09/11/25 0837	09/11/25 1740	JAR
Cadmium, total	0.0006	0.0002	mg/L		09/11/25 0837	09/11/25 1740	JAR
Chromium, total	0.0053	0.0010	mg/L		09/11/25 0837	09/11/25 1740	JAR
Cobalt, total	<0.0005	0.0005	mg/L		09/11/25 0837	09/11/25 1740	JAR
Copper, total	<0.0050	0.0050	mg/L		09/30/25 1435	10/01/25 2027	RVV
Lead, total	<0.0010	0.0010	mg/L		09/11/25 0837	09/11/25 1740	JAR
Nickel, total	0.0051	0.0050	mg/L		09/11/25 0837	09/11/25 1740	JAR
Selenium, total	<0.0020	0.0020	mg/L		09/11/25 0837	09/11/25 1740	JAR
Silver, total	<0.0050	0.0050	mg/L		09/11/25 0837	09/11/25 1740	JAR
Thallium, total	<0.0005	0.0005	mg/L		09/11/25 0837	09/11/25 1740	JAR
Vanadium, total	<0.0020	0.0020	mg/L		09/11/25 0837	09/11/25 1740	JAR
Zinc, total	0.0173	0.0050	mg/L		09/11/25 0837	09/11/25 1740	JAR

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CERTIFICATE OF ANALYSIS

11I0767

Client Sample ID: MW-3
Sample Matrix: Aqueous
Lab Sample ID: 11I0767-02

Collected By: Whipple, Todd
Collection Date: 09/08/2025 11:13

Determination of Volatile Organic Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260D							
Chloromethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1735	RAF
Vinyl Chloride	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1735	RAF
Bromomethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1735	RAF
Chloroethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1735	RAF
Trichlorofluoromethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1735	RAF
1,1-Dichloroethylene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1735	RAF
Acetone	<10.0	10.0	ug/L		09/11/25 0000	09/11/25 1735	RAF
Methyl Iodide	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1735	RAF
Carbon Disulfide	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1735	RAF
Methylene Chloride	<5.0	5.0	ug/L		09/11/25 0000	09/11/25 1735	RAF
Acrylonitrile	<5.0	5.0	ug/L		09/11/25 0000	09/11/25 1735	RAF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1735	RAF
1,1-Dichloroethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1735	RAF
Vinyl Acetate	<5.0	5.0	ug/L		09/11/25 0000	09/11/25 1735	RAF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1735	RAF
2-Butanone (MEK)	<10.0	10.0	ug/L		09/11/25 0000	09/11/25 1735	RAF
Bromochloromethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1735	RAF
Chloroform	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1735	RAF
1,1,1-Trichloroethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1735	RAF
Carbon Tetrachloride	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1735	RAF
Benzene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1735	RAF
1,2-Dichloroethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1735	RAF
Trichloroethylene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1735	RAF
1,2-Dichloropropane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1735	RAF
Dibromomethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1735	RAF
Bromodichloromethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1735	RAF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1735	RAF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L		09/11/25 0000	09/11/25 1735	RAF
Toluene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1735	RAF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1735	RAF
1,1,2-Trichloroethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1735	RAF
Tetrachloroethylene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1735	RAF
2-Hexanone (MBK)	<5.0	5.0	ug/L		09/11/25 0000	09/11/25 1735	RAF
Dibromochloromethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1735	RAF
1,2-Dibromoethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1735	RAF
Chlorobenzene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1735	RAF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1735	RAF
Ethylbenzene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1735	RAF
Xylenes, total	<2.0	2.0	ug/L		09/11/25 0000	09/11/25 1735	RAF
Styrene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1735	RAF
Bromoform	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1735	RAF
1,2,3-Trichloropropane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1735	RAF

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Page 5 of 47



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CERTIFICATE OF ANALYSIS

11I0767

Client Sample ID: MW-3
Sample Matrix: Aqueous
Lab Sample ID: 11I0767-02

Collected By: Whipple, Todd
Collection Date: 09/08/2025 11:13

Determination of Volatile Organic Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L		09/11/25 0000	09/11/25 1735	RAF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1735	RAF
1,4-Dichlorobenzene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1735	RAF
1,2-Dichlorobenzene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1735	RAF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L		09/11/25 0000	09/11/25 1735	RAF
Surrogate: Dibromofluoromethane	98.6	Limit: 57-128	% Rec		09/11/25 0000	09/11/25 1735	RAF
Surrogate: Dibromofluoromethane	98.6	Limit: 75-136	% Rec		09/11/25 0000	09/11/25 1735	RAF
Surrogate: 1,2-Dichloroethane-d4	97.3	Limit: 61-142	% Rec		09/11/25 0000	09/11/25 1735	RAF
Surrogate: 1,2-Dichloroethane-d4	97.3	Limit: 49-135	% Rec		09/11/25 0000	09/11/25 1735	RAF
Surrogate: Toluene-d8	98.5	Limit: 82-116	% Rec		09/11/25 0000	09/11/25 1735	RAF
Surrogate: Toluene-d8	98.5	Limit: 82-121	% Rec		09/11/25 0000	09/11/25 1735	RAF
Surrogate: 4-Bromofluorobenzene	91.0	Limit: 77-114	% Rec		09/11/25 0000	09/11/25 1735	RAF
Surrogate: 4-Bromofluorobenzene	91.0	Limit: 80-116	% Rec		09/11/25 0000	09/11/25 1735	RAF

Determination of Total Metals	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A							
Antimony, total	<0.0010	0.0010	mg/L		09/11/25 0837	09/11/25 1750	JAR
Arsenic, total	<0.0020	0.0020	mg/L		09/11/25 0837	09/11/25 1750	JAR
Barium, total	0.815	0.0010	mg/L		09/11/25 0837	09/11/25 1750	JAR
Beryllium, total	<0.0005	0.0005	mg/L		09/11/25 0837	09/11/25 1750	JAR
Cadmium, total	<0.0002	0.0002	mg/L		09/11/25 0837	09/11/25 1750	JAR
Chromium, total	<0.0010	0.0010	mg/L		09/11/25 0837	09/11/25 1750	JAR
Cobalt, total	<0.0005	0.0005	mg/L		09/11/25 0837	09/11/25 1750	JAR
Copper, total	<0.0050	0.0050	mg/L		09/11/25 0837	09/11/25 1750	JAR
Lead, total	<0.0010	0.0010	mg/L		09/11/25 0837	09/11/25 1750	JAR
Nickel, total	<0.0050	0.0050	mg/L		09/11/25 0837	09/11/25 1750	JAR
Selenium, total	<0.0020	0.0020	mg/L		09/11/25 0837	09/11/25 1750	JAR
Silver, total	<0.0050	0.0050	mg/L		09/11/25 0837	09/11/25 1750	JAR
Thallium, total	<0.0005	0.0005	mg/L		09/11/25 0837	09/11/25 1750	JAR
Vanadium, total	0.0048	0.0020	mg/L		09/11/25 0837	09/11/25 1750	JAR
Zinc, total	0.0190	0.0050	mg/L		09/11/25 0837	09/11/25 1750	JAR

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Page 6 of 47



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CERTIFICATE OF ANALYSIS

11I0767

Client Sample ID: MW-9
Sample Matrix: Aqueous
Lab Sample ID: 11I0767-03

Collected By: Whipple, Todd
Collection Date: 09/08/2025 11:00

Determination of Volatile Organic Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260D							
Chloromethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1758	RAF
Vinyl Chloride	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1758	RAF
Bromomethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1758	RAF
Chloroethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1758	RAF
Trichlorofluoromethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1758	RAF
1,1-Dichloroethylene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1758	RAF
Acetone	<10.0	10.0	ug/L		09/11/25 0000	09/11/25 1758	RAF
Methyl Iodide	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1758	RAF
Carbon Disulfide	1.2	1.0	ug/L		09/11/25 0000	09/11/25 1758	RAF
Methylene Chloride	<5.0	5.0	ug/L		09/11/25 0000	09/11/25 1758	RAF
Acrylonitrile	<5.0	5.0	ug/L		09/11/25 0000	09/11/25 1758	RAF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1758	RAF
1,1-Dichloroethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1758	RAF
Vinyl Acetate	<5.0	5.0	ug/L		09/11/25 0000	09/11/25 1758	RAF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1758	RAF
2-Butanone (MEK)	<10.0	10.0	ug/L		09/11/25 0000	09/11/25 1758	RAF
Bromochloromethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1758	RAF
Chloroform	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1758	RAF
1,1,1-Trichloroethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1758	RAF
Carbon Tetrachloride	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1758	RAF
Benzene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1758	RAF
1,2-Dichloroethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1758	RAF
Trichloroethylene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1758	RAF
1,2-Dichloropropane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1758	RAF
Dibromomethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1758	RAF
Bromodichloromethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1758	RAF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1758	RAF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L		09/11/25 0000	09/11/25 1758	RAF
Toluene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1758	RAF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1758	RAF
1,1,2-Trichloroethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1758	RAF
Tetrachloroethylene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1758	RAF
2-Hexanone (MBK)	<5.0	5.0	ug/L		09/11/25 0000	09/11/25 1758	RAF
Dibromochloromethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1758	RAF
1,2-Dibromoethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1758	RAF
Chlorobenzene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1758	RAF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1758	RAF
Ethylbenzene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1758	RAF
Xylenes, total	<2.0	2.0	ug/L		09/11/25 0000	09/11/25 1758	RAF
Styrene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1758	RAF
Bromoform	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1758	RAF
1,2,3-Trichloropropane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1758	RAF

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Page 7 of 47



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CERTIFICATE OF ANALYSIS

11I0767

Client Sample ID: MW-9
Sample Matrix: Aqueous
Lab Sample ID: 11I0767-03

Collected By: Whipple, Todd
Collection Date: 09/08/2025 11:00

Determination of Volatile Organic Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L		09/11/25 0000	09/11/25 1758	RAF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1758	RAF
1,4-Dichlorobenzene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1758	RAF
1,2-Dichlorobenzene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1758	RAF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L		09/11/25 0000	09/11/25 1758	RAF
Surrogate: Dibromofluoromethane	97.2	Limit: 57-128	% Rec		09/11/25 0000	09/11/25 1758	RAF
Surrogate: Dibromofluoromethane	97.2	Limit: 75-136	% Rec		09/11/25 0000	09/11/25 1758	RAF
Surrogate: 1,2-Dichloroethane-d4	93.7	Limit: 61-142	% Rec		09/11/25 0000	09/11/25 1758	RAF
Surrogate: 1,2-Dichloroethane-d4	93.7	Limit: 49-135	% Rec		09/11/25 0000	09/11/25 1758	RAF
Surrogate: Toluene-d8	100	Limit: 82-116	% Rec		09/11/25 0000	09/11/25 1758	RAF
Surrogate: Toluene-d8	100	Limit: 82-121	% Rec		09/11/25 0000	09/11/25 1758	RAF
Surrogate: 4-Bromofluorobenzene	91.2	Limit: 80-116	% Rec		09/11/25 0000	09/11/25 1758	RAF
Surrogate: 4-Bromofluorobenzene	91.2	Limit: 77-114	% Rec		09/11/25 0000	09/11/25 1758	RAF

Determination of Total Metals	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A							
Antimony, total	<0.0010	0.0010	mg/L		09/11/25 0837	09/11/25 1752	JAR
Arsenic, total	<0.0020	0.0020	mg/L		09/11/25 0837	09/11/25 1752	JAR
Barium, total	0.332	0.0010	mg/L		09/11/25 0837	09/11/25 1752	JAR
Beryllium, total	<0.0005	0.0005	mg/L		09/11/25 0837	09/11/25 1752	JAR
Cadmium, total	0.0003	0.0002	mg/L		09/11/25 0837	09/11/25 1752	JAR
Chromium, total	0.0012	0.0010	mg/L		09/11/25 0837	09/11/25 1752	JAR
Cobalt, total	0.0006	0.0005	mg/L		09/11/25 0837	09/11/25 1752	JAR
Copper, total	<0.0050	0.0050	mg/L		09/11/25 0837	09/11/25 1752	JAR
Lead, total	<0.0010	0.0010	mg/L		09/11/25 0837	09/11/25 1752	JAR
Nickel, total	<0.0050	0.0050	mg/L		09/11/25 0837	09/11/25 1752	JAR
Selenium, total	<0.0020	0.0020	mg/L		09/11/25 0837	09/11/25 1752	JAR
Silver, total	<0.0050	0.0050	mg/L		09/11/25 0837	09/11/25 1752	JAR
Thallium, total	<0.0005	0.0005	mg/L		09/11/25 0837	09/11/25 1752	JAR
Vanadium, total	<0.0020	0.0020	mg/L		09/11/25 0837	09/11/25 1752	JAR
Zinc, total	0.0200	0.0050	mg/L		09/11/25 0837	09/11/25 1752	JAR

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Page 8 of 47



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

11I0767

Client Sample ID: MW-12
Sample Matrix: Aqueous
Lab Sample ID: 11I0767-04

Collected By: Whipple, Todd
Collection Date: 09/08/2025 12:00

Determination of Volatile Organic Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260D							
Chloromethane	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1418	RAF
Vinyl Chloride	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1418	RAF
Bromomethane	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1418	RAF
Chloroethane	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1418	RAF
Trichlorofluoromethane	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1418	RAF
1,1-Dichloroethylene	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1418	RAF
Acetone	<10.0	10.0	ug/L		09/15/25 0000	09/15/25 1418	RAF
Methyl Iodide	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1418	RAF
Carbon Disulfide	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1418	RAF
Methylene Chloride	<5.0	5.0	ug/L		09/15/25 0000	09/15/25 1418	RAF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1418	RAF
1,1-Dichloroethane	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1418	RAF
Vinyl Acetate	<5.0	5.0	ug/L		09/15/25 0000	09/15/25 1418	RAF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1418	RAF
2-Butanone (MEK)	<10.0	10.0	ug/L		09/15/25 0000	09/15/25 1418	RAF
Bromochloromethane	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1418	RAF
Chloroform	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1418	RAF
1,1,1-Trichloroethane	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1418	RAF
Carbon Tetrachloride	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1418	RAF
Benzene	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1418	RAF
1,2-Dichloroethane	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1418	RAF
Trichloroethylene	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1418	RAF
1,2-Dichloropropane	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1418	RAF
Dibromomethane	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1418	RAF
Bromodichloromethane	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1418	RAF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1418	RAF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L		09/15/25 0000	09/15/25 1418	RAF
Toluene	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1418	RAF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1418	RAF
1,1,2-Trichloroethane	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1418	RAF
Tetrachloroethylene	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1418	RAF
2-Hexanone (MBK)	<5.0	5.0	ug/L		09/15/25 0000	09/15/25 1418	RAF
Dibromochloromethane	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1418	RAF
1,2-Dibromoethane	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1418	RAF
Chlorobenzene	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1418	RAF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1418	RAF
Ethylbenzene	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1418	RAF
Xylenes, total	<2.0	2.0	ug/L		09/15/25 0000	09/15/25 1418	RAF
Styrene	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1418	RAF
Bromoform	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1418	RAF
1,2,3-Trichloropropane	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1418	RAF
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L		09/15/25 0000	09/15/25 1418	RAF

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Page 9 of 47



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CERTIFICATE OF ANALYSIS

11I0767

Client Sample ID: MW-12
Sample Matrix: Aqueous
Lab Sample ID: 11I0767-04

Collected By: Whipple, Todd
Collection Date: 09/08/2025 12:00

Determination of Volatile Organic Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1418	RAF
1,4-Dichlorobenzene	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1418	RAF
1,2-Dichlorobenzene	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1418	RAF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L		09/15/25 0000	09/15/25 1418	RAF
Surrogate: Dibromofluoromethane	109	Limit: 75-136	% Rec		09/15/25 0000	09/15/25 1418	RAF
Surrogate: 1,2-Dichloroethane-d4	106	Limit: 61-142	% Rec		09/15/25 0000	09/15/25 1418	RAF
Surrogate: Toluene-d8	102	Limit: 82-121	% Rec		09/15/25 0000	09/15/25 1418	RAF
Surrogate: 4-Bromofluorobenzene	93.1	Limit: 80-116	% Rec		09/15/25 0000	09/15/25 1418	RAF

Determination of Total Metals	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A							
Antimony, total	<0.0010	0.0010	mg/L		09/11/25 0837	09/11/25 1755	JAR
Arsenic, total	<0.0020	0.0020	mg/L		09/11/25 0837	09/11/25 1755	JAR
Barium, total	0.384	0.0010	mg/L		09/11/25 0837	09/11/25 1755	JAR
Beryllium, total	<0.0005	0.0005	mg/L		09/11/25 0837	09/11/25 1755	JAR
Cadmium, total	0.0009	0.0002	mg/L		09/11/25 0837	09/11/25 1755	JAR
Chromium, total	0.0019	0.0010	mg/L		09/11/25 0837	09/11/25 1755	JAR
Cobalt, total	<0.0005	0.0005	mg/L		09/11/25 0837	09/11/25 1755	JAR
Copper, total	<0.0050	0.0050	mg/L		09/11/25 0837	09/11/25 1755	JAR
Lead, total	<0.0010	0.0010	mg/L		09/11/25 0837	09/11/25 1755	JAR
Nickel, total	<0.0050	0.0050	mg/L		09/11/25 0837	09/11/25 1755	JAR
Selenium, total	<0.0020	0.0020	mg/L		09/11/25 0837	09/11/25 1755	JAR
Silver, total	<0.0050	0.0050	mg/L		09/11/25 0837	09/11/25 1755	JAR
Thallium, total	<0.0005	0.0005	mg/L		09/11/25 0837	09/11/25 1755	JAR
Vanadium, total	<0.0020	0.0020	mg/L		09/11/25 0837	09/11/25 1755	JAR
Zinc, total	0.0069	0.0050	mg/L		09/11/25 0837	09/11/25 1755	JAR

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CERTIFICATE OF ANALYSIS

11I0767

Client Sample ID: MW-14
Sample Matrix: Aqueous
Lab Sample ID: 11I0767-05

Collected By: Whipple, Todd
Collection Date: 09/08/2025 11:34

Determination of Volatile Organic Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260D							
Chloromethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1821	RAF
Vinyl Chloride	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1821	RAF
Bromomethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1821	RAF
Chloroethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1821	RAF
Trichlorofluoromethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1821	RAF
1,1-Dichloroethylene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1821	RAF
Acetone	<10.0	10.0	ug/L		09/11/25 0000	09/11/25 1821	RAF
Methyl Iodide	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1821	RAF
Carbon Disulfide	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1821	RAF
Methylene Chloride	<5.0	5.0	ug/L		09/11/25 0000	09/11/25 1821	RAF
Acrylonitrile	<5.0	5.0	ug/L		09/11/25 0000	09/11/25 1821	RAF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1821	RAF
1,1-Dichloroethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1821	RAF
Vinyl Acetate	<5.0	5.0	ug/L		09/11/25 0000	09/11/25 1821	RAF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1821	RAF
2-Butanone (MEK)	<10.0	10.0	ug/L		09/11/25 0000	09/11/25 1821	RAF
Bromochloromethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1821	RAF
Chloroform	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1821	RAF
1,1,1-Trichloroethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1821	RAF
Carbon Tetrachloride	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1821	RAF
Benzene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1821	RAF
1,2-Dichloroethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1821	RAF
Trichloroethylene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1821	RAF
1,2-Dichloropropane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1821	RAF
Dibromomethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1821	RAF
Bromodichloromethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1821	RAF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1821	RAF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L		09/11/25 0000	09/11/25 1821	RAF
Toluene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1821	RAF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1821	RAF
1,1,2-Trichloroethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1821	RAF
Tetrachloroethylene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1821	RAF
2-Hexanone (MBK)	<5.0	5.0	ug/L		09/11/25 0000	09/11/25 1821	RAF
Dibromochloromethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1821	RAF
1,2-Dibromoethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1821	RAF
Chlorobenzene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1821	RAF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1821	RAF
Ethylbenzene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1821	RAF
Xylenes, total	<2.0	2.0	ug/L		09/11/25 0000	09/11/25 1821	RAF
Styrene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1821	RAF
Bromoform	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1821	RAF
1,2,3-Trichloropropane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1821	RAF

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Page 11 of 47



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CERTIFICATE OF ANALYSIS

11I0767

Client Sample ID: MW-14
Sample Matrix: Aqueous
Lab Sample ID: 11I0767-05

Collected By: Whipple, Todd
Collection Date: 09/08/2025 11:34

Determination of Volatile Organic Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L		09/11/25 0000	09/11/25 1821	RAF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1821	RAF
1,4-Dichlorobenzene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1821	RAF
1,2-Dichlorobenzene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1821	RAF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L		09/11/25 0000	09/11/25 1821	RAF
Surrogate: Dibromofluoromethane	95.3	Limit: 75-136	% Rec		09/11/25 0000	09/11/25 1821	RAF
Surrogate: Dibromofluoromethane	95.3	Limit: 57-128	% Rec		09/11/25 0000	09/11/25 1821	RAF
Surrogate: 1,2-Dichloroethane-d4	96.6	Limit: 61-142	% Rec		09/11/25 0000	09/11/25 1821	RAF
Surrogate: 1,2-Dichloroethane-d4	96.6	Limit: 49-135	% Rec		09/11/25 0000	09/11/25 1821	RAF
Surrogate: Toluene-d8	96.1	Limit: 82-121	% Rec		09/11/25 0000	09/11/25 1821	RAF
Surrogate: Toluene-d8	96.1	Limit: 82-116	% Rec		09/11/25 0000	09/11/25 1821	RAF
Surrogate: 4-Bromofluorobenzene	94.7	Limit: 80-116	% Rec		09/11/25 0000	09/11/25 1821	RAF
Surrogate: 4-Bromofluorobenzene	94.7	Limit: 77-114	% Rec		09/11/25 0000	09/11/25 1821	RAF

Determination of Total Metals	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A							
Antimony, total	<0.0010	0.0010	mg/L		09/11/25 0837	09/11/25 1802	JAR
Arsenic, total	<0.0020	0.0020	mg/L		09/11/25 0837	09/11/25 1802	JAR
Barium, total	0.259	0.0010	mg/L		09/11/25 0837	09/11/25 1802	JAR
Beryllium, total	<0.0005	0.0005	mg/L		09/11/25 0837	09/11/25 1802	JAR
Cadmium, total	0.0005	0.0002	mg/L		09/11/25 0837	09/11/25 1802	JAR
Chromium, total	0.0021	0.0010	mg/L		09/11/25 0837	09/11/25 1802	JAR
Cobalt, total	<0.0005	0.0005	mg/L		09/11/25 0837	09/11/25 1802	JAR
Copper, total	<0.0050	0.0050	mg/L		09/11/25 0837	09/11/25 1802	JAR
Lead, total	<0.0010	0.0010	mg/L		09/11/25 0837	09/11/25 1802	JAR
Nickel, total	<0.0050	0.0050	mg/L		09/11/25 0837	09/11/25 1802	JAR
Selenium, total	0.0041	0.0020	mg/L		09/11/25 0837	09/11/25 1802	JAR
Silver, total	<0.0050	0.0050	mg/L		09/11/25 0837	09/11/25 1802	JAR
Thallium, total	<0.0005	0.0005	mg/L		09/11/25 0837	09/11/25 1802	JAR
Vanadium, total	<0.0020	0.0020	mg/L		09/11/25 0837	09/11/25 1802	JAR
Zinc, total	0.0089	0.0050	mg/L		09/11/25 0837	09/11/25 1802	JAR

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Page 12 of 47



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CERTIFICATE OF ANALYSIS

11I0767

Client Sample ID: MW-15
Sample Matrix: Aqueous
Lab Sample ID: 11I0767-06

Collected By: Whipple, Todd
Collection Date: 09/08/2025 9:44

Determination of Volatile Organic Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260D							
Chloromethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1844	RAF
Vinyl Chloride	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1844	RAF
Bromomethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1844	RAF
Chloroethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1844	RAF
Trichlorofluoromethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1844	RAF
1,1-Dichloroethylene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1844	RAF
Acetone	<10.0	10.0	ug/L		09/11/25 0000	09/11/25 1844	RAF
Methyl Iodide	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1844	RAF
Carbon Disulfide	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1844	RAF
Methylene Chloride	<5.0	5.0	ug/L		09/11/25 0000	09/11/25 1844	RAF
Acrylonitrile	<5.0	5.0	ug/L		09/11/25 0000	09/11/25 1844	RAF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1844	RAF
1,1-Dichloroethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1844	RAF
Vinyl Acetate	<5.0	5.0	ug/L		09/11/25 0000	09/11/25 1844	RAF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1844	RAF
2-Butanone (MEK)	<10.0	10.0	ug/L		09/11/25 0000	09/11/25 1844	RAF
Bromochloromethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1844	RAF
Chloroform	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1844	RAF
1,1,1-Trichloroethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1844	RAF
Carbon Tetrachloride	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1844	RAF
Benzene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1844	RAF
1,2-Dichloroethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1844	RAF
Trichloroethylene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1844	RAF
1,2-Dichloropropane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1844	RAF
Dibromomethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1844	RAF
Bromodichloromethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1844	RAF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1844	RAF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L		09/11/25 0000	09/11/25 1844	RAF
Toluene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1844	RAF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1844	RAF
1,1,2-Trichloroethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1844	RAF
Tetrachloroethylene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1844	RAF
2-Hexanone (MBK)	<5.0	5.0	ug/L		09/11/25 0000	09/11/25 1844	RAF
Dibromochloromethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1844	RAF
1,2-Dibromoethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1844	RAF
Chlorobenzene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1844	RAF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1844	RAF
Ethylbenzene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1844	RAF
Xylenes, total	<2.0	2.0	ug/L		09/11/25 0000	09/11/25 1844	RAF
Styrene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1844	RAF
Bromoform	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1844	RAF
1,2,3-Trichloropropane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1844	RAF

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Page 13 of 47



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CERTIFICATE OF ANALYSIS

11I0767

Client Sample ID: MW-15
Sample Matrix: Aqueous
Lab Sample ID: 11I0767-06

Collected By: Whipple, Todd
Collection Date: 09/08/2025 9:44

Determination of Volatile Organic Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L		09/11/25 0000	09/11/25 1844	RAF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1844	RAF
1,4-Dichlorobenzene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1844	RAF
1,2-Dichlorobenzene	<1.0	1.0	ug/L		09/11/25 0000	09/11/25 1844	RAF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L		09/11/25 0000	09/11/25 1844	RAF
Surrogate: Dibromofluoromethane	93.2	Limit: 75-136	% Rec		09/11/25 0000	09/11/25 1844	RAF
Surrogate: Dibromofluoromethane	93.2	Limit: 57-128	% Rec		09/11/25 0000	09/11/25 1844	RAF
Surrogate: 1,2-Dichloroethane-d4	95.2	Limit: 61-142	% Rec		09/11/25 0000	09/11/25 1844	RAF
Surrogate: 1,2-Dichloroethane-d4	95.2	Limit: 49-135	% Rec		09/11/25 0000	09/11/25 1844	RAF
Surrogate: Toluene-d8	101	Limit: 82-121	% Rec		09/11/25 0000	09/11/25 1844	RAF
Surrogate: Toluene-d8	101	Limit: 82-116	% Rec		09/11/25 0000	09/11/25 1844	RAF
Surrogate: 4-Bromofluorobenzene	86.5	Limit: 80-116	% Rec		09/11/25 0000	09/11/25 1844	RAF
Surrogate: 4-Bromofluorobenzene	86.5	Limit: 77-114	% Rec		09/11/25 0000	09/11/25 1844	RAF

Determination of Total Metals	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A							
Antimony, total	<0.0010	0.0010	mg/L		09/11/25 0837	09/11/25 1805	JAR
Arsenic, total	<0.0020	0.0020	mg/L		09/11/25 0837	09/11/25 1805	JAR
Barium, total	0.556	0.0010	mg/L		09/11/25 0837	09/11/25 1805	JAR
Beryllium, total	<0.0005	0.0005	mg/L		09/11/25 0837	09/11/25 1805	JAR
Cadmium, total	<0.0002	0.0002	mg/L		09/11/25 0837	09/11/25 1805	JAR
Chromium, total	<0.0010	0.0010	mg/L		09/11/25 0837	09/11/25 1805	JAR
Cobalt, total	<0.0005	0.0005	mg/L		09/11/25 0837	09/11/25 1805	JAR
Copper, total	<0.0050	0.0050	mg/L		09/11/25 0837	09/11/25 1805	JAR
Lead, total	<0.0010	0.0010	mg/L		09/11/25 0837	09/11/25 1805	JAR
Nickel, total	0.0055	0.0050	mg/L		09/11/25 0837	09/11/25 1805	JAR
Selenium, total	<0.0020	0.0020	mg/L		09/11/25 0837	09/11/25 1805	JAR
Silver, total	<0.0050	0.0050	mg/L		09/11/25 0837	09/11/25 1805	JAR
Thallium, total	<0.0005	0.0005	mg/L		09/11/25 0837	09/11/25 1805	JAR
Vanadium, total	<0.0020	0.0020	mg/L		09/11/25 0837	09/11/25 1805	JAR
Zinc, total	<0.0050	0.0050	mg/L		09/11/25 0837	09/11/25 1805	JAR

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Page 14 of 47



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CERTIFICATE OF ANALYSIS

11I0767

Client Sample ID: MW-19
Sample Matrix: Aqueous
Lab Sample ID: 11I0767-07

Collected By: Whipple, Todd
Collection Date: 09/08/2025 11:45

Determination of Volatile Organic Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260D							
Chloromethane	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1045	RAF
Vinyl Chloride	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1045	RAF
Bromomethane	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1045	RAF
Chloroethane	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1045	RAF
Trichlorofluoromethane	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1045	RAF
1,1-Dichloroethylene	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1045	RAF
Acetone	<10.0	10.0	ug/L		09/12/25 0000	09/12/25 1045	RAF
Methyl Iodide	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1045	RAF
Carbon Disulfide	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1045	RAF
Methylene Chloride	<5.0	5.0	ug/L		09/12/25 0000	09/12/25 1045	RAF
Acrylonitrile	<5.0	5.0	ug/L		09/12/25 0000	09/12/25 1045	RAF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1045	RAF
1,1-Dichloroethane	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1045	RAF
Vinyl Acetate	<5.0	5.0	ug/L		09/12/25 0000	09/12/25 1045	RAF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1045	RAF
2-Butanone (MEK)	<10.0	10.0	ug/L		09/12/25 0000	09/12/25 1045	RAF
Bromochloromethane	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1045	RAF
Chloroform	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1045	RAF
1,1,1-Trichloroethane	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1045	RAF
Carbon Tetrachloride	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1045	RAF
Benzene	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1045	RAF
1,2-Dichloroethane	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1045	RAF
Trichloroethylene	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1045	RAF
1,2-Dichloropropane	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1045	RAF
Dibromomethane	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1045	RAF
Bromodichloromethane	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1045	RAF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1045	RAF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L		09/12/25 0000	09/12/25 1045	RAF
Toluene	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1045	RAF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1045	RAF
1,1,2-Trichloroethane	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1045	RAF
Tetrachloroethylene	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1045	RAF
2-Hexanone (MBK)	<5.0	5.0	ug/L		09/12/25 0000	09/12/25 1045	RAF
Dibromochloromethane	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1045	RAF
1,2-Dibromoethane	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1045	RAF
Chlorobenzene	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1045	RAF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1045	RAF
Ethylbenzene	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1045	RAF
Xylenes, total	<2.0	2.0	ug/L		09/12/25 0000	09/12/25 1045	RAF
Styrene	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1045	RAF
Bromoform	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1045	RAF
1,2,3-Trichloropropane	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1045	RAF

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Page 15 of 47



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CERTIFICATE OF ANALYSIS

11I0767

Client Sample ID: MW-19
Sample Matrix: Aqueous
Lab Sample ID: 11I0767-07

Collected By: Whipple, Todd
Collection Date: 09/08/2025 11:45

Determination of Volatile Organic Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L		09/12/25 0000	09/12/25 1045	RAF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1045	RAF
1,4-Dichlorobenzene	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1045	RAF
1,2-Dichlorobenzene	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1045	RAF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L		09/12/25 0000	09/12/25 1045	RAF
Surrogate: Dibromofluoromethane	92.5	Limit: 75-136	% Rec		09/12/25 0000	09/12/25 1045	RAF
Surrogate: Dibromofluoromethane	92.5	Limit: 57-128	% Rec		09/12/25 0000	09/12/25 1045	RAF
Surrogate: 1,2-Dichloroethane-d4	91.9	Limit: 61-142	% Rec		09/12/25 0000	09/12/25 1045	RAF
Surrogate: 1,2-Dichloroethane-d4	91.9	Limit: 49-135	% Rec		09/12/25 0000	09/12/25 1045	RAF
Surrogate: Toluene-d8	101	Limit: 82-121	% Rec		09/12/25 0000	09/12/25 1045	RAF
Surrogate: Toluene-d8	101	Limit: 82-116	% Rec		09/12/25 0000	09/12/25 1045	RAF
Surrogate: 4-Bromofluorobenzene	89.6	Limit: 77-114	% Rec		09/12/25 0000	09/12/25 1045	RAF
Surrogate: 4-Bromofluorobenzene	89.6	Limit: 80-116	% Rec		09/12/25 0000	09/12/25 1045	RAF

Determination of Total Metals	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A							
Antimony, total	<0.0010	0.0010	mg/L		09/11/25 0837	09/11/25 1807	JAR
Arsenic, total	<0.0020	0.0020	mg/L		09/11/25 0837	09/11/25 1807	JAR
Barium, total	0.599	0.0010	mg/L		09/11/25 0837	09/11/25 1807	JAR
Beryllium, total	<0.0005	0.0005	mg/L		09/11/25 0837	09/11/25 1807	JAR
Cadmium, total	0.0009	0.0002	mg/L		09/11/25 0837	09/11/25 1807	JAR
Chromium, total	0.0012	0.0010	mg/L		09/11/25 0837	09/11/25 1807	JAR
Cobalt, total	0.0040	0.0005	mg/L		09/11/25 0837	09/11/25 1807	JAR
Copper, total	<0.0050	0.0050	mg/L		09/11/25 0837	09/11/25 1807	JAR
Lead, total	<0.0010	0.0010	mg/L		09/11/25 0837	09/11/25 1807	JAR
Nickel, total	0.0061	0.0050	mg/L		09/11/25 0837	09/11/25 1807	JAR
Selenium, total	<0.0020	0.0020	mg/L		09/11/25 0837	09/11/25 1807	JAR
Silver, total	<0.0050	0.0050	mg/L		09/11/25 0837	09/11/25 1807	JAR
Thallium, total	<0.0005	0.0005	mg/L		09/11/25 0837	09/11/25 1807	JAR
Vanadium, total	<0.0020	0.0020	mg/L		09/11/25 0837	09/11/25 1807	JAR
Zinc, total	0.0253	0.0050	mg/L		09/11/25 0837	09/11/25 1807	JAR

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Page 16 of 47



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CERTIFICATE OF ANALYSIS

11I0767

Client Sample ID: MW-21
Sample Matrix: Aqueous
Lab Sample ID: 11I0767-08

Collected By: Whipple, Todd
Collection Date: 09/08/2025 10:09

Determination of Volatile Organic Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260D							
Chloromethane	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1108	RAF
Vinyl Chloride	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1108	RAF
Bromomethane	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1108	RAF
Chloroethane	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1108	RAF
Trichlorofluoromethane	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1108	RAF
1,1-Dichloroethylene	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1108	RAF
Acetone	<10.0	10.0	ug/L		09/12/25 0000	09/12/25 1108	RAF
Methyl Iodide	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1108	RAF
Carbon Disulfide	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1108	RAF
Methylene Chloride	<5.0	5.0	ug/L		09/12/25 0000	09/12/25 1108	RAF
Acrylonitrile	<5.0	5.0	ug/L		09/12/25 0000	09/12/25 1108	RAF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1108	RAF
1,1-Dichloroethane	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1108	RAF
Vinyl Acetate	<5.0	5.0	ug/L		09/12/25 0000	09/12/25 1108	RAF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1108	RAF
2-Butanone (MEK)	<10.0	10.0	ug/L		09/12/25 0000	09/12/25 1108	RAF
Bromochloromethane	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1108	RAF
Chloroform	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1108	RAF
1,1,1-Trichloroethane	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1108	RAF
Carbon Tetrachloride	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1108	RAF
Benzene	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1108	RAF
1,2-Dichloroethane	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1108	RAF
Trichloroethylene	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1108	RAF
1,2-Dichloropropane	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1108	RAF
Dibromomethane	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1108	RAF
Bromodichloromethane	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1108	RAF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1108	RAF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L		09/12/25 0000	09/12/25 1108	RAF
Toluene	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1108	RAF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1108	RAF
1,1,2-Trichloroethane	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1108	RAF
Tetrachloroethylene	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1108	RAF
2-Hexanone (MBK)	<5.0	5.0	ug/L		09/12/25 0000	09/12/25 1108	RAF
Dibromochloromethane	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1108	RAF
1,2-Dibromoethane	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1108	RAF
Chlorobenzene	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1108	RAF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1108	RAF
Ethylbenzene	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1108	RAF
Xylenes, total	<2.0	2.0	ug/L		09/12/25 0000	09/12/25 1108	RAF
Styrene	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1108	RAF
Bromoform	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1108	RAF
1,2,3-Trichloropropane	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1108	RAF

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Page 17 of 47



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CERTIFICATE OF ANALYSIS

11I0767

Client Sample ID: MW-21
Sample Matrix: Aqueous
Lab Sample ID: 11I0767-08

Collected By: Whipple, Todd
Collection Date: 09/08/2025 10:09

Determination of Volatile Organic Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L		09/12/25 0000	09/12/25 1108	RAF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1108	RAF
1,4-Dichlorobenzene	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1108	RAF
1,2-Dichlorobenzene	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1108	RAF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L		09/12/25 0000	09/12/25 1108	RAF
Surrogate: Dibromofluoromethane	92.7	Limit: 57-128	% Rec		09/12/25 0000	09/12/25 1108	RAF
Surrogate: Dibromofluoromethane	92.7	Limit: 75-136	% Rec		09/12/25 0000	09/12/25 1108	RAF
Surrogate: 1,2-Dichloroethane-d4	90.4	Limit: 49-135	% Rec		09/12/25 0000	09/12/25 1108	RAF
Surrogate: 1,2-Dichloroethane-d4	90.4	Limit: 61-142	% Rec		09/12/25 0000	09/12/25 1108	RAF
Surrogate: Toluene-d8	99.1	Limit: 82-116	% Rec		09/12/25 0000	09/12/25 1108	RAF
Surrogate: Toluene-d8	99.1	Limit: 82-121	% Rec		09/12/25 0000	09/12/25 1108	RAF
Surrogate: 4-Bromofluorobenzene	92.9	Limit: 77-114	% Rec		09/12/25 0000	09/12/25 1108	RAF
Surrogate: 4-Bromofluorobenzene	92.9	Limit: 80-116	% Rec		09/12/25 0000	09/12/25 1108	RAF

Determination of Total Metals	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A							
Antimony, total	<0.0010	0.0010	mg/L		09/11/25 0837	09/11/25 1810	JAR
Arsenic, total	<0.0020	0.0020	mg/L		09/11/25 0837	09/11/25 1810	JAR
Barium, total	0.376	0.0010	mg/L		09/11/25 0837	09/11/25 1810	JAR
Beryllium, total	<0.0005	0.0005	mg/L		09/11/25 0837	09/11/25 1810	JAR
Cadmium, total	<0.0002	0.0002	mg/L		09/11/25 0837	09/11/25 1810	JAR
Chromium, total	<0.0010	0.0010	mg/L		09/11/25 0837	09/11/25 1810	JAR
Cobalt, total	<0.0005	0.0005	mg/L		09/11/25 0837	09/11/25 1810	JAR
Copper, total	0.0082	0.0050	mg/L		09/11/25 0837	09/11/25 1810	JAR
Lead, total	<0.0010	0.0010	mg/L		09/11/25 0837	09/11/25 1810	JAR
Nickel, total	<0.0050	0.0050	mg/L		09/11/25 0837	09/11/25 1810	JAR
Selenium, total	<0.0020	0.0020	mg/L		09/11/25 0837	09/11/25 1810	JAR
Silver, total	<0.0050	0.0050	mg/L		09/11/25 0837	09/11/25 1810	JAR
Thallium, total	<0.0005	0.0005	mg/L		09/11/25 0837	09/11/25 1810	JAR
Vanadium, total	0.0020	0.0020	mg/L		09/11/25 0837	09/11/25 1810	JAR
Zinc, total	<0.0050	0.0050	mg/L		09/11/25 0837	09/11/25 1810	JAR

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Page 18 of 47



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

11I0767

Client Sample ID: MW-23
Sample Matrix: Aqueous
Lab Sample ID: 11I0767-09

Collected By: Whipple, Todd
Collection Date: 09/08/2025 10:40

Determination of Volatile Organic Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260D							
Chloromethane	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1131	RAF
Vinyl Chloride	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1131	RAF
Bromomethane	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1131	RAF
Chloroethane	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1131	RAF
Trichlorofluoromethane	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1131	RAF
1,1-Dichloroethylene	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1131	RAF
Acetone	<10.0	10.0	ug/L		09/12/25 0000	09/12/25 1131	RAF
Methyl Iodide	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1131	RAF
Carbon Disulfide	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1131	RAF
Methylene Chloride	<5.0	5.0	ug/L		09/12/25 0000	09/12/25 1131	RAF
Acrylonitrile	<5.0	5.0	ug/L		09/12/25 0000	09/12/25 1131	RAF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1131	RAF
1,1-Dichloroethane	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1131	RAF
Vinyl Acetate	<5.0	5.0	ug/L		09/12/25 0000	09/12/25 1131	RAF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1131	RAF
2-Butanone (MEK)	<10.0	10.0	ug/L		09/12/25 0000	09/12/25 1131	RAF
Bromochloromethane	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1131	RAF
Chloroform	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1131	RAF
1,1,1-Trichloroethane	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1131	RAF
Carbon Tetrachloride	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1131	RAF
Benzene	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1131	RAF
1,2-Dichloroethane	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1131	RAF
Trichloroethylene	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1131	RAF
1,2-Dichloropropane	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1131	RAF
Dibromomethane	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1131	RAF
Bromodichloromethane	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1131	RAF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1131	RAF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L		09/12/25 0000	09/12/25 1131	RAF
Toluene	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1131	RAF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1131	RAF
1,1,2-Trichloroethane	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1131	RAF
Tetrachloroethylene	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1131	RAF
2-Hexanone (MBK)	<5.0	5.0	ug/L		09/12/25 0000	09/12/25 1131	RAF
Dibromochloromethane	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1131	RAF
1,2-Dibromoethane	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1131	RAF
Chlorobenzene	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1131	RAF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1131	RAF
Ethylbenzene	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1131	RAF
Xylenes, total	<2.0	2.0	ug/L		09/12/25 0000	09/12/25 1131	RAF
Styrene	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1131	RAF
Bromoform	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1131	RAF
1,2,3-Trichloropropane	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1131	RAF

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Page 19 of 47



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CERTIFICATE OF ANALYSIS

11I0767

Client Sample ID: MW-23
Sample Matrix: Aqueous
Lab Sample ID: 11I0767-09

Collected By: Whipple, Todd
Collection Date: 09/08/2025 10:40

Determination of Volatile Organic Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L		09/12/25 0000	09/12/25 1131	RAF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1131	RAF
1,4-Dichlorobenzene	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1131	RAF
1,2-Dichlorobenzene	<1.0	1.0	ug/L		09/12/25 0000	09/12/25 1131	RAF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L		09/12/25 0000	09/12/25 1131	RAF
Surrogate: Dibromofluoromethane	96.3	Limit: 75-136	% Rec		09/12/25 0000	09/12/25 1131	RAF
Surrogate: Dibromofluoromethane	96.3	Limit: 57-128	% Rec		09/12/25 0000	09/12/25 1131	RAF
Surrogate: 1,2-Dichloroethane-d4	97.6	Limit: 49-135	% Rec		09/12/25 0000	09/12/25 1131	RAF
Surrogate: 1,2-Dichloroethane-d4	97.6	Limit: 61-142	% Rec		09/12/25 0000	09/12/25 1131	RAF
Surrogate: Toluene-d8	99.8	Limit: 82-121	% Rec		09/12/25 0000	09/12/25 1131	RAF
Surrogate: Toluene-d8	99.8	Limit: 82-116	% Rec		09/12/25 0000	09/12/25 1131	RAF
Surrogate: 4-Bromofluorobenzene	89.3	Limit: 80-116	% Rec		09/12/25 0000	09/12/25 1131	RAF
Surrogate: 4-Bromofluorobenzene	89.3	Limit: 77-114	% Rec		09/12/25 0000	09/12/25 1131	RAF

Determination of Total Metals	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A							
Antimony, total	<0.0010	0.0010	mg/L		09/11/25 0837	09/11/25 1812	JAR
Arsenic, total	<0.0020	0.0020	mg/L		09/11/25 0837	09/11/25 1812	JAR
Barium, total	0.352	0.0010	mg/L		09/11/25 0837	09/11/25 1812	JAR
Beryllium, total	<0.0005	0.0005	mg/L		09/11/25 0837	09/11/25 1812	JAR
Cadmium, total	<0.0002	0.0002	mg/L		09/11/25 0837	09/11/25 1812	JAR
Chromium, total	0.0021	0.0010	mg/L		09/11/25 0837	09/11/25 1812	JAR
Cobalt, total	<0.0005	0.0005	mg/L		09/11/25 0837	09/11/25 1812	JAR
Copper, total	<0.0050	0.0050	mg/L		09/11/25 0837	09/11/25 1812	JAR
Lead, total	<0.0010	0.0010	mg/L		09/11/25 0837	09/11/25 1812	JAR
Nickel, total	<0.0050	0.0050	mg/L		09/11/25 0837	09/11/25 1812	JAR
Selenium, total	<0.0020	0.0020	mg/L		09/11/25 0837	09/11/25 1812	JAR
Silver, total	<0.0050	0.0050	mg/L		09/11/25 0837	09/11/25 1812	JAR
Thallium, total	<0.0005	0.0005	mg/L		09/11/25 0837	09/11/25 1812	JAR
Vanadium, total	<0.0020	0.0020	mg/L		09/11/25 0837	09/11/25 1812	JAR
Zinc, total	0.0094	0.0050	mg/L		09/11/25 0837	09/11/25 1812	JAR

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Page 20 of 47



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CERTIFICATE OF ANALYSIS

11I0767

Client Sample ID: Duplicate
Sample Matrix: Aqueous
Lab Sample ID: 11I0767-10

Collected By: Whipple, Todd
Collection Date: 09/08/2025

Determination of Total Metals	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A							
Antimony, total	<0.0010	0.0010	mg/L		09/11/25 0837	09/11/25 1815	JAR
Arsenic, total	<0.0020	0.0020	mg/L		09/11/25 0837	09/11/25 1815	JAR
Barium, total	0.543	0.0010	mg/L		09/11/25 0837	09/11/25 1815	JAR
Beryllium, total	<0.0005	0.0005	mg/L		09/11/25 0837	09/11/25 1815	JAR
Cadmium, total	<0.0002	0.0002	mg/L		09/11/25 0837	09/11/25 1815	JAR
Chromium, total	<0.0010	0.0010	mg/L		09/11/25 0837	09/11/25 1815	JAR
Cobalt, total	<0.0005	0.0005	mg/L		09/11/25 0837	09/11/25 1815	JAR
Copper, total	<0.0050	0.0050	mg/L		09/11/25 0837	09/11/25 1815	JAR
Lead, total	<0.0010	0.0010	mg/L		09/11/25 0837	09/11/25 1815	JAR
Nickel, total	0.0054	0.0050	mg/L		09/11/25 0837	09/11/25 1815	JAR
Selenium, total	<0.0020	0.0020	mg/L		09/11/25 0837	09/11/25 1815	JAR
Silver, total	<0.0050	0.0050	mg/L		09/11/25 0837	09/11/25 1815	JAR
Thallium, total	<0.0005	0.0005	mg/L		09/11/25 0837	09/11/25 1815	JAR
Vanadium, total	<0.0020	0.0020	mg/L		09/11/25 0837	09/11/25 1815	JAR
Zinc, total	<0.0050	0.0050	mg/L		09/11/25 0837	09/11/25 1815	JAR

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Page 21 of 47



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CERTIFICATE OF ANALYSIS

11I0767

Batch Log Summary

Method	Batch	Laboratory ID	Client / Source ID
EPA 6020A	11I0635	11I0635-BLK1	
		11I0635-BS1	
		11I0767-01	MW-2 (b)
		11I0635-MS1	11I0767-01
		11I0635-MSD1	11I0767-01
		11I0635-PS1	11I0767-01
		11I0767-02	MW-3
		11I0767-03	MW-9
		11I0767-04	MW-12
		11I0767-05	MW-14
		11I0767-06	MW-15
		11I0767-07	MW-19
		11I0767-08	MW-21
		11I0767-09	MW-23
		11I0767-10	Duplicate
Method	Batch	Laboratory ID	Client / Source ID
EPA 8260D	11I0699	11I0699-BS1	
		11I0699-BSD1	
		11I0699-BLK1	
		11I0767-01	MW-2 (b)
		11I0767-02	MW-3
		11I0767-03	MW-9
		11I0767-05	MW-14
		11I0767-06	MW-15
		11I0699-MS1	11I0763-01
		11I0699-MSD1	11I0763-01
Method	Batch	Laboratory ID	Client / Source ID
EPA 8260D	11I0774	11I0774-BS1	
		11I0774-BSD1	
		11I0774-BLK1	
		11I0767-07	MW-19
		11I0767-08	MW-21
		11I0767-09	MW-23
		11I0774-MS1	11I0767-08
		11I0774-MSD1	11I0767-08
Method	Batch	Laboratory ID	Client / Source ID
EPA 8260D	11I0883	11I0883-BS1	
		11I0883-BSD1	
		11I0883-BLK1	
		11I0767-04	MW-12
		11I0883-MS1	11I1028-18
		11I0883-MSD1	11I1028-18
Method	Batch	Laboratory ID	Client / Source ID
EPA 6020A	11I1723	11I1723-BLK1	
		11I1723-BS1	
		11I1723-MS1	11I0763-14RE1
		11I1723-MSD1	11I0763-14RE1
		11I1723-PS1	11I0763-14RE1

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CERTIFICATE OF ANALYSIS

11I0767

Method	Batch	Laboratory ID	Client / Source ID
EPA 6020A	11I1723	11I0767-01RE1	MW-2 (b)

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 11I0699 - EPA 5030B - EPA 8260D

Blank (11I0699-BLK1)

Prepared: 09/11/25 00:00 Analyzed: 09/11/25 10:24

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

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CERTIFICATE OF ANALYSIS

11I0767

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch 11I0699 - EPA 5030B - EPA 8260D									
Blank (11I0699-BLK1)									
Prepared: 09/11/25 00:00 Analyzed: 09/11/25 10:24									
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									
	46.9		ug/L	50.2		93.5	57-128		
Surrogate: Dibromofluoromethane									
	46.9		ug/L	50.2		93.5	75-136		
Surrogate: 1,2-Dichloroethane-d4									
	48.7		ug/L	50.4		96.6	49-135		
Surrogate: 1,2-Dichloroethane-d4									
	48.7		ug/L	50.4		96.6	61-142		
Surrogate: Toluene-d8									
	50.3		ug/L	50.5		99.7	82-116		
Surrogate: Toluene-d8									
	50.3		ug/L	50.5		99.7	82-121		
Surrogate: 4-Bromofluorobenzene									
	47.6		ug/L	50.2		94.8	77-114		
Surrogate: 4-Bromofluorobenzene									
	47.6		ug/L	50.2		94.8	80-116		
LCS (11I0699-BS1)									
Prepared: 09/11/25 00:00 Analyzed: 09/11/25 09:15									
Chloromethane	29.87	1.0	ug/L	30.3		98.5	63-155		
Vinyl Chloride	33.85	1.0	ug/L	30.2		112	70-154		
Bromomethane	28.08	1.0	ug/L	30.1		93.2	52-176		
Chloroethane	30.60	1.0	ug/L	30.3		101	72-148		
Trichlorofluoromethane	30.33	1.0	ug/L	30.3		100	70-152		
1,1-Dichloroethylene	52.61	1.0	ug/L	50.1		105	70-148		
Acetone	90.04	10.0	ug/L	100		90.0	43-172		
Methyl Iodide	112.8	1.0	ug/L	100		113	69-170		
Carbon Disulfide	108.2	1.0	ug/L	100		108	72-162		
Methylene Chloride	48.25	5.0	ug/L	50.1		96.3	68-142		
Acrylonitrile	88.93	5.0	ug/L	50.4		177	33-163		Q2
trans-1,2-Dichloroethylene	48.88	1.0	ug/L	50.1		97.6	66-148		
1,1-Dichloroethane	52.05	1.0	ug/L	50.1		104	66-143		
Vinyl Acetate	174.8	5.0	ug/L	131		133	43-153		
cis-1,2-Dichloroethylene	49.78	1.0	ug/L	50.4		98.9	71-149		
2-Butanone (MEK)	102.0	10.0	ug/L	100		102	52-159		
Bromochloromethane	48.86	1.0	ug/L	50.4		96.9	69-143		
Chloroform	48.51	1.0	ug/L	50.1		96.9	69-144		
1,1,1-Trichloroethane	51.81	1.0	ug/L	50.1		103	62-129		
Carbon Tetrachloride	51.54	1.0	ug/L	50.1		103	63-141		
Benzene	50.16	1.0	ug/L	50.4		99.5	71-134		
1,2-Dichloroethane	51.80	1.0	ug/L	50.1		103	72-132		
Trichloroethylene	51.73	1.0	ug/L	50.1		103	71-135		
1,2-Dichloropropane	50.69	1.0	ug/L	50.1		101	69-136		
Dibromomethane	48.27	1.0	ug/L	50.4		95.8	73-147		
Bromodichloromethane	49.99	1.0	ug/L	50.1		99.8	68-129		

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Page 24 of 47



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

11I0767

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11I0699 - EPA 5030B - EPA 8260D										
LCS (11I0699-BS1)										
Prepared: 09/11/25 00:00 Analyzed: 09/11/25 09:15										
cis-1,3-Dichloropropene	50.21	1.0	ug/L	50.1		100	65-134			
4-Methyl-2-pentanone (MIBK)	103.2	5.0	ug/L	100		103	58-147			
Toluene	48.81	1.0	ug/L	50.5		96.7	72-133			
trans-1,3-Dichloropropene	54.80	1.0	ug/L	50.1		109	67-130			
1,1,2-Trichloroethane	48.54	1.0	ug/L	50.1		96.9	69-135			
Tetrachloroethylene	51.79	1.0	ug/L	50.1		103	69-130			
2-Hexanone (MBK)	100.5	5.0	ug/L	100		100	55-144			
Dibromochloromethane	51.15	1.0	ug/L	50.1		102	73-127			
1,2-Dibromoethane	52.35	1.0	ug/L	50.2		104	67-132			
Chlorobenzene	48.79	1.0	ug/L	50.1		97.4	72-123			
1,1,1,2-Tetrachloroethane	50.96	1.0	ug/L	50.3		101	73-127			
Ethylbenzene	49.96	1.0	ug/L	50.2		99.6	71-127			
Xylenes, total	151.0	2.0	ug/L	151		100	74-127			
Styrene	52.88	1.0	ug/L	50.4		105	66-126			
Bromoform	56.18	1.0	ug/L	50.1		112	68-130			
1,2,3-Trichloropropane	51.58	1.0	ug/L	50.3		102	63-136			
trans-1,4-Dichloro-2-butene	112.6	5.0	ug/L	100		113	54-134			
1,1,2,2-Tetrachloroethane	49.30	1.0	ug/L	50.1		98.4	61-131			
1,4-Dichlorobenzene	45.89	1.0	ug/L	50.1		91.6	70-129			
1,2-Dichlorobenzene	48.89	1.0	ug/L	50.1		97.6	69-126			
1,2-Dibromo-3-chloropropane	52.18	5.0	ug/L	50.1		104	50-143			
Surrogate: Dibromofluoromethane	47.9		ug/L	50.2		95.5	57-128			
Surrogate: Dibromofluoromethane	47.9		ug/L	50.2		95.5	75-136			
Surrogate: 1,2-Dichloroethane-d4	50.0		ug/L	50.4		99.3	49-135			
Surrogate: 1,2-Dichloroethane-d4	50.0		ug/L	50.4		99.3	61-142			
Surrogate: Toluene-d8	49.4		ug/L	50.5		97.8	82-116			
Surrogate: Toluene-d8	49.4		ug/L	50.5		97.8	82-121			
Surrogate: 4-Bromofluorobenzene	51.9		ug/L	50.2		103	77-114			
Surrogate: 4-Bromofluorobenzene	51.9		ug/L	50.2		103	80-116			
LCS Dup (11I0699-BSD1)										
Prepared: 09/11/25 00:00 Analyzed: 09/11/25 09:38										
Chloromethane	31.72	1.0	ug/L	30.3		105	63-155	6.01	24	
Vinyl Chloride	35.73	1.0	ug/L	30.2		118	70-154	5.40	25	
Bromomethane	25.77	1.0	ug/L	30.1		85.6	52-176	8.58	27	
Chloroethane	29.84	1.0	ug/L	30.3		98.4	72-148	2.51	25	
Trichlorofluoromethane	32.15	1.0	ug/L	30.3		106	70-152	5.83	26	
1,1-Dichloroethylene	55.93	1.0	ug/L	50.1		112	70-148	6.12	24	
Acetone	90.50	10.0	ug/L	100		90.5	43-172	0.510	30	
Methyl Iodide	122.1	1.0	ug/L	100		122	69-170	7.89	30	
Carbon Disulfide	112.8	1.0	ug/L	100		113	72-162	4.13	24	
Methylene Chloride	50.98	5.0	ug/L	50.1		102	68-142	5.50	21	
Acrylonitrile	93.37	5.0	ug/L	50.4		185	33-163	4.87	28	Q2
trans-1,2-Dichloroethylene	52.87	1.0	ug/L	50.1		106	66-148	7.84	27	
1,1-Dichloroethane	55.04	1.0	ug/L	50.1		110	66-143	5.58	24	

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11I0767

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11I0699 - EPA 5030B - EPA 8260D										
LCS Dup (11I0699-BSD1)										
Prepared: 09/11/25 00:00 Analyzed: 09/11/25 09:38										
Vinyl Acetate	189.5	5.0	ug/L	131		145	43-153	8.05	30	
cis-1,2-Dichloroethylene	51.06	1.0	ug/L	50.4		101	71-149	2.54	26	
2-Butanone (MEK)	105.7	10.0	ug/L	100		106	52-159	3.57	27	
Bromochloromethane	53.08	1.0	ug/L	50.4		105	69-143	8.28	23	
Chloroform	52.60	1.0	ug/L	50.1		105	69-144	8.09	23	
1,1,1-Trichloroethane	52.98	1.0	ug/L	50.1		106	62-129	2.23	24	
Carbon Tetrachloride	54.34	1.0	ug/L	50.1		108	63-141	5.29	25	
Benzene	51.57	1.0	ug/L	50.4		102	71-134	2.77	24	
1,2-Dichloroethane	54.62	1.0	ug/L	50.1		109	72-132	5.30	24	
Trichloroethylene	54.49	1.0	ug/L	50.1		109	71-135	5.20	24	
1,2-Dichloropropane	52.56	1.0	ug/L	50.1		105	69-136	3.62	24	
Dibromomethane	50.69	1.0	ug/L	50.4		101	73-147	4.89	25	
Bromodichloromethane	53.53	1.0	ug/L	50.1		107	68-129	6.84	22	
cis-1,3-Dichloropropene	55.30	1.0	ug/L	50.1		110	65-134	9.65	23	
4-Methyl-2-pentanone (MIBK)	107.5	5.0	ug/L	100		108	58-147	4.13	27	
Toluene	50.57	1.0	ug/L	50.5		100	72-133	3.54	24	
trans-1,3-Dichloropropene	59.14	1.0	ug/L	50.1		118	67-130	7.62	24	
1,1,2-Trichloroethane	52.70	1.0	ug/L	50.1		105	69-135	8.22	23	
Tetrachloroethylene	55.21	1.0	ug/L	50.1		110	69-130	6.39	25	
2-Hexanone (MBK)	110.5	5.0	ug/L	100		110	55-144	9.46	25	
Dibromochloromethane	55.17	1.0	ug/L	50.1		110	73-127	7.56	22	
1,2-Dibromoethane	58.60	1.0	ug/L	50.2		117	67-132	11.3	24	
Chlorobenzene	54.06	1.0	ug/L	50.1		108	72-123	10.2	23	
1,1,1,2-Tetrachloroethane	56.63	1.0	ug/L	50.3		112	73-127	10.5	24	
Ethylbenzene	53.03	1.0	ug/L	50.2		106	71-127	5.96	26	
Xylenes, total	161.3	2.0	ug/L	151		107	74-127	6.57	25	
Styrene	56.22	1.0	ug/L	50.4		112	66-126	6.12	23	
Bromoform	60.81	1.0	ug/L	50.1		121	68-130	7.92	23	
1,2,3-Trichloropropane	55.90	1.0	ug/L	50.3		111	63-136	8.04	24	
trans-1,4-Dichloro-2-butene	114.8	5.0	ug/L	100		115	54-134	1.96	27	
1,1,2,2-Tetrachloroethane	49.01	1.0	ug/L	50.1		97.8	61-131	0.590	29	
1,4-Dichlorobenzene	48.24	1.0	ug/L	50.1		96.2	70-129	4.99	24	
1,2-Dichlorobenzene	50.55	1.0	ug/L	50.1		101	69-126	3.34	26	
1,2-Dibromo-3-chloropropane	53.87	5.0	ug/L	50.1		107	50-143	3.19	30	
Surrogate: Dibromofluoromethane	49.9		ug/L	50.2		99.5	57-128			
Surrogate: Dibromofluoromethane	49.9		ug/L	50.2		99.5	75-136			
Surrogate: 1,2-Dichloroethane-d4	52.3		ug/L	50.4		104	49-135			
Surrogate: 1,2-Dichloroethane-d4	52.3		ug/L	50.4		104	61-142			
Surrogate: Toluene-d8	50.1		ug/L	50.5		99.4	82-116			
Surrogate: Toluene-d8	50.1		ug/L	50.5		99.4	82-121			
Surrogate: 4-Bromofluorobenzene	51.8		ug/L	50.2		103	77-114			
Surrogate: 4-Bromofluorobenzene	51.8		ug/L	50.2		103	80-116			

Matrix Spike (11I0699-MS1)

Source: 11I0763-01

Prepared: 09/11/25 00:00 Analyzed: 09/11/25 19:06

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Page 26 of 47



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CERTIFICATE OF ANALYSIS

11I0767

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11I0699 - EPA 5030B - EPA 8260D										
Matrix Spike (11I0699-MS1)	Source: 11I0763-01			Prepared: 09/11/25 00:00 Analyzed: 09/11/25 19:06						
Chloromethane	300.2	10.0	ug/L	303	ND	99.0	61-152			
Vinyl Chloride	279.0	10.0	ug/L	302	ND	92.2	66-149			
Bromomethane	310.9	10.0	ug/L	301	ND	103	43-171			
Chloroethane	284.2	10.0	ug/L	303	ND	93.7	69-148			
Trichlorofluoromethane	311.8	10.0	ug/L	303	ND	103	62-163			
1,1-Dichloroethylene	513.4	10.0	ug/L	501	ND	102	70-148			
Acetone	913.9	100	ug/L	1000	ND	91.4	45-173			
Methyl Iodide	754.6	10.0	ug/L	1000	ND	75.5	62-167			
Carbon Disulfide	969.1	10.0	ug/L	1000	ND	96.9	71-163			
Methylene Chloride	486.2	50.0	ug/L	501	ND	97.0	69-140			
Acrylonitrile	901.4	50.0	ug/L	504	ND	179	32-159			M1
trans-1,2-Dichloroethylene	477.1	10.0	ug/L	501	ND	95.3	69-144			
1,1-Dichloroethane	517.1	10.0	ug/L	501	ND	103	70-138			
Vinyl Acetate	1593	50.0	ug/L	1310	ND	122	58-142			
cis-1,2-Dichloroethylene	492.3	10.0	ug/L	504	ND	97.8	68-151			
2-Butanone (MEK)	1091	100	ug/L	1000	ND	109	50-160			
Bromochloromethane	490.7	10.0	ug/L	504	ND	97.4	65-143			
Chloroform	498.8	10.0	ug/L	501	ND	99.6	71-143			
1,1,1-Trichloroethane	516.5	10.0	ug/L	501	ND	103	63-133			
Carbon Tetrachloride	521.8	10.0	ug/L	501	ND	104	63-142			
Benzene	496.2	10.0	ug/L	504	ND	98.4	69-133			
1,2-Dichloroethane	503.7	10.0	ug/L	501	ND	101	63-138			
Trichloroethylene	521.5	10.0	ug/L	501	ND	104	71-133			
1,2-Dichloropropane	519.9	10.0	ug/L	501	ND	104	69-132			
Dibromomethane	502.3	10.0	ug/L	504	ND	99.7	70-147			
Bromodichloromethane	511.2	10.0	ug/L	501	ND	102	67-130			
cis-1,3-Dichloropropene	508.4	10.0	ug/L	501	ND	102	61-126			
4-Methyl-2-pentanone (MIBK)	1002	50.0	ug/L	1000	ND	100	55-147			
Toluene	493.6	10.0	ug/L	505	ND	97.8	71-133			
trans-1,3-Dichloropropene	569.1	10.0	ug/L	501	ND	114	63-124			
1,1,2-Trichloroethane	487.5	10.0	ug/L	501	ND	97.3	69-133			
Tetrachloroethylene	547.4	10.0	ug/L	501	ND	109	70-124			
2-Hexanone (MBK)	1018	50.0	ug/L	1000	ND	102	53-141			
Dibromochloromethane	517.9	10.0	ug/L	501	ND	103	74-122			
1,2-Dibromoethane	523.5	10.0	ug/L	502	ND	104	66-127			
Chlorobenzene	521.4	10.0	ug/L	501	ND	104	76-116			
1,1,1,2-Tetrachloroethane	520.6	10.0	ug/L	503	ND	103	77-121			
Ethylbenzene	508.9	10.0	ug/L	502	ND	101	73-124			
Xylenes, total	1564	20.0	ug/L	1510	ND	104	75-123			
Styrene	529.6	10.0	ug/L	504	ND	105	70-120			
Bromoform	579.1	10.0	ug/L	501	ND	116	70-124			
1,2,3-Trichloropropane	561.2	10.0	ug/L	503	ND	111	62-135			
trans-1,4-Dichloro-2-butene	1103	50.0	ug/L	1000	ND	110	50-120			

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CERTIFICATE OF ANALYSIS

11I0767

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11I0699 - EPA 5030B - EPA 8260D										
Matrix Spike (11I0699-MS1)	Source: 11I0763-01			Prepared: 09/11/25 00:00 Analyzed: 09/11/25 19:06						
1,1,2,2-Tetrachloroethane	459.4	10.0	ug/L	501	ND	91.7	63-126			
1,4-Dichlorobenzene	466.5	10.0	ug/L	501	ND	93.1	72-119			
1,2-Dichlorobenzene	491.2	10.0	ug/L	501	ND	98.1	71-117			
1,2-Dibromo-3-chloropropane	503.5	50.0	ug/L	501	ND	100	49-134			
Surrogate: Dibromofluoromethane	513		ug/L	502		102	75-136			
Surrogate: Dibromofluoromethane	513		ug/L	502		102	57-128			
Surrogate: 1,2-Dichloroethane-d4	504		ug/L	504		100	61-142			
Surrogate: 1,2-Dichloroethane-d4	504		ug/L	504		100	49-135			
Surrogate: Toluene-d8	497		ug/L	505		98.5	82-121			
Surrogate: Toluene-d8	497		ug/L	505		98.5	82-116			
Surrogate: 4-Bromofluorobenzene	527		ug/L	502		105	80-116			
Surrogate: 4-Bromofluorobenzene	527		ug/L	502		105	77-114			
Matrix Spike Dup (11I0699-MSD1)	Source: 11I0763-01			Prepared: 09/11/25 00:00 Analyzed: 09/11/25 19:29						
Chloromethane	286.0	10.0	ug/L	303	ND	94.3	61-152	4.84	26	
Vinyl Chloride	276.2	10.0	ug/L	302	ND	91.3	66-149	1.01	23	
Bromomethane	274.0	10.0	ug/L	301	ND	91.0	43-171	12.6	29	
Chloroethane	274.7	10.0	ug/L	303	ND	90.6	69-148	3.40	25	
Trichlorofluoromethane	289.8	10.0	ug/L	303	ND	95.6	62-163	7.31	25	
1,1-Dichloroethylene	487.6	10.0	ug/L	501	ND	97.3	70-148	5.15	22	
Acetone	846.1	100	ug/L	1000	ND	84.6	45-173	7.70	30	
Methyl Iodide	812.4	10.0	ug/L	1000	ND	81.2	62-167	7.38	24	
Carbon Disulfide	912.8	10.0	ug/L	1000	ND	91.3	71-163	5.98	22	
Methylene Chloride	444.9	50.0	ug/L	501	ND	88.8	69-140	8.87	19	
Acrylonitrile	721.4	50.0	ug/L	504	ND	143	32-159	22.2	30	
trans-1,2-Dichloroethylene	448.2	10.0	ug/L	501	ND	89.5	69-144	6.25	22	
1,1-Dichloroethane	491.0	10.0	ug/L	501	ND	98.0	70-138	5.18	20	
Vinyl Acetate	1541	50.0	ug/L	1310	ND	118	58-142	3.34	24	
cis-1,2-Dichloroethylene	441.2	10.0	ug/L	504	ND	87.6	68-151	10.9	22	
2-Butanone (MEK)	1011	100	ug/L	1000	ND	101	50-160	7.59	23	
Bromochloromethane	451.4	10.0	ug/L	504	ND	89.6	65-143	8.34	22	
Chloroform	470.8	10.0	ug/L	501	ND	94.0	71-143	5.78	21	
1,1,1-Trichloroethane	486.2	10.0	ug/L	501	ND	97.0	63-133	6.04	23	
Carbon Tetrachloride	509.5	10.0	ug/L	501	ND	102	63-142	2.39	22	
Benzene	476.6	10.0	ug/L	504	ND	94.5	69-133	4.03	18	
1,2-Dichloroethane	493.9	10.0	ug/L	501	ND	98.6	63-138	1.96	20	
Trichloroethylene	501.2	10.0	ug/L	501	ND	100	71-133	3.97	23	
1,2-Dichloropropane	496.9	10.0	ug/L	501	ND	99.2	69-132	4.52	20	
Dibromomethane	450.1	10.0	ug/L	504	ND	89.4	70-147	11.0	22	
Bromodichloromethane	504.5	10.0	ug/L	501	ND	101	67-130	1.32	21	
cis-1,3-Dichloropropene	501.1	10.0	ug/L	501	ND	100	61-126	1.45	21	
4-Methyl-2-pentanone (MIBK)	977.0	50.0	ug/L	1000	ND	97.7	55-147	2.48	23	
Toluene	465.3	10.0	ug/L	505	ND	92.2	71-133	5.90	19	
trans-1,3-Dichloropropene	521.6	10.0	ug/L	501	ND	104	63-124	8.71	21	

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Page 28 of 47



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

11I0767

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11I0699 - EPA 5030B - EPA 8260D										
Matrix Spike Dup (11I0699-MSD1) Source: 11I0763-01 Prepared: 09/11/25 00:00 Analyzed: 09/11/25 19:29										
1,1,2-Trichloroethane	474.3	10.0	ug/L	501	ND	94.7	69-133	2.74	19	
Tetrachloroethylene	516.4	10.0	ug/L	501	ND	103	70-124	5.83	24	
2-Hexanone (MBK)	962.3	50.0	ug/L	1000	ND	96.2	53-141	5.60	24	
Dibromochloromethane	500.3	10.0	ug/L	501	ND	99.9	74-122	3.46	21	
1,2-Dibromoethane	505.2	10.0	ug/L	502	ND	101	66-127	3.56	23	
Chlorobenzene	490.5	10.0	ug/L	501	ND	97.9	76-116	6.11	21	
1,1,1,2-Tetrachloroethane	506.0	10.0	ug/L	503	ND	101	77-121	2.84	25	
Ethylbenzene	479.7	10.0	ug/L	502	ND	95.6	73-124	5.91	20	
Xylenes, total	1475	20.0	ug/L	1510	ND	97.7	75-123	5.82	20	
Styrene	511.4	10.0	ug/L	504	ND	102	70-120	3.50	23	
Bromoform	545.0	10.0	ug/L	501	ND	109	70-124	6.07	22	
1,2,3-Trichloropropane	522.5	10.0	ug/L	503	ND	104	62-135	7.14	28	
trans-1,4-Dichloro-2-butene	1016	50.0	ug/L	1000	ND	102	50-120	8.25	26	
1,1,2,2-Tetrachloroethane	444.0	10.0	ug/L	501	ND	88.6	63-126	3.41	24	
1,4-Dichlorobenzene	428.8	10.0	ug/L	501	ND	85.5	72-119	8.42	24	
1,2-Dichlorobenzene	469.0	10.0	ug/L	501	ND	93.6	71-117	4.62	24	
1,2-Dibromo-3-chloropropane	444.9	50.0	ug/L	501	ND	88.8	49-134	12.4	28	
Surrogate: Dibromofluoromethane	473		ug/L	502		94.3	75-136			
Surrogate: Dibromofluoromethane	473		ug/L	502		94.3	57-128			
Surrogate: 1,2-Dichloroethane-d4	497		ug/L	504		98.7	61-142			
Surrogate: 1,2-Dichloroethane-d4	497		ug/L	504		98.7	49-135			
Surrogate: Toluene-d8	493		ug/L	505		97.6	82-121			
Surrogate: Toluene-d8	493		ug/L	505		97.6	82-116			
Surrogate: 4-Bromofluorobenzene	515		ug/L	502		103	80-116			
Surrogate: 4-Bromofluorobenzene	515		ug/L	502		103	77-114			
Batch 11I0774 - EPA 5030B - EPA 8260D										
Blank (11I0774-BLK1) Prepared: 09/12/25 00:00 Analyzed: 09/12/25 10:22										
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							

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11I0767

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11I0774 - EPA 5030B - EPA 8260D										
Blank (11I0774-BLK1)										
Prepared: 09/12/25 00:00 Analyzed: 09/12/25 10:22										
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	48.1		ug/L	50.2		95.8	57-128			
Surrogate: Dibromofluoromethane	48.1		ug/L	50.2		95.8	75-136			
Surrogate: 1,2-Dichloroethane-d4	48.2		ug/L	50.4		95.7	49-135			
Surrogate: 1,2-Dichloroethane-d4	48.2		ug/L	50.4		95.7	61-142			
Surrogate: Toluene-d8	49.1		ug/L	50.5		97.3	82-116			
Surrogate: Toluene-d8	49.1		ug/L	50.5		97.3	82-121			
Surrogate: 4-Bromofluorobenzene	45.7		ug/L	50.2		91.0	77-114			
Surrogate: 4-Bromofluorobenzene	45.7		ug/L	50.2		91.0	80-116			
LCS (11I0774-BS1)										
Prepared: 09/12/25 00:00 Analyzed: 09/12/25 09:13										
Chloromethane	33.12	1.0	ug/L	30.3		109	63-155			
Vinyl Chloride	32.45	1.0	ug/L	30.2		107	70-154			

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11I0767

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11I0774 - EPA 5030B - EPA 8260D										
LCS (11I0774-BS1)				Prepared: 09/12/25 00:00 Analyzed: 09/12/25 09:13						
Bromomethane	27.98	1.0	ug/L	30.1		92.9	52-176			
Chloroethane	29.49	1.0	ug/L	30.3		97.3	72-148			
Trichlorofluoromethane	29.60	1.0	ug/L	30.3		97.7	70-152			
1,1-Dichloroethylene	51.62	1.0	ug/L	50.1		103	70-148			
Acetone	82.03	10.0	ug/L	100		82.0	43-172			
Methyl Iodide	93.15	1.0	ug/L	100		93.2	69-170			
Carbon Disulfide	105.9	1.0	ug/L	100		106	72-162			
Methylene Chloride	46.90	5.0	ug/L	50.1		93.6	68-142			
Acrylonitrile	87.54	5.0	ug/L	50.4		174	33-163			Q2
trans-1,2-Dichloroethylene	49.48	1.0	ug/L	50.1		98.8	66-148			
1,1-Dichloroethane	51.45	1.0	ug/L	50.1		103	66-143			
Vinyl Acetate	163.8	5.0	ug/L	131		125	43-153			
cis-1,2-Dichloroethylene	49.28	1.0	ug/L	50.4		97.9	71-149			
2-Butanone (MEK)	95.83	10.0	ug/L	100		95.8	52-159			
Bromochloromethane	48.78	1.0	ug/L	50.4		96.8	69-143			
Chloroform	49.18	1.0	ug/L	50.1		98.2	69-144			
1,1,1-Trichloroethane	51.16	1.0	ug/L	50.1		102	62-129			
Carbon Tetrachloride	54.13	1.0	ug/L	50.1		108	63-141			
Benzene	50.55	1.0	ug/L	50.4		100	71-134			
1,2-Dichloroethane	52.28	1.0	ug/L	50.1		104	72-132			
Trichloroethylene	53.52	1.0	ug/L	50.1		107	71-135			
1,2-Dichloropropane	52.42	1.0	ug/L	50.1		105	69-136			
Dibromomethane	48.60	1.0	ug/L	50.4		96.5	73-147			
Bromodichloromethane	52.99	1.0	ug/L	50.1		106	68-129			
cis-1,3-Dichloropropene	53.59	1.0	ug/L	50.1		107	65-134			
4-Methyl-2-pentanone (MIBK)	104.0	5.0	ug/L	100		104	58-147			
Toluene	49.18	1.0	ug/L	50.5		97.4	72-133			
trans-1,3-Dichloropropene	57.07	1.0	ug/L	50.1		114	67-130			
1,1,2-Trichloroethane	49.87	1.0	ug/L	50.1		99.6	69-135			
Tetrachloroethylene	52.99	1.0	ug/L	50.1		106	69-130			
2-Hexanone (MBK)	101.4	5.0	ug/L	100		101	55-144			
Dibromochloromethane	52.87	1.0	ug/L	50.1		106	73-127			
1,2-Dibromoethane	52.50	1.0	ug/L	50.2		105	67-132			
Chlorobenzene	50.79	1.0	ug/L	50.1		101	72-123			
1,1,1,2-Tetrachloroethane	50.58	1.0	ug/L	50.3		100	73-127			
Ethylbenzene	49.87	1.0	ug/L	50.2		99.4	71-127			
Xylenes, total	152.5	2.0	ug/L	151		101	74-127			
Styrene	53.43	1.0	ug/L	50.4		106	66-126			
Bromoform	57.88	1.0	ug/L	50.1		115	68-130			
1,2,3-Trichloropropane	53.79	1.0	ug/L	50.3		107	63-136			
trans-1,4-Dichloro-2-butene	111.5	5.0	ug/L	100		111	54-134			
1,1,2,2-Tetrachloroethane	48.22	1.0	ug/L	50.1		96.2	61-131			
1,4-Dichlorobenzene	46.99	1.0	ug/L	50.1		93.7	70-129			

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11I0767

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11I0774 - EPA 5030B - EPA 8260D										
LCS (11I0774-BS1) Prepared: 09/12/25 00:00 Analyzed: 09/12/25 09:13										
1,2-Dichlorobenzene	51.32	1.0	ug/L	50.1		102	69-126			
1,2-Dibromo-3-chloropropane	52.10	5.0	ug/L	50.1		104	50-143			
Surrogate: Dibromofluoromethane	49.7		ug/L	50.2		99.0	57-128			
Surrogate: Dibromofluoromethane	49.7		ug/L	50.2		99.0	75-136			
Surrogate: 1,2-Dichloroethane-d4	49.0		ug/L	50.4		97.4	49-135			
Surrogate: 1,2-Dichloroethane-d4	49.0		ug/L	50.4		97.4	61-142			
Surrogate: Toluene-d8	50.8		ug/L	50.5		101	82-116			
Surrogate: Toluene-d8	50.8		ug/L	50.5		101	82-121			
Surrogate: 4-Bromofluorobenzene	51.0		ug/L	50.2		102	77-114			
Surrogate: 4-Bromofluorobenzene	51.0		ug/L	50.2		102	80-116			
LCS Dup (11I0774-BSD1) Prepared: 09/12/25 00:00 Analyzed: 09/12/25 09:36										
Chloromethane	33.67	1.0	ug/L	30.3		111	63-155	1.65	24	
Vinyl Chloride	33.64	1.0	ug/L	30.2		111	70-154	3.60	25	
Bromomethane	28.31	1.0	ug/L	30.1		94.0	52-176	1.17	27	
Chloroethane	29.80	1.0	ug/L	30.3		98.3	72-148	1.05	25	
Trichlorofluoromethane	32.27	1.0	ug/L	30.3		106	70-152	8.63	26	
1,1-Dichloroethylene	54.03	1.0	ug/L	50.1		108	70-148	4.56	24	
Acetone	81.18	10.0	ug/L	100		81.2	43-172	1.04	30	
Methyl Iodide	96.85	1.0	ug/L	100		96.8	69-170	3.89	30	
Carbon Disulfide	109.6	1.0	ug/L	100		110	72-162	3.49	24	
Methylene Chloride	48.40	5.0	ug/L	50.1		96.6	68-142	3.15	21	
Acrylonitrile	88.38	5.0	ug/L	50.4		176	33-163	0.955	28	Q2
trans-1,2-Dichloroethylene	50.02	1.0	ug/L	50.1		99.9	66-148	1.09	27	
1,1-Dichloroethane	52.48	1.0	ug/L	50.1		105	66-143	1.98	24	
Vinyl Acetate	164.5	5.0	ug/L	131		126	43-153	0.408	30	
cis-1,2-Dichloroethylene	47.51	1.0	ug/L	50.4		94.4	71-149	3.66	26	
2-Butanone (MEK)	102.4	10.0	ug/L	100		102	52-159	6.67	27	
Bromochloromethane	50.02	1.0	ug/L	50.4		99.2	69-143	2.51	23	
Chloroform	49.46	1.0	ug/L	50.1		98.8	69-144	0.568	23	
1,1,1-Trichloroethane	52.53	1.0	ug/L	50.1		105	62-129	2.64	24	
Carbon Tetrachloride	54.33	1.0	ug/L	50.1		108	63-141	0.369	25	
Benzene	52.90	1.0	ug/L	50.4		105	71-134	4.54	24	
1,2-Dichloroethane	54.30	1.0	ug/L	50.1		108	72-132	3.79	24	
Trichloroethylene	55.82	1.0	ug/L	50.1		111	71-135	4.21	24	
1,2-Dichloropropane	54.48	1.0	ug/L	50.1		109	69-136	3.85	24	
Dibromomethane	49.45	1.0	ug/L	50.4		98.2	73-147	1.73	25	
Bromodichloromethane	54.06	1.0	ug/L	50.1		108	68-129	2.00	22	
cis-1,3-Dichloropropene	54.89	1.0	ug/L	50.1		110	65-134	2.40	23	
4-Methyl-2-pentanone (MIBK)	105.2	5.0	ug/L	100		105	58-147	1.14	27	
Toluene	51.92	1.0	ug/L	50.5		103	72-133	5.42	24	
trans-1,3-Dichloropropene	57.70	1.0	ug/L	50.1		115	67-130	1.10	24	
1,1,2-Trichloroethane	49.86	1.0	ug/L	50.1		99.5	69-135	0.0201	23	
Tetrachloroethylene	55.50	1.0	ug/L	50.1		111	69-130	4.63	25	

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Page 32 of 47



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CERTIFICATE OF ANALYSIS

11I0767

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11I0774 - EPA 5030B - EPA 8260D										
LCS Dup (11I0774-BSD1)				Prepared: 09/12/25 00:00 Analyzed: 09/12/25 09:36						
2-Hexanone (MBK)	100.8	5.0	ug/L	100		101	55-144	0.643	25	
Dibromochloromethane	53.07	1.0	ug/L	50.1		106	73-127	0.378	22	
1,2-Dibromoethane	52.03	1.0	ug/L	50.2		104	67-132	0.899	24	
Chlorobenzene	51.22	1.0	ug/L	50.1		102	72-123	0.843	23	
1,1,1,2-Tetrachloroethane	55.22	1.0	ug/L	50.3		110	73-127	8.77	24	
Ethylbenzene	51.28	1.0	ug/L	50.2		102	71-127	2.79	26	
Xylenes, total	154.7	2.0	ug/L	151		102	74-127	1.39	25	
Styrene	52.75	1.0	ug/L	50.4		105	66-126	1.28	23	
Bromoform	58.83	1.0	ug/L	50.1		117	68-130	1.63	23	
1,2,3-Trichloropropane	55.92	1.0	ug/L	50.3		111	63-136	3.88	24	
trans-1,4-Dichloro-2-butene	108.3	5.0	ug/L	100		108	54-134	2.89	27	
1,1,2,2-Tetrachloroethane	48.16	1.0	ug/L	50.1		96.1	61-131	0.125	29	
1,4-Dichlorobenzene	47.53	1.0	ug/L	50.1		94.8	70-129	1.14	24	
1,2-Dichlorobenzene	50.97	1.0	ug/L	50.1		102	69-126	0.684	26	
1,2-Dibromo-3-chloropropane	52.81	5.0	ug/L	50.1		105	50-143	1.35	30	
Surrogate: Dibromofluoromethane	48.6		ug/L	50.2		96.7	57-128			
Surrogate: Dibromofluoromethane	48.6		ug/L	50.2		96.7	75-136			
Surrogate: 1,2-Dichloroethane-d4	48.5		ug/L	50.4		96.3	49-135			
Surrogate: 1,2-Dichloroethane-d4	48.5		ug/L	50.4		96.3	61-142			
Surrogate: Toluene-d8	51.1		ug/L	50.5		101	82-116			
Surrogate: Toluene-d8	51.1		ug/L	50.5		101	82-121			
Surrogate: 4-Bromofluorobenzene	49.1		ug/L	50.2		97.8	77-114			
Surrogate: 4-Bromofluorobenzene	49.1		ug/L	50.2		97.8	80-116			
Matrix Spike (11I0774-MS1)				Source: 11I0767-08		Prepared: 09/12/25 00:00 Analyzed: 09/12/25 18:22				
Chloromethane	316.2	10.0	ug/L	303	ND	104	61-152			
Vinyl Chloride	301.1	10.0	ug/L	302	ND	99.5	66-149			
Bromomethane	289.2	10.0	ug/L	301	ND	96.0	43-171			
Chloroethane	295.1	10.0	ug/L	303	ND	97.3	69-148			
Trichlorofluoromethane	313.3	10.0	ug/L	303	ND	103	62-163			
1,1-Dichloroethylene	506.0	10.0	ug/L	501	ND	101	70-148			
Acetone	908.9	100	ug/L	1000	ND	90.9	45-173			
Methyl Iodide	787.7	10.0	ug/L	1000	ND	78.8	62-167			
Carbon Disulfide	1005	10.0	ug/L	1000	ND	100	71-163			
Methylene Chloride	477.4	50.0	ug/L	501	ND	95.3	69-140			
Acrylonitrile	887.2	50.0	ug/L	504	ND	176	32-159			M1
trans-1,2-Dichloroethylene	471.6	10.0	ug/L	501	ND	94.2	69-144			
1,1-Dichloroethane	496.0	10.0	ug/L	501	ND	99.0	70-138			
Vinyl Acetate	1511	50.0	ug/L	1310	ND	115	58-142			
cis-1,2-Dichloroethylene	469.0	10.0	ug/L	504	ND	93.1	68-151			
2-Butanone (MEK)	970.8	100	ug/L	1000	ND	97.1	50-160			
Bromochloromethane	478.5	10.0	ug/L	504	ND	94.9	65-143			
Chloroform	486.8	10.0	ug/L	501	ND	97.2	71-143			
1,1,1-Trichloroethane	501.8	10.0	ug/L	501	ND	100	63-133			

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11I0767

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11I0774 - EPA 5030B - EPA 8260D										
Matrix Spike (11I0774-MS1)	Source: 11I0767-08			Prepared: 09/12/25 00:00 Analyzed: 09/12/25 18:22						
Carbon Tetrachloride	507.2	10.0	ug/L	501	ND	101	63-142			
Benzene	510.4	10.0	ug/L	504	ND	101	69-133			
1,2-Dichloroethane	523.3	10.0	ug/L	501	ND	104	63-138			
Trichloroethylene	532.7	10.0	ug/L	501	ND	106	71-133			
1,2-Dichloropropane	522.2	10.0	ug/L	501	ND	104	69-132			
Dibromomethane	496.7	10.0	ug/L	504	ND	98.6	70-147			
Bromodichloromethane	542.3	10.0	ug/L	501	ND	108	67-130			
cis-1,3-Dichloropropene	518.8	10.0	ug/L	501	ND	104	61-126			
4-Methyl-2-pentanone (MIBK)	1024	50.0	ug/L	1000	ND	102	55-147			
Toluene	510.1	10.0	ug/L	505	ND	101	71-133			
trans-1,3-Dichloropropene	530.0	10.0	ug/L	501	ND	106	63-124			
1,1,2-Trichloroethane	516.3	10.0	ug/L	501	ND	103	69-133			
Tetrachloroethylene	556.0	10.0	ug/L	501	ND	111	70-124			
2-Hexanone (MBK)	975.7	50.0	ug/L	1000	ND	97.6	53-141			
Dibromochloromethane	511.0	10.0	ug/L	501	ND	102	74-122			
1,2-Dibromoethane	527.0	10.0	ug/L	502	ND	105	66-127			
Chlorobenzene	505.7	10.0	ug/L	501	ND	101	76-116			
1,1,1,2-Tetrachloroethane	538.9	10.0	ug/L	503	ND	107	77-121			
Ethylbenzene	522.1	10.0	ug/L	502	ND	104	73-124			
Xylenes, total	1559	20.0	ug/L	1510	ND	103	75-123			
Styrene	543.9	10.0	ug/L	504	ND	108	70-120			
Bromoform	562.4	10.0	ug/L	501	ND	112	70-124			
1,2,3-Trichloropropane	551.9	10.0	ug/L	503	ND	110	62-135			
trans-1,4-Dichloro-2-butene	1020	50.0	ug/L	1000	ND	102	50-120			
1,1,2,2-Tetrachloroethane	464.1	10.0	ug/L	501	ND	92.6	63-126			
1,4-Dichlorobenzene	466.0	10.0	ug/L	501	ND	93.0	72-119			
1,2-Dichlorobenzene	505.6	10.0	ug/L	501	ND	101	71-117			
1,2-Dibromo-3-chloropropane	470.6	50.0	ug/L	501	ND	93.9	49-134			
Surrogate: Dibromofluoromethane	479		ug/L	502		95.5	57-128			
Surrogate: Dibromofluoromethane	479		ug/L	502		95.5	75-136			
Surrogate: 1,2-Dichloroethane-d4	484		ug/L	504		96.1	61-142			
Surrogate: 1,2-Dichloroethane-d4	484		ug/L	504		96.1	49-135			
Surrogate: Toluene-d8	505		ug/L	505		100	82-116			
Surrogate: Toluene-d8	505		ug/L	505		100	82-121			
Surrogate: 4-Bromofluorobenzene	500		ug/L	502		99.6	77-114			
Surrogate: 4-Bromofluorobenzene	500		ug/L	502		99.6	80-116			
Matrix Spike Dup (11I0774-MSD1)	Source: 11I0767-08			Prepared: 09/12/25 00:00 Analyzed: 09/12/25 18:45						
Chloromethane	319.3	10.0	ug/L	303	ND	105	61-152	0.976	26	
Vinyl Chloride	311.3	10.0	ug/L	302	ND	103	66-149	3.33	23	
Bromomethane	285.0	10.0	ug/L	301	ND	94.6	43-171	1.46	29	
Chloroethane	277.7	10.0	ug/L	303	ND	91.6	69-148	6.08	25	
Trichlorofluoromethane	312.5	10.0	ug/L	303	ND	103	62-163	0.256	25	
1,1-Dichloroethylene	507.1	10.0	ug/L	501	ND	101	70-148	0.217	22	

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CERTIFICATE OF ANALYSIS

11I0767

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11I0774 - EPA 5030B - EPA 8260D										
Matrix Spike Dup (11I0774-MSD1)										
Source: 11I0767-08			Prepared: 09/12/25 00:00 Analyzed: 09/12/25 18:45							
Acetone	880.6	100	ug/L	1000	ND	88.1	45-173	3.16	30	
Methyl Iodide	848.6	10.0	ug/L	1000	ND	84.9	62-167	7.44	24	
Carbon Disulfide	982.5	10.0	ug/L	1000	ND	98.2	71-163	2.24	22	
Methylene Chloride	461.2	50.0	ug/L	501	ND	92.0	69-140	3.45	19	
Acrylonitrile	888.3	50.0	ug/L	504	ND	176	32-159	0.124	30	M1
trans-1,2-Dichloroethylene	470.4	10.0	ug/L	501	ND	93.9	69-144	0.255	22	
1,1-Dichloroethane	500.1	10.0	ug/L	501	ND	99.8	70-138	0.823	20	
Vinyl Acetate	1544	50.0	ug/L	1310	ND	118	58-142	2.13	24	
cis-1,2-Dichloroethylene	440.8	10.0	ug/L	504	ND	87.5	68-151	6.20	22	
2-Butanone (MEK)	1011	100	ug/L	1000	ND	101	50-160	4.05	23	
Bromochloromethane	475.7	10.0	ug/L	504	ND	94.4	65-143	0.587	22	
Chloroform	474.0	10.0	ug/L	501	ND	94.6	71-143	2.66	21	
1,1,1-Trichloroethane	490.1	10.0	ug/L	501	ND	97.8	63-133	2.36	23	
Carbon Tetrachloride	524.8	10.0	ug/L	501	ND	105	63-142	3.41	22	
Benzene	495.0	10.0	ug/L	504	ND	98.1	69-133	3.06	18	
1,2-Dichloroethane	512.6	10.0	ug/L	501	ND	102	63-138	2.07	20	
Trichloroethylene	512.3	10.0	ug/L	501	ND	102	71-133	3.90	23	
1,2-Dichloropropane	504.1	10.0	ug/L	501	ND	101	69-132	3.53	20	
Dibromomethane	488.2	10.0	ug/L	504	ND	96.9	70-147	1.73	22	
Bromodichloromethane	527.6	10.0	ug/L	501	ND	105	67-130	2.75	21	
cis-1,3-Dichloropropene	509.5	10.0	ug/L	501	ND	102	61-126	1.81	21	
4-Methyl-2-pentanone (MIBK)	997.4	50.0	ug/L	1000	ND	99.7	55-147	2.60	23	
Toluene	485.0	10.0	ug/L	505	ND	96.1	71-133	5.04	19	
trans-1,3-Dichloropropene	550.5	10.0	ug/L	501	ND	110	63-124	3.79	21	
1,1,2-Trichloroethane	487.9	10.0	ug/L	501	ND	97.4	69-133	5.66	19	
Tetrachloroethylene	544.6	10.0	ug/L	501	ND	109	70-124	2.07	24	
2-Hexanone (MBK)	989.1	50.0	ug/L	1000	ND	98.9	53-141	1.36	24	
Dibromochloromethane	503.5	10.0	ug/L	501	ND	101	74-122	1.48	21	
1,2-Dibromoethane	496.9	10.0	ug/L	502	ND	98.9	66-127	5.88	23	
Chlorobenzene	494.1	10.0	ug/L	501	ND	98.7	76-116	2.32	21	
1,1,1,2-Tetrachloroethane	531.0	10.0	ug/L	503	ND	105	77-121	1.48	25	
Ethylbenzene	499.3	10.0	ug/L	502	ND	99.5	73-124	4.46	20	
Xylenes, total	1515	20.0	ug/L	1510	ND	100	75-123	2.85	20	
Styrene	528.3	10.0	ug/L	504	ND	105	70-120	2.91	23	
Bromoform	547.4	10.0	ug/L	501	ND	109	70-124	2.70	22	
1,2,3-Trichloropropane	521.0	10.0	ug/L	503	ND	103	62-135	5.76	28	
trans-1,4-Dichloro-2-butene	994.8	50.0	ug/L	1000	ND	99.5	50-120	2.47	26	
1,1,2,2-Tetrachloroethane	455.7	10.0	ug/L	501	ND	91.0	63-126	1.83	24	
1,4-Dichlorobenzene	452.6	10.0	ug/L	501	ND	90.3	72-119	2.92	24	
1,2-Dichlorobenzene	480.9	10.0	ug/L	501	ND	96.0	71-117	5.01	24	
1,2-Dibromo-3-chloropropane	474.1	50.0	ug/L	501	ND	94.6	49-134	0.741	28	
Surrogate: Dibromofluoromethane	475		ug/L	502		94.6	57-128			

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CERTIFICATE OF ANALYSIS

11I0767

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch 11I0774 - EPA 5030B - EPA 8260D									
Matrix Spike Dup (11I0774-MSD1)		Source: 11I0767-08		Prepared: 09/12/25 00:00 Analyzed: 09/12/25 18:45					
Surrogate: Dibromofluoromethane	475		ug/L	502		94.6 75-136			
Surrogate: 1,2-Dichloroethane-d4	488		ug/L	504		97.0 49-135			
Surrogate: 1,2-Dichloroethane-d4	488		ug/L	504		97.0 61-142			
Surrogate: Toluene-d8	494		ug/L	505		98.0 82-116			
Surrogate: Toluene-d8	494		ug/L	505		98.0 82-121			
Surrogate: 4-Bromofluorobenzene	500		ug/L	502		99.6 77-114			
Surrogate: 4-Bromofluorobenzene	500		ug/L	502		99.6 80-116			

Batch 11I0883 - EPA 5030B - EPA 8260D

Blank (11I0883-BLK1) Prepared: 09/15/25 00:00 Analyzed: 09/15/25 11:16

Chloromethane	<1.0	1.0	ug/L
Vinyl Chloride	<1.0	1.0	ug/L
Bromomethane	<1.0	1.0	ug/L
Chloroethane	<1.0	1.0	ug/L
Trichlorofluoromethane	<1.0	1.0	ug/L
1,1-Dichloroethylene	<1.0	1.0	ug/L
Acetone	<10.0	10.0	ug/L
Methyl Iodide	<1.0	1.0	ug/L
Carbon Disulfide	<1.0	1.0	ug/L
Methylene Chloride	<5.0	5.0	ug/L
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L
1,1-Dichloroethane	<1.0	1.0	ug/L
Vinyl Acetate	<5.0	5.0	ug/L
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L
2-Butanone (MEK)	<10.0	10.0	ug/L
Bromochloromethane	<1.0	1.0	ug/L
Chloroform	<1.0	1.0	ug/L
1,1,1-Trichloroethane	<1.0	1.0	ug/L
Carbon Tetrachloride	<1.0	1.0	ug/L
Benzene	<1.0	1.0	ug/L
1,2-Dichloroethane	<1.0	1.0	ug/L
Trichloroethylene	<1.0	1.0	ug/L
1,2-Dichloropropane	<1.0	1.0	ug/L
Dibromomethane	<1.0	1.0	ug/L
Bromodichloromethane	<1.0	1.0	ug/L
cis-1,3-Dichloropropene	<1.0	1.0	ug/L
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L
Toluene	<1.0	1.0	ug/L
trans-1,3-Dichloropropene	<1.0	1.0	ug/L
1,1,2-Trichloroethane	<1.0	1.0	ug/L
Tetrachloroethylene	<1.0	1.0	ug/L
2-Hexanone (MBK)	<5.0	5.0	ug/L

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CERTIFICATE OF ANALYSIS

11I0767

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11I0883 - EPA 5030B - EPA 8260D										
Blank (11I0883-BLK1)										
Prepared: 09/15/25 00:00 Analyzed: 09/15/25 11:16										
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							
1,1,1,2-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	48.6		ug/L	50.2		96.9	75-136			
Surrogate: 1,2-Dichloroethane-d4	49.2		ug/L	50.4		97.6	61-142			
Surrogate: Toluene-d8	49.3		ug/L	50.5		97.8	82-121			
Surrogate: 4-Bromofluorobenzene	46.8		ug/L	50.2		93.4	80-116			
LCS (11I0883-BS1)										
Prepared: 09/15/25 00:00 Analyzed: 09/15/25 10:07										
Chloromethane	34.51	1.0	ug/L	30.3		114	63-155			
Vinyl Chloride	33.67	1.0	ug/L	30.2		111	70-154			
Bromomethane	29.00	1.0	ug/L	30.1		96.3	52-176			
Chloroethane	30.27	1.0	ug/L	30.3		99.8	72-148			
Trichlorofluoromethane	34.26	1.0	ug/L	30.3		113	70-152			
1,1-Dichloroethylene	56.03	1.0	ug/L	50.1		112	70-148			
Acetone	87.68	10.0	ug/L	100		87.7	43-172			
Methyl Iodide	95.45	1.0	ug/L	100		95.4	69-170			
Carbon Disulfide	110.6	1.0	ug/L	100		111	72-162			
Methylene Chloride	49.49	5.0	ug/L	50.1		98.8	68-142			
trans-1,2-Dichloroethylene	50.38	1.0	ug/L	50.1		101	66-148			
1,1-Dichloroethane	52.92	1.0	ug/L	50.1		106	66-143			
Vinyl Acetate	155.7	5.0	ug/L	131		119	43-153			
cis-1,2-Dichloroethylene	45.62	1.0	ug/L	50.4		90.6	71-149			
2-Butanone (MEK)	104.5	10.0	ug/L	100		104	52-159			
Bromochloromethane	50.63	1.0	ug/L	50.4		100	69-143			
Chloroform	50.64	1.0	ug/L	50.1		101	69-144			
1,1,1-Trichloroethane	52.69	1.0	ug/L	50.1		105	62-129			
Carbon Tetrachloride	56.07	1.0	ug/L	50.1		112	63-141			
Benzene	49.74	1.0	ug/L	50.4		98.6	71-134			
1,2-Dichloroethane	54.13	1.0	ug/L	50.1		108	72-132			
Trichloroethylene	55.03	1.0	ug/L	50.1		110	71-135			
1,2-Dichloropropane	50.71	1.0	ug/L	50.1		101	69-136			

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CERTIFICATE OF ANALYSIS

11I0767

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11I0883 - EPA 5030B - EPA 8260D										
LCS (11I0883-BS1)										
Prepared: 09/15/25 00:00 Analyzed: 09/15/25 10:07										
Dibromomethane	47.04	1.0	ug/L	50.4		93.4	73-147			
Bromodichloromethane	55.76	1.0	ug/L	50.1		111	68-129			
cis-1,3-Dichloropropene	53.70	1.0	ug/L	50.1		107	65-134			
4-Methyl-2-pentanone (MIBK)	100.0	5.0	ug/L	100		100	58-147			
Toluene	49.46	1.0	ug/L	50.5		98.0	72-133			
trans-1,3-Dichloropropene	57.22	1.0	ug/L	50.1		114	67-130			
1,1,2-Trichloroethane	50.05	1.0	ug/L	50.1		99.9	69-135			
Tetrachloroethylene	55.48	1.0	ug/L	50.1		111	69-130			
2-Hexanone (MBK)	97.65	5.0	ug/L	100		97.6	55-144			
Dibromochloromethane	52.66	1.0	ug/L	50.1		105	73-127			
1,2-Dibromoethane	53.35	1.0	ug/L	50.2		106	67-132			
Chlorobenzene	49.82	1.0	ug/L	50.1		99.5	72-123			
1,1,1,2-Tetrachloroethane	53.90	1.0	ug/L	50.3		107	73-127			
Ethylbenzene	50.91	1.0	ug/L	50.2		101	71-127			
Xylenes, total	155.0	2.0	ug/L	151		103	74-127			
Styrene	52.47	1.0	ug/L	50.4		104	66-126			
Bromoform	57.11	1.0	ug/L	50.1		114	68-130			
1,2,3-Trichloropropane	53.11	1.0	ug/L	50.3		105	63-136			
trans-1,4-Dichloro-2-butene	104.1	5.0	ug/L	100		104	54-134			
1,1,2,2-Tetrachloroethane	44.21	1.0	ug/L	50.1		88.2	61-131			
1,4-Dichlorobenzene	44.61	1.0	ug/L	50.1		89.0	70-129			
1,2-Dichlorobenzene	47.61	1.0	ug/L	50.1		95.0	69-126			
1,2-Dibromo-3-chloropropane	47.55	5.0	ug/L	50.1		94.9	50-143			
Surrogate: Dibromofluoromethane	49.0		ug/L	50.2		97.6	75-136			
Surrogate: 1,2-Dichloroethane-d4	48.9		ug/L	50.4		97.1	61-142			
Surrogate: Toluene-d8	48.9		ug/L	50.5		96.8	82-121			
Surrogate: 4-Bromofluorobenzene	52.0		ug/L	50.2		104	80-116			
LCS Dup (11I0883-BSD1)										
Prepared: 09/15/25 00:00 Analyzed: 09/15/25 10:30										
Chloromethane	33.08	1.0	ug/L	30.3		109	63-155	4.23	24	
Vinyl Chloride	32.66	1.0	ug/L	30.2		108	70-154	3.05	25	
Bromomethane	28.95	1.0	ug/L	30.1		96.1	52-176	0.173	27	
Chloroethane	29.57	1.0	ug/L	30.3		97.5	72-148	2.34	25	
Trichlorofluoromethane	33.73	1.0	ug/L	30.3		111	70-152	1.56	26	
1,1-Dichloroethylene	53.31	1.0	ug/L	50.1		106	70-148	4.98	24	
Acetone	92.20	10.0	ug/L	100		92.2	43-172	5.03	30	
Methyl Iodide	97.12	1.0	ug/L	100		97.1	69-170	1.73	30	
Carbon Disulfide	108.1	1.0	ug/L	100		108	72-162	2.29	24	
Methylene Chloride	49.86	5.0	ug/L	50.1		99.5	68-142	0.745	21	
trans-1,2-Dichloroethylene	48.85	1.0	ug/L	50.1		97.5	66-148	3.08	27	
1,1-Dichloroethane	50.49	1.0	ug/L	50.1		101	66-143	4.70	24	
Vinyl Acetate	153.8	5.0	ug/L	131		117	43-153	1.23	30	
cis-1,2-Dichloroethylene	47.25	1.0	ug/L	50.4		93.8	71-149	3.51	26	

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CERTIFICATE OF ANALYSIS

11I0767

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11I0883 - EPA 5030B - EPA 8260D										
LCS Dup (11I0883-BSD1)				Prepared: 09/15/25 00:00 Analyzed: 09/15/25 10:30						
2-Butanone (MEK)	103.8	10.0	ug/L	100		104	52-159	0.663	27	
Bromochloromethane	50.26	1.0	ug/L	50.4		99.7	69-143	0.733	23	
Chloroform	49.47	1.0	ug/L	50.1		98.8	69-144	2.34	23	
1,1,1-Trichloroethane	50.67	1.0	ug/L	50.1		101	62-129	3.91	24	
Carbon Tetrachloride	54.17	1.0	ug/L	50.1		108	63-141	3.45	25	
Benzene	50.10	1.0	ug/L	50.4		99.3	71-134	0.721	24	
1,2-Dichloroethane	51.75	1.0	ug/L	50.1		103	72-132	4.50	24	
Trichloroethylene	52.49	1.0	ug/L	50.1		105	71-135	4.72	24	
1,2-Dichloropropane	50.91	1.0	ug/L	50.1		102	69-136	0.394	24	
Dibromomethane	48.43	1.0	ug/L	50.4		96.2	73-147	2.91	25	
Bromodichloromethane	53.01	1.0	ug/L	50.1		106	68-129	5.06	22	
cis-1,3-Dichloropropene	53.94	1.0	ug/L	50.1		108	65-134	0.446	23	
4-Methyl-2-pentanone (MIBK)	103.5	5.0	ug/L	100		103	58-147	3.39	27	
Toluene	48.41	1.0	ug/L	50.5		95.9	72-133	2.15	24	
trans-1,3-Dichloropropene	56.97	1.0	ug/L	50.1		114	67-130	0.438	24	
1,1,2-Trichloroethane	49.87	1.0	ug/L	50.1		99.6	69-135	0.360	23	
Tetrachloroethylene	51.63	1.0	ug/L	50.1		103	69-130	7.19	25	
2-Hexanone (MBK)	101.3	5.0	ug/L	100		101	55-144	3.66	25	
Dibromochloromethane	53.07	1.0	ug/L	50.1		106	73-127	0.776	22	
1,2-Dibromoethane	50.52	1.0	ug/L	50.2		101	67-132	5.45	24	
Chlorobenzene	49.13	1.0	ug/L	50.1		98.1	72-123	1.39	23	
1,1,1,2-Tetrachloroethane	52.26	1.0	ug/L	50.3		104	73-127	3.09	24	
Ethylbenzene	50.00	1.0	ug/L	50.2		99.7	71-127	1.80	26	
Xylenes, total	150.0	2.0	ug/L	151		99.3	74-127	3.26	25	
Styrene	52.45	1.0	ug/L	50.4		104	66-126	0.0381	23	
Bromoform	56.19	1.0	ug/L	50.1		112	68-130	1.62	23	
1,2,3-Trichloropropane	51.85	1.0	ug/L	50.3		103	63-136	2.40	24	
trans-1,4-Dichloro-2-butene	105.0	5.0	ug/L	100		105	54-134	0.871	27	
1,1,2,2-Tetrachloroethane	44.54	1.0	ug/L	50.1		88.9	61-131	0.744	29	
1,4-Dichlorobenzene	44.97	1.0	ug/L	50.1		89.7	70-129	0.804	24	
1,2-Dichlorobenzene	46.48	1.0	ug/L	50.1		92.8	69-126	2.40	26	
1,2-Dibromo-3-chloropropane	47.36	5.0	ug/L	50.1		94.5	50-143	0.400	30	
Surrogate: Dibromofluoromethane	47.8		ug/L	50.2		95.2	75-136			
Surrogate: 1,2-Dichloroethane-d4	50.6		ug/L	50.4		100	61-142			
Surrogate: Toluene-d8	49.4		ug/L	50.5		97.8	82-121			
Surrogate: 4-Bromofluorobenzene	51.5		ug/L	50.2		103	80-116			
Matrix Spike (11I0883-MS1)				Source: 11I1028-18		Prepared: 09/15/25 00:00 Analyzed: 09/15/25 19:15				
Chloromethane	713.7	10.0	ug/L	303	ND	235	61-152			M1
Vinyl Chloride	373.8	10.0	ug/L	302	ND	124	66-149			
Bromomethane	163.4	10.0	ug/L	301	ND	54.2	43-171			
Chloroethane	353.7	10.0	ug/L	303	ND	117	69-148			
Trichlorofluoromethane	369.2	10.0	ug/L	303	ND	122	62-163			

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Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11I0883 - EPA 5030B - EPA 8260D										
Matrix Spike (11I0883-MS1)	Source: 11I028-18			Prepared: 09/15/25 00:00 Analyzed: 09/15/25 19:15						
1,1-Dichloroethylene	596.4	10.0	ug/L	501	ND	119	70-148			
Acetone	1194	100	ug/L	1000	ND	119	45-173			
Methyl Iodide	499.2	10.0	ug/L	1000	ND	49.9	62-167			M2
Carbon Disulfide	1175	10.0	ug/L	1000	ND	117	71-163			
Methylene Chloride	562.2	50.0	ug/L	501	ND	112	69-140			
trans-1,2-Dichloroethylene	531.2	10.0	ug/L	501	ND	106	69-144			
1,1-Dichloroethane	564.9	10.0	ug/L	501	ND	113	70-138			
Vinyl Acetate	1742	50.0	ug/L	1310	ND	133	58-142			
cis-1,2-Dichloroethylene	507.6	10.0	ug/L	504	ND	101	68-151			
2-Butanone (MEK)	1200	100	ug/L	1000	ND	120	50-160			
Bromochloromethane	556.4	10.0	ug/L	504	ND	110	65-143			
Chloroform	557.1	10.0	ug/L	501	ND	111	71-143			
1,1,1-Trichloroethane	555.5	10.0	ug/L	501	ND	111	63-133			
Carbon Tetrachloride	509.9	10.0	ug/L	501	ND	102	63-142			
Benzene	527.6	10.0	ug/L	504	ND	105	69-133			
1,2-Dichloroethane	544.9	10.0	ug/L	501	ND	109	63-138			
Trichloroethylene	568.5	10.0	ug/L	501	ND	113	71-133			
1,2-Dichloropropane	544.2	10.0	ug/L	501	ND	109	69-132			
Dibromomethane	523.4	10.0	ug/L	504	ND	104	70-147			
Bromodichloromethane	542.6	10.0	ug/L	501	ND	108	67-130			
cis-1,3-Dichloropropene	597.5	10.0	ug/L	501	ND	119	61-126			
4-Methyl-2-pentanone (MIBK)	1134	50.0	ug/L	1000	ND	113	55-147			
Toluene	517.8	10.0	ug/L	505	ND	103	71-133			
trans-1,3-Dichloropropene	600.7	10.0	ug/L	501	ND	120	63-124			
1,1,2-Trichloroethane	530.6	10.0	ug/L	501	ND	106	69-133			
Tetrachloroethylene	569.1	10.0	ug/L	501	ND	114	70-124			
2-Hexanone (MBK)	1071	50.0	ug/L	1000	ND	107	53-141			
Dibromochloromethane	508.3	10.0	ug/L	501	ND	102	74-122			
1,2-Dibromoethane	542.0	10.0	ug/L	502	ND	108	66-127			
Chlorobenzene	521.7	10.0	ug/L	501	ND	104	76-116			
1,1,1,2-Tetrachloroethane	533.7	10.0	ug/L	503	ND	106	77-121			
Ethylbenzene	523.6	10.0	ug/L	502	ND	104	73-124			
Xylenes, total	1560	20.0	ug/L	1510	ND	103	75-123			
Styrene	549.8	10.0	ug/L	504	ND	109	70-120			
Bromoform	579.9	10.0	ug/L	501	ND	116	70-124			
1,2,3-Trichloropropane	560.8	10.0	ug/L	503	ND	111	62-135			
trans-1,4-Dichloro-2-butene	1186	50.0	ug/L	1000	ND	119	50-120			
1,1,2,2-Tetrachloroethane	498.3	10.0	ug/L	501	ND	99.5	63-126			
1,4-Dichlorobenzene	484.8	10.0	ug/L	501	ND	96.7	72-119			
1,2-Dichlorobenzene	518.9	10.0	ug/L	501	ND	104	71-117			
1,2-Dibromo-3-chloropropane	571.3	50.0	ug/L	501	ND	114	49-134			
Surrogate: Dibromofluoromethane	523		ug/L	502		104	75-136			

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Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11I0883 - EPA 5030B - EPA 8260D										
Matrix Spike (11I0883-MS1)		Source: 11I1028-18		Prepared: 09/15/25 00:00 Analyzed: 09/15/25 19:15						
Surrogate: 1,2-Dichloroethane-d4	524		ug/L	504		104	61-142			
Surrogate: Toluene-d8	501		ug/L	505		99.3	82-121			
Surrogate: 4-Bromofluorobenzene	491		ug/L	502		97.8	80-116			
Matrix Spike Dup (11I0883-MSD1)		Source: 11I1028-18		Prepared: 09/15/25 00:00 Analyzed: 09/15/25 19:38						
Chloromethane	681.3	10.0	ug/L	303	ND	225	61-152	4.65	26	M1
Vinyl Chloride	350.5	10.0	ug/L	302	ND	116	66-149	6.43	23	
Bromomethane	157.6	10.0	ug/L	301	ND	52.3	43-171	3.61	29	
Chloroethane	326.0	10.0	ug/L	303	ND	108	69-148	8.15	25	
Trichlorofluoromethane	344.6	10.0	ug/L	303	ND	114	62-163	6.89	25	
1,1-Dichloroethylene	589.7	10.0	ug/L	501	ND	118	70-148	1.13	22	
Acetone	1253	100	ug/L	1000	ND	125	45-173	4.82	30	
Methyl Iodide	496.2	10.0	ug/L	1000	ND	49.6	62-167	0.603	24	M2
Carbon Disulfide	1129	10.0	ug/L	1000	ND	113	71-163	3.98	22	
Methylene Chloride	536.7	50.0	ug/L	501	ND	107	69-140	4.64	19	
trans-1,2-Dichloroethylene	521.5	10.0	ug/L	501	ND	104	69-144	1.84	22	
1,1-Dichloroethane	542.4	10.0	ug/L	501	ND	108	70-138	4.06	20	
Vinyl Acetate	1763	50.0	ug/L	1310	ND	135	58-142	1.20	24	
cis-1,2-Dichloroethylene	506.2	10.0	ug/L	504	ND	101	68-151	0.276	22	
2-Butanone (MEK)	1277	100	ug/L	1000	ND	128	50-160	6.26	23	
Bromochloromethane	526.8	10.0	ug/L	504	ND	105	65-143	5.47	22	
Chloroform	529.3	10.0	ug/L	501	ND	106	71-143	5.12	21	
1,1,1-Trichloroethane	534.2	10.0	ug/L	501	ND	107	63-133	3.91	23	
Carbon Tetrachloride	486.7	10.0	ug/L	501	ND	97.2	63-142	4.66	22	
Benzene	499.8	10.0	ug/L	504	ND	99.1	69-133	5.41	18	
1,2-Dichloroethane	532.3	10.0	ug/L	501	ND	106	63-138	2.34	20	
Trichloroethylene	513.6	10.0	ug/L	501	ND	103	71-133	10.1	23	
1,2-Dichloropropane	527.0	10.0	ug/L	501	ND	105	69-132	3.21	20	
Dibromomethane	489.3	10.0	ug/L	504	ND	97.1	70-147	6.73	22	
Bromodichloromethane	519.5	10.0	ug/L	501	ND	104	67-130	4.35	21	
cis-1,3-Dichloropropene	553.4	10.0	ug/L	501	ND	110	61-126	7.66	21	
4-Methyl-2-pentanone (MIBK)	1099	50.0	ug/L	1000	ND	110	55-147	3.15	23	
Toluene	490.2	10.0	ug/L	505	ND	97.1	71-133	5.48	19	
trans-1,3-Dichloropropene	571.1	10.0	ug/L	501	ND	114	63-124	5.05	21	
1,1,2-Trichloroethane	496.7	10.0	ug/L	501	ND	99.2	69-133	6.60	19	
Tetrachloroethylene	535.2	10.0	ug/L	501	ND	107	70-124	6.14	24	
2-Hexanone (MBK)	1075	50.0	ug/L	1000	ND	108	53-141	0.410	24	
Dibromochloromethane	515.8	10.0	ug/L	501	ND	103	74-122	1.46	21	
1,2-Dibromoethane	548.1	10.0	ug/L	502	ND	109	66-127	1.12	23	
Chlorobenzene	502.0	10.0	ug/L	501	ND	100	76-116	3.85	21	
1,1,1,2-Tetrachloroethane	526.4	10.0	ug/L	503	ND	105	77-121	1.38	25	
Ethylbenzene	498.2	10.0	ug/L	502	ND	99.3	73-124	4.97	20	
Xylenes, total	1504	20.0	ug/L	1510	ND	99.5	75-123	3.65	20	

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Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11I0883 - EPA 5030B - EPA 8260D										
Matrix Spike Dup (11I0883-MSD1)		Source: 11I1028-18		Prepared: 09/15/25 00:00 Analyzed: 09/15/25 19:38						
Styrene	510.9	10.0	ug/L	504	ND	101	70-120	7.33	23	
Bromoform	565.9	10.0	ug/L	501	ND	113	70-124	2.44	22	
1,2,3-Trichloropropane	548.3	10.0	ug/L	503	ND	109	62-135	2.25	28	
trans-1,4-Dichloro-2-butene	1129	50.0	ug/L	1000	ND	113	50-120	4.97	26	
1,1,2,2-Tetrachloroethane	464.1	10.0	ug/L	501	ND	92.6	63-126	7.11	24	
1,4-Dichlorobenzene	446.2	10.0	ug/L	501	ND	89.0	72-119	8.29	24	
1,2-Dichlorobenzene	478.7	10.0	ug/L	501	ND	95.6	71-117	8.06	24	
1,2-Dibromo-3-chloropropane	548.0	50.0	ug/L	501	ND	109	49-134	4.16	28	
Surrogate: Dibromofluoromethane	515		ug/L	502		103	75-136			
Surrogate: 1,2-Dichloroethane-d4	552		ug/L	504		110	61-142			
Surrogate: Toluene-d8	502		ug/L	505		99.4	82-121			
Surrogate: 4-Bromofluorobenzene	500		ug/L	502		99.7	80-116			

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11I0635 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Blank (11I0635-BLK1)		Prepared: 09/11/25 08:37 Analyzed: 09/11/25 17:35								
Antimony, total	<0.0010	0.0010	mg/L							
Arsenic, total	<0.0020	0.0020	mg/L							
Barium, total	<0.0010	0.0010	mg/L							
Beryllium, total	<0.0005	0.0005	mg/L							
Cadmium, total	<0.0002	0.0002	mg/L							
Chromium, total	<0.0010	0.0010	mg/L							
Cobalt, total	<0.0005	0.0005	mg/L							
Copper, total	<0.0050	0.0050	mg/L							B
Lead, total	<0.0010	0.0010	mg/L							
Nickel, total	<0.0050	0.0050	mg/L							
Selenium, total	<0.0020	0.0020	mg/L							
Silver, total	<0.0050	0.0050	mg/L							
Thallium, total	<0.0005	0.0005	mg/L							
Vanadium, total	<0.0020	0.0020	mg/L							
Zinc, total	<0.0050	0.0050	mg/L							

LCS (11I0635-BS1)		Prepared: 09/11/25 08:37 Analyzed: 09/11/25 17:37								
Antimony, total	0.101	0.0010	mg/L	0.100		101	80-120			
Arsenic, total	0.0993	0.0020	mg/L	0.100		99.3	80-120			
Barium, total	0.107	0.0010	mg/L	0.100		107	80-120			
Beryllium, total	0.100	0.0005	mg/L	0.100		100	80-120			
Cadmium, total	0.100	0.0002	mg/L	0.100		100	80-120			
Chromium, total	0.101	0.0010	mg/L	0.100		101	80-120			
Cobalt, total	0.101	0.0005	mg/L	0.100		101	80-120			
Copper, total	0.0937	0.0050	mg/L	0.100		93.7	80-120			
Lead, total	0.105	0.0010	mg/L	0.100		105	80-120			

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11I0767

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch 11I0635 - EPA 3005A Total Recoverable Metals - EPA 6020A									
LCS (11I0635-BS1) Prepared: 09/11/25 08:37 Analyzed: 09/11/25 17:37									
Nickel, total	0.0961	0.0050	mg/L	0.100		96.1	80-120		
Selenium, total	0.0969	0.0020	mg/L	0.100		96.9	80-120		
Silver, total	0.101	0.0050	mg/L	0.100		101	80-120		
Thallium, total	0.104	0.0005	mg/L	0.100		104	80-120		
Vanadium, total	0.110	0.0020	mg/L	0.100		110	80-120		
Zinc, total	0.0985	0.0050	mg/L	0.100		98.5	80-120		
Matrix Spike (11I0635-MS1) Source: 11I0767-01 Prepared: 09/11/25 08:37 Analyzed: 09/11/25 17:42									
Antimony, total	0.106	0.0010	mg/L	0.100	0.0014	105	75-125		
Arsenic, total	0.102	0.0020	mg/L	0.100	ND	102	75-125		
Barium, total	0.291	0.0010	mg/L	0.100	0.180	111	75-125		
Beryllium, total	0.105	0.0005	mg/L	0.100	ND	105	75-125		
Cadmium, total	0.103	0.0002	mg/L	0.100	0.0006	102	75-125		
Chromium, total	0.108	0.0010	mg/L	0.100	0.0053	103	75-125		
Cobalt, total	0.100	0.0005	mg/L	0.100	0.0001	100	75-125		
Copper, total	0.0930	0.0050	mg/L	0.100	0.0068	86.3	75-125		
Lead, total	0.110	0.0010	mg/L	0.100	ND	110	75-125		
Nickel, total	0.101	0.0050	mg/L	0.100	0.0051	95.6	75-125		
Selenium, total	0.0994	0.0020	mg/L	0.100	0.0012	98.2	75-125		
Silver, total	0.104	0.0050	mg/L	0.100	ND	104	75-125		
Thallium, total	0.110	0.0005	mg/L	0.100	0.00005	110	75-125		
Vanadium, total	0.114	0.0020	mg/L	0.100	0.0013	113	75-125		
Zinc, total	0.116	0.0050	mg/L	0.100	0.0173	98.2	75-125		
Matrix Spike Dup (11I0635-MSD1) Source: 11I0767-01 Prepared: 09/11/25 08:37 Analyzed: 09/11/25 17:45									
Antimony, total	0.106	0.0010	mg/L	0.100	0.0014	105	75-125	0.166	20
Arsenic, total	0.0995	0.0020	mg/L	0.100	ND	99.5	75-125	2.59	20
Barium, total	0.303	0.0010	mg/L	0.100	0.180	123	75-125	4.08	20
Beryllium, total	0.102	0.0005	mg/L	0.100	ND	102	75-125	3.19	20
Cadmium, total	0.102	0.0002	mg/L	0.100	0.0006	102	75-125	0.499	20
Chromium, total	0.107	0.0010	mg/L	0.100	0.0053	102	75-125	1.08	20
Cobalt, total	0.0977	0.0005	mg/L	0.100	0.0001	97.6	75-125	2.77	20
Copper, total	0.0969	0.0050	mg/L	0.100	0.0068	90.1	75-125	4.08	20
Lead, total	0.104	0.0010	mg/L	0.100	ND	104	75-125	6.12	20
Nickel, total	0.0997	0.0050	mg/L	0.100	0.0051	94.6	75-125	0.931	20
Selenium, total	0.0982	0.0020	mg/L	0.100	0.0012	97.0	75-125	1.29	20
Silver, total	0.100	0.0050	mg/L	0.100	ND	100	75-125	3.55	20
Thallium, total	0.106	0.0005	mg/L	0.100	0.00005	106	75-125	4.29	20
Vanadium, total	0.111	0.0020	mg/L	0.100	0.0013	110	75-125	2.75	20
Zinc, total	0.113	0.0050	mg/L	0.100	0.0173	95.8	75-125	2.08	20
Post Spike (11I0635-PS1) Source: 11I0767-01 Prepared: 09/11/25 08:37 Analyzed: 09/11/25 17:47									
Antimony, total	0.0218		mg/L	0.0200	0.0014	102	80-120		
Arsenic, total	0.0198		mg/L	0.0200	0.0004	96.8	80-120		
Barium, total	0.196		mg/L	0.0200	0.177	97.7	80-120		
Beryllium, total	0.0198		mg/L	0.0200-0.000003		99.0	80-120		

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11I0767

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11I0635 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Post Spike (11I0635-PS1) Source: 11I0767-01 Prepared: 09/11/25 08:37 Analyzed: 09/11/25 17:47										
Cadmium, total	0.0199		mg/L	0.0200	0.0006	96.4	80-120			
Chromium, total	0.0243		mg/L	0.0200	0.0052	95.6	80-120			
Cobalt, total	0.0184		mg/L	0.0200	0.0001	91.1	80-120			
Copper, total	0.0242		mg/L	0.0200	0.0066	87.6	80-120			
Lead, total	0.0197		mg/L	0.0200	0.0001	97.9	80-120			
Nickel, total	0.0233		mg/L	0.0200	0.0050	91.6	80-120			
Selenium, total	0.0207		mg/L	0.0200	0.0012	97.8	80-120			
Silver, total	0.0200		mg/L	0.0200	0.00007	99.7	80-120			
Thallium, total	0.0199		mg/L	0.0200	0.00005	99.4	80-120			
Vanadium, total	0.0210		mg/L	0.0200	0.0013	98.2	80-120			
Zinc, total	0.0357		mg/L	0.0200	0.0170	93.3	80-120			
Batch 11I1723 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Blank (11I1723-BLK1) Prepared: 09/30/25 14:35 Analyzed: 10/01/25 20:04										
Cadmium, total	<0.0002	0.0002	mg/L							
Chromium, total	<0.0010	0.0010	mg/L							
Copper, total	<0.0050	0.0050	mg/L							
Zinc, total	<0.0050	0.0050	mg/L							
LCS (11I1723-BS1) Prepared: 09/30/25 14:35 Analyzed: 10/01/25 20:07										
Cadmium, total	0.106	0.0002	mg/L	0.100		106	80-120			
Chromium, total	0.105	0.0010	mg/L	0.100		105	80-120			
Copper, total	0.110	0.0050	mg/L	0.100		110	80-120			
Zinc, total	0.111	0.0050	mg/L	0.100		111	80-120			
Matrix Spike (11I1723-MS1) Source: 11I0763-14RE1 Prepared: 09/30/25 14:35 Analyzed: 10/01/25 20:12										
Cadmium, total	0.102	0.0002	mg/L	0.100	ND	102	75-125			
Chromium, total	0.0999	0.0010	mg/L	0.100	0.0024	97.5	75-125			
Copper, total	0.103	0.0050	mg/L	0.100	ND	103	75-125			
Zinc, total	0.109	0.0050	mg/L	0.100	0.0069	102	75-125			
Matrix Spike Dup (11I1723-MSD1) Source: 11I0763-14RE1 Prepared: 09/30/25 14:35 Analyzed: 10/01/25 20:19										
Cadmium, total	0.104	0.0002	mg/L	0.100	ND	104	75-125	2.17	20	
Chromium, total	0.105	0.0010	mg/L	0.100	0.0024	102	75-125	4.63	20	
Copper, total	0.106	0.0050	mg/L	0.100	ND	106	75-125	2.86	20	
Zinc, total	0.113	0.0050	mg/L	0.100	0.0069	106	75-125	3.12	20	
Post Spike (11I1723-PS1) Source: 11I0763-14RE1 Prepared: 09/30/25 14:35 Analyzed: 10/01/25 20:22										
Cadmium, total	0.0200		mg/L	0.0200	0.00	99.8	80-120			
Chromium, total	0.0223		mg/L	0.0200	0.0024	99.7	80-120			
Copper, total	0.0208		mg/L	0.0200	0.0011	98.6	80-120			
Zinc, total	0.0267		mg/L	0.0200	0.0069	98.8	80-120			



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1110767

Definitions

B:	The target analyte was detected in the blank at or above the method acceptance criteria.
M1:	Matrix spike recovery is above acceptance limits.
M2:	Matrix spike recovery is below acceptance limits.
Q2:	LCS recovery is above acceptance limits.
RL:	Reporting Limit
RPD:	Relative Percent Difference

Cooler Receipt Log

Cooler ID: Default Cooler Temp: 2.1°C

Cooler Inspection Checklist

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

Report Comments

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

Reviewed and Approved By:

Heather Murphy

Customer Relationship Specialist
heather.murphy@microbac.com
10/03/25 15:59

CHAIN OF CUSTODY RECORD



600 East 17th Street South
Newton, IA 50208
Phone: 641-792-8451

Page 1 of 2
Printed: 8/28/2025 3:50:05PM

Page 46 of 47

SITE INFORMATION

Sampler: Todd Whipple
Project: **Fremont Co-New Regs**
6046

REPORT TO

Todd Whipple
HLW Engineering
204 West Broad St
Story City, IA 50248

INVOICE TO

Casey Moyer
Fremont County Landfill
PO Box 487, 2879 250th St
Sidney, IA 51652

SPECIAL INSTRUCTIONS

None

Turn Around Time

☐ Standard ☐ RUSH, need by ___/___/___



HLW Engineering
PM: Heather Murphy

Temperature: 2.1 ice °C

Number	Sample Identification / Client ID	Matrix	Sample Type	Date	Time	# Containers	Analyses	Lab Sample Number
01-001	MW-2 (b)	Aqueous	GRAB	9/8/25	9:30	7	Indfil-app1-metals-6020dfill-app1-voc-group	01
02-001	MW-18 (b) <u>NO SAMPLE</u>	Aqueous	GRAB	—	—	—	Indfil-app1-metals-6020dfill-app1-voc-group	~~02~~
03-001	MW-3	Aqueous	GRAB	9/8/25	11:13	7	Indfil-app1-metals-6020dfill-app1-voc-group	02
04-001	MW-9	Aqueous	GRAB	9/8/25	11:00	7	Indfil-app1-metals-6020dfill-app1-voc-group	03
05-001	MW-12	Aqueous	GRAB	9/8/25	12:00	4*	Indfil-app1-metals-6020dfill-app1-voc-group	04
06-001	MW-14	Aqueous	GRAB	9/8/25	11:34	7	Indfil-app1-metals-6020dfill-app1-voc-group	05
07-001	MW-15	Aqueous	GRAB	9/8/25	9:44	7	Indfil-app1-metals-6020dfill-app1-voc-group	06
08-001	MW-19	Aqueous	GRAB	9/8/25	11:45	5*	Indfil-app1-metals-6020dfill-app1-voc-group	07
09-001	MW-21	Aqueous	GRAB	9/8/25	10:09	7	Indfil-app1-metals-6020dfill-app1-voc-group	08
10-001	MW-23	Aqueous	GRAB	9/8/25	10:40	7	Indfil-app1-metals-6020dfill-app1-voc-group	09

Relinquished By [Signature]

Date/Time 9/9/25

Relinquished By [Signature]

Date/Time 9/9/25 10:00

Received By

Date/Time

Received for Lab By [Signature]

Date/Time

Remarks: insufficient sample - non preserved vials were not filled, or only some filled.

CHAIN OF CUSTODY RECORD



600 East 17th Street South
Newton, IA 50208
Phone: 641-792-8451

Page 2 of 2
Printed: 8/28/2025 3:50:05PM

Page 47 of 47

SITE INFORMATION

Sampler: _____

Project: Fremont Co-New Regs
6046

SPECIAL INSTRUCTIONS

None

Turn Around Time

☐ Standard ☐ RUSH, need by ____/____/____

REPORT TO

Todd Whipple
HLW Engineering
204 West Broad St
Story City, IA 50248

INVOICE TO

Casey Moyer
Fremont County Landfill
PO Box 487, 2879 250th St
Sidney, IA 51652



1 I I 0 7 6 7

HLW Engineering
PM: Heather Murphy

Temperature: 2.1 ice ✓ °C

Number	Sample Identification / Client ID	Matrix	Sample Type	Date	Time	# Containers	Analyses	Lab Sample Number
11-001	GWD-1 Dry	Aqueous	GRAB	—	—	—	Indfil-app1-metals-6020dfill-app1-voc-group	
12-001	GWD-2 Dry	Aqueous	GRAB	—	—	—	Indfil-app1-metals-6020dfill-app1-voc-group	
13-001	Duplicate	Aqueous	GRAB	9/8/25	✓	1	Indfil-app1-metals-6020dfill-app1-voc-group	10

Relinquished By _____ Date/Time 9/9/25

Relinquished By _____ Date/Time 9/9/25

Received By _____ Date/Time

Received for Lab By _____ Date/Time 9/9/25

Remarks:

Appendix D

Summary of Field Turbidity Measurements

Fremont County Sanitary Landfill

Field Turbidity Over Time

No-Purge Sampling

	3/21/17	10/12/17	3/8/18	9/6/18	5/13/19	9/26/19	11/14/19	3/30/20	6/25/20
Well	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>
2	1.31	8.61	9.96	0.75	0.72	1.63		6.92	
3	1.72	5.33	8.91	0.38	2.53	0.59		0.56	
9	7.02	19.8	0.44	0.64	4.86	0.57		0.48	
12	8.12	4.05	1.39	0.24	1.56	0.76	3.08	5.15	0.97
14	4.2	8.52	1.3	0.51	0.79	0.98		0.69	1.25
15	5.3	6.41	0.52	1.56	1.1	0.63		7	
18	2.08	23.6	81.1	0.33	7.38	0.87		41.8	
19	24.9	3.23	1.61	1.58	1.58	0.6	33.2	0.61	
21	1.29	8.05	0.35	0.46	0.88	0.62		0.74	
23						1.06		0.34	
GWD-1	8.27	0.99	0.71	0.49	0.4	0.48		0.64	
GWD-2	11.1	2.95	0.54	0.39	0.63	0.47		0.55	
Max	24.90	23.60	81.10	1.58	7.38	1.63	33.20	41.80	1.25
Min	1.29	0.99	0.35	0.24	0.40	0.47	3.08	0.34	0.97
Median	5.30	6.41	1.30	0.49	1.10	0.63	18.14	0.67	1.11
Average	6.85	8.32	9.71	0.67	2.04	0.77	18.14	5.46	1.11

Fremont

Field Turbic

No-Purge S

	9/17/20	12/3/20	3/9/21	6/3/21	9/9/21	12/8/21	3/14/22	6/14/22	9/1/22	3/6/23	5/9/23
Well	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>
2	3.34		3.59		2.71		2.56		2.44	6.83	
3	0.34		9.13		0.58		0.89		0.58	0.61	
9	0.43		1.39		2.14		9.7		0.59	17.1	
12	1.98		9.25		7.72	17.5	3.34		5.83	62.7	
14	0.37	0.72	0.83		0.85		0.71		6.81	7.44	
15	0.5		0.69		0.51	2.05	0.88		0.98	2.85	
18	13.9		779	3.77	1.02		260		58.1	24.4	
19	0.89		0.66		2.2		4.8			3.89	
21	0.55		5.98	3.53	0.87		1.01	11.25	0.99	0.62	
23	0.7		0.53		1.05		0.76		0.68	0.98	
GWD-1	3.36		20.1	0.96	0.67		2.39			1.63	
GWD-2	89.9	0.6	1.72		0.73		0.51			0.69	1.07
Max	89.90	0.72	779.00	3.77	7.72	17.50	260.00	11.25	58.10	62.70	1.07
Min	0.34	0.60	0.53	0.96	0.51	2.05	0.51	11.25	0.58	0.61	1.07
Median	0.80	0.66	2.66	3.53	0.95	9.78	1.70	11.25	0.99	3.37	1.07
Average	9.69	0.66	69.41	2.75	1.75	9.78	23.96	11.25	8.56	10.81	1.07

Fremont

Field Turbic

No-Purge S

	9/8/23	3/20/24	6/14/24	9/25/24	3/11/25	9/8/25	Max	Min	Ave	Std Dev
Well	NTU	NTU	NTU	NTU	NTU	NTU				
2	1.5	2.42		2.93	1.56	4.96	9.96	0.72	3.60	2.75
3	1.08	1.27		2.06	0.69	0.8	9.13	0.34	2.11	2.78
9	2.18	4.48		3.33	4.62	2.66	19.80	0.43	4.58	5.67
12	5.41	18.5		3.88	75.8	4.14	75.80	0.24	11.49	19.91
14	1.5	1.64		2.33	1.07	1.41	8.52	0.37	2.20	2.48
15	1.72	0.95		5.11	1.26	0.51	7.00	0.50	2.13	2.15
18	1.27	5.3		31.47	9.18		779.00	0.33	74.70	186.02
19	1.77	1.6		2.53	1.93	2.42	33.20	0.60	5.00	8.93
21	3.03	6.53	0.53	2.76	0.83	1.3	11.25	0.35	2.48	2.99
23	1.14	0.6		1.82	0.79	0.65	1.82	0.34	0.85	0.37
GWD-1		11.0		2.04			20.10	0.40	3.61	5.51
GWD-2	1.24	4.27	0.41	1.88	0.81		89.90	0.39	6.34	20.39
Max	5.41	18.50	0.53	31.47	75.80	4.96				
Min	1.08	0.60	0.41	1.82	0.69	0.51				
Median	1.50	3.35	0.47	2.65	1.26	1.41				
Average	1.99	4.88	0.47	5.18	8.96	2.09				

Appendix E

Summary of Prediction Limit Exceedances 2022 - Present

Spring 2022		Fall 2022	
MW-3*	Barium	MW-3*	Barium
	Cis-1,2-dichloroethylene		

Spring 2023		Fall 2023	
MW-3*	Barium	MW-3*	Barium
MW-12*	Arsenic	MW-12*	None
	Nickel		
GWD-2*	Barium	GWD-2*	Barium

Spring 2024		Fall 2024	
MW-3*	Barium	MW-3*	Barium
MW-12*	Arsenic	MW-12*	None
	Nickel		
	Barium**		
	Chromium**		
	Cobalt**		
	Copper**		
	Lead**		
	Vanadium**		

Spring 2025		Fall 2025	
MW-3*	Barium	MW-3*	Barium
MW-12*	Arsenic	MW-12*	None
	Barium		
	Nickel		

* = Assessment Monitoring Well

** = Not Verified

Note that Groundwater Underdrains (GWD-1 & GWD-2) are evaluated by Intrawell Statistical methods beginning in June, 2024 and there are no control limit exceedances.

Appendix F

Summary of Assessment Monitoring Results

Date	bis(2ethylhexyl)phthalate (ug/L)		
	MW-3	MW-12	MW-15
9/23/2009	NT	NT	NT
6/1/2010	<8	NT	<8
10/11/2011	<8	NT	<8
10/10/2013	NT	<8	<8
9/18/2014	NT	NT	NT
4/29/2015	NT	NT	NT
10/6/2015	NT	NT	NT
4/19/2016	NT	NT	NT
9/19/2016	<8	NT	NT
3/21/2017	NT	NT	NT
10/12/2017	NT	NT	NT
3/8/2018	NT	NT	NT
9/6/2018	NT	NT	NT
5/13/2019	NT	NT	NT
9/26/2019	NT	NT	NT
3/30/2020	NT	NT	NT
9/17/2020	NT	NT	NT
3/9/2021	NT	NT	NT
9/9/2021	<6	NT	NT
3/14/2022	NT	NT	NT
9/1/2022	NT	<6	7.0
3/6/2023	NT	NT	NT
5/9/2023	NT	NT	<6
9/8/2023	NT	<6	<6
3/20/2024	NT	NT	NT
9/25/2024	NT	NT	NT
3/11/2025	NT	NT	NT
9/8/2025	NT	NT	NT

* GWD-1 and GWD-2 are evaluated by Intrawell Statistical methods beginning in June, 2024 and are not in the assessment monitoring program.

Appendix G

Leachate Collection System Performance Evaluation Report

Appendix G.1- Treatment Agreement with Shenandoah POTW



January 24, 2022

ROGER MCQUEEN - MAYOR
SHENANDOAH CITY
PO BOX 338
500 W CLARINDA AVE
SHENANDOAH, IOWA 51601

RE: NPDES Final Permit #3659001

To whom it may concern,

Enclosed is the final NPDES permit that authorizes the discharge of wastewater from the Shenandoah City wastewater treatment facility. This final permit is the same as the draft permit sent on November 30, 2021. The issuance date of this permit is February 1, 2022; please become familiar with all limits and requirements in the enclosed final permit.

The facility will be required to use new discharge monitoring report (DMR) forms. Paper and electronic DMR forms are available from your regional Field Office. The facility is strongly encouraged to use the electronic reporting form. Please contact Dan Olson at 712-243-1934 (Field Office 4) or dan.olson@dnr.iowa.gov for more information or to request forms.

If you have any questions, please contact me at 515-725-8418 or at derek.dusenbery@dnr.iowa.gov.

Sincerely,

Derek Dusenbery

Digitally signed by
Derek Dusenbery
Date: 2022.01.24
13:28:27 -06'00'

Derek Dusenbery
Environmental Specialist
NPDES Permit Writer

IOWA DEPARTMENT OF NATURAL RESOURCES

National Pollutant Discharge Elimination System (NPDES) Permit

OWNER NAME & ADDRESS

CITY OF SHENANDOAH
CITY HALL, P.O. BOX 338
SHENANDOAH, IA 51601

FACILITY NAME & ADDRESS

SHENANDOAH CITY OF STP
WEST OF TOWN OFF 190TH STREET AND
WEST SHERIDAN AVENUE
SHENANDOAH, IA 51601

Section 24, T69N, R40W
Fremont County

IOWA NPDES PERMIT NUMBER: 3659001

DATE OF ISSUANCE: 02/01/2022

DATE OF EXPIRATION: 01/31/2027

YOU ARE REQUIRED TO FILE FOR RENEWAL OF THIS

PERMIT BY: 08/04/2026

EPA NUMBER: IA0032328

This permit is issued pursuant to the authority of section 402(b) of the Clean Water Act (33 U.S.C. 1342(b)), Iowa Code section 455B.174, and rule 567-64.3, Iowa Administrative Code. You are authorized to operate the disposal system and to discharge the pollutants specified in this permit in accordance with the effluent limitations, monitoring requirements and other terms set forth in this permit.

You may appeal any condition of this permit by filing a written notice of appeal and request for administrative hearing with the director of the department within 30 days of permit issuance.

Any existing, unexpired Iowa operation permit or Iowa NPDES permit previously issued by the department for the facility identified above is revoked by the issuance of this permit. This provision does not apply to any authorization to discharge under the terms and conditions of a general permit issued by the department or to any permit issued exclusively for the discharge of stormwater.

FOR THE DEPARTMENT OF NATURAL RESOURCES

Derek

By **Dusenbery**

Derek Dusenbery
NPDES Section, Environmental Services Division

Digitally signed by Derek
Dusenbery
Date: 2022.01.24 12:24:00
-06'00'

Facility Name: SHENANDOAH CITY OF STP
Permit Number: 3659001

Outfall No.: 001 DISCHARGE FROM A TRICKLING FILTER WASTEWATER TREATMENT FACILITY.
Receiving Stream: UNNAMED CREEK
Route of Flow: UNNAMED CREEK TO EAST NISHNABOTNA RIVER

Class A2 waters are secondary contact recreational use waters in which recreational or other uses may result in contact with the water that is either incidental or accidental. During the recreational use, the probability of ingesting appreciable quantities of water is minimal. Class A2 uses include fishing, commercial and recreational boating, any limited contact incidental to shoreline activities and activities in which users do not swim or float in the water body while on a boating activity.

Waters designated Class B(WW2) are those in which flow or other physical characteristics are capable of supporting a resident aquatic community that includes a variety of native nongame fish and invertebrate species. The flow and other physical characteristics limit the maintenance of warm water game fish populations. These waters generally consist of small perennially flowing streams.

Outfall No.: 002 DISCHARGE TO GOLF COURSE IRRIGATION SYSTEM.
Receiving Stream: GOLF COURSE
Route of Flow: GOLF COURSE

Class A1 waters are primary contact recreational use waters in which recreational or other uses may result in prolonged and direct contact with the water, involving considerable risks of ingesting water in quantities sufficient to pose a health hazard. Such activities would include, but not be limited to, swimming, diving, water skiing, and water contact recreational canoeing.

Outfall No.: 003 BYPASS OF ETHANOL PLANT RETURN FLOW
Receiving Stream: UNNAMED CREEK
Route of Flow: UNNAMED CREEK TO EAST NISHNABOTNA RIVER

Class A2 waters are secondary contact recreational use waters in which recreational or other uses may result in contact with the water that is either incidental or accidental. During the recreational use, the probability of ingesting appreciable quantities of water is minimal. Class A2 uses include fishing, commercial and recreational boating, any limited contact incidental to shoreline activities and activities in which users do not swim or float in the water body while on a boating activity.

Waters designated Class B(WW2) are those in which flow or other physical characteristics are capable of supporting a resident aquatic community that includes a variety of native nongame fish and invertebrate species. The flow and other physical characteristics limit the maintenance of warm water game fish populations. These waters generally consist of small perennially flowing streams.

Bypasses from any portion of a treatment facility or from a sanitary sewer collection system designed to carry only sewage are prohibited.

Facility Name: SHENANDOAH CITY OF STP

Permit Number: 3659001

Effluent Limitations:

You are prohibited from discharging pollutants except in compliance with the following effluent limitations:

001 DISCHARGE FROM A TRICKLING FILTER WASTEWATER TREATMENT FACILITY.

Outfall: 001 Effective Dates: 02/01/2022 to 01/31/2027				
Parameter	Season	Limit Type	Limits	
CBOD5		85% Removal Required		
	Yearly	7 Day Average	40 MG/L	627 LBS/DAY
	Yearly	30 Day Average	25 MG/L	392 LBS/DAY
TOTAL SUSPENDED SOLIDS		85% Removal Required		
	Yearly	7 Day Average	45 MG/L	706 LBS/DAY
	Yearly	30 Day Average	30 MG/L	470 LBS/DAY
ACUTE TOXICITY, CERIODAPHNIA				
	Yearly	Daily Maximum	1 NO TOXICITY	
ACUTE TOXICITY, PIMEPHALES				
	Yearly	Daily Maximum	1 NO TOXICITY	
DISSOLVED OXYGEN				
	Yearly	Daily Minimum	5.0 MG/L	
PH				
	Yearly	Daily Maximum	9.0 STD UNITS	
	Yearly	Daily Minimum	6.5 STD UNITS	

Facility Name: SHENANDOAH CITY OF STP

Permit Number: 3659001

Outfall: 001 Effective Dates: 02/01/2022 to 04/30/2026				
Parameter	Season	Limit Type	Limits	
AMMONIA NITROGEN (N)				
	JAN	30 Day Average	19 MG/L	258 LBS/DAY
	JAN	Daily Maximum	19 MG/L	276 LBS/DAY
	FEB	30 Day Average	19 MG/L	266 LBS/DAY
	FEB	Daily Maximum	19 MG/L	266 LBS/DAY
	MAR	30 Day Average	18 MG/L	225 LBS/DAY
	MAR	Daily Maximum	18 MG/L	263 LBS/DAY
	APR	30 Day Average	10 MG/L	98 LBS/DAY
	APR	Daily Maximum	19 MG/L	273 LBS/DAY
	MAY	30 Day Average	9.0 MG/L	85 LBS/DAY
	MAY	Daily Maximum	18 MG/L	265 LBS/DAY
	JUN	30 Day Average	6.1 MG/L	59 LBS/DAY
	JUN	Daily Maximum	17 MG/L	253 LBS/DAY
	JUL	30 Day Average	7.0 MG/L	64 LBS/DAY
	JUL	Daily Maximum	21 MG/L	306 LBS/DAY
	AUG	30 Day Average	6.4 MG/L	59 LBS/DAY
	AUG	Daily Maximum	19 MG/L	281 LBS/DAY
	SEP	30 Day Average	6.9 MG/L	66 LBS/DAY
	SEP	Daily Maximum	20 MG/L	289 LBS/DAY
	OCT	30 Day Average	15 MG/L	135 LBS/DAY
	OCT	Daily Maximum	19 MG/L	276 LBS/DAY
	NOV	30 Day Average	17 MG/L	166 LBS/DAY
	NOV	Daily Maximum	17 MG/L	257 LBS/DAY
	DEC	30 Day Average	19 MG/L	195 LBS/DAY
	DEC	Daily Maximum	19 MG/L	280 LBS/DAY

Facility Name: SHENANDOAH CITY OF STP

Permit Number: 3659001

Outfall: 001 Effective Dates: 05/01/2026 to 01/31/2027				
Parameter	Season	Limit Type	Limits	
AMMONIA NITROGEN (N)				
	JAN	30 Day Average	3.4 MG/L	53.4 LBS/DAY
	JAN	Daily Maximum	15.2 MG/L	238.1 LBS/DAY
	FEB	30 Day Average	4.0 MG/L	62.0 LBS/DAY
	FEB	Daily Maximum	14.2 MG/L	222.6 LBS/DAY
	MAR	30 Day Average	3.4 MG/L	53.4 LBS/DAY
	MAR	Daily Maximum	14.7 MG/L	230.3 LBS/DAY
	APR	30 Day Average	1.5 MG/L	23.9 LBS/DAY
	APR	Daily Maximum	15.7 MG/L	246.2 LBS/DAY
	MAY	30 Day Average	1.7 MG/L	27.3 LBS/DAY
	MAY	Daily Maximum	15.2 MG/L	238.1 LBS/DAY
	JUN	30 Day Average	1.3 MG/L	20.5 LBS/DAY
	JUN	Daily Maximum	14.4 MG/L	226.4 LBS/DAY
	JUL	30 Day Average	1.0 MG/L	15.8 LBS/DAY
	JUL	Daily Maximum	14.3 MG/L	217.9 LBS/DAY
	AUG	30 Day Average	1.0 MG/L	15.0 LBS/DAY
	AUG	Daily Maximum	13.7 MG/L	208.5 LBS/DAY
	SEP	30 Day Average	1.1 MG/L	16.6 LBS/DAY
	SEP	Daily Maximum	16.5 MG/L	258.6 LBS/DAY
	OCT	30 Day Average	1.6 MG/L	24.4 LBS/DAY
	OCT	Daily Maximum	15.7 MG/L	246.2 LBS/DAY
	NOV	30 Day Average	2.3 MG/L	36.4 LBS/DAY
	NOV	Daily Maximum	14.7 MG/L	230.3 LBS/DAY
	DEC	30 Day Average	2.5 MG/L	38.8 LBS/DAY
	DEC	Daily Maximum	16.0 MG/L	250.3 LBS/DAY

Facility Name: SHENANDOAH CITY OF STP

Permit Number: 3659001

Outfall: 001 Effective Dates: 05/01/2026 to 01/31/2027			
Parameter	Season	Limit Type	Limits
E. COLI			
	MAR	Geometric Mean	134 #/100 ML
	APR	Geometric Mean	134 #/100 ML
	MAY	Geometric Mean	134 #/100 ML
	JUN	Geometric Mean	134 #/100 ML
	JUL	Geometric Mean	134 #/100 ML
	AUG	Geometric Mean	134 #/100 ML
	SEP	Geometric Mean	134 #/100 ML
	OCT	Geometric Mean	134 #/100 ML
	NOV	Geometric Mean	134 #/100 ML

Outfall: 001 Effective Dates: 01/01/2027 to 01/31/2027			
Parameter	Season	Limit Type	Limits
SELENIUM, TOTAL (AS SE)			
	Yearly	30 Day Average	0.005 MG/L 0.0784 LBS/DAY
	Yearly	Daily Maximum	0.0193 MG/L 0.3026 LBS/DAY
COPPER, TOTAL (AS CU)			
	Yearly	30 Day Average	0.01687 MG/L 0.2645 LBS/DAY
	Yearly	Daily Maximum	0.0269 MG/L 0.4217 LBS/DAY

Facility Name: SHENANDOAH CITY OF STP

Permit Number: 3659001

Monitoring and Reporting Requirements

(a) Samples and measurements taken shall be representative of the volume and nature of the monitored wastewater.

(b) Analytical and sampling methods specified in 40 CFR Part 136 or other methods approved in writing by the department shall be utilized. All effluent samples for which a limit applies must be analyzed using sufficiently sensitive methods (i.e. testing procedures) approved under 567 IAC Chapter 63 and 40 CFR Part 136 for the analysis of pollutants or pollutant parameters or as required under 40 CFR chapter I, subchapter N or O.

For the purposes of this paragraph, an approved method is sufficiently sensitive when:

- (1) the method minimum level (ML) is at or below the level of the effluent limit established in the permit for the measured pollutant or pollutant parameter; or
- (2) the method has the lowest ML of the approved analytical methods for the measured pollutant or pollutant parameter.

Samples collected for operational testing need not be analyzed by approved analytical methods; however, commonly accepted test methods should be used.

(c) You are required to report all data including calculated results needed to determine compliance with the limitations contained in this permit. The results of any monitoring not specified in this permit performed at the compliance monitoring point and analyzed according to 40 CFR Part 136 shall be included in the calculation and reporting of any data submitted in accordance with this permit. This includes daily maximums and minimums, 30-day averages and 7-day averages for all parameters that have concentration (mg/l) and mass (lbs/day) limits. In addition, flow data shall be reported in million gallons per day (MGD).

(d) Records of monitoring activities and results shall include for all samples: the date, exact place and time of the sampling; the dates the analyses were performed; who performed the analyses; the analytical techniques or methods used; and the results of such analyses.

(e) Results of all monitoring shall be recorded on forms provided by, or approved by, the department, and shall be submitted to the appropriate regional field office of the department by the fifteenth day following the close of the reporting period. Your reporting period is on a MONTHLY basis, ending on the last day of each reporting period.

(f) Operational performance monitoring for treatment unit process control shall be conducted to ensure that the facility is properly operated in accordance with its design. The results of any operational performance monitoring need not be reported to the department, but shall be maintained in accordance with rule 567 IAC 63.2 (455B). The results of any operational performance monitoring specified in this permit shall be submitted to the department in accordance with these reporting requirements.

(g) Chapter 63 of the rules provides you with further explanation of your monitoring requirements.

Facility Name: SHENANDOAH CITY OF STP

Permit Number: 3659001

Outfall	Wastewater Parameter	Sample Frequency	Sample Type	Monitoring Location
The following monitoring requirements shall be in effect from 02/01/2022 to 01/31/2027				
001	BIOCHEMICAL OXYGEN DEMAND (BOD5)	2 TIMES PER WEEK	24 HOUR COMPOSITE	RAW WASTE
001	FLOW	7/WEEK OR DAILY	24 HOUR TOTAL	RAW WASTE
001	NITROGEN, TOTAL (AS N)	1 TIME PER WEEK	24 HOUR COMPOSITE	RAW WASTE
001	NITROGEN, TOTAL KJELDAHL (AS N)	1 EVERY MONTH	24 HOUR COMPOSITE	RAW WASTE
001	PH	2 TIMES PER WEEK	GRAB	RAW WASTE
001	PHOSPHORUS, TOTAL (AS P)	1 TIME PER WEEK	24 HOUR COMPOSITE	RAW WASTE
001	TEMPERATURE	2 TIMES PER WEEK	GRAB	RAW WASTE
001	TOTAL SUSPENDED SOLIDS	1 TIME PER WEEK	24 HOUR COMPOSITE	RAW WASTE
001	<i>E. COLI</i>	SEE SPECIAL MONITORING	GRAB	EFFLUENT AFTER DISINFECTION - GEO MEAN
001	ACUTE TOXICITY, CERIODAPHNIA	1 EVERY 12 MONTHS	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION
001	ACUTE TOXICITY, PIMEPHALES	1 EVERY 12 MONTHS	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION
001	AMMONIA NITROGEN (N)	2 TIMES PER WEEK	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION
001	CBOD5	2 TIMES PER WEEK	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION
001	COPPER, TOTAL (AS CU)	1 EVERY MONTH	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION
001	DISSOLVED OXYGEN	2 TIMES PER WEEK	GRAB	EFFLUENT AFTER DISINFECTION
001	NITROGEN, TOTAL (AS N)	1 TIME PER WEEK	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION
001	PH	2 TIMES PER WEEK	GRAB	EFFLUENT AFTER DISINFECTION
001	PHOSPHORUS, TOTAL (AS P)	1 TIME PER WEEK	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION
001	SELENIUM, TOTAL (AS SE)	1 EVERY MONTH	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION
001	TEMPERATURE	2 TIMES PER WEEK	GRAB	EFFLUENT AFTER DISINFECTION
001	TOTAL SUSPENDED SOLIDS	1 TIME PER WEEK	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION
001	ZINC, TOTAL (AS ZN)	1 EVERY MONTH	24 HOUR COMPOSITE	EFFLUENT AFTER DISINFECTION
002	FLOW	7/WEEK OR DAILY	24 HOUR COMPOSITE	PRIOR TO LAND APPLICATION
002	NITROGEN, TOTAL (AS N)	1 EVERY 2 MONTHS	24 HOUR COMPOSITE	PRIOR TO LAND APPLICATION

Facility Name: SHENANDOAH CITY OF STP

Permit Number: 3659001

Special Monitoring Requirements

Outfall Description

001 **E. COLI**

Except as specified in the effluent monitoring study portion of the compliance schedule in this permit, monitoring for *E. coli* is not required until the final *E. coli* limit is effective. All *E. coli* sample results must be reported in the Monthly Operation Report. If *E. coli* monitoring is not conducted during the time from the end of the effluent monitoring study to the final compliance date, the facility shall indicate on the Monthly Operation Report that monitoring is not required by using the "NOT REQ/MP" no discharge code.

The limit for *E. coli* specified in the limit pages of this permit is a geometric mean. The disinfection season is established in the Iowa Administrative Code, Subparagraph 567 IAC 61.3(3)"a"(1), and is in effect from March 15 to November 15. Any disinfection system (chlorine, UV light, etc.) shall be operated to comply with the limit during the entire disinfection season.

The facility must collect and analyze a minimum of five samples in one calendar month during each 3-month period from March 15 to November 15. The 3-month periods are March – May, June – August, and September – November. The collection of five samples in each 3-month period will result in a minimum of 15 samples being collected during a calendar year. For example, for the first 3-month period, the operator may choose April as the calendar month to collect the 5 individual *E. coli* samples to determine compliance with the limits. The operator may also choose the months of March or May as well, as long as each of the 5 samples is collected during a single calendar month. The same principle applies to the other two 3-month periods during the disinfection season. The following requirements apply to the individual samples collected in one calendar month:

Samples must be spaced over one calendar month.

No more than one sample can be collected on any one day.

There must be a minimum of two days between each sample.

No more than two samples may be collected in a period of seven consecutive days.

If the effluent has been disinfected using chlorine, ultraviolet light (UV), or any other process intended to disrupt the biological integrity of the *E. coli*, the samples shall be analyzed using the Most Probable Number method found in Standard Method 9223B (Colilert® or Colilert-18® made by IDEXX Laboratories, Inc.). If the effluent has not been disinfected the samples may be analyzed using either the MPN method above or EPA Method 1603: *Escherichia coli* (*E. coli*) in water by membrane filtration using modified membrane-thermotolerant *E. coli* agar (modified mTEC) or mColiBlue-24® made by the Hach Company.

The geometric mean must be calculated using all valid sample results collected during a month. The geometric mean formula is as follows: Geometric Mean = $(\text{Sample one} * \text{Sample two} * \text{Sample three} * \text{Sample four} * \text{Sample five} \dots \text{Sample N})^{(1/N)}$, which is the Nth root of the result of the multiplication of all of the sample results where N = the number of samples. If a sample result is a less than value, the value reported by the lab without the less than sign should be used in the geometric mean calculation.

The geometric mean can be calculated in one of the following ways:

Use a scientific calculator that can calculate the powers of numbers.

Enter the samples in Microsoft Excel and use the function "GEOMEAN" to perform the calculation.

Use the geometric mean calculator on the Iowa DNR webpage at:

<http://www.iowadnr.gov/Environmental-Protection/Water-Quality/NPDES-Wastewater-Permitting/NPDES-Operator-Information/Bacteria-Sampling>

Facility Name: SHENANDOAH CITY OF STP

Permit Number: 3659001

Special Monitoring Requirements - Continued

NITROGEN, TOTAL (AS N)

Total nitrogen shall be determined by testing for Total Kjeldahl Nitrogen (TKN) and nitrate + nitrite nitrogen and reporting the sum of the TKN and nitrate + nitrite results (reported as N). Nitrate + nitrite can be analyzed together or separately.

METALS

Sample and analyze your final effluent for parameters listed below at the frequency shown on the Monitoring and Reporting Requirements pages of this permit. EPA approved test methods shall be used to test at a detection level at or below the levels listed after each parameter. If a sample result is not at a detection level which is low enough to demonstrate compliance with the limit in the permit, the facility will be considered to be non-compliant with that limit.

Copper 0.01687 mg/L

Selenium 0.0050 mg/L

Zinc 0.2156 mg/L

FLOW (OUTFALL 002)

Disinfected effluent shall be held in a retention pond with a detention time of at least 20 days prior to reuse as irrigation on a golf course. For this purpose, effluent may be disinfected using any common treatment technology, and either an existing pond or a pond constructed specifically for effluent retention may be used.

Also, a golf course utilizing treated final effluent shall take all of the following actions:

- (1) Clearly state on all scorecards that treated final effluent is used for irrigation of the golf course and oral contact with golf balls and tees should be avoided;
- (2) Post signs that warn against consumption of water at all water hazards;
- (3) Color code, label, or tag all piping and sprinklers associated with the distribution or transmission of the treated final effluent to clearly warn against the consumptive use of the contents; and
- (4) Restrict the access of the public to any area of the golf course where spraying is being conducted.

GOLF COURSE

A minimum total residual chlorine level of 0.5 mg/l must be maintained at a minimum of 15 minutes contact time of chlorine to wastewater prior to the irrigation of the golf course with treatment plant effluent.

In addition, a golf course utilizing treated final effluent shall take all of the following actions:

- (1) Clearly state on all scorecards that treated final effluent is used for irrigation of the golf course and oral contact with golf balls and tees should be avoided;
- (2) Post signs that warn against consumption of water at all water hazards;
- (3) Color code, label, or tag all piping and sprinklers associated with the distribution or transmission of the treated final effluent to clearly warn against the consumptive use of the contents; and
- (4) Restrict the access of the public to any area of the golf course where spraying is being conducted.

Facility Name: SHENANDOAH CITY OF STP

Permit Number: 3659001

ADDITIONAL OPERATING, MONITORING AND REPORTING REQUIREMENTS

In addition to the monitoring requirements specified elsewhere in this permit, you shall collect at least one grab sample of the final effluent from outfall 001 on a day when the plant is operating normally. The sample(s) you collect must be representative of the actual discharge and shall be analyzed for chloride, sulfate, and oil & grease using sufficiently sensitive methods (i.e., testing procedures) approved under 567 IAC Chapter 63 and 40 CFR Part 136.

For the purposes of this paragraph, an approved method is "sufficiently sensitive" when:

- (1) the method reporting limit is at or below 389 mg/L for chloride and 1,514 mg/L for sulfate; or
- (2) the level of the measured pollutant in the discharge is high enough that the method detects and quantifies the level of the pollutant in the discharge; or
- (3) the method has the lowest reporting limit of the approved analytical methods for the measured pollutant.

The lab report(s) with the analytical result(s) shall be submitted to the email address below no later than *[Insert date of 3 months from permit issuance]*. The analytical result(s) will be evaluated and the department will reopen this permit if it is determined that there is a reasonable potential for the discharge to cause or contribute to a water quality standards violation for cadmium or lead.

npdes.mail@dnr.iowa.gov

Subject: Additional Monitoring (3659001)

Facility Name: SHENANDOAH CITY OF STP

Permit Number: 3659001

Significant Industrial User Discharges:

Significant Industrial User: AMERICANA COMPANIES

Outfall # Outfall Description

001 PROCESS WASTEWATER PRIOR TO MIXING WITH ANY OTHER WASTES

Significant Industrial User Effluent Limitations

You are prohibited from discharging pollutants except in compliance with the following effluent limitations:

Outfall: 001 Effective Dates: 02/01/2022 to 01/31/2027				
Parameter	Season	Limit Type	Limit Values	
FLOW				
	Yearly	30 Day Average	0.072 MGD	
	Yearly	DAILY MAXIMUM	0.072 MGD	
ZINC, TOTAL (AS ZN)				
	Yearly	30 Day Average	1.48 MG/L	0.888 LBS/DAY
	Yearly	DAILY MAXIMUM	2.61 MG/L	1.57 LBS/DAY
CADMIUM, TOTAL (AS CD)				
	Yearly	30 Day Average	0.07 MG/L	0.42 LBS/DAY
	Yearly	DAILY MAXIMUM	0.11 MG/L	0.07 LBS/DAY
CHROMIUM, TOTAL (AS CR)				
	Yearly	30 Day Average	1.01 MG/L	0.606 LBS/DAY
	Yearly	DAILY MAXIMUM	2.77 MG/L	1.66 LBS/DAY
CYANIDE, TOTAL (AS CN)				
	Yearly	30 Day Average	0.45 MG/L	0.270 LBS/DAY
	Yearly	DAILY MAXIMUM	1.20 MG/L	0.72 LBS/DAY
NICKEL, TOTAL (AS NI)				
	Yearly	30 Day Average	2.38 MG/L	1.42 LBS/DAY
	Yearly	DAILY MAXIMUM	3.90 MG/L	2.34 LBS/DAY

Facility Name: SHENANDOAH CITY OF STP

Permit Number: 3659001

Outfall: 001 Effective Dates: 02/01/2022 to 01/31/2027				
Parameter	Season	Limit Type	Limit Values	
OIL AND GREASE				
	Yearly	30 Day Average	50 MG/L	
	Yearly	DAILY MAXIMUM	100 MG/L	
SILVER, TOTAL (AS AG)				
	Yearly	30 Day Average	0.24 MG/L	0.144 LBS/DAY
	Yearly	DAILY MAXIMUM	0.43 MG/L	0.26 LBS/DAY
TOTAL TOXIC ORGANICS				
	Yearly	DAILY MAXIMUM	2.13 LBS/DAY	
COPPER, TOTAL (AS CU)				
	Yearly	30 Day Average	2.07 MG/L	1.24 LBS/DAY
	Yearly	DAILY MAXIMUM	3.28 MG/L	1.97 LBS/DAY
LEAD, TOTAL (AS PB)				
	Yearly	30 Day Average	0.43 MG/L	0.258 LBS/DAY
	Yearly	DAILY MAXIMUM	0.60 MG/L	0.36 LBS/DAY
PH				
	Yearly	DAILY MAXIMUM	10 STD UNITS	
	Yearly	DAILY MINIMUM	5 STD UNITS	

Facility Name: SHENANDOAH CITY OF STP

Permit Number: 3659001

Monitoring and Reporting Requirements

(a) Samples and measurements taken shall be representative of the volume and nature of the monitored wastewater.

(b) Analytical and sampling methods specified in 40 CFR Part 136 or other methods approved in writing by the department shall be utilized. All effluent samples for which a limit applies must be analyzed using sufficiently sensitive methods (i.e. testing procedures) approved under 567 IAC Chapter 63 and 40 CFR Part 136 for the analysis of pollutants or pollutant parameters or as required under 40 CFR chapter I, subchapter N or O.

For the purposes of this paragraph, an approved method is sufficiently sensitive when:

- (1) the method minimum level (ML) is at or below the level of the effluent limit established in the permit for the measured pollutant or pollutant parameter; or
- (2) the method has the lowest ML of the approved analytical methods for the measured pollutant or pollutant parameter.

Samples collected for operational testing need not be analyzed by approved analytical methods; however, commonly accepted test methods should be used.

(c) You are required to report all data including calculated results needed to determine compliance with the limitations contained in this permit. The results of any monitoring not specified in this permit performed at the compliance monitoring point and analyzed according to 40 CFR Part 136 shall be included in the calculation and reporting of any data submitted in accordance with this permit. This includes daily maximums and minimums, 30-day averages and 7-day averages for all parameters that have concentration (mg/l) and mass (lbs/day) limits. In addition, flow data shall be reported in million gallons per day (MGD).

(d) Records of monitoring activities and results shall include for all samples: the date, exact place and time of the sampling; the dates the analyses were performed; who performed the analyses; the analytical techniques or methods used; and the results of such analyses.

(e) Results of all monitoring shall be recorded on forms provided by, or approved by, the department, and shall be submitted to the appropriate regional field office of the department by the fifteenth day following the close of the reporting period. Your reporting period is on a MONTHLY basis, ending on the last day of each reporting period.

(f) Operational performance monitoring for treatment unit process control shall be conducted to ensure that the facility is properly operated in accordance with its design. The results of any operational performance monitoring need not be reported to the department, but shall be maintained in accordance with rule 567 IAC 63.2 (455B). The results of any operational performance monitoring specified in this permit shall be submitted to the department in accordance with these reporting requirements.

(g) Chapter 63 of the rules provides you with further explanation of your monitoring requirements.

Facility Name: SHENANDOAH CITY OF STP

Permit Number: 3659001

AMERICANA COMPANIES				
Outfall	Wastewater Parameter	Sample Frequency	Sample Type	Monitoring Location
001	CADMIUM, TOTAL (AS CD)	1 EVERY MONTH	24 HOUR COMPOSITE	PRIOR TO DISCHARGE TO CITY SEWER
001	CHROMIUM, TOTAL (AS CR)	1 EVERY MONTH	24 HOUR COMPOSITE	PRIOR TO DISCHARGE TO CITY SEWER
001	COPPER, TOTAL (AS CU)	1 EVERY MONTH	24 HOUR COMPOSITE	PRIOR TO DISCHARGE TO CITY SEWER
001	CYANIDE, TOTAL (AS CN)	1 EVERY MONTH	GRAB	PRIOR TO DISCHARGE TO CITY SEWER
001	FLOW	7/WEEK OR DAILY	24 HOUR TOTAL	PRIOR TO DISCHARGE TO CITY SEWER
001	LEAD, TOTAL (AS PB)	1 EVERY MONTH	24 HOUR COMPOSITE	PRIOR TO DISCHARGE TO CITY SEWER
001	NICKEL, TOTAL (AS NI)	1 EVERY MONTH	24 HOUR COMPOSITE	PRIOR TO DISCHARGE TO CITY SEWER
001	OIL AND GREASE	1 EVERY MONTH	GRAB	PRIOR TO DISCHARGE TO CITY SEWER
001	PH	1 EVERY MONTH	GRAB	PRIOR TO DISCHARGE TO CITY SEWER
001	SILVER, TOTAL (AS AG)	1 EVERY MONTH	24 HOUR COMPOSITE	PRIOR TO DISCHARGE TO CITY SEWER
001	TOTAL TOXIC ORGANICS	1 EVERY MONTH	24 HOUR COMPOSITE	PRIOR TO DISCHARGE TO CITY SEWER
001	ZINC, TOTAL (AS ZN)	1 TIME PER WEEK	24 HOUR COMPOSITE	PRIOR TO DISCHARGE TO CITY SEWER

AMERICANA COMPANIES Special Monitoring Requirements

Outfall # Description

001 TOTAL TOXIC ORGANICS

In lieu of monitoring for total toxic organics (TTO), you may make the following certification statement on each monthly discharge report: "based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation or (pretreatment standard) for TTO. I certify that to the best on my knowledge and belief, no dumping of concentrated toxic organics into the wastewater has occurred since filing of the last discharge monitoring report. I further certify that this facility is implementing the solvent management plan submitted to the department of natural resources."

Facility Name: SHENANDOAH CITY OF STP

Permit Number: 3659001

Significant Industrial User Discharges:

Significant Industrial User: PAGE COUNTY SANITARY LANDFILL

Outfall # Outfall Description

001 Batch Discharge by Truck

Significant Industrial User Effluent Limitations

You are prohibited from discharging pollutants except in compliance with the following effluent limitations:

Outfall: 001 Effective Dates: 02/01/2022 to 01/31/2027			
Parameter	Season	Limit Type	Limit Values
FLOW			
	Yearly	30 Day Average	0.022000 MGD
	Yearly	DAILY MAXIMUM	0.03000 MGD
BIOCHEMICAL OXYGEN DEMAND (BOD5)			
	Yearly	30 Day Average	9.174 LBS/DAY
	Yearly	DAILY MAXIMUM	25.02 LBS/DAY
TOTAL SUSPENDED SOLIDS			
	Yearly	30 Day Average	18.35 LBS/DAY
	Yearly	DAILY MAXIMUM	50.04 LBS/DAY
AMMONIA NITROGEN (N)			
	Yearly	30 Day Average	12.843 LBS/DAY
	Yearly	DAILY MAXIMUM	35.03 LBS/DAY
PH			
	Yearly	30 Day Average	8.5 STD UNITS
	Yearly	DAILY MINIMUM	5.8 STD UNITS

Facility Name: SHENANDOAH CITY OF STP

Permit Number: 3659001

Monitoring and Reporting Requirements

(a) Samples and measurements taken shall be representative of the volume and nature of the monitored wastewater.

(b) Analytical and sampling methods specified in 40 CFR Part 136 or other methods approved in writing by the department shall be utilized. All effluent samples for which a limit applies must be analyzed using sufficiently sensitive methods (i.e. testing procedures) approved under 567 IAC Chapter 63 and 40 CFR Part 136 for the analysis of pollutants or pollutant parameters or as required under 40 CFR chapter I, subchapter N or O.

For the purposes of this paragraph, an approved method is sufficiently sensitive when:

- (1) the method minimum level (ML) is at or below the level of the effluent limit established in the permit for the measured pollutant or pollutant parameter; or
- (2) the method has the lowest ML of the approved analytical methods for the measured pollutant or pollutant parameter.

Samples collected for operational testing need not be analyzed by approved analytical methods; however, commonly accepted test methods should be used.

(c) You are required to report all data including calculated results needed to determine compliance with the limitations contained in this permit. The results of any monitoring not specified in this permit performed at the compliance monitoring point and analyzed according to 40 CFR Part 136 shall be included in the calculation and reporting of any data submitted in accordance with this permit. This includes daily maximums and minimums, 30-day averages and 7-day averages for all parameters that have concentration (mg/l) and mass (lbs/day) limits. In addition, flow data shall be reported in million gallons per day (MGD).

(d) Records of monitoring activities and results shall include for all samples: the date, exact place and time of the sampling; the dates the analyses were performed; who performed the analyses; the analytical techniques or methods used; and the results of such analyses.

(e) Results of all monitoring shall be recorded on forms provided by, or approved by, the department, and shall be submitted to the appropriate regional field office of the department by the fifteenth day following the close of the reporting period. Your reporting period is on a MONTHLY basis, ending on the last day of each reporting period.

(f) Operational performance monitoring for treatment unit process control shall be conducted to ensure that the facility is properly operated in accordance with its design. The results of any operational performance monitoring need not be reported to the department, but shall be maintained in accordance with rule 567 IAC 63.2 (455B). The results of any operational performance monitoring specified in this permit shall be submitted to the department in accordance with these reporting requirements.

(g) Chapter 63 of the rules provides you with further explanation of your monitoring requirements.

Facility Name: SHENANDOAH CITY OF STP

Permit Number: 3659001

PAGE COUNTY SANITARY LANDFILL				
Outfall	Wastewater Parameter	Sample Frequency	Sample Type	Monitoring Location
001	AMMONIA NITROGEN (N)	1 EVERY BATCH	GRAB	PRIOR TO DISCHARGE TO CITY SEWER
001	BIOCHEMICAL OXYGEN DEMAND (BOD5)	1 EVERY BATCH	GRAB	PRIOR TO DISCHARGE TO CITY SEWER
001	FLOW	1 EVERY BATCH	24 HOUR TOTAL	PRIOR TO DISCHARGE TO CITY SEWER
001	PH	1 EVERY BATCH	GRAB	PRIOR TO DISCHARGE TO CITY SEWER
001	SANITARY LANDFILL LEACHATE	1 EVERY 12 MONTHS	GRAB	PRIOR TO DISCHARGE TO CITY SEWER
001	TOTAL SUSPENDED SOLIDS	1 EVERY BATCH	GRAB	PRIOR TO DISCHARGE TO CITY SEWER

ADDITIONAL MONITORING REQUIREMENTS

PAGE COUNTY SANITARY LANDFILL

The permittee shall analyze a representative sample of the landfill leachate discharge from Page County Sanitary Landfill at least annually for each of the pollutants listed below. In addition, the permittee shall monitor the volume of waste discharged and pH, Ammonia Nitrogen, BOD5, and TSS at the frequencies specified on page 18 of this permit.

Pollutant:

Biochemical Oxygen Demand (BOD5)	Total Suspended Solids
Ammonia Nitrogen (NH3-N)	Oil and Grease (O&G)
Ph	Chloride (as Cl)
Sulfate (as SO4)	Arsenic, Total (as As)
Chromium, Total (as Cr)	Copper, Total (as Cu)
Iron, Total (as Fe)	Lead, Total (as Pb)
Nickel, Total (as Ni)	Selenium, Total (as Se)
Zinc, Total (as Zn)	Benzoic Acid
Chlorobenzene	Ethylbenzene
p-Cresol	Phenol
Toluene	

The permittee will indicate completion of the annual leachate monitoring by entering a "1" in the "LEACHAT" column on the Discharge Monitoring Report (DMR) spreadsheet on the day that the samples are collected. Select the No Discharge Indicator "NOT REQUIRED/MP" on the DMR spreadsheet during the months that the monitoring is not required.

Results of annual monitoring shall be submitted to the addresses below:

NPDES.mail@dnr.iowa.gov
Subject: Landfill Leachate Scan (3659001)

Iowa DNR Field Office 4
1401 Sunnyside Ln.
Atlantic, IA 50022

Facility Name: SHENANDOAH CITY OF STP

Permit Number: 3659001

Significant Industrial User Discharges:

Significant Industrial User: FREMONT COUNTY SANITARY LANDFILL

Outfall # Outfall Description

001 Batch Discharge by Truck

Significant Industrial User Effluent Limitations

You are prohibited from discharging pollutants except in compliance with the following effluent limitations:

Outfall: 001 Effective Dates: 02/01/2022 to 01/31/2027			
<u>Parameter</u>	<u>Season</u>	<u>Limit Type</u>	<u>Limit Values</u>
FLOW			
	Yearly	30 Day Average	0.022000 MGD
	Yearly	DAILY MAXIMUM	0.030000 MGD
BIOCHEMICAL OXYGEN DEMAND (BOD5)			
	Yearly	30 Day Average	83.00 LBS/DAY
	Yearly	DAILY MAXIMUM	83.00 LBS/DAY
TOTAL SUSPENDED SOLIDS			
	Yearly	30 Day Average	25.00 LBS/DAY
	Yearly	DAILY MAXIMUM	25.00 LBS/DAY
AMMONIA NITROGEN (N)			
	Yearly	30 Day Average	12.843 LBS/DAY
	Yearly	DAILY MAXIMUM	35.028 LBS/DAY
NITROGEN, TOTAL KJELDAHL (AS N)			
	Yearly	30 Day Average	33.36 LBS/DAY
	Yearly	DAILY MAXIMUM	33.36 LBS/DAY
PH			
	Yearly	DAILY MAXIMUM	9.5 STD UNITS
	Yearly	DAILY MINIMUM	5.5 STD UNITS

Facility Name: SHENANDOAH CITY OF STP

Permit Number: 3659001

Monitoring and Reporting Requirements

(a) Samples and measurements taken shall be representative of the volume and nature of the monitored wastewater.

(b) Analytical and sampling methods specified in 40 CFR Part 136 or other methods approved in writing by the department shall be utilized. All effluent samples for which a limit applies must be analyzed using sufficiently sensitive methods (i.e. testing procedures) approved under 567 IAC Chapter 63 and 40 CFR Part 136 for the analysis of pollutants or pollutant parameters or as required under 40 CFR chapter I, subchapter N or O.

For the purposes of this paragraph, an approved method is sufficiently sensitive when:

- (1) the method minimum level (ML) is at or below the level of the effluent limit established in the permit for the measured pollutant or pollutant parameter; or
- (2) the method has the lowest ML of the approved analytical methods for the measured pollutant or pollutant parameter.

Samples collected for operational testing need not be analyzed by approved analytical methods; however, commonly accepted test methods should be used.

(c) You are required to report all data including calculated results needed to determine compliance with the limitations contained in this permit. The results of any monitoring not specified in this permit performed at the compliance monitoring point and analyzed according to 40 CFR Part 136 shall be included in the calculation and reporting of any data submitted in accordance with this permit. This includes daily maximums and minimums, 30-day averages and 7-day averages for all parameters that have concentration (mg/l) and mass (lbs/day) limits. In addition, flow data shall be reported in million gallons per day (MGD).

(d) Records of monitoring activities and results shall include for all samples: the date, exact place and time of the sampling; the dates the analyses were performed; who performed the analyses; the analytical techniques or methods used; and the results of such analyses.

(e) Results of all monitoring shall be recorded on forms provided by, or approved by, the department, and shall be submitted to the appropriate regional field office of the department by the fifteenth day following the close of the reporting period. Your reporting period is on a MONTHLY basis, ending on the last day of each reporting period.

(f) Operational performance monitoring for treatment unit process control shall be conducted to ensure that the facility is properly operated in accordance with its design. The results of any operational performance monitoring need not be reported to the department, but shall be maintained in accordance with rule 567 IAC 63.2 (455B). The results of any operational performance monitoring specified in this permit shall be submitted to the department in accordance with these reporting requirements.

(g) Chapter 63 of the rules provides you with further explanation of your monitoring requirements.

Facility Name: SHENANDOAH CITY OF STP

Permit Number: 3659001

FREMONT COUNTY SANITARY LANDFILL				
Outfall	Wastewater Parameter	Sample Frequency	Sample Type	Monitoring Location
001	AMMONIA NITROGEN (N)	1 EVERY BATCH	GRAB	PRIOR TO DISCHARGE TO CITY SEWER
001	BIOCHEMICAL OXYGEN DEMAND (BOD5)	1 EVERY BATCH	GRAB	PRIOR TO DISCHARGE TO CITY SEWER
001	FLOW	1 EVERY BATCH	24 HOUR TOTAL	PRIOR TO DISCHARGE TO CITY SEWER
001	NITROGEN, TOTAL KJELDAHL (AS N)	1 EVERY BATCH	GRAB	PRIOR TO DISCHARGE TO CITY SEWER
001	PH	1 EVERY BATCH	GRAB	PRIOR TO DISCHARGE TO CITY SEWER
001	SANITARY LANDFILL LEACHATE	1 EVERY 12 MONTHS	GRAB	PRIOR TO DISCHARGE TO CITY SEWER
001	TOTAL SUSPENDED SOLIDS	1 EVERY BATCH	GRAB	PRIOR TO DISCHARGE TO CITY SEWER

ADDITIONAL MONITORING REQUIREMENTS

FREMONT COUNTY SANITARY LANDFILL

The permittee shall analyze a representative sample of the landfill leachate discharge from Fremont County Sanitary Landfill at least annually for each of the pollutants listed below. In addition, the permittee shall monitor the volume of waste discharged and pH, Ammonia Nitrogen, BOD5, and TSS at the frequencies specified on page 21 of this permit.

Pollutant:

Biochemical Oxygen Demand (BOD5)	Total Suspended Solids
Ammonia Nitrogen (NH3-N)	Oil and Grease (O&G)
Ph	Chloride (as Cl)
Sulfate (as SO4)	Arsenic, Total (as As)
Chromium, Total (as Cr)	Copper, Total (as Cu)
Iron, Total (as Fe)	Lead, Total (as Pb)
Nickel, Total (as Ni)	Selenium, Total (as Se)
Zinc, Total (as Zn)	Benzoic Acid
Chlorobenzene	Ethylbenzene
p-Cresol	Phenol
Toluene	

The permittee will indicate completion of the annual leachate monitoring by entering a "1" in the "LEACHAT" column on the Discharge Monitoring Report (DMR) spreadsheet on the day that the samples are collected. Select the No Discharge Indicator "NOT REQUIRED/MP" on the DMR spreadsheet during the months that the monitoring is not required. Results of annual monitoring shall be submitted to the addresses below:

NPDES.mail@dnr.iowa.gov
Subject: Landfill Leachate Scan (3659001)

Iowa DNR Field Office 4
1401 Sunnyside Ln.
Atlantic, IA 50022

Facility Name: SHENANDOAH CITY OF STP

Permit Number: 3659001

Significant Industrial User Discharges:

Significant Industrial User: GREEN PLAINS RENEWABLE ENERGY

Outfall # Outfall Description

001 DISCHARGE OF COOLING WATER

Significant Industrial User Effluent Limitations

You are prohibited from discharging pollutants except in compliance with the following effluent limitations:

Outfall: 001 Effective Dates: 02/01/2022 to 01/31/2027			
<u>Parameter</u>	<u>Season</u>	<u>Limit Type</u>	<u>Limit Values</u>
FLOW			
	Yearly	30 Day Average	0.230 MGD
	Yearly	DAILY MAXIMUM	0.3 MGD
BIOCHEMICAL OXYGEN DEMAND (BOD5)			
	Yearly	30 Day Average	30 LBS/DAY
	Yearly	DAILY MAXIMUM	45 LBS/DAY
TOTAL SUSPENDED SOLIDS			
	Yearly	30 Day Average	35 LBS/DAY
	Yearly	DAILY MAXIMUM	45 LBS/DAY
AMMONIA NITROGEN (N)			
	Yearly	30 Day Average	3.0 LBS/DAY
	Yearly	DAILY MAXIMUM	10 LBS/DAY
NITROGEN, TOTAL KJELDAHL (AS N)			
	Yearly	30 Day Average	10 LBS/DAY
	Yearly	DAILY MAXIMUM	15 LBS/DAY
OIL AND GREASE			
	Yearly	30 Day Average	15 MG/L
	Yearly	DAILY MAXIMUM	30 MG/L
PH			
	Yearly	DAILY MAXIMUM	8.0 STD UNITS
	Yearly	DAILY MINIMUM	7.0 STD UNITS

Facility Name: SHENANDOAH CITY OF STP

Permit Number: 3659001

Monitoring and Reporting Requirements

(a) Samples and measurements taken shall be representative of the volume and nature of the monitored wastewater.

(b) Analytical and sampling methods specified in 40 CFR Part 136 or other methods approved in writing by the department shall be utilized. All effluent samples for which a limit applies must be analyzed using sufficiently sensitive methods (i.e. testing procedures) approved under 567 IAC Chapter 63 and 40 CFR Part 136 for the analysis of pollutants or pollutant parameters or as required under 40 CFR chapter I, subchapter N or O.

For the purposes of this paragraph, an approved method is sufficiently sensitive when:

- (1) the method minimum level (ML) is at or below the level of the effluent limit established in the permit for the measured pollutant or pollutant parameter; or
- (2) the method has the lowest ML of the approved analytical methods for the measured pollutant or pollutant parameter.

Samples collected for operational testing need not be analyzed by approved analytical methods; however, commonly accepted test methods should be used.

(c) You are required to report all data including calculated results needed to determine compliance with the limitations contained in this permit. The results of any monitoring not specified in this permit performed at the compliance monitoring point and analyzed according to 40 CFR Part 136 shall be included in the calculation and reporting of any data submitted in accordance with this permit. This includes daily maximums and minimums, 30-day averages and 7-day averages for all parameters that have concentration (mg/l) and mass (lbs/day) limits. In addition, flow data shall be reported in million gallons per day (MGD).

(d) Records of monitoring activities and results shall include for all samples: the date, exact place and time of the sampling; the dates the analyses were performed; who performed the analyses; the analytical techniques or methods used; and the results of such analyses.

(e) Results of all monitoring shall be recorded on forms provided by, or approved by, the department, and shall be submitted to the appropriate regional field office of the department by the fifteenth day following the close of the reporting period. Your reporting period is on a MONTHLY basis, ending on the last day of each reporting period.

(f) Operational performance monitoring for treatment unit process control shall be conducted to ensure that the facility is properly operated in accordance with its design. The results of any operational performance monitoring need not be reported to the department, but shall be maintained in accordance with rule 567 IAC 63.2 (455B). The results of any operational performance monitoring specified in this permit shall be submitted to the department in accordance with these reporting requirements.

(g) Chapter 63 of the rules provides you with further explanation of your monitoring requirements.

Facility Name: SHENANDOAH CITY OF STP

Permit Number: 3659001

GREEN PLAINS RENEWABLE ENERGY				
Outfall	Wastewater Parameter	Sample Frequency	Sample Type	Monitoring Location
001	AMMONIA NITROGEN (N)	1 EVERY MONTH	24 HOUR COMPOSITE	PRIOR TO DISCHARGE TO CITY SEWER
001	BIOCHEMICAL OXYGEN DEMAND (BOD5)	1 EVERY MONTH	24 HOUR COMPOSITE	PRIOR TO DISCHARGE TO CITY SEWER
001	FLOW	7/WEEK OR DAILY	24 HOUR TOTAL	PRIOR TO DISCHARGE TO CITY SEWER
001	NITROGEN, TOTAL KJELDAHL (AS N)	1 EVERY MONTH	24 HOUR COMPOSITE	PRIOR TO DISCHARGE TO CITY SEWER
001	OIL AND GREASE	1 EVERY MONTH	GRAB	PRIOR TO DISCHARGE TO CITY SEWER
001	PH	1 EVERY MONTH	GRAB	PRIOR TO DISCHARGE TO CITY SEWER
001	TOTAL SUSPENDED SOLIDS	1 EVERY MONTH	24 HOUR COMPOSITE	PRIOR TO DISCHARGE TO CITY SEWER

Facility Name: SHENANDOAH CITY OF STP

Permit Number: 3659001

Outfall Number: 001

Ceriodaphnia and Pimephales Toxicity Effluent Testing

1. For facilities that have not been required to conduct toxicity testing by a previous NPDES permit, the initial annual toxicity test shall be conducted within three (3) months of permit issuance. For facilities that have been required to conduct toxicity testing by a previous NPDES permit, the initial annual toxicity test shall be conducted within twelve months (12) of the last toxicity test.
2. The test organisms that are to be used for acute toxicity testing shall be *Ceriodaphnia dubia* and *Pimephales promelas*. The acute toxicity testing procedures used to demonstrate compliance with permit limits shall be those listed in 40 CFR Part 136 and adopted by reference in rule 567 IAC 63.1(1). The method for measuring acute toxicity is specified in USEPA, October 2002, Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition. USEPA, Office of Water, Washington, D.C., EPA 821-R-02-012.
3. The diluted effluent sample must contain a minimum of 100.00 % effluent and no more than 0.00 % of culture water.
4. One valid positive toxicity result will require, at a minimum, quarterly testing for effluent toxicity until three successive tests are determined not to be positive.
5. Two successive valid positive toxicity results or three positive results out of five successive valid effluent toxicity tests will require a toxicity reduction evaluation to be completed to eliminate the toxicity.
6. A non-toxic test result shall be indicated as a "1" on the monthly operation report. A toxic test result shall be indicated as a "2" on the monthly operation report. DNR Form 542-1381 shall also be submitted to the DNR field office along with the monthly operation report.

Ceriodaphnia and Pimephales Toxicity Effluent Limits

The maximum limit of "1" for the parameters Acute Toxicity, *Ceriodaphnia* and Acute Toxicity, *Pimephales* means no positive toxicity results.

Definition: "Positive toxicity result" means a statistical difference of mortality rate between the control and the diluted effluent sample. For more information, see USEPA, October 2002, Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition, USEPA, Office of Water, Washington, D.C., EPA 821-R-02-012.

Facility Name: SHENANDOAH CITY OF STP

Permit Number: 3659001

Design Capacity

Design: 1

The design capacity for the treatment works is specified in Construction Permit Number 88-41-S, issued Thursday, 17 Oct 2002. The treatment plant is designed to treat:

- * An average dry weather (ADW) flow of 0.8670 Million Gallons Per Day (MGD).
- * An average wet weather (AWW) flow of 1.8800 Million Gallons Per Day (MGD).
- * A maximum wet weather (MWW) flow of 5.4000 Million Gallons Per Day (MGD).
- * A design 5-day biochemical oxygen demand (BOD5) load of 1,450 lbs/day.
- * A design Total Kjeldahl Nitrogen (TKN) load of 322.00 lbs/day.

Operator Certification Type/Grade: WW/III

Wastes in such volumes or quantities as to exceed the design capacity of the treatment works or reduce the effluent quality below that specified in the operation permit of the treatment works are considered to be a waste which interferes with the operation or performance of the treatment works and are prohibited by subrule IAC 567-62.1(7).

Facility Name: SHENANDOAH CITY OF STP

Permit Number: 3659001

SEWAGE SLUDGE HANDLING AND DISPOSAL REQUIREMENTS

"Sewage sludge" is solid, semisolid, or liquid residue generated during the treatment of domestic sewage in a treatment works. Sewage sludge does not include the grit and screenings generated during preliminary treatment.

1. The permittee shall comply with all existing Federal and State laws and regulations that apply to the use and disposal of sewage sludge and with technical standards developed pursuant to Section 405(d) of the Clean Water Act when such standards are promulgated. If an applicable numerical limit or management practice for pollutants in sewage sludge is promulgated after issuance of this permit that is more stringent than a sludge pollutant limit or management practice specified in existing Federal or State laws or regulations, this permit shall be modified, or revoked and reissued, to conform to the regulations promulgated under Section 405(d) of the Clean Water Act. The permittee shall comply with the limitation no later than the compliance deadline specified in the applicable regulations.
2. The permittee shall provide written notice to the Department of Natural Resources prior to any planned changes in sludge disposal practices.
3. Land application of sewage sludge shall be conducted in accordance with criteria established in rule IAC 567 67.1 through 67.11 (455B).

Facility Name: SHENANDOAH CITY OF STP

Permit Number: 3659001

SIGNIFICANT INDUSTRIAL USER LIMITATIONS, MONITORING AND REPORTING REQUIREMENTS

1. You must enforce the pollutant limits for each significant industrial user that are listed elsewhere in this permit. Violation of a treatment agreement limit is prohibited by subrule 567 IAC 62.1(6). Monitoring of each significant industrial user is required elsewhere in this permit.

You are required to notify the department, in writing, of any of the following:

(a) 180 days prior to the introduction of pollutants to your facility from a significant industrial user. A significant industrial user means an industrial user of a treatment works that:

- (1) Discharges an average of 25,000 gallons per day or more of process wastewater excluding sanitary, noncontact cooling and boiler blowdown wastewater;
- (2) Contributes a process waste stream which makes up five percent or more of the average dry weather hydraulic or organic capacity of the publicly-owned treatment works;
- (3) Is subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N; or
- (4) Is designated by the department as a significant industrial user on the basis that the contributing industry, either singly or in combination with other contributing industries, has a reasonable potential for adversely affecting the operation of or effluent quality from the publicly-owned treatment works or for violating any pretreatment standards or requirements.

(b) 60 days prior to a proposed expansion, production increase or process modification that may result in the discharge of a new pollutant or a discharge in excess of limitations stated in the existing treatment agreement.

(c) 10 days prior to any commitment by you to accept waste from any new significant industrial user. Your written notification must include a new or revised treatment agreement in accordance with rule 64.3(5)(455B).

2. You shall require all users of your facility to comply with Sections 204(b), 307, and 308 of the Clean Water Act.

(a) Section 204(b) requires that all users of the treatment works constructed with funds provided under Sections 201(g) or 601 of the Act to pay their proportionate share of the costs of operation, maintenance and replacement of the treatment works.

(b) Section 307 of the Act requires users to comply with pretreatment standards promulgated by EPA for pollutants that would cause interference with the treatment process or would pass through the treatment works.

(c) Section 308 of the Act requires users to allow access at reasonable times to state and EPA inspectors for the purpose of sampling the discharge and reviewing and copying records.

Facility Name: SHENANDOAH CITY OF STP

Permit Number: 3659001

Nutrient Reduction Requirements

In support of the Iowa Nutrient Reduction Strategy you shall prepare and submit a report that evaluates the feasibility and reasonableness of reducing the amounts of nitrogen and phosphorus discharged into surface water. The report shall be submitted no later than **11-1-2023** and shall address the following:

- ⚡ A description of the existing treatment facility with particular emphasis on its capabilities for removing nitrogen and phosphorus. The description shall include monitoring data that define the current amounts of total nitrogen and total phosphorus in both the raw wastewater and the final effluent.
- ⚡ A description and evaluation of operational changes to the existing treatment facility that could be implemented to reduce the amounts of total nitrogen and total phosphorus discharged in the final effluent and the feasibility and reasonableness of each. Your evaluation must discuss the projected degree of total nitrogen and total phosphorus reduction achievable for each operational change. When evaluating feasibility you must consider what, if any, effect operational changes would have on the removal of other pollutants (e.g. CBOD₅, TSS). When evaluating reasonableness you shall include estimates of the additional cost, if any, to implement such changes and for a publicly-owned treatment works the impact on user rates.
- ⚡ A description and evaluation of new or additional treatment technologies that would achieve significant reductions in the amounts of total nitrogen and total phosphorus discharged in the final effluent with a goal of achieving annual average concentrations of 10 mg/L total nitrogen and 1 mg/L total phosphorus for plants treating typical domestic strength sewage. For purposes of this evaluation typical domestic sewage is considered to contain approximately 25 – 35 mg/L total nitrogen and 4 - 8 mg/L total phosphorus. For plants treating wastewater with total nitrogen and/or total phosphorus concentrations greater than typical domestic strength sewage, the evaluation shall include the projected reductions in the total nitrogen and phosphorus effluent concentrations achievable with the application of feasible and reasonable treatment technology with a goal of achieving at least a 66 % reduction in nitrogen and 75% reduction in total phosphorus. For each treatment technology the report shall assess its feasibility, reasonableness, practicability, the availability of equipment, capital costs, annual operating costs, impact on user rates and any non-water quality environmental impacts (e.g. additional air pollution, increased sludge production, etc.).
- ⚡ Based on the evaluations of operational changes and new or additional treatment technologies the report must select the preferred method(s) for reducing total nitrogen and total phosphorus in the final effluent, the rationale for the selected method(s) and an estimate of the effluent quality achievable.
- ⚡ In addition to selecting operational changes and/or new or additional treatment technologies, the permittee may evaluate and propose to implement practices within the watershed that may achieve greater reductions in nitrogen and phosphorous than the preferred method(s) alone. Such evaluations are particularly encouraged when no feasible or reasonable operational changes or additional treatment technologies can be identified or when the schedule for installing the selected technology exceeds ten years.
- ⚡ The report must include a schedule for making operational changes and/or installing new or additional treatment technologies to achieve the concentration and/or percentage removal goals listed above. Additional financial justification must be included in the report if no operational changes or treatment technologies are feasible or reasonable.

The schedule will be incorporated into the NPDES permit by amendment. Effluent discharge limits will be based on one full year of operating data after implementation of the operational changes or completion of plant modifications and a six month optimization period.

The report shall be sent to the following email:

npdes.mail@dnr.iowa.gov

Subject: Nutrient Reduction Requirement (3659001)

Facility Name: SHENANDOAH CITY OF STP

Permit Number: 3659001

Ammonia Nitrogen and *E. coli* Compliance Schedule

The facility shall make necessary improvements to meet the new/more stringent ammonia nitrogen and *E. coli* limits according to the following schedule **unless an approved alternative schedule is submitted to the Department:**

- Submit an Alternatives Implementation Compliance Plan (AICP) by 8/1/2022. The AICP shall be in accordance with 567 IAC 64.7(5)“g” and shall include an updated Disadvantaged Community Analysis.
- Complete a Self-Assessment Matrix and submit a Work Record Request form to DNR’s Wastewater Engineering Section by 2/1/2023. The forms and instructions are available on the DNR website at <http://www.iowadnr.gov/InsideDNR/RegulatoryWater/WastewaterConstruction.aspx>. Questions on the forms should be directed to either Terry Kirschenman at 515/725-8422 or Emy Liu at 515/725-8421.
- Submit a Facility Plan by 4/1/2023. The Facility Plan shall be in accordance with Chapter 11.2 of the Iowa Wastewater Facilities Design Standards adopted April 25, 1979.
- Submit progress report by 1/1/2024.
- Submit final plans and specifications by 7/1/2024.
- Award contract for construction of wastewater treatment improvements by 12/1/2024.
- Submit progress report by 9/1/2025.
- Complete construction of wastewater treatment improvements by 4/1/2026.
- Achieve compliance with the more stringent limits by 5/1/2026.

Within fourteen (14) days following all dates of compliance, the permittee shall provide written notice of compliance with the scheduled event. All written notices and progress reports shall be sent to the following address:

Iowa Department of Natural Resources
Environmental Services Division
Regional Office # 4
1401 Sunnyside Lane
Atlantic, IA 50022

Facility Name: SHENANDOAH CITY OF STP

Permit Number: 3659001

59 Month Copper and Selenium Compliance Schedule

The facility shall meet the final limits for copper and selenium listed on the limits pages of this permit according to the following schedule:

- The facility shall submit a compliance strategy by February 1, 2023. The compliance strategy must describe the steps the facility will take to comply with the final effluent limits as soon as possible, but no later than January 1, 2027.
- The facility shall submit progress reports every 12 months until compliance with final effluent limits is achieved, with the first progress report due February 1, 2024. The progress reports shall detail completion of the steps described in the compliance strategy.
- Achieve compliance with final effluent limits by January 1, 2027.

Within fourteen (14) days following all dates of compliance, the permittee shall provide written notice of compliance with the scheduled event. All written notices and progress reports shall be sent to the following address:

Iowa Department of Natural Resources
Environmental Services Division
Regional Office # 4
1401 Sunnyside Lane
Atlantic, IA 50022

STANDARD CONDITIONS

1. ADMINISTRATIVE RULES

Rules of this Department that govern the operation of your facility in connection with this permit are published in Part 567 of the Iowa Administrative Code (IAC) in Chapters 60-65, 67, and 121. Reference to the term “rule” in this permit means the designated provision of Part 567 of the IAC. Reference to the term “CFR” means the Code of Federal Regulations.

2. DEFINITIONS

- (a) 7 day average means the sum of the total daily discharges by mass, volume, or concentration during a 7 consecutive day period, divided by the total number of days during the period that measurements were made. Four 7 consecutive day periods shall be used each month to calculate the 7-day average. The first 7-day period shall begin with the first day of the month.
- (b) 30 day average means the sum of the total daily discharges by mass, volume, or concentration during a calendar month, divided by the total number of days during the month that measurements were made.
- (c) Daily maximum means the total discharge by mass, volume, or concentration during a twenty-four hour period.

3. DUTY TO PROVIDE INFORMATION

You must furnish to the Director, within a reasonable time, any information the Director may request to determine compliance with this permit or determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, in accordance with 567 IAC 64.3(11)“c”. You must also furnish to the Director, upon request, copies of any records required to be kept by this permit.

4. MONITORING AND RECORDS OF OPERATION

- (a) Maintenance of records. You shall retain for a minimum of three years all paper and electronic records of monitoring activities and results including all original strip chart recordings for continuous monitoring instrumentation and calibration and maintenance records. *{See 567 IAC 63.2(3)}*
- (b) Any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000 or by imprisonment for not more than two years, or both. *{See 40 CFR 122.41(j)(5)}*

5. SIGNATORY REQUIREMENTS

Applications, reports or other information submitted to the Department in connection with this permit must be signed and certified in accordance with 567 IAC 64.3(8).

6. OTHER INFORMATION

Where you become aware that you failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application, you must promptly submit such facts or information. Where you become aware that you failed to submit any relevant facts in the submission of in any report to the director, including records of operation, you shall promptly submit such facts or information.

{See 567 IAC 60.4(2)“a” and 567 IAC 63.7}

7. TRANSFER OF TITLE OR OWNER ADDRESS CHANGE

If title to your facility, or any part of it, is transferred the new owner shall be subject to this permit. You are required to notify the new owner of the requirements of this permit in writing prior to any transfer of title. The Director shall be notified in writing within 30 days of the transfer. No transfer of the authorization to discharge from the facility represented by the permit shall take place prior to notifying the department of the transfer of title. Whenever the address of the owner is changed, the department shall be notified in writing within 30 days of the address change. Electronic notification is not sufficient; all title transfers or address changes must be reported to the department by mail. *{See 567 IAC 64.14}*

8. PROPER OPERATION AND MAINTENANCE

All facilities and control systems shall be operated as efficiently as possible and maintained in good working order. A sufficient number of staff, adequately trained and knowledgeable in the operation of your facility shall be retained at all times and adequate laboratory controls and appropriate quality assurance procedures shall be provided to maintain compliance with the conditions of this permit.

{See 40 CFR 122.41(e) and 567 IAC 64.7(7)“f”}

9. PERMIT MODIFICATION, SUSPENSION OR REVOCATION

- (a) This permit may be modified, suspended, or revoked and reissued for cause including but not limited to those specified in 567 IAC 64.3(11).
- (b) This permit may be modified due to conditions or information on which this permit is based, including any new standard the department may adopt that would change the required effluent limits. *{See 567 IAC 64.3(11)}*
- (c) If a toxic pollutant is present in your discharge and more stringent standards for toxic pollutants are established under Section 307(a) of the Clean Water Act, this permit will be modified in accordance with the new standards.

{See 40 CFR 122.62(a)(6) and 567 IAC 64.7(7)“g”}

The filing of a request for a permit modification, revocation or suspension, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

10. DUTY TO REAPPLY AND PERMIT CONTINUATION

If you wish to continue to discharge after the expiration date of this permit, you must file a complete application for reissuance at least 180 days prior to the expiration date of this permit. If a timely and sufficient application is submitted, this permit will remain in effect until the Department makes a final determination on the permit application. *{See 567 IAC 64.8(1) and Iowa Code 17A.18}*

11. DUTY TO COMPLY

You must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. Issuance of this permit does not relieve you of the responsibility to comply with all local, state and federal laws, ordinances, regulations or other legal requirements applying to the operation of your facility. *{See 40 CFR 122.41(a) and 567 IAC 64.7(4)“e”}*

STANDARD CONDITIONS

12. DUTY TO MITIGATE

You shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment. *{See 40 CFR 122.41(d) and 567 IAC 64.7(7)“i”}*

13. TWENTY-FOUR HOUR REPORTING

You shall report any noncompliance that may endanger human health or the environment, including, but not limited to, violations of maximum daily limits for any toxic pollutant (listed as toxic under 307(a)(1) of the Clean Water Act) or hazardous substance (as designated in 40 CFR Part 116 pursuant to 311 of the Clean Water Act). Information shall be provided orally within 24 hours from the time you become aware of the circumstances. A written submission that includes a description of noncompliance and its cause; the period of noncompliance including exact dates and times, whether the noncompliance has been corrected or the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent a reoccurrence of the noncompliance must be provided within 5 days of the occurrence. *{See 567 IAC 63.12}*

14. OTHER NONCOMPLIANCE

You shall report all instances of noncompliance not reported under Condition #13 at the time monitoring reports are submitted. You shall give advance notice to the appropriate regional field office of the department of any planned activity which may result in noncompliance with permit requirements. *{See 567 IAC 63.14}*

15. INSPECTION OF PREMISES, RECORDS, EQUIPMENT, METHODS AND DISCHARGES

You are required to permit authorized personnel to:

- (a) Enter upon the premises where a regulated facility or activity is located or conducted or where records are kept under conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect, at reasonable times, any facilities, equipment, practices or operations regulated or required under this permit; and
- (d) Sample or monitor, at reasonable times, to assure compliance or as otherwise authorized by the Clean Water Act.

16. FAILURE TO SUBMIT FEES

This permit may be revoked, in whole or in part, if the appropriate permit fees are not submitted within thirty (30) days of the date of notification that such fees are due. *{See 567 IAC 64.16(1)}*

17. NEED TO HALT OR REDUCE ACTIVITY

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. *{See 40 CFR 122.41(c) and 567 IAC 64.7(7)“j”}*

18. NOTICE OF CHANGED CONDITIONS

You are required to notify the director of any changes in existing conditions or information on which this permit is based. This includes, but is not limited to, the following:

- (a) If your facility is a publicly owned treatment works (POTW) or otherwise may accept waste for treatment from an indirect discharger or industrial contributor (See 567 IAC 64.3(5) for further notice requirements).
- (b) If your facility is a POTW and there is any substantial change in the volume or character of pollutants being introduced to the POTW by a source introducing pollutants into the POTW at the time of issuance of the permit. *{See 40 CFR 122.42(b)}*
- (c) As soon as you know or have reason to believe that any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in this permit. *{See 40 CFR 122.42(a)}*
- (d) If you have begun or will begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant which was not reported in the permit application.

19. PLANNED CHANGES

The permittee shall give notice to the appropriate regional field office of the department 30 days prior to any planned physical alterations or additions to the permitted facility. Notice is required only when:

- (a) Notice has not been given to any other section of the department. (Note: Facility expansions, production increases, or process modifications which may result in new or increased discharges of pollutants must be reported to the Director in advance. If such discharges will exceed effluent limitations, your report must include an application for a new permit. If any modification of, addition to, or construction of a disposal system is to be made, you must first obtain a written permit from this Department. In addition, no construction activity that will result in disturbance of one acre or more shall be initiated without first obtaining coverage under NPDES General Permit No. 2 for “Storm water discharge associated with construction activity.”) *{See 567 IAC 64.7(7)“a” and 64.2}*
- (b) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source as defined in 567 IAC 60.2;
- (c) The alteration or addition results in a significant change in the permittee’s sludge use or disposal practices; or
- (d) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are not subject to effluent limitations in the permit. *{See 567 IAC 63.13 and 63.14}*

20. USE OF CERTIFIED LABORATORIES

Analyses of wastewater, groundwater or sewage sludge that are required to be submitted to the department as a result of this permit must be performed by a laboratory certified by the State of Iowa. Routine, on-site monitoring for pH, temperature, dissolved oxygen, total residual chlorine and other pollutants that must be analyzed immediately upon sample collection, settleable solids, physical measurements, and operational monitoring tests specified in 567 IAC 63.3(4) are excluded from this requirement.

STANDARD CONDITIONS

21. BYPASSES

- (a) Definition. "Bypass" means the diversion of waste streams from any portion of a treatment facility or collection system. A bypass does not include internal operational waste stream diversions that are part of the design of the treatment facility, maintenance diversions where redundancy is provided, diversions of wastewater from one point in a collection system to another point in a collection system, or wastewater backups into buildings that are caused in the building lateral or private sewer line.
- (b) Prohibitions.
 - i. Bypasses from any portion of a treatment facility or from a sanitary sewer collection system designed to carry only sewage are prohibited.
 - ii. Bypass is prohibited and the department may not assess a civil penalty against a permittee for bypass if the permittee has complied with all of the following:
 - (1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; and
 - (2) There were no feasible alternatives to the bypass such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 - (3) The permittee submitted notices as required by paragraph (d) of this section.
- (c) The Director may approve an anticipated bypass after considering its adverse effects if the Director determines that it will meet the three conditions listed above and a request for bypass has been submitted to the Department in accordance with 567 IAC 63.6(2).
- (d) Reporting bypasses. Bypasses shall be reported in accordance with 567 IAC 63.6.

22. UPSET PROVISION

- (a) Definition. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
- (b) Effect of an upset. An upset constitutes an affirmative defense in an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph "c" of this condition are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
- (c) Conditions necessary for demonstration of an upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate through properly signed operating logs or other relevant evidence that:
 - i. An upset occurred and that the permittee can identify the cause(s) of the upset;
 - ii. The permitted facility was at the time being properly operated;

- iii. The permittee submitted notice of the upset to the Department in accordance with 567 IAC 63.6(3); and
 - iv. The permittee complied with any remedial measures required in accordance with 567 IAC 63.6(6)"b".
- (d) Burden of Proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

23. PROPERTY RIGHTS

This permit does not convey any property rights of any sort or any exclusive privilege. ***{See 567 IAC 64.4(3)"b"}***

24. EFFECT OF A PERMIT

Compliance with a permit during its term constitutes compliance, for purposes of enforcement, with Sections 301, 302, 306, 307, 318, 403 and 405(a)-(b) of the Clean Water Act, and equivalent limitations and standards set out in 567 IAC Chapters 61 and 62. ***{See 567 IAC 64.4(3)"a"}***

25. SEVERABILITY

The provisions of this permit are severable and if any provision or application of any provision to any circumstance is found to be invalid by this department or a court of law, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected by such finding.

Appendix G.2- Volumes Hauled to Treatment

Fremont County Sanitary Landfill
IDNR Permit No. 36-SDP-1-74P
Leachate hauled to Shenandoah POTW

2025

Month	Total Gallons	Shenandoah Gallons
January	32,340	32,340
February	13,440	13440
March	18,900	18900
April	23,520	23520
May	47,880	47880
June	28,980	28980
July	30,240	30240
August	26,880	26,880
September	60,480	60,480
October	97,440	97440
November	44,520	44520
December	31,080	31080
TOTAL	455,700	455,700

Appendix G.3 – Summary of Monthly Lagoon Testing & Monthly Laboratory Reports

**Fremont County SLF
2025 Leachate Testing**

Date Collected		Ammonia, N	Kjeldahl, N	BOD5	pH	TSS
1/6/2025	Concentration (mg/L)	262	284	12	6.8	118
2/10/2025	Concentration (mg/L)	320	400	23	6.8	139
3/4/2025	Concentration (mg/L)	412	403	21	7	131
3/11/2025	Concentration (mg/L)	387	313	32	7	1670
4/3/2025	Concentration (mg/L)	360	359	29	6.9	129
5/5/2025	Concentration (mg/L)	314	302	24	6.9	100
6/3/2025	Concentration (mg/L)	252	367	17	6.8	116
8/4/2025	Concentration (mg/L)	338	337	22	6.8	134
9/8/2025	Concentration (mg/L)	242	259	23	6.8	132
10/1/2025	Concentration (mg/L)	234	247	17	6.8	122
11/3/2025	Concentration (mg/L)	205	195	16	7.3	6
12/8/2025	Concentration (mg/L)	30.1	328	18	7.5	9



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

11A0458

Fremont County Landfill

Project Name: Leachate Sampling

Casey Moyer
PO Box 487, 2879 250th St
Sidney, IA 51652

Project / PO Number: N/A
Received: 01/07/2025
Reported: 01/20/2025

Analytical Testing Parameters

Client Sample ID: Leachate Tank
Sample Matrix: Aqueous
Lab Sample ID: 11A0458-01

Collected By: CM
Collection Date: 01/06/2025 8:00

Determination of Conventional Chemistry Parameters	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 351.2, Rv. 2 (1993)								
Nitrogen, Kjeldahl, total	284	10.0	mg/L	1		01/14/25 1043	01/17/25 1221	SGB
SM 4500-H+ B-2011								
pH	6.8	0.5	pH	1	H4	01/07/25 1226	01/07/25 1628	BSS
SM 5210 B-2016								
BOD (5 day)	12	6	mg/L	3		01/07/25 1451	01/07/25 1526	MND
TIMBERLINE								
Nitrogen, Ammonia	262	10.0	mg/L	100		01/14/25 0934	01/14/25 1326	SDF
USGS I-3765-85								
Total Suspended Solids (TSS)	118	20	mg/L	20		01/08/25 0819	01/08/25 1328	KDA

Definitions

H4: The test was performed outside of the EPA recommended holding time of 15 minutes.
RL: Reporting Limit

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
01/20/25 14:23



SITE INFORMATION

Sampler: Casey Moyer

Project: Routine Leachate
Leachate Sampling

SPECIAL INSTRUCTIONS

None

Turn Around Time

☒ Standard ☐ RUSH, need by ___/___/___

REPORT TO

Casey Moyer
Fremont County Landfill
PO Box 487, 2879 250th St
Sidney, IA 51652

INVOICE TO

Casey Moyer
Fremont County Landfill
PO Box 487, 2879 250th St
Sidney, IA 51652

LAB USE ONLY

Work Order 11A0458

Temperature 0.0

Turn-Cooler: Yes

☐ 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	Aqueous	GRAB	/ /			bod-5210 nh3-timberline fkn-351.2 dilution ph-4500 tes-i-3765-85	<u>01</u>

Casey Moyer 1-4-25 8:00 AM
Relinquished By Date/Time

Received By Date/Time

Emily Hochstetler 1/7/25 10:25
Received for Lab By Date/Time

Original - Lab Copy Yellow - Sampler Copy

Remarks:



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

11B0726

Fremont County Landfill

Project Name: Leachate Sampling

Casey Moyer
PO Box 487, 2879 250th St
Sidney, IA 51652

Project / PO Number: N/A
Received: 02/11/2025
Reported: 02/20/2025

Analytical Testing Parameters

Client Sample ID:	Leachate Tank	Collected By:	Moyer, Casey
Sample Matrix:	Aqueous	Collection Date:	02/10/2025 8:00
Lab Sample ID:	11B0726-01		

Determination of Conventional Chemistry Parameters	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 351.2, Rv. 2 (1993)								
Nitrogen, Kjeldahl, total	400	10.0	mg/L	1		02/18/25 1306	02/20/25 1227	SGB
SM 4500-H+ B-2011								
pH	6.8	0.5	pH	1	H4	02/12/25 1253	02/12/25 1339	BSS
SM 5210 B-2016								
BOD (5 day)	23	6	mg/L	3		02/11/25 1357	02/11/25 1628	MND
TIMBERLINE								
Nitrogen, Ammonia	320	10.0	mg/L	100		02/13/25 0908	02/13/25 1133	SDF
USGS I-3765-85								
Total Suspended Solids (TSS)	139	10	mg/L	10		02/13/25 0807	02/14/25 1130	MSP

Definitions

H4: The test was performed outside of the EPA recommended holding time of 15 minutes.
RL: Reporting Limit
RPD: Relative Percent Difference

Report Comments

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Reviewed and Approved By:

Heather Murphy
Customer Relationship Specialist
heather.murphy@microbac.com
02/20/25 16:46



600 E
Newtor
641-791



1 I B 0 7 2 6
Fremont County Landfill
PM: Heather Murphy

Page 1 of

Printed: 1/7/2025 4:28:04P

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Page 2 of 2

SITE INFORMATION

Sampler:

Project:

Routine Leachate

Leachate Sampling

SPECIAL INSTRUCTIONS

None

Turn Around Time

☒ Standard ☐ RUSH, need by ___/___/___

REPORT TO

Casey Moyer
Fremont County Landfill
PO Box 487, 2879 250th St
Sidney, IA 51652

INVOICE TO

Casey Moyer
Fremont County Landfill
PO Box 487, 2879 250th St
Sidney, IA 51652

LAB USE ONLY

Work Order 1IB0726

Temperature 0.0

Turn-Cooler:

Yes

- ☐ Custody Seal
- ☒ Containers Intact
- ☐ COC/Labels Agree
- ☐ Preservation Confirmed
- ☒ Received on Ice

Number	Sample Identification / Client ID	Matrix	Sample Type	Date	Time	Number of Containers	Analyses	Lab Sample Number
-00	Leachate Tank	Aqueous	GRAB	/ /			bod-2210 ab3-timberline dss-351.2 dilution ph-4500 tes-i-3765-85	01

Casey Moyer 1-10-25 8:00 AM
Relinquished By Date/Time

Received By Date/Time

Relinquished By Date/Time

Received for Lab By Date/Time

Remarks:

Original - Lab Copy Yellow - Sampler Copy



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

11C0364

Fremont County Landfill

Project Name: Leachate Sampling

Casey Moyer
PO Box 487, 2879 250th St
Sidney, IA 51652

Project / PO Number: N/A
Received: 03/06/2025
Reported: 03/19/2025

Analytical Testing Parameters

Client Sample ID:	Leachate Tank	Collected By:	Meyer, Casey
Sample Matrix:	Aqueous	Collection Date:	03/04/2025 7:30
Lab Sample ID:	11C0364-01		

Determination of Conventional Chemistry Parameters	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 351.2, Rv. 2 (1993)								
Nitrogen, Kjeldahl, total	403	12.5	mg/L	1		03/14/25 1207	03/19/25 1348	SGB
SM 4500-H+ B-2011								
pH	7.0	0.5	pH	1	H4	03/14/25 0831	03/18/25 0806	BSS
SM 5210 B-2016								
BOD (5 day)	21	6	mg/L	3	H1	03/06/25 1422	03/06/25 1552	MND
TIMBERLINE								
Nitrogen, Ammonia	412	10.0	mg/L	100		03/10/25 1318	03/10/25 1521	SDF
USGS I-3765-85								
Total Suspended Solids (TSS)	131	10	mg/L	10		03/07/25 0732	03/07/25 1025	MSP

Definitions

H1:	Sample was received past holding time.
H4:	The test was performed outside of the EPA recommended holding time of 15 minutes.
RL:	Reporting Limit
RPD:	Relative Percent Difference

Report Comments

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Reviewed and Approved By:

Heather Murphy
Customer Relationship Specialist
heather.murphy@microbac.com
03/19/25 16:13



600 East 17th St
Newton, IA 502
641-792-8451

CHAIN



1 I C 0 3 6 4

Fremont County Landfill

PM: Heather Murphy

Page 1 of 2

Printed: 2/12/2025 9:46:02A

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Page 2 of 2

SITE INFORMATION

Sampler: Casey Moyer

Project: Routine Leachate
Leachate Sampling

SPECIAL INSTRUCTIONS

None

Turn Around Time

☐ Standard

☒ RUSH, need by ___/___/___

REPORT TO

Casey Moyer
Fremont County Landfill
PO Box 487, 2879 250th St
Sidney, IA 51652

INVOICE TO

Casey Moyer
Fremont County Landfill
PO Box 487, 2879 250th St
Sidney, IA 51652

LAB USE ONLY

Work Order

LIC 0364

Temperature

0.4

Turn-Cooler:

Yes



☐ 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	Aqueous	GRAB	1/1			bod-5210 nh3-timberline tkn-351.2 dilution ph-4500 tes-l-3765-85	01

Casey Moyer 3-4-25 7:30 AM
Relinquished By Date/Time

Received By Date/Time

Relinquished By Date/Time
Aime Koffi 3-6-25 10:30
Received for Lab By Date/Time

Original - Lab Copy Yellow - Sampler Copy

Remarks:



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

11D0709

Fremont County Landfill

Project Name: Leachate Sampling

Casey Moyer
PO Box 487, 2879 250th St
Sidney, IA 51652

Project / PO Number: N/A
Received: 04/04/2025
Reported: 04/17/2025

Analytical Testing Parameters

Client Sample ID:	Leachate Tank	Collected By:	Moyer, Casey
Sample Matrix:	Aqueous	Collection Date:	04/03/2025 8:00
Lab Sample ID:	11D0709-01		

Determination of Conventional Chemistry Parameters	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 351.2, Rv. 2 (1993)								
Nitrogen, Kjeldahl, total	359	100	mg/L	1		04/15/25 1530	04/17/25 1347	AKK
SM 4500-H+ B-2011								
pH	6.9	0.5	pH	1	H4	04/16/25 0850	04/16/25 1403	BSS
SM 5210 B-2016								
BOD (5 day)	29	6	mg/L	3		04/04/25 1436	04/04/25 1616	MND
TIMBERLINE								
Nitrogen, Ammonia	360	10.0	mg/L	100		04/08/25 1157	04/08/25 1350	SDF
USGS I-3765-85								
Total Suspended Solids (TSS)	129	12	mg/L	12		04/08/25 1418	04/09/25 1051	RDH

Definitions

H4: The test was performed outside of the EPA recommended holding time of 15 minutes.
RL: Reporting Limit
RPD: Relative Percent Difference

Report Comments

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Reviewed and Approved By:

Heather Murphy
Customer Relationship Specialist
heather.murphy@microbac.com
04/17/25 15:53



600 East 17th Street
Newton, IA 50208
641-792-8451

CHAIN OF C



Fremont County Landfill
PM: Heather Murphy

Page 1 of 2

Printed: 3/7/2025 9:51:02A

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Page 2 of 2

SITE INFORMATION

Sampler: Casey Moyer
Project: Routine Leachate
Leachate Sampling

REPORT TO

Casey Moyer
Fremont County Landfill
PO Box 487, 2879 250th St
Sidney, IA 51652

INVOICE TO

Casey Moyer
Fremont County Landfill
PO Box 487, 2879 250th St
Sidney, IA 51652

SPECIAL INSTRUCTIONS

None

Turn Around Time

☒ Standard ☐ RUSH, need by ___/___/___

LAB USE ONLY

Work Order 11D0709
Temperature 08
Turn-Cooler: Yes

☐ 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	Aqueous	GRAB	4/3/25	0800	2	bod-5210 nh3-timberline tkn-351.2 dilution ph-4500 tas-i-3765-35	01

Casey Moyer 4-3-25 8:00 AM
Relinquished By Date/Time

Received By Date/Time

Heather Murphy 4/4/25 10:00
Received for Lab By Date/Time

Remarks:

Original - Lab Copy Yellow - Sampler Copy



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

11E0474

Fremont County Landfill

Project Name: Leachate Sampling

Casey Moyer
PO Box 487, 2879 250th St
Sidney, IA 51652

Project / PO Number: N/A
Received: 05/06/2025
Reported: 05/15/2025

Analytical Testing Parameters

Client Sample ID:	Leachate Tank	Collected By:	Moyer, Casey
Sample Matrix:	Aqueous	Collection Date:	05/05/2025 7:45
Lab Sample ID:	11E0474-01		

Determination of Conventional Chemistry Parameters	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 351.2, Rv. 2 (1993)								
Nitrogen, Kjeldahl, total	302	10.0	mg/L	1			05/13/25 0913	SGB
SM 4500-H+ B-2011								
pH	6.9	0.5	pH	1	H4		05/06/25 1607	BSS
SM 5210 B-2016								
BOD (5 day)	24	6	mg/L	3		05/06/25 1530	05/06/25 1740	HBH
TIMBERLINE								
Nitrogen, Ammonia	314	10.0	mg/L	100		05/08/25 1033	05/08/25 1419	SDF
USGS I-3765-85								
Total Suspended Solids (TSS)	100	33	mg/L	33		05/08/25 0800	05/09/25 0833	LAW

Definitions

DF:	Dilution Factor representing the amount the sample was diluted during analysis and may not represent preparation factors.
H4:	The test was performed outside of the EPA recommended holding time of 15 minutes.
RL:	Reporting Limit
RPD:	Relative Percent Difference

Report Comments

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Reviewed and Approved By:

Heather Murphy
Customer Relationship Specialist
heather.murphy@microbac.com
05/15/25 11:45

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1 I E 0 4 7 4

keystonelabs.com

Page 2 of 3

Number	Sample Identification / Client ID	Matrix	Sample Type	Date	Time	Number of Containers	Analyses		Lab Sample Number
-001	Leachate Tank	Aqueous	GRAB	7 / 1			bod-5210 nh3-timberline tku-351.2	dilution ph-4500 tss-i-3765-85	01

Relinquished By Lacey Meyer

4-5-25 7:45 AM
Date/Time B

Relinquished By

Date/Time

Received By _____

Date/Time

Amel Goffi
Received for Lab By

Date/Time

Remarks:

Original - Lab Copy Yellow - Sampler Copy

CHAIN OF CUSTODY RECORD



600 East 17th Street South
Newton, IA 50208
641-792-8451



1 I E 0 4 7 4

Fremont County Landfill

PM: Heather Murphy

Page 1 of 3

4/7/2025 10:57:20A

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Page 3 of 3

SITE INFORMATION

Sampler: Casey Moyer
Project: Routine Leachate
Leachate Sampling

SPECIAL INSTRUCTIONS

None

Turn Around Time

☒ Standard ☐ RUSH, need by ___/___/___

REPORT TO

Casey Moyer
Fremont County Landfill
PO Box 487, 2879 250th St
Sidney, IA 51652

INVOICE TO

Casey Moyer
Fremont County Landfill
PO Box 487, 2879 250th St
Sidney, IA 51652

LAB USE ONLY

Work Order

Temperature

Turn-Cooler:

Yes

- ☐ 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	Aqueous	GRAB	4/5/25	7:45 AM		hcd-5210 nh3-timberline den-351.2 dilution ph-4500 tas-i-3765-85	01

Casey Moyer
Relinquished By

4-5-25 7:45 AM
Date/Time

Relinquished By

Date/Time

Remarks:

Received By

Date/Time

Received for Lab By

Date/Time

Original - Lab Copy Yellow - Sampler Copy



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

11F0346

Fremont County Landfill

Project Name: Leachate Sampling

Casey Moyer
PO Box 487, 2879 250th St
Sidney, IA 51652

Project / PO Number: N/A
Received: 06/04/2025
Reported: 06/17/2025

Analytical Testing Parameters

Client Sample ID:	Leachate Tank	Collected By:	Moyer, Casey
Sample Matrix:	Aqueous	Collection Date:	06/03/2025 7:30
Lab Sample ID:	11F0346-01		

Determination of Conventional Chemistry Parameters	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 351.2, Rv. 2 (1993)							
Nitrogen, Kjeldahl, total	367	12.5	mg/L		06/16/25 0842	06/17/25 1546	SGB
SM 4500-H+ B-2011							
pH	6.8	0.5	pH	H4	06/04/25 1302	06/05/25 0941	BSS
SM 5210 B-2016							
BOD (5 day)	17	6	mg/L		06/04/25 1228	06/04/25 1419	MND
TIMBERLINE							
Nitrogen, Ammonia	252	10.0	mg/L		06/05/25 0957	06/05/25 1323	SDF
USGS I-3765-85							
Total Suspended Solids (TSS)	116	1	mg/L		06/04/25 1320	06/05/25 0833	LAW

Definitions

H4: The test was performed outside of the EPA recommended holding time of 15 minutes.
RL: Reporting Limit

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
06/17/25 16:39



CHAIN OF CUSTODY
600 East 17th Street South
Newton, IA 50208
641-792-8451



1 I F 0 3 4 6

Fremont County Landfill
PM: Heather Murphy

Page 1 of 2

Printed: 5/9/2025 8:59:47A

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Page 2 of 2

SITE INFORMATION

Sampler: Casey Moyer

Project: Routine Leachate
Leachate Sampling

SPECIAL INSTRUCTIONS

None

Turn Around Time

☒ Standard ☐ RUSH, need by ___/___/___

REPORT TO

Casey Moyer
Fremont County Landfill
PO Box 487, 2879 250th St
Sidney, IA 51652

INVOICE TO

Casey Moyer
Fremont County Landfill
PO Box 487, 2879 250th St
Sidney, IA 51652

LAB USE ONLY

Work Order 1IF0346

Temperature 1.1

Turn-Cooler: Yes



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	Aqueous	GRAB	5/9/25	7:30 AM		bod-5210 nh3-timberline den-351.2 chluton ph-4500 tss-i-3763-85	01

Casey Moyer 5-9-25 7:30 AM
Relinquished By Date/Time

Received By Date/Time

Relinquished By Date/Time

Ame Koffi 06-4-25 10:20
Received for Lab By Date/Time

Original - Lab Copy Yellow - Sampler Copy

Remarks:



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1IF0480

Project Description

Leachate Sampling

For:

Todd Whipple

HLW Engineering

204 West Broad St

Story City, IA 50248

Heather Murphy

Customer Relationship Specialist

Wednesday, June 18, 2025

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

11F0480

HLW Engineering

Todd Whipple
204 West Broad St
Story City, IA 50248

Project Name: Leachate Sampling

Project / PO Number: N/A
Received: 06/04/2025
Reported: 06/18/2025

Sample Summary Report

<u>Sample Name</u>	<u>Laboratory ID</u>	<u>Client Matrix</u>	<u>Sample Type</u>	<u>Sample Begin</u>	<u>Sample Taken</u>	<u>Lab Received</u>
_____	11F0480-01	Aqueous			06/03/25 07:30	06/04/25 10:20



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

11F0480

Analytical Testing Parameters

Client Sample ID:		Collected By:	Moyer, Casey
Sample Matrix:	Aqueous	Collection Date:	06/03/2025 7:30
Lab Sample ID:	11F0480-01		

Determination of Extractable Petroleum Hydrocarbons	Result	RL	Units	Note	Prepared	Analyzed	Analyst

EPA 3510C/Iowa OA-2

TEH, as gasoline	<0.1	0.1	mg/L		06/10/25 1431	06/17/25 2055	PDS
TEH, as #2 diesel fuel	1.9	0.1	mg/L		06/10/25 1431	06/17/25 2055	PDS
TEH, as waste oil	<0.1	0.1	mg/L		06/10/25 1431	06/17/25 2055	PDS
Total Extractable Hydrocarbons	1.9	0.1	mg/L		06/10/25 1431	06/17/25 2055	PDS
Surrogate: Pentacosane	97.7	Limit: 10-168	% Rec		06/10/25 1431	06/17/25 2055	PDS

Determination of Conventional Chemistry Parameters	Result	RL	Units	Note	Prepared	Analyzed	Analyst

4500CN-E

Cyanide, total	0.008	0.005	mg/L		06/16/25 0816	06/17/25 0910	KKJ

SM 3500-Cr B-2011

Chromium, hexavalent	<0.0100	0.0100	mg/L	H1	06/05/25 0824	06/05/25 0959	KKJ

SM 4500-S2- D-2011

Sulfide, total	<0.10	0.10	mg/L		06/05/25 1524	06/06/25 1010	KKJ

Determination of Total Metals	Result	RL	Units	Note	Prepared	Analyzed	Analyst

200.7

Magnesium, total	76.7	0.10	mg/L		06/09/25 0718	06/10/25 2201	JAR
Sodium, total	288	1.00	mg/L		06/09/25 0718	06/10/25 2201	JAR

EPA 200.7, Rv. 4.4 (1994)

Molybdenum, total	0.010	0.010	mg/L		06/09/25 0718	06/10/25 2201	JAR



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

11F0480

Batch Log Summary

Method	Batch	Laboratory ID	Client / Source ID
SM 3500-Cr B-2011	11F0279	11F0279-BLK1	
		11F0279-BS1	
		11F0279-MS1	11F0480-01
		11F0279-MSD1	11F0480-01
		11F0480-01	
Method	Batch	Laboratory ID	Client / Source ID
SM 4500-S2- D-2011	11F0317	11F0317-MS1	11F0522-03
		11F0317-BS1	
		11F0317-BLK1	
		11F0480-01	
		11F0317-MSD1	11F0522-03
Method	Batch	Laboratory ID	Client / Source ID
200.7	11F0407	11F0407-BLK1	
EPA 200.7, Rv. 4.4 (1994)		11F0407-BLK1	
200.7		11F0407-BS1	
EPA 200.7, Rv. 4.4 (1994)		11F0407-BS1	
200.7		11F0407-MS1	11F0477-01
EPA 200.7, Rv. 4.4 (1994)		11F0407-MS1	11F0477-01
200.7		11F0407-MSD1	11F0477-01
EPA 200.7, Rv. 4.4 (1994)		11F0407-MSD1	11F0477-01
200.7		11F0407-PS1	11F0477-01
EPA 200.7, Rv. 4.4 (1994)		11F0407-PS1	11F0477-01
		11F0480-01	
200.7		11F0480-01	
Method	Batch	Laboratory ID	Client / Source ID
Iowa OA-2	11F0514	11F0514-BLK1	
		11F0480-01	
		11F0514-BS1	
		11F0514-BSD1	
Method	Batch	Laboratory ID	Client / Source ID
4500CN-E	11F0819	11F0819-MSD1	11F0316-01
		11F0480-01	
		11F0819-BLK1	
		11F0819-MS1	11F0316-01
		11F0819-BS1	

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



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

11F0480

Determination of Extractable Petroleum Hydrocarbons	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11F0514 - 3510C OA-2 Sep Fnl - Iowa OA-2										
Blank (11F0514-BLK1)				Prepared: 06/10/25 14:31 Analyzed: 06/17/25 19:31						
TEH, as gasoline	<0.1	0.1	mg/L							
TEH, as #2 diesel fuel	<0.1	0.1	mg/L							
TEH, as waste oil	<0.1	0.1	mg/L							
Total Extractable Hydrocarbons	<0.1	0.1	mg/L							
Surrogate: Pentacosane	0.0409		mg/L	0.0411		99.5	10-168			
LCS (11F0514-BS1)				Prepared: 06/10/25 14:31 Analyzed: 06/17/25 22:19						
TEH, as #2 diesel fuel	0.91	0.1	mg/L	1.07		85.1	19-167			
Surrogate: Pentacosane	0.0430		mg/L	0.0411		105	10-168			
LCS Dup (11F0514-BSD1)				Prepared: 06/10/25 14:31 Analyzed: 06/17/25 23:01						
TEH, as #2 diesel fuel	0.81	0.1	mg/L	1.07		76.4	19-167	10.8	30	
Surrogate: Pentacosane	0.0337		mg/L	0.0411		82.0	10-168			
Determination of Conventional Chemistry Parameters	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11F0279 - Wet Chem Preparation - SM 3500-Cr B-2011										
Blank (11F0279-BLK1)				Prepared: 06/05/25 08:24 Analyzed: 06/05/25 09:59						
Chromium, hexavalent	<0.0100	0.0100	mg/L							
LCS (11F0279-BS1)				Prepared: 06/05/25 08:24 Analyzed: 06/05/25 09:59						
Chromium, hexavalent	0.0373	0.0100	mg/L	0.0400		93.3	85-115			
Matrix Spike (11F0279-MS1)				Source: 11F0480-01 Prepared: 06/05/25 08:24 Analyzed: 06/05/25 09:59						
Chromium, hexavalent	0.0208	0.0100	mg/L	0.0200	ND	104	85-115			
Matrix Spike Dup (11F0279-MSD1)				Source: 11F0480-01 Prepared: 06/05/25 08:24 Analyzed: 06/05/25 09:59						
Chromium, hexavalent	0.0214	0.0100	mg/L	0.0200	ND	107	85-115	3.13	20	
Batch 11F0317 - Wet Chem Preparation - SM 4500-S2- D-2011										
Blank (11F0317-BLK1)				Prepared: 06/05/25 15:24 Analyzed: 06/06/25 10:10						
Sulfide, total	<0.10	0.10	mg/L							
LCS (11F0317-BS1)				Prepared: 06/05/25 15:24 Analyzed: 06/06/25 10:10						
Sulfide, total	<0.10	0.10	mg/L	0.158		56.9	56-120			
Matrix Spike (11F0317-MS1)				Source: 11F0522-03 Prepared: 06/05/25 15:24 Analyzed: 06/06/25 10:10						
Sulfide, total	<0.10	0.10	mg/L	0.158	ND	50.4	50-150			
Matrix Spike Dup (11F0317-MSD1)				Source: 11F0522-03 Prepared: 06/05/25 15:24 Analyzed: 06/06/25 10:10						
Sulfide, total	<0.10	0.10	mg/L	0.158	ND	46.7	50-150	7.65	30	M2
Batch 11F0819 - Wet Chem Preparation - 4500CN-E										



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

11F0480

Determination of Conventional Chemistry Parameters	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11F0819 - Wet Chem Preparation - 4500CN-E										
Blank (11F0819-BLK1)				Prepared: 06/16/25 08:16 Analyzed: 06/17/25 09:10						
Cyanide, total	<0.005	0.005	mg/L							
LCS (11F0819-BS1)				Prepared: 06/16/25 08:16 Analyzed: 06/17/25 09:10						
Cyanide, total	0.097	0.005	mg/L	0.100		97.0	84-118			
Matrix Spike (11F0819-MS1)				Source: 11F0316-01 Prepared: 06/16/25 08:16 Analyzed: 06/17/25 09:10						
Cyanide, total	0.094	0.010	mg/L	0.100	ND	94.0	70-136			
Matrix Spike Dup (11F0819-MSD1)				Source: 11F0316-01 Prepared: 06/16/25 08:16 Analyzed: 06/17/25 09:10						
Cyanide, total	0.098	0.010	mg/L	0.100	ND	98.0	70-136	4.17	30	
Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11F0407 - EPA 200.2 Total ICP-OES (200.7) - 200.7										
Blank (11F0407-BLK1)				Prepared: 06/09/25 07:18 Analyzed: 06/10/25 21:14						
Magnesium, total	<0.10	0.10	mg/L							
Molybdenum, total	<0.010	0.010	mg/L							
Sodium, total	<1.00	1.00	mg/L							
LCS (11F0407-BS1)				Prepared: 06/09/25 07:18 Analyzed: 06/10/25 21:22						
Magnesium, total	2.36	0.10	mg/L	2.20		107	85-115			
Molybdenum, total	0.204	0.010	mg/L	0.200		102	85-115			
Sodium, total	2.46	1.00	mg/L	2.20		112	85-115			
Matrix Spike (11F0407-MS1)				Source: 11F0477-01 Prepared: 06/09/25 07:18 Analyzed: 06/10/25 21:33						
Magnesium, total	16.7	0.10	mg/L	2.20	15.1	73.9	70-130			
Molybdenum, total	0.199	0.010	mg/L	0.200	ND	99.7	70-130			
Sodium, total	133	1.00	mg/L	2.20	132	72.3	70-130			
Matrix Spike Dup (11F0407-MSD1)				Source: 11F0477-01 Prepared: 06/09/25 07:18 Analyzed: 06/10/25 21:39						
Magnesium, total	17.5	0.10	mg/L	2.20	15.1	108	70-130	4.39	20	
Molybdenum, total	0.203	0.010	mg/L	0.200	ND	102	70-130	1.94	20	
Sodium, total	139	1.00	mg/L	2.20	132	336	70-130	4.26	20	M6
Post Spike (11F0407-PS1)				Source: 11F0477-01 Prepared: 06/09/25 07:18 Analyzed: 06/10/25 21:45						
Magnesium, total	23.5		mg/L	8.80	15.1	95.2	85-115			
Molybdenum, total	0.795		mg/L	0.800	0.00475	98.8	85-115			
Sodium, total	143		mg/L	8.80	132	133	85-115			M6

Definitions

H1:	Sample was received past holding time.
M2:	Matrix spike recovery is below acceptance limits.
M6:	Matrix spike recovery is outside of acceptance limits. The analyte concentration is greater than 4X the spiking level.
RL:	Reporting Limit
RPD:	Relative Percent Difference



Microbac Laboratories, Inc., Newton
CERTIFICATE OF ANALYSIS
11F0480

Cooler Receipt Log

Cooler ID: Default Cooler Temp: 0.3°C

Cooler Inspection Checklist

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

Report Comments

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

Reviewed and Approved By:

Heather Murphy
Customer Relationship Specialist
heather.murphy@microbac.com
06/18/25 16:42

CHAIN OF CUSTODY RECORD



600 East 17th Street South
Newton, IA 50208
Phone: 641-792-8451

Page 1 of 1

Printed: 5/30/2025 8:57:50AM

Page 8 of 8

SITE INFORMATION

Sampler: *Casey Moyer*

Project: **Fremont Co Additional Leachate Sam**
Leachate Sampling

SPECIAL INSTRUCTIONS

None

Turn Around Time

☒ Standard ☐ RUSH, need by ___/___/___

REPORT TO

Todd Whipple
HLW Engineering
204 West Broad St
Story City, IA 50248

INVOICE TO

Todd Whipple
HLW Engineering
204 West Broad St
Story City, IA 50248

LAB USE ONLY



1 I F 0 4 8 0

HLW Engineering
PM: Heather Murphy

Temperature: *0-3 i/c* °C

Number	Sample Identification / Client ID	Matrix	Sample Type	Date	Time	Comments	Analyses	Lab Sample Number
01-001		Aqueous		<i>6/3/25</i>	<i>0730</i>		mo-t-200.7 na-t-200.7 cn-t-4500e oa2-iowa sulfide-t-4500d-low mg-t-200.7 200.7-digestion cr+6-3500-cr-b	<i>01</i>

Casey Moyer *6-3-25 7:30 AM*

Relinquished By Date/Time

Received By Date/Time

Relinquished By Date/Time

Ame Koffi *06-4-25 10:20*
Received for Lab By Date/Time

Remarks:



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1IG0690

Fremont County Landfill

Project Name: Leachate Sampling

Casey Moyer
PO Box 487, 2879 250th St
Sidney, IA 51652

Project / PO Number: N/A
Received: 07/03/2025
Reported: 07/16/2025

Analytical Testing Parameters

Client Sample ID:	Leachate Tank	Collected By:	Moyer, Casey
Sample Matrix:	Aqueous	Collection Date:	07/02/2025 7:00
Lab Sample ID:	1IG0690-01		

Determination of Conventional Chemistry Parameters	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 351.2, Rv. 2 (1993)							
Nitrogen, Kjeldahl, total	313	12.5	mg/L		07/14/25 1614	07/16/25 1258	SGB
SM 4500-H+ B-2011							
pH	6.7	0.5	pH	H4		07/09/25 1532	BSS
SM 5210 B-2016							
BOD (5 day)	18	6	mg/L			07/03/25 1510	MND
TIMBERLINE							
Nitrogen, Ammonia	286	10.0	mg/L		07/07/25 0921	07/07/25 1142	TEP
USGS I-3765-85							
Total Suspended Solids (TSS)	122	1	mg/L		07/03/25 1341	07/07/25 1020	LAW

Definitions

H4: The test was performed outside of the EPA recommended holding time of 15 minutes.
RL: Reporting Limit

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
07/16/25 16:13

CHAIN OF CUSTODY RECORD



600 East 17th Street South
Newton, IA 50208
Phone: 641-792-8451

Page 1 of 1
Printed: 6/10/2025 7:32:28AM

Page 2 of 2

SITE INFORMATION

Sampler: Casey Moyer

Project: **Routine Leachate**
Leachate Sampling

SPECIAL INSTRUCTIONS

None

Turn Around Time

☒ Standard ☐ RUSH, need by ___/___/___

REPORT TO

Casey Moyer
Fremont County Landfill
PO Box 487, 2879 250th St
Sidney, IA 51652

INVOICE TO

Casey Moyer
Fremont County Landfill
PO Box 487, 2879 250th St
Sidney, IA 51652



Fremont County Landfill
PM: Heather Murphy

Temperature: 10-9.1°C °C

Number	Sample Identification / Client ID	Matrix	Sample Type	Date	Time	# Containers	Analyses	Lab Sample Number
01-001	Leachate Tank	Aqueous	GRAB				dilution nh3-timberline tkn-351.2	bod-5210 ph-4500 tss-i-3765-85
								01

Casey Moyer 7-2-25 7:00AM
Relinquished By Date/Time

Received By Date/Time

Relinquished By Date/Time

Ame Koffi 07-2-25 @ 10:39am
Received for Lab By Date/Time

Remarks:



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1IH0525

Fremont County Landfill

Project Name: Leachate Sampling

Casey Moyer
PO Box 487, 2879 250th St
Sidney, IA 51652

Project / PO Number: N/A
Received: 08/05/2025
Reported: 08/19/2025

Analytical Testing Parameters

Client Sample ID:	Leachate Tank	Collected By:	Moyer, Casey
Sample Matrix:	Aqueous	Collection Date:	08/04/2025 7:00
Lab Sample ID:	1IH0525-01		

Determination of Conventional Chemistry Parameters	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 351.2, Rv. 2 (1993)							
Nitrogen, Kjeldahl, total	337	10.0	mg/L		08/14/25 1601	08/18/25 1516	SGB
SM 4500-H+ B-2011							
pH	6.8	0.5	pH	H4		08/12/25 1622	BSS
SM 5210 B-2016							
BOD (5 day)	22	6	mg/L	H2	08/11/25 1457	08/11/25 1812	MND
TIMBERLINE							
Nitrogen, Ammonia	338	10.0	mg/L		08/05/25 1248	08/05/25 1344	TEP
USGS I-3765-85							
Total Suspended Solids (TSS)	134	1	mg/L		08/05/25 1148	08/06/25 0723	LAW

Definitions

H2:	Initial analysis was within holding time. Reanalysis was done past holding time.
H4:	The test was performed outside of the EPA recommended holding time of 15 minutes.
RL:	Reporting Limit

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
08/19/25 14:55

CHAIN OF CUSTODY RECORD



600 East 17th Street South
Newton, IA 50208
Phone: 641-792-8451

Page 1 of 1
Printed: 7/8/2025 10:21:43AM

Page 2 of 2

SITE INFORMATION

Sampler: Casey Moyer

Project: **Routine Leachate**
Leachate Sampling

SPECIAL INSTRUCTIONS

None

Turn Around Time

☒ Standard ☐ RUSH, need by ___/___/___

REPORT TO

Casey Moyer
Fremont County Landfill
PO Box 487, 2879 250th St
Sidney, IA 51652

INVOICE TO

Casey Moyer
Fremont County Landfill
PO Box 487, 2879 250th St
Sidney, IA 51652



1 I H 0 5 2 5

Fremont County Landfill

PM: Heather Murphy

Temperature: 0.8 ^{ice} °C

Number	Sample Identification / Client ID	Matrix	Sample Type	Date	Time	# Containers	Analyses	Lab Sample Number
01-001	Leachate Tank	Aqueous	GRAB				dilution nh3-timberline tkn-351.2	bod-5210 ph-4500 tss-i-3765-85
								01

Casey Moyer

8-4-25 7:00 AM

Relinquished By

Date/Time

Relinquished By

Date/Time

Received for Lab By

Date/Time

Remarks:



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

11I0715

Fremont County Landfill

Project Name: Leachate Sampling

Casey Moyer
PO Box 487, 2879 250th St
Sidney, IA 51652

Project / PO Number: N/A
Received: 09/09/2025
Reported: 09/22/2025

Analytical Testing Parameters

Client Sample ID:	Leachate Tank	Collected By:	Moyer, Casey
Sample Matrix:	Aqueous	Collection Date:	09/08/2025 7:30
Lab Sample ID:	11I0715-01		

Determination of Conventional Chemistry Parameters	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 351.2, Rv. 2 (1993)							
Nitrogen, Kjeldahl, total	259	25.0	mg/L		09/17/25 1609	09/22/25 1545	AKK
SM 4500-H+ B-2011							
pH	6.8	0.5	pH	H4	09/10/25 0827	09/10/25 0939	BSS
SM 5210 B-2016							
BOD (5 day)	23	6	mg/L		09/09/25 1442	09/09/25 1746	HBH
TIMBERLINE							
Nitrogen, Ammonia	242	5.00	mg/L		09/15/25 1155	09/15/25 1455	BHF
USGS I-3765-85							
Total Suspended Solids (TSS)	132	1	mg/L		09/09/25 1542	09/10/25 0755	LAW

Definitions

H4: The test was performed outside of the EPA recommended holding time of 15 minutes.
RL: Reporting Limit

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
09/22/25 16:29

CHAIN OF CUSTODY RECORD



600 East 17th Street South
Newton, IA 50208
Phone: 641-792-8451

Page 1 of 1

Printed: 8/6/2025 7:44:05AM

Page 2 of 2

SITE INFORMATION

Sampler: Casey Moyer

Project: Routine Leachate
Leachate Sampling

SPECIAL INSTRUCTIONS

None

Turn Around Time

☒ Standard ☐ RUSH, need by ___/___/___

REPORT TO

Casey Moyer
Fremont County Landfill
PO Box 487, 2879 250th St
Sidney, IA 51652

INVOICE TO

Casey Moyer
Fremont County Landfill
PO Box 487, 2879 250th St
Sidney, IA 51652

LAB USE ONLY



1 I I 0 7 1 5

Fremont County Landfill

PM: Heather Murphy

Temperature: 0.2 ice °C

Number	Sample Identification / Client ID	Matrix	Sample Type	Date	Time	# Containers	Analyses	Lab Sample Number
01-001	Leachate Tank	Aqueous	GRAB				dilution nh3-timberline tkn-351.2	bod-5210 ph-4500 tss-i-3765-85

Casey Moyer 8-8-25 7:30 AM
Relinquished By Date/Time

Received By Date/Time

Amy Hochstetler 9/9/25 10:30
Received for Lab By Date/Time

Remarks:



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

11J0429

Fremont County Landfill

Project Name: Leachate Sampling

Casey Moyer
PO Box 487, 2879 250th St
Sidney, IA 51652

Project / PO Number: N/A
Received: 10/02/2025
Reported: 10/15/2025

Analytical Testing Parameters

Client Sample ID:	Leachate Tank	Collected By:	Moyer, Casey				
Sample Matrix:	Aqueous						
Lab Sample ID:	11J0429-01						
Collection Date:	10/01/2025	8:00					
Determination of Conventional Chemistry Parameters	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 351.2, Rv. 2 (1993)							
Nitrogen, Kjeldahl, total	247	10.0	mg/L		10/14/25 0909	10/15/25 1440	AKK
SM 4500-H+ B-2011							
pH	6.8	0.5	pH	H4	10/01/25 1421	10/02/25 1344	BSS
SM 5210 B-2016							
BOD (5 day)	17	6	mg/L		10/02/25 1351	10/07/25 1306	MND
TIMBERLINE							
Nitrogen, Ammonia	234	5.00	mg/L		10/07/25 1259	10/08/25 1045	BHF
USGS I-3765-85							
Total Suspended Solids (TSS)	122	1	mg/L		10/03/25 1355	10/06/25 1332	LAW

Definitions

H4: The test was performed outside of the EPA recommended holding time of 15 minutes.
RL: Reporting Limit

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
10/15/25 16:59

CHAIN OF CUSTODY RECORD



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Newton, IA 50208
Phone: 641-792-8451

Page 1 of 1
Printed: 9/11/2025 8:44:56AM

Page 2 of 2

SITE INFORMATION

Sampler: Casey Moyer

Project: **Routine Leachate**
Leachate Sampling

SPECIAL INSTRUCTIONS

None

Turn Around Time

☒ Standard ☐ RUSH, need by ___/___/___

REPORT TO

Casey Moyer
Fremont County Landfill
PO Box 487, 2879 250th St
Sidney, IA 51652

INVOICE TO

Casey Moyer
Fremont County Landfill
PO Box 487, 2879 250th St
Sidney, IA 51652

LAB USE ONLY



1 I J 0 4 2 9

Fremont County Landfill
PM: Heather Murphy

Temperature: 3.4 °C

Number	Sample Identification / Client ID	Matrix	Sample Type	Date	Time	# Containers	Analyses	Lab Sample Number
01-001	Leachate Tank	Aqueous	GRAB				dilution nh3-timberline tkn-351.2	bod-5210 ph-4500 tss-i-3765-85
								01

Casey Moyer 10-1-25 8:00 AM
Relinquished By Date/Time

Received By Date/Time

Jaime Hoff 10/02/2025 10:45
Received for Lab By Date/Time

Remarks:



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

11K0256

Fremont County Landfill

Project Name: Leachate Sampling

Casey Moyer
PO Box 487, 2879 250th St
Sidney, IA 51652

Project / PO Number: N/A
Received: 11/04/2025
Reported: 11/13/2025

Analytical Testing Parameters

Client Sample ID: Leachate Tank				Collected By: Moyer, Casey			
Sample Matrix: Aqueous				Collection Date: 11/03/2025 7:10			
Lab Sample ID: 11K0256-01							
Inorganics Total	Result	RL	Units	Note	Prepared	Analyzed	Analyst
SM 5210 B-2016							
Biochemical Oxygen Demand (BOD5)	16	6	mg/L		11/04/25 1532	11/09/25 1617	MND
Determination of Conventional Chemistry Parameters	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 351.2, Rv. 2 (1993)							
Nitrogen, Kjeldahl, total	195	10.0	mg/L			11/12/25 0823	AKK
SM 4500-H+ B-2011							
pH	7.3	0.5	pH	H4	11/05/25 1626	11/05/25 1650	BSS
TIMBERLINE							
Nitrogen, Ammonia	205	5.00	mg/L		11/05/25 0940	11/05/25 1304	BHF
USGS I-3765-85							
Total Suspended Solids (TSS)	6	1	mg/L		11/04/25 1308	11/05/25 0809	LAW

Definitions

H4: The test was performed outside of the EPA recommended holding time of 15 minutes.
RL: Reporting Limit

Report Comments

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Reviewed and Approved By:

Heather Murphy
Customer Relationship Specialist
heather.murphy@microbac.com
11/13/25 16:39

CHAIN OF CUSTODY RECORD



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Phone: 641-792-8451

Page 1 of 1
Printed: 10/3/2025 11:26:06AM

Page 2 of 2

SITE INFORMATION

Sampler: Casey Moyer

Project: **Routine Leachate**
Leachate Sampling

SPECIAL INSTRUCTIONS

None

Turn Around Time

☒ Standard ☐ RUSH, need by ___/___/___

REPORT TO

Casey Moyer
Fremont County Landfill
PO Box 487, 2879 250th St
Sidney, IA 51652

INVOICE TO

Casey Moyer
Fremont County Landfill
PO Box 487, 2879 250th St
Sidney, IA 51652

LAB USE ONLY



1 I K 0 2 5 6

Fremont County Landfill
PM: Heather Murphy

Temperature: 4.8°C

Number	Sample Identification / Client ID	Matrix	Sample Type	Date	Time	# Containers	Analyses	Lab Sample Number
01-001	Leachate Tank	Aqueous	GRAB				dilution nh3-timberline tkn-351.2	bod-5210 ph-4500 tss-i-3765-85
								01

Casey Moyer 11-3-25 7:10AM
Relinquished By Date/Time

Received By Date/Time

Relinquished By Date/Time

Aime Koff 11-04-25 10:35
Received for Lab By Date/Time

Remarks:



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

11L0736

Fremont County Landfill

Project Name: Leachate Sampling

Casey Moyer
PO Box 487, 2879 250th St
Sidney, IA 51652

Project / PO Number: N/A
Received: 12/09/2025
Reported: 12/23/2025

Analytical Testing Parameters

Client Sample ID: Leachate Tank
Sample Matrix: Aqueous
Lab Sample ID: 11L0736-01

Collected By: Moyer, Casey
Collection Date: 12/08/2025 7:30

Inorganics Total	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 351.2, Rv. 2 (1993)							
Nitrogen, Kjeldahl, total	328	10.0	mg/L		12/19/25 1457	12/23/25 1359	AKK
SM 5210 B-2016							
Biochemical Oxygen Demand (BOD5)	18	6	mg/L		12/09/25 1509	12/14/25 1306	MND
USGS I-3765-85							
Total Suspended Solids (TSS)	9	2	mg/L		12/09/25 1320	12/10/25 0819	LAW
General Parameters	Result	RL	Units	Note	Prepared	Analyzed	Analyst
SM 4500-H+ B-2011							
pH	7.5	0.5	pH	H4	12/10/25 1331	12/11/25 1526	BSS
Determination of Conventional Chemistry Parameters	Result	RL	Units	Note	Prepared	Analyzed	Analyst
TIMBERLINE							
Nitrogen, Ammonia	30.1	5.00	mg/L		12/11/25 1036	12/11/25 1409	BHF

Definitions

H4: The test was performed outside of the EPA recommended holding time of 15 minutes.
RL: Reporting Limit

Report Comments

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Reviewed and Approved By:

Heather Tisdale
Customer Relationship Specialist
12/23/25 16:25

CHAIN OF CUSTODY RECORD



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Phone: 641-792-8451

Page 1 of 1
Printed: 11/4/2025 1:45:54PM

Page 2 of 2

SITE INFORMATION

Sampler: Casey Moyer

Project: **Routine Leachate**
Leachate Sampling

SPECIAL INSTRUCTIONS

None

Turn Around Time

☒ Standard ☐ RUSH, need by ___/___/___

REPORT TO

Casey Moyer
Fremont County Landfill
PO Box 487, 2879 250th St
Sidney, IA 51652

INVOICE TO

Casey Moyer
Fremont County Landfill
PO Box 487, 2879 250th St
Sidney, IA 51652

LAB USE ONLY



1 I L 0 7 3 6

Fremont County Landfill

PM: Heather Murphy

Temperature: 1.0 °C

Number	Sample Identification / Client ID	Matrix	Sample Type	Date	Time	# Containers	Analyses		Lab Sample Number
01-001	Leachate Tank	Aqueous	GRAB				dilution nh3-timberline tkn-351.2	BOD5 SM5210 B-2016 ph-4500 tss-i-3765-85	01

Casey Moyer 12-8-25 7:30 AM
Relinquished By Date/Time

Received By Date/Time

Relinquished By [Signature] Date/Time 12/9/25 11:00
Received for Lab By [Signature] Date/Time

Remarks:

Appendix G.4 – Annual Leachate Testing Laboratory Report



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1IC0822

Project Description

Leachate Sampling

For:

Todd Whipple

HLW Engineering

204 West Broad St

Story City, IA 50248

Heather Murphy

Customer Relationship Specialist

Monday, April 7, 2025

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

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

Microbac Laboratories, Inc.

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Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1IC0822

HLW Engineering

Todd Whipple
204 West Broad St
Story City, IA 50248

Project Name: Leachate Sampling

Project / PO Number: N/A
Received: 03/12/2025
Reported: 04/07/2025

Sample Summary Report

<u>Sample Name</u>	<u>Laboratory ID</u>	<u>Client Matrix</u>	<u>Sample Type</u>	<u>Sample Begin</u>	<u>Sample Taken</u>	<u>Lab Received</u>
Leachate Tank	1IC0822-01	Aqueous	GRAB		03/11/25 12:27	03/12/25 10:20



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

11C0822

Analytical Testing Parameters

Client Sample ID:	Leachate Tank	Collected By:	Hunter, Glenn
Sample Matrix:	Aqueous	Collection Date:	03/11/2025 12:27
Lab Sample ID:	11C0822-01		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 624.1		Method Notes: L3						
Chloromethane	<10.0	10.0	ug/L	10		03/21/25 0000	03/21/25 2213	CSM
Vinyl Chloride	<10.0	10.0	ug/L	10		03/21/25 0000	03/21/25 2213	CSM
Bromomethane	<10.0	10.0	ug/L	10		03/21/25 0000	03/21/25 2213	CSM
Chloroethane	<10.0	10.0	ug/L	10		03/21/25 0000	03/21/25 2213	CSM
1,1-Dichloroethylene	<10.0	10.0	ug/L	10		03/21/25 0000	03/21/25 2213	CSM
Methylene Chloride	<50.0	50.0	ug/L	10		03/21/25 0000	03/21/25 2213	CSM
trans-1,2-Dichloroethylene	<10.0	10.0	ug/L	10		03/21/25 0000	03/21/25 2213	CSM
1,1-Dichloroethane	<10.0	10.0	ug/L	10		03/21/25 0000	03/21/25 2213	CSM
cis-1,2-Dichloroethylene	<10.0	10.0	ug/L	10		03/21/25 0000	03/21/25 2213	CSM
Chloroform	<10.0	10.0	ug/L	10		03/21/25 0000	03/21/25 2213	CSM
1,1,1-Trichloroethane	<10.0	10.0	ug/L	10		03/21/25 0000	03/21/25 2213	CSM
Carbon Tetrachloride	<10.0	10.0	ug/L	10		03/21/25 0000	03/21/25 2213	CSM
Benzene	<10.0	10.0	ug/L	10		03/21/25 0000	03/21/25 2213	CSM
1,2-Dichloroethane	<10.0	10.0	ug/L	10		03/21/25 0000	03/21/25 2213	CSM
Trichloroethylene	<10.0	10.0	ug/L	10		03/21/25 0000	03/21/25 2213	CSM
1,2-Dichloropropane	<10.0	10.0	ug/L	10		03/21/25 0000	03/21/25 2213	CSM
Bromodichloromethane	<10.0	10.0	ug/L	10		03/21/25 0000	03/21/25 2213	CSM
2-Chloroethylvinyl ether	<100	100	ug/L	10		03/21/25 0000	03/21/25 2213	CSM
cis-1,3-Dichloropropene	<10.0	10.0	ug/L	10		03/21/25 0000	03/21/25 2213	CSM
Toluene	<10.0	10.0	ug/L	10		03/21/25 0000	03/21/25 2213	CSM
trans-1,3-Dichloropropene	<10.0	10.0	ug/L	10		03/21/25 0000	03/21/25 2213	CSM
1,1,2-Trichloroethane	<10.0	10.0	ug/L	10		03/21/25 0000	03/21/25 2213	CSM
Tetrachloroethylene	<10.0	10.0	ug/L	10		03/21/25 0000	03/21/25 2213	CSM
Dibromochloromethane	<10.0	10.0	ug/L	10	L3	03/21/25 0000	03/21/25 2213	CSM
Chlorobenzene	<10.0	10.0	ug/L	10		03/21/25 0000	03/21/25 2213	CSM
Ethylbenzene	28.4	10.0	ug/L	10		03/21/25 0000	03/21/25 2213	CSM
Bromoform	<10.0	10.0	ug/L	10		03/21/25 0000	03/21/25 2213	CSM
1,1,2,2-Tetrachloroethane	<10.0	10.0	ug/L	10		03/21/25 0000	03/21/25 2213	CSM
Surrogate: Dibromofluoromethane	80.7	Limit: 59-123	% Rec	10		03/21/25 0000	03/21/25 2213	CSM
Surrogate: 1,2-Dichloroethane-d4	77.7	Limit: 56-130	% Rec	10		03/21/25 0000	03/21/25 2213	CSM
Surrogate: Toluene-d8	105	Limit: 85-113	% Rec	10		03/21/25 0000	03/21/25 2213	CSM
Surrogate: 4-Bromofluorobenzene	97.3	Limit: 82-112	% Rec	10		03/21/25 0000	03/21/25 2213	CSM

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 625.1		Method Notes: D4						
Bis(2-Chloroethyl) Ether	<100	100	ug/L	10		03/17/25 1538	03/20/25 2144	EPP
2-Chlorophenol	<100	100	ug/L	10		03/17/25 1538	03/20/25 2144	EPP
1,3-Dichlorobenzene	<100	100	ug/L	10		03/17/25 1538	03/20/25 2144	EPP
1,4-Dichlorobenzene	<100	100	ug/L	10		03/17/25 1538	03/20/25 2144	EPP
Benzyl Alcohol	<100	100	ug/L	10		03/17/25 1538	03/20/25 2144	EPP

Microbac Laboratories, Inc., Newton

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Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

11C0822

Client Sample ID: Leachate Tank
Sample Matrix: Aqueous
Lab Sample ID: 11C0822-01

Collected By: Hunter, Glenn
Collection Date: 03/11/2025 12:27

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
1,2-Dichlorobenzene	<100	100	ug/L	10		03/17/25 1538	03/20/25 2144	EPP
Bis[2-Chloroisopropyl]ether	<100	100	ug/L	10		03/17/25 1538	03/20/25 2144	EPP
n-Nitroso-di-n-propylamine	<100	100	ug/L	10		03/17/25 1538	03/20/25 2144	EPP
Hexachloroethane	<100	100	ug/L	10		03/17/25 1538	03/20/25 2144	EPP
Nitrobenzene	<100	100	ug/L	10		03/17/25 1538	03/20/25 2144	EPP
Isophorone	<100	100	ug/L	10		03/17/25 1538	03/20/25 2144	EPP
2-Nitrophenol	<100	100	ug/L	10		03/17/25 1538	03/20/25 2144	EPP
2,4-Dimethylphenol	<100	100	ug/L	10		03/17/25 1538	03/20/25 2144	EPP
Bis (2-Chloroethoxy) Methane	<100	100	ug/L	10		03/17/25 1538	03/20/25 2144	EPP
Benzoic acid	<500	500	ug/L	10		03/17/25 1538	03/20/25 2144	EPP
2,4-Dichlorophenol	<100	100	ug/L	10		03/17/25 1538	03/20/25 2144	EPP
1,2,4-Trichlorobenzene	<100	100	ug/L	10		03/17/25 1538	03/20/25 2144	EPP
Naphthalene	<100	100	ug/L	10		03/17/25 1538	03/20/25 2144	EPP
Hexachlorobutadiene	<200	200	ug/L	10		03/17/25 1538	03/20/25 2144	EPP
4-Chloro-3-methylphenol	<100	100	ug/L	10		03/17/25 1538	03/20/25 2144	EPP
Hexachlorocyclopentadiene	<200	200	ug/L	10	Q8	03/17/25 1538	03/20/25 2144	EPP
2,4,6-Trichlorophenol	<100	100	ug/L	10		03/17/25 1538	03/20/25 2144	EPP
2,4,5-Trichlorophenol	<500	500	ug/L	10		03/17/25 1538	03/20/25 2144	EPP
2-Chloronaphthalene	<100	100	ug/L	10		03/17/25 1538	03/20/25 2144	EPP
Dimethylphthalate	<150	150	ug/L	10		03/17/25 1538	03/20/25 2144	EPP
Acenaphthylene	<100	100	ug/L	10		03/17/25 1538	03/20/25 2144	EPP
2,6-Dinitrotoluene	<100	100	ug/L	10		03/17/25 1538	03/20/25 2144	EPP
Acenaphthene	<100	100	ug/L	10		03/17/25 1538	03/20/25 2144	EPP
2,4-Dinitrophenol	<200	200	ug/L	10		03/17/25 1538	03/20/25 2144	EPP
Dibenzofuran	<100	100	ug/L	10		03/17/25 1538	03/20/25 2144	EPP
2,4-Dinitrotoluene	<100	100	ug/L	10		03/17/25 1538	03/20/25 2144	EPP
4-Nitrophenol	<100	100	ug/L	10		03/17/25 1538	03/20/25 2144	EPP
Diethyl Phthalate	<300	300	ug/L	10		03/17/25 1538	03/20/25 2144	EPP
Fluorene	<100	100	ug/L	10		03/17/25 1538	03/20/25 2144	EPP
4-Chlorophenyl Phenyl Ether	<100	100	ug/L	10		03/17/25 1538	03/20/25 2144	EPP
4,6-Dinitro-2-methylphenol	<200	200	ug/L	10		03/17/25 1538	03/20/25 2144	EPP
N-Nitrosodiphenylamine	<100	100	ug/L	10		03/17/25 1538	03/20/25 2144	EPP
4-Bromophenyl Phenyl Ether	<100	100	ug/L	10		03/17/25 1538	03/20/25 2144	EPP
Hexachlorobenzene	<100	100	ug/L	10		03/17/25 1538	03/20/25 2144	EPP
Pentachlorophenol	<200	200	ug/L	10	Q8	03/17/25 1538	03/20/25 2144	EPP
Phenanthrene	<100	100	ug/L	10		03/17/25 1538	03/20/25 2144	EPP
Anthracene	<100	100	ug/L	10		03/17/25 1538	03/20/25 2144	EPP
Di-n-butyl Phthalate	<100	100	ug/L	10		03/17/25 1538	03/20/25 2144	EPP
Fluoranthene	<100	100	ug/L	10		03/17/25 1538	03/20/25 2144	EPP
Pyrene	<100	100	ug/L	10		03/17/25 1538	03/20/25 2144	EPP
Butyl Benzyl Phthalate	<100	100	ug/L	10		03/17/25 1538	03/20/25 2144	EPP
Benzo(a)anthracene	<100	100	ug/L	10		03/17/25 1538	03/20/25 2144	EPP
Chrysene	<100	100	ug/L	10		03/17/25 1538	03/20/25 2144	EPP

Microbac Laboratories, Inc., Newton

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Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

11C0822

Client Sample ID: Leachate Tank
Sample Matrix: Aqueous
Lab Sample ID: 11C0822-01

Collected By: Hunter, Glenn
Collection Date: 03/11/2025 12:27

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Bis(2-Ethylhexyl) Phthalate	<100	100	ug/L	10		03/17/25 1538	03/20/25 2144	EPP
Di-n-octyl Phthalate	<100	100	ug/L	10		03/17/25 1538	03/20/25 2144	EPP
Indeno(1,2,3-cd)Pyrene	<100	100	ug/L	10		03/17/25 1538	03/20/25 2144	EPP
3,3'-Dichlorobenzidine	<200	200	ug/L	10		03/17/25 1538	03/20/25 2144	EPP
Benzo(b)Fluoranthene	<100	100	ug/L	10		03/17/25 1538	03/20/25 2144	EPP
Benzo(k)Fluoranthene	<100	100	ug/L	10		03/17/25 1538	03/20/25 2144	EPP
Benzo(a)Pyrene	<100	100	ug/L	10		03/17/25 1538	03/20/25 2144	EPP
Dibenzo(a,h)anthracene	<100	100	ug/L	10		03/17/25 1538	03/20/25 2144	EPP
Benzo(g,h,i)perylene	<100	100	ug/L	10		03/17/25 1538	03/20/25 2144	EPP
Surrogate: 2-Fluorophenol	60.1	Limit: 16-140	% Rec	10		03/17/25 1538	03/20/25 2144	EPP
Surrogate: Phenol-d6	61.3	Limit: 13-147	% Rec	10		03/17/25 1538	03/20/25 2144	EPP
Surrogate: Nitrobenzene-d5	70.0	Limit: 17-150	% Rec	10		03/17/25 1538	03/20/25 2144	EPP
Surrogate: 2-Fluorobiphenyl	57.4	Limit: 15-134	% Rec	10		03/17/25 1538	03/20/25 2144	EPP
Surrogate: 2,4,6-Tribromophenol	79.3	Limit: 20-158	% Rec	10		03/17/25 1538	03/20/25 2144	EPP
Surrogate: Terphenyl-dl4	52.9	Limit: 12-157	% Rec	10		03/17/25 1538	03/20/25 2144	EPP

Determination of Organochlorine Insecticides & PCBs	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3520C/EPA 608.3 GC-ECD								
Gamma-BHC [Lindane]	<0.50	0.50	ug/L	1		03/13/25 1033	03/20/25 1326	EPP
Beta-BHC	<0.50	0.50	ug/L	1		03/13/25 1033	03/20/25 1326	EPP
Heptachlor	<0.50	0.50	ug/L	1		03/13/25 1033	03/20/25 1326	EPP
Delta-BHC	<0.50	0.50	ug/L	1		03/13/25 1033	03/20/25 1326	EPP
Aldrin	<0.50	0.50	ug/L	1		03/13/25 1033	03/20/25 1326	EPP
Heptachlor Epoxide	<0.50	0.50	ug/L	1		03/13/25 1033	03/20/25 1326	EPP
Endosulfan I	<0.50	0.50	ug/L	1		03/13/25 1033	03/20/25 1326	EPP
4,4'-DDE	<0.50	0.50	ug/L	1		03/13/25 1033	03/20/25 1326	EPP
Dieldrin	<0.50	0.50	ug/L	1		03/13/25 1033	03/20/25 1326	EPP
Endrin	<0.50	0.50	ug/L	1		03/13/25 1033	03/20/25 1326	EPP
4,4'-DDD	<0.50	0.50	ug/L	1		03/13/25 1033	03/20/25 1326	EPP
Endosulfan II	<0.50	0.50	ug/L	1		03/13/25 1033	03/20/25 1326	EPP
4,4'-DDT	<0.50	0.50	ug/L	1		03/13/25 1033	03/20/25 1326	EPP
Endrin Aldehyde	<0.50	0.50	ug/L	1		03/13/25 1033	03/20/25 1326	EPP
Endosulfan Sulfate	<0.50	0.50	ug/L	1		03/13/25 1033	03/20/25 1326	EPP
Chlordane	<1.00	1.00	ug/L	1		03/13/25 1033	03/20/25 1326	EPP
Toxaphene	<2.00	2.00	ug/L	1		03/13/25 1033	03/20/25 1326	EPP
Arochlor 1016	<2.00	2.00	ug/L	1		03/13/25 1033	03/20/25 1326	EPP
Arochlor 1221	<2.00	2.00	ug/L	1		03/13/25 1033	03/20/25 1326	EPP
Arochlor 1232	<2.00	2.00	ug/L	1		03/13/25 1033	03/20/25 1326	EPP
Arochlor 1242	<2.00	2.00	ug/L	1		03/13/25 1033	03/20/25 1326	EPP
Arochlor 1248	<2.00	2.00	ug/L	1		03/13/25 1033	03/20/25 1326	EPP
Arochlor 1254	<2.00	2.00	ug/L	1		03/13/25 1033	03/20/25 1326	EPP
Arochlor 1260	<2.00	2.00	ug/L	1		03/13/25 1033	03/20/25 1326	EPP
Surrogate: Decachlorobiphenyl	49.5	Limit: 12-130	% Rec	1		03/13/25 1033	03/20/25 1326	EPP

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11C0822

Client Sample ID: Leachate Tank
Sample Matrix: Aqueous
Lab Sample ID: 11C0822-01

Collected By: Hunter, Glenn
Collection Date: 03/11/2025 12:27

Determination of Organochlorine Insecticides & PCBs

	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Surrogate: Tetrachloro-m-xylene	79.5	Limit: 31-116	% Rec	1		03/13/25 1033	03/20/25 1326	EPP

Determination of Conventional Chemistry Parameters

	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
5310B								
Total Organic Carbon	204	25.0	mg/L	50		03/26/25 0000	03/26/25 1535	CSM
EPA 351.2, Rv. 2 (1993)								
Nitrogen, Kjeldahl, total	313	25.0	mg/L	1		03/24/25 0923	03/25/25 1423	SGB
SM 4500-H+ B-2011								
pH	7.0	0.5	pH	1	H4		03/18/25 1510	BSS
SM 5210 B-2016								
BOD (5 day)	32	6	mg/L	3		03/12/25 1721	03/12/25 1909	MND
TIMBERLINE								
Nitrogen, Ammonia	387	10.0	mg/L	100		03/25/25 1643	03/25/25 1918	SDF
USGS I-1750-85								
Total Dissolved Solids (TDS)	2600	5	mg/L	20		03/14/25 0645	03/18/25 1248	LAW
USGS I-3765-85								
Total Suspended Solids (TSS)	1670	33	mg/L	33		03/18/25 0730	03/18/25 1538	MSP

Determination of Total Metals

	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
200.7								
Iron, total	70.9	0.100	mg/L	1		03/19/25 0710	03/20/25 0058	JAR
245.1								
Mercury, total	<0.00050	0.00050	mg/L	1		03/20/25 1533	03/21/25 1433	JAR
EPA 200.8, Rv. 5.4 (1994)								
Arsenic, total	0.0773	0.0020	mg/L	4		03/14/25 1605	03/18/25 0231	RVV
Barium, total	2.62	0.0500	mg/L	100		03/14/25 1605	03/19/25 1500	KKJ
Cadmium, total	0.0007	0.0002	mg/L	4		03/14/25 1605	03/18/25 0231	RVV
Chromium, total	0.0458	0.0020	mg/L	4		03/14/25 1605	03/18/25 0231	RVV
Copper, total	0.0353	0.0020	mg/L	4		03/14/25 1605	03/18/25 0231	RVV
Lead, total	0.0191	0.0008	mg/L	4		03/14/25 1605	03/18/25 0231	RVV
Nickel, total	0.129	0.0040	mg/L	4		03/14/25 1605	03/18/25 0231	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/14/25 1605	03/18/25 0231	RVV
Silver, total	<0.0020	0.0020	mg/L	4		03/14/25 1605	03/18/25 0231	RVV
Zinc, total	0.161	0.0200	mg/L	4		03/14/25 1605	03/18/25 0231	RVV



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Batch Log Summary

Method	Batch	Laboratory ID	Client / Source ID
SM 5210 B-2016	1IC0593	1IC0593-BLK1	
		1IC0593-SRM1	
		1IC0593-DUP1	1IC0818-01
		1IC0822-01	Leachate Tank
Method	Batch	Laboratory ID	Client / Source ID
EPA 608.3 GC-ECD	1IC0617	1IC0617-BLK1	
		1IC0617-BS1	
		1IC0617-BSD1	
		1IC0617-SRM1	
		1IC0822-01	Leachate Tank
Method	Batch	Laboratory ID	Client / Source ID
USGS I-1750-85	1IC0680	1IC0680-BLK1	
		1IC0680-DUP1	1IC0804-01
		1IC0680-BS1	
		1IC0822-01	Leachate Tank
Method	Batch	Laboratory ID	Client / Source ID
EPA 200.8, Rv. 5.4 (1994)	1IC0737	1IC0737-BLK1	
		1IC0737-BS1	
		1IC0822-01	Leachate Tank
		1IC0737-MS1	1IC0834-01
		1IC0737-MSD1	1IC0834-01
		1IC0737-PS1	1IC0834-01
		1IC0822-01RE1	Leachate Tank
Method	Batch	Laboratory ID	Client / Source ID
TIMBERLINE	1IC0764	1IC0764-BLK1	
		1IC0764-BS1	
		1IC0764-MRL1	
		1IC0764-MS1	1IC0824-02
		1IC0764-MSD1	1IC0824-02
Method	Batch	Laboratory ID	Client / Source ID
EPA 625.1	1IC0804	1IC0804-BLK1	
		1IC0804-BS1	
		1IC0804-BSD1	
		1IC0822-01	Leachate Tank
Method	Batch	Laboratory ID	Client / Source ID



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CERTIFICATE OF ANALYSIS

1IC0822

USGS I-3765-85	1IC0818	1IC0818-DUP1 1IC0818-BLK1 1IC0818-BS1 1IC0822-01	1IC0801-01 Leachate Tank

Method	Batch	Laboratory ID	Client / Source ID
SM 4500-H+ B-2011	1IC0881	1IC0881-SRM2 1IC0881-SRM1 1IC0881-DUP1 1IC0822-01 1IC0881-SRM3	1IC0822-01 Leachate Tank

Method	Batch	Laboratory ID	Client / Source ID
200.7	1IC0910	1IC0910-BLK1 1IC0910-BS1 1IC0910-MS1 1IC0910-MSD1 1IC0910-PS1 1IC0822-01	1IC0655-01 1IC0655-01 1IC0655-01 Leachate Tank

Method	Batch	Laboratory ID	Client / Source ID
245.1	1IC1059	1IC1059-BLK1 1IC1059-BS1 1IC1059-MS1 1IC1059-MSD1 1IC0822-01	1IC0688-01 1IC0688-01 Leachate Tank

Method	Batch	Laboratory ID	Client / Source ID
EPA 624.1	1IC1150	1IC1150-BS1 1IC1150-BSD1 1IC1150-BLK1 1IC0822-01 1IC1150-MS1 1IC1150-MSD1	Leachate Tank 1IC1317-07 1IC1317-07

Method	Batch	Laboratory ID	Client / Source ID
EPA 351.2, Rv. 2 (1993)	1IC1152	1IC1152-BLK1 1IC1152-BS1 1IC1152-MS1 1IC1152-MSD1 1IC0822-01	1IC0969-02 1IC0969-02 Leachate Tank

Method	Batch	Laboratory ID	Client / Source ID
EPA 351.2, Rv. 2 (1993)	1IC1262	1IC1262-MSD1 1IC1262-MS1	1IC0935-02 1IC0935-02



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EPA 351.2, Rv. 2 (1993)

1IC1262

1IC1262-BS1
1IC1262-BLK1

Method	Batch	Laboratory ID	Client / Source ID
TIMBERLINE	1IC1282	1IC1282-BLK2	
		1IC1282-BS2	
		1IC1282-MS2	4IC0144-02
		1IC1282-MSD2	4IC0144-02
		1IC0822-01RE1	Leachate Tank

Method	Batch	Laboratory ID	Client / Source ID
5310B	1IC1376	1IC1376-BSD1	
		1IC1376-BLK1	
		1IC1376-BS1	
		1IC0822-01	Leachate Tank
		1IC1376-MS1	1IC0692-01
		1IC1376-MSD1	1IC0692-01

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 1IC1150 - EPA 5030B - EPA 624.1

Blank (1IC1150-BLK1)

Prepared: 03/21/25 00:00 Analyzed: 03/21/25 12:36

Chloromethane	<1.0	1.0	ug/L
Vinyl Chloride	<1.0	1.0	ug/L
Bromomethane	<1.0	1.0	ug/L
Chloroethane	<1.0	1.0	ug/L
1,1-Dichloroethylene	<1.0	1.0	ug/L
Methylene Chloride	<5.0	5.0	ug/L
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L
1,1-Dichloroethane	<1.0	1.0	ug/L
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L
Chloroform	<1.0	1.0	ug/L
1,1,1-Trichloroethane	<1.0	1.0	ug/L
Carbon Tetrachloride	<1.0	1.0	ug/L
Benzene	<1.0	1.0	ug/L
1,2-Dichloroethane	<1.0	1.0	ug/L
Trichloroethylene	<1.0	1.0	ug/L
1,2-Dichloropropane	<1.0	1.0	ug/L
Bromodichloromethane	<1.0	1.0	ug/L
2-Chloroethylvinyl ether	<10.0	10.0	ug/L
cis-1,3-Dichloropropene	<1.0	1.0	ug/L
Toluene	<1.0	1.0	ug/L
trans-1,3-Dichloropropene	<1.0	1.0	ug/L
1,1,2-Trichloroethane	<1.0	1.0	ug/L

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CERTIFICATE OF ANALYSIS

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Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IC1150 - EPA 5030B - EPA 624.1										
Blank (1IC1150-BLK1)										
Prepared: 03/21/25 00:00 Analyzed: 03/21/25 12:36										
Tetrachloroethylene	<1.0	1.0	ug/L							
Dibromochloromethane	<1.0	1.0	ug/L							
Chlorobenzene	<1.0	1.0	ug/L							
Ethylbenzene	<1.0	1.0	ug/L							
Bromoform	<1.0	1.0	ug/L							
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L							
Surrogate: Dibromofluoromethane	38.8		ug/L	50.2		77.4	59-123			
Surrogate: 1,2-Dichloroethane-d4	36.7		ug/L	50.1		73.3	56-130			
Surrogate: Toluene-d8	52.5		ug/L	50.4		104	85-113			
Surrogate: 4-Bromofluorobenzene	50.3		ug/L	50.1		100	82-112			
LCS (1IC1150-BS1)										
Prepared: 03/21/25 00:00 Analyzed: 03/21/25 11:29										
Chloromethane	24.89	1.0	ug/L	30.3		82.1	5-205			
Vinyl Chloride	26.38	1.0	ug/L	30.2		87.2	5-195			
Bromomethane	24.82	1.0	ug/L	30.1		82.4	15-185			
Chloroethane	26.04	1.0	ug/L	30.3		85.9	40-160			
1,1-Dichloroethylene	51.72	1.0	ug/L	50.1		103	50-150			
Methylene Chloride	40.81	5.0	ug/L	50.1		81.4	60-140			
trans-1,2-Dichloroethylene	52.67	1.0	ug/L	50.1		105	70-130			
1,1-Dichloroethane	51.60	1.0	ug/L	50.1		103	70-130			
cis-1,2-Dichloroethylene	52.83	1.0	ug/L	50.4		105	57-148			
2-Butanone (MEK)	106.3	10.0	ug/L	100		106	44-134			
Chloroform	51.53	1.0	ug/L	50.1		103	70-135			
1,1,1-Trichloroethane	51.16	1.0	ug/L	50.1		102	70-130			
Carbon Tetrachloride	49.60	1.0	ug/L	50.1		99.0	70-130			
Benzene	45.41	1.0	ug/L	50.4		90.0	65-135			
1,2-Dichloroethane	51.21	1.0	ug/L	50.1		102	70-130			
Trichloroethylene	48.42	1.0	ug/L	50.1		96.7	65-135			
1,2-Dichloropropane	48.01	1.0	ug/L	50.1		95.8	35-165			
Dibromomethane	51.08	1.0	ug/L	50.4		101	71-139			
Bromodichloromethane	50.69	1.0	ug/L	50.1		101	65-135			
2-Chloroethylvinyl ether	96.90	10.0	ug/L	100		96.9	5-225			
cis-1,3-Dichloropropene	49.16	1.0	ug/L	50.1		98.2	25-175			
Toluene	47.65	1.0	ug/L	50.5		94.4	70-130			
trans-1,3-Dichloropropene	45.20	1.0	ug/L	50.1		90.3	50-150			
1,1,2-Trichloroethane	44.69	1.0	ug/L	50.1		89.2	70-130			
Tetrachloroethylene	47.98	1.0	ug/L	50.1		95.8	70-130			
Dibromochloromethane	50.53	1.0	ug/L	50.1		101	70-135			
Chlorobenzene	45.65	1.0	ug/L	50.1		91.1	65-135			
Ethylbenzene	50.24	1.0	ug/L	50.2		100	60-140			
Xylenes, total	150.3	2.0	ug/L	151		99.5	79-126			
Bromoform	45.95	1.0	ug/L	50.1		91.7	70-130			
1,1,2,2-Tetrachloroethane	47.00	1.0	ug/L	50.1		93.8	60-140			

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CERTIFICATE OF ANALYSIS

1IC0822

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IC1150 - EPA 5030B - EPA 624.1										
LCS (1IC1150-BS1) Prepared: 03/21/25 00:00 Analyzed: 03/21/25 11:29										
1,3-Dichlorobenzene	48.76	1.0	ug/L	50.1		97.4	70-130			
1,4-Dichlorobenzene	45.35	1.0	ug/L	50.1		90.5	65-135			
1,2-Dichlorobenzene	45.40	1.0	ug/L	50.1		90.6	65-135			
Surrogate: Dibromofluoromethane	51.6		ug/L	50.2		103	59-123			
Surrogate: 1,2-Dichloroethane-d4	53.5		ug/L	50.1		107	56-130			
Surrogate: Toluene-d8	47.7		ug/L	50.4		94.7	85-113			
Surrogate: 4-Bromofluorobenzene	48.3		ug/L	50.1		96.3	82-112			
LCS Dup (1IC1150-BSD1) Prepared: 03/21/25 00:00 Analyzed: 03/21/25 11:51										
Chloromethane	27.75	1.0	ug/L	30.3		91.5	5-205	10.9	19	
Vinyl Chloride	28.59	1.0	ug/L	30.2		94.5	5-195	8.04	26	
Bromomethane	27.85	1.0	ug/L	30.1		92.5	15-185	11.5	20	
Chloroethane	28.82	1.0	ug/L	30.3		95.1	40-160	10.1	22	
1,1-Dichloroethylene	49.61	1.0	ug/L	50.1		99.0	50-150	4.16	19	
Methylene Chloride	44.75	5.0	ug/L	50.1		89.3	60-140	9.21	17	
trans-1,2-Dichloroethylene	49.71	1.0	ug/L	50.1		99.2	70-130	5.78	17	
1,1-Dichloroethane	50.06	1.0	ug/L	50.1		99.9	70-130	3.03	17	
cis-1,2-Dichloroethylene	50.52	1.0	ug/L	50.4		100	57-148	4.47	21	
2-Butanone (MEK)	99.14	10.0	ug/L	100		99.1	44-134	7.00	30	
Chloroform	49.24	1.0	ug/L	50.1		98.3	70-135	4.54	17	
1,1,1-Trichloroethane	50.06	1.0	ug/L	50.1		99.9	70-130	2.17	30	
Carbon Tetrachloride	48.30	1.0	ug/L	50.1		96.4	70-130	2.66	19	
Benzene	47.08	1.0	ug/L	50.4		93.3	65-135	3.61	17	
1,2-Dichloroethane	53.23	1.0	ug/L	50.1		106	70-130	3.87	15	
Trichloroethylene	47.95	1.0	ug/L	50.1		95.7	65-135	0.975	18	
1,2-Dichloropropane	49.61	1.0	ug/L	50.1		99.0	35-165	3.28	17	
Dibromomethane	53.51	1.0	ug/L	50.4		106	71-139	4.65	27	
Bromodichloromethane	52.55	1.0	ug/L	50.1		105	65-135	3.60	14	
2-Chloroethylvinyl ether	105.8	10.0	ug/L	100		106	5-225	8.80	26	
cis-1,3-Dichloropropene	51.95	1.0	ug/L	50.1		104	25-175	5.52	30	
Toluene	52.31	1.0	ug/L	50.5		104	70-130	9.32	17	
trans-1,3-Dichloropropene	50.97	1.0	ug/L	50.1		102	50-150	12.0	20	
1,1,2-Trichloroethane	49.67	1.0	ug/L	50.1		99.2	70-130	10.6	18	
Tetrachloroethylene	47.66	1.0	ug/L	50.1		95.1	70-130	0.669	16	
Dibromochloromethane	51.83	1.0	ug/L	50.1		104	70-135	2.54	13	
Chlorobenzene	48.99	1.0	ug/L	50.1		97.8	65-135	7.06	18	
Ethylbenzene	52.65	1.0	ug/L	50.2		105	60-140	4.68	17	
Xylenes, total	159.8	2.0	ug/L	151		106	79-126	6.11	18	
Bromoform	53.69	1.0	ug/L	50.1		107	70-130	15.5	21	
1,1,2,2-Tetrachloroethane	47.82	1.0	ug/L	50.1		95.4	60-140	1.73	30	
1,3-Dichlorobenzene	49.71	1.0	ug/L	50.1		99.3	70-130	1.93	15	
1,4-Dichlorobenzene	46.95	1.0	ug/L	50.1		93.7	65-135	3.47	15	
1,2-Dichlorobenzene	49.94	1.0	ug/L	50.1		99.7	65-135	9.52	15	

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CERTIFICATE OF ANALYSIS

11C0822

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11C1150 - EPA 5030B - EPA 624.1										
LCS Dup (11C1150-BSD1)				Prepared: 03/21/25 00:00 Analyzed: 03/21/25 11:51						
Surrogate: Dibromofluoromethane	47.6		ug/L	50.2		94.8	59-123			
Surrogate: 1,2-Dichloroethane-d4	49.7		ug/L	50.1		99.3	56-130			
Surrogate: Toluene-d8	50.1		ug/L	50.4		99.5	85-113			
Surrogate: 4-Bromofluorobenzene	51.4		ug/L	50.1		103	82-112			
Matrix Spike (11C1150-MS1)				Source: 11C1317-07 Prepared: 03/21/25 00:00 Analyzed: 03/21/25 22:35						
Chloromethane	301.0	10.0	ug/L	303	ND	99.3	5-273			
Vinyl Chloride	310.0	10.0	ug/L	302	ND	102	5-251			
Bromomethane	284.7	10.0	ug/L	301	ND	94.5	5-242			
Chloroethane	306.3	10.0	ug/L	303	ND	101	14-230			
1,1-Dichloroethylene	545.3	10.0	ug/L	501	ND	109	5-235			
Methylene Chloride	468.4	50.0	ug/L	501	ND	93.5	5-221			
trans-1,2-Dichloroethylene	544.6	10.0	ug/L	501	ND	109	54-156			
1,1-Dichloroethane	548.5	10.0	ug/L	501	ND	109	59-155			
cis-1,2-Dichloroethylene	544.6	10.0	ug/L	504	ND	108	42-168			
2-Butanone (MEK)	1048	100	ug/L	1000	ND	105	57-133			
Chloroform	538.8	10.0	ug/L	501	ND	108	51-138			
1,1,1-Trichloroethane	542.1	10.0	ug/L	501	ND	108	52-162			
Carbon Tetrachloride	533.8	10.0	ug/L	501	ND	107	70-140			
Benzene	501.9	10.0	ug/L	504	ND	99.5	37-151			
1,2-Dichloroethane	556.3	10.0	ug/L	501	ND	111	59-155			
Trichloroethylene	500.7	10.0	ug/L	501	ND	100	70-157			
1,2-Dichloropropane	516.9	10.0	ug/L	501	ND	103	5-210			
Dibromomethane	548.1	10.0	ug/L	504	ND	109	62-141			
Bromodichloromethane	554.5	10.0	ug/L	501	ND	111	35-155			
2-Chloroethylvinyl ether	1098	100	ug/L	1000	ND	110	5-305			
cis-1,3-Dichloropropene	523.7	10.0	ug/L	501	ND	105	5-227			
Toluene	536.5	10.0	ug/L	505	ND	106	47-150			
trans-1,3-Dichloropropene	513.4	10.0	ug/L	501	ND	103	17-183			
1,1,2-Trichloroethane	506.4	10.0	ug/L	501	ND	101	52-150			
Tetrachloroethylene	487.3	10.0	ug/L	501	ND	97.3	64-148			
Dibromochloromethane	537.7	10.0	ug/L	501	ND	107	53-149			
Chlorobenzene	498.3	10.0	ug/L	501	ND	99.5	37-160			
Ethylbenzene	524.4	10.0	ug/L	502	ND	105	79-119			
Xylenes, total	1593	20.0	ug/L	1510	ND	105	80-120			
Bromoform	556.1	10.0	ug/L	501	ND	111	45-169			
1,1,2,2-Tetrachloroethane	507.5	10.0	ug/L	501	ND	101	46-157			
1,3-Dichlorobenzene	501.1	10.0	ug/L	501	ND	100	59-156			
1,4-Dichlorobenzene	481.8	10.0	ug/L	501	ND	96.1	18-190			
1,2-Dichlorobenzene	512.5	10.0	ug/L	501	ND	102	18-190			
Surrogate: Dibromofluoromethane	522		ug/L	502		104	59-123			
Surrogate: 1,2-Dichloroethane-d4	540		ug/L	501		108	56-130			
Surrogate: Toluene-d8	500		ug/L	504		99.2	85-113			
Surrogate: 4-Bromofluorobenzene	513		ug/L	501		102	82-112			

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CERTIFICATE OF ANALYSIS

11C0822

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11C1150 - EPA 5030B - EPA 624.1										
Matrix Spike Dup (11C1150-MSD1)	Source: 11C1317-07			Prepared: 03/21/25 00:00 Analyzed: 03/21/25 22:57						
Chloromethane	294.1	10.0	ug/L	303	ND	97.0	5-273	2.32	60	
Vinyl Chloride	299.4	10.0	ug/L	302	ND	99.0	5-251	3.48	66	
Bromomethane	287.2	10.0	ug/L	301	ND	95.3	5-242	0.874	61	
Chloroethane	289.6	10.0	ug/L	303	ND	95.5	14-230	5.60	78	
1,1-Dichloroethylene	535.6	10.0	ug/L	501	ND	107	5-235	1.79	32	
Methylene Chloride	473.7	50.0	ug/L	501	ND	94.5	5-221	1.13	60	
trans-1,2-Dichloroethylene	529.6	10.0	ug/L	501	ND	106	54-156	2.79	45	
1,1-Dichloroethane	537.6	10.0	ug/L	501	ND	107	59-155	2.01	40	
cis-1,2-Dichloroethylene	538.3	10.0	ug/L	504	ND	107	42-168	1.16	28	
2-Butanone (MEK)	1094	100	ug/L	1000	ND	109	57-133	4.21	30	
Chloroform	537.6	10.0	ug/L	501	ND	107	51-138	0.223	54	
1,1,1-Trichloroethane	528.3	10.0	ug/L	501	ND	105	52-162	2.58	36	
Carbon Tetrachloride	521.0	10.0	ug/L	501	ND	104	70-140	2.43	41	
Benzene	504.1	10.0	ug/L	504	ND	100	37-151	0.437	61	
1,2-Dichloroethane	576.9	10.0	ug/L	501	ND	115	59-155	3.64	49	
Trichloroethylene	508.4	10.0	ug/L	501	ND	101	70-157	1.53	48	
1,2-Dichloropropane	545.8	10.0	ug/L	501	ND	109	5-210	5.44	55	
Dibromomethane	574.2	10.0	ug/L	504	ND	114	62-141	4.65	11	
Bromodichloromethane	572.5	10.0	ug/L	501	ND	114	35-155	3.19	56	
2-Chloroethylvinyl ether	1162	100	ug/L	1000	ND	116	5-305	5.65	71	
cis-1,3-Dichloropropene	547.3	10.0	ug/L	501	ND	109	5-227	4.41	58	
Toluene	547.0	10.0	ug/L	505	ND	108	47-150	1.94	41	
trans-1,3-Dichloropropene	546.2	10.0	ug/L	501	ND	109	17-183	6.19	86	
1,1,2-Trichloroethane	545.6	10.0	ug/L	501	ND	109	52-150	7.45	45	
Tetrachloroethylene	492.9	10.0	ug/L	501	ND	98.4	64-148	1.14	39	
Dibromochloromethane	567.6	10.0	ug/L	501	ND	113	53-149	5.41	50	
Chlorobenzene	512.4	10.0	ug/L	501	ND	102	37-160	2.79	53	
Ethylbenzene	540.4	10.0	ug/L	502	ND	108	79-119	3.01	63	
Xylenes, total	1632	20.0	ug/L	1510	ND	108	80-120	2.47	12	
Bromoform	566.2	10.0	ug/L	501	ND	113	45-169	1.80	42	
1,1,2,2-Tetrachloroethane	551.2	10.0	ug/L	501	ND	110	46-157	8.26	61	
1,3-Dichlorobenzene	542.1	10.0	ug/L	501	ND	108	59-156	7.86	43	
1,4-Dichlorobenzene	511.1	10.0	ug/L	501	ND	102	18-190	5.90	57	
1,2-Dichlorobenzene	558.7	10.0	ug/L	501	ND	112	18-190	8.63	57	
Surrogate: Dibromofluoromethane	522		ug/L	502		104	59-123			
Surrogate: 1,2-Dichloroethane-d4	532		ug/L	501		106	56-130			
Surrogate: Toluene-d8	502		ug/L	504		99.6	85-113			
Surrogate: 4-Bromofluorobenzene	514		ug/L	501		102	82-112			

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

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CERTIFICATE OF ANALYSIS

1IC0822

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch 1IC0804 - EPA 625 BNA - EPA 625.1									
Blank (1IC0804-BLK1)				Prepared: 03/17/25 15:38 Analyzed: 03/20/25 16:26					
Bis(2-Chloroethyl) Ether	<10	10	ug/L						
2-Chlorophenol	<10	10	ug/L						
1,3-Dichlorobenzene	<10	10	ug/L						
1,4-Dichlorobenzene	<10	10	ug/L						
Benzyl Alcohol	<10	10	ug/L						
1,2-Dichlorobenzene	<10	10	ug/L						
Bis[2-Chloroisopropyl]ether	<10	10	ug/L						
n-Nitroso-di-n-propylamine	<10	10	ug/L						
Hexachloroethane	<10	10	ug/L						
Nitrobenzene	<10	10	ug/L						
Isophorone	<10	10	ug/L						
2-Nitrophenol	<10	10	ug/L						
2,4-Dimethylphenol	<10	10	ug/L						
Bis (2-Chloroethoxy) Methane	<10	10	ug/L						
Benzoic acid	<50	50	ug/L						
2,4-Dichlorophenol	<10	10	ug/L						
1,2,4-Trichlorobenzene	<10	10	ug/L						
Naphthalene	<10	10	ug/L						
Hexachlorobutadiene	<20	20	ug/L						
4-Chloro-3-methylphenol	<10	10	ug/L						
Hexachlorocyclopentadiene	<20	20	ug/L						
2,4,6-Trichlorophenol	<10	10	ug/L						
2,4,5-Trichlorophenol	<50	50	ug/L						
2-Chloronaphthalene	<10	10	ug/L						
Dimethylphthalate	<15	15	ug/L						
Acenaphthylene	<10	10	ug/L						
2,6-Dinitrotoluene	<10	10	ug/L						
Acenaphthene	<10	10	ug/L						
2,4-Dinitrophenol	<20	20	ug/L						
Dibenzofuran	<10	10	ug/L						
2,4-Dinitrotoluene	<10	10	ug/L						
4-Nitrophenol	<10	10	ug/L						
Diethyl Phthalate	<30	30	ug/L						
Fluorene	<10	10	ug/L						
4-Chlorophenyl Phenyl Ether	<10	10	ug/L						
4,6-Dinitro-2-methylphenol	<20	20	ug/L						
N-Nitrosodiphenylamine	<10	10	ug/L						
4-Bromophenyl Phenyl Ether	<10	10	ug/L						
Hexachlorobenzene	<10	10	ug/L						
Pentachlorophenol	<20	20	ug/L						
Phenanthrene	<10	10	ug/L						
Anthracene	<10	10	ug/L						

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CERTIFICATE OF ANALYSIS

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Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch 1IC0804 - EPA 625 BNA - EPA 625.1									
Blank (1IC0804-BLK1)									
Prepared: 03/17/25 15:38 Analyzed: 03/20/25 16:26									
Di-n-butyl Phthalate	<10	10	ug/L						
Fluoranthene	<10	10	ug/L						
Pyrene	<10	10	ug/L						
Butyl Benzyl Phthalate	<10	10	ug/L						
Benzo(a)anthracene	<10	10	ug/L						
Chrysene	<10	10	ug/L						
Bis(2-Ethylhexyl) Phthalate	<10	10	ug/L						
Di-n-octyl Phthalate	<10	10	ug/L						
Indeno(1,2,3-cd)Pyrene	<10	10	ug/L						
3,3'-Dichlorobenzidine	<20	20	ug/L						
Benzo(b)Fluoranthene	<10	10	ug/L						
Benzo(k)Fluoranthene	<10	10	ug/L						
Benzo(a)Pyrene	<10	10	ug/L						
Dibenzo(a,h)anthracene	<10	10	ug/L						
Benzo(g,h,i)perylene	<10	10	ug/L						
Surrogate: 2-Fluorophenol	14.8		ug/L	20.6		71.9		16-140	
Surrogate: Phenol-d6	14.2		ug/L	19.6		72.6		13-147	
Surrogate: Nitrobenzene-d5	14.7		ug/L	20.6		71.6		17-150	
Surrogate: 2-Fluorobiphenyl	15.1		ug/L	19.5		77.4		15-134	
Surrogate: 2,4,6-Tribromophenol	19.9		ug/L	20.0		99.2		20-158	
Surrogate: Terphenyl-d14	19.0		ug/L	20.6		92.4		12-157	
LCS (1IC0804-BS1)									
Prepared: 03/17/25 15:38 Analyzed: 03/20/25 16:50									
Bis(2-Chloroethyl) Ether	<10	10	ug/L	10.0		70.7		43-126	
2-Chlorophenol	<10	10	ug/L	10.0		78.2		36-120	
1,3-Dichlorobenzene	<10	10	ug/L	10.0		64.8		18-95	
1,4-Dichlorobenzene	<10	10	ug/L	10.0		66.0		18-99	
Benzyl Alcohol	<10	10	ug/L	10.0		71.7		10-125	
1,2-Dichlorobenzene	<10	10	ug/L	10.0		67.9		20-100	
Bis[2-Chloroisopropyl]ether	<10	10	ug/L	10.0		75.4		63-139	
n-Nitroso-di-n-propylamine	<10	10	ug/L	10.0		70.5		14-198	
Hexachloroethane	<10	10	ug/L	10.0		63.7		55-120	
Nitrobenzene	<10	10	ug/L	10.0		73.6		54-158	
Isophorone	<10	10	ug/L	10.0		74.6		47-180	
2-Nitrophenol	<10	10	ug/L	10.0		81.9		45-167	
2,4-Dimethylphenol	<10	10	ug/L	10.0		79.5		42-120	
Bis (2-Chloroethoxy) Methane	<10	10	ug/L	10.0		73.5		49-165	
2,4-Dichlorophenol	<10	10	ug/L	10.0		85.6		53-122	
1,2,4-Trichlorobenzene	<10	10	ug/L	10.0		75.6		57-130	
Naphthalene	<10	10	ug/L	10.0		71.3		36-120	
Hexachlorobutadiene	<20	20	ug/L	10.0		68.0		38-120	
4-Chloro-3-methylphenol	<10	10	ug/L	10.0		82.4		41-128	
Hexachlorocyclopentadiene	<20	20	ug/L	10.0		37.5		10-107	

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CERTIFICATE OF ANALYSIS

1IC0822

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch 1IC0804 - EPA 625 BNA - EPA 625.1									
LCS (1IC0804-BS1)									
Prepared: 03/17/25 15:38 Analyzed: 03/20/25 16:50									
2,4,6-Trichlorophenol	<10	10	ug/L	10.0		84.8	52-129		
2,4,5-Trichlorophenol	<50	50	ug/L	10.0		87.9	50-121		
2-Chloronaphthalene	<10	10	ug/L	10.0		71.2	65-120		
Dimethylphthalate	<15	15	ug/L	10.0		81.2	1-120		
Acenaphthylene	<10	10	ug/L	10.0		75.3	54-126		
2,6-Dinitrotoluene	<10	10	ug/L	10.0		84.6	68-137		
Acenaphthene	<10	10	ug/L	10.0		76.4	60-132		
2,4-Dinitrophenol	<20	20	ug/L	10.0		64.4	1-172		
Dibenzofuran	<10	10	ug/L	10.0		77.8	49-108		
2,4-Dinitrotoluene	<10	10	ug/L	10.0		84.5	48-127		
4-Nitrophenol	<10	10	ug/L	10.0		72.3	13-129		
Diethyl Phthalate	<30	30	ug/L	10.0		85.5	1-120		
Fluorene	<10	10	ug/L	10.0		78.7	70-120		
4-Chlorophenyl Phenyl Ether	<10	10	ug/L	10.0		79.8	38-145		
4,6-Dinitro-2-methylphenol	<20	20	ug/L	10.0		79.4	53-130		
N-Nitrosodiphenylamine	<10	10	ug/L	10.0		78.6	29-136		
4-Bromophenyl Phenyl Ether	<10	10	ug/L	10.0		83.5	44-127		
Hexachlorobenzene	<10	10	ug/L	10.0		79.7	8-142		
Pentachlorophenol	<20	20	ug/L	10.0		54.5	38-152		
Phenanthrene	<10	10	ug/L	10.0		78.9	65-120		
Anthracene	<10	10	ug/L	10.0		78.0	43-120		
Di-n-butyl Phthalate	<10	10	ug/L	10.0		83.9	8-120		
Fluoranthene	<10	10	ug/L	10.0		83.0	42-121		
Pyrene	<10	10	ug/L	10.0		84.9	70-120		
Butyl Benzyl Phthalate	<10	10	ug/L	10.0		81.9	1-140		
Benzo(a)anthracene	<10	10	ug/L	10.0		81.2	42-133		
Chrysene	<10	10	ug/L	10.0		80.8	44-140		
Bis(2-Ethylhexyl) Phthalate	<10	10	ug/L	10.0		86.1	29-137		
Di-n-octyl Phthalate	<10	10	ug/L	10.0		90.2	19-132		
Indeno(1,2,3-cd)Pyrene	<10	10	ug/L	10.0		80.9	1-151		
Benzo(b)Fluoranthene	<10	10	ug/L	10.0		80.8	42-140		
Benzo(k)Fluoranthene	<10	10	ug/L	10.0		85.6	27-168		
Benzo(a)Pyrene	<10	10	ug/L	10.0		82.4	32-148		
Dibenzo(a,h)anthracene	<10	10	ug/L	10.0		80.9	1-200		
Benzo(g,h,i)perylene	<10	10	ug/L	10.0		80.7	1-195		
Surrogate: 2-Fluorophenol	15.4		ug/L	20.6		74.6	16-140		
Surrogate: Phenol-d6	15.4		ug/L	19.6		78.7	13-147		
Surrogate: Nitrobenzene-d5	15.8		ug/L	20.6		76.7	17-150		
Surrogate: 2-Fluorobiphenyl	15.4		ug/L	19.5		78.9	15-134		
Surrogate: 2,4,6-Tribromophenol	19.6		ug/L	20.0		98.0	20-158		
Surrogate: Terphenyl-d14	18.8		ug/L	20.6		91.1	12-157		

LCS Dup (1IC0804-BSD1)

Prepared: 03/17/25 15:38 Analyzed: 03/20/25 17:14

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CERTIFICATE OF ANALYSIS

1IC0822

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IC0804 - EPA 625 BNA - EPA 625.1										
LCS Dup (1IC0804-BSD1)				Prepared: 03/17/25 15:38 Analyzed: 03/20/25 17:14						
Bis(2-Chloroethyl) Ether	<10	10	ug/L	10.0		67.5	43-126	4.63	65	
2-Chlorophenol	<10	10	ug/L	10.0		81.3	36-120	3.89	37	
1,3-Dichlorobenzene	<10	10	ug/L	10.0		65.3	18-95	0.769	30	
1,4-Dichlorobenzene	<10	10	ug/L	10.0		67.7	18-99	2.54	30	
Benzyl Alcohol	<10	10	ug/L	10.0		59.1	10-125	19.3	30	
1,2-Dichlorobenzene	<10	10	ug/L	10.0		69.5	20-100	2.33	30	
Bis[2-Chloroisopropyl]ether	<10	10	ug/L	10.0		75.5	63-139	0.133	46	
n-Nitroso-di-n-propylamine	<10	10	ug/L	10.0		74.8	14-198	5.92	52	
Hexachloroethane	<10	10	ug/L	10.0		64.9	55-120	1.87	32	
Nitrobenzene	<10	10	ug/L	10.0		74.4	54-158	1.08	37	
Isophorone	<10	10	ug/L	10.0		74.8	47-180	0.268	56	
2-Nitrophenol	<10	10	ug/L	10.0		82.3	45-167	0.487	33	
2,4-Dimethylphenol	<10	10	ug/L	10.0		82.1	42-120	3.22	35	
Bis (2-Chloroethoxy) Methane	<10	10	ug/L	10.0		74.2	49-165	0.948	32	
2,4-Dichlorophenol	<10	10	ug/L	10.0		86.1	53-122	0.582	30	
1,2,4-Trichlorobenzene	<10	10	ug/L	10.0		75.9	57-130	0.396	30	
Naphthalene	<10	10	ug/L	10.0		71.7	36-120	0.559	39	
Hexachlorobutadiene	<20	20	ug/L	10.0		69.2	38-120	1.75	38	
4-Chloro-3-methylphenol	<10	10	ug/L	10.0		85.6	41-128	3.81	44	
Hexachlorocyclopentadiene	<20	20	ug/L	10.0		39.5	10-107	5.19	30	
2,4,6-Trichlorophenol	<10	10	ug/L	10.0		92.4	52-129	8.58	35	
2,4,5-Trichlorophenol	<50	50	ug/L	10.0		93.5	50-121	6.17	25	
2-Chloronaphthalene	<10	10	ug/L	10.0		74.8	65-120	4.93	26	
Dimethylphthalate	<15	15	ug/L	10.0		86.5	1-120	6.32	110	
Acenaphthylene	<10	10	ug/L	10.0		79.2	54-126	5.05	45	
2,6-Dinitrotoluene	12.4	10	ug/L	10.0		124	68-137	38.1	29	R1
Acenaphthene	<10	10	ug/L	10.0		81.1	60-132	5.97	29	
2,4-Dinitrophenol	<20	20	ug/L	10.0		92.8	1-172	36.1	79	
Dibenzofuran	<10	10	ug/L	10.0		82.6	49-108	5.99	26	
2,4-Dinitrotoluene	<10	10	ug/L	10.0		86.9	48-127	2.80	25	
4-Nitrophenol	<10	10	ug/L	10.0		80.8	13-129	11.1	79	
Diethyl Phthalate	<30	30	ug/L	10.0		86.1	1-120	0.699	60	
Fluorene	<10	10	ug/L	10.0		81.3	70-120	3.25	23	
4-Chlorophenyl Phenyl Ether	<10	10	ug/L	10.0		85.3	38-145	6.66	36	
4,6-Dinitro-2-methylphenol	<20	20	ug/L	10.0		97.1	53-130	20.1	122	
N-Nitrosodiphenylamine	<10	10	ug/L	10.0		85.4	29-136	8.29	30	
4-Bromophenyl Phenyl Ether	<10	10	ug/L	10.0		94.5	44-127	12.4	30	
Hexachlorobenzene	<10	10	ug/L	10.0		90.3	8-142	12.5	33	
Pentachlorophenol	<20	20	ug/L	10.0		88.4	38-152	47.4	52	
Phenanthrene	<10	10	ug/L	10.0		86.1	65-120	8.73	24	
Anthracene	<10	10	ug/L	10.0		84.8	43-120	8.35	40	
Di-n-butyl Phthalate	<10	10	ug/L	10.0		89.6	8-120	6.57	28	

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Page 17 of 26



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1IC0822

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IC0804 - EPA 625 BNA - EPA 625.1										

LCS Dup (1IC0804-BSD1)

Prepared: 03/17/25 15:38 Analyzed: 03/20/25 17:14

Fluoranthene	<10	10	ug/L	10.0		83.1	42-121	0.120	40	
Pyrene	<10	10	ug/L	10.0		91.8	70-120	7.81	30	
Butyl Benzyl Phthalate	<10	10	ug/L	10.0		87.3	1-140	6.38	37	
Benzo(a)anthracene	<10	10	ug/L	10.0		86.5	42-133	6.32	32	
Chrysene	<10	10	ug/L	10.0		86.9	44-140	7.27	53	
Bis(2-Ethylhexyl) Phthalate	10.1	10	ug/L	10.0		101	29-137	15.5	50	
Di-n-octyl Phthalate	<10	10	ug/L	10.0		96.6	19-132	6.85	42	
Indeno(1,2,3-cd)Pyrene	<10	10	ug/L	10.0		93.8	1-151	14.8	60	
Benzo(b)Fluoranthene	<10	10	ug/L	10.0		85.2	42-140	5.30	38	
Benzo(k)Fluoranthene	<10	10	ug/L	10.0		91.4	27-168	6.55	30	
Benzo(a)Pyrene	<10	10	ug/L	10.0		90.5	32-148	9.37	43	
Dibenzo(a,h)anthracene	<10	10	ug/L	10.0		92.7	1-200	13.6	75	
Benzo(g,h,i)perylene	<10	10	ug/L	10.0		94.5	1-195	15.8	61	
Surrogate: 2-Fluorophenol	15.0		ug/L	20.6		72.7	16-140			
Surrogate: Phenol-d6	13.1		ug/L	19.6		67.0	13-147			
Surrogate: Nitrobenzene-d5	15.7		ug/L	20.6		76.4	17-150			
Surrogate: 2-Fluorobiphenyl	16.4		ug/L	19.5		83.9	15-134			
Surrogate: 2,4,6-Tribromophenol	20.1		ug/L	20.0		100	20-158			
Surrogate: Terphenyl-d14	19.2		ug/L	20.6		93.0	12-157			

Determination of Organochlorine Insecticides & PCBs	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch 1IC0617 - 3520C NP/OC Cont Liq - EPA 608.3 GC-ECD

Blank (1IC0617-BLK1)

Prepared: 03/13/25 10:33 Analyzed: 03/20/25 10:05

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

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Determination of Organochlorine Insecticides & PCBs	Result	RL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch 11C0617 - 3520C NP/OC Cont Liq - EPA 608.3 GC-ECD									
Blank (11C0617-BLK1)									
				Prepared: 03/13/25 10:33 Analyzed: 03/20/25 10:05					
Toxaphene	<0.20	0.20	ug/L						
Arochlor 1016	<0.20	0.20	ug/L						
Arochlor 1221	<0.20	0.20	ug/L						
Arochlor 1232	<0.20	0.20	ug/L						
Arochlor 1242	<0.20	0.20	ug/L						
Arochlor 1248	<0.20	0.20	ug/L						
Arochlor 1254	<0.20	0.20	ug/L						
Arochlor 1260	<0.20	0.20	ug/L						
Surrogate: Tetrachloro-m-xylene	0.445		ug/L	0.600		74.2		31-116	
Surrogate: Decachlorobiphenyl	0.0896		ug/L	0.600		14.9		12-130	
LCS (11C0617-BS1)									
				Prepared: 03/13/25 10:33 Analyzed: 03/20/25 10:24					
Gamma-BHC [Lindane]	0.229	0.05	ug/L	0.250		91.8		44-124	
Beta-BHC	0.191	0.05	ug/L	0.250		76.3		56-122	
Heptachlor	0.214	0.05	ug/L	0.250		85.7		57-124	
Delta-BHC	0.228	0.05	ug/L	0.250		91.2		53-138	
Aldrin	0.212	0.05	ug/L	0.250		85.0		53-114	
Heptachlor Epoxide	0.246	0.05	ug/L	0.250		98.6		61-128	
Endosulfan I	0.218	0.05	ug/L	0.250		87.3		60-124	
4,4'-DDE	0.221	0.05	ug/L	0.250		88.4		59-122	
Dieldrin	0.222	0.05	ug/L	0.250		89.0		52-119	
Endrin	0.234	0.05	ug/L	0.250		93.5		45-152	
4,4'-DDD	0.215	0.05	ug/L	0.250		86.2		59-127	
Endosulfan II	0.228	0.05	ug/L	0.250		91.2		57-130	
4,4'-DDT	0.216	0.05	ug/L	0.250		86.4		55-143	
Endrin Aldehyde	0.182	0.05	ug/L	0.250		73.0		55-139	
Endosulfan Sulfate	0.217	0.05	ug/L	0.250		86.9		64-123	
Surrogate: Tetrachloro-m-xylene	0.491		ug/L	0.600		81.9		31-116	
Surrogate: Decachlorobiphenyl	0.100		ug/L	0.600		16.7		12-130	
LCS Dup (11C0617-BSD1)									
				Prepared: 03/13/25 10:33 Analyzed: 03/20/25 10:41					
Gamma-BHC [Lindane]	0.230	0.05	ug/L	0.250		92.0	44-124	0.211	30
Beta-BHC	0.187	0.05	ug/L	0.250		74.8	56-122	1.91	30
Heptachlor	0.216	0.05	ug/L	0.250		86.4	57-124	0.802	30
Delta-BHC	0.233	0.05	ug/L	0.250		93.4	53-138	2.32	30
Aldrin	0.217	0.05	ug/L	0.250		86.8	53-114	2.20	30
Heptachlor Epoxide	0.264	0.05	ug/L	0.250		106	61-128	6.95	30
Endosulfan I	0.210	0.05	ug/L	0.250		84.1	60-124	3.73	30
4,4'-DDE	0.226	0.05	ug/L	0.250		90.2	59-122	2.08	30
Dieldrin	0.229	0.05	ug/L	0.250		91.8	52-119	3.06	30
Endrin	0.238	0.05	ug/L	0.250		95.1	45-152	1.74	30
4,4'-DDD	0.219	0.05	ug/L	0.250		87.5	59-127	1.54	30

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Determination of	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Organochlorine Insecticides & PCBs										
Batch 11C0617 - 3520C NP/OC Cont Liq - EPA 608.3 GC-ECD										
LCS Dup (11C0617-BSD1) Prepared: 03/13/25 10:33 Analyzed: 03/20/25 10:41										
Endosulfan II	0.231	0.05	ug/L	0.250		92.5	57-130	1.44	30	
4,4'-DDT	0.220	0.05	ug/L	0.250		88.0	55-143	1.86	30	
Endrin Aldehyde	0.199	0.05	ug/L	0.250		79.5	55-139	8.59	30	
Endosulfan Sulfate	0.222	0.05	ug/L	0.250		88.8	64-123	2.08	30	
Surrogate: Decachlorobiphenyl	0.0703		ug/L	0.600		11.7	12-130			S2
Surrogate: Tetrachloro-m-xylene	0.510		ug/L	0.600		85.0	31-116			
Reference (11C0617-SRM1) Prepared: 03/13/25 10:33 Analyzed: 03/20/25 10:58										
Gamma-BHC [Lindane]	0.242	0.05	ug/L	0.250		96.7	80-120			
Beta-BHC	0.230	0.05	ug/L	0.250		92.2	80-120			
Heptachlor	0.225	0.05	ug/L	0.250		90.0	80-120			
Delta-BHC	0.247	0.05	ug/L	0.250		98.9	80-120			
Aldrin	0.232	0.05	ug/L	0.250		93.0	80-120			
Heptachlor Epoxide	0.251	0.05	ug/L	0.250		100	80-120			
Endosulfan I	0.240	0.05	ug/L	0.250		96.1	80-120			
4,4'-DDE	0.228	0.05	ug/L	0.250		91.2	80-120			
Dieldrin	0.225	0.05	ug/L	0.250		90.1	80-120			
Endrin	0.234	0.05	ug/L	0.250		93.7	80-120			
4,4'-DDD	0.219	0.05	ug/L	0.250		87.7	80-120			
Endosulfan II	0.232	0.05	ug/L	0.250		92.9	80-120			
4,4'-DDT	0.235	0.05	ug/L	0.250		93.9	80-120			
Endrin Aldehyde	0.259	0.05	ug/L	0.250		103	80-120			
Endosulfan Sulfate	0.234	0.05	ug/L	0.250		93.6	80-120			
Surrogate: Decachlorobiphenyl	0.652		ug/L	0.600		109	12-130			
Surrogate: Tetrachloro-m-xylene	0.603		ug/L	0.600		100	31-116			
Determination of	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Conventional Chemistry Parameters										
Batch 11C0593 - General Prep Micro - SM 5210 B-2016										
Blank (11C0593-BLK1) Prepared: 03/12/25 17:21 Analyzed: 03/12/25 18:27										
BOD (5 day)	<2	2	mg/L							AC, K1
Duplicate (11C0593-DUP1) Source: 11C0818-01 Prepared: 03/12/25 17:21 Analyzed: 03/12/25 18:56										
BOD (5 day)	53.8	24	mg/L		61.3			13.0	30	
Reference (11C0593-SRM1) Prepared: 03/12/25 17:21 Analyzed: 03/12/25 18:41										
BOD (5 day)	186	100	mg/L	198		93.7	84.6-115.4			
Batch 11C0680 - Wet Chem Preparation - USGS I-1750-85										
Blank (11C0680-BLK1) Prepared: 03/14/25 06:45 Analyzed: 03/18/25 12:48										



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1IC0822

Determination of Conventional Chemistry Parameters	Result	RL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch 1IC0680 - Wet Chem Preparation - USGS I-1750-85									
Blank (1IC0680-BLK1)				Prepared: 03/14/25 06:45 Analyzed: 03/18/25 12:48					
Total Dissolved Solids (TDS)	<5	5	mg/L						
LCS (1IC0680-BS1)				Prepared: 03/14/25 06:45 Analyzed: 03/18/25 12:48					
Total Dissolved Solids (TDS)	101	5	mg/L	100	101	79-114			
Duplicate (1IC0680-DUP1)				Prepared: 03/14/25 06:45 Analyzed: 03/18/25 12:48					
Total Dissolved Solids (TDS)	357	5	mg/L		347		3.03	24	
Batch 1IC0764 - General Prep HPLC/IC - TIMBERLINE									
Blank (1IC0764-BLK1)				Prepared: 03/17/25 09:47 Analyzed: 03/17/25 10:59					
Nitrogen, Ammonia	<0.10	0.10	mg/L						
LCS (1IC0764-BS1)				Prepared: 03/17/25 09:47 Analyzed: 03/17/25 11:01					
Nitrogen, Ammonia	4.68	0.10	mg/L	5.00	93.6	90-114			
Matrix Spike (1IC0764-MS1)				Prepared: 03/17/25 09:47 Analyzed: 03/17/25 11:04					
Nitrogen, Ammonia	9.04	0.10	mg/L	5.00	4.05	99.7	84-115		
Matrix Spike Dup (1IC0764-MSD1)				Prepared: 03/17/25 09:47 Analyzed: 03/17/25 11:06					
Nitrogen, Ammonia	9.04	0.10	mg/L	5.00	4.05	99.7	84-115	0.00110	20
Batch 1IC0818 - Wet Chem Preparation - USGS I-3765-85									
Blank (1IC0818-BLK1)				Prepared: 03/18/25 07:30 Analyzed: 03/18/25 15:38					
Total Suspended Solids (TSS)	<1	1	mg/L						
LCS (1IC0818-BS1)				Prepared: 03/18/25 07:30 Analyzed: 03/18/25 15:38					
Total Suspended Solids (TSS)	14.6	1	mg/L	15.0	97.3	71-110			
Duplicate (1IC0818-DUP1)				Prepared: 03/18/25 07:30 Analyzed: 03/18/25 15:38					
Total Suspended Solids (TSS)	167	10	mg/L		151		10.1	30	
Batch 1IC0881 - Wet Chem Preparation - SM 4500-H+ B-2011									
Duplicate (1IC0881-DUP1)				Prepared & Analyzed: 03/18/25 15:10					
pH	7.0	0.5	pH		7.0		0.0432	10	
Reference (1IC0881-SRM1)				Prepared & Analyzed: 03/18/25 15:10					
pH	7.0	0.5	pH	7.00	101	98.6-101.4			
Reference (1IC0881-SRM2)				Prepared & Analyzed: 03/18/25 15:10					
pH	7.0	0.5	pH	7.00	100	98.6-101.4			
Reference (1IC0881-SRM3)				Prepared: 03/18/25 15:10 Analyzed: 03/20/25 08:31					
pH	1.8	0.5	pH	1.68	105	90-110			
Batch 1IC1152 - Wet Chem Preparation - EPA 351.2, Rv. 2 (1993)									
Blank (1IC1152-BLK1)				Prepared: 03/24/25 09:23 Analyzed: 03/25/25 14:05					
Nitrogen, Kjeldahl, total	<1.00	1.00	mg/L						

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1IC0822

Determination of Conventional Chemistry Parameters	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IC1152 - Wet Chem Preparation - EPA 351.2, Rv. 2 (1993)										
LCS (1IC1152-BS1)	Prepared: 03/24/25 09:23 Analyzed: 03/25/25 14:06									
Nitrogen, Kjeldahl, total	18.7	1.00	mg/L	20.0		93.6	90-110			
Matrix Spike (1IC1152-MS1)	Source: 1IC0969-02 Prepared: 03/24/25 09:23 Analyzed: 03/25/25 14:11									
Nitrogen, Kjeldahl, total	51.9	2.50	mg/L	50.0	1.72	100	90-110			
Matrix Spike Dup (1IC1152-MSD1)	Source: 1IC0969-02 Prepared: 03/24/25 09:23 Analyzed: 03/25/25 14:12									
Nitrogen, Kjeldahl, total	53.8	2.50	mg/L	50.0	1.72	104	90-110	3.63	10	
Batch 1IC1262 - Wet Chem Preparation - EPA 351.2, Rv. 2 (1993)										
Blank (1IC1262-BLK1)	Prepared & Analyzed: 03/25/25 14:47									
Nitrogen, Kjeldahl, total	<1.00	1.00	mg/L							
LCS (1IC1262-BS1)	Prepared & Analyzed: 03/25/25 14:47									
Nitrogen, Kjeldahl, total	21.0	1.00	mg/L	20.0		105	90-110			
Matrix Spike (1IC1262-MS1)	Source: 1IC0935-02 Prepared & Analyzed: 03/25/25 14:47									
Nitrogen, Kjeldahl, total	65.3	2.50	mg/L	50.0	11.3	108	90-110			
Matrix Spike Dup (1IC1262-MSD1)	Source: 1IC0935-02 Prepared & Analyzed: 03/25/25 14:47									
Nitrogen, Kjeldahl, total	63.9	2.50	mg/L	50.0	11.3	105	90-110	2.14	10	
Batch 1IC1282 - General Prep HPLC/IC - TIMBERLINE										
Blank (1IC1282-BLK2)	Prepared: 03/25/25 16:43 Analyzed: 03/25/25 18:21									
Nitrogen, Ammonia	<0.10	0.10	mg/L							
LCS (1IC1282-BS2)	Prepared: 03/25/25 16:43 Analyzed: 03/25/25 18:23									
Nitrogen, Ammonia	5.03	0.10	mg/L	5.00		101	90-114			
Matrix Spike (1IC1282-MS2)	Source: 4IC0144-02 Prepared: 03/25/25 16:43 Analyzed: 03/25/25 18:24									
Nitrogen, Ammonia	9.00	0.10	mg/L	5.00	3.70	106	84-115			
Matrix Spike Dup (1IC1282-MSD2)	Source: 4IC0144-02 Prepared: 03/25/25 16:43 Analyzed: 03/25/25 18:26									
Nitrogen, Ammonia	9.11	0.10	mg/L	5.00	3.70	108	84-115	1.21	20	
Batch 1IC1376 - TOC/DOC - 5310B										
Blank (1IC1376-BLK1)	Prepared: 03/26/25 00:00 Analyzed: 03/26/25 11:15									
Total Organic Carbon	<0.50	0.50	mg/L							
LCS (1IC1376-BS1)	Prepared: 03/26/25 00:00 Analyzed: 03/26/25 13:13									
Total Organic Carbon	5.44	0.50	mg/L	5.00		109	89-116			
LCS Dup (1IC1376-BSD1)	Prepared: 03/26/25 00:00 Analyzed: 03/26/25 11:00									
Total Organic Carbon	5.42	0.50	mg/L	5.00		108	89-116	0.313	10	
Matrix Spike (1IC1376-MS1)	Source: 1IC0692-01 Prepared: 03/26/25 00:00 Analyzed: 03/26/25 16:41									
Total Organic Carbon	30.25	0.50	mg/L	5.00	26.62	72.6	50-133			
Matrix Spike Dup (1IC1376-MSD1)	Source: 1IC0692-01 Prepared: 03/26/25 00:00 Analyzed: 03/26/25 16:57									
Total Organic Carbon	31.66	0.50	mg/L	5.00	26.62	101	50-133	4.55	10	

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Determination of Conventional Chemistry Parameters	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11C0737 - EPA 200.2 Total ICP-MS - EPA 200.8, Rv. 5.4 (1994)										
Blank (11C0737-BLK1)				Prepared: 03/14/25 16:05 Analyzed: 03/18/25 02:00						
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							
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 (11C0737-BS1)				Prepared: 03/14/25 16:05 Analyzed: 03/18/25 02:18						
Arsenic, total	0.0891	0.0020	mg/L	0.100		89.1	85-115			
Barium, total	0.104	0.0020	mg/L	0.100		104	85-115			
Cadmium, total	0.0917	0.0002	mg/L	0.100		91.7	85-115			
Chromium, total	0.0890	0.0020	mg/L	0.100		89.0	85-115			
Copper, total	0.0944	0.0020	mg/L	0.100		94.4	85-115			
Lead, total	0.0965	0.0008	mg/L	0.100		96.5	85-115			
Nickel, total	0.0961	0.0040	mg/L	0.100		96.1	85-115			
Selenium, total	0.0939	0.0040	mg/L	0.100		93.9	85-115			
Silver, total	0.100	0.0020	mg/L	0.100		100	85-115			
Zinc, total	0.100	0.0200	mg/L	0.100		100	85-115			
Matrix Spike (11C0737-MS1)				Source: 11C0834-01 Prepared: 03/14/25 16:05 Analyzed: 03/18/25 02:43						
Arsenic, total	0.0945	0.0020	mg/L	0.100	0.0017	92.7	70-130			
Barium, total	0.335	0.0020	mg/L	0.100	0.238	97.2	70-130			
Cadmium, total	0.0921	0.0002	mg/L	0.100	0.0003	91.7	70-130			
Chromium, total	0.123	0.0020	mg/L	0.100	0.0048	118	70-130			
Copper, total	0.178	0.0020	mg/L	0.100	0.137	40.8	70-130			M2
Lead, total	0.100	0.0008	mg/L	0.100	0.0072	93.0	70-130			
Nickel, total	0.0997	0.0040	mg/L	0.100	0.0060	93.7	70-130			
Selenium, total	0.0925	0.0040	mg/L	0.100	0.0022	90.3	70-130			
Silver, total	0.0982	0.0020	mg/L	0.100	ND	98.2	70-130			
Zinc, total	0.738	0.0200	mg/L	0.100	0.631	107	70-130			
Matrix Spike Dup (11C0737-MSD1)				Source: 11C0834-01 Prepared: 03/14/25 16:05 Analyzed: 03/18/25 02:49						
Arsenic, total	0.0951	0.0020	mg/L	0.100	0.0017	93.4	70-130	0.668	20	
Barium, total	0.328	0.0020	mg/L	0.100	0.238	90.5	70-130	2.02	20	
Cadmium, total	0.0932	0.0002	mg/L	0.100	0.0003	92.8	70-130	1.16	20	
Chromium, total	0.122	0.0020	mg/L	0.100	0.0048	117	70-130	1.03	20	
Copper, total	0.174	0.0020	mg/L	0.100	0.137	37.2	70-130	2.02	20	M2
Lead, total	0.0998	0.0008	mg/L	0.100	0.0072	92.7	70-130	0.349	20	

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CERTIFICATE OF ANALYSIS

11C0822

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11C0737 - EPA 200.2 Total ICP-MS - EPA 200.8, Rv. 5.4 (1994)										
Matrix Spike Dup (11C0737-MSD1)		Source: 11C0834-01		Prepared: 03/14/25 16:05 Analyzed: 03/18/25 02:49						
Nickel, total	0.101	0.0040	mg/L	0.100	0.0060	94.9	70-130	1.18	20	
Selenium, total	0.0943	0.0040	mg/L	0.100	0.0022	92.2	70-130	2.00	20	
Silver, total	0.0981	0.0020	mg/L	0.100	ND	98.1	70-130	0.101	20	
Zinc, total	0.715	0.0200	mg/L	0.100	0.631	84.3	70-130	3.09	20	
Post Spike (11C0737-PS1)		Source: 11C0834-01		Prepared: 03/14/25 16:05 Analyzed: 03/18/25 02:55						
Arsenic, total	0.0751		mg/L	0.0800	0.0017	91.7	70-130			
Barium, total	0.308		mg/L	0.0800	0.233	93.7	70-130			
Cadmium, total	0.0722		mg/L	0.0800	0.0003	89.8	70-130			
Chromium, total	0.0930		mg/L	0.0800	0.0048	110	70-130			
Copper, total	0.209		mg/L	0.0800	0.134	93.7	70-130			
Lead, total	0.0798		mg/L	0.0800	0.0070	91.0	70-130			
Nickel, total	0.0820		mg/L	0.0800	0.0059	95.1	70-130			
Selenium, total	0.0789		mg/L	0.0800	0.0021	96.0	70-130			
Silver, total	0.0776		mg/L	0.0800	0.0004	96.5	70-130			
Zinc, total	0.693		mg/L	0.0800	0.618	93.0	70-130			
Batch 11C0910 - EPA 200.2 Total ICP-OES (200.7) - 200.7										
Blank (11C0910-BLK1)		Prepared: 03/19/25 07:10 Analyzed: 03/19/25 22:35								
Iron, total	<0.100	0.100	mg/L							
LCS (11C0910-BS1)		Prepared: 03/19/25 07:10 Analyzed: 03/19/25 22:41								
Iron, total	2.49	0.100	mg/L	2.20		113	85-115			
Matrix Spike (11C0910-MS1)		Source: 11C0655-01		Prepared: 03/19/25 07:10 Analyzed: 03/19/25 22:56						
Iron, total	2.99	0.100	mg/L	2.20	0.619	108	70-130			
Matrix Spike Dup (11C0910-MSD1)		Source: 11C0655-01		Prepared: 03/19/25 07:10 Analyzed: 03/19/25 23:07						
Iron, total	3.18	0.100	mg/L	2.20	0.619	116	70-130	5.99	20	
Post Spike (11C0910-PS1)		Source: 11C0655-01		Prepared: 03/19/25 07:10 Analyzed: 03/19/25 23:17						
Iron, total	10.7		mg/L	8.80	0.619	115	85-115			
Batch 11C1059 - EPA 7470A Hg Water - 245.1										
Blank (11C1059-BLK1)		Prepared: 03/20/25 15:33 Analyzed: 03/21/25 12:54								
Mercury, total	<0.00050	0.00050	mg/L							
LCS (11C1059-BS1)		Prepared: 03/20/25 15:33 Analyzed: 03/21/25 12:57								
Mercury, total	0.00227	0.00050	mg/L	0.00250		90.7	85-115			
Matrix Spike (11C1059-MS1)		Source: 11C0688-01		Prepared: 03/20/25 15:33 Analyzed: 03/21/25 13:08						
Mercury, total	0.00210	0.00050	mg/L	0.00250	ND	84.1	70-130			
Matrix Spike Dup (11C1059-MSD1)		Source: 11C0688-01		Prepared: 03/20/25 15:33 Analyzed: 03/21/25 13:13						
Mercury, total	0.00235	0.00050	mg/L	0.00250	ND	94.2	70-130	11.3	10	R1



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CERTIFICATE OF ANALYSIS

1IC0822

Definitions

AC: BOD blank = 0.35mg/L
D4: Dilution was performed due to high non-target analyte concentration.
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.
L3: Elevated reporting limit due to sample foaming.
M2: Matrix spike recovery is below acceptance limits.
Q8: CCV recovery is below acceptance limits. The reported value is estimated.
R1: Duplicate RPD is outside acceptance criteria.
RL: Reporting Limit
RPD: Relative Percent Difference
S2: Surrogate recovery is below acceptance limits.

Cooler Receipt Log

Cooler ID: Default Cooler **Temp:** 1.5°C

Cooler Inspection Checklist

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

Report Comments

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

Reviewed and Approved By:

Heather Murphy
Customer Relationship Specialist
heather.murphy@microbac.com
04/07/25 15:57



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CHAIN C



1 I C 0 8 2 2

HLW Engineering
PM: Heather Murphy

Page 1 of

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Page 26 of 26

SITE INFORMATION

Sampler: dent
Project: Fremont County-Leachate
Leachate Sampling

REPORT TO

Todd Whipple
HLW Engineering
204 West Broad St.
Story City, IA 50248

INVOICE TO

Casey Moyer
Fremont County Landfill
PO Box 487, 2879 250th St
Sidney, IA 51652

SPECIAL INSTRUCTIONS

None

Turn Around Time

☒ Standard ☐ RUSH, need by ___/___/___

LAB USE ONLY

Work Order

Temperature

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	Aqueous	GRAB	3/11/25	12:27	12	608-107 624-105 ag-t-200.8 ba-t-200.8 ed-t-200.8 cu-t-200.8 hg-t-245.1 ni-t-200.8 ph-4500 tds-i-1750-85 toc-5310b zn-t-200.8 624@dibromochloromethane 625-116 as-t-200.8 bod-5210 cr-t-200.8 fe-t-200.7 nh3-timberline pb-t-200.8 se-t-200.8 Bm-351.2 tss-i-3765-85	01

Relinquished By

Date/Time

Relinquished By

Date/Time

Received By

Date/Time

Received for Lab By

Date/Time

Remarks:

Original - Lab Copy Yellow - Sampler Copy